



August 22, 2008  
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U.S. Nuclear Regulatory Commission  
Director, Offices of Nuclear Material  
Safety and Safeguards  
Attn: Document Control Desk  
Washington, D.C. 20555-0001

Ref.: 1. Letter, R.E. Link to Peter J. Habighorst, "Upcoming Amendment for AREVA NP Inc. Richland, Washington Fuel Fabrication Facility (License No. SNM-1227; Docket No. 70-1257), August 31, 2007

Ref.: 2. Letter, R.E. Link to Peter J. Habighorst, "Application for Amendment to License No. SNM-1227; Installation of Supercritical CO<sub>2</sub> Uranium Recovery Process (Docket No. 70-1257), June 12, 2008

Gentlemen:

**Subject: Revised Application for Amendment to License No. SNM-1227; Installation of Supercritical CO<sub>2</sub> Uranium Recovery Process ( Docket No. 70-1257)**

In reference 1, AREVA NP informed the NRC that AREVA NP had completed a review of 10CFR70.72 requirements as they relate to AREVA's plans to install a supercritical CO<sub>2</sub> uranium recovery process in the UO<sub>2</sub> Building (an existing facility). The process will be utilized to recover uranium from solid uranium-containing residues, most notably incinerator ash. As noted, AREVA's review indicated that the proposed change will require NRC approval prior to implementation.

Reference 2 requested that the NRC amend License No. SNM-1227 (Docket No. 70-1257) via a revised Chapter 6, Special Programs, of SNM-1227, provided in attachment 1. Wording in section 6.4.2 has been revised to reflect installation of the incinerator ash recovery process. Other changes to Chapter 6.0 are descriptive and/or administrative, e.g. updating of the company name, the organizational name of the safety organization, the current status of the city of Richland water supply system, and the description of the plant's wastewater treatment system now that the lagoons have been closed.

On July 1, 2008, via telephone Rafael Rodriguez, NRC's Project Manager assigned to the AREVA Richland Facility, requested changes to the amendment application. Enclosed in support of this request is a copy of amended chapter 6 of SNM-1227 and the revised technical supporting information needed for the NRC to process this requested amendment.

The enclosed information contains proprietary and public release versions of these documents. The information in yellow highlight indicates revised text. The information highlighted in green and black indicates information that AREVA requests be withheld from the public pursuant to the requirements in 10CFR 2.390.

**AREVA NP INC.**  
An AREVA and Siemens company

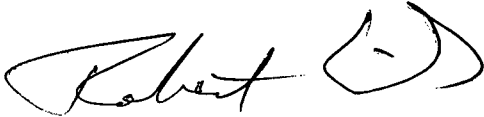
NUMSS01

For your information, AREVA has also reviewed the pending license renewal application currently being considered by the NRC and has concluded that no changes to the application are required. Additionally, the Decommissioning Funding Plan for the AREVA Richland Facility is scheduled for its triennial update by the end of calendar year 2008 and the process equipment associated with this installation will be considered in this update.

AREVA has a business need to perform start-up testing by March 1, 2009 and would greatly appreciate consideration of this need as you process the requested license amendment.

If you have questions, please contact me on 509-375-8409.

Very truly yours,

A handwritten signature in black ink, appearing to read "Robert E. Link", followed by a circular stamp or mark.

R. E. Link, Manager  
Environmental, Health, Safety & Licensing

cc: Rafael L. Rodriguez  
U.S. Nuclear Regulatory Commission  
Fuel Manufacturing Branch, Mail Stop EBB-2-C-40  
Division of Fuel Cycle Safety and Safeguards  
Office of Nuclear Material Safety and Safeguards  
Washington, D.C. 20555-0001



requested qualifies under 10 CFR 2.390(a)(4) "Trade secrets and commercial or financial information".

6. The following criteria are customarily applied by AREVA to determine whether information should be classified as proprietary:

- (a) The information reveals details of AREVA's research and development plans and programs or their results.
- (b) Use of the information by a competitor would permit the competitor to significantly reduce its expenditures, in time or resources, to design, produce, or market a similar product or service.
- (c) The information includes test data or analytical techniques concerning a process, methodology, or component, the application of which results in a competitive advantage for AREVA.
- (d) The information reveals certain distinguishing aspects of a process, methodology, or component, the exclusive use of which provides a competitive advantage for AREVA in product optimization or marketability.
- (e) The information is vital to a competitive advantage held by AREVA, would be helpful to competitors to AREVA NP, and would likely cause substantial harm to the competitive position of AREVA NP.

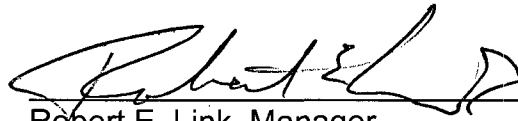
The information identified in these Documents is considered proprietary for all of the reasons set forth above. In particular, AREVA has expended considerable sums of money to develop the process described in these Documents relating to the extraction of uranium using the supercritical carbon dioxide process, and to design and engineer a system capable of extracting uranium. The release of the AREVA designed and engineered process would allow a competitor to develop a similar process without incurring the significant expense of having to develop that process. Further, if the AREVA designed and engineered process is revealed to the public, it would permit competitors to directly compete with AREVA in the recovery of uranium using the AREVA developed process and take, without compensation, proprietary and trade secret information developed at private expense. This would result in substantial harm to the competitive position of AREVA.

7. In accordance with AREVA's policies governing the protection and control of information, proprietary information contained in these Documents has

been made available, on a limited basis, to others outside AREVA only as required and under suitable agreements providing for nondisclosure and limited use of the information.

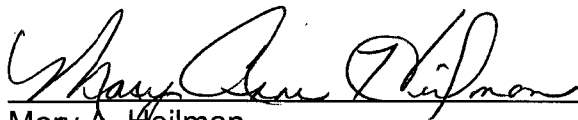
8. AREVA NP policy requires that proprietary information be kept in a secured file or area and distributed on a need-to-know basis.

9. The foregoing statements are true and correct to the best of my knowledge, information, and belief.

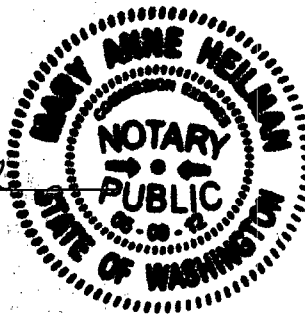


Robert E. Link, Manager  
Environment, Health, Safety and Licensing  
AREVA NP Inc.

SUBSCRIBED before me this 22nd day of August, 2008.



Mary A. Heilman  
NOTARY PUBLIC, STATE OF WASHINGTON  
MY COMMISSION EXPIRES: 6/19/2012



PART I - LICENSE CONDITIONS		REV 50
<b>CHAPTER 6 <u>SPECIAL PROGRAMS</u></b>		
<b>6.1 <u>Proprietary Information</u></b>		
<p>With application for license amendment dated June 12, 1985 for operation of a dry conversion process, AREVA NP (then Advanced Nuclear Fuels) submitted copies of document XN-NF-837, Part II, "License Amendment Application, Dry Conversion Process, Proprietary Supplement," dated June 1985, and requested that it be withheld from public disclosure pursuant to 10 CFR 2.790. An accompanying affidavit dated June 13, 1985 was also submitted. The U.S. Nuclear Regulatory Commission (NRC) determined that the submitted document did contain trade secrets or confidential or proprietary commercial information (letter, R. E. Cunningham to C. W. Malody, dated July 19, 1985). Amendment No. 26, dated November 7, 1986, was subsequently issued permitting operation, and no additional conditions of license were imposed.</p> <p>With a change to the safety demonstration in Chapter 15, AREVA NP (then Siemens Power Corporation) requested in letters dated March 26, 1992 and April 17, 1992 that the fact that it was conducting certain operations be withheld from public disclosure. By letter of July 9, 1992 (R. E. Cunningham to J. B. Edgar) the NRC agreed that the submitted information did contain trade secrets or confidential commercial information and further agreed to withhold the March 26, 1992 and April 17, 1992 letters and applicable pages from the safety demonstration in Chapter 15 (pages 15-13 and 15-15) from public disclosure.</p>		
<b>6.2 <u>Occupational Safety</u></b>		
<p>AREVA NP follows the current American Conference of Governmental Industrial Hygienists (ACGIH), Washington Industrial Safety and Health Administration (WISHA), Washington State Department of Ecology (WDOE), U.S. Environmental Protection Agency (USEPA), and the U.S. Nuclear Regulatory Commission (USNRC) maximum permissible concentrations, threshold value limits, and permissible exposure limits for radioactive and hazardous chemicals in the design and operation of its Engineering and Manufacturing Facility.</p> <p>In case of a known release, personnel shall contact Environmental, Health, Safety, and Licensing (EHS&amp;L) personnel to ascertain the concentration levels and the recommended personnel protective equipment required for cleanup operations to proceed. EHS&amp;L personnel shall conduct routine or periodic surveys, as appropriate, to determine the concentrations of routinely utilized radioactive and hazardous chemicals.</p>		
<b>6.3 <u>Emergency Utilities</u></b>		
AMENDMENT APPLICATION DATE:	2008	PAGE NO.: 6-1



PART I - LICENSE CONDITIONS		REV 50
<p><b>6.3.1 Emergency Electrical Power Supply</b></p> <p>Diesel generator sets are installed to provide emergency electrical power to operate the Criticality Accident Alarm System, selected exhaust fans, telephones, radiation detection instrumentation, critical process equipment, and emergency lighting. These generators shall be tested at least monthly for proper startup and operation. Functional tests consisting of tying the generator to a normal emergency load shall be performed at least annually.</p> <p><b>6.3.2 Emergency Backup Water Supply</b></p> <p>The water supply to the AREVA's Engineering and Manufacturing Facility is furnished by the City of Richland through separate 10- and 12-inch mainlines connected into a loop feeding the plant fire loop. The City of Richland estimates the flow at the fire loop to be 1,600 gpm at 40 psi through each line, resulting in 3,200 gpm at 40 psi from the two lines. A more conservative estimate of reliable, available flow of 2,500 gpm at 40 psi provides ample supply for hose lines and exhaust ventilation filter deluge protection. Normal UO<sub>2</sub> Building water needs are about 200 gpm.</p> <p>The source of water for Richland is the Columbia River which the city treats via two separate treatment plants - a traditional treatment plant located on the river and a second remote plant to which river water is pumped and then treated via slow-sand filtration. The city system includes approximately 22 million gallons of storage capacity.</p> <p><b>6.4 Radioactive Waste Management</b></p> <p><b>6.4.1 Liquid Wastes</b></p> <p>Radioactive and chemical wastes from the process and laboratories are routed to the plant liquid effluent treatment system. In addition to removal of residual uranium via ion exchange columns, the liquid effluent treatment system provides physical particulate filtration and, as appropriate, ammonia removal and pH adjustment. Effluent from the liquid effluent treatment system is combined with non-contact cooling water and plant sanitary wastes to form a combined liquid effluent that is continuously measured for volume and sampled for uranium and selected chemical constituents. Liquid effluent from the laundry facility is routed through one of two retention tanks for particulate settling and uranium sampling, prior to introduction into the combined liquid effluent at a point upstream of the previously mentioned continuous sampling station.</p>		
AMENDMENT APPLICATION DATE:		PAGE NO.:
2008		6-2

PART I - LICENSE CONDITIONS		REV 50
<p><b>6.4.2 <u>Solid Radioactive Waste</u></b></p> <p>Uranium-contaminated solid waste is segregated into noncombustible and combustible types, and is stored in designated areas within the controlled access area. Containers used for this purpose shall be adequately sealed and appropriately labeled prior to being stored. In the event that such containers of waste are stored outdoors for extended periods of time, their physical integrity shall be visually inspected, and the accumulation shall be surveyed for external radioactive material contamination at least quarterly, and records of such inspections and surveys shall be maintained.</p> <p>Combustible waste may be processed by incineration through the Solid Waste Uranium Recovery (SWUR) facility to obtain volume reduction with the ash being stored for the recovery of uranium. Ash uranium recovery may be pursued in ash processing facilities; alternatively the uranium recovery may be performed by an offsite processor. When incineration at SWUR is not utilized, combustibles may be compacted, offsite or onsite, prior to burial at a licensed Low Level Radioactive Waste (LLRW) disposal site.</p> <p>Noncombustible waste is stored prior to shipment to a permanent waste disposal site. Specialized facilities may be utilized onsite to allow for the radiological decontamination of non-combustible items, thereby reducing the volume of non-combustibles for disposal at the LLRW disposal site. Waste packaged for disposal shall not be allowed to remain in storage for extended periods, but shall be scheduled for disposal on a current basis depending upon generation rate and cost-effective shipment sizes.</p> <p>Certain containerized LLRW, not amenable to processing at SWUR (e.g., non-combustible HEPA filters or certain chemically contaminated combustible wastes), may contain uranium in economically recoverable quantities. Processing of these containerized wastes for uranium recovery may be pursued via onsite processing facilities by AREVA or via processing by a commercial vendor, onsite or offsite.</p> <p><b>6.5 <u>UF<sub>6</sub> Cylinders</u></b></p> <p>New UF<sub>6</sub> cylinders purchased by AREVA shall conform to ANSI N14.1, which includes certification by the vendor that the cylinders comply with all fabrication, test, and cleanliness requirements specified therein. Periodic inspection and testing of cylinders shall be performed following heel removal. The heel removal procedures shall specifically exclude the use of hydrocarbons.</p>		
AMENDMENT APPLICATION DATE:		PAGE NO.:
2008		6-3



PART I - LICENSE CONDITIONS		REV 50
<p>Cylinders of UF<sub>6</sub> shall be received, unloaded, and stored within barricaded pads. Evacuated UF<sub>6</sub> cylinders (containing heels) shall also be stored at these locations. As needed for processing, cylinders of UF<sub>6</sub> are transferred to either an elevated dock or a barricaded pad adjacent to the UO<sub>2</sub> Building. Elevated or barricaded storage of bare UF<sub>6</sub> cylinders is designed to guard the cylinders against vehicular damage. Bare UF<sub>6</sub> cylinders shall be stored in cradles providing spacing and stability.</p> <p>Prior to shipping bare cylinders containing heels, the valves shall be covered and sealed. When the cylinders are shipped in overpacks, the valves are not covered and sealed, but the overpack shall be sealed.</p>		
AMENDMENT APPLICATION DATE:	2008	PAGE NO.: 6-4