AREVA

June 12, 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

Gentlemen:

Subject: Application for Amendment to License No. SNM-1227; Installation of Supercritical CO2 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_2 uranium recovery process in the UO2 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.

This letter requests 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. Enclosed in support of this request is a copy of amended Chapter 6 of SNM-1227 and the technical supporting information needed for the NRC to process this requested amendment.

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.

NMSS01

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An AREVA and Siemens company

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

Very truly yours,

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

STATE OF WASHINGTON)
: ss
COUNTY OF BENTON)

Robert E. Link, being duly sworn on oath, states as follows:

1. I am employed by AREVA NP Inc. (AREVA NP) as Manager, Environmental, Health, Safety and Licensing in Richland, Washington. I am responsible for the overall administration of the safety programs at AREVA NP's Richland, Washington nuclear fuel fabrication facility, including regulatory licensing and permitting. This affidavit is based on my first hand, personal knowledge and is submitted in my capacity as Manager, Environmental, Health, Safety and Licensing.

2. I am familiar with the contents of the "Application for Amendment to License No. SNM-1227; Installation of Supercritical CO_2 Uranium Recovery Process" package. This license amendment has been classified and designated as "Proprietary" by AREVA NP in accordance with the document control system and policies established by AREVA NP for the control and protection of proprietary and confidential information.

3. AREVA NP is engaged in the business of designing and manufacturing nuclear fuel assemblies for commercial nuclear reactors. Within the United States, there are two additional firms that design and manufacture nuclear fuel for commercial nuclear reactors and there are several other companies outside of the United States that engage in the same business as AREVA NP. Competition among these companies including AREVA NP is fierce and manufacturing costs of the nuclear fuel are critical to the maintenance of market share and to the growth of market share among utility customers.

4. The license amendment package contains commercial information of a confidential nature that is not available in public sources or available to the public. This information contained in the license amendment package is commercial and confidential because it:

A. Reveals distinguishing aspects of AREVA NP's manufacturing processes by relating sequences of operations and/or sub-operations to optimize the efficiency and performance of manufacturing operations which a competitor within the field of nuclear fuel manufacturing may adapt for their own processes, reducing the competitor's expenditure of resources to achieve the same efficiencies, thereby gaining a competitive advantage to the disadvantage of AREVA NP.

B. Reveals the use of process chemical additives for the enhancement of chemical processes which are believed to be unique in the industry both in terms of type and application, which if revealed to a competitor would provide for an unfair competitive advantage by reducing any expenditure by the competitor to develop and test the same concepts.

C. Reveals aspects of privately funded development of process controls and parameters derived by AREVA NP over the course of optimizing the performance of waste treatment and other processes.

D. Reveals technical rationale developed by AREVA NP relating to plant layout, structure, process flow and other technical information which a competitor could readily use without expenditure of funds and replicate in its facilities thereby gaining a competitive advantage to the disadvantage of AREVA NP.

5. AREVA NP Inc. will suffer considerable competitive harm if the contents of the license amendment package are made available to AREVA NP domestic and international competitors. Finally, this material cannot be reasonably segregated from other material which may not meet the criteria set forth in 10 CFR § 2.790 and 10 CFR § 2.390.

6. Additionally, the contents of the license amendment package have been reviewed under the provisions of 10 CFR § 2.790 (d). The contents of the license amendment package contain information relating to AREVA NP's physical protection, location of radioactive materials, site specific design of structures and equipment, vulnerability assessments, accident analyses, safety analyses, and risk assessments, material control and accounting program for special nuclear materials that has not otherwise designated as Safeguards Information or Restricted Data. Further, this material cannot be reasonably segregated from other material that may not meet the criteria set forth in 10 CFR § 2.790 (d).

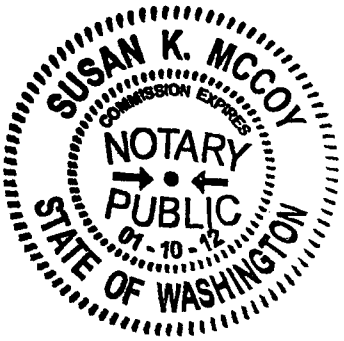
Dated this 13th day of June, 2008.

Robert E. Link
Manager, Environmental, Health, Safety and Licensing

STATE OF WASHINGTON)
: ss
COUNTY OF BENTON)

On this 13th day of June, 2008, before me, the undersigned, a Notary Public in and for the State of Washington, duly commissioned and sworn, personally appeared Robert E. Link to me known to be the Manager, Environmental, Health, Safety and Licensing of AREVA NP Inc., the corporation that executed the foregoing instrument, and acknowledged the said instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that he is authorized to execute the said instrument.

Witness my hand and official seal hereto affixed the day and year first above written.



Susan K. McCoy
Notary Public in and for the State of Washington,
residing at Dixie, Washington.
MY COMMISSION EXPIRES: January 10, 2012

CHAPTER 6 SPECIAL PROGRAMS

6.1 Proprietary Information

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.

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.

6.2 Occupational Safety

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.

In case of a known release, personnel shall contact Environmental, Health, Safety, and Licensing (EHS&L) personnel to ascertain the concentration levels and the recommended personnel protective equipment required for cleanup operations to proceed. EHS&L personnel shall conduct routine or periodic surveys, as appropriate, to determine the concentrations of routinely utilized radioactive and hazardous chemicals.

6.3 Emergency Utilities

6.3.1 Emergency Electrical Power Supply

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.

6.3.2 Emergency Backup Water Supply

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_2 Building water needs are about 200 gpm.

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.

6.4 Radioactive Waste Management

6.4.1 Liquid Wastes

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.

6.4.2 Solid Radioactive Waste

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.

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.

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.

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.

6.5 UF_6 Cylinders

New UF_6 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.

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Cylinders of UF_6 shall be received, unloaded, and stored within barricaded pads. Evacuated UF_6 cylinders (containing heels) shall also be stored at these locations. As needed for processing, cylinders of UF_6 are transferred to either an elevated dock or a barricaded pad adjacent to the UO_2 Building. Elevated or barricaded storage of bare UF_6 cylinders is designed to guard the cylinders against vehicular damage. Bare UF_6 cylinders shall be stored in cradles providing spacing and stability. 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.	