

Statement of Considerations

REQUEST BY USEC INC. FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN RIGHTS IN SUBJECT INVENTIONS MADE IN THE COURSE OF OR UNDER DEPARTMENT OF ENERGY COOPERATIVE AGREEMENT NO. DE-NE0000488; DOE WAIVER DOCKET W(A)2012-021 [ORO-807]

USEC, Inc. (USEC) has made a timely request for an advance waiver to worldwide rights in Subject Inventions made in the course of or under Department of Energy (DOE) Cooperative Agreement No. DE-NE0000488. The primary goal of this work is to construct a 120 centrifuge uranium enrichment cascade and associated activities to establish the capability of the American Centrifuge to enrich uranium at a commercial scale. This activity will take place primarily in Oak Ridge, Tennessee (machine component manufacture and assembly, centrifuge design and testing facilities); Piketon, Ohio (final machine assembly and operation, cascade demonstration).

The program will also sustain the domestic U.S. centrifuge technical and industrial base for national security purposes and potential commercialization of the American Centrifuge Project. This work is sponsored by the Office of Nuclear Energy. It is noted that prior to USEC's submission of its written waiver petition, this waiver request was verbally approved pursuant to 10 CFR 784.8(f) by the Assistant General Counsel for Technology Transfer and Intellectual Property on June 11, 2012.

The \$350 million cooperative agreement will be funded on an 80-20 federal/private cost sharing basis between DOE and USEC, Inc. DOE's initial cost share will be provided by DOE assuming responsibility for the disposition of a quantity of depleted uranium. Funding for the balance of the project is subject to future appropriations or other authorization. The scope of work is from June 1, 2012 to September 30, 2013.

It is expected that USEC's experience and market position will contribute substantially to the commercialization of inventions made under the cooperative agreement. USEC is the sole domestic enricher in the United States. USEC is the successor to a government corporation (the United States Enrichment Corporation) that was created in 1993 and inherited much of the experience and knowledge from 50 years of military and commercial uranium enrichment activities at Paducah, Kentucky and Portsmouth, Ohio. USEC has unique experience with all enrichment technologies, including (i) gaseous diffusion; (ii) gas centrifuge; and (iii) laser enrichment, and has successfully implemented a number of major projects related to uranium enrichment.

It is expected that USEC's experience and market position will contribute substantially to the commercialization of inventions made under the cooperative agreement. USEC is the only U.S. owned uranium enrichment company and one of the four major companies supplying the world market (approximate market share of 28%). USEC currently obtains its supply from two sources: operations of the Paducah Gaseous Diffusion Plant (leased from the Department of Energy) and as Executive Agent for the U.S. government in the purchase and marketing of Low Enriched Uranium from the Russian Federation derived from blended down Russian weapons HEU (the "megatons to megawatts" program). USEC's revenues from enrichment sales in 2009 totaled \$1.8 billion. One hundred percent (100%) of these sales were to supply commercial nuclear power plants operated by utilities around the world (less than 10% of these sales were to the Tennessee Valley Authority, an agency of the US Government, for operation of its commercial nuclear power plants). The Paducah Gaseous Diffusion Plant has been operated by

USEC and its predecessors for over 57 years. Many of USEC's management and operations personnel have decades of experience in the nuclear fuel business and operations of enrichment facilities.

According to USEC's waiver petition, over \$2 billion has been invested in the development, testing and operation of a commercial machine design and the deployment of a commercial plant that would utilize the centrifuge technology. This investment includes initial construction work on the commercial plant facilities leased from DOE in Piketon, Ohio to ready them for commercial deployment of the advanced centrifuges and facility upgrades to support manufacturing of centrifuge machines at several U.S. supplier locations including Oak Ridge, Tennessee and Rocket City, West Virginia. The deployment is expected to cost in excess of \$3.5 billion in total. According to USEC, a clear right to competitively utilize the technology developed at such an expense is necessary to attract additional funding and to justify the further investment. Furthermore, DOE has substantial rights in the underlying technology and the developments under other agreements with USEC, including a license agreement dated December 7, 2006 and an agreement between DOE and USEC dated June 17, 2002 regarding, *intra alia*, the deployment of advance enrichment technology.

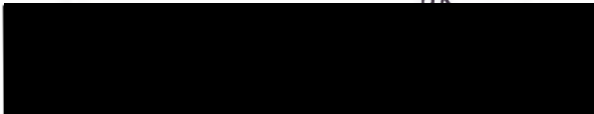
The attached Patent Rights –Waiver clause has already been included in the cooperative agreement and approved by USEC. This clause includes march-in rights, granting of licenses to background patents and data necessary for practicing subject inventions, retention of a government license, and preference for U.S. industry. These provisions, together with the fact that there are several competing firms in the uranium enrichment industry provide adequate assurance that granting of the waiver will not adversely affect competition. These competing firms include Urenco, a British, German, Dutch consortium and Roseatom/Tenex, agencies of the Russian Federal Government. A third competitor, Areva, a company owned substantially by the French government, is also building competing enrichment plants in France and the United States with centrifuge technology purchased from a Joint Venture formed with Urenco with the strong backing of the French government.

USEC has had or has presently other contracts with DOE or its contractors. USEC has a Cooperative Research and Development Agreement (CRADA) with UT-Battelle, LLC, the operator of DOE's Oak Ridge National Laboratory since 2000. USEC was granted a license to DOE's underlying centrifuge technology in December 2006. In 2010, USEC completed a cooperative agreement with DOE for the American Centrifuge Demonstration Project (DE-SC0003997).

Finally, USEC has agreed that any products embodying any waived invention or produced through the use of any waived invention will be manufactured substantially in the United States, unless USEC can show to the satisfaction of DOE that it is not commercially feasible to do so. In the event DOE agrees to foreign manufacture, there will be a requirement that the Government's support of the technology be recognized in some appropriate manner, e.g., recoupment of the Government's investment, etc. USEC further agrees to make the above condition binding on any assignee or licensee or any entity otherwise acquiring rights to any waived invention, including subsequent assignees or licensees. Should USEC or other such entity receiving rights in any waived invention undergo a change in ownership amounting to a controlling interest, then the waiver, assignment, license, or other transfer of rights in the waived invention is suspended until approved in writing by DOE.

Granting of the requested waiver should serve as encouragement to other DOE contractors and subcontractors that significant cost sharing will be recognized as an acceptable consideration for granting greater rights in Subject Inventions.

In view of the significant level of cost sharing by USEC and the objectives and considerations set forth in 10 CFR 784.4, all of which have been considered, it is recommended that the waiver described above be granted.



Emily G. Schneider
Assistant Chief Counsel for
Intellectual Property
Oak Ridge Office

Date

Based on the foregoing Statement of Considerations and the representations in the attached Waiver Petition, it is determined that the interest of the United States and the general public best be served by a waiver of patent rights of the scope described above, and therefore the waiver is granted. This waiver shall not apply to a modification or extension of the cost-shared cooperative agreement where, through such a modification or extension, the purpose, scope or cost of the cooperative agreement has been substantially altered.

CONCURRENCE:



William Szymnaski
Director, Uranium Management and Policy
Office of Nuclear Energy

Date: 

APPROVAL:



John T. Lucas
Assistant General Counsel for Technology
Transfer and Intellectual Property

Date: 