STATEMENT OF CONSIDERATIONS

REQUEST FOR ADVANCE WAIVER OF PATENT RIGHTS BY SOUTHERN COMPANY SERVICES, INC. UNDER DOE AWARD NO. DE-NE0008473; W (A) 2016-014, CH-1722

The Petitioner, Southern Company Services, Inc. (Petitioner) on behalf of itself and its subrecipient, TerraPower, LLC (Subrecipient), has requested a waiver of domestic and foreign patent rights for all subject inventions arising under the above referenced award. The award is entitled "Integrated Effects Testing & Molten Chloride Fast Reactor Development." This waiver will not impact the rights of those parties subject to Public Law 96-517, as amended, nor shall it grant any rights in inventions made by employees of the National Laboratories.

The objective of Petitioner's award is to advance the technology readiness of the Molten Chloride Fast Reactor (MCFR). To achieve this goal, a MCFR Test Reactor will be made operational by 2025, which will serve to demonstrate the key features of the technology (safety, performance, economics) in a nuclear environment and result in a commercial offering by 2035. To support the regulatory licensing, detailed design, and operation of the Test Reactor, the Petitioner and Subrecipient are developing an Integrated Effects Test (IET), as well as developing key programmatic technologies in support of its technical viability and deployment. In addition, the Petitioner will develop the necessary regulatory licensing strategies and technical documents to support the MCFR program.

The total anticipated cost of the award is \$68.5 Million including the Petitioner's contribution of \$28.5 Million, or about forty two percent (42%) of the total cost of the work under the award. This waiver is contingent upon the Petitioner maintaining, in aggregate, the above cost sharing percentage over the course of the award.

As noted in its waiver petition, the Petitioner has extensive experience in developing and commercializing innovative clean energy solutions. Additionally, Petitioner has unique experience in deploying nuclear power, as well as developing integrated costing models and technical viability analysis of pre-conceptual designs. Petitioner has invested approximately \$0.5M to date in advancing MCFR commercial development in addition to the more than \$5 Million the Subrecipient has expended. Furthermore, considering the Petitioner's expertise and investment in this technology including cost sharing in this award, it is reasonable to conclude that the Petitioner will continue to develop and ultimately commercialize the technology and products which may arise from this award.

The Petitioner and Subrecipient have agreed that this waiver shall be subject to the march-in and preference for U.S. industry provisions, as well as the U.S. Government license, comparable to those set out in 35 U.S.C. 202-204. Further, the Petitioner and Subrecipient have agreed to the U.S. competitiveness provisions as attached to this Statement. In brief, the Petitioner has agreed that products embodying a waived invention or produced through the use of a waived invention shall be substantially manufactured in the United States, and that neither the Petitioner not the Subrecipient will license, assign or otherwise transfer any waived invention to

any entity unless that entity agrees to these same requirements. Additionally, Petitioner and Subrecipient have agreed to execute a Subrecipient Agreement that will improve collaboration within the Cooperative Agreement and ensure single ownership of jointly developed patents. Subject to the terms and conditions of the Award, Petitioner shall retain ownership of the Intellectual Property it develops, Subrecipient shall retain ownership of the Intellectual Property it develops, and Petitioner shall assign its ownership rights to Subrecipient, and retain a license, to any jointly developed Intellectual Property.

Referring to item 10 of the waiver petition, granting this waiver is not expected to have an adverse impact on competition. The Petitioner cites to a competitive market with multiple parties working to develop advanced nuclear designs. Additionally, there are several competing proprietary molten salt reactor designs that are being pursued. Granting the Petition is not expected to hinder competition in the field. Rather, the success of this award can be expected to stimulate further investment and competition in this technology.

Considering the foregoing, it is believed that granting this waiver will provide the Petitioner with the necessary incentive to invest its resources in the commercialization of the results of the award in a fashion which will make the technology available to the public in the shortest practicable time. Therefore, upon evaluation of the waiver petition and in view of the objectives and considerations set forth in 10 CFR 784, all of which have been considered, it is recommended that the requested waiver be granted.

Vimothy L. Harney Patent Attorney

Intellectual Property Law Division Integrated Support Center

Date: 2/8/2019

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Based upon the foregoing Statement of Considerations and representations in the attached waiver petition, it is determined that the interests of the U.S. and the general public will best be served by a waiver of patent rights of the scope described above, and therefore the waiver is granted. This waiver will not apply to any modification or extension of the award, where through such modification or extension, the purpose, scope or cost of the award has been substantially altered.

CONCURRENCE:	APPROVAL:
Mike Worley Associate Deputy Assistant Secretary	Brian J. Lally Assistant General Counsel for Technology Transfer and Intellectual Property, GC-62
Date: 05/21/2019	Date: 5.21.19