STATEMENT OF CONSIDERATIONS

CLASS WAIVER OF PATENT RIGHTS FOR TECHNOLOGY DEVELOPED UNDER DOE FUNDING AGREEMENTS RELATING TO INNOVATION FOR "NEXT GENERATION TRANSFORMERS – FLEXIBLE AND ADAPTABLE DESIGNS"; DOE FUNDING OPPORTUNITY ANNOUNCEMENT DE-FOA-0001876; W(C)-2018-003; CH-1791

The Department of Energy Office of Electricity Advanced Grid Research and Development Program on Transformer Resilience and Advanced Components and Resilient Distribution Systems/Sensors anticipates providing federal assistance in the form of financial assistance. This financial assistance is to facilitate development of lab-scale prototypes of flexible and adaptable large power transformer designs to provide proof-of-concept and performance evaluation in a relevant operational environment.

The objective of this funding opportunity announcement (FOA) is to stimulate innovative designs for a large (greater than 100 MVA) power transformer (LPT) that are more flexible and adaptable. The LPT designs are to increase grid resilience by facilitating transformer sharing and long-term replacement in the event of catastrophic failures. Accomplishment of the objective would entail LPT designs which promote greater standardization to increase grid resilience (i.e., faster recovery through greater interchangeability) in the event of the loss of one or more LPTs. The objective furthers program efforts to modernize, harden, and increase resilience of the grid by addressing the unique challenges facing transformers and other critical components that are responsible for carrying and controlling electricity from where it is generated to where it is needed.

DOE expects to make approximately 3 to 5 awards in the form of financial assistance agreements under this announcement. The amount of DOE funding allocated toward the FOA is \$7,500,000. Recipient cost share will be at least \$1,875,000 (20%). Applicant's cost share will be based on the total cost of the project, including the applicant's and Federally Funded Research and Development Centers (FFRDCs)/National Laboratories (NL) portions of the effort. The FFRDC/NL's effort, in aggregate, shall not exceed 25% of the total estimated cost of the project, including the applicant's and the FFRDC/NL's portions of the effort.

All types of domestic entities including FFRDCs are eligible to apply; however, FFRDCs may not apply as primary applicants. FFRDCs may be proposed as a subcontractor on another entity's application. NETL is not eligible for an award under the FOA and may not be proposed as a team member on another entity's application. Recipients agree that 100% of the direct labor costs

a team member on another entity's application. Recipients agree that 100% of the direct labor costs for the project (including subrecipient labor) shall be incurred in the United States, unless the Recipient can demonstrate to the satisfaction of the Department of Energy that the United States economic interest will be better served through a greater percentage of the work being performed outside of the United States.

Considering the above, it is the purpose of this class waiver to vest title in new inventions made under DE-FOA-0001876 to domestic large business awardees and subcontractors in a fashion enabling them to expediently commercialize the various technologies. Accordingly, DOE will waive the Government's title to subject inventions, other than inventions made by Bayh-Dole participants pursuant to P.L. 96-517, as amended, or National Laboratories, to the above identified large business entities.

This class waiver of the Government's rights in inventions is subject to the usual patent waiver and background data licensing provisions. The terms of the patent waiver include the usual Government license, march-in rights, and preference for U.S. industry provisions comparable to those set out in 35 U.S.C. §§ 202-204. This patent waiver also includes the attached U.S. Competitiveness clause which requires that products embodying any waived invention or produced through the use of any waived invention be manufactured substantially in the United States unless the participant 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. The Contractor will further agree to make this condition binding on any assignee or licensee or any entity otherwise acquiring rights to any waived invention, including subsequent assignees or licensees. Should the Contractor 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.

The grant of this waiver is not expected to result in adverse effects on competition or market concentration. Rather, the waiver should enhance competition and growth in the development of systems for energy delivery resilience.

This class patent waiver is available to any domestic large business that (1) is a recipient, or subrecipient at any tier, to a funding agreement issued under DE-FOA-0001876 and (2) is providing at least 20% cost share for the work assigned to it under their funding agreement. The waiver will

remain in effect as long as such cost sharing is maintained, in aggregate, over the term of the agreement. A large business, whether recipient or sub-recipient, that does not accept the terms of this waiver, or is otherwise ineligible may petition for an advanced or identified patent waiver.

Considering the foregoing, and in view of the statutory objectives to be obtained and the factors to be considered under DOE's waiver regulation, 10 C.F.R. 784, all of which have been considered, it has been determined that this class waiver as set forth above will best serve the interest of the United States and the general public. It is recommended that the waiver be granted.

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Date: <u>06/15/2018</u>

Michael J. Dobbs

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Date: 06/22/2018

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 of extension of the award, where through such modification or extension, the purpose, scope or cost of the award has been substantially altered.

CONCURRENCE:	APPROVAL:
Kerry Cheung	Brian J Lally
Program Manager	Assistant General Counsel for Technology
Advanced Grid Research and Development	Transfer and Intellectual Property
OE-10	GC-62
Date: 7/3/18	Date: 8/8/18