STATEMENT OF CONSIDERATIONS

CLASS WAIVER OF PATENT RIGHTS FOR TECHNOLOGY DEVELOPED UNDER DOE FUNDING AGREEMENTS RELATING TO INNOVATION FOR "BIG DATA ANALYSIS OF SYNCHROPHASOR DATA"; DOE FUNDING OPPORTUNITY ANNOUNCEMENT DE-FOA-0001861; W(C)-2018-004; CH-1795

The Department of Energy Office of Electricity's Advanced Grid Research and Development Program for Transmission Reliability anticipates providing federal assistance in the form of financial assistance. This financial assistance is to facilitate development of tools for the discovery and analysis of information within the growing archives of phasor measurement unit (PMU) data, so future PMUs can contribute to the efficient, safe, reliable operation and design of the nation's electric system.

The objective of this funding opportunity announcement (FOA) is to explore the use of big data, artificial intelligence (AI), and machine learning technology and tools on PMU data to identify and improve existing knowledge, and to discover new insights and tools for better grid operation and management. Meeting the objective will provide early research in support of more real-time early warning tools, operator decision support tools, and potentially phasor measurement unit-(PMU-) based automated controls to enhance the reliability and resiliency of the national's power grid. With this aim, Department of Energy (DOE) will provide pre-packaged datasets to a diverse set of award recipients that already have commercial or near-commercial big data, AI, and machine learning tools and capabilities.

DOE expects to make approximately 8 to 10 awards in the form of financial assistance agreements under this announcement. The awards will likely receive federal funding ranging from \$300,000 to \$1,000,000 per award with an expected period of performance of 18 months. Recipient cost share must be at least 20% for research and development projects.

All types of domestic and foreign entities are eligible to apply; however, Federally Funded Research and Development Centers (FFRDCs) and National Laboratories (NL) are not allowed to participate as a Prime Applicant or as a team member. A domestic large business, as used in this class patent waiver, is any for-profit entity that does not qualify as a "small business" under Bayh-Dole and is incorporated (or otherwise formed) under the laws of a particular State or territory of the United States and is not owned, controlled, or influenced by a foreign government, agency, firm, corporation or person. Federal agencies and instrumentalities (other than DOE) are eligible to apply

for funding as a subrecipient, but are not eligible to apply as a Prime Applicant. 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 DOE 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-0001861 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 patent waiver. The terms of the patent waiver include the 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-0001861 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 interests of the United States and the general public. It is recommended that the waiver be granted.

Jacob A. Heafner
Patent Attorney
Intellectual Property Law Division
DOE ISC-CH

Date: 09/12/2018

Michael J. Dobbs Deputy Chief Counsel Intellectual Property Law Division DOE ISC-CH

Date: 10/2/2018

Based upon the foregoing Statement of Considerations and representations in the attached waiver petition, it is determined that the interests of the United States. 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.

CONCURRANCE:		
000	0	0

Philip Overholt

Transmission Reliability Program Manager Advanced Grid Research and Development OE-10

Date: 10/11/2018

Brian J. Lally

APPROVAL

Assistant/General Counsel for Technology Transfer and Intellectual Property

GC-62 Date: 11/7/18