

## STATEMENT OF CONSIDERATIONS

IDENTIFIED WAIVER OF DOMESTIC AND FOREIGN PATENT RIGHTS IN THE IDENTIFIED INVENTIONS, DOE DOCKET NOS. S-137,489, MADE DURING PERFORMANCE OF AWARD DE-OE0000626.

W(I)-2015-030; CH-1747; S-137,489; U.S. PAT. APPL. N<sup>o</sup>. 14/693,590; GE N<sup>o</sup>. 275825

This waiver request is for domestic and foreign rights in the above identified inventions made by employees of General Electric Global Research (hereinafter GE) during the performance of award DE-OE0000626. GE has requested the instant patent waivers to obtain clear title to an undivided interest in the above identified inventions.

The objective of the award was to develop mathematical and high performance computing techniques for power system simulation, implement those high performance computing techniques in simulation software, and verify and validate speed enhancement of the simulation and decision making methods using modelling. The immediate subject inventions relate to electrical power transmission systems and, more particularly, to systems and methods for analyzing oscillatory stability in electrical power transmission systems under the effects of a plurality of conditions, and for improving oscillatory stability through generation re-dispatch.

The award funding allotted totaled \$1,599,949.00, including Petitioner's cost share totaling \$319,990.00, or about 20% of the total award. The period of performance for the award was October 1, 2012 to September 30, 2014.

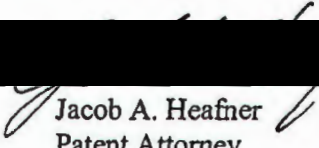
Referring to items 5-9 of the waiver petitions, Petitioner has significant experience in power systems, including wide-area monitoring and control to detect and damp power system oscillations. Petitioner's software products have been used by electric utilities as well as system operators throughout the U.S. Accordingly, Petitioner is well positioned to implement simulation and oscillation damping control methods to utility systems. Additionally, Petitioner noted the potential to integrate the subject of any intellectual property derived from the research across their multiple business platforms, thus making the inventions viable in other technologies.

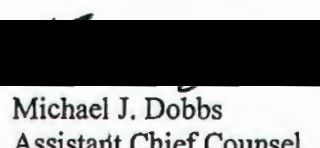
Petitioner has agreed that this waiver will be subject to the march-in and preference for U.S. industry provisions, as well as the U.S. Government license, set out in 35 U.S.C. 202-204. Further, Petitioner has agreed to the attached U.S. Competitiveness provision paragraph (t). In brief, Petitioner has agreed that products embodying a waived invention or produced through the use of a waived invention will be manufactured substantially in the United States unless Petitioner can show to the satisfaction of the DOE that it is not commercially feasible to do so. Petitioner has further agreed to make the above conditions binding on any assignee or licensee or

license, or other transfer of rights in the waived inventions is suspended until approved in writing by DOE.

Referring to item 10 of the waiver petition, granting this waiver will have little if any adverse impact on competition in this technology. Petitioner is one of many business entities developing controls for energy management and power system resiliency solutions. As such, there are several competing approaches being researched for power distribution system resiliency. Further, the power systems are controlled by multiple utilities, which would necessitate continued research and development to ensure successful integration of a technology across a power grid.

Considering the foregoing, it is believed that grant this waiver will provide the Petitioner with the necessary incentive to invest its resources in the commercialization of the results of the agreement 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.

  
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Michael J. Dobbs  
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Intellectual Property Law Division

Date: 4/1/16

Date: 5/23/16

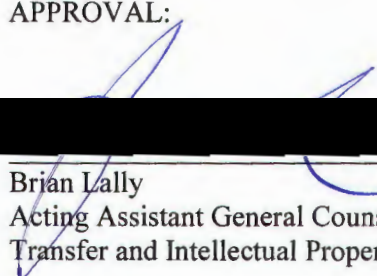
Based upon the foregoing Statement of Considerations and representations in the attached waiver petition, it is determined that the interests of the U.S. and the general public will best be served by a waiver of patent rights of the scope described above, and therefore the waiver is granted.

CONCURRENCE:

APPROVAL:


Michael Pesin,  
Deputy Assistant Secretary, Advanced Grid  
Research and Development OE-10

  
Brian Lally  
Acting Assistant General Counsel for Technology  
Transfer and Intellectual Property, GC-62

Date: 11/16/16

Date: 11/29/16