

## STATEMENT OF CONSIDERATIONS

REQUEST BY DOOSAN GRIDTECH SERVICES, LLC ("DOOSAN GRIDTECH") FOR AN  
ADVANCE WAIVER OF DOMESTIC AND FOREIGN PATENT RIGHTS  
UNDER DOE AWARD NO. DE-EE0007177  
W(A)2016-010

DOOSAN GRIDTECH has requested a waiver of domestic and foreign patent rights for all subject inventions arising from its participation under the above referenced award entitled "Austin SHINES." The award is to Austin Energy, a municipally owned utility. DOOSAN GRIDTECH is a sub-awardee to Austin Energy.

When the award was made to Austin Energy, DOOSAN GRIDTECH was 1Energy Services, LLC ("1Energy"), a domestic small business that could retained title to its subject inventions pursuant to Bayh-Dole. On June 30, 2016, 1Energy was acquired by Doosan Heavy Industry & Construction, a large international corporation based in South Korea. With the acquisition, 1Energy changed its name to DOOSAN GRIDTECH and no longer qualifies as a small business because it is a wholly owned subsidiary of a large company. DOOSAN GRIDTECH does not qualify for an EERE Class Patent Waiver because the cost share requirement for its portion of the work is being provided by Austin Energy, not DOOSAN GRIDTECH. Therefore, DOOSAN GRIDTECH needs this waiver in order to retain title to its subject inventions under the award.

The project, being funded by the award, is to allow Austin Energy to develop and deploy a distributed energy resource (DER) management platform that enables loads to be served for the lowest possible cost and with a high penetration of distributed photo-voltaic (PV) generation while maintaining the traditional power quality and reliability associated with grid service. The DER management platform recognizes that emerging DER assets such as solar and energy storage are part of an integrated, interconnected grid system and that the benefits of these resources are maximized only when they are holistically coordinated with other grid assets. The DER management platform employs multiple advanced controls methodologies that will be demonstrated and evaluated using a fleet of diverse DER assets designed and deployed at diverse locations among Austin Energy's customers and distribution system. By operating these assets as a coordinated system, the project will create and demonstrate DER deployment and control methodologies that enable the grid ecosystem to serve load at a cost of less than \$0.14/kWh while enabling a high penetration of distributed solar.

DOOSON GRIDTECH is providing its Distributed Energy Resource Optimizer ("DG-DERO") and Intelligent Controller ("DG-IC"). The DG-DERO and DG-IC will optimize the performance of the energy storage system deployed by Austin Energy to mitigate and offset the effects of various PV systems in Austin Energy's distribution system. The DG-DERO and the DG-IC were developed outside of the award without federal funds but additional technology and algorithms may be developed as part of the project.


The period of performance for the award is from February 1, 2016 through April 30, 2019. The total anticipated cost of the award is \$8,643,973. The portion of the award attributable to DOOSAN GRIDTECH is \$3,812,250. DOE is contributing \$4,300,000. Austin Energy is providing at least 50% cost share. This waiver is contingent upon Austin Energy maintaining, in aggregate, at least 50% cost sharing percentage over the course of the award.

DOOSAN GRIDTECH has extensive software and power systems engineering experience. It is a leader in deploying energy storage systems at utilities. It developed its DG-DERO and DG-IC for Snohomish County PUD (the distribution utility for Everett, WA), Puget Sound Energy (the distribution utility for King County, WA) and Duke Energy (utility in SE United States). DOOSAN GRIDTECH has already invested millions of dollars into DG-DERO and DG-IC prior to the award.

DOOSAN GRIDTECH does not anticipate that the granting of this waiver would place DOOSAN GRIDTECH in a preferred or dominant position. The applicable markets for the DG-DERO and DG-IC products is highly competitive with several large and well established companies. This waiver should not impact the ability of the other competitors to continue to provide their products and solutions to the market.

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 waiver shall be subject to the attached U.S. Competitiveness provision paragraph (i). In brief, products embodying a waived subject invention or produced through the use of a waived subject invention will be manufactured substantially in the United States unless DOOSAN GRIDTECH can show to the satisfaction of the DOE that is not commercially feasible to do so.

Considering the foregoing, it is believed that granting a waiver to subject inventions of DOOSAN GRIDTECH will provide DOOSAN GRIDTECH with the necessary incentive to invest its resources in commercializing the results of the award in a manner that will make the subject inventions available to the public in the shortest 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.



  
Glen R. Drysdale  
Patent Attorney  
Golden Field Office



Date: 10/27/16

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 determined above, and therefore the waiver is granted. This waiver shall 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:

  
  
Charlie Gay  
Office Director  
Solar Energy Technologies Office

  
  
Brian Lally  
Acting Assistant General Counsel for  
Technology Transfer and Intellectual  
Property

Date: 2 November 2016

Date: 11/25/16