STATEMENT OF CONSIDERATIONS

REQUEST BY GENERAL MOTORS LLC (GM) FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN PATENT RIGHTS UNDER DOE COOPERATIVE AGREEMENT NO. DE-EE0005753; W(A) 2013-016

GM has requested a waiver of domestic and foreign patent rights for all subject inventions arising from its participation under the above-referenced cooperative agreement entitled "Development of Integrated Die Casting Process for Large Thin-Wall Magnesium Applications." This patent waiver applies only to the inventions of GM. The waiver does not apply to any subcontractor of GM under the cooperative agreement.

The objective of the project funded through the cooperative agreement is to develop an energy-efficient integrated die casting (IDC) process for thin-walled magnesium (Mg) applications. The IDC process will increase part integration potential and decrease the number of processing steps, while decreasing the overall door panel weight compared to conventional materials. The project intends to advance the state-of-the-art casting capability from the current minimum thickness of 3-4mm to 1.5-2mm while maintaining the manufacturability and performance requirements of the application.

The total anticipated cost of the cooperative agreement is \$3,340,155. GM is providing \$668,031 of cost share funds for a cost share percentage of 20%. This waiver is contingent upon GM maintaining, in aggregate, a cost share percentage of 20% or more over the course of the cooperative agreement.

GM is one of the largest automotive companies in the world. It has a history of industry leadership in automotive innovations, extensive experience in manufacturing processes, substantial in-house die casting production of aluminum powertrain components, several patents and pending patent applications related to die casting, and established extensive die casting research and development facilities throughout the world. Once the technology of the project is proven, GM is committed to make the necessary investments to use the technology in the mass production of vehicles.

The 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. Furthermore, the waiver shall be subject to the U.S. competitiveness provisions attached to this Statement. In brief, GM and its licensees and assignees will substantially manufacture in the United States products that embody any waived invention or are made through the use of any waived invention.

Referring to item 10 of the waiver petition, GM does not believe that the granting of this patent waiver will have any significant anti-competitive effects. The technology that is subject to this waiver must compete against numerous other technologies being considered in attempts to improve energy efficiency and reduce consumption. The numerous competing technologies should prevent any significant anti-competitive effect from this waiver. Moreover, GM

anticipates licensing the technology developed under this project to other auto manufacturers and suppliers in order to maximize the full benefits of available scale economics resulting from large-scale introduction.

Considering the foregoing, it is believed that granting this waiver will provide GM with the necessary incentive to invest its resources in commercializing the results of the cooperative agreement in a manner that will make the above technology 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 approved.

Glen R. Drysdale

DOE Patent Counsel

Date: 0125/13

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 approved. This waiver shall not apply to any modification or extension of the cooperative agreement, where through such modification or extension, the purpose, scope, or cost of the cooperative agreement has been substantially altered.

CONCURRENCE:

APPROVAL:

Robert W. Ivester Acting Program Director Advanced Manufacturing Office John T/Lucas Assistant General Counsel for Technology Transfer and Intellectual Property

Date: 10/10/2013

Date: 10/15/2013

U.S. COMPETITIVENESS

The Contractor agrees that any products embodying any waived invention or produced through the use of any waived invention will be manufactured substantially in the United States, unless the Contractor 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 further agrees to make the above 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 any waived invention is suspended until approved in writing by DOE.