STATEMENT OF CONSIDERATIONS

REQUEST BY POET PROJECT LIBERTY, LLC (POET) FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN PATENT RIGHTS UNDER DOE GRANT NO. DE-FC36-07GO17026; W(A)-07-038

The Petitioner, POET, 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 "Launch of an Integrated Bio-Refinery with Eco-Sustainable and Renewable Technologies in Y2009." Novozymes is a subawardee on this project, and will file a petition for a waiver separately.

The cooperative agreement that is the subject of this waiver covers preliminary engineering, permitting, and associated work in connection with DOE's commercial scale cellulosic biorefinery program authorized under Section 932 of the Energy Policy Act of 2005. Six companies were selected to negotiate for awards under this program. These awards are structured such that an "Award 1" is a standard cooperative agreement which has a scope of work that covers preliminary design, engineering, and permitting. DOE expects that most or all of the six awardees under this program will continue on to "Award 2" under the program, as there is no down-select between the two awards. Award 2 will either be a Technology Investment Agreement that is a transaction other than a cooperative agreement under 10 C.F.R. Part 603, or another cooperative agreement. Under Award 2, the awardees will construct and operate a commercial-scale cellulosic biorefinery that can be replicated. If Award 2 is a cooperative agreement, POET will petition for a patent waiver for that agreement.

The objective of the cooperative agreement is to prepare data and designs and obtain the necessary permits and other information needed to support a decision regarding whether to proceed, in a subsequent agreement, to jointly finance construction, commissioning, and start-up of a commercial integrated biorefinery to be located near Emmetsburg, Iowa. The proposed biorefinery would convert 700 metric dry tons per day of biomass to ethanol. DOE and POET will jointly fund the cooperative agreement, with DOE providing 40% of the funding and POET providing 60% of the funding. The total dollar amount of the agreement is $9,624,751, with $3,763,282 funded by DOE and $5,861,464 funded by POET. This waiver is contingent upon the Petitioner maintaining, in aggregate, the above cost sharing percentage over the course of the agreement.

Petitioner is the largest ethanol producer in the United States, producing over one billion gallons of ethanol annually at 21 ethanol plants, and sells approximately 3 million tons of distillers' grains (an ethanol production byproduct) to the animal feed market each year. Petitioner has been engaged in the development and implementation of new technologies related to ethanol production for the past 10 years. From 2002 through 2006, the company developed and implemented technology related to raw starch processing and dry corn fractionation. During that time, Petitioner collaborated with the National Renewable Energy Laboratory and South Dakota State University to evaluate pretreatment, saccharification, and fermentation technologies for the cellulosic corn fiber. Poet has filed numerous patent applications related to raw starch

processing and dry corn fractionation and has developed numerous proprietary technologies in the field of ethanol production.

In 2006, Petitioner launched a self-funded research and development effort to demonstrate cellulosic ethanol technology at lab and pilot scale. The project represents a comprehensive effort to select, demonstrate, and validate cellulose-to-ethanol technology beginning at feedstock collection and storage, pretreatment, saccharification, fermentation, distillation, waste stream processing, and alternative energy generation. Petitioner has entered into two licensing agreements for additional pretreatment technologies and is collaborating with Novozymes to develop and market biomass enzymes for the project. The results from all of these efforts will be used for this project.

Petitioner currently licenses its base technology to its plants, which are affiliates of Petitioner. Petitioner intends to license the cellulose ethanol technology developed under this award to existing and future plants, regardless whether they are owned by Petitioner. Petitioner's plants have management contracts that will facilitate the implementation of the technology at each plant. All license agreements will have diligence obligations with regard to technology implementation. Petitioner intends to replicate the project at existing and future ethanol plants, and states that failure to grant this waiver petition would significantly impede Petitioner in these commercialization efforts.

Petitioner has agreed that 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, Petitioner has agreed to the U.S. competitiveness provisions as attached to this Statement. In brief, Petitioner has agreed that products embodying intellectual property developed under this agreement shall be substantially manufactured in the United States, and that Petitioner will not license, assign, or otherwise transfer any waived invention to any entity unless that entity agrees to these same requirements.

Referring to item 10 of the waiver petition, granting this waiver is not anticipated to have any adverse impact on competition. Each award under the Section 932 program will cover a different technical approach, and many other entities are pursuing cellulosic ethanol. Further, the success of Petitioner under this cooperative agreement, can be expected to stimulate further investment and competition in this technology.

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

[redacted]

Julia Cook Moody
Patent Attorney
Golden Field Office

Date: 12 December 2007

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

CONCURRENCE:

[redacted]

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Office of the Biomass Program
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Date: 1/16/08

APPROVAL:

[redacted]

Paul A. Gottlieb
Assistant General Counsel for Technology
Transfer and Intellectual Property

Date: 2-06-08

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 subst~tially in the United States, unless the Contractor can show to the satisfaction of DOE thatit is not commercially feasiblc to do so. In the event DOE agrees to forcign manufacture, there will be a requirement that the Governmnent's support of the technology bc 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 licensces. 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.