December 7, 2009

stretchfowler@socal.rr.com Idaho Sustainable Energy, LLC 23903 Francisco Way Valencia, CA: California 91354

Dear :

SUBJECT: Biomass Funding Opportunity Announcement DE-FOA-0000096, Recovery Act - Demonstration of Integrated Biorefinery Operations

### Application Title: Algae Growth and Harvest Complex for the Production of Algae-Based Biofuel

On behalf of the U.S. Department of Energy (DOE), Golden Field Office (GO), we wish to thank Idaho Sustainable Energy, LLC for its efforts in submitting an application to the subject Funding Opportunity Announcement. We recognize the significant effort expended on the part of your organization to prepare a response to this Announcement. Your Application was carefully reviewed in accordance with the evaluation criteria in the Announcement. Unfortunately, we cannot award every application and must therefore make difficult choices. Your Application was not selected for negotiation of an award.

The enclosed attachment contains the strengths and weaknesses reported by the Merit Review Committee. This letter, along with the attachment, constitutes your debriefing for this Funding Opportunity Announcement.

On behalf of the DOE, I would like to express a sincere appreciation for your interest and participation in this program and hope that you will continue to participate in future activities and programs with the DOE. Any questions can be addressed to me at 303-275-4928 or fred.gerdeman@go.doe.gov.

Sincerely,

Thed Gerdeman

Fred Gerdeman Merit Review Chairperson US Department of Energy

Enclosure: Consensus Strengths and Weaknesses

# **Recovery Act - Demonstration of Integrated Biorefinery Operations**

# DE-FOA-0000096

Record of Consensus Strengths and Weaknesses

# Idaho Sustainable Energy, LLC

Project Title:	Algae Growth and Harvest Complex for the Production of Algae-Based Biofuel
ID Number:	T000003906_2
Topic:	Topic Area 5

### **Criterion 1: Technical Merit**

Strengths:	
Significan	t The engineer in charge is experienced in design, development, and construction processes.
Significan	t Drawing on significant resources, the project incorporates an existing biodiesel plant already 50% built. The company has a proven track record of producing quality biodiesel.
Significan	t The company appears to have a well qualified and experienced leadership team.
Minor	The project is innovative and ambitious.
Minor	The proposal included strong letters of support from project participants.
Weaknesses:	
Significan	t The proposal provides limited information on the optimization of the algae strain for maximum suitable lipid content.
Significan	t The production of the minor product - cellulosic ethanol - is not well defined.
Significan	t Applicant did not provide credible discussion of technical critical success factors that are necessary to justify moving forward with the proposed project such as identification of the algae strain that will be used in the project and the process that will be used to produce the cellulosic ethanol.

# **Recovery Act - Demonstration of Integrated Biorefinery Operations**

### DE-FOA-0000096

# Record of Consensus Strengths and Weaknesses

# Idaho Sustainable Energy, LLC

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### Criterion 2: Commercialization Plan

Strengths:	
Significant	The company has existing operations at the biodiesel facility that substantiate its abilities and experience.
Significant	The team demonstrates that it has strong commercialization experience and engineering leaders.
Minor	The biodiesel refinery already exists and will be expanded making good use of existing facilities and resources.
Minor	The proposal indicates a significant degree of financial participation by the applicant, including an 86 million dollar cost share.
Weaknesses:	
Significant	No number was provided specifying the percent reduction in greenhouse gases on the cover sheet, but a greenhouse gas analysis was provided. In oral presentation, information was provided showing that GHG reduction was only 78%.
Significant	The petroleum displacement analysis needs greater substantiation. Displacement analysis is based on production of large quantities of ethanol, and this was not clear in the application or oral presentation. It was also not clear if the ethanol co-product (if produced) would be sold as a transportation fuel or used in the process to produce the biodiesel. Description of the petroleum displacement calculation in oral presentation left doubt regarding the actual products that would be produced in the process.

#### **Criterion 3: Project Management**

Strengths:	
Significant	The Project Management Plan is fully integrated with financial and business systems.
Significant	The applicant is experienced and demonstrates qualified leadership.
Significant	The applicant has demonstrated an ability to build and operate pilot and commercial scale facilities.
Minor	The proposal possesses a stage gate method that adequately described and is coordinated with a resource loaded schedule.
Weaknesses:	
Minor	The risk management plan needs clarification. It provided insufficient information for some of the risks, and the mitigation for some was either not explained or was inadequately explained.
Minor	The budget allocation plan needs more detailed information.

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