

FINANCIAL ASSISTANCE FUNDING OPPORTUNITY ANNOUNCEMENT



**U.S. Department of Energy
Golden Field Office**

**Development of Supply Systems to Handle and Deliver High Tonnage
Biomass Feedstocks for Cellulosic Biofuels Production**

Funding Opportunity Announcement Number: DE-FOA-0000060

Announcement Type: Amendment No. 000001

CFDA Number: 81.087 Renewable Energy Research and Development

Issue Date: 3/18/2009

Application Due Date: 5/18/2009, 5:00 PM Eastern Time

PLEASE NOTE:

Questions regarding the content of this announcement must be submitted through FedConnect. Applications must be submitted through FedConnect to be considered for award, unless the applicant has system to system capability with Grants.gov. You must be completely registered before you can submit questions regarding this announcement or submit an application.

Applicants who are not registered with CCR and FedConnect, should allow at least 21 days to complete these requirements. It is suggested that the process be started as soon as possible. For those Applicants already registered in CCR, the CCR registration must be updated annually at <http://www.ccr.gov/Renew.aspx>.



Department of Energy
Golden Field Office
1617 Cole Boulevard
Golden, Colorado 80401-3393

DE-FOA-0000060
Amendment No. 000001

DATE: April 16, 2009
FROM: Henry E. Eggink, Contracting Officer
TO: All Prospective Applicants

SUBJECT: Amendment No. 000001 to Announcement DE-FOA-0000060,
"Development of Supply Systems to Handle and Deliver High Tonnage Biomass
Feedstocks for Cellulosic Biofuels Production"

The purpose of this Amendment is to notify Applicants of changes to Part IV – Application and Submission Information of the announcement. **THE “ADOBE APPLICATION PACKAGE” OUTLINED BY THIS AMENDMENT MUST BE USED FOR AN APPLICATION TO BE CONSIDERED FOR AWARD.** The Adobe Application Package is posted as a separate attachment to this Funding Opportunity Announcement on the FedConnect website, <https://www.fedconnect.net>.

Correspondingly, the Announcement is amended as follows:

In the FedConnect Quick Start Guide, Registration/Submission Requirement, and Where to Submit Questions page that immediately precedes the Table of Contents, Item 1. “Application Submission” is deleted in its entirety and replaced with the following:

1. Application Submission

Applications must be submitted through FedConnect to be considered for award, unless the applicant has system to system capability with Grants.gov. The Adobe Application Package identified in Part IV. C. is posted as an attachment to this FOA (in FedConnect, <https://www.fedconnect.net/>). It is the responsibility of the applicant, prior to the Application due date and time, to verify successful transmission.

Part IV – Application and Submission Information is deleted in its entirety and replaced with the following:

PART IV – APPLICATION AND SUBMISSION INFORMATION

A. ADDRESS TO REQUEST APPLICATION PACKAGE

The Adobe Application Package is provided as separate attachments to this Funding Opportunity Announcement (on FedConnect).

B. LETTER OF INTENT AND PRE-APPLICATION

Letters of Intent are not required.

A pre-application is not required.

C. CONTENT AND FORM OF APPLICATION

The Adobe Application Package is provided as a separate attachment to this Funding Opportunity Announcement (on FedConnect).

You must complete the mandatory forms, and any applicable optional forms, in accordance with the instructions on the forms and the additional instructions below, as required by this FOA. Files that are attached to the forms must be in Adobe Portable Document Format (PDF) unless otherwise specified in this announcement.

1. SF 424 - Application for Federal Assistance

Complete this form first to populate data in other forms. Complete all required fields in accordance with the pop-up instructions on the form. The list of certifications and assurances referenced in Field 21 can be found at

http://management.energy.gov/business_doc/business_forms.htm, under Certifications and Assurances.

2. Project/Performance Site Location(s)

Indicate the primary site where the work will be performed. If a portion of the project will be performed at any other site(s), identify the site location(s) in the blocks provided.

Note that the Project/Performance Site Congressional District is entered in the format of the 2 digit state code followed by a dash and a 3 digit Congressional district code, for example VA-001.

3. Other Attachments Form

Submit the following files with your application and attach them to the Other Attachments Form. Click on “Add Mandatory Other Attachment” to attach the Project Narrative. Click on “Add Optional Other Attachment,” to attach the other files.

a. Project Summary/Abstract File

The project summary/abstract must contain a summary of the proposed activity suitable for dissemination to the public. It should be a self-contained document that identifies the name of the applicant, the project director/principal investigator, the project title, the objectives of the project, a description of the project, including methods to be employed, the potential impact of the project (i.e., benefits, outcomes), and major participants (for collaborative projects). Applicants are cautioned that this document should not include any proprietary information, trade secrets, or other confidential business, financial or sensitive information, since this summary may be subject to public disclosure under the Freedom of Information Act (FOIA). The project summary must not exceed 1 page when printed using standard 8.5” by 11” paper with 1” margins (top, bottom, left and right) with font not smaller

than 11 point. Save this information in a file named “Summary.pdf,” and click on “Add Optional Other Attachment” to attach.

b. Project Narrative File

The project narrative must not exceed 25 pages, including cover page, table of contents, charts, graphs, maps, photographs, and other pictorial presentations, when printed using standard 8.5” by 11” paper with 1 inch margins (top, bottom, left, and right). **EVALUATORS WILL REVIEW ONLY THE NUMBER OF PAGES SPECIFIED IN THE PRECEDING SENTENCE.** The font must not be smaller than 11 point. Do not include any Internet addresses (URLs) that provide information necessary to review the application. See Part VIII.D for instructions on how to mark proprietary application information. Save the information in a single file named “Project.pdf,” and click on “Add Mandatory Other Attachment” to attach.

The project narrative must include:

Project Objectives.

This section should provide a clear, concise statement of the specific objectives/aims of the proposed project.

Merit Review Criteria Discussion.

The section should be formatted to address each of the merit review criteria and sub-criteria listed in Part V. A. below. Provide sufficient information so that reviewers will be able to evaluate the application in accordance with these merit review criteria. **DOE WILL EVALUATE AND CONSIDER ONLY THOSE APPLICATIONS THAT ADDRESS SEPARATELY EACH OF THE MERIT REVIEW CRITERIA AND SUB-CRITERIA.**

Project Timetable:

This section should outline as a function of time, year by year, all the important activities or phases of the project, including any activities planned beyond the project period. Successful applicants must use this project timetable to report progress.

Members of Consortium:

Provide listing of all consortium member organizations including contact information.

The above listed components of your Project Narrative combined, must be within the Narrative page limit specified above.

Documents listed below may be included as clearly marked appendices to your Narrative and will not count towards the Project Narrative page limit. Please note that some of the required documents listed below may have their own page limits to which you must adhere.

c. Resume File

Provide a resume for each key person proposed, including subawardees and consultants if they meet the definition of key person. A key person is any individual who contributes in a substantive, measurable way to the execution of the project. Save all resumes in a single file named “resume.pdf” and click on “Add Optional Other Attachment” to attach. Each resume must not exceed 2 pages when printed on 8.5” by 11” paper with 1 inch margins (top, bottom, left, and right) with font not smaller than 11 point and should include the following information, if applicable:

Education and Training. Undergraduate, graduate and postdoctoral training, provide institution, major/area, degree and year.

Professional Experience: Beginning with the current position list, in chronological order, professional/academic positions with a brief description.

Publications. Provide a list of up to 10 publications most closely related to the proposed project. For each publication, identify the names of all authors (in the same sequence in which they appear in the publication), the article title, book or journal title, volume number, page numbers, year of publication, and website address if available electronically.

Patents, copyrights and software systems developed may be provided in addition to or substituted for publications.

Synergistic Activities. List no more than 5 professional and scholarly activities related to the effort proposed.

Of the key personnel identified in this file, indicate the Principal Investigator (PI)

The resume file does not have a page limitation.

d. Budget File

SF 424 A Excel, Budget Information – Non-Construction Programs File

You must provide a separate budget for each year of support requested and a cumulative budget for the total project period. Use the SF424 A Excel, “Budget Information – Non Construction Programs” form on the Applicant and Recipient Page at http://management.energy.gov/business_doe/business_forms.htm. A sample with further directions is also included as Appendix G to this FOA. You may request funds under any of the Object Class Categories as long as the item and amount are necessary to perform the proposed work, meet all the criteria for allowability under the applicable Federal cost principles, and are not prohibited by the funding restrictions in this announcement (See PART IV, G). Save the information in a single file named “SF424A.xls,” and click on “Add Optional Other Attachment” to attach.

e. Budget Justification File

A Budget Justification for SF 424A must be provided for the costs proposed in each Object Class Category/Cost Classification category (e.g., identify key persons and personnel categories and the estimated costs for each person or category; provide a list of equipment and cost of each item; identify proposed subaward/consultant work and cost of each subaward/consultant; describe purpose of proposed travel, number of travelers and number of travel days; list general categories of supplies and amount for each category; and provide any other information you wish to support your budget). Provide the name of your cognizant/oversight agency, if you have one, and the name and phone number of the individual responsible for negotiating your indirect rates as part of the budget justification or under the comments under the Indirect tab of the Budget Justification form.

The Excel format provided as PMC 123.1, Budget Justification for SF 424A, at <https://www.eere-pmc.energy.gov/forms.aspx>, is recommended but not required for use in providing this budget justification. Save the information in a single file named "BudgetJustification.xls" (or other file name as applicable), and click on "Add Optional Other Attachment" to attach.

f. Budget for Federal Laboratories and Other Federal Agencies, if applicable

If a DOE FFRDC contractor is to perform a portion of the work, you must provide a DOE Field Work Proposal in accordance with the requirements in DOE Order 412.1 Work Authorization System. This order and the DOE Field Work Proposal form are available at the following link:

<http://www.management.energy.gov/documents/o4121.pdf>. Use up to 10 letters of the FFRDC name (plus .pdf) as the file name (e.g., lanl.pdf or anl.pdf), and click on "Add Optional Other Attachment" to attach.

If any other federal laboratory or federal agency is to perform a portion of the work, you must provide documentation equivalent to a DOE Field Work Proposal, as described above, specific to the agency performing the work. Use up to 10 letters of the Lab or Agency name (plus .pdf) as the file name and click on "Add Optional Other Attachment" to attach.

g. Authorization for Federal Laboratories and Other Federal Agencies, if applicable

Save the Authorization for DOE FFRDCs, as specified in Part III.C. Other Eligibility Requirements, in a single file named "DOE_FFRDC_Auth.pdf" and click on "Add Optional Other Attachment" to attach.

For any other federal laboratory or federal agency save the Authorization, as specified in Part III.C. Other Eligibility Requirements, in a single file named "Lab_Auth.pdf" and click on "Add Optional Other Attachment" to attach.

4. SF-LLL Disclosure of Lobbying Activities

If applicable, complete SF- LLL. Applicability: If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in

connection with the grant/cooperative agreement, you must complete and submit the Standard Form - LLL, "Disclosure Form to Report Lobbying." The form is available in the optional documents box on the Adobe Application Package.

Summary of Required Forms/Files

Your application must include the following documents:

Name of Document	Format	File Name
1. SF 424 - Application for Federal Assistance	Part of Application Package	
2. Project/Performance Site Location(s)	Part of Application Package	
3. Other Attachments Form: Attach the following files (a. – g.) to this form:	Part of Application Package	See instructions
a. Project Summary/Abstract File	pdf	Summary.pdf
b. Project Narrative File	pdf	Project.pdf
c. Resume File	pdf	Resume.pdf
d. SF 424A Excel – Budget Information for Non-Construction Programs File	Excel	SF424A.xls
e. Budget Justification File	As applicable	See instructions
f. Budget for Federal Laboratories and Other Federal Agencies, if applicable.	pdf	See instructions
g. Authorization for Federal Laboratories and Other Federal Agencies, if applicable	pdf	See instructions
4. SF-LLL Disclosure of Lobbying Activities, if applicable	Part of Application Package	

D. SUBMISSIONS FROM SUCCESSFUL APPLICANTS

If selected for award, DOE reserves the right to request additional or clarifying information for any reason deemed necessary, including, but not limited to:

- Indirect cost information
- Other budget information
- Name and phone number of the Designated Responsible Employee for complying with national policies prohibiting discrimination (See 10 CFR 1040.5)
- Commitment Letter from Third Parties Contributing to Cost Sharing, if applicable
- Environmental Questionnaire
- Licensing, use, and/or manufacturing rights for any equipment or components used in the proposed comprehensive system.

E. SUBMISSION DATES AND TIMES

Pre-applications are not required.

Application Due Date

Applications must be received by May 18, 2009, 5:00 PM Eastern Time. You are encouraged to transmit your application well before the deadline. **APPLICATIONS RECEIVED AFTER THE DEADLINE WILL NOT BE REVIEWED OR CONSIDERED FOR AWARD.**

F. INTERGOVERNMENTAL REVIEW

This program is not subject to Executive Order 12372 – Intergovernmental Review of Federal Programs.

G. FUNDING RESTRICTIONS

Cost Principles. Costs must be allowable in accordance with the applicable Federal cost principles referenced in 10 CFR Part 600. The cost principles for commercial organization are in FAR Part 31.

Pre-award Costs. Recipients may charge to an award resulting from this announcement pre-award costs that were incurred within the ninety (90) calendar day period immediately preceding the effective date of the award, if the costs are allowable in accordance with the applicable Federal cost principles referenced in 10 CFR part 600. Recipients must obtain the prior approval of the contracting officer for any pre-award costs that are for periods greater than this 90 day calendar period.

Pre-award costs are incurred at the applicant's risk. DOE is under no obligation to reimburse such costs if for any reason the applicant does not receive an award or if the award is made for a lesser amount than the applicant expected.

H. SUBMISSION AND REGISTRATION REQUIREMENTS

1. Where to Submit

Applications must be submitted through FedConnect to be considered for award, unless the applicant has system to system capability with Grants.gov. Submit electronic applications through the FedConnect portal. Information regarding how to submit applications via Fed Connect can be found at https://www.fedconnect.net/FedConnect/PublicPages/FedConnect_Ready_Set_Go.pdf.

Further, it is the responsibility of the applicant, prior to the Application due date and time, to verify successful transmission.

2. Registration Process Requirements

To submit an application in response to this FOA, Applicants must be registered with FedConnect. Before you can register with FedConnect, you will need the following:

- a. Your company's DUNS (including plus 4 extension if applicable). If you don't know your company's DUNS or if your company does not have a DUNS you can search for it or request one at <http://fedgov.dnb.com/webform/displayHomePage.do>.
- b. A federal Central Contractor Registration (CCR) account. If your company is not currently registered with CCR, please register at www.ccr.gov before continuing with your FedConnect registration.
- c. Possibly, your company's CCR MPIN. If you are the first person from your company to register, FedConnect will need to create a company account. Only a person who knows your company's CCR MPIN can do this. To find out who this is in your company, go to <http://www.ccr.gov/> and click **Search CCR**. Once you've found your company, locate the Electronic Business Point of Contact.

After the initial FedConnect account is created, employees can register themselves without the MPIN. If you are not sure whether your company has an account with FedConnect, don't worry. Complete the registration form and FedConnect will let you know.

Applicants who are not registered with CCR and FedConnect, should allow at least 21 days to complete these requirements. It is suggested that the process be started as soon as possible. For those Applicants already registered in CCR, the CCR registration must be updated annually at <http://www.ccr.gov/Renew.aspx>.

All other content of the Announcement remains unchanged.

FEDCONNECT QUICK START GUIDE, REGISTRATION/SUBMISSION REQUIREMENTS, AND WHERE TO SUBMIT QUESTIONS

1. Application Submission

APPLICATIONS MUST BE SUBMITTED THROUGH FEDCONNECT TO BE CONSIDERED FOR AWARD. It is the responsibility of the applicant, prior to the Application due date and time, to verify successful transmission.

2. FedConnect Quick Start Guide:

Use this guide to assist you with FedConnect:

https://www.fedconnect.net/FedConnect/PublicPages/FedConnect_Ready_Set_Go.pdf

3. Registration Process Requirements

To submit an application in response to this FOA, Applicants must be registered with FedConnect. Before you can register with FedConnect, you will need the following:

1. Your company's DUNS (including plus 4 extension if applicable). If you don't know your company's DUNS or if your company does not have a DUNS you can search for it or request one at <http://fedgov.dnb.com/webform/displayHomePage.do>.
2. A federal Central Contractor Registration (CCR) account. If your company is not currently registered with CCR, please register at www.ccr.gov before continuing with your FedConnect registration.
3. Possibly, your company's CCR MPIN. If you are the first person from your company to register, FedConnect will need to create a company account. Only a person who knows your company's CCR MPIN can do this. To find out who this is in your company, go to [http://www.ccr.gov/](http://www.ccr.gov) and click **Search CCR**. Once you've found your company, locate the Electronic Business Point of Contact.

After the initial FedConnect account is created, employees can register themselves without the MPIN. If you are not sure whether your company has an account with FedConnect, don't worry. Complete the registration form and FedConnect will let you know.

Applicants who are not registered with CCR and FedConnect, should allow at least 21 days to complete these requirements. It is suggested that the process be started as soon as possible. For those Applicants already registered in CCR, the CCR registration must be updated annually at <http://www.ccr.gov/Renew.aspx>.

4. Questions

Questions regarding the content of the announcement must be submitted through the FedConnect portal. You must register with FedConnect to respond as an interested party to submit questions, and to view responses to questions. It is recommended that you register as soon after release of the FOA as possible to have the benefit of all responses. More information is available at https://www.fedconnect.net/FedConnect/PublicPages/FedConnect_Ready_Set_Go.pdf. DOE will try to respond to a question within 3 business days, unless a similar question and answer have already been posted on the website.

Questions pertaining to the submission of applications through FedConnect should be directed by e-mail to support@FedConnect.net or by phone to FedConnect Support at 1-800-899-6665.

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PART I – FUNDING OPPORTUNITY DESCRIPTION

BACKGROUND:

The U.S. Department of Energy (DOE), Office of Energy Efficiency and Renewable Energy (EERE), announces a Funding Opportunity Announcement (FOA) for financial assistance from the Office of the Biomass Program. DOE has funded technology development projects since FY 2002 to meet two of the EERE performance goals: 1) dramatically reduce, or even end dependence on imported oil; and 2) spur the creation of the domestic bioindustry. This FOA also supports the same two performance goals.

The lack of logistics systems capable of handling and delivering sufficiently high tonnage year round volumes of feedstocks to support the rapid escalation of cellulosic biofuels production has been identified as a significant barrier to the expansion of a sustainable domestic biofuels industry. DOE issued a Request for Information, DE-PS36-08GO38009, in August 2008 to solicit comments on the perceived infrastructure barriers to the rapid escalation of the domestic biofuels industry. The input from industry and other interested parties was used in shaping this FOA.

The National Biofuels Action Plan released in October, 2008, provides more discussion of the issues and needs of the domestic biofuels industry. The report may be downloaded at <http://www1.eere.energy.gov/biomass/pdfs/nbap.pdf>

Interested applicants are encouraged to study the additional information and the discussion of a feedstocks logistics report at the following website; www.inl.gov/bioenergy/uniform-feedstock. PowerPoint presentation(s), an executive summary, completed report sections, and a locked version of the database/analyses are available. Individuals who access information from this site will be asked to provide review comments. These comments may be utilized when reviewing the document prior to the final release of the report. As additional analysis and reports become available, material may be added to this site. Potential applicants should check the site regularly.

DOE plans to support the increased production of high volumes of sustainably produced domestic biofuels from cellulosic feedstocks by seeking proposals to design new systems or adapt existing systems to handle industrial scale volumes of cellulosic feedstocks from the harvest point to the mouth of biorefinery production facilities. Feedstocks or combinations of feedstocks that will be considered include: agricultural residues, energy crops (switchgrass, miscanthus, energycane, sorghum, poplar, willow, etc), forest resources (forest thinnings, wood chips, wood wastes, small diameter trees, etc), and urban wood wastes. **For purposes of this FOA; algae, animal wastes, and municipal solid wastes (MSW) are not acceptable feedstocks.**

DESCRIPTION:

The intent of this FOA is to stimulate the design and demonstration of a comprehensive system to handle the harvesting, collection, preprocessing, transport and storage of sufficient volumes of sustainably produced feedstocks required to achieve the rapid expansion of the commercial domestic biofuels industry. The expansion of the domestic biofuels industry is needed to support meeting the requirements of the Energy Independence and Security Act of 2007 (EISA) Renewable Fuels Standard (RFS).

DOE is seeking applications from consortia that include at least one Original Equipment Manufacturer (OEM) of industrial/agricultural equipment used in harvest, collection, preprocessing, transport and storage of lignocellulosic feedstocks. Typical entities that may partner with OEMs include: growers, transport companies, universities, national labs, and biorefineries or conversion facilities. Other interested entities may partner with any applicant consortium. One entity must be designated as the lead (Applicant) by members of the consortium.

This FOA requests that applicants define, design, fabricate, and demonstrate a comprehensive industrial scale feedstocks logistics handling system capable of supplying high impact feedstocks to support production of cellulosic domestic biofuels. For purposes of this FOA, “high impact” feedstocks have the ultimate sustainable potential for at least 100 million dry metric tonnes per year. All aspects of harvest, collection, preprocessing, handling, transport, storage and delivery should be addressed comprehensively in the proposal. The biorefinery or conversion facility proposed for the demonstration must be located within the United States and use feedstocks only from domestic sources. Consortia may design entirely new equipment, use existing equipment, modify existing equipment or propose some combination of these. To support DOE’s goals, it is expected that system components proposed will be operational within one to two years after applicants are selected. Comprehensive systems are sought that have the capability to proceed rapidly through demonstration to commercialization. It is expected that the successfully completed projects under this FOA will lead to commercialization of the project systems. Only those applicants who are willing and able to diligently pursue the system demonstration and have a sound business strategy to deploy, license, and market the system and it’s components should apply. Applicants must secure licensing, use, and/or manufacturing rights for any equipment or components used in the proposed comprehensive system.

Applicants must provide projections for market penetration as a result of the proposed project. The forecasted data will be examined by the Merit Review Committee with consideration of the reasonableness and thoroughness of the planning, methodology, and assumptions that support the data.

A limited amount of preparatory work to support the design of the proposed project will be allowed within the scope of the project. Typically, up to 10% of the total project budget may be proposed for the preparatory R&D, but the amount is subject to negotiation after notification of selection for negotiation of an award. Preparatory work may include limited research and development (R&D), including expenses for equipment, salaries, and supplies. Appendix D provides more information on the scope that would be permissible as preparatory work.

The applicant must provide a minimum cost share of 50% of the total project budget. Total project budget includes both the DOE and cost share funds. Costs incurred prior to selection under the FOA will not be reimbursable or allowed as cost share.

Acceptable feedstocks

The applicant must propose the use of at least one high impact feedstock, which is defined as a domestically available feedstock with a sustainable ultimate availability of at least 100 million dry metric tonnes of biomass per year. Acceptable feedstocks must be domestically

available and compliant with the definitions and exclusions provided in this section. The acceptable feedstocks proposed in response to this FOA must be shown to be domestically available in sufficient quantities to contribute to the RFS goal of 21 billion gallons of advanced biofuels by 2022. Proposed projects may use one feedstock or a combination of several feedstocks.

Acceptable feedstocks include organic matter that is available on a renewable, reliable, year round basis including –

- (i) renewable plant material, including –
 - (I) organic material grown for the purposes of being converted to energy;
- (ii) waste material, including –
 - (I) crop residue (including stover, bagasse and other residues);
 - (II) other vegetative waste material (including wood waste and wood residues);

No plant based material that is generally intended for use as food can be employed as a feedstock.

For purposes of this FOA; algae, animal wastes, and municipal solid wastes (MSW) are not acceptable feedstocks.

LEGISLATIVE AUTHORITY:

This announcement is being issued under authorization of the Energy Policy Act of 2005 (EPAAct 2005), Section 932 (See Appendix B). The acceptable feedstocks in this FOA are expected to contribute to the goal of 21 billion gallons of advanced biofuels by 2022.

EPAAct 2005

While federal policies fostering ethanol production have been in place for more than two decades,¹ these were renewed and strengthened by EPAAct 2005, Section 932(d), in which the Secretary is directed to “...encourage the demonstration of a wide variety of lignocellulosic feedstocks and the demonstration of the collection and treatment of a variety of biomass feedstocks.”

PART II – AWARD INFORMATION

A. TYPE OF AWARD INSTRUMENT

DOE anticipates awarding grants and/or cooperative agreements under this program announcement. If it is determined that a cooperative agreement is the appropriate award instrument, the nature of the Federal substantial involvement will be included in a special award condition.

B. ESTIMATED FUNDING

¹ *Biofuels – At What Cost? Government support for ethanol and biodiesel in the United States.* Earth Track, Inc. for Global Subsidies Initiative of the International Institute for Sustainable Development. October 2006. www.globalsubsidies.org

Approximately \$ 4,000,000 is expected to be available for new awards in FY 2009 and an additional \$ 11,000,000 is expected to be available for awards made under this announcement in years FY2010 through FY2011. The actual level of funding, depends on appropriations for this program.

C. MAXIMUM AND MINIMUM AWARD SIZE

Ceiling (i.e., the maximum amount for an individual award made under this announcement): \$ 5,000,000.

Floor (i.e., the minimum amount for an individual award made under this announcement): None.

D. EXPECTED NUMBER OF AWARDS

DOE anticipates making 1 - 3 awards under this announcement depending on the size of the awards.

E. ANTICIPATED AWARD SIZE

DOE anticipates that awards will be in the \$ 5,000,000 range for the total project period.

F. PERIOD OF PERFORMANCE

Budget Periods of Financial Assistance Agreements. Each project will be divided into two budget periods, which may be encompassed within one award. DOE's determination for proceeding from one budget period to the next will be based on go/no go decision criteria that will be negotiated with the applicants.

Budget period 1, up to 12 months, will be for the completion of activities such as design or modification of defined system components; completing National Environmental Policy Act (NEPA) documentation; permitting; limited R&D on the practices or components of the system; fabrication of prototype system components; and demonstration of selected components.

The second budget period, up to 24 months, will be used for fabrication of components or modification to existing systems and field demonstration of the entire logistics system on an industrial scale in partnership with an existing biorefinery.

G. TYPE OF APPLICATION

Only new applications will be accepted under this announcement (e.g., applications for renewals of existing DOE funded projects will not be considered).

PART III - ELIGIBILITY INFORMATION

A. ELIGIBLE APPLICANTS.

All types of domestic entities are eligible to apply, except federal laboratories, other federal agencies, and nonprofit organizations described in section 501(c)(4) of the Internal Revenue Code of 1986 that engaged in lobbying activities after December 31, 1995.

DOE is seeking applications from consortia which include at least one Original Equipment Manufacturer (OEM) of industrial/agricultural equipment used in harvest, collection, preprocessing, transport and storage of lignocellulosic feedstocks. Typical entities that may partner with OEMs include: growers, transport companies, universities, national labs, and biorefineries or conversion facilities. Other interested entities may partner with the applicant consortia.

B. COST SHARING

Cost share must be at least 50% of the total allowable costs for demonstration and commercial application projects and must come from non-Federal sources unless otherwise allowed by law. The sum of the Government share, including federal laboratory and other federal agency costs if applicable, and the recipient share of allowable costs equals the total allowable cost of the project.

C. OTHER ELIGIBILITY REQUIREMENTS

Federal Laboratories and Other Federal Agencies

Federal laboratories and other federal agencies are not eligible for an award under this announcement, but they may be proposed as a team member on another entity's application subject to the following guidelines:

Authorization: A federal laboratory or other federal agency must provide an authorization from an appropriate authorizing official that it can perform work for other federal entities in a manner consistent with this funding opportunity. Save the authorization in a single file named "Lab_Auth.doc," and attach.

Effort: Federal laboratory and other federal agency efforts, in aggregate, shall not exceed 30% of the total estimated cost of the project, including the applicant's, federal laboratory's and other federal agency's portions of the effort.

Responsibility: The applicant, if successful, will be the responsible authority regarding the settlement and satisfaction of all contractual and administrative issues, including but not limited to, disputes and claims arising out of any agreement between the applicant and the federal laboratory or other federal agency.

If the federal laboratory is a DOE FFRDC (Department of Energy Federally Funded Research and Development Center), the following guidelines also apply:

Authorization: The cognizant contracting officer for the DOE FFRDC must authorize in writing the use of a DOE FFRDC contractor on the proposed project and this

authorization must be submitted with the application. Save the authorization in a single file named “DOE_FFRDC_Auth.doc,” and attach. The following wording is acceptable for this authorization.

“Authorization is granted for the _____ Laboratory to participate in the proposed project. The work proposed for the laboratory is consistent with or complementary to the missions of the laboratory, will not adversely impact execution of the DOE assigned programs at the laboratory.”

Value/Funding: The value of, and funding for, the DOE FFRDC contractor portion of the work will not normally be included in the award to a successful applicant. Usually, DOE will fund a DOE FFRDC contractor through the DOE field work proposal system.

Cost Share: The applicant’s cost share requirement will be based on the total cost of the project, including the applicant’s, the federal laboratory’s, the other agency’s and the DOE FFRDC contractor’s portions of the effort.

D. MULTIPLE PRINCIPAL INVESTIGATORS

The assignment and use of multiple Principal Investigators (PIs) in projects awarded under this FOA is allowed. The applicant, whether a single organization or team/partnership/consortium, must however indicate in the application if the project will include multiple PI’s. (See Part IV, Section XX.) The decision to use multiple PIs for a project is the sole responsibility of the applicant. If multiple PI’s will be designated, the application must identify in the application the Contact PI/Project Coordinator and provide a “Coordination and Management Plan” that describes the organization structure of the project as it pertains to the designation of multiple PI’s. This plan should, at a minimum, include:

- Process for making decisions on scientific/technical direction
- Publications;
- Intellectual property issues;
- Communication plans’
- Procedures for resolving conflicts; and
- PI’s roles and administrative, technical and scientific responsibilities for the project

PART IV – APPLICATION AND SUBMISSION INFORMATION

A. ADDRESS TO REQUEST APPLICATION PACKAGE

Application forms are provided as separate attachments to this Funding Opportunity Announcement which is posted on the FedConnect website at <https://www.fedconnect.net/FedConnect>. The application forms are also available at <https://www.eere-pmc.energy.gov/forms.aspx>.

B. LETTER OF INTENT AND PRE-APPLICATION

Letters of Intent are not required.
A pre-application is not required.

C. CONTENT AND FORM OF APPLICATION

Application forms are provided as separate attachments to this Funding Opportunity Announcement which is posted on the FedConnect website at <https://www.fedconnect.net/FedConnect>. The application forms are also available at <https://www.eere-pmc.energy.gov/forms.aspx>.

You must complete the application forms, in accordance with the instructions on the forms and the additional instructions below, as required by this FOA.

1. SF 424 - Application for Federal Assistance

Use the SF 424, “Application for Financial Assistance” form attached to this announcement. The form is also available at <https://www.eere-pmc.energy.gov/forms.aspx>. Complete all required fields in accordance with the instructions on the form. The list of certifications and assurances referenced in Field 21 can be found at http://management.energy.gov/business_doe/business_forms.htm, under Certifications and Assurances. Submission of your application to DOE with the name of the authorized representative typed in the “Signature of Authorized Representative” box constitutes an electronic signature. Save in a file named “SF-424Application.doc,” and attach.

2. Project/Performance Site Location(s)

Use the “Project/Performance Site Location(s)” form attached to this announcement. The form is also available at <https://www.eere-pmc.energy.gov/forms.aspx>. Indicate the primary site where the work will be performed. If a portion of the project will be performed at any other site(s), identify the site location(s) in the blocks provided. **Note that the Project/Performance Site Congressional District is entered in the format of the 2 digit state code followed by a dash and a 3 digit Congressional district code, for example VA-001.** Save in a file named “PPSL.doc” and attach.

3. Project Summary/Abstract File

The project summary/abstract must contain a summary of the proposed activity suitable for dissemination to the public. It should be a self-contained document that identifies the name of the applicant, the project director/principal investigator, the project title, the objectives of the project, a description of the project, including methods to be employed, the potential impact of the project (i.e., benefits, outcomes), and major participants (for collaborative projects). Applicants are cautioned that this document should not include any proprietary information, trade secrets, or other confidential business, financial or sensitive information, since this summary may be subject to public disclosure under the Freedom of Information Act (FOIA). The project summary

must not exceed 1 page when printed using standard 8.5” by 11” paper with 1” margins (top, bottom, left and right) with font not smaller than 11 point. Save this information in a file named “Summary.doc,” and attach.

4. Project Narrative File

The project narrative must not exceed 25 pages, including cover page, table of contents, charts, graphs, maps, photographs, and other pictorial presentations, when printed using standard 8.5” by 11” paper with 1 inch margins (top, bottom, left, and right).

EVALUATORS WILL REVIEW ONLY THE NUMBER OF PAGES SPECIFIED IN THE PRECEDING SENTENCE. The font must not be smaller than 11 point. Do not include any Internet addresses (URLs) that provide information necessary to review the application. See Part VIII.D for instructions on how to mark proprietary application information. Save the information in a single file named “Project.doc,” and attach.

The project narrative must include:

Project Objectives.

This section should provide a clear, concise statement of the specific objectives/aims of the proposed project.

Merit Review Criterion Discussion.

The section should be formatted to address each of the merit review criterion and sub-criterion listed in Part V. A. below. Provide sufficient information so that reviewers will be able to evaluate the application in accordance with these merit review criteria. **DOE WILL EVALUATE AND CONSIDER ONLY THOSE APPLICATIONS THAT ADDRESS SEPARATELY EACH OF THE MERIT REVIEW CRITERION AND SUB-CRITERION.**

Project Timetable:

This section should outline as a function of time, year by year, all the important activities or phases of the project, including any activities planned beyond the project period. Successful applicants must use this project timetable to report progress.

Members of Consortium:

Provide listing of all consortium member organizations including contact information.

The above listed components of your Project Narrative combined, must be within the Narrative page limit specified above.

Documents listed below may be included as clearly marked appendices to your Narrative and will not count towards the Project Narrative page limit. Please note that some of the required documents listed below may have their own page limits to which you must adhere.

5. Resume File

Provide a resume for each key person proposed, including subawardees and consultants if they meet the definition of key person. A key person is any individual who contributes in a substantive, measurable way to the execution of the project. Save all

resumes in a single file named “resume.doc” and attach. Each resume must not exceed 2 pages when printed on 8.5” by 11” paper with 1 inch margins (top, bottom, left, and right) with font not smaller than 11 point and should include the following information, if applicable:

Education and Training. Undergraduate, graduate and postdoctoral training, provide institution, major/area, degree and year.

Professional Experience: Beginning with the current position list, in chronological order, professional/academic positions with a brief description.

Publications. Provide a list of up to 10 publications most closely related to the proposed project. For each publication, identify the names of all authors (in the same sequence in which they appear in the publication), the article title, book or journal title, volume number, page numbers, year of publication, and website address if available electronically.

Patents, copyrights and software systems developed may be provided in addition to or substituted for publications.

Synergistic Activities. List no more than 5 professional and scholarly activities related to the effort proposed.

Of the key personnel identified in this file, indicate the Principal Investigator (PI)

The resume file does not have a page limitation.

6. Budget File

SF 424 A Excel, Budget Information – Non-Construction Programs File

You must provide a separate budget for each year of support requested and accumulative budget for the total project period. Use the SF424 A Excel, “Budget Information – Non Construction Programs” form attached to this announcement. The form is also available at <https://www.eere-pmc.energy.gov/forms.aspx>. A sample with further directions is also included as Appendix G to this FOA. You may request funds under any of the Object Class Categories as long as the item and amount are necessary to perform the proposed work, meet all the criteria for allowability under the applicable Federal cost principles, and are not prohibited by the funding restrictions in this announcement (See PART IV, G). Save the information in a single file named “SF424A.xls,” and attach.

7. Budget Justification File

A Budget Justification for SF 424A must be provided for the costs proposed in each Object Class Category/Cost Classification category (e.g., identify key persons and personnel categories and the estimated costs for each person or category; provide a list of equipment and cost of each item; identify proposed subaward/consultant work and cost of each subaward/consultant; describe purpose of proposed travel, number of travelers and number of travel days; list general categories of supplies and amount for

each category; and provide any other information you wish to support your budget). Provide the name of your cognizant/oversight agency, if you have one, and the name and phone number of the individual responsible for negotiating your indirect rates as part of the budget justification or under the comments under the Indirect tab of the Budget Justification form.

It is highly recommended you use the PMC 123.1, “Budget Justification for SF 424A” form attached to this announcement. The form is also available at <https://www.eere-pmc.energy.gov/forms.aspx>. Save the information in a single file named BudgetJustification.xls (or other file name as applicable), and attach.

8. Budget for Federal Laboratories and Other Federal Agencies, if applicable

If a DOE FFRDC contractor is to perform a portion of the work, you must provide a DOE Field Work Proposal in accordance with the requirements in DOE Order 412.1 Work Authorization System. This order and the DOE Field Work Proposal form are available at the following link:

<http://www.management.energy.gov/documents/o4121.pdf>. Use up to 10 letters of the FFRDC name (plus .doc) as the file name (e.g., lanl.doc or anl.doc), and attach.

If any other federal laboratory or federal agency is to perform a portion of the work, you must provide documentation equivalent to a DOE Field Work Proposal, as described above, specific to the agency performing the work. Use up to 10 letters of the Lab or Agency name (plus .doc) as the file name and attach.

9. Authorization for Federal Laboratories and Other Federal Agencies, if applicable

Save the Authorization for DOE FFRDCs, as specified in Part III.C. Other Eligibility Requirements, in a single file named “DOE_FFRDC_Auth.doc” and attach.

For any other federal laboratory or federal agency save the Authorization, as specified in Part III.C. Other Eligibility Requirements, in a single file named “Lab_Auth.doc” and attach.

10. SF-LLL Disclosure of Lobbying Activities

If applicable, complete SF- LLL. Applicability: If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the grant/cooperative agreement, you must complete and submit the Standard Form - LLL, "Disclosure Form to Report Lobbying" attached to this announcement. The form is also available at <https://www.eere-pmc.energy.gov/forms.aspx>. Save in a file named “SF-LLL.doc,” and attach.

Summary of Required Forms/Files

Your application must include the following documents:

Name of Document	Format	File Name
SF 424 - Application for Federal Assistance	Word	SF-424Application.doc
Project/Performance Site Location(s)	Word	PPSL.doc
Project Summary/Abstract File	Word	Summary.doc
Project Narrative File	Word	Project.doc
Resume File	Word	Resume.doc
SF 424A Excel – Budget Information for Non-Construction Programs File	Excel	SF424A.xls
Budget Justification File	As applicable	See instructions (Part IV.C.7)
Budget for Federal Laboratories and Other Federal Agencies, if applicable.	Word	See instructions (Part IV.C.8)
Authorization for Federal Laboratories and Other Federal Agencies, if applicable	Word	See instructions (Part IV.C.9)
SF-LLL Disclosure of Lobbying Activities, if applicable	Word	SF-LLL.doc

D. SUBMISSIONS FROM SUCCESSFUL APPLICANTS

If selected for award, DOE reserves the right to request additional or clarifying information for any reason deemed necessary, including, but not limited to:

- Indirect cost information
- Other budget information
- Name and phone number of the Designated Responsible Employee for complying with national policies prohibiting discrimination (See 10 CFR 1040.5)
- Commitment Letter from Third Parties Contributing to Cost Sharing, if applicable
- Environmental Questionnaire
- Licensing, use, and/or manufacturing rights for any equipment or components used in the proposed comprehensive system.

E. SUBMISSION DATES AND TIMES

Pre-applications are not required.

Application Due Date

Applications must be received by May 18, 2009, 5:00 PM Eastern Time. You are encouraged to transmit your application well before the deadline. **APPLICATIONS RECEIVED AFTER THE DEADLINE WILL NOT BE REVIEWED OR CONSIDERED FOR AWARD.**

F. INTERGOVERNMENTAL REVIEW

This program is not subject to Executive Order 12372 – Intergovernmental Review of Federal Programs.

G. FUNDING RESTRICTIONS

Cost Principles. Costs must be allowable in accordance with the applicable Federal cost principles referenced in 10 CFR Part 600. The cost principles for commercial organization are in FAR Part 31.

Pre-award Costs. Recipients may charge to an award resulting from this announcement pre-award costs that were incurred within the ninety (90) calendar day period immediately preceding the effective date of the award, if the costs are allowable in accordance with the applicable Federal cost principles referenced in 10 CFR part 600. Recipients must obtain the prior approval of the contracting officer for any pre-award costs that are for periods greater than this 90 day calendar period.

Pre-award costs are incurred at the applicant's risk. DOE is under no obligation to reimburse such costs if for any reason the applicant does not receive an award or if the award is made for a lesser amount than the applicant expected.

H. SUBMISSION AND REGISTRATION REQUIREMENTS

1. Where to Submit

APPLICATIONS MUST BE SUBMITTED THROUGH FEDCONNECT TO BE CONSIDERED FOR AWARD. Submit electronic applications through the FedConnect portal. Information regarding how to submit applications via Fed Connect can be found at https://www.fedconnect.net/FedConnect/PublicPages/FedConnect_Ready_Set_Go.pdf.

Further, it is the responsibility of the applicant, prior to the Application due date and time, to verify successful transmission.

2. Registration Process Requirements

To submit an application in response to this FOA, Applicants must be registered with FedConnect. Before you can register with FedConnect, you will need the following:

- a. Your company's DUNS (including plus 4 extension if applicable). If you don't know your company's DUNS or if your company does not have a DUNS you can search for it or request one at <http://fedgov.dnb.com/webform/displayHomePage.do>.
- b. A federal Central Contractor Registration (CCR) account. If your company is not currently registered with CCR, please register at www.ccr.gov before continuing with your FedConnect registration.
- c. Possibly, your company's CCR MPIN. If you are the first person from your company to register, FedConnect will need to create a company account. Only a person who knows your company's CCR MPIN can do this. To find out who this is in your company, go to <http://www.ccr.gov/> and click **Search CCR**. Once you've found your company, locate the Electronic Business Point of Contact.

After the initial FedConnect account is created, employees can register themselves without the MPIN. If you are not sure whether your company has an account with FedConnect, don't worry. Complete the registration form and FedConnect will let you know.

Applicants who are not registered with CCR and FedConnect, should allow at least 21 days to complete these requirements. It is suggested that the process be started as soon as possible. For those Applicants already registered in CCR, the CCR registration must be updated annually at <http://www.ccr.gov/Renew.aspx>.

Part V - APPLICATION REVIEW INFORMATION

A. REVIEW CRITERIA

1. Initial Review Criteria

Prior to a comprehensive merit evaluation, DOE will perform an initial review to determine that (1) the applicant is eligible for an award; (2) the information required by the announcement has been submitted; (3) all mandatory requirements of the FOA

are satisfied; and (4) the proposed project is responsive to the objectives of the funding opportunity announcement. If an application fails to meet these requirements, it may be deemed non-responsive and eliminated from full Merit Review.

2. Merit Review Criteria

Applications will be evaluated against the merit review criteria shown below.

Criterion 1: Technical Merit Weight: [35%]

The application demonstrates the technical merit and rationale for the proposed project. The technical description of the proposed project adequately presents and justifies that the proposed project:

Adequately addresses feedstock characteristics such as moisture content, stability, uniform size, flowability, composition and bulk density.

Clearly defines the scope, schedule, and budget, demonstrating that the project will be able to achieve its goals and objectives as planned.

Defines and establishes the applicant's rights to use and commercialize the proposed system/technology.

Criterion 2: Work Plan Weight: [35%]

Adequately explains the extent to which the proposed goals and objectives are likely to lead to industry acceptance of the comprehensive system. Go/no-go decision points are described and coordinated with a schedule including how progress will be measured.

The application demonstrates through the project schedule and related documents that the applicant is likely to successfully complete the project within proposed budget and on schedule.

The application demonstrates the knowledge of and a plan to address all environmental, health and safety, permitting, and compliance concerns.

Criterion 3: Roles, Responsibilities and Capabilities Weight: [30%]

The extent to which applicant adequately demonstrates that it has the core competencies necessary to cover all project aspects, including but not limited to, feedstocks management, engineering, process development, financing, and product marketing. Any partnerships with organizations such as industrial, academic, biorefineries, and national laboratories, are clearly defined, including:

Experience in designing, engineering and fabricating similar systems or system components.

Evidence of industrial-scale experience in all proposed key technology areas.

Experience managing communications within the team and between the team and outside entities, such as growers, suppliers, fabricators, customers, DOE, etc.

3. Other Selection Factors

The selection official may consider the following program policy factors in the selection process:

Geographic diversity

Feedstocks diversity

Partnership with an existing biorefinery for demonstration or commercialization activities

B. REVIEW AND SELECTION PROCESS

a. Merit Review

Applications that pass the initial review will be subjected to a merit review in accordance with the guidance provided in the "Department of Energy Merit Review Guide for Financial Assistance and Unsolicited Proposals." This guide is at <http://www.management.energy.gov/documents/meritrev.pdf>.

It is very important that those documents, Project Abstract and Project Narrative file, that will be used during the Merit Review Process do not contain any Personally Identifiable Information as described in Appendix F.

b. Selection

The Selection Official may consider the merit review recommendation, program policy factors, and the amount of funds available.

c. Discussions and Award

The Government may enter into discussions with a selected applicant for any reason deemed necessary, including, but not limited to: (1) the budget is not appropriate or reasonable for the requirement; (2) only a portion of the application is selected for award; (3) the Government needs additional information to determine that the recipient is capable of complying with the requirements in 10 CFR part 600; and/or (4) special terms and conditions are required. Failure to resolve satisfactorily the issues identified by the Government will preclude award to the applicant.

C. ANTICIPATED NOTICE OF SELECTION AND AWARD DATES

DOE anticipates notifying applicants selected for award by the end of August, 2009 and making awards by the end of September, 2009.

Part VI - AWARD ADMINISTRATION INFORMATION

A. AWARD NOTICES

1. Notice of Selection

DOE will notify applicants selected for negotiation of award. This notice of selection is not an authorization to begin performance. (See Part IV.G with respect to the allowability of pre-award costs.)

Organizations whose applications have not been selected will be advised as promptly as possible. This notice will explain why the application was not selected.

2. Notice of Award

A Notice of Financial Assistance Award issued by the contracting officer is the authorizing award document. It normally includes, either as an attachment or by reference: 1. Special Terms and Conditions; 2. Applicable program regulations, if any; 3. Application as approved by DOE; 4. DOE assistance regulations at 10 CFR part 600, or, for Federal Demonstration Partnership (FDP) institutions, the FDP terms and conditions; 5. National Policy Assurances To Be Incorporated As Award Terms; 6. Budget Summary; and 7. Federal Assistance Reporting Checklist, which identifies the reporting requirements.

B. ADMINISTRATIVE AND NATIONAL POLICY REQUIREMENTS

1. Administrative Requirements

The administrative requirements for DOE grants and cooperative agreements are contained in 10 CFR part 600 (See: <http://ecfr.gpoaccess.gov>), except for grants made to Federal Demonstration Partnership (FDP) institutions. The FDP terms and conditions and DOE FDP agency specific terms and conditions are located on the National Science Foundation web site at http://www.nsf.gov/awards/managing/fed_dem_part.jsp.

2. Special Terms and Conditions and National Policy Requirements

The DOE Special Terms and Conditions for Use in Most Grants and Cooperative Agreements are located at <http://www.management.energy.gov/documents/specialtermsandcondition308.pdf>. The National Policy Assurances To Be Incorporated As Award Terms are located at http://management.energy.gov/business_doe/1374.htm.

3. Intellectual Property Provisions

The standard DOE financial assistance intellectual property provisions applicable to the various types of recipients are located at http://www.gc.doe.gov/financial_assistance_awards.htm.

4. Statement of Substantial Involvement

Either a grant or cooperative agreement may be awarded under this program announcement. If the award is a cooperative agreement, the DOE Specialist and DOE Project Officer will negotiate a Statement of Substantial Involvement prior to award.

C. REPORTING

Reporting requirements are identified on the Federal Assistance Reporting Checklist, DOE F 4600.2, attached to the award agreement. The proposed Checklist for this program can be found at https://www.eere-pmc.energy.gov/procurement/FinancialAssistance/Forms/DOE_Forms/DOEF4600_2.doc.

PART VII - QUESTIONS

QUESTIONS

Questions regarding the content of the announcement must be submitted through the FedConnect portal. You must register with FedConnect to respond as an interested party to submit questions, and to view responses to questions. It is recommended that you register as soon after release of the FOA as possible to have the benefit of all responses. More information is available at https://www.fedconnect.net/FedConnect/PublicPages/FedConnect_Ready_Set_Go.pdf. DOE will try to respond to a question within 3 business days, unless a similar question and answer have already been posted on the website.

Questions pertaining to the **submission** of applications through FedConnect should be directed by e-mail to support@FedConnect.net or by phone to FedConnect Support at 800-899-6665.

PART VIII - OTHER INFORMATION

A. MODIFICATIONS

Notices of any modifications to this announcement will be posted on Grants.gov and the FedConnect portal. You can receive an email when a modification or an announcement message is posted by registering with FedConnect as an interested party for this FOA. It is recommended that you register as soon after release of the FOA as possible to ensure you receive timely notice of any modifications or other announcements.

B. GOVERNMENT RIGHT TO REJECT OR NEGOTIATE

DOE reserves the right, without qualification, to reject any or all applications received in response to this announcement and to select any application, in whole or in part, as a basis for negotiation and/or award.

C. COMMITMENT OF PUBLIC FUNDS

The Contracting Officer is the only individual who can make awards or commit the Government to the expenditure of public funds. A commitment by other than the Contracting Officer, either explicit or implied, is invalid.

D. PROPRIETARY APPLICATION INFORMATION

Patentable ideas, trade secrets, proprietary or confidential commercial or financial information, disclosure of which may harm the applicant, should be included in an application only when such information is necessary to convey an understanding of the proposed project. The use and disclosure of such data may be restricted, provided the applicant includes the following legend on the first page of the project narrative and specifies the pages of the application which are to be restricted:

“The data contained in pages _____ of this application have been submitted in confidence and contain trade secrets or proprietary information, and such data shall be used or disclosed only for evaluation purposes, provided that if this applicant receives an award as a result of or in connection with the submission of this application, DOE shall have the right to use or disclose the data herein to the extent provided in the award. This restriction does not limit the government’s right to use or disclose data obtained without restriction from any source, including the applicant.”

To protect such data, each line or paragraph on the pages containing such data must be specifically identified and marked with a legend similar to the following:

“The following contains proprietary information that (name of applicant) requests not be released to persons outside the Government, except for purposes of review and evaluation.”

E. EVALUATION AND ADMINISTRATION BY NON-FEDERAL PERSONNEL

In conducting the merit review evaluation, the Government may seek the advice of qualified non-Federal personnel as reviewers. The Government may also use non-Federal personnel to conduct routine, nondiscretionary administrative activities. The applicant, by submitting its application, consents to the use of non-Federal reviewers/administrators. Non-Federal reviewers must sign conflict of interest and non-disclosure agreements prior to reviewing an application. Non-Federal personnel conducting administrative activities must sign a non-disclosure agreement.

F. INTELLECTUAL PROPERTY DEVELOPED UNDER THIS PROGRAM

Patent Rights. The government will have certain statutory rights in an invention that is conceived or first actually reduced to practice under a DOE award. 42 U.S.C. 5908 provides that title to such inventions vests in the United States, except where 35 U.S.C. 202 provides otherwise for nonprofit organizations or small business firms. However, the Secretary of Energy may waive all or any part of the rights of the United States subject to certain conditions. (See “Notice of Right to Request Patent Waiver” in paragraph G below.)

Rights in Technical Data. Normally, the government has unlimited rights in technical data created under a DOE agreement. Delivery or third party licensing of proprietary software or data developed solely at private expense will not normally be required except as specifically negotiated in a particular agreement to satisfy DOE’s own needs or to insure the commercialization of technology developed under a DOE agreement.

Special Protected Data Statutes. This program is covered by a special protected data statute. The provisions of the statute provide for the protection from public disclosure, for a period of up to 5 years from the development of the information, of data that would be trade secret, or commercial or financial information that is privileged or confidential, if the information had been obtained from a non-Federal party. Generally, the provision entitled, Rights in Data – Programs Covered Under Special Protected Data Statutes, (10 CFR 600 Appendix A to Subpart D), would apply to an award made under this announcement. This provision will identify data or categories of data first produced in the performance of the award that will be made available to the public, notwithstanding the statutory authority to withhold data from public dissemination, and will also identify data that will be recognized by the parties as protected data. For national laboratories and Federally Funded Research and Development Centers, the data rights clause in applicant’s management and operating contract will apply.

G. NOTICE OF RIGHT TO REQUEST PATENT WAIVER

Applicants may request a waiver of all or any part of the rights of the United States in inventions conceived or first actually reduced to practice in performance of an agreement as a result of this announcement, in advance of or within 30 days after the effective date of the award. Even if such advance waiver is not requested or the request is denied, the recipient will have a continuing right under the award to request a waiver of the rights of the United States in identified inventions, i.e., individual inventions conceived or first actually reduced to practice in performance of the award. Any patent waiver that may be granted is subject to certain terms and conditions in 10 CFR 784.

Domestic small businesses and domestic nonprofit organizations will receive the patent rights clause at 37 CFR 401.14, i.e., the implementation of the Bayh-Dole Act. This clause permits domestic small business and domestic nonprofit organizations to retain title to subject inventions. Therefore, small businesses and nonprofit organizations do not need to request a waiver.

H. NOTICE REGARDING ELIGIBLE/INELIGIBLE ACTIVITIES

Eligible activities under this program include those which describe and promote the understanding of scientific and technical aspects of specific energy technologies, but not those which encourage or support political activities such as the collection and dissemination of information related to potential, planned or pending legislation.

I. NOTICE OF RIGHT TO CONDUCT A REVIEW OF FINANCIAL CAPABILITY

DOE reserves the right to conduct an independent third party review of financial capability for applicants that are selected for negotiation of award (including personal credit information of principal(s) of a small business if there is insufficient information to determine financial capability of the organization).

J. NOTICE OF POTENTIAL DISCLOSURE UNDER FREEDOM OF INFORMATION ACT

Applicants should be advised that identifying information regarding all applicants, including applicant names and/or points of contact, may be subject to public disclosure under the Freedom of Information Act, whether or not such applicants are selected for negotiation of award.

REFERENCE MATERIAL

Appendix A – Definitions

“Amendment” means a revision to a Funding Opportunity Announcement

"Applicant" means the legal entity or individual signing the Application. This entity or individual may be one organization or a single entity representing a group of organizations (such as a Consortium) that has chosen to submit a single Application in response to a Funding Opportunity Announcement.

"Application" means the documentation submitted in response to a Funding Opportunity Announcement.

“Authorized Organization Representative (AOR)” is the person with assigned privileges who is authorized to submit grant applications through Grants.gov on behalf of an organization. The privileges are assigned by the organization’s E-Business Point of Contact designated in the CCR.

"Award" means the written documentation executed by a DOE Contracting Officer, after an Applicant is selected, which contains the negotiated terms and conditions for providing Financial Assistance to the Applicant. A Financial Assistance Award may be either a Grant or a Cooperative Agreement.

"Budget" means the cost expenditure plan submitted in the Application, including both the DOE contribution and the Applicant Cost Share.

"Consortium (plural consortia)" means the group of organizations or individuals that have chosen to submit a single Application in response to a Funding Opportunity Announcement. For purposes of this FOA, each consortium must include an industrial/agricultural equipment OEM. One entity must be designated as the lead (Applicant) by the members of the consortium.

"Contracting Officer" means the DOE official authorized to execute Awards on behalf of DOE and who is responsible for the business management and non-program aspects of the Financial Assistance process.

"Cooperative Agreement" means a Financial Assistance instrument used by DOE to transfer money or property when the principal purpose of the transaction is to accomplish a public purpose of support or stimulation authorized by Federal statute, and Substantial Involvement (see definition below) is anticipated between DOE and the Applicant during the performance of the contemplated activity.

"Cost Sharing" means the respective share of Total Project Costs to be contributed by the Applicant and by DOE. The percentage of Applicant Cost Share is to be applied to the Total Project Cost (i.e., the sum of Applicant plus DOE Cost Shares) rather than to the DOE contribution alone.

“Central Contractor Registry (CCR)” is the primary database which collects, validates, stores and disseminates data in support of agency missions. Funding Opportunity Announcements which require application submission through Grants.gov require that the organization first be registered in the CCR at <http://www.grants.gov/CCRRegister>.

“Credential Provider” is an organization that validates the electronic identity of an individual through electronic credentials, PINS, and passwords for Grants.gov. Funding Opportunity Announcements which require application submission through Grants.gov require that the individual applying on behalf of an organization first be registered with the Credential Provider at <https://apply.grants.gov/OrcRegister>.

“Data Universal Numbering System (DUNS) Number” is a unique nine-character identification number issued by Dun and Bradstreet (D&B). Organizations must have a DUNS number prior to registering in the CCR. Call 1-866-705-5711 to receive one free of charge. http://www.grants.gov/applicants/request_duns_number.jsp

“E-Business Point of Contact (POC)” is the individual who is designated as the Electronic Business Point of Contact in the CCR registration. This person is the sole authority of the organization with the capability of designating or revoking an individual’s ability to submit grant applications on behalf of their organization through Grants.gov.

“E-Find” is a Grants.gov webpage where you can search for Federal Funding Opportunities in FedGrants. <http://www.grants.gov/search/searchHome.do>

"Financial Assistance" means the transfer of money or property to an Applicant or Participant to accomplish a public purpose of support authorized by Federal statute through Grants or Cooperative Agreements and sub-awards. For DOE, it does not include direct loans, loan guarantees, price guarantees, purchase agreements, Cooperative Research and Development Agreements (CRADAs), or any other type of financial incentive instrument.

“Federally Funded Research and Development Center (FFRDC)” means a research laboratory as defined by Federal Acquisition Regulation 35.017.

“Funding Opportunity Announcement (FOA)” is a publicly available document by which a Federal agency makes known its intentions to award discretionary grants or cooperative agreements, usually as a result of competition for funds. Funding opportunity announcements may be known as program announcements, notices of funding availability, solicitations, or other names depending on the agency and type of program.

"Grant" means a Financial Assistance instrument used by DOE to transfer money or property when the principal purpose of the transaction is to accomplish a public purpose of support or stimulation authorized by Federal statute, and no Substantial Involvement is anticipated between DOE and the Applicant during the performance of the contemplated activity.

“Grants.gov” is the “storefront” web portal which allows organizations to electronically find and apply for competitive grant opportunities from all Federal grant-making agencies.

Grants.gov is THE single access point for over 900 grant programs offered by the 26 Federal grant-making agencies. <http://www.grants.gov>

“High Impact Feedstock” is a feedstock that is domestically available and has the ultimate sustainable potential of at least 100 million dry metric tonnes of biomass per year.

“Industry Interactive Procurement System (IIPS)” is DOE’s Internet-based procurement system which allows access to DOE’s business opportunities database, allows user registration and submittal of Applications: <http://e-center.doe.gov/>.

"Key Personnel" means the individuals who will have significant roles in planning and implementing the proposed Project on the part of the Applicant and Participants, including FFRDCs.

“Marketing Partner Identification Number (MPIN)” is a very important password designated by your organization when registering in CCR. The E-Business Point of Contact will need the MPIN to login to Grants.gov to assign privileges to the individual(s) authorized to submit applications on behalf of your organization. The MPIN must have 9 digits containing at least one alpha character (must be in capital letters) and one number (no spaces or special characters permitted).

OEM, Original Equipment Manufacturer, For purposes of this FOA, OEM means an industrial or agricultural equipment manufacturer engaged in the production of harvesting machines, transport vehicles or similar types of equipment used in the production, harvesting, preprocessing, and transport of energy crops or crop residues.

"Participant" for purposes of this Funding Opportunity Announcement only, means any entity, (including all parties to the Application at any tier), responding to the Funding Opportunity Announcement.

“Principal Investigator” refers to the technical point of contact/Project Manager for a specific project award.

"Project" means the set of activities described in an Application, State plan, or other document that is approved by DOE for Financial Assistance (whether such Financial Assistance represents all or only a portion of the support necessary to carry out those activities).

“Proposal” is the term used in IIPS meaning the documentation submitted in response to a Funding Opportunity Announcement. Also see Application.

“Recipient” means the organization, individual, or other entity that receives a Financial Assistance Award from DOE, is financially accountable for the use of any DOE funds or property provided for the performance of the Project, and is legally responsible for carrying out the terms and condition of the award.

"Selection" means the determination by the DOE Selection Official that negotiations take place for certain Projects with the intent of awarding a Financial Assistance instrument.

"Selection Official" means the DOE official designated to select Applications for negotiation toward Award under a subject Funding Opportunity Announcement.

"Substantial Involvement" means involvement on the part of the Government. DOE's involvement may include shared responsibility for the performance of the Project; providing technical assistance or guidance which the Applicant is to follow; and the right to intervene in the conduct or performance of the Project. Such involvement will be negotiated with each Applicant prior to signing any agreement.

"Total Project Cost" means all the funds to complete the effort proposed by the Applicant, including DOE funds (including direct funding of any FFRDC) plus all other funds that will be committed by the Applicant as Cost Sharing.

Appendix B - EAct 2005 Sec. 932. BIOENERGY PROGRAM

(a) DEFINITIONS:—In this section:

(1) BIOMASS.—The term “biomass” means—

(A) any organic material grown for the purpose of being converted to energy;

(B) any organic byproduct of agriculture (including wastes from food production and processing) that can be converted into energy; or

(C) any waste material that can be converted to energy, is segregated from other waste materials, and is derived from—

(i) any of the following forest-related resources: mill residues, precommercial thinnings, slash, brush, or otherwise non-merchantable material; or

(ii) wood waste materials, including waste pallets, crates, dunnage, manufacturing and construction wood wastes (other than pressure-treated, chemically-treated, or painted wood wastes), and landscape or right-of-way tree trimmings, but not including municipal solid waste, gas derived from the biodegradation of municipal solid waste or paper that is commonly recycled.

(2) LIGNOCELLULOSIC FEEDSTOCK.—The term “lignocellulosic feedstock” means any portion of a plant or coproduct from conversion, including crops, trees, forest residues, and agricultural residues *not specifically grown for food*, [emphasis added] including from barley grain, grapeseed, rice bran, rice hulls, rice straw, soybean matter, and sugarcane bagasse.

(b) PROGRAM.—The Secretary shall conduct a program of research, development, demonstration, and commercial application for bioenergy, including—

(1) biopower energy systems;

(2) biofuels;

(3) bioproducts;

(4) integrated biorefineries that may produce biopower, biofuels, and bioproducts;

(5) cross-cutting research and development in feedstocks; and

(6) economic analysis

(c) BIOFUELS AND BIOPRODUCTS.— The goals of the biofuels and bioproducts programs shall be to develop, in partnership with industry and institutions of higher education—

(1) advanced biochemical and thermochemical conversion technologies capable of making biofuels from lignocellulosic feedstocks that are price-competitive with gasoline or diesel in either internal combustion engines or fuel cell-powered vehicles;

(2) advanced biotechnology processes capable of making biofuels and bioproducts with emphasis on development of biorefinery technologies using enzyme-based processing systems;

(3) advanced biotechnology processes capable of increasing energy production from lignocellulosic feedstocks, with emphasis on reducing the dependence of industry on fossil fuels in manufacturing facilities; and

(4) other advanced processes that will enable the development of cost-effective bioproducts, including biofuels.

(d) INTEGRATED BIOREFINERY DEMONSTRATION PROJECTS—

(1) IN GENERAL.—The Secretary shall carry out a program to demonstrate the

commercial application of integrated biorefineries. The Secretary shall ensure geographical distribution of biorefinery demonstrations under this subsection. The Secretary shall not provide more than \$100,000,000 under this subsection for any single biorefinery demonstration. In making awards under this subsection, the Secretary shall encourage—

- (A) the demonstration of a wide variety of lignocellulosic feedstocks;
- (B) the commercial application of biomass technologies for a variety of uses, including –
 - (i) Liquid transportation fuels;
 - (ii) High-value biobased chemicals
 - (iii) Substitutes for petroleum-based feedstocks and products; and
 - (iv) Energy in the form of electricity or useful heat; and
- (C) the demonstration of the collection and treatment of a variety of biomass feedstocks.

(2) PROPOSALS.—Not later than 6 months after the date of enactment of this Act, the Secretary shall solicit proposals for demonstration of advanced biorefineries. The Secretary shall select only proposals that—

- (A) demonstrate that the project will be able to operate profitably without direct Federal subsidy after initial construction costs are paid; and
- (B) enable the biorefinery to be easily replicated.

Appendix C – Cost Share Information

Cost Sharing or Cost Matching

The terms “cost sharing” and “cost matching” are often used synonymously. Even the DOE Financial Assistance Regulations, 10 CFR Part 600, use both of the terms in the titles specific to regulations applicable to cost sharing. DOE almost always uses the term “cost sharing,” as it conveys the concept that **non-federal share is calculated as a percentage of the Total Project Cost**. An exception is the State Energy Program Regulation, 10 CFR Part 420.12, State Matching Contribution. Here “cost matching” for the non-federal share is calculated as a percentage of the federal funds only, rather than the Total Project Cost.

How Cost Sharing Is Calculated

As stated above, cost sharing is calculated as a percentage of the Total Project Cost. Following is an example of how to calculate cost sharing amounts for a project with \$1,000,000 in federal funds with a minimum 20% non-federal cost sharing requirement:

Formula: Federal share (\$) divided by Federal share (%) = Total Project Cost

Example: \$1,000,000 divided by 80% = \$1,250,000

Formula: Total Project Cost (\$) minus Federal share (\$) = Non-federal share (\$)

Example: \$1,250,000 minus \$1,000,000 = \$250,000

Formula: Non-federal share (\$) divided by Total Project Cost (\$) = Non-federal share (%)

Example: \$250,000 divided by \$1,250,000 = 20%

See the sample cost share calculation for a blended cost share percentage below. **Keep in mind that Federal laboratory funding is part of the Federal share.**

What Qualifies For Cost Sharing

While it is not possible to explain what specifically qualifies for cost sharing in one or even a couple of sentences, in general, if a cost is allowable under the cost principles applicable to the organization incurring the cost and is eligible for reimbursement under a DOE grant or cooperative agreement, then it is allowable as cost share. Conversely, if the cost is not allowable under the cost principles and not eligible for reimbursement, then it is not allowable as cost share. In addition, costs may not be counted as cost share if they are paid by the Federal Government under another award unless authorized by Federal statute to be used for cost sharing.

The rules associated with what is allowable as cost share are specific to the type of organization that is receiving funds under the grant or cooperative agreement, though are generally the same for all types of entities. The specific rules applicable to:

- Institutions of Higher Education, Hospitals, and Other Nonprofit Organizations are

found at 10 CFR600.123;

- State and Local Governments are found at 10 CFR600.224;
- For-profit Organizations are found at 10 CFR600.313.

In addition to the regulations referenced above, other factors may also come into play such as timing of donations and length of the project period. For example, the value of ten years of donated maintenance on a project that has a project period of five years would not be fully allowable as cost share. Only the value for the five years of donated maintenance that corresponds to the project period is allowable and may be counted as cost share.

Additionally, DOE generally does not allow pre-award costs for either cost share or reimbursement when these costs precede the signing of the appropriation bill that funds the award. In the case of a competitive award, DOE generally does not allow pre-award costs prior to the signing of the Selection Statement by the DOE Selection Official.

Following is a link to the DOE Financial Assistance Regulations. You can click on the specific section for each Code of Federal Regulations reference mentioned above.

DOE Financial Assistance Regulations:

<http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=98a996164312e8dcf0df9c22912852b0&rgn=div5&view=text&node=10:4.0.1.3.9&idno=10>

As stated above, the rules associated with what is allowable cost share are generally the same for all types of organizations. Following are the rules found to be common, but again, the specifics are contained in the regulations and cost principles specific to the type of entity:

(A) *Acceptable contributions.* All contributions, including cash contributions and third party in-kind contributions, must be accepted as part of the recipient's cost sharing if such contributions meet all of the following criteria:

- (1) They are verifiable from the recipient's records.
- (2) They are not included as contributions for any other federally-assisted project or program.
- (3) They are necessary and reasonable for proper and efficient accomplishment of project or program objectives.
- (4) They are allowable under the cost principles applicable to the type of entity incurring the cost as follows:

(a) *For-profit organizations.* Allowability of costs incurred by for-profit organizations and those nonprofit organizations listed in Attachment C to OMB Circular A-122 is determined in accordance with the for-profit costs principles in 48 CFR Part 31 in the Federal Acquisition Regulation, except that patent prosecution costs are not allowable unless specifically authorized

in the award document.

(b) *Other types of organizations.* Allowability of costs incurred by other types of organizations that may be subrecipients under a prime award is determined as follows:

(i) *Institutions of higher education.* Allowability is determined in accordance with OMB Circular No. A-21 -- Cost Principles for Educational Institutions

(ii) *Other nonprofit organizations.* Allowability is determined in accordance with OMB Circular A-122, Cost Principles for Non-Profit Organizations

(iii) *Hospitals.* Allowability is determined in accordance with the provisions of 45 CFR Part 74, Appendix E, Principles for Determining Costs Applicable to Research and Development Under Grants and Contracts with Hospitals

(iv) *Governmental organizations.* Allowability for State, local, or federally recognized Indian tribal government is determined in accordance with OMB Circular No. A-87, Cost Principles for State, Local, and Indian Tribal Governments

(5) They are not paid by the Federal Government under another award unless authorized by Federal statute to be used for cost sharing or matching.

(6) They are provided for in the approved budget.

(B) *Valuing and documenting contributions*

(1) *Valuing recipient's property or services of recipient's employees.* Values are established in accordance with the applicable cost principles, which means that amounts chargeable to the project are determined on the basis of costs incurred. For real property or equipment used on the project, the cost principles authorize depreciation or use charges. The full value of the item may be applied when the item will be consumed in the performance of the award or fully depreciated by the end of the award. In cases where the full value of a donated capital asset is to be applied as cost sharing or matching, that full value must be the lesser or the following:

(a) The certified value of the remaining life of the property recorded in the recipient's accounting records at the time of donation; or

(b) The current fair market value. If there is sufficient justification, the contracting officer may approve the use of the current fair market value of the donated property, even if it exceeds the certified value at the time of donation to the project. The contracting officer may accept the use of any reasonable basis for determining the fair market value of the

property.

- (2) *Valuing services of others' employees.* If an employer other than the recipient furnishes the services of an employee, those services are valued at the employee's regular rate of pay, provided these services are for the same skill level for which the employee is normally paid. Fringe and overhead expenses on others' employee services are treated differently depending on the type of organization. No fringe or overhead is allowed for State and Local Governments, fringe and overhead are allowed for For-profit Organizations, and fringe but no overhead is allowed for Universities, Non-profits, and Hospitals.
- (3) *Valuing volunteer services.* Volunteer services furnished by professional and technical personnel, consultants, and other skilled and unskilled labor may be counted as cost sharing or matching if the service is an integral and necessary part of an approved project or program. Rates for volunteer services must be consistent with those paid for similar work in the recipient's organization. In those markets in which the required skills are not found in the recipient organization, rates must be consistent with those paid for similar work in the labor market in which the recipient competes for the kind of services involved. In either case, paid fringe benefits that are reasonable, allowable, and allocable may be included in the valuation.
- (4) *Valuing property donated by third parties.*
 - (a) Donated supplies may include such items as office supplies or laboratory supplies. Value assessed to donated supplies included in the cost sharing or matching share must be reasonable and must not exceed the fair market value of the property at the time of the donation.
 - (b) Normally only depreciation or use charges for equipment and buildings may be applied. However, the fair rental charges for land and the full value of equipment or other capital assets may be allowed, when they will be consumed in the performance of the award or fully depreciated by the end of the award, provided that the contracting officer has approved the charges. When use charges are applied, values must be determined in accordance with the usual accounting policies of the recipient, with the following qualifications:
 - (i) The value of donated space must not exceed the fair rental value of comparable space as established by an independent appraisal of comparable space and facilities in a privately-owned building in the same locality.
 - (ii) The value of loaned equipment must not exceed its fair rental value.
- (5) *Documentation.* The following requirements pertain to the recipient's supporting records for in-kind contributions from third parties:

- (a) Volunteer services must be documented and, to the extent feasible, supported by the same methods used by the recipient for its own employees.
- (b) The basis for determining the valuation for personal services and property must be documented.

Appendix D – Requirements and Guidance for Preparing Responses

The purpose of this appendix is to assist applicants in developing their response to the Funding Opportunity Announcement (FOA) criteria. This appendix provides a discussion of the requirements and guidance in order to help the applicant provide focused responses to the subjects that DOE considers important. This will align with the guidance that will be given to the Merit Review Committee (MRC) to direct its evaluation of the applications and assess the applicant’s ability to prepare an application that addresses the goals of the FOA.

As stated in Part V of the FOA, applicants should ensure that all criteria are addressed in terms of the applicant’s historical performance, experience, data (including the objectives and quality control measures for collecting the data), as well as their current ability and future plans to rapidly advance the proposed system to commercialization.

The application (including all required attachments) should be written to fully address each criterion. In its evaluations, deliberations, and scoring, the MRC is not allowed to use any information from any source, except what is provided in the application. References to other documents or to websites for additional information, photographs, data, etc. will be ignored by the MRC by direction. MRC panel members are also forbidden from obtaining additional information by contacting the applicant or other parties. This restriction is required so each application will be evaluated based on a standardized and consistent set of information.

The applicant may include additional clarifying information as long as the page limit is not exceeded. Each submitted document must be within the stated page limit defined in Part IV.C.

1. Project Narrative, Including the Merit Review Criteria Discussion

The project narrative shall consist of 3 major sections: overview; project description (for the project proposed in response to the FOA); and, the merit review criteria discussion.

a. Overview

The narrative should begin with a brief overview of the project. The overview should summarize the following subjects:

- i. For the project proposed in response to the FOA – Summarize the goals and targets, the major actions that will be completed to meet them, and the schedule for completing them.
- ii. Forecasted commercial application –Assuming the project meets its goals and targets, describe/forecast how the system developed from the project will lead to the eventual market penetration and how that will impact the biofuels industry.

b. Project Description

Following the overview, the remainder of the response to this criterion should focus primarily on the details of the project. The applicant should identify those areas that would face the largest uncertainties and what actions will be taken to mitigate these risks.

The application must describe the items listed below. The order and grouping of the information in the application is at the discretion of the applicant.

The information used to demonstrate the likelihood of success should be described in the application and in particular in the Project Narrative, budget documents, the project timeline, and the IP information.

- i. Describe the proposed comprehensive system including individual components, equipment and processes. Discuss the current status of any competing systems and how they compare to the proposed system. Emphasize merits of the proposed system.
- ii. A description of key activities. The schedule should include time periods for conceptual and detailed design, procurement, fabrication, and demonstration. The schedule should clearly identify all go/no-go decision points.
- iii. Summarize the procedures that will be used for ensuring compliance with the National Environmental Policy Act (NEPA) and Federal, state and local environmental, siting, and zoning requirements (see specific guidance in Appendix E of the FOA).
- iv. Justify the ability to scale from the proposed system to future commercial distribution including industry acceptance.

c. Merit Review Criteria Discussion

The technical, budget and other information should demonstrate the likelihood of successfully achieving the project goals and targets. The merits of the proposed comprehensive system will be scored as well as the quality of the discussion to support industry acceptance.

Criterion 1: Technical Merit Weight: [35%]

The application demonstrates the technical merit and rationale for the proposed project. The technical description of the proposed project adequately presents and justifies that the proposed project:

Adequately addresses the handling of feedstock characteristics such as moisture content, stability, uniform size, flowability, composition and bulk density.

Clearly defines the scope, schedule, and budget, demonstrating that the project will be able to achieve its goals and objectives as planned.

Defines and establishes the applicant's rights to use and commercialize the proposed system/technology.

Rating example: Demonstrated availability and experienced suppliers and processors capable of meeting or exceeding the designed throughput would rate higher than an application that simply states the feedstocks will be available when and where needed.

Criterion 2: Work Plan Weight: [35%]

Adequately explains the extent to which the proposed goals and objectives are likely to lead to industry acceptance of the comprehensive system.

Go/no-go decision points are described and coordinated with a schedule including how progress will be measured.

The application demonstrates through the project schedule and related documents that the applicant is likely to successfully complete the project within proposed budget and on schedule.

The application demonstrates the knowledge of and a plan to address all environmental, health and safety, permitting, and compliance concerns.

Rating Example: Significant weight will be placed on the discussion of issues in the current industrial equipment market and the probabilities of adapting new equipment or comprehensive systems. A comprehensive discussion addressing the various factors involved in industry receptiveness to change would be more favorably reviewed than a single comment.

Criterion 3: Roles, Responsibilities and Capabilities Weight: [30%]

The extent to which applicant adequately demonstrates that it has the core competencies necessary to cover all project aspects including but not limited to, feedstocks management, engineering, process development, financing, and product marketing. Any partnerships with organizations such as industrial, academic, biorefineries, and national labs, are clearly defined. Address the qualifications of team undertaking the work, including an explanation of their:

Experience in designing, engineering and fabricating similar systems or system components.

Evidence of industrial-scale experience in all proposed key technology areas.

Experience managing communications within the team and between the team and outside entities, such as growers, suppliers, fabricators, customers, DOE, etc.

APPENDIX E - National Environmental Policy Act (NEPA) Submittal Requirements and Guidance

All proposed actions that involve U.S. government decisions or resources must be evaluated to determine how environmental impact review requirements apply. All new projects must be analyzed to determine if permitting issues must be addressed.

If an applicant moves forward with activities that are not authorized for federal funding by the DOE Contracting Officer in advance of the final NEPA decision, they are doing so at risk of not receiving federal funding and such costs may not be recognized as allowable cost share.

Under NEPA, all "major federal actions" or projects affecting the quality of human health and the environment must be reviewed to evaluate their environmental effects and to identify project alternatives. The depth of review required varies with a project's environmental impact sensitivity. All reviews require the collection and analysis of data about the project. For some, the information is readily available or obtainable. This NEPA review process must be completed before final decisions are made by DOE officials to begin the project or action, or before irretrievably committing substantial federal resources. Limited Federal funds may be available or cost share may be allowed to cover some costs associated with conducting the NEPA review.

Under DOE's implementing regulations, NEPA review requirements apply to **all proposed actions**, not only those that are considered "major" federal actions with potentially significant impacts. The process must begin as early as possible in the project planning cycle since the review must be completed by DOE before committing resources, or before actually starting the award or project activities on non-construction projects.

Decisions as to whether the NEPA review process is adequate rest with DOE; and DOE cannot delegate the authority to make NEPA determinations to contractors or to the grantees.

“Project funds” may be DOE funds, cost share funds, or a combination of both. For projects selected for negotiation of an award, the NEPA information must be provided for EACH location at which activities will be done under this project including support facilities, such as laboratories, test plot locations, fields, feedstock sources, and so forth.

Each applicant selected for negotiation of an award must provide a description of projected environmental consequences specific to the proposed project as well as mitigation measures to reduce its impacts.

The following outlines the typical DOE NEPA process that follows the Selection Officials notice to negotiate for award.

- a. After the initial award, the selected applicants will be asked to submit NEPA information for all locations at which work will be done under the proposed project.
- b. The NEPA Compliance Staff and the DOE project management team will work with the applicant to identify any additional information required.

Appendix F – Personally Identifiable Information

In responding to this Announcement, Applicants must ensure that Protected Personally Identifiable Information (PII) is not included in the following documents: Project Abstract, Project Narrative, Biographical Sketches, Budget or Budget Justification. These documents will be used by the Merit Review Committee in the review process to evaluate each application. PII is defined by the Office of Management and Budget (OMB) and DOE as:

Any information about an individual maintained by an agency, including but not limited to, education, financial transactions, medical history, and criminal or employment history and information that can be used to distinguish or trace an individual's identity, such as their social security number, date and place of birth, mother's maiden name, biometric records, etc., including any other personal information that is linked or linkable to an individual.

This definition of PII can be further defined as: (1) Public PII and (2) Protected PII.

1. **Public PII:** PII found in public sources such as telephone books, public websites, business cards, university listing, etc. Public PII includes first and last name, address, work telephone number, email address, home telephone number, and general education credentials.
2. **Protected PII:** PII that requires enhanced protection. This information includes data that if compromised could cause harm to an individual such as identity theft.

Listed below are examples of Protected PII that Applicants must not include in the files listed above to be evaluated by the Merit Review Committee.

- Social Security Numbers in any form
- Place of Birth associated with an individual
- Date of Birth associated with an individual
- Mother's maiden name associated with an individual
- Biometric record associated with an individual
- Fingerprint
- Iris scan
- DNA
- Medical history information associated with an individual
- Medical conditions, including history of disease
- Metric information, e.g. weight, height, blood pressure
- Criminal history associated with an individual
- Employment history and other employment information associated with an individual
- Ratings
- Disciplinary actions

- Performance elements and standards (or work expectations) are PII when they are so intertwined with performance appraisals that their disclosure would reveal an individual's performance appraisal
- Financial information associated with an individual
- Credit card numbers
- Bank account numbers
- Security clearance history or related information (not including actual clearances held)

Listed below are examples of Public PII that Applicants may include in the files listed above to be evaluated by the Merit Review Committee:

- Phone numbers (work, home, cell)
- Street addresses (work and personal)
- Email addresses (work and personal)
- Digital pictures
- Medical information included in a health or safety report
- Employment information that is not PII even when associated with a name
- Resumes, unless they include a Social Security Number
- Present and past position titles and occupational series
- Present and past grades
- Present and past annual salary rates (including performance awards or bonuses, incentive awards, merit pay amount, Meritorious or Distinguished Executive Ranks, and allowances and differentials)
- Present and past duty stations and organization of assignment (includes room and phone numbers, organization designations, work email address, or other identifying information regarding buildings, room numbers, or places of employment)
- Position descriptions, identification of job elements, and those performance standards (but not actual performance appraisals) that the release of which would not interfere with law enforcement programs or severely inhibit agency effectiveness
- Security clearances held
- Written biographies (e.g. to be used in a program describing a speaker)
- Academic credentials
- Schools attended
- Major or area of study
- Personal information stored by individuals about themselves on their assigned workstation or laptop unless it contains a Social Security Number

Appendix G – SF-424A Directions/Sample

Applicant Name: (Complete)

Award Number: (Leave Blank)

Budget Information - Non Construction Programs

This is an example of a cumulative budget. The Grand Total Fed \$ / Non-Fed \$ on this form should also match the SF-424 Application and the Budget Justification Grand Totals.

OMB Approval No. 0348-0044

Section A - Budget Summary						
Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. Year 1	81.087	(Leave blank)	(Leave blank)	(Enter Yr. 1 Fed \$)	(Enter Yr. 1 Non-Fed \$)	(Yr. 1 Total Fed / Non-Fed \$)
2. Year 2	81.087	(Leave blank)	(Leave blank)	(Enter Yr. 2 Fed \$)	(Enter Yr. 2 Non-Fed \$)	(Yr. 2 Total Fed / Non-Fed \$)
3. Year 3	81.087	(Leave blank)	(Leave blank)	(Enter Yr. 3 Fed \$)	(Enter Yr. 3 Non-Fed \$)	(Yr. 3 Total Fed / Non-Fed \$)
4.						
5. Totals		\$0	\$0	(Total Fed \$)	(Total Non-Fed \$)	(Grand Total Fed / Non-Fed \$)
Section B - Budget Categories:						
6. Object Class Categories	Grant Program, Function or Activity				Total (5)	
	(1) (Yr. 1 budget)	(2) (Yr. 2 budget)	(3) (Yr. 3 budget)	(4)		
a. Personnel	(Complete all	(Complete all	(Complete all		(Total Fed / Non-Fed \$)	
b. Fringe Benefits	applicable	applicable	applicable		(Total Fed / Non-Fed \$)	
c. Travel	categories for	categories for	categories for		(Total Fed / Non-Fed \$)	
d. Equipment	Year 1 budget	Year 2 budget)	Year 3 budget)		(Total Fed / Non-Fed \$)	
e. Supplies	All categories	All categories	All categories		(Total Fed / Non-Fed \$)	
f. Contractual	must include both	must include both	must include both		(Total Fed / Non-Fed \$)	
g. Construction	federal share and	federal share and	federal share and		(Total Fed / Non-Fed \$)	
h. Other	applicant or	applicant or	applicant or		(Total Fed / Non-Fed \$)	
i. Total Direct Charges (sum of 6a-6h)	third-party	third-party	third-party	\$0	(Total Direct Fed / Non-Fed \$)	
j. Indirect Charges	cost share	cost share	cost share		(Total Fed / Non-Fed \$)	
k. Totals (sum of 6i-6j)	(Yr. 1 Total Fed / Non-Fed \$)	(Yr. 2 Total Fed / Non-Fed \$)	(Yr. 3 Total Fed / Non-Fed \$)	\$0	(Grand Total Fed / Non-Fed \$)	
7. Program Income					\$0	