

FINANCIAL ASSISTANCE FUNDING OPPORTUNITY ANNOUNCEMENT



**U. S. Department of Energy
National Energy Technology Laboratory**

Solid-State Lighting Core Technologies

Funding Opportunity Number: DE-PS26-08NT00290

Announcement Type: Amendment No. 001

CFDA Number: 81.086 Conservation Research and Development

Issue Date:	05/20/2008
Letter of Intent Due Date:	Not Applicable
Pre-Application Due Date:	Not Applicable
Application Due Date:	06/19/2008 at 8:00:00 PM Eastern Time

This announcement will remain open until the Application Due Date. Applications may be submitted at any time before the announcement closes.

The purpose of this amendment is to correct the application due date in Area of Interest One to 6/19/2008 and to correct inconsistencies in the Summary of Required Forms/Files Table located on Page 17. Corrections to the table are delineated in *bold italics*.

NOTE: NEW REQUIREMENTS FOR GRANTS.GOV

Where to Submit

Applications must be submitted through Grants.gov to be considered for award. You cannot submit an application through Grants.gov unless you are registered. Please read the registration requirements carefully and start the process immediately. Remember you have to update your CCR registration annually. If you have any questions about your registration, you should contact the Grants.gov Helpdesk at 1-800-518-4726 to verify that you are still registered in Grants.gov.

Registration Requirements

There are several one-time actions you must complete in order to submit an application through Grants.gov (e.g., obtain a Dun and Bradstreet Data Universal Numbering System (DUNS) number, register with the Central Contract Registry (CCR), register with the credential provider, and register with Grants.gov). See <http://www.grants.gov/GetStarted>. Use the Grants.gov Organization Registration Checklist at <http://www.grants.gov/assets/OrganizationReqCheck.pdf> to guide you through the process. Designating an E-Business Point of Contact (EBiz POC) and obtaining a special password called an MPIN are important steps in the CCR registration process. Applicants, who are not registered with CCR and Grants.gov, should allow at least 21 days to complete these requirements. It is suggested that the process be started as soon as possible.

IMPORTANT NOTICE TO POTENTIAL APPLICANTS: When you have completed the process, you should call the Grants.gov Helpdesk at 1-800-518-4726 to verify that you have completed the final step (i.e. Grants.gov registration).

Microsoft Vista and Office 2007 Compatibility

Grants.gov is currently incompatible with both the new Microsoft (MS) Vista Operating System and the new Microsoft (MS) Office 2007 versions of Word, Excel, and Power Point. In order to create and submit your application to Grants.gov, you must find a computer with a previous version Microsoft Operating System, such as Windows XP.

If you attach a file created using MS Office 2007, you will not get an error message when you submit the application, HOWEVER, your entire application will not be able to be processed or accepted at Grants.gov and will not reach DOE. Grants.gov can accept applications with attachments created in MS Office 2007 if the attachments are saved in the prior format. See the http://www.grants.gov/assets/Vista_and_office_07_Compatibility.pdf for detailed instructions on how to do this. A file created in MS Office 2007 can be identified by the "x" at the end of the file extension, for example "sample.docx" for a Word file. Contact Grants.gov at 1-800-518-4726 with any questions.

Questions

Questions relating to the registration process, system requirements, how an application form works, or the submittal process must be directed to Grants.gov at 1-800-518-4726 or support@grants.gov. Part VII of this announcement explains how to submit other questions to the U.S. Department of Energy (DOE).

Application Receipt Notices

After an application is submitted, the Authorized Organization Representative (AOR) will receive a series of five e-mails. It is extremely important that the AOR watch for and save each of the emails. It may take up to two (2) business days from application submission to receipt of email Number 2. When the AOR receives e-mail Number 5, it is their responsibility to follow the instructions in the e-mail to logon to IIPS and verify that their application was received by DOE. The titles of the five e-mails are:

- Number 1 – Grants.gov Submission Receipt Number
- Number 2 – Grants.gov Submission Validation Receipt for Application Number
- Number 3 – Grants.gov Grantor Agency Retrieval Receipt for Application Number
- Number 4 – Grants.gov Agency Tracking Number Assignment for Application Number
- Number 5 – DOE e-Center Grant Application Received

The last email will contain instructions for the AOR to register with the DOE e-Center. If the AOR is already registered with the DOE e-Center, the title of the last email changes to:

Number 5 – DOE e-Center Grant Application Received and Matched

This email will contain the direct link to the application in IIPS. The AOR will need to enter their DOE e-Center user id and password to access the application.

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PART I – FUNDING OPPORTUNITY DESCRIPTION

PURPOSE: The Department of Energy (DOE), National Energy Technology Laboratory (NETL), on behalf of the Office of Energy Efficiency and Renewable Energy's (EERE) Building Technologies (BT) Program, is seeking applications for applied research in the Solid-State Lighting (SSL) Core Technologies Program.

DOE has set aggressive and ambitious goals for SSL Research and Development (R&D): By 2025, to develop advanced solid-state lighting technologies that, compared to conventional lighting technologies, are much more energy efficient, longer lasting, and cost-competitive. The focus of this Funding Opportunity Announcement, herein referred to as Announcement, is to support applied research in certain key technical areas by fostering a collaborative atmosphere favorable to overcoming the significant technical challenges that restrict the application of SSL.

Significant progress has been made in the performance of solid-state lighting. Products are just now reaching the lighting market. However, these products have yet to reach the full potential of solid-state lighting. Significant technical challenges remain to the adoption of viable SSL. The technical challenges that impede penetration into mainstream general illumination markets are complex and require the combined resources of many researchers and perhaps, the unique research tools found only at a limited number of universities, National Laboratories and research institutions. It may be difficult to overcome these critical technical challenges without a focused Government initiative. This is partly because the research may be judged as too risky for industry to undertake alone. Thus, the collaborations sought under this Announcement will help mitigate or reduce the level of technical risk by providing significant financial resources.

Core Technology Research involves applied research efforts to seek more comprehensive knowledge about a subject. These projects fill technology gaps, provide enabling knowledge or data, and represent a significant advance in our knowledge base. A subsequent funding opportunity announcement will solicit applications from interested entities for product development. Product applications will systematically use the knowledge gained from basic or applied research to develop or improve commercially viable materials, devices, or systems.

BACKGROUND: The DOE's BT Program has selected lighting as one of the principle target markets for the development of more efficient technologies since it represents one-fifth of the national electrical consumption. The DOE has provided assistance over the past several years with significant effort invested by industry, academia, and Government. The prevailing theme that has surfaced repeatedly is the promise that solid-state lighting will only be produced through a focused and concentrated effort between the stakeholders.

To address these issues and to advance energy conservation in lighting in US buildings, the DOE's BT Program maintains a Lighting Research and Development (LR&D) program.

To insure that its research portfolio meets critical and evolving needs in a timely fashion, the LR&D program hosts industry-led efforts to develop and maintain a series of technology road maps for the various technologies that comprise the lighting business. While not the only lighting technology of interest within the BT Program portfolio, SSL is the singular focus of this Announcement.

This Announcement is the fifth in a series of announcements projected to span the next decade. As the relevant SSL technology base matures, it is anticipated that the present level, applied research, will advance to market conditioning once the targets for efficiency, cost, longevity, stability, and control are demonstrated in a product environment.

The DOE envisions a LR&D Program that works together with the SSL industry to meet the program's goal by the year 2025. Critical to this LR&D Program are seven important aspects:

- Emphasizing Competition
- Cost (and Risk) Sharing
- Partners Involved in Planning and Funding
- Targeted Research for Focused Need
- Innovative Intellectual Property Provisions
- Open Information and Process
- Success Determined by Milestones Met and Ultimately Energy Efficient, Long-life and Cost Competitive Products Developed

In order to achieve these goals, a partnership was awarded via Memorandum of Agreement (MOA) with the Next Generation Lighting Industry Alliance (NGLIA). The NGLIA, as directed by EPACT Section 912(d), is broadly representative of U.S. solid-state lighting research, development, infrastructure, and manufacturing expertise as a whole. The purpose of the NGLIA is to provide input and prioritization of the core technology needs, provide administrative expertise and staffing to organize and conduct technical meetings and workshops, and support demonstrations of SSL technologies, among others. DOE is seeking applications that are consistent with and which promote the direction of Section 912. More detailed information about the MOA with the NGLIA can be found at: <http://www.netl.doe.gov/ssl/PDFs/MOA.PDF>.

Additionally, the SSL program has implemented innovative Intellectual Property provisions. This program has been granted an Exceptional Circumstances Determination under the Bayh-Dole Act. The Exceptional Circumstances Determination applies to awards under the Core Technologies Program and is expected to stimulate commercial utilization of new technology developed by Core participants. The Core Technologies Program participants will also have the potential benefit of partnering with licensees to license their invention(s). And if these SSL Partnership members are successful in commercializing lighting systems developed under the Core Technologies Program, participants may reap income in the form of royalties. The determination also requires substantial product manufacturing in the US. More detailed information about the Exceptional Circumstances Determination can be found at: http://www.netl.doe.gov/ssl/PDFs/SSL%20Determination%20-%20Signed%20June%202005_1.pdf.

PROGRAM AREAS OF INTEREST: The Program Areas of Interest for this announcement were chosen by the DOE based on the prioritization of research subtasks in the DOE SSL Multi-Year Program Plan (MYPP) through collaboration with the NGLIA, the current status of projects in the DOE SSL Project Portfolio, and stakeholder input from the DOE SSL Workshops. The Areas of Interest target innovations in both Light Emitting Diodes (LED) and Organic Light Emitting Diodes (OLED). Each proposal shall feature a single approach to achieve the desired performance improvements. Multiple approaches shall be proposed in multiple applications, but all applications must offer a research plan that is not dependent on other applications. Applications shall not duplicate existing projects in the DOE SSL Portfolio. Active projects can be found on the Solid-State Lighting Project Portfolio page at www.netl.doe.gov/ssl/project.html. Descriptive information on each of these Areas of Interest is provided in the following paragraphs:

Light Emitting Diodes:

Applicants shall relate their technical progress and milestones to the SSL Program milestones and device performance projections contained in the DOE SSL MYPP. Current performance levels for the LED Areas of Interest by subtask can be found on page 75 in the MYPP at http://www.netl.doe.gov/ssl/PDFs/SSLMYPP2008_web.pdf.

Area of Interest 1: Internal Quantum Efficiency
(DE-PS26-08NT00290-01)

Research is sought that continues to improve the internal quantum efficiency (IQE) of LEDs suitable for general illumination applications. Of particular interest is research in LED material or device structures that improve IQE at current densities necessary for lighting applications. Proposed research shall demonstrate improved IQE over state of the art and applicability to the field of solid-state lighting. Preference will be given to projects that demonstrate the highest potential for improvement from current levels. Demonstrable and quantifiable improvements in the IQE are the required milestones for this approach. (MYPP Subtask 1.1.2)

Area of Interest 2: Phosphors and Conversion Materials
(DE-PS26-08NT00290-02)

Research is sought in phosphors and phosphor/LED systems that improve light extraction, phosphor coupling, light directionality, and/or phosphor system efficiency (quantum yield and scattering losses). Research shall include, but is not limited to, the development of new predictive models with experimental feedback for the identification of new phosphor materials, development of new or improved broad emitting phosphors materials, and the development of new phosphor systems that improve LED/phosphor system extraction efficiency, directionality, or scattering losses. Quantifiable improvements in the system efficiency shall be the primary objective of this research, but spectral power distribution, CRI, and color stability shall also be discussed in the application. Metrics in these areas shall be offered as additional milestones. (MYPP Subtask 1.3.1)

Area of Interest 3: Encapsulants and Packaging Materials
(DE-PS26-08NT00290-03)

Research sought under this area is principally aimed at lower loss and more stable encapsulants to improve the performance, long term reliability, and cost-effectiveness of High Brightness LEDs (HBLEDs). The encapsulant will need to maintain the original transmittance, refractive index, thermal management properties, protective barrier properties, and the structural integrity over the lifetime of the emitting device. New encapsulants shall not only be stable and protect the LED die but shall also enhance the extraction of light from the die/phosphor optical system. Research on phosphor embedded encapsulants and device designs that remove the necessity for encapsulation will also be considered. Milestones and success criteria must address transmittance and lifetime beyond the current levels in solid-state lighting. (MYPP Subtask 1.3.2)

Organic Light Emitting Diodes:

Applicants shall relate their technical progress and milestones to the SSL Program milestones and device performance projections contained in the DOE SSL MYPP. Current performance levels for the OLED Areas of Interest by subtask can be found on page 81 in the MYPP at http://www.netl.doe.gov/ssl/PDFs/SSLMYPP2008_web.pdf.

Area of Interest 4: High Efficiency OLED Materials and Structures
(DE-PS26-08NT00290-04)

Research is sought in high efficiency OLED materials and device structures. Research will be considered in organic emitting materials and materials for improved charge injection and balancing, as well as novel device structures compatible with the needs for general illumination. The development of material through modeling and combinatorial techniques together with experimental feedback will also

be considered. Improvements in emission efficiency, electrical efficiency, stability, and manufacturing costs shall be the primary objectives and basis for milestones. Proposed improvements to efficiency or stability shall not come at the expense of other performance parameters. (MYPP Subtask 3.1.2, 3.2.2)

Area of Interest 5: OLED Encapsulation and Substrates
(DE-PS26-08NT00290-05)

Research is sought on transparent electrodes, transparent and reflective substrates, and encapsulation for improved cost, device stability, light extraction and/or charge injection. Research shall demonstrate an OLED device that shows improvement to one or more of these areas while maintaining other performance aspects suitable for lighting applications. All proposed work shall be compatible with state of the art OLED materials and benchmarked against state of the art OLED performance. The recommended milestones must relate to measurable improvements in extraction efficiency, overall device efficiency, device stability and/or electrode resistance and transparency. (MYPP Subtask 3.3.2, 3.2.1, 3.2.3)

Area of Interest 6: OLED Fabrication
(DE-PS26-08NT00290-06)

Research is sought on improved low-cost fabrication techniques compatible with high efficiency OLEDs for SSL. Applicants to this area shall take into account and discuss all aspects of device fabrication and show compatibility with state of the art OLED materials and device structures. Cost justification and device performance limitations shall be considered in the proposal and compared with state of the art OLED fabrication techniques. The recommended milestones must relate to measurable improvements in deposition speed, material utilization, and cost per area for this area of interest. (MYPP Subtask 3.4.2)

PART II – AWARD INFORMATION

A. TYPE OF AWARD INSTRUMENT

DOE anticipates awarding cooperative agreements under this program announcement (See Section VI.B.2 Statement of Substantial Involvement).

B. ESTIMATED FUNDING

Approximately \$7,500,000 is expected to be available for new awards under this announcement.

C. MAXIMUM AND MINIMUM AWARD SIZE

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

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

D. EXPECTED NUMBER OF AWARDS

DOE anticipates making approximately 5-10 awards under this announcement.

E. ANTICIPATED AWARD SIZE

DOE anticipates that awards will not exceed \$600,000 (Federal Share) per year for up to 3 years.

F. PERIOD OF PERFORMANCE

DOE anticipates making awards that will range from twelve (12) months to thirty-six (36) months. Awards will have budget periods that are specific to the project and funding.

G. TYPE OF APPLICATION

DOE will accept new and renewal applications under this announcement.

PART III - ELIGIBILITY INFORMATION

A. ELIGIBLE APPLICANTS

All types of domestic entities are eligible to apply, except other Federal agencies, Federally Funded Research and Development Center (FFRDC) Contractors, 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.

B. COST SHARING

The cost share must be at least 20% of the total allowable costs of the project (i.e., the sum of the Government share, including FFRDC contractor costs if applicable, and the recipient share of allowable costs equals the total allowable costs of the projects) and must come from non-Federal sources unless otherwise allowed by law.

C. OTHER ELIGIBILITY REQUIREMENTS

Federally Funded Research and Development Center (FFRDC) Contractors.

FFRDC contractors 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 for non-DOE/NNSA FFRDCs. The Federal agency sponsoring the FFRDC contractor must authorize in writing the use of the FFRDC contractor on the proposed project and this authorization must be submitted with the application. The use of a FFRDC contractor must be consistent with the contractor's authority under its award and must not place the FFRDC contractor in direct competition with the private sector.

Authorization for DOE/NNSA FFRDCs. The cognizant contracting officer for the FFRDC must authorize in writing the use of a DOE/NNSA FFRDC contractor on the proposed project and this authorization must be submitted with the application. 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 complimentary to the missions of the laboratory, will not adversely impact execution of the DOE/NNSA assigned programs at the laboratory, and will not place the laboratory in direct competition with the domestic private sector."

Value/Funding. The value of, and funding for, the FFRDC contractor portion of the work will not normally be included in the award to a successful applicant. Usually, DOE/NNSA will fund a DOE/NNSA FFRDC contractor through the DOE field work proposal system and other FFRDC contractors through an interagency agreement with the sponsoring agency.

Cost Share. The applicant's cost share requirement will be based on the total cost of the project, including the applicant's and the FFRDC contractor's portions of the effort.

FFRDC Contractor Effort: The FFRDC contractor effort, in aggregate, shall not exceed 20% of the total estimated cost of the project, including the applicant's and the FFRDC contractor's portions of the effort. **The FFRDC portion shall be limited to use of equipment and/or facilities and any related personnel costs that would apply to this use.**

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 FFRDC contractor.

PART IV – APPLICATION AND SUBMISSION INFORMATION

A. ADDRESS TO REQUEST APPLICATION PACKAGE

Application forms and instructions are available at Grants.gov. To access these materials, go to <http://www.grants.gov>, select “Apply for Grants,” and then select “Download Application Package.” Enter the CFDA and/or the funding opportunity number located on the cover of this announcement and then follow the prompts to download the application package.

B. LETTER OF INTENT AND PRE-APPLICATION

1. Letter of Intent.

Letters of Intent are not required.

2. Pre-application

Pre-applications are not required.

C. CONTENT AND FORM OF APPLICATION – 424 (R&R) { TC "C. CONTENT AND FORM OF APPLICATION – 424 (R&R)" \f C \l "1" }

You must complete the mandatory forms and any applicable optional forms (e.g., Disclosure of Lobbying Activities (SF-LLL)) in accordance with the instructions on the forms and the additional instructions below. Files that are attached to the forms must be in Adobe Portable Document Format (PDF) unless otherwise specified in this announcement.

- SF 424 (R&R)** Complete this form first to populate data in other forms. Complete all the required fields in accordance with the pop-up instructions on the form. To activate the instructions, turn on the “Help Mode” (Icon with the pointer and question mark at the top of the form). The list of certifications and assurances referenced in Field 18 can be found on the DOE Financial Assistance Forms Page at http://management.energy.gov/business_doe/business_forms.htm under Certification and Assurances.
- RESEARCH AND RELATED Other Project Information**
Complete questions 1 through 5 and attach files. The files must comply with the following instructions:

Project Summary/Abstract (Field 6 on the Form)

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(s), 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). This document must not include any proprietary or sensitive business information as the Department may make it available to the public. 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. To attach a Project Summary/Abstract, click “Add Attachment.”

Project Narrative (Field 7 on the Form)

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 ONLY REVIEW 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, because the information contained in these sites will not be reviewed. See Part VIII.D for instructions on how to mark proprietary application information. To attach a Project Narrative, click “Add Attachment.”

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. 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.

Statement Of Project Objectives (SOPO):

The Department of Energy's, National Energy Technology Laboratory uses a specific format for Statement of Project Objectives in its awards. In announcements such as this one, where the Government does not provide a Statement of Project Objectives, the Applicant is to provide one, which the DOE will then use to generate the Statement of Project Objectives to be included in the award.

The project narrative must contain a single, detailed Statement of Project Objectives that addresses how the project objectives will be met. The Statement of Project Objectives must contain a clear, concise description of all activities to be completed during project performance and follow the structure discussed below. The Statement of Project Objectives may be released to the public by DOE in whole or in part at any time. It is therefore required that it shall not contain proprietary or confidential business information.

The Statement of Project Objectives is generally less than 3-4 pages in total for the proposed work. Applicants shall prepare the Statement of Project Objectives in the following format:
TITLE OF WORK TO BE PERFORMED

(Insert the title of work to be performed. Be concise and descriptive.)

A. OBJECTIVES

Include one paragraph on the overall objective(s) of the work. Also, include objective(s) for each phase of the work.

B. SCOPE OF WORK

This section should not exceed one-half page and should summarize the effort and approach to achieve the objective(s) of the work for each Phase.

C. TASKS TO BE PERFORMED

Tasks, concisely written, should be provided in a logical sequence and should be divided into the phases of the project, as appropriate. This section provides a brief summary of the planned approach to this project.

PHASE I

Task 1.0 – (Title)

(Description)

Subtask 1.1 (Optional)

(Description)

Task 2.0 - (Title)

PHASE II (Optional)
Task 3.0 - (Title)

D. MILESTONES AND SUCCESS CRITERIA

As a part of the approved SOPO, the Recipient shall propose Milestones that will serve as the baseline for tracking performance of the project and will identify success criteria associated with the milestones. Milestones are incremental achievements that need to occur to accomplish a goal. Success Criteria are meant to define project goals for each interval of the proposed effort. Success Criteria are intended to objectively determine whether or not a project has been successful. These success criteria and milestones shall relate to the determination of technical "value" as described in Criterion 2 and shall be relevant to the MYPP goals. The success criteria will be taken into consideration when making a continuation determination at each decision point.

During project performance, the Recipient will report the Milestone Status as relates to the Success Criteria. The Milestone and Success Criteria Status will present and include:

- (1) the actual status and progress of the project,
- (2) specific progress made toward achieving the project's Success Criteria, and,
- (3) any proposed changes in the projects schedule required to complete critical path milestones.

E. DELIVERABLES

The periodic, topical, and final reports shall be submitted in accordance with the attached "Federal Assistance Reporting Checklist" and the instructions accompanying the checklist. Note: The Recipient shall provide a list of deliverables other than those identified on the "Federal Assistance Reporting Checklist" that will be delivered. These reports shall also be identified within the text of the Statement of Project Objectives. See the following examples:

1. Task 1.1 - (Report Description)
2. Task 2.2 - (Report Description)

F. BRIEFINGS/TECHNICAL PRESENTATIONS (If applicable)

The Recipient shall prepare detailed briefings for presentation to the Project Officer at the Project Officer's facility located in Pittsburgh, PA or Morgantown, WV. Briefings shall be given by the Recipient to explain the plans, progress, and results of the technical effort.

The Recipient shall provide and present a technical paper(s) at the DOE/NETL Annual Contractor's Review Meeting to be held at the NETL facility located in Pittsburgh, PA or Morgantown, WV; or other location as specified by the DOE Project Officer.

The Recipient shall provide and present a technical paper(s) at the DOE/NETL Peer Review Meeting to be held at DOE Headquarters in Washington D.C.; or other location as specified by the DOE Project Officer.

(END OF STATEMENT OF PROJECT OBJECTIVES)

Project Performance Site:

Indicate the primary site where the work will be performed. If a portion of the work will be performed at any other sites, identify those sites, also.

Biographical Sketch Appendix:

Provide a biographical sketch for the project director/principal investigator (PD/PI) and each senior/key person listed in Section A on the R&R Budget form. Provide the biographical sketch information as an appendix to your project narrative. Do not attach a separate file. The biographical sketch appendix will not count in the project narrative page limitation. The biographical information for each person 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 must include:

Education and Training:

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

Research and 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.

Third Parties Contributing to Cost Sharing Appendix: At the time you submit your application, you must have a letter from each third party (i.e., a party other than the organization submitting the application). The letter must state that the third party is committed to providing a specific minimum dollar amount of cost sharing. By submitting your application, you are providing assurance that you have signed letters of commitment. In an appendix to your Project Narrative, you must identify the following information for each third party contributing to cost sharing: (1) the name of the organization; (2) the proposed dollar amount to be provided; (3) the amount as a percentage of the total project cost; and (4) the proposed cost sharing – cash, services, or property. This appendix will not count in the project narrative page limitation. Successful applicants must provide the signed letters of commitments within the number of days specified in Part IV.D, Submissions from Successful Applicants.

Bibliography & References Cited Appendix: Provide a bibliography of any references cited in the Project Narrative. Each reference must include the names of all authors (in the same sequence in which they appear in the publication), the article and journal title, book title, volume number, page numbers, and year of publication. Include only bibliographic citations. Applicants should be especially careful to follow scholarly practices in providing citations for source materials relied upon when preparing any section of the application. In order to reduce the number of files attached to your application, please provide the Bibliography and References Cited information as an appendix to your project narrative. Do not attach a file in field 8. This appendix will not count in the project narrative page limitation.

Facilities & Other Resources Appendix: This information is used to assess the capability of the organizational resources, including subawardee resources, available to perform the effort

proposed. Identify the facilities to be used (Laboratory, Animal, Computer, Office, Clinical, and Other). If appropriate, indicate their capacities, pertinent capabilities, relative proximity, and extent of availability to the project. Describe only those resources that are directly applicable to the proposed work. Describe other resources available to the project (e.g., machine shop, electronic shop) and the extent to which they would be available to the project. In order to reduce the number of files attached to your application, please provide the Facility and Other Resource information as an appendix to your project narrative. Do not attach a file in field 9. This appendix will not count in the project narrative page limitation.

Equipment Appendix: List major items of equipment already available for this project and, if appropriate identify location and pertinent capabilities. In order to reduce the number of files attached to your application, please provide the Equipment information as an appendix to your project narrative. Do not attach a file in field 10. This appendix will not count in the project narrative page limitation.

Other Attachments (Field 11 on the form): If you need to elaborate on your responses to questions 1-5 on the "Other Project Information" document, attach a file in field 11.

Also, attach the following file:

Budget for DOE/NNSA Federally Funded Research and Development Center (FFRDC) Contractor, if applicable. If a DOE/NNSA 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 http://management.energy.gov/business_doe/business_forms.htm. Use the FFRDC name as the file name (up to 10 letters) and attach to the R&R Other Project Information form in Field 11 – Add Attachments.

3. RESEARCH AND RELATED BUDGET (TOTAL FED + NON-FED)

Complete the Research and Related Budget (Total Fed & Non-Fed) form in accordance with the instructions on the form (Activate Help Mode to see instructions) and the following instructions. You must complete a separate budget for each year of support requested. The form will generate a cumulative budget for the total project period. You must complete all the mandatory information on the form before the NEXT PERIOD button is activated. You may request funds under any of the categories listed 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).

Budget Justification (Field K on the form).

Provide the required supporting information for the following costs (See R&R instructions): equipment; domestic and foreign travel; participant/trainees; material and supplies; publication; consultant services; ADP/computer services; subaward/consortium/contractual; equipment or facility rental/user fees; alterations and renovations; and indirect cost type. Provide any other information you wish to submit to justify your budget request. If cost sharing is required, provide an explanation of the source, nature, amount, and availability of any proposed cost sharing. Attach a single budget justification file for the entire project period in Field K. The file automatically carries over to each budget year.

4. R&R SUBAWARD (Total Fed + Non-Fed) FORM

Budgets for Subawardees, other than DOE FFRDC Contractors. You must provide a separate cumulative R&R budget for each subawardee that is expected to perform work estimated to be more than \$100,000 or 50 percent of the total work effort (whichever is less).

Download the R&R Budget Attachment from the R&R SUBAWARD BUDGET (Total Fed + Non-Fed) FORM and e-mail it to each subawardee that is required to submit a separate budget. After the Subawardee has e-mailed its completed budget back to you, attach it to one of the blocks provided on the form. Use up to 10 letters of the subawardee's name as the file name.

5. Disclosure of Lobbying Activities (SF-LLL)

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 Standard Form - LLL, "Disclosure Form to Report Lobbying."

Summary of Required Forms/Files

Your application must include the forms from the application package and other documents as shown below:

Name of Document	Format	Attach to
SF 424 (R&R)	Form	N/A
RESEARCH AND RELATED Other Project Information	Form	N/A
Project Summary/Abstract	PDF	Field 6
Project Narrative, including required appendices	PDF	Field 7
Budget for DOE/NNSA FFRDC, if applicable	PDF	Field 11
Third Parties Contributing to Cost Sharing Appendix	PDF	Field 11
Biographical Sketch Appendix	PDF	Attach to appropriate block
RESEARCH AND RELATED BUDGET (Total Fed + Non-Fed)	Form	N/A
Budget Justification	PDF	Field K
R&R SUBAWARD BUDGET (Total Fed + Non-Fed) ATTACHMENT(S) FORM, if applicable	Form	N/A
SF-LLL Disclosure of Lobbying Activities, if applicable	Form	N/A

D. SUBMISSIONS FROM SUCCESSFUL APPLICANTS

If selected for award, DOE/NNSA 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)
- Representation of Limited Rights Data and Restricted Software, if applicable
- Environmental Questionnaire

E. SUBMISSION DATES AND TIMES

1. Pre-application Due Date

- Pre-applications are not required.

2. Application Due Date

- Applications should be received by 6/19/2008, not later than 8:00 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. OTHER SUBMISSION AND REGISTRATION REQUIREMENTS

1. Where to Submit

APPLICATIONS MUST BE SUBMITTED THROUGH GRANTS.GOV TO BE CONSIDERED FOR AWARD. Submit electronic applications through the “Apply for Grants” function at www.Grants.gov. If you have problems completing the registration process or submitting your application, call Grants.gov at 1-800-518-4726 or send an email to support@grants.gov.

2. Registration Process

You must COMPLETE the one-time registration process (all steps) before you can submit your first application through Grants.gov (See www.grants.gov/GetStarted). **We recommend that you start this process at least three weeks before the application due date.** It may take 21 days or more to complete the entire process. Use the Grants.gov Organizational Registration Checklists at <http://www.grants.gov/assets/OrganizationRegCheck.pdf> to guide you through the process. **IMPORTANT:** During the CCR registration process, you will be asked to designate an E-Business Point of Contact (EBIZ POC). The EBIZ POC must obtain a special password called “Marketing Partner identification Number” (MPIN). When you have completed the process, you should call the Grants.gov Helpdesk at 1-800-518-4726 to verify that you have completed the final step (i.e., Grants.gov registration).

3. Application Receipt Notices

After an application is submitted, the Authorized Organization Representative (AOR) will receive a series of five e-mails. It is extremely important that the AOR watch for and save each of the emails. It may take up to two (2) business days from application submission to receipt of email Number 2. When the AOR receives email Number 5, it is their responsibility to follow the instructions in the email to logon to IIPS and verify that their application was received by DOE. You will need the Submission Receipt Number (email Number 1) to track a submission. The titles of the five e-mails are:

- Number 1 - Grants.gov Submission Receipt Number
- Number 2 - Grants.gov Submission Validation Receipt for Application Number
- Number 3 - Grants.gov Grantor Agency Retrieval Receipt for Application Number
- Number 4 - Grants.gov Agency Tracking Number Assignment for Application Number
- Number 5 – DOE e-Center Grant Application Received

The last email will contain instructions for the AOR to register with the DOE e-Center. If the AOR is already registered with the DOE e-Center, the title of the last email changes to:

- Number 5 – DOE e-Center Grant Application Received and Matched

This email will contain the direct link to the application in IIPS. The AOR will need to enter their DOE e-Center user id and password to access the application.

Part V - APPLICATION REVIEW INFORMATION

A. 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 are satisfied (See Part III, A. Eligible Applicants); and (4) the proposed project is responsive to the objectives of the funding opportunity announcement.

2. Merit Review Criteria

Applications submitted in response to this Announcement will be evaluated and scored in accordance with the criteria and weights listed below:

Criterion 1: Technical Approach
Weight: [35%]

- Validity of the proposed approach, the likelihood of success, and the scientific merit of the key technology issues addressed.
- Clarity, reasonableness and applicability of proposed milestones and success criteria as relates to MYPP goals for each interval of the proposed effort with special emphasis on the descriptive, qualitative and especially quantitative milestone aspects.
- Thoroughness and adequacy of the proposed Statement of Project Objectives (SOPO), anticipated outcomes and results.
- The proposed technical innovation and its relevance to the stated objectives.

Criterion 2: Technology Value
Weight: [35%]

- The extent to which the proposed project meets or exceeds yearly projections as defined in the MYPP, and contributes to the DOE's SSL mission and/or goal.
- Potential improvements over current state of the art device levels.
- The extent to which the proposed approach will contribute to multiple SSL technologies or how it may positively impact other DOE energy efficiency objectives (crosscutting).
- The relevance of the proposed work and its potential impact on eventual SSL products.
- The degree to which the proposed work meets the published statement of needs.
- Degree of possibility that the proposed work will achieve the SSL goals earlier than planned.

Criterion 3: Applicant and Team Members Roles and Capabilities
Weight: [20%]

- Ability of the proposed team to achieve the goals stated in the SOPO; the level of professional and academic credentials.
- Demonstrated abilities based on relevant prior Federal and non-Federal performance.
- Reasonableness of time allocations and mix of personnel proposed in the manpower matrix.
- The adequacy (quality, availability, and appropriateness) of facilities and equipment for the proposed project.

Criterion 4: Corporate Commitment and Technology Transfer Abilities
Weight: [10%]

- The degree to which the applicant leverages existing relationships, collaborations or partnerships with the SSL industry or relevant Federal Programs, and evidence of corporate commitment.
- Evidence of successfully transferring technologies to US industry for commercialization.

3. Other Selection Factors

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

1. It may be desirable to select for award a group of projects which represents a diversity of technical approaches and methods;
2. It may be desirable to support complementary and/or duplicative efforts or projects, which, when taken together, will best achieve the research goals and objectives;
3. It may be desirable to select different kinds and sizes of organizations in order to provide a balanced programmatic effort and a variety of different technical perspectives;
4. It may be desirable to select project(s) of less technical merit than other project(s) if such a selection will optimize use of available funds by allowing more projects to be supported and not be detrimental to the overall objectives of the program.
5. It may be desirable to select project(s) that reduce Federal investment and maximize corporate commitment as demonstrated by cost share levels that exceed the required 20%.

B. REVIEW AND SELECTION PROCESS

1. 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 available under Financial Assistance, Regulations and Guidance at <http://www.management.energy.gov/documents/meritrev.pdf>.

2. Selection

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

3. 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 December 31, 2008 and making awards by [March 31, 2009](#).

Part VI - AWARD ADMINISTRATION INFORMATION

A. AWARD NOTICES

1. Notice of Selection

DOE will notify applicants selected for 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.)

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/NNSA.; (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 and cooperative agreements 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://management.energy.gov/business_doe/business_forms.htm.

The National Policy Assurances To Be Incorporated As Award Terms are located at DOE http://management.energy.gov/business_doe/business_forms.htm.

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.

• Statement of Substantial Involvement

There will be substantial involvement between the DOE and the Recipient during performance of the resultant cooperative agreements

RECIPIENT'S RESPONSIBILITIES. The Recipient is responsible for:

Performing the activities supported by this award, including providing the required personnel, facilities, equipment, supplies and services;

Defining approaches and plans, submitting the plans to DOE for review, and incorporating DOE comments;

Managing and conducting the project activities;

Providing all deliverables specified in the award in a timely basis;

Participating in all briefings specified in the award Statement of Project Objectives;

Submitting technical reports and incorporating DOE comments; and;

Presenting the project results at appropriate technical conferences or meetings as specified by the DOE Project Officer.

DOE RESPONSIBILITIES.

Monitoring projects closely and may recommend alternative approaches to the work because of interrelationships with other projects within the SSL portfolio;

Providing guidance for recipient's participation in the annual SSL Program Planning Workshop. This workshop provides a forum for building partnerships and strategies to accelerate technology advances and guide market introduction of high efficiency, high-performance SSL products;

Reviewing in a timely manner, technical reports and other deliverables and provide comments to the Recipient;

Conducting program review meetings and peer reviews to ensure adequate progress and that the work accomplishes the program and project objectives;

Promoting and facilitate technology transfer activities, including disseminating program results through presentations and publications, and communications with the building community and other research organizations through the Technical Information Network as well as ENERGY STAR® for SSL; and

Serving as scientific/technical liaison and coordinate the close collaboration between participants and other program or industry staff.

C. REPORTING

Reporting requirements are identified on the Federal Assistance Reporting Checklist, DOE F 4600.2, attached to the award agreement. See the NETL Business Page at <http://www.netl.doe.gov/business/forms/FederalAssistanceReportingChecklistExample.pdf> for the proposed Checklist for this program.

PART VII - QUESTIONS/AGENCY CONTACTS

A. QUESTIONS

Questions regarding the content of the announcement must be submitted through the “Submit Question” feature of the DOE Industry Interactive Procurement System (IIPS) at <http://e-center.doe.gov>. Locate the program announcement on IIPS and then click on the “Submit Question” button. Enter required information. You will receive an electronic notification that your question has been answered. DOE/NNSA 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 relating to the registration process, system requirements, how an application form works, or the submittal process must be directed to Grants.gov at 1-800-518-4726 or support@grants.gov. DOE/NNSA cannot answer these questions.

B. AGENCY CONTACT

Name:	Jacquelyn Wilson
E-mail:	jacquelyn.wilson@netl.doe.gov
FAX:	(304) 285-6043
Telephone (Optional):	(304) 285-4135

PART VIII - OTHER INFORMATION

A. MODIFICATIONS

Notices of any modifications to this announcement will be posted on Grants.gov and the DOE Industry Interactive Procurement System (IIPS). You can receive an email when a modification or an announcement message is posted by joining the mailing list for this announcement through the link in IIPS. When you download the application at Grants.gov, you can also register to receive notifications of changes through Grants.gov.

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.

G. NOTICE OF RIGHT TO REQUEST PATENT WAIVER

Applicants may request a waiver http://www.gc.doe.gov/documents/gc62_advance.pdf 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 <http://www.gc.doe.gov/documents/patwaivclau.pdf>.

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. EXCEPTIONAL CIRCUMSTANCES

Regarding any award made to domestic small businesses, institutions of higher education, or other non-profit organizations under this announcement, the Department of Energy has approved a determination titled "Exceptional Circumstances Determination for Inventions Arising Under the Solid-State Lighting Core Technologies Program." This Determination is based on the Department's belief that circumstances surrounding the Solid-State Lighting Core Technologies Program are exceptional and justify modified intellectual property arrangements as allowed by the Bayh-Dole Act (35 U.S.C. 202(a)(ii)). More detailed information about the Exceptional Circumstances Determination can be found at:
http://www.netl.doe.gov/ssl/PDFs/SSL%20Determination%20-%20Signed%20June%202005_1.pdf

The Department of Energy intends that disposition of rights to subject inventions made by domestic small businesses and non-profit entities under awards resulting from this announcement will be subject to the terms of this Determination. The restriction of patent rights under the Determination will be basically as described in the last paragraph of the document in the link provided above. The Department is requiring minimum licensing rights of which the Core Technology Program recipients will have to agree. In addition, under 35 U.S.C 203 § (2), an awardee adversely affected by this Exceptional Circumstance Determination has a right to appeal the Determination to the Department

of Energy or to the United States Court of Federal Claims.