**<Full Application Title Here>**

**Topic Area <Enter topic area number here>: <Enter title of chosen Topic here, i.e. “Proving Next Generation PV Concepts”>**

**Proposed Budget:** $<XX>

**Proposed Non-Federal Cost Share:** <XX>%

**Proposed Award Duration:** <XX> months

|  |  |
| --- | --- |
| **Technical Point of Contact:** | <First and last name here, in that order>  <Job Title>  <Organization Name>  <Location of Organization (i.e. Cleveland, OH)>  <Email address > |

|  |  |
| --- | --- |
| **Business Point of Contact:** | <First and last name here, in that order>  <Job Title>  <Organization Name>  <Location of Organization (i.e. Cleveland, OH)>  <Email address > |

|  |  |
| --- | --- |
| **Team Members:** | <First and last name of member #1>  <Insert Organization Name here>  <First and last name of member #2>  <Organization Name>  <Etc.> |

**Confidentiality Statement:** <Enter “Not Applicable” here if that is the case>

**Project Overview**

***[(Delete this information before submitting your completed application)The Project Overview should contain the following information:***

* *Background: The applicant should discuss the background of their organization, including the history, successes, and current research and development status (i.e., the technical baseline) relevant to the technical topic being addressed in the Full Application.*
* *Project Goal: The applicant should explicitly identify the targeted improvements to the baseline technology and the critical success factors in achieving that goal.*
* *DOE Impact: The applicant should discuss the impact that DOE funding would have on the proposed project. Applicants should specifically explain how DOE funding, relative to prior, current, or anticipated funding from other public and private sources, is necessary to achieve the project objectives. ]*

**Technical Description, Innovation, and Impact**

***[(Delete this information before submitting your completed application)The Technical Description should contain the following:***

* *Relevance and Outcomes: The applicant should provide a detailed description of the technology, including the scientific and other principles and objectives that will be pursued during the project. This section should describe the relevance of the proposed project to the goals and objectives of the FOA, including the potential to meet specific DOE technical targets or other relevant performance targets. The applicant should clearly specify the expected outcomes of the project.*
* *Feasibility: The applicant should demonstrate the technical feasibility of the proposed technology and capability of achieving the anticipated performance targets, including a description of previous work done and prior results.*
* *Innovation and Impacts: The applicant should describe the current state of the art in the applicable field, the specific innovation of the proposed technology, the advantages of proposed technology over current and emerging technologies, and the overall impact on advancing the state of the art/technical baseline if the project is successful.****]***

**Workplan and Market Transformation Plan**

***[(Delete this information before submitting your completed application)***

***The Workplan should contain the following:***

* *Project Objectives: The applicant should provide a clear and concise (high-level) statement of the goals and objectives of the project as well as the expected outcomes.*
* *Technical Scope Summary: The applicant should provide a summary description of the overall work scope and approach to achieve the objective(s). The overall work scope is to be divided by performance periods that are separated by discrete, approximately annual decision points (see below for more information on go/no-go decision points). The applicant should describe the specific expected end result of each performance period.*
* *Work Breakdown Structure (WBS) and Task Descriptions: The Workplan should fully describe the work to be accomplished and how the applicant will achieve the milestones, will accomplish the final project goal(s), and will produce all deliverables. The Workplan is to be structured with a hierarchy of performance period (approximately annual), task and subtasks, which is typical of a standard work breakdown structure (WBS) for any project. The Workplan shall contain a concise detailed description of the specific activities to be conducted over the life of the project. “Detailed” is defined as a full explanation and disclosure of the project being proposed (i.e., a statement such as “we will then complete a proprietary process” is unacceptable). It is the Applicant’s responsibility to prepare an adequately detailed task plan to describe the proposed project and the plan for addressing the objectives of this FOA.  To this end, each task and subtask is to have a unique number and title and an indication of the duration of the task or subtask in months. Each task and subtask is to have a task summary that describes the objectives, what work is to be accomplished, and relationship to project deliverables or expected results. Appropriate milestones should be incorporated into the task and subtask structure. Each task and subtask is to have a technical details section, as appropriate, to discuss how the work will be done, anticipated problems or uncertainties, and any further clarification, such as why a specific approach is being taken. An example Work Breakdown Structure is provided below.*
* *Milestones: The Applicant should provide appropriate milestones throughout the project to demonstrate success, where success is defined as technical achievement rather than simply completing a task. To ensure that milestones are relevant, Applicants should follow the SMART rule of thumb, which is that all milestones should be* ***S****pecific,* ***M****easurable,* ***A****chievable,* ***R****elevant, and* ***T****imely. The minimum requirement is that each project must have at least one milestone per quarter for the duration of the project (depending on the project, more milestones may be necessary to comprehensively demonstrate progress). The Applicant should also provide the means by which the milestone will be verified.*
* *Go/No-Go Decision Points: The applicant should provide a summary of project-wide go/no-go decision points at appropriate points in the Workplan. A go/no-go decision point is a risk management tool and a project management best practice to ensure that, for the current phase or period of performance, technical success is definitively achieved and potential for success in future phases or periods of performance is evaluated, prior to actually beginning the execution of future phases. Unless otherwise specified in the FOA, the minimum requirement is that each project must have at least one project-wide go/no-go decision point for each budget period (12 month period) of the project. The Applicant should also provide the specific technical criteria to be used to make the go/no-go decision.*
* *Project Schedule (Gantt Chart or similar): The applicant should provide a schedule for the entire project, including task and subtask durations, milestones, and go/no-go decision points.*
* *Project Management: The applicant should discuss the team’s proposed management plan, including the following:*
  + *The overall approach to and organization for managing the work*
  + *The roles of each Project Team member*
  + *Any critical handoffs/interdependencies among Project Team members*
  + *The technical and management aspects of the management plan, including systems and practices, such as financial and project management practices*
  + *The approach to project risk management*
  + *A description of how project changes will be handled*
  + *If applicable, the approach to Quality Assurance/Control*
  + *How communications will be maintained among Project Team members*
* *Market Transformation Plan: The applicant should provide a market transformation plan, including the following:*

*Identification of target market, competitors, and distribution channels for proposed technology along with known or perceived barriers to market penetration, including a mitigation plan*

**Example Work Breakdown Structure**

**Technical Summary:** Provide a high-level overview of the final result of this project. Explain the final objective, outcome, milestone and/or deliverable that are to be produced and the rationale for why the applicant has organized the tasks in the way they have.   
  
**Technical Details** (Optional): Describe the relevant management, engineering, design, process, scientific or other principles and aspects of the project that warrant discussion.

**Year 1:**

**Task 1.1:** Distinctive Title, Date range of the task in months (M1-M4)

**Task Summary:** Task summaries shall explicitly describe what work is to be accomplished, identify the project objectives/outcomes being addressed and provide a concise statement of the objectives of that task. In addition, the description should indicate the project milestones that this task will help achieve (M1.1, M2.1…).

**Task Details:** Within this section, the barriers and risks should be identified, as well as the approaches for overcoming those barriers and risks. Where appropriate, multiple pathways early in the effort can be outlined for risk reduction.

**Milestone 1.1** (if applicable)

**Milestone 1.2** (if applicable)

**Etc.**

**Subtask 1.1.1**: Date range (M1-M2)

**Subtask Summary:** Describe the specific and detailed work efforts that go into achieving the higher-level tasks.

**Subtask Details:** Describe the evaluation techniques that will be used and the expected result that will be generated from the effort.

**Milestone 1.3** (if applicable)

**Milestone 1.4** (if applicable)

**Etc.**

**Subtask 1.1.2**:

(Continue until all Task 1 subtasks are listed)

**Task 1.2:** (continue in the format above until all tasks and subtasks are listed)

**Subtask 1.2.1:** Description and Discussion

**Subtask 1.2.2:** Description and Discussion

**Year 2:** (continue until all project years are listed)

**Task 2.1:**

**Subtask 2.2.1:** Description and Discussion

**Subtask 2.2.2:** Description and Discussion

**Etc.*]***

**Technical Qualifications and Resources**

***[(Delete this information before submitting your completed application):***

***The Technical Qualifications and Resources should contain the following information***

* *Describe the Project Team’s unique qualifications and expertise, including those of key Subrecipients.*
* *Describe the Project Team’s existing equipment and facilities that will facilitate the successful completion of the proposed project; include a justification of any new equipment or facilities requested as part of the project.*
* *This section should also include relevant, previous work efforts, demonstrated innovations, and how these enable the applicant to achieve the project objectives.*
* *Describe the time commitment of the key team members to support the project.*
* *Attach one-page resumes for key participating team members as an appendix.  Resumes do not count towards the page limit.  Multi-page resumes are not allowed.*
* *Describe the technical services to be provided by DOE/NNSA FFRDCs, if applicable.*
* *Attach letters of commitment from all Subrecipient/third party cost share providers as an appendix. Letters of commitment do not count towards the page limit.*
* *Attach any letters of support from partners/end users as an appendix (1 page maximum per letter).  Letters of support do not count towards the page limit.*
* *For multi-organizational or multi-investigator projects, describe succinctly:*
  + *The roles and the work to be performed by each PI and Key Participant;*
  + *Business agreements between the applicant and each PI and Key Participant;*
  + *How the various efforts will be integrated and managed;*
  + *Process for making decisions on scientific/technical direction;*
  + *Publication arrangements;*
  + *Intellectual Property issues; and Communication plans****]***