

PROJECT TITLE

Lead Organization (City, State); Principal Investigator Name

Technical Category

Proposed Funds: Fed: \$xxx/ Cost Share: \$xxx/ Total: \$xxx

Project Duration

1. CONCEPT SUMMARY

- Describe the proposed concept with minimal jargon, and explain how it addresses the Program Objectives of the FOA.

2. INNOVATION AND IMPACT

- Clearly identify the problem to be solved with the proposed technology concept.
- Describe how the proposed effort represents an innovative and potentially transformational solution to the technical challenges posed by the FOA.
- Explain the concept's potential to be disruptive compared to existing or emerging technologies.
- To the extent possible, provide quantitative metrics in a table that compares the proposed technology concept to current and emerging technologies and to the Technical Performance Targets in Section I.E of the FOA for the appropriate Technology Category in Section I.D of the FOA.

3. PROPOSED WORK

- Describe the final deliverable(s) for the project and the overall technical approach used to achieve project objectives.
- Discuss alternative approaches considered, if any, and why the proposed approach is most appropriate for the project objectives.
- Describe the background, theory, simulation, modeling, experimental data, or other sound engineering and scientific practices or principles that support the proposed approach. Provide specific examples of supporting data and/or appropriate citations to the scientific and technical literature.
- Describe why the proposed effort is a significant technical challenge and the key technical risks to the project. Does the approach require one or more entirely new technical developments to succeed? How will technical risk be mitigated?
- Identify techno-economic challenges to be overcome for the proposed technology to be commercially relevant.

4. TEAM ORGANIZATION AND CAPABILITIES

- Indicate the roles and responsibilities of the organizations and key personnel that comprise the Project Team.
- Provide the name, position, and institution of each key team member and describe in 1-2

Pages 1-4 of this document contain confidential, proprietary, or privileged information that is exempt from public disclosure. Such information shall be used or disclosed only for evaluation purposes or in accordance with a financial assistance or loan agreement between the submitter and the Government. The Government may use or disclose any information that is not appropriately marked or otherwise restricted, regardless of source.

sentences the skills and experience that he/she brings to the team.

- Identify key capabilities provided by the organizations comprising the Project Team and how those key capabilities will be used in the proposed effort.
- Identify (if applicable) previous collaborative efforts among team members relevant to the proposed effort.

CONCEPT PAPER TEMPLATE INSTRUCTIONS

CONTENT REQUIREMENTS (See Section IV.C of the FOA for Content Requirements):

- (1) The Concept Paper template may be used to prepare Concept Papers.
- (2) Applicants should ensure the accuracy of their Concept Paper by reviewing and/or printing prior to the Concept Paper submission.
- (3) ARPA-E may not review or consider noncompliant and/or nonresponsive Concept Papers (see Section III.C of the FOA).
- (4) Each Concept Paper should be limited to a single concept or technology. Unrelated concepts and technologies should not be consolidated into a single Concept Paper. However, a single concept or technology may address more than one of the Categories listed in Section I.D of the FOA.
- (5) Confidential, proprietary, or privileged information should be indicated by including in the header and footer of every page the following language: "Contains Confidential, Proprietary, or Privileged Information Exempt from Public Disclosure." In addition, the cover sheet of the Concept Paper must also include the disclaimer provided in Section VIII.E of the FOA, and every line and paragraph containing proprietary, privileged, or trade secret information must be clearly marked with double brackets or highlighting. See Section VIII.E of the FOA for additional information on marking confidential information.
- (6) Delete these template instructions and delete the prompts in each section above prior to submitting Concept Papers.

FORMAT REQUIREMENTS (See Section IV.C of the FOA for Format Requirements):

- (1) Concept Papers must be submitted in Adobe PDF format, be written in English, use black 12 point or larger Times New Roman font (except in figures and tables), use 8.5 inch by 11 inch paper, be single-spaced, and have margins no less than 1 inch on every side.
- (2) Concept Papers that address Category 1 or more than just one Category shall not exceed six (6) pages in length including graphics, figures, and/or tables. Concept Papers that address only one among Categories 2, 3, 4, or 5 shall not exceed five (5) pages in length including graphics, figures, and/or tables. If applicants exceed the maximum page length, ARPA-E will review only the authorized number of pages and disregard any additional pages.
- (3) The ARPA-E assigned Control Number, Lead Organization Name, and Principal Investigator's (PI's) Last Name must be in the upper right corner of the header of every page. Page numbers must be included in the footer of every page.