# Abstract

(Limit one page)

*[This whitepaper template will be used to report information for concepts for which a funding opportunity is not yet open. The whitepaper must include discussion for each heading and subpoint provided, which would easily translate into a future proposal.*

*Branding is included in this template to meet the CAES requisites (logo and affiliation).*

*White papers must be 11 pt font for text and no smaller than 10pt font for figures and graphics. Whitepapers are limited to a minimum of 10 pages and a maximum of 15 pages (not including attachments).* *Use charts, tables, and graphs when appropriate.]*

# Introduction

Who are your collaborators and partners (include name and entity)?

Did you identify a potential customer/funding source?

What is the requested funding?

Proposed project duration?

What is your value statement?

# Research and Development Challenge or Opportunity

What is the problem/opportunity?

What is the planned aim and scope?

Provide enough detail to show demonstrated knowledge of the challenge or opportunity.

Why is this important? Who will care about your innovative idea?

# Builds Upon Previous Work or New Concept

How unique is the idea?

Has this already been done?

Does the proposed work build upon or move beyond current state-of-the-art?

How significant is the scientific and/or technical challenge?

# Objectives, Solution, and Work Plan

Set the stage for the proposed work.

Explain your proposed outcomes and the plan to reach the outcomes (logical path of the work).

Discuss the soundness and level of adequacy of the work plan to meet the problem or opportunity.

Describe key differentiators for your proposed solution.

Describe your advantage over the alternatives.

List potential risks, level of impact, and strategies for mitigation.

# Staffing, Capabilities, and Facilities

List providers, key staff, and other contributors.

Explain why they are qualified to complete the work.

Provide and organizational structure.

List equipment or capabilities (include adequacy statement).

List facilities needed to complete the work.

# Tasks and Milestones

Detail the work plan to meet the problem or opportunity.

Describe tasks, responsible person/entity, and durations (number of months).

List milestones for each task and associated responsible person/entity.

# Impact and Value

What are the benefits to the customer?

Define the impacts (lives saves, costs reduced, etc.)

Include funding sources researched.

When is the opportunity potentially available?

Why should this be funded? What is the value to the funder?

Provide a discussion of why the funding sources or project are not logical pathways. Is this permanent or limited because of time/resources?

Describe the value of this funded activity or provide suggestions for future consideration.

What is the significance of the technical and/or economic benefits of the proposed work, if successful?

Will the proposed work lead to a marketable product or process and on the size of the potential market?

Will the project attract further development funding (from private sector or Federal sources)?

Is there a tech to market plan (may be too early to determine)?

# Conclusion

Use this section to articulate your main points with clarity to reiterate.

What are the next steps, actions, and support needed?

# Acknowledgements

This proposal development activity and resulting whitepaper was funded by the Center for Advanced Energy Studies (CAES).

# References

Include appropriate and complete citations for your work.

# Attachment A, Cost Sheet

Include a budget to complete the estimated work. Not included in page count.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Institution** | **PI/Co-PI Name** | **Year 1 Budget** | **Year 2 Budget** | **Year 3 Budget** | **Total Budget** |
|  |  | $400K | $400K | $400K | $1,200K |
|  |  | $300K | $300K | $300K | $900K |
|  |  | $200K | $200K | $200K | $600K |
|  |  | $200K | $200K | $200K | $600K |
| Total Project | | | | | $ |

# Attachment B, Resumes

Include resumes (no more than 1-2 pages each) for the key contributors to this work. Not included in page count. At least two required.