Attachment B5

PON 4854 *Innovations in Offshore Wind Solicitation 2.0*

Concept Paper Template

**PROJECT TITLE (250 characters or less)**

Principal Investigator

Lead Organization (City, State)

**1. OVERVIEW**

|  |  |
| --- | --- |
| Funding Request, Cost Share (incl. source) | *Enter the funding request in U.S. dollars and the project cost share commitment (incl. source), e.g., $299,997, $100,000 cost share from X* |
| Round, Challenge Area | *Enter the solicitation Round and Challenge Area to which this concept is responsive, e.g., R1c2* |
| Funding Category(ies) | *Enter the solicitation Funding Category(ies) under which this project is categorized, e.g., C, or AB* |
| Project Duration | *Enter the project duration in months, e.g., 24 months* |
| Project Abstract | *Write a brief abstract (1-3 sentences, 2000 characters or less) that describes the proposed concept, the problem that it solves, and the impact it could have on energy.* |

**2. IMPACT**

* What is the current technical challenge(s) associated with U.S. offshore wind this concept will address, and what is the proposed solution?
* Who is the customer for this concept, and how will the successful implementation of this concept help them address the previously specified offshore wind challenge(s)? Quantify how this concept will make a positive impact on U.S. offshore wind LCOE, safety, deployment timeline, job creation, and/or investment risk.

**3. INNOVATION**

* What is the new idea or information that will be obtained?
* How does the core innovation work? Describe in detail how the new concept works, with no jargon. Feel free to include images or a diagram if appropriate.
* Has this concept been tried before? If so, what differentiates this project in enabling a working concept or overcoming past failures?

**4. STATE OF THE ART**

* What solution is practiced today? What other competing technologies are being developed?
* Why is the current technology insufficient or undesirable? What problem does the proposed innovation address?
* What is the value that your solution will provide over and above current solutions (including the ‘do nothing’) option?
* If successful, how would the proposed technology/work advance the state of the art? To the extent possible, provide quantitative metrics in a table that compares the proposed technology to commercial and other competing technologies.

**5. RISKS AND CHALLENGES**

* What makes the proposed technology/work a significant challenge? What are the technical risks for the proposed concept?
* Does the approach require one or more entirely new innovations or methodologies to be successful (e.g.; a never-before‑demonstrated fabrication technique, greater-than-previously-shown subcomponent performance, or material property for a yet-unknown material)?
* What techno-economic challenges must the proposed technology overcome to be relevant in the marketplace?
* Are there other risks associated with the proposed work, project team, or securing of facilities/resources necessary to complete the project as defined here?

**6. PROJECT PLAN**

* What will be accomplished by the end of the project? What are the objectives and performance characteristics of the proposed effort? Indicate the technical goals and anticipated results using appropriate metrics for the project.
* What work will be associated with the proposed effort, and what are the technical deliverables (e.g.; algorithm development, prototyping, modeling and simulation, architecture definition, reports, etc.)?
* How does the project team anticipate sharing project outputs/learnings/results with the broader OSW community?

**7. TEAM**

* What organizations will be involved with the proposed effort and what will each contribute?
* Who are the key team members on the proposed effort? For each key team member, include their name, position, institution, and 1-2 sentences about the skills or experience that make them ideally suited for the proposed effort.
* What other parties (not key team members) will be engaged for technical input or market engagement?

**CONCEPT PAPER TEMPLATE INSTRUCTIONS**

**CONTENT REQUIREMENTS:**

1. The above Concept Paper template and content provided should be used to prepare Concept Papers.
2. Applicants should ensure the accuracy of their Concept Paper by reviewing and/or printing prior to the proposal submission.
3. Confidential, proprietary, or privileged information should be indicated by including in the footer of every page the following: “Contains Confidential, Proprietary, or Privileged Information Exempt from Public Disclosure.” In addition, every line and paragraph containing proprietary, privileged, or trade secret information must be clearly marked with double brackets or highlighting.
4. Delete these template instructions and the prompt questions in Sections 2-7 above prior to submitting Concept Papers.

**FORMAT REQUIREMENTS:**

1. Concept Papers must be submitted in Adobe PDF format, be written in English, use black 11 point Times New Roman font, use 8.5 inch by 11 inch paper, be single-spaced, and have margins no less than 1 inch.
2. Concept Papers shall not exceed four (4) pages in length including graphics, figures, and/or tables.
3. Concept Papers must have the Principal Investigator’s (PI’s) Last Name in the upper right corner of each page.