

## National Offshore Wind Research and Development Consortium

Applicant Briefing Webinar - Innovations in Offshore Wind – Solicitation 3.0

#### **Welcome & Introductions**

#### **Kori Groenveld**

Senior Program Manager at NOWRDC

#### **Roger Townsend**

Innovation Lead - Energy at Innovate UK

#### **Additional notes:**

- All attendees are in listen-only mode. We encourage you to submit questions throughout the presentation via the question box. Questions will be answered during the Q&A portion at the end of the webinar.
- These slides and a recording of this webinar will be posted on <u>NOWRDC's website</u> within a week of this webinar.
- All proposal information included in this webinar is included in more depth in the RFP located here.



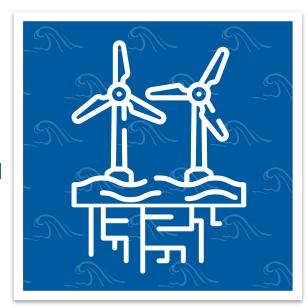
- Introduction to NOWRDC
- 2. Introduction to Innovate UK
- 3. Overview of Solicitation 3.0 challenge areas
- 4. Overview of Application Materials and Eligibility
- Introduction to B2Match
- Additional NOWRDC Announcements
- 7. Q&A



#### **NOWRDC's Mission**

NOWRDC is a nationally-focused, not-for-profit organization collaborating with industry to fund prioritized R&D activities to:

- Accelerate the deployment of offshore wind energy in the U.S.
- Address challenges and obstacles facing the offshore wind industry and maximize economic and social benefits.
- Reduce the levelized cost of energy (LCOE) of offshore wind in the U.S.





## **Our Core Activities**



Fund innovation directly responsive to the technical and supply chain barriers faced by offshore wind project developers in the U.S.



Increase U.S. content and job opportunities



## **NOWRDC Members and Board**

#### **Government & Utilities**

#### Offshore Wind Developers





































NEW YORK STATE OF OPPORTUNITY.





nationalgrid





VINEYARD (



**Orsted** 





OFFSHORE



**NY Power Authority** 





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# Introduction to Innovate UK and UKRI

**Roger Townsend** 



## **UK Research and Innovation**

We work with the government to invest over £7 billion a year in research and innovation by partnering with academia and industry to make the impossible, possible. Through the UK's nine leading academic and industrial funding councils, we create knowledge with impact.



UK Research and Innovation

## Innovate UK

We are the UK's innovation agency

We support business-led innovation in all sectors, technologies and UK regions

A key delivery body of the Government's Innovation Strategy

## **Our Mission**

To help UK businesses grow through the development and commercialisation of new products, processes, and services, supported by an outstanding innovation ecosystem that is agile, inclusive, and easy to navigate.





## UK ranks 4th in Global Innovation Index

Innovation accounts for up to 50% of labour productivity growth

Firms that persistently invest in R&D have higher productivity

Innovating companies are more likely to export and generate growth



## Delivering with Impact



Industry match funding taking the total value of projects above



£7.5bn









11,800

unique organisations involved











Core Programmes and ISCF





## 2023 Bilateral R&D Competition in partnership with





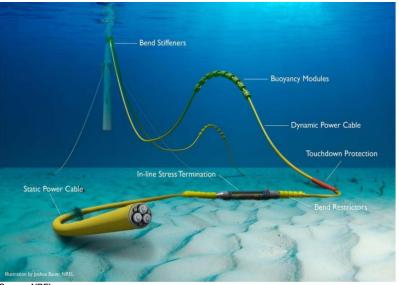
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## **Joint Solicitation Challenge Area #1**

Solutions to facilitate offshore wind resiliency and transmission coordination

Full topic area description provided in RFP

#### Illustration of a dynamic power cable:



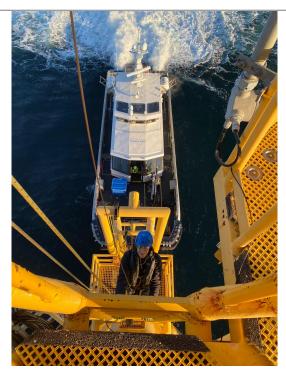
Source: NREL



## **Joint Solicitation Challenge Area #2**

**O&M Systems Development** 

Full topic area description provided in RFP



NOWRDC Project #154719: Dr. Babak Moaveni from Tufts University, instrumenting the Block Island Wind Farm with sensors for digital twin asset management



## **Joint Solicitation Challenge Area #3**

#### Innovation to facilitate ocean area coexistence

#### Full topic area description provided in RFP

\*\*Research projects in this category are encouraged to follow the Regional Wildlife Science Collaborative (RWSC) and the Responsible Offshore Science Alliance (ROSA) recommendations for regional research coordination by providing, when appropriate, project updates to appropriate RWSC and ROSA advisory groups, including project information in regional research and technology databases (e.g., RWSC Offshore Wind & Wildlife Database, ROSA Regional Framework Database and Fish FORWRD), and drafting data management and sharing plans that support regional collaborative research.



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#### **NOWRDC Joint Solicitation Process**

US and UK based offshore wind researchers partner to design a project focused on one of the solicitation topic areas.

US side of project applies to NOWRDC RFP

UK side of project applies to Innovate UK RFP









NOWRDC reviews applications and coordinates scoring with Innovate UK



Innovate UK reviews applications and coordinates scoring with NOWRDC & US states.

NOWRDC and Innovate UK select projects for award, with the US-led part of the project being funded by US state funding and the UK-led part of the project receiving matched Innovate UK funding.



## **NOWRDC Joint Solicitation - Key Dates**

Event	Date
Competition Opens	16-Oct-23
Briefing Event (Live or Webinar)	18-Oct-23
Questions Due	10-Nov-23
Submission Date	10-Jan-24
Notifications	22-Mar-24
Project setup/contracting complete (+90 days from	
Notifications)	20-Jun-24

View preview info on our website here: <a href="https://nationaloffshorewind.org/solicitations/">https://nationaloffshorewind.org/solicitations/</a>



## **Project Categories**

#### **Project categories:**

- Category A Technical Feasibility Studies: Category A is for feasibility studies that conduct
  preliminary research into the concepts underlying new products, systems, strategies or services
  as a first stage of development. These studies are necessary precursors to ultimate product
  development and commercialization. Feasibility studies may include conceptual design,
  technology and market assessments, and similar early-stage studies.
- Category B New Product, Systems, Service or Strategy Development: Category B includes efforts that are crucial to the development of a marketable product, system, strategy or service and any testing or validation of an innovation that is not already commercially available.
- Category C Demonstration of Technologies, Systems or Services: Category C is aimed at demonstrating and testing innovative offshore wind technologies, systems, strategies or services that have undergone product development and require testing to reach commercialization or are already commercially available but have not yet been sufficiently demonstrated in the U.S. to gain industry acceptance. This includes hardware, software, and market development initiatives.
- Multi-phase project proposals will be considered as well.



### **Project Guidelines**

The following guidelines should be considered when developing proposals:

- Proposals are welcomed from all geographic locations within the United States, with additional eligibility parameters outlined in Section III: Proposal Requirements.
- Projects are expected to begin as soon as feasibly possible with a project schedule estimate of: 6-18 months for Category A; 18-30 months for Category B; and Category C will be negotiated based on the scope and goals of the project.
- To enhance the likelihood of successful commercialization, project teams are strongly encouraged to engage an end user such as an offshore wind developer or a key member of the offshore wind supply chain. Teams may include offshore wind developers, turbine manufacturers, supply chain members, research organizations, universities, national laboratories, end-users, or other stakeholders.
- Proposals must state the existing Technology Readiness Level (TRL) of any technology being proposed and what the expected TRL of that technology will be at the end of the proposed project, as a direct result of having undertaken the project.



## **Cost Sharing**

- Aside from the required partnership with a UK-based entity, proposers are not required to provide any form of cost-share.
- However, it is recognized that, for projects such as demonstration projects, project team members may wish to provide additional funding or in-kind contribution to maximize the benefit of the project.
- Proposers are encouraged to provide an indication of any additional funding or in-kind contribution that will be used to support the delivery of a project.



## **Documenting Project Benefits**

The following guidelines should be considered when developing proposals:

- Establish potential benefits clearly and credibly
- Assess potential impact on levelized cost of energy using a credible, demonstrable methodology
- Where relevant, proposals may claim project benefits by providing an explanation of how their outcomes will
  reduce uncertainties and risks in wind plant development, installation, and/or operations and/or the costs
  associated with health and safety during the life cycle of a project.
- All proposals shall provide an explanation of how the proposed project could have a positive impact on advancing the offshore wind supply chain to the benefit of U.S companies.
- Include a commercialization strategy
- Use letters of commitment or interest



## **Proposal Evaluation**

Each proposal will be scored on a scale of 100 with the following weighting applied to each of the evaluation criteria:

- 1) Project Benefits and Value 40%
- 2) Innovation and State of the Art 30%
- 3) Project Plan, Scope, Risks and Challenges 15%
- 4) Team Experience and Capabilities 15%

Review Section IV. Proposal Evaluation Criteria in the RFP for full descriptions of each criteria.



## **Application Materials**

- All Full Proposals must include, at minimum, the following documents:
- Attachment A: Proposal Narrative (with required attachments)
- Attachment B1: Statement of Work
- Attachment B3: TRL/CRL Calculator
- Attachment C1: Milestone Payment Schedule
- Attachment D: Budget Justification
- Attachment 2: Applicant Assumption of Risk Form



## **Application Submission**

#### Application submission:

- Proposers may submit up to three unique proposals as a prime applicant, provided that each proposal concerns a separate and distinct topic. Online submission is required.
- Proposal submissions will be accepted at any time up until 3pm Eastern Time on January 10, 2024.
- Full proposals will be evaluated by Scoring Committees. There will be one or more Scoring Committees per
  Challenge Area. NOWRDC reserves the right to change the interval of Scoring Rounds. Any, all, or none of the
  available program funds may be awarded in any Scoring Round. Full proposals not selected for award can be
  updated based on feedback and can be resubmitted in later solicitations if appropriate under that later solicitation.

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#### How to Partner with UK Offshore Wind Researchers

The b2match online platform is your opportunity to find potential UK and US collaboration partners by posting a profile about your innovation, your project idea, and the type of organization you would like to collaborate with.

You can also arrange 1-2-1 online meetings to take your discussions forward.

→ Learn more and use the platform here



25 September 2023 - 10 January 2024 United Kingdom

UK-US matchmaking for UK-US Offshore
Wind R&D
Competition







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#### **Key Event Details:**

Date: December 4 & 5

Location: In-Person at NYU Tandon School of Engineering in Brooklyn, NY & virtually live-streamed on Hopin

Platform

Registration: The general admission link is available here.



## **NOWRDC Symposium registration is now open!**

The National Offshore Wind R&D Symposium will feature presentations from NOWRDC's offshore wind R&D projects, as well as networking opportunities and keynote talks from industry leaders.

In this 2023 Symposium, you will:

- Learn what NOWRDC's project portfolio is working on to deliver the next generation of cost reduction innovations in offshore wind
- Connect with other top professionals in the offshore wind innovation community
- Get a comprehensive overview of the principal technical challenge areas in the U.S. offshore wind industry
- Engage in solution-oriented discussion





#### **NOWRDC's Next Solicitation**

 Our next solicitation will be in collaboration with the California Energy Commission and will be announced in 2024

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## Q&A

Please submit questions in the question box.