Supergen ORE Hub/PRIMaRE Workshop

At-Sea Component Testing for Offshore Renewables (ACTOR)

28th June 2024 – 14.00 - 17.00

CONTEXT

The UK needs rapid Offshore Renewable Energy (ORE) expansion for Net Zero and climate change mitigation, energy security, green growth and jobs. The target of 50GW Offshore Wind by 2030 means building out ten times faster than at present. However, as development pushes into deeper water and more complex and challenging offshore environments, new floating technology and innovation is required. An offshore testing platform is a critical part of an integrated experimental testing ground for rapid proving for technology intended to operate in extreme hostile offshore environments.

Resulting from Supergen ORE Hub consultations with the ORE community, the University of Plymouth, in collaboration with ORE Catapult and PML are leading a proposal for a new "At-Sea Component Testing Facility for Offshore Renewables" (ACTOR). The aim of the workshop is to share details of the proposal and consult with the ORE community to further refine the use cases and specifications for the new facility.

To accelerate and de-risk ORE expansion, the aim for ACTOR is to establish an offshore floating laboratory (OffLab) to generate data pipelines in a 'controlled' offshore environment in parallel with a globally leading infrastructure of virtual ORE replicas (V-ORE). This will enable representations of real-world ORE assets, processes, and systems in their natural environment.

PROGRAMME

14.00 - 14.10 Welcome and update on the ACTOR proposal – Prof. Deborah Greaves (University of Plymouth)

14.10 - 15.20 Panel member presentations (*10 mins*):

- Prof. Campbell Booth - *Vice Dean – Research, Faculty of Engineering, University of Strathclyde (ENSIGN project and use of digital twins*
- Segoline Berthou *(Met Office)/* Jon Taylor *(Met Office Principal fellow in observations) (TBC)*
- Prof. Matthew Palmer - *Head of Science - Digital Innovation & Marine Autonomy, PML (Environmental impacts of OWFs and how autonomy provides potential for related monitoring solutions)*
- Katherine York *(Offshore Renewable Energy Catapult DOME Lead) (TBC)*
- Jeremy Nahon *(Akselos)*
- Tim Stiven *(The Crown Estate) (TBC)*
- *Dr Katie Blaney, Joint Head of Research Infrastructure EPSRC UKRI*

15.20 - 15.45 Refreshment Break

15.45 - 16.45 Plenary panel discussion and Q&A with audience

16.45 - 17.00 Next steps and close – Prof. Deborah Greaves (University of Plymouth)