

Big Offshore Coupling

Publieke samenvatting / Public summary

Aanleiding

Solar parks at sea are an ideal solution for countries with little space and lots of water. SolarDuck recently put its first floating farm into operation successfully. Large assemblies offshore is the next step, and an upgrade in the connections is required to cope with the high waves and strong winds. Flexibility at the required strength are key elements and combining these, normally contradictory demands, require innovative solutions.

Doelstelling

TNO and SolarDuck are therefore going to collaborate on research into the development of a robust coupling that has both spring and damping properties.

Korte omschrijving

By introducing damping, the system will last longer, can be of a larger scale and have lower maintenance costs. Specifically this project focuses on: 1. Investigations into the requirements of the coupling and design of a coupling 2. Modelling of behaviour of the coupling under longer term operating conditions 3. Testing and measurements to validate model performance and design functionality. 4. Optimisation of design parameters through tests

Resultaat

The following results are expected at the end of this project ? A prototype spring/damper unit ? A validated calculation method for prediction of the effectiveness of damping and spring functionalities and loads ? A significant reduction in peak loads and

Projectinformatie / Project information

Projectnummer / Project number

TKITOE_WOZ_2204_OpenCall_SolarDuck_BOC

Subsidiebedrag / Grant amount

€ 100.000,00

Algemene informatie / General information

Penvoerder / Secretariat

SolarDuck

Volg Topsector Energie op X / Follow Topsector Energie on X

@TSEnergie

vibration levels This coupling will provide a reduction in peak loads. This will result in lowering the cost and help in reducing cost of the structural design of the coupled platforms.

De data in deze applicatie is afkomstig van de Rijksdienst voor Ondernemend Nederland (RVO) en wordt in samenwerking met de Topsector Energie ontsloten.

Voor meer informatie over de Topsector Energie, ga naar www.topsectorenergie.nl.

Voor meer informatie over de TSE / Energie-Innovatie regelingen die RVO aanbiedt, ga naar www.rvo.nl/tse.