Baltic OffshoreGrid Forum

Side event at **WINDFORCE Conference 2018**
15 May 2018, 16:00-19:00

ATLANTIC Hotel Sail City
Conference Room 6
Bremerhaven, Germany

MINUTES

Thematic Working Group Seminar
"Environment & Society" and "Cost-Benefit Analysis"

Venue: WINDFORCE Conference 2018, Bremerhaven (Germany)
Host: Stiftung OFFSHORE-WINDENERGIE & Deutsche WindGuard
Materials: Presentations

Welcome and introduction

Thilo Krupp (Stiftung OFFSHORE-WINDENERGIE) welcomed all participants to the joined TWG Seminars "Environment & Society" and "Cost-Benefit Analysis" within the scope of the Baltic Offshore Grid Forum. He gave a short introduction to the Baltic InteGrid project and presented the agenda of the seminar.

Session 1: Environment & Society

Dr. Vanessa Stelzenmüller (Thünen-Institut) outlined the challenges and opportunities for multi-use solutions of offshore wind farms. Dr. Stelzenmüller depicted the increasing conflict potential between offshore wind and fisheries due to higher offshore wind energy ambitions and emphasized the potential of aquaculture within the offshore wind areas. Furthermore, she introduced the project "Co-use of offshore wind farms as a model for an ecosystem-based approach to marine spatial planning". The two-year project will run until March 2020 and will further investigate the above-mentioned points and develop, *inter alia*, potential marketing strategies.
In the subsequent round of questions, it has been highlighted that system designs are of importance in order to guarantee e.g. maintenance.

During the second presentation of the session **Dr. Matthias Wehkamp (Stiftung OFFSHORE-WINDENERGIE)** gave a short overview of the environmental impacts of offshore wind farms. Since this topic is very broad, Dr. Wehkamp focussed in his presentation on the environmental impacts of offshore windfarms on fish and benthos. He stressed that with the construction of offshore windfarms artificial reefs are introduced in an environment that often consists of sandy sediments. There are solid indications that offshore wind farms attract and accumulate fish from the surroundings. Therefore, new ecological niches for marine communities are provided.
Anyway, to his knowledge currently there are no studies available on how cables actually influence the marine environment or if there are any impacts of magnetic electronic fields.

Mariusz Wójcik (Foundation for Sustainable Energy) presented the Impact Mitigation Strategy which has been developed within the Baltic InteGrid project. The main objective of the Impact

Mitigation Strategy is to develop guidelines and assumptions for the strategic environmental impact assessment and to identify good practices for the environmental procedure for infrastructure offshore investments. This will be done, *inter alia,* through the development of standards for the environment and socio-economic impact analysis, the creation of assumption for mitigation strategy for a Baltic Offshore Grid (BOG) and the development of recommendations for the environmental impact assessment process for a BOG and social dialogue. The Impact Mitigation Strategy will be published during the Baltic InteGrid project duration.

Session 2: Cost-Benefit Analysis

The session was opened by Thilo Krupp, who presented the session's agenda and introduced **Dr. Bo Yin (Global Energy Interconnection Cooperation Organization, GEIDCO)** as the first speaker. In his function as deputy director of the Europe office Dr. Yin represented the Global Energy Interconnection Cooperation Organization (GEIDCO). He gave some detailed insights into his China-based organization and its purpose to promote a global electricity system based on renewable energies and an ultra-high voltage (UHV) grid infrastructure.
From his point of view, biggest challenges are regulatory issues, political reliability and market design.

The next presentation was given by **Alexandra Armeni (Deutsche WindGuard)** who shared some results of the PROMOTioN project, which seeks to develop a meshed HVDC offshore grid in the North Sea. The project partners identified a substantial need for grid investments. Ms. Armeni presented four potential investment models to cope with the financial challenges: 1) North Sea Grid TSO, 2) National TSOs, 3) Third Party Investor together with an Independent System Operator, and 4) Competitively Appointed Transmission Owner. During her presentation she pointed out pros and cons of each model and highlighted that the major challenge is the huge investments needed. A pan-European structure might be needed.

In the last presentation **Richard Weinhold (IKEM)** and **Anna-Kathrin Wallasch (Deutsche WindGuard)** presented the results of the Cost-Benefit-Analysis that has been conducted within the Baltic InteGrid project. They showed that due to the choice of case studies, benefits differ only marginally between the different scenarios. The costs varied depending on the degree of integration. No general conclusion could be drawn with regard to the level of integration, although the partial or maximum integration scenarios showed to be the most favourable ones for most case studies

Closing

Thilo Krupp thanked all participants for the valuable inputs and pointed out the upcoming events within the scope of the Baltic InteGrid project:

- 23 May 2018: Thematic Working Group Seminar 'Technology & Grid Design' (Copenhagen, Denmark) – Official side event of the Nordic Clean Energy Week 2018
- 7 June 2018: Conference "Offshore Grid and Offshore Wind Energy in the Baltic Sea – Opportunity for Integrating Energy Markets" (Warsaw, Poland) – Official event of the European Commission's Sustainable Energy Week

The registration form and further details are available on the Baltic InteGrid project website: http://www.baltic-integrid.eu/index.php/Events.html

The session ended with an informal exchange between the partners and external guest during the evening reception of the WINDFORCE Conference.