

# **Offshore Wind Roadmap**

#### International dialogue on Renewables Integration

- Honoured to engage with the Philippines Roadmap on Offshore wind
- Many lessons (good and bad) gained from UK experience to date and future plans

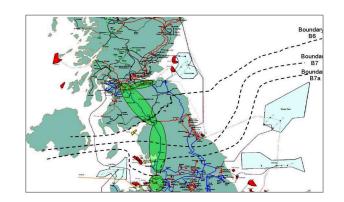
### **Summary**

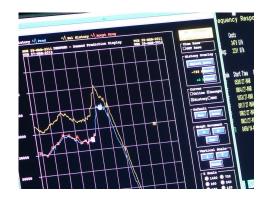
- Rapid UK renewable growth has maintained a secure, reliable and economic grid
- Early planning in network development, Data and Market helps remove barriers
- Connection issues and network growth require coordination
- Market developments important to future success

## **Energy Transition – Connections and Markets**

### Key early Issues for renewable growth

- Connection of renewable projects and capacity build of transmission grid
- In the last 15 years we have seen growth to:
  - 14 GW Onshore wind
  - 10 GW Offshore wind (fixed)
- Next 8 years will deliver
  - Additional 20-30 GW Offshore, mis of fixed and floating
- Experience to date
  - Joint strategic Network and Market Studies are key Gov-Industry Network Strategy Group to unblock delays
  - Wind turbines can deploy faster than networks or markets so important to build strategic capacity/capability early
- Floating turbines has opened up whole ocean... so coordination even more important
  National Grid







national**grid** 

### **Useful links**

#### **Future Energy Scenarios**

https://www.nationalgrideso.com/future-energy/future-energy-scenarios/fes-2020-documents

#### **System Operability Framework:**

https://www.nationalgrideso.com/research-publications/system-operability-framework-sof

#### **Ten Year Statement**

https://www.nationalgrideso.com/news/electricity-ten-year-statement-etys

#### **Electricity Networks Strategy Group**

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/48274/4263-ensgFull.pdf

#### **Crown Estate Offshore Wind annual report**

https://www.thecrownestate.co.uk/media/3792/offshore-wind-operational-report-1.pdf

**National Grid**