



**Transmission Charging  
Methodologies Forum and  
CUSC Issues Steering  
Group**

**Meeting 129 - 24 November 2022**

# Agenda

- 
- |   |  |               |
|---|--|---------------|
| 1 | Introduction, meeting objectives and review of previous actions <b>Claire Huxley - ESO</b> | 10:30 - 10:35 |
| 2 | Code Administrator update <b>Paul Mullen - Code Administrator ESO</b>                      | 10:35 - 10:40 |
| 3 | TNUoS Taskforce update <b>James Stone - ESO</b>  | 10:40 - 10:50 |
| 4 | BSUoS draft tariff update <b>Nick Everitt - ESO</b>  | 10:50 - 11:00 |
| 5 | New BSUoS mods – P85 BSUoS Fund (CMP406 & 407) <b>Naomi De Silva - ESO</b>                 | 11:00 - 11:15 |
| 6 | OTNR Codes and Standards update <b>Nitin Prajapati &amp; David Witherspoon - ESO</b>       | 11:15 - 11:25 |
| 7 | AOB and Meeting Close <b>Claire Huxley - ESO</b>   | 11:25 - 11:40 |
-

# Review of previous actions

ID	Month	Agenda Item	Description	Owner	Notes	Target Date	Status
22-13	Oct 22		To reach out to Ofgem for update on timescales for Code reform headline.	Claire Huxley	In progress	Dec	Open

Code Administrator update

Paul Mullen – Code Administrator ESO

TNUoS Taskforce update

James Stone - ESO

# Background...

- The TNUoS Task Force was established by the ESO with industry membership in **July 2022**.
- The key focus of the Task Force is to look at the issues of predictability and cost-reflectivity in current transmission charging arrangements - **considering the balance of and inherent trade-off between improving predictability and cost reflectivity**.
- In **October 2022**, Task Force members were asked to identify potential areas for review or specific defects within the current TNUoS charging methodology.
- Members then prioritised the list of defects in terms of importance, whilst also focusing on if the defect should be looked at now or if this could be reviewed at a later date - **with defects then given a High/Medium/Low rating**.
- In addition, consideration of work that could **feasibly** be carried out by ESO should the Task Force be required to pause (given the upcoming demands of winter work), was also taken into account.
- In **November 2022**, Ofgem published an open letter, setting out how it plans to approach activities on electricity network charging over the winter period - **Task Force meetings will no longer be scheduled for the rest of 2022**.
- To maintain momentum during this interim period, the ESO have been asked by Ofgem to now build on the work already undertaken by the Task Force.

# Priority areas for review...

- Following Task Force prioritisation, the work the ESO intend to take forward and review during the pause includes:

## 1. Backgrounds (Peak & Year Round):

- Backgrounds in the TNUoS model are used in the calculation of charges to reflect the drivers of transmission investment.
- The current specification of these backgrounds is based on assumed Generation & Demand patterns made at the time of Project TransmiT.
- The system has evolved significantly since then (and continues to do so) i.e., a move away from conventional generation plant to more intermittent weather driven generation as well as changes to the nature of demand.

**The Task Force considered that a review of backgrounds is necessary to ensure charges main reflective.**

## 2. Shared/Not Shared elements of the Wider tariff:

- The Year Round Shared & Not Shared components of the Wider Tariff are used to calculate the locational charge specific to a generator – this is linked to, and varies by generation zone.
- Over recent years a divergence between the locational charges for generators between the North and South of GB has been witnessed - which has been suggested by some as being a barrier to achieving Net Zero decarbonisation goals.

**It has been recognised by the Task Force that there is a strong case to review these elements to ensure they continue to be based on cost reflective assumptions.**

# Priority areas for review continued...

## 3. Review of data inputs to the charging methodology:

- There are currently a large number of variable inputs used within the TNUoS model.
- Sensitivity to the inputs can mean charges change significantly year-on-year, meaning charges are unpredictable, a problem which may be addressed by reducing any volatility within the inputs.
- It has also been suggested that some of the data used may no longer be fit-for-purpose or reflective of the most reasonable assumptions as to various parties' effects on the network

**The Task Force agreed there would be merit in reviewing inputs. The ESO intends to review inputs including, charging bases, demand assumptions, Average Cold Spell (ACS), Week 24 Data etc - both on their affect on stability but also in the cost reflectivity of TNUoS tariffs.**

## 4. Consideration of changes to the Reference Node:

- The 'reference node' is the broad term used to describe the demand-weighted distributed reference node used within the Transport model
- It's the methodology underpinning the 'distance to demand' calculations in transmission charges, and as such determines the relative split of the cost of a transmission route between demand and generation.
- It has been suggested for some time (by various industry participants) that the node (and its location) impacts charges for generation and thus may also impact competition.

**Given previous industry feedback, the ESO believes that a review of the methodology (and consideration of potential options for change) may be prudent in the context of better improving the cost reflectivity of TNUoS charges.**



# Next Steps

- We are currently in the process of looking to onboard additional support to progress this review.
- This work is likely to include; conceptual assessments; solution identification; assessment of potential reforms (qualitative (conceptual) and quantitative analysis).
- Further detail regarding the priority areas and Task Force meeting materials can be located on the Charging Futures website, found here: [Charging Futures TNUoS Task Force - Resources Page](#).
- We intend to provide periodic updates to industry and to the Task Force regarding progress of the priority areas identified for review.

BSUoS draft tariff update

Nick Everitt - ESO



# BSUoS Fixed Tariff Recap

**ESO**

**Draft BSUoS Fixed Tariff for 2023-24**  
11<sup>th</sup> October 2022

**Introduction**

Under the existing Balancing Services Use of System (BSUoS) methodology, the daily costs of operating the system are recovered through the BSUoS charge on an ex-post basis. The costs that need to be recovered each day determine what the half hourly tariff is for the BSUoS charge.

The tariff (also called BSUoS price) changes each settlement period and is a function of the cost that needs to be recovered in each settlement period being divided by the chargeable volume. The costs of balancing the system are volatile and difficult to predict and this makes the BSUoS charge also difficult to predict.

CMP361 seeks to introduce an ex-ante fixed volumetric BSUoS tariff set over a total fixed notice period of 15 months which is designed to deliver the recommendations of the Second BSUoS Task Force. The decision on whether to implement CMP361 currently sits with Ofgem and they published a [minded to document on the 21st September 2022](#).

The "minded to position" from Ofgem suggested WACM5 (Workgroup Alternative CUSC Modification) as the most likely to be implemented. WACM5 fixes BSUoS for 12 months with 3 months' notice and defined that a BSUoS fund at the P99 level be built up over 5 years.

Since CMP361 was first raised we have been preparing to implement a fixed tariff and this draft tariff is part of that preparation. We have been developing a model for forecasting balancing costs and ran two webinars to seek feedback on the model.

CMP308 which has already been approved for implementation on the 1st of April 2023 removes the burden of BSUoS charges from generation and levies the charge on final demand energy volumes only.

**1. BSUoS Fixed Tariff Overview**

Below are the numbers for the key components that make up the BSUoS draft tariff for the 2023/24 charging year which determines a main tariff of **£17.22 per MWh** and a fund tariff of **£1.52 per MWh**.

If Ofgem gave approval for WACM5 of CMP361 these rates would be chargeable from the first settlement period of the 1st April 2023 until the final settlement period of 31st March 2024

It is important to note at this point that this is a draft tariff. CMP361 has not been approved and the final tariff, that we intend to publish by the end of December 2022, could be very different to the numbers below with revised forecast data and potentially different parameters depending on final decision by Ofgem.

Fund Recovery Period (Yrs)	Balancing Costs (£m)	Internal Costs (£m)	CMP395 Costs (£m)	Main Tariff Cost (£m)	Fund Tariff Cost (£m)	Volume Forecast (TWh)	Main Tariff (£/MWh)	Fund Tariff (£/MWh)
5	4,184	435.6	137.5	4,757	2,100	276.2	£17.22	£1.52

1

Document or Webpage	Links
CMP308 – BSUoS charged on final demand only from 2023/24	<a href="#">Web link</a>
BSUoS Fixed Tariff Model Methodology	<a href="#">Download</a>
BSUoS Fixed Tariff Model Q&A	<a href="#">Download</a>
BSUoS Fixed Tariff Model Consultation 2	<a href="#">Download</a>
Non final demand declaration process running in next few weeks	Direct Emails
CMP361/362 – Ofgem minded-to 21/09/2022	<a href="#">Web link</a>
CMP361/362 – Ofgem update on minded-to 15/11/2022	<a href="#">Web link</a>
Consultation closes 30th November	
Draft BSUoS Fixed Tariff Published 31/10/2022	<a href="#">Download</a>
CMP406/407 – Raised at urgent panel 23/11/2022	<a href="#">Web link</a>
Draft Tariff Webinar 23/11/2022	<a href="#">Download</a>

# Updated Tariff Values

Based on Forecast Published on 17th October 2022

Fund Recovery Period (Yrs)	Balancing Costs (£m)	Internal Costs (£m)	CMP395 Costs (£m)	Main Tariff Recovery (£m)	Fund Tariff Recovery (£m)	Volume Forecast (Twh)	Main Tariff (£/Mwh)	P Level (%)	Fund Tariff (£/Mwh)	Combined Tariff (£/Mwh)
5	4,184	435.6	137.5	4,757	2,100	276.2	£17.22	99	£1.52	£18.74

Based on Forecast Published on 15th November 2022

Fund Recovery Period (Yrs)	Balancing Costs (£m)	Internal Costs (£m)	Main Tariff Recovery (£m)	Fund Tariff Recovery (£m)	Volume Forecast (Twh)	Main Tariff (£/Mwh)	P Level (%)	Fund Tariff (£/Mwh)	Combined Tariff (£/Mwh)
5	4,244	435.6	4,680	2,011	276.2	£16.94	99	£1.46	£18.40

## Next Steps

- Ofgem response deadline 30<sup>th</sup> November 2022
- CMP406/407 Raised today
- Revised monthly forecast middle of December
- Final BSUoS Fixed Tariff by end of December or at least revised draft numbers if awaiting decision
- We are continuing to work on the forecasting model
- Working with our billing system integration team to implement a solution that will be ready for April 2023 go live
- Report specifications for our changed reports will be made available as soon as we have specified them.
- New methodology goes live 1<sup>st</sup> April 2023
- New system development and integration post go live
- Changeover from existing to new system date tbc

New BSUoS mods – P85 BSUoS Fund

(CMP406 & 407)

Naomi De Silva - ESO

# Background

- In September 2022, Ofgem published their consultation on their minded to decision on CMP361 and CMP362: CMP361 WACM5 and the original proposal for CMP362. WACM5 has a 12 month fixed period and a 3 month notice period, a BSUoS fund built up over 5 years, and a P level of P99 i.e. the probability charges will need to be reset within a fixed period is 1 in 100.
- This would implement the recommendation of the second Balancing Services Task Force to recover BSUoS charges as a flat volumetric charge set on an ex-ante basis from 1 April 2023. In addition, CMP308 will be implemented from 1 April 2023 to move BSUoS charges to final demand only.
- On 15 November, Ofgem [published an update](#) to this explaining they are concerned about the erosion of consumer benefits under P99 due to the size of the industry fund. Feedback received from industry through the consultation also provided feedback about the fund size. The industry fund is necessary for the ESO to manage cashflow beyond c. £300m of ringfenced working capital.
- Ofgem have asked the ESO to raise urgent mods looking at options for an industry fund set between P70 and P90 certainly levels.

# The Mod

- The mod will have a £/MWh BSUoS rate fixed for a 12 month period and 3 month notice period i.e. final tariff published by 1 January each year
- The industry fund will be built up over 2 years via a £/MWh fund levy element incorporated into the BSUoS tariff rate. The industry fund is in addition to the ESO's c.£300m of working capital
- The fund will be set at P85 where the P level is equivalent to the probability under normal circumstances that tariffs would only need to be reset within a fixed period. A recent forecast of fund size at P85 is £800m v. £2.1bn at P99. We welcome engagement through the workgroup from industry on the costs and benefits of different P levels.
- The BSUoS industry fund requirements will be reassessed each year when the tariff is set. If the fund is exceeding that of its P level (in this case P85) it will be adjusted downwards to reflect this, and if the fund is lower than the P level it will be adjusted upwards.
- As a key date is providing a final tariff rate before 1 January.
- This was raised as Urgent and rejected by Panel on 23<sup>rd</sup> Nov due to it being not substantially different to CMP361/362



# Next Steps

- The issue still remains that fixed BSUoS is now at risk for implementation for 1<sup>st</sup> April 2023.
- Panel agreed that this was an immediate issue and were very open to other ways of working to help deliver a solution.
- Waiting to hear from OFGEM of their proposed next steps.
- Suggestion to use a TCMF sub-group to discuss the potential options and be in a position to raise another modification when appropriate.
  - Seeking input from industry for availability for 2 workshops next week to work through the 406/407 content and develop an industry position. Note that this is not a working group or a formal modification process. It may help to form an industry position for a future modification given the tight timescales.

# OTNR Codes and Standards update

Nitin Prajapati & David Witherspoon - ESO

# OTNR Update

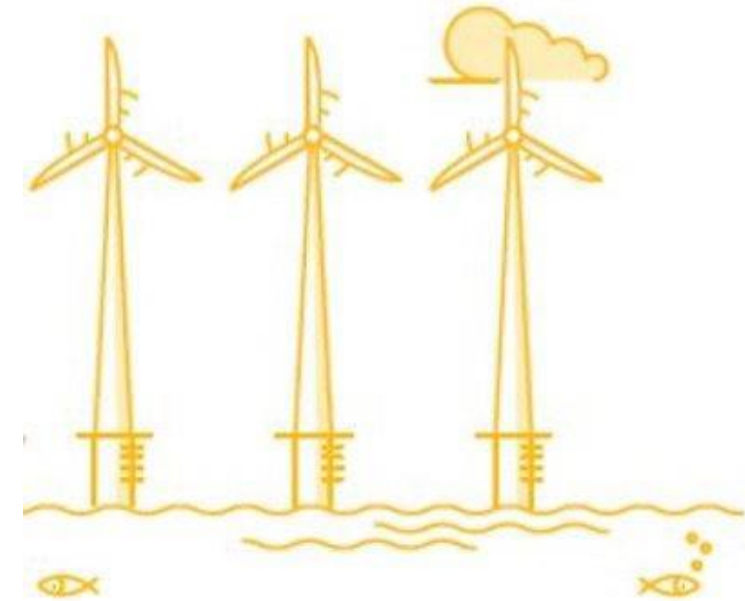
Following on from the ESO update provided in October's TCMF, Ofgem have published two decisions related to OTNR.

## Anticipatory Investment (AI)

- On 18th October, Ofgem published their decision on AI and Implementation of Policy Changes confirming the allocation of AI risk between consumers and the later connected user to the shared transmission infrastructure.
  - Ofgem are working through the application of the charging methodology for AI across all OTNR workstreams and will further consult with the industry on this.
- The ESO will take into consideration the further consultation from Ofgem and will plan to raise a CUSC code modification relating to AI and network charging.

## Holistic Network Design (HND) Asset Classification

- On 19th October, Ofgem published their OTNR decision on Asset Classification.
- The decision categorises the assets within the HND into either onshore transmission, radial offshore transmission, or non-radial offshore transmission.
- The ESO are now reviewing the asset classification decision against the draft networking charging modifications (we started to develop following the industry workshops) to ensure alignment with the policy decision.



# Proposed Code Modifications

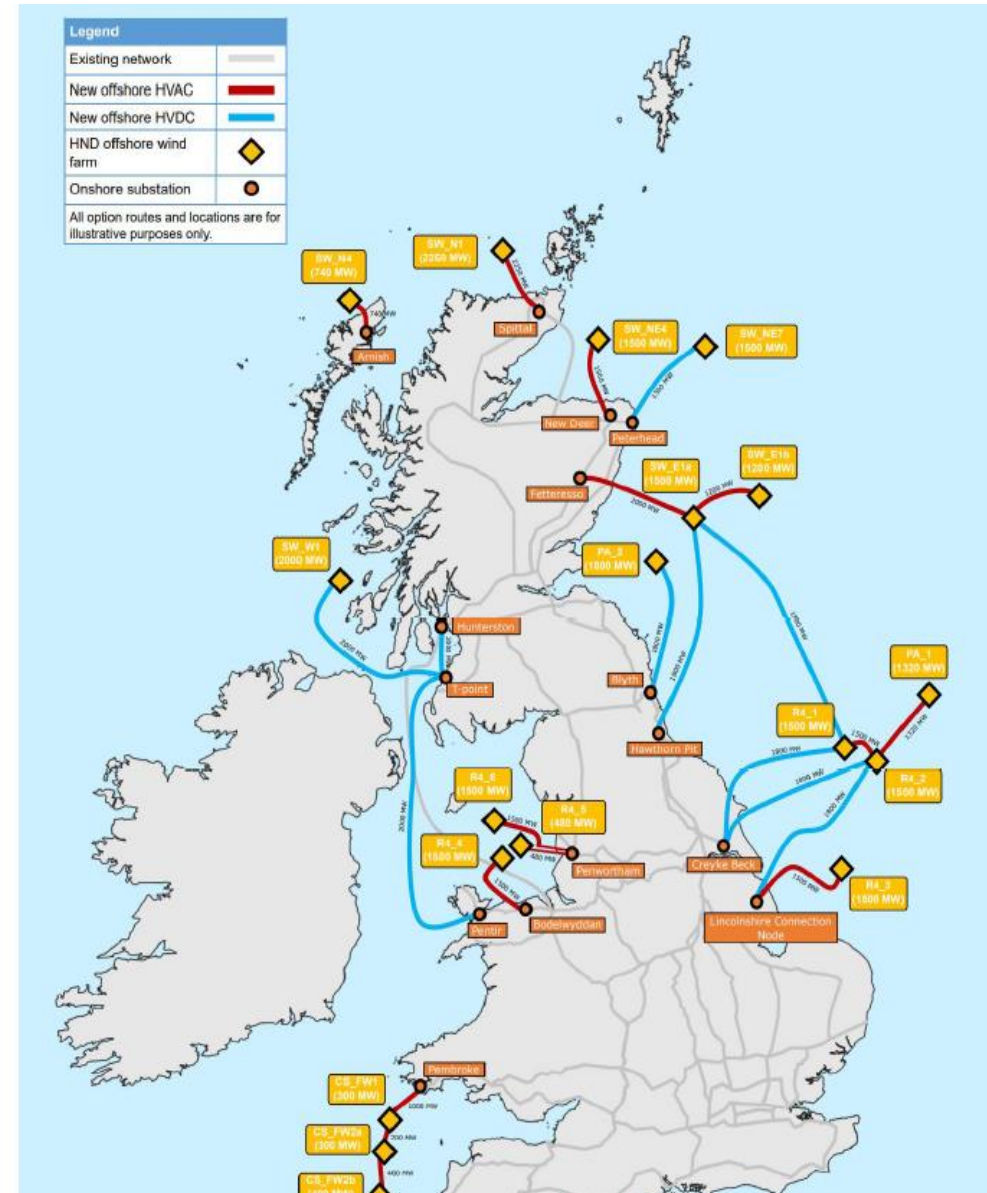
- The below table provides an indicative overview of the proposed OTNR commercial and charging code modifications, which could be changed, removed or added to once the policy decisions from Ofgem have been fully reviewed.
- The ESO raised the first CUSC Code Modification relating to AI and User Commitment on 10th November and this will be discussed at the CUSC Panel meeting on 25th November.

Code Modification	Code Impacted	Overview	Dependencies / Comment
User Commitment - AI	CUSC Section 15	A CUSC code modification related to Anticipatory Investment (AI) and User Commitment	Raised in November 2022
Network Charging - AI	CUSC Section 14	A CUSC code modification related to the AI Cost Gap, AI and TNUoS charges	Subject to review of AI Decision
Network Charging - Offshore Zones	CUSC Section 14	A CUSC code modification to create offshore zones for wider charging purposes	Subject to review Asset Classification Decision
Network Charging - application of wider tariff	CUSC Section 14	A CUSC code modification to set out how wider charges will be apportioned in the event of a connection via two different MITS Nodes	Subject to review Asset Classification Decision
Network Charging - onshore user charges	CUSC Section 14	A CUSC code modification to set out the extent to which onshore developers will pay for offshore network via wider charges	Subject to review Asset Classification Decision
Network Charging - Offshore MITS Node	CUSC Section 14	A CUSC code modification for the creation of the concept of an Offshore MITS Node and setting the principles associated with an Offshore MITS Node	Subject to review Asset Classification Decision
Network Charging - GCC	CUSC Section 14	A CUSC code modification related to the Generator Commissioning Clause (GCC) and Network Charging	Subject to review Asset Classification Decision and Offshore Delivery Model Decision
CUSC - OTSDUW and OTSUA	CUSC Section 1	A code modification to clarify such offshore concepts (and those related concepts) can now also be in respect of offshore assets which are shared and/or for wider system purposes	Subject to review Asset Classification Decision and Offshore Delivery Model Decision
STC - Non-Radial OFTOs	STC – various sections	A code modification to increase the obligations on non-radial offshore transmission system owners and introduce the concept of an offshore-to-offshore transmission interface point and site	Subject to review Asset Classification Decision and Offshore Delivery Model Decision
Queue Management	CUSC – various sections	A CUSC code modification to add any offshore delivery model specific elements to the outcome of CMP376 e.g., in relation to delays to the delivery of AI	Subject to review Asset Classification Decision, Offshore Delivery Model Decision and Queue Management Modification Outcome

# Annex – Ofgem Decision on Asset Classification

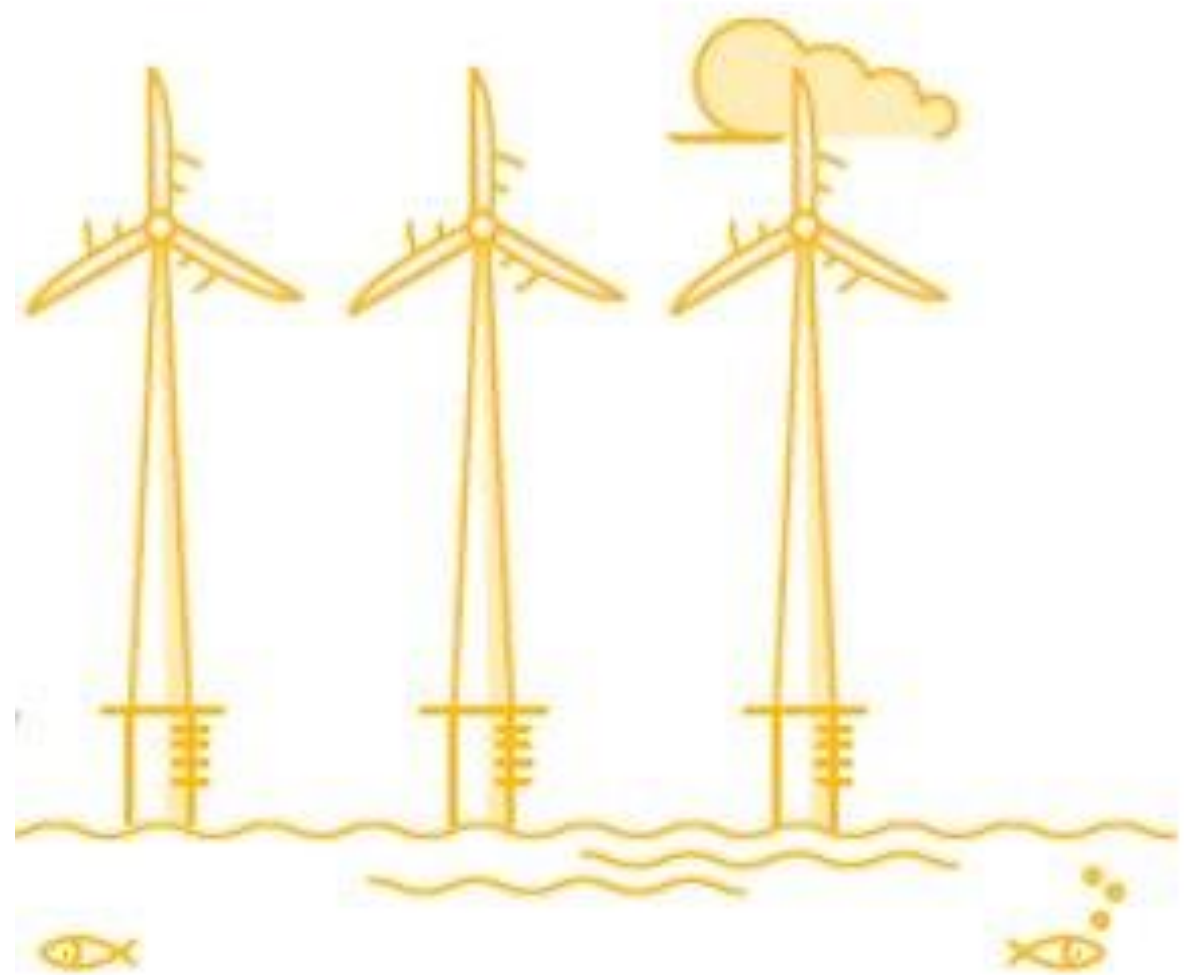
**Table 1 – Classification of assets**

Circuit	Classification
PA_2 - Blyth	Radial Offshore
SW_NE4 - New Deer	Radial Offshore
R4_2 - Creyke Beck	Non-radial Offshore
R4_2 - Lincolnshire	Onshore
R4_1 - Creyke Beck	Non-radial Offshore
R4_1 - R4_2	Onshore
Fetteresso - SW_E1a	Onshore
PA_1 - R4_2	Radial Offshore
SW_E1b - SW_E1a	Radial Offshore
SW_W1 - T-Point	Radial Offshore
SW_NE7 - Peterhead	Radial Offshore
R4_4 - Bodelwyddan	Radial Offshore
R4_5 - Penwortham	Radial Offshore
R4_6 - Penwortham	Radial Offshore
SW_E1a - Hawthorn Pit	Non-radial Offshore
SW_E1a - R4_1	Onshore
SW_N4 - Arnish	Radial Offshore
R4_3 - Lincolnshire	Radial Offshore
Hunterston - T-point	Onshore
Pentir - T-point	Onshore
SW_N1 - Spittal	Radial Offshore



Thank you!

Any questions?



# AOB & Close