



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

**Meeting 146 - 9 May 2024**

# Agenda

1	Introduction, meeting objectives and review of previous actions <b>Chris Parsons - ESO</b>	10:30 - 10:35
2	TNUoS Task Force update <b>Joe Dunn - Scottish Power</b>	10:35 - 10:45
3	ESO Connections update <b>Alex Curtis &amp; Paul Mullen - ESO</b>	10:45 - 10:55
4	Code Administrator update <b>Milly Lewis - Code Administrator ESO</b>	10:55 - 11:05
5	RWE/Taskforce proposal - fixing TNUoS <b>Tom Steward - RWE</b>	11:05 - 11:30
6	AOB and Meeting Close <b>Chris Parsons - ESO</b>	11:30 - 11:45

# TCMF Objective and Expectations

## Objective

Develop ideas, understand impacts to industry and modification content discussion, related to the Charging and Connection matters.

Anyone can bring an agenda item (not just the ESO!)

## Expectations

Explain acronyms and context of the update or change

Be respectful of each other's opinions and polite when providing feedback and asking questions

Contribute to the discussion

Language and Conduct to be consistent with the values of equality and diversity

Keep to agreed scope

## Review of previous actions

ID	Month	Description	Owner	Notes	Target Date	Status
24-6	Feb 29	Update TCMF with progress on potential CUSC defect on double counting of Cancellation Liability and Security presented by Tony Cotton at TCMF 1 February 2024.	CG	TC expressed dissatisfaction with progress. CG confirmed action was progressing and will catch up with TC offline. Action to remain open	May 24	Open
24-7	April	NE to respond to PY on TNUoS Task Force Signals Work	NE	NE to speak to PY on matter	May 24	Open
24-8	April	ESO to advise who is representing large scale demand users on TNUoS TF	NE	ESO to advise at next subgroup	May 24	Open
24-9	April	ESO to confirm if CUSC and STC users have reciprocal arrangements for raising alternatives on proposed connections modifications	PM	PM to check governance arrangements with ESO Code Admin	May 24	Open

TNUoS Task Force verbal update

Joe Dunn - Scottish Power



# TNUoS Task Force update

> **Signals sub group:**

Objective: Discuss content of Demand TNUoS draft proposal, taking into account in particular a proposed shorter period than has previously been agreed for measuring Year Round chargeable volumes, and agree next steps.

Outcome: Majority of taskforce supported a longer period (total consumption) for measuring Year Round chargeable volumes. Proposer will redraft accordingly and Signals Sub-Group will meet to discuss next draft.

> **Backgrounds Sub group:**

Objective: Discuss considerations for a TNUoS modification proposal relating to the Transport and Tariff model backgrounds. In particular consider changes to generation scaling factors, terminology and technology classifications regarding “carbon” versus “low carbon”, treatment of PV and embedded generation in the background model, different assumption regarding demand in the Year Round background, compared with the Peak Security background, as well as model design issues including treatment of parallel zones with regards to sharing, and the definition of MITS for both onshore and offshore.

Outcome: Majority of taskforce supported that there appears to be a case for change regarding most of the issues raised. Some of the issues are relatively large and complicated, so it may be better to address these through several smaller modifications instead of one large modification. Resulting actions included to investigate whether the parallel zones issue could be addressed within the existing re-zoning modification, whether there is sufficient data to separately model embedded generation, and clarify ESO view of carbon versus low carbon classifications. The backgrounds subgroup will meet before the next Task Force to discuss each issue in more detail, ensure key considerations are identified and recommend the most appropriate way to group issues into a number of modifications.

> **TNUoS Gen FIX:**

Objective: Discuss content of Fixed TNUoS draft proposal, including whether it reflects agreed principles, and agree next steps.

Outcome: Proposer is asked to consider whether there is a risk of gaming if a site increases and decreases its TEC, and present draft proposal to next TCMF. LJ will produce a draft recommended ToR that has been collated by the sub-group, for consideration by panel.

>

# ESO Connections update

Alex Curtis and Paul Mullen - ESO





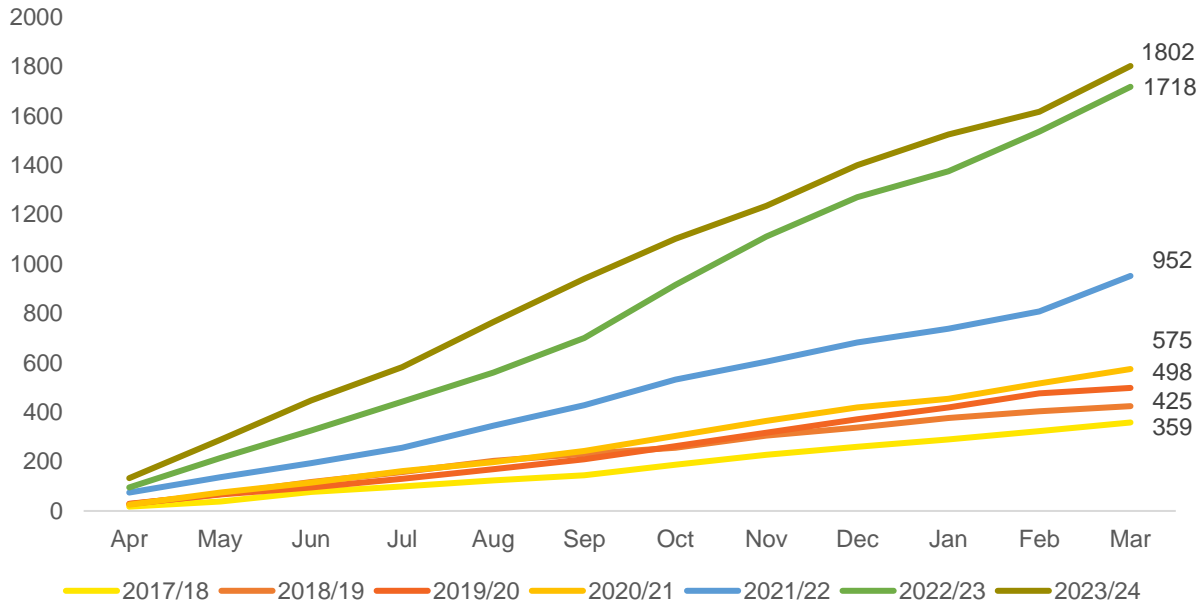


# Connections by Numbers

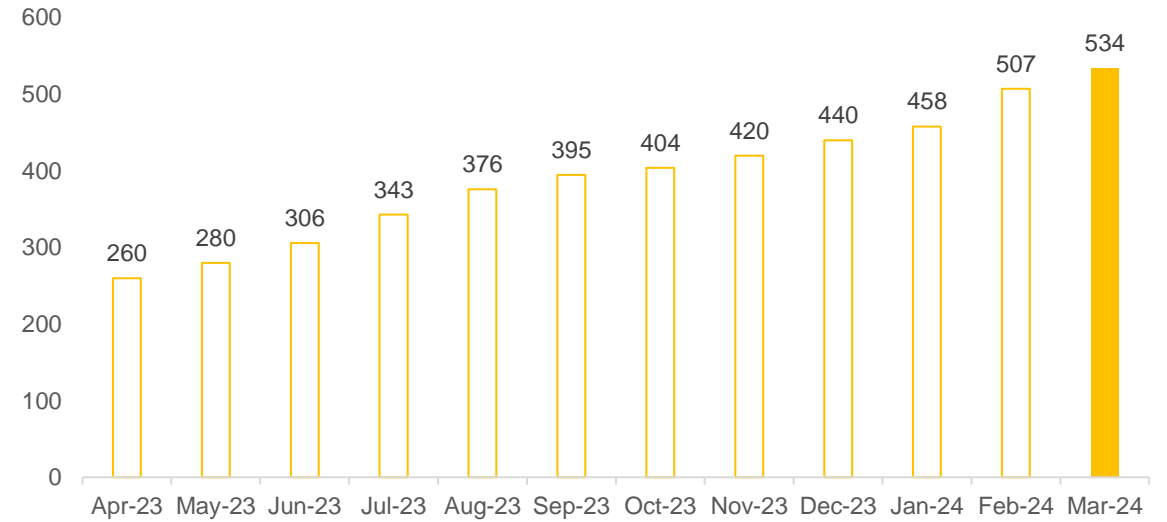


# Connection Applications

No. Licensed Applications



Connection Queue (Contracted Background)



Record Type	Licensed Applications Received - March24
ESO Modification Application	53
ESO New Connection Application	101
ESO Project Progression Application	31
ESO Statement of Work (SOW)	1
<b>Grand Total</b>	<b>186</b>

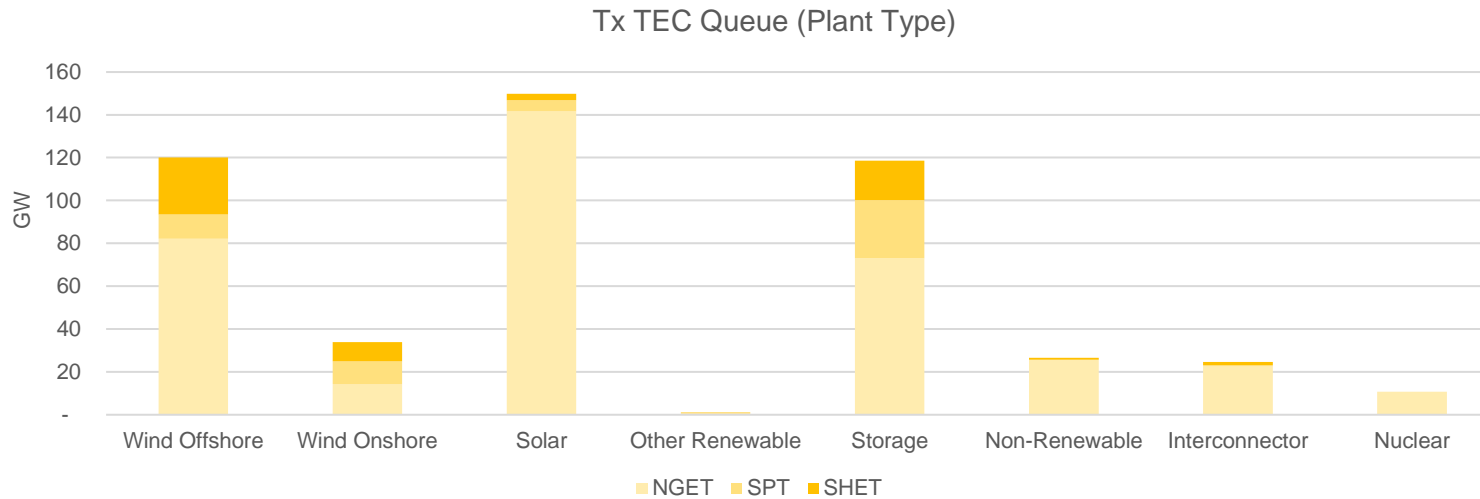
## Queue Growth

- 534GW in transmission queue
- 274GW increase in 12 months
- 105% size increase in 12 months



# Connections Queue [726GW]

## Transmission Queue



**534GW**

Queue Size

**1533**

Contracted Projects

Technology Type	Total
Interconnector	20
Non-Renewable	67
Nuclear	8
Other Renewable	15
Solar	472
Storage	567
Storage - Hydrogen	6
Wind Offshore	122
Wind Onshore	256
<b>Total</b>	<b>1533</b>

## Directly Connected Demand

**26GW**

Queue Size

**87**

Contracted Projects

## Distribution Queue

**166GW**

Queue Size

**7027**

Contracted Projects

Phase 1 of Technical Limits – Jan 24  
30GW across 72 GSPs

10 GW BESS accelerated – Jan 24

CMP376 QM – ongoing Implementation Feb – June 24

CMP 427 LOA mod implemented- 28 Mar 24

CAP Milestone delivery Package 2- Apr 24

Reform Mods (incl LoA Phase 2) Raised CMP 434/5– Apr 24

Second Step Offer Completed - 31 May 24

CAP- substation bays initiatives- Spring/summer 24

IDNO paper- spring/summer 24

# 2024 and beyond...

 Distribution  
 Transmission

CAP - Effectively allocate network capacity released in the short term- spring/summer 24

CMP 330 / 374 Contestability Mod- Jul 24 Ofgem decision

Transmission works review Contract updates – Summer 24

Technology Change Paper- summer 24

CMP328- distribution impact assessment

CAP - Decide longer-term approach to allocate capacity complementing strategic network planning- spring/summer 24

CAP - Explore more stringent measures to improve certainty of progression- spring/summer 24

CAP - Recommendations to optimise existing network capacity- spring/summer 24

Accelerating BESS in Scotland – Jul 24

Phase 1 of Scottish Technical Limits – Mar / Jul 24  
216MW across 26 GSPs

Rollout of Phase 2 of Technical Limits – Mar / Aug 24  
16 GW across 80 GSPs

Rollout of Reallocation of Capacity – Mar / Aug 24

Accelerating BESS further in England & Wales – Autumn 24

Reformed process proposed 'go live' – Jan 25

CMP417 - securities for demand- Q1 25 Ofgem decision

Monitoring and Exit of 'Zombie Projects' – Dec 23: Nov 25

# Code Administrator Update

Milly Lewis - Code Administrator ESO



# Key Updates since last TCMF

## New Modifications / Nominations

- [CMP433](#) 'Optimised Transmission Investment Cost model' ([Nomination](#) Form will go out on 13 May 2024)
- [CMP434](#) 'Implementing Connections Reform'
- [CMP435](#) 'Application of Gate 2 Criteria to existing contracted background'

## Decisions

- [CMP286](#) 'Improving TNUoS Predictability Through Increased Notice of the Target Revenue used in the TNUoS Tariff Setting Process' **Rejected**
- [CMP392](#) 'Transparency and legal certainty as to the calculation of TNUoS in conformance with the Limiting Regulation' **WACM2 approved**
- [CMP411](#) 'Introduction of Anticipatory Investment (AI) within the Section 14 charging methodologies'' **Original approved**

## Implementations

- **None**

# Authority Expected Decision Date

Modification	Final Modification Report Received	Expected Decision Date
<a href="#">CMP315</a> 'TNUoS Review of the expansion constant and the elements of the transmission system charged for' and <a href="#">CMP375</a> 'Enduring Expansion Constant & Expansion Factor Review'	07/02/2024	30/09/2024
<a href="#">CMP330&amp;CMP374</a> 'Allowing new Transmission Connected parties to build Connection Assets greater than 2km in length and Extending contestability for Transmission Connections'	10/08/2023	08/07/2024 (Previously 08/05/2024)
<a href="#">CMP396</a> 'Re-introduction Of BSUoS on Interconnector Lead Parties'	05/01/2024	31/05/2024
<a href="#">CMP408</a> 'Allowing consideration of a different notice period for BSUoS tariff settings'	13/10/2023	09/09/2024 (Previously TBC)
<a href="#">CMP414</a> 'CMP330/CMP374 Consequential Modification'	10/08/2023	08/07/2024 (Previously 08/05/2024)
<a href="#">CMP415</a> 'Amending the Fixed Price Period from 6 to 12 months'	13/10/2023	09/09/2024 (Previously TBC)
<a href="#">CMP413</a> 'Rolling 10-year wider TNUoS generation tariffs'	08/05/2024	TBC
<a href="#">CMP418</a> 'Refine the allocation of Dynamic Reactive Compensation Equipment (DRCE) costs at OFTO transfer'	08/05/2024	TBC

The Authority's publication on decisions can be found on their website below:

<https://www.ofgem.gov.uk/publications/code-modificationmodification-proposals-ofgem-decision-expected-publication-dates-timetable>

\* Dates moved since last update



# Key Updates ahead of the next TCMF

May  
Consultations

- [CMP424](#) (Amendments to Scaling Factors used for Year Round TNUoS Charges) Code Administrator Consultation **open until 5pm 22 May 2024**

# Non Urgent Modification Workgroup Meeting Update

At the April 2024 CUSC Panel, Panel members agreed that based on the volume of ESO and industry resource being utilised by the Urgent CUSC Modifications Workgroup meetings that all other modification Workgroup meetings should take a hiatus. The Panel agreed that they would appraise each modification on a rolling monthly basis to understand whether there was a freeing up of industry resource.

Month	May				June				July					August	
Weekdays	06 -10	13-17	20-24	27-31	03 -07	10 -14	17 -21	24 -28	01 -05	08 -12	15 -19	22 -26	29 -31	05 -09	
<a href="#">CMP430/CMP431</a> Meetings (MHHS Urgent modifications)	2	1	2	1	0	CAC									
CMP434 Meetings (IRC Urgent modification)	1	2	1	1	1	2	2	Workgroup		0	2	1	1	1	
CMP435 Meetings (Gate 2 Urgent modification)	1	1	1	1	1	1	0	Consultation		0	2	1	1	1	
Total Workgroup meetings	3	4	4	3	2	3	2	0	0	0	3	2	2	2	30

Whilst there will be no Workgroup meetings arranged until further notice this does not prevent appropriate work being completed in the meanwhile. The ESO have committed to do the following:

Mod Number	Title	Committed Activity
CMP426	TNUoS charges for transmission circuits identified for the HND as onshore transmission	The ESO is completing further analysis which will be available early Summer 2024
CMP402	Introduction of Anticipatory Investment (AI) principles within the User Commitment Arrangements	The ESO are currently reviewing the solution for CMP402 which will be available from early Summer 2024
CMP419	Generation Zoning Methodology Review	A new Proposer has taken over the modification and based on feedback from the Workgroup the ESO are reviewing the scope of the modification and will feedback to the Workgroup once this has been finished
CMP417	Extending principles of CUSC Section 15 to all Users	The Proposer and Connections SME will complete additional detailed worked examples and verification through a subgroup ahead of future Workgroup meetings being arranged
CMP423	Generation Weighted Reference Node	The ESO will continue with the required further analysis, develop the legal text and share the transport model with the Workgroup members that have signed the software license agreement.
CMP288	Explicit charging arrangements for customer delays and backfeeds	The Workgroup Consultation Document will be finalised and circulated for Workgroup approval ahead of being published to industry
CMP344	Clarification of Transmission Licensee revenue recovery and the treatment of revenue adjustments in the Charging Methodology	The Workgroup is awaiting external analysis ahead of the next Workgroup meeting. The ESO will continue to work on addressing the Send Back deficiencies in preparation for the next Workgroup meeting.

If you have any queries around specific modifications please contact Rachel McLeod [Rachel.McLeod@nationalgrideso.com](mailto:Rachel.McLeod@nationalgrideso.com) or [cusc.team@nationalgrideso.com](mailto:cusc.team@nationalgrideso.com)

## Useful Links

Updates on all Modifications are available on the Modification Tracker [here](#)

Ofgem's expected decision dates/ date they intend to publish an impact assessment or consultation, for code modifications that are with them for decision are available [here](#)

The latest CUSC Panel Headline Report and prioritisation stack are available [here](#)

If you would like to receive updates from the Code Administrator on CUSC modifications please join the distribution list [here](#)

## CUSC 2024 - Panel dates

	Panel Dates	Papers Day	Modification Submission Date	(TCMF) CUSC Development Forum
November	24	16	9	2
December	15	7	30 November	23 November
January	26	18	11	4
February	23 (Face to Face Meeting)	15	8	1
March	22	14	7	29 February (Face to Face Meeting)
April	26	18	11	4
May	31(Face to Face Meeting)	23	16	9
June	28	20	13	6 (Face to Face Meeting)
July	26 (Face to Face Meeting)	18	11	4
August	23	15	8	1
September	27	19	12	5 (Face to Face Meeting)
October	25 (Face to Face Meeting)	17	10	3
November	29	21	14	7 (Face to Face Meeting)
December	13	5	28 November	21 November

RWE/Taskforce proposal - fixing TNUsoS

Tom Steward - RWE

# RWE

## RWE / Taskforce Fixing TNUoS Proposal

Tom Steward, RWE Offshore



# High Level Overview of Proposal

We believe that the (N)ESO is better placed to forecast evolution of network and costs than individual developers, particularly in the context of the introduction of the Centralised Strategic Network Plan (CSNP).

It is well acknowledged that unpredictability adds avoidable risk (and therefore cost) to the system. We therefore propose to give generators the option to fix their wider generation charges in line with a forecast to be produced by the (N)ESO.

# Background

This proposal began life in two places, simultaneously:

- Discussions at TNUoS taskforce around the value of fixing TNUoS in some way
- CMP413 - Rolling 10-year wider TNUoS generation tariffs – WACM 2 – then withdrawn

Since this time it's undergone further development, but there are a couple of areas that remain unanswered (comments from TCMF welcome).

# Proposal – Overview (1)

- Principle objective: minimise unnecessary TNUoS risk in order to minimise costs to the consumer.
- Proposal to have an option to fix a profile for the majority\* of a generator's wider TNUoS charges for a period against a forecast profile produced by the ESO, this would be refreshed annually. This means each fix is based on the best information at the time.
- This would be open to all generators, and fixes could be for any number of whole years, from 1 to 15 (or up to a maximum length of the ESO's forecast, whichever is shorter).
- TNUoS charges would be on a fixed profile – ie. could go up and down over this period, however these fluctuations would be known in advance.
- For new projects, liability would begin at the point of TEC start. For existing projects, from the following year.
- Towards the end of a fixed period, a site would have the option of fixing again, or moving onto a variable TNUoS tariff (akin to today's arrangements).
- Generators opting into a fix would **not** be able to opt out again mid-way through, however if a site closes it will not be obligated to pay for its remaining fixed period.

\*There is a European Regulation, the “€2.50 cap” which applies a negative adjustment to all generators, this would continue to operate independent of the fix. In 2023/24 it reduced all generators TNUoS charges by £0.93/kW. This proposal would also not affect a generator's local tariffs including OFTO charges.

## Proposal – Overview (2)

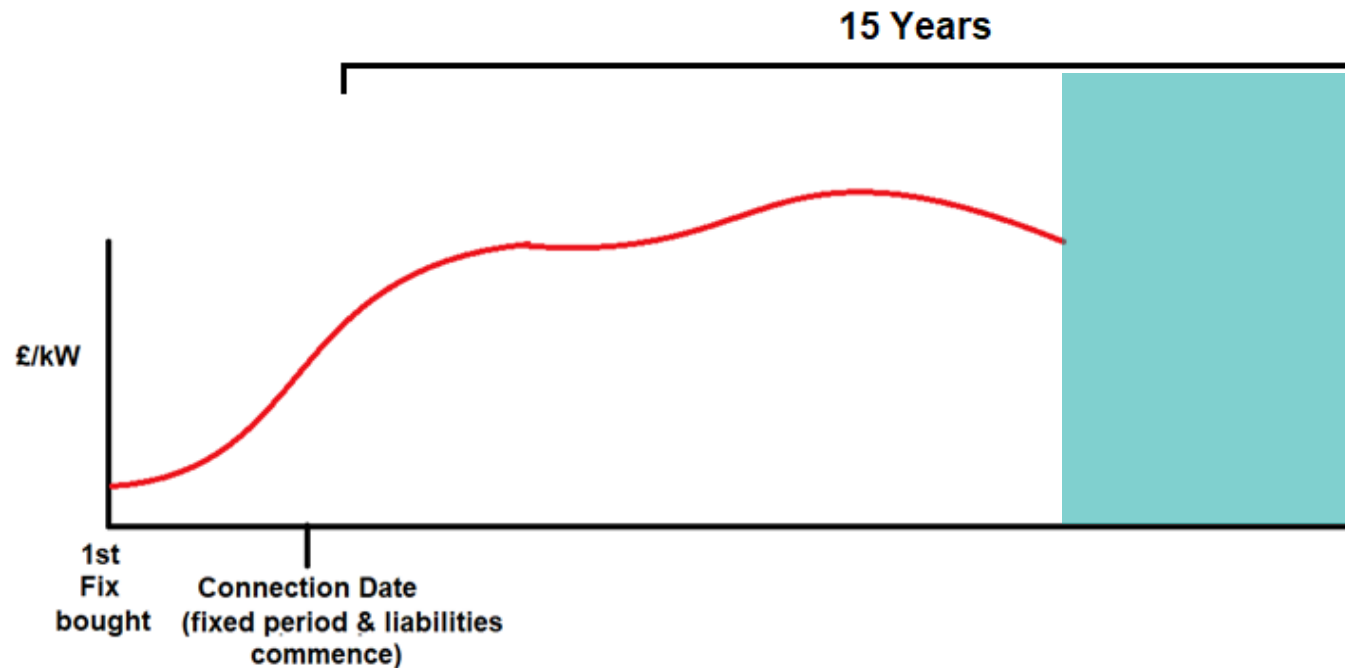
- A generator is not required to fix its entire TEC, but can elect to subdivide its TEC – again to allow consideration of future investment plans.
- It is not possible for a modification to truly protect a generator from future modifications. It would therefore be possible for a future modification to change the TNUoS charges of a generator with a fix. It is a matter for OFGEM how future modifications are applied, and to manage any impacts on investor certainty.

### Addressing changes to a site mid-way through a fixed period

- High level principle: A TNUoS fix shouldn't be the reason to make changes to a site, nor the reason not to make changes a site.
- If a site reduces its TEC, its liabilities decrease as per today.
- If a site increases its TEC, the new TEC is charged at the latest forecast rates (and the generator may choose to fix that part of its TEC).
- A “ratchet” would apply whereby previously fixed price TEC that was reinstated during the fixed period would again attract the original charge – this is to avoid gaming risk.
- If a site changes technology during the life of a fix (e.g. moves from intermittent to conventional carbon by adding storage), the life of the fix continues, but at the rate that would have been charged at the point the fix was initially taken.

## Challenge: Tail end of fixed period

- If a generator is bidding on a 15 year contract (e.g. CfD, CM, DPA), it will likely be a number of years between making that bid (and presumably securing the fix alongside it) and the fixed period beginning. If ESO carries out a 15 year forecast, this will leave an unfixed/unforecasted period at the end (shaded area below).
- Therefore, we propose asking ESO what the longest fix it could do would be to minimise the size of the shaded area.

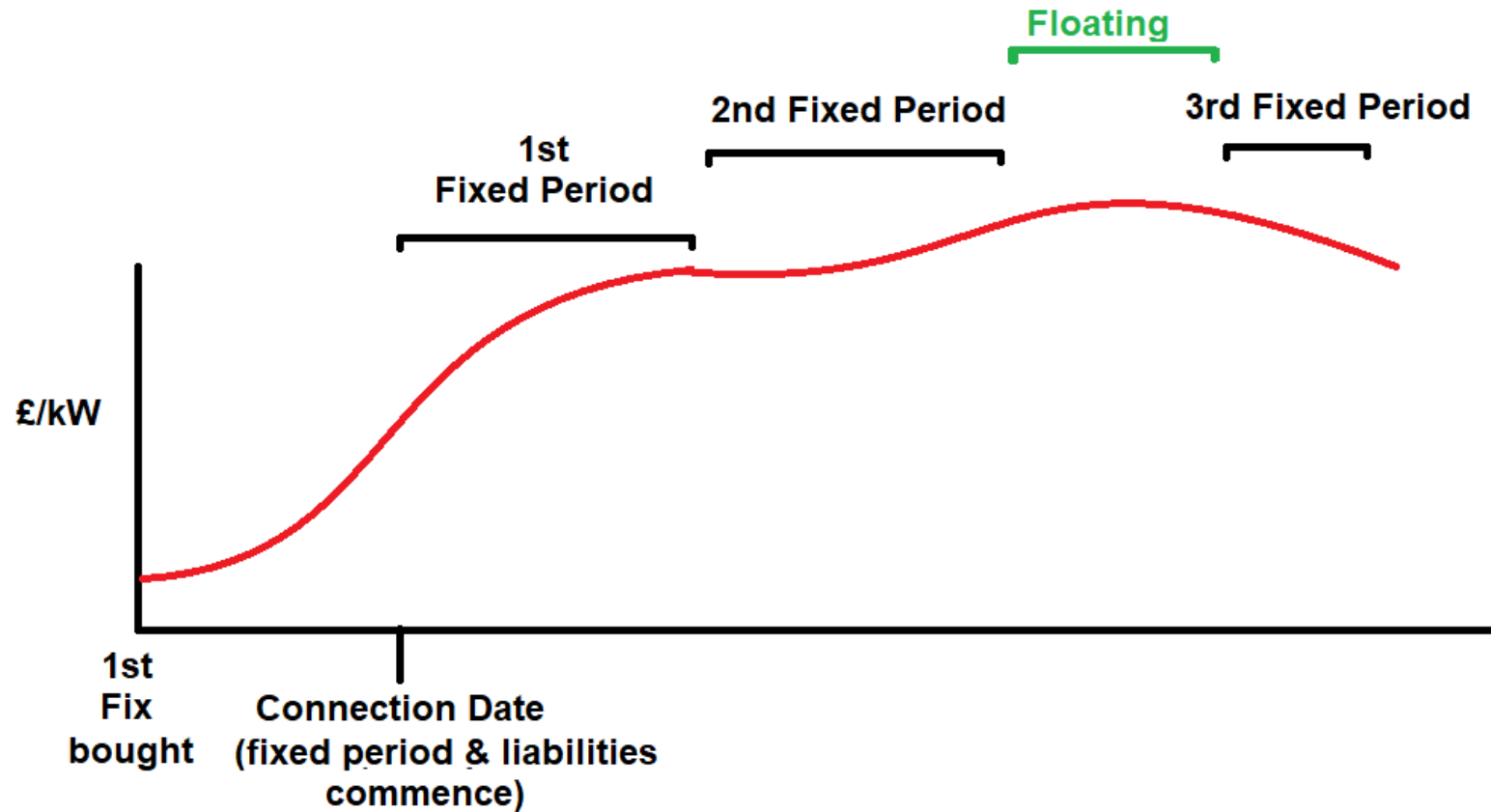


# Open questions

- How best to address the “tail end” issue?
- Is the current scope (ie. locational wider charges only, not covering local charges or €2.50/MWh cap adjustment)
- Should developers that commit to a fix be “on the hook” for that level of TEC against the forecast (irrespective of closure / TEC reduction)?
- Are there unintended consequences or opportunities for gaming?



# Example – series of fixes over the lifetime of a site



# AOB & Close