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Competition in transmission

An early competition overview

Introduction

James Kennerley – Technical Engineering Manager at NESO

- 3 years at ESO/NESO
- Responsible for the technical elements of early competition
  - Project identification
  - Specification
  - Technical bid evaluation
- 10 years previous experience with NGET
- Academic background in civil engineering

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An early competition overview

Why introduce competition?

What is Early Competition?

How are we doing it?

Next steps

Questions.

Why?

Transmission Acceleration Action Plan – Government's response:

The government plans to introduce competition in onshore electricity networks in phases. This strategy aims to save consumers up to £1 billion by 2050.

- Efficiency in investment
- Foster innovative solutions to network needs
- Reduce costs to consumers

Energy Act 2023

- Encourage greater levels of inward investment into electricity networks
- Provide sufficient additional network capacity to meet growing demand in Great Britain

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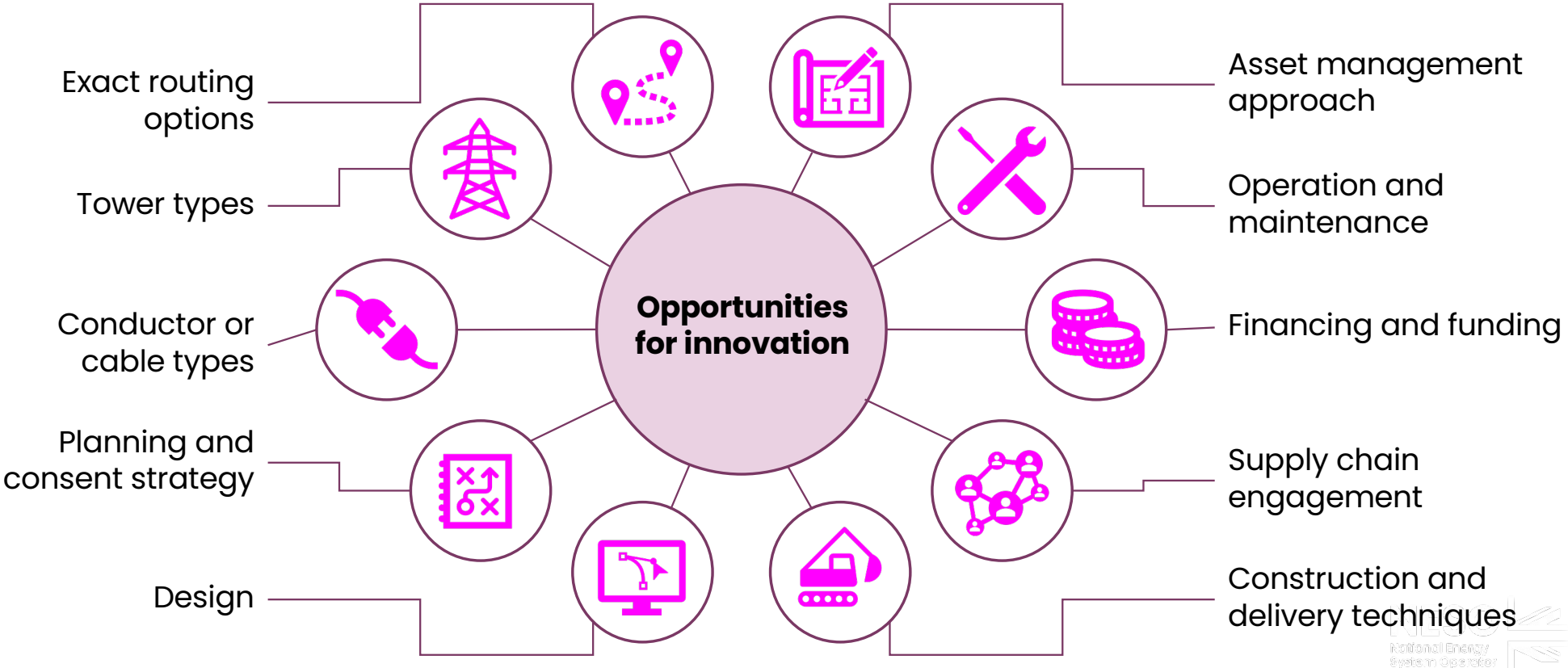
Why? – Consumer value

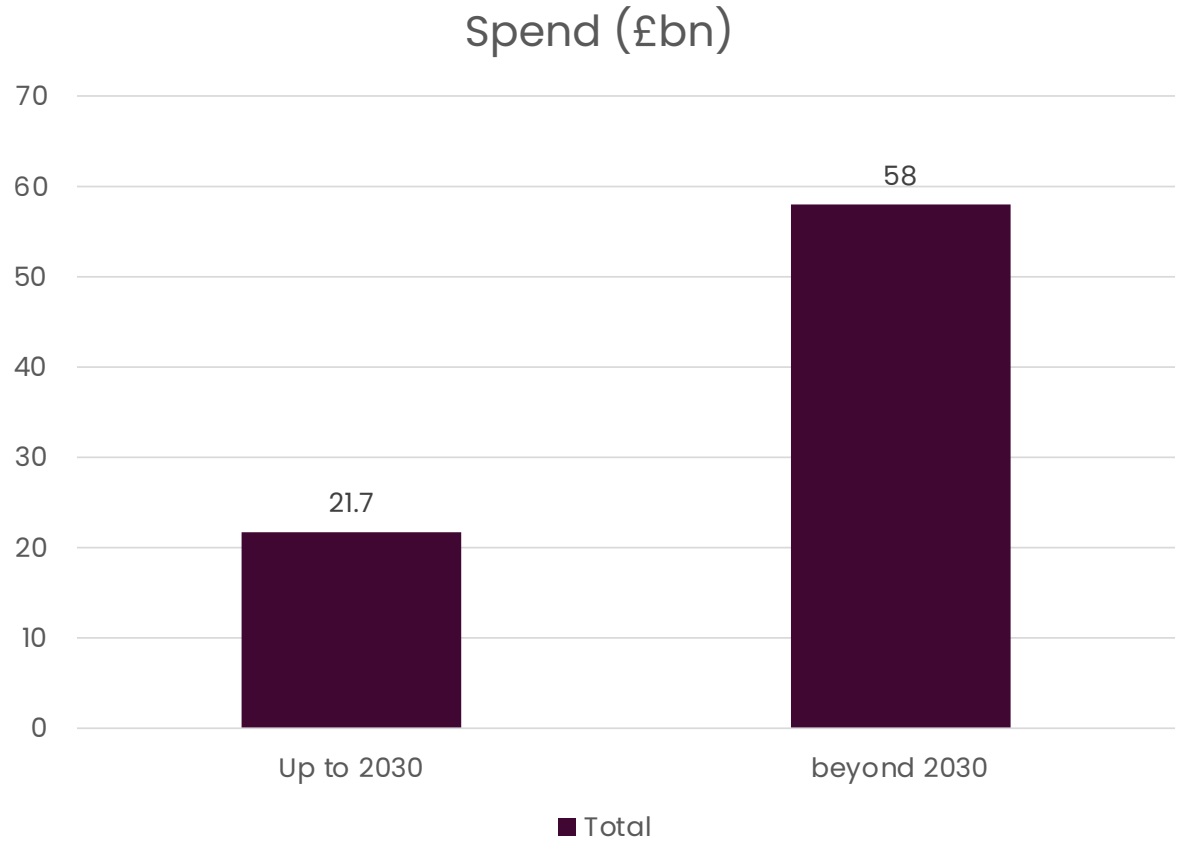
We believe the model allows for scope for innovation within the selected option in the following areas:



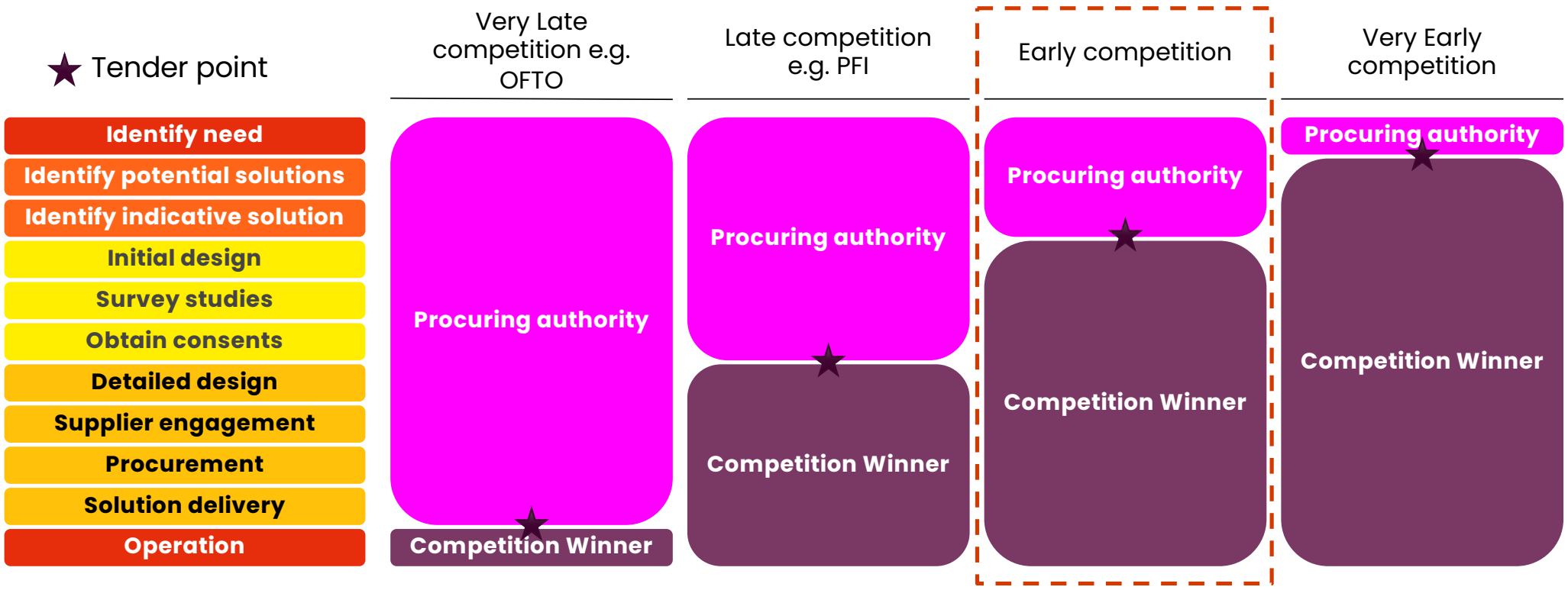
Why? – Net zero challenge

Currently, all transmission network build is achieved through 3 incumbent transmission owners:

- NGET in England and Wales
- SPT in Southern Scotland
- SSE in Northern Scotland
- Total RAV of c.£23-25bn



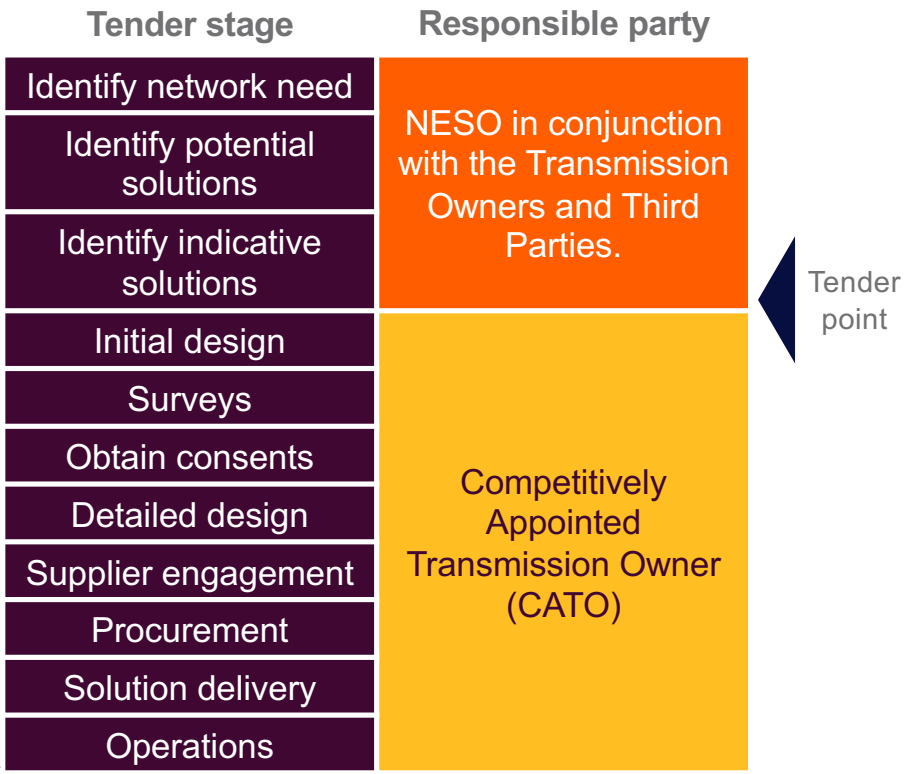
Competition models



What is Early Competition?

Early competition is a competitive process to select a bidder, and a solution, to a specific need on the electricity transmission system.

Early Competition snapshot



Key highlights

- Organisations will **compete for the design, build, finance and ownership** of onshore transmission solutions.
- **Begins 'early'**, prior to the detailed design, surveying and consenting phases of solution development.

Potential benefits of Early Competition

Innovation

Cost savings

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What we will be competing – Project criteria

The criteria for projects is set out in The Electricity (Criteria for Relevant Electricity Projects) (Transmission) Regulations 2024:

Network Need criterion

- A project's electricity solution must be capable, with reasonable certainty, of addressing a network need. (Translation: There must be a needs case for the project)

Novelty criterion

- A project's electricity solution must, in respect of the transmission system and network need to which it relates, be wholly new. (Translation: Cannot utilise existing assets e.g. restringing of an existing OHL)

Separability criterion

- A project's electricity solution must be capable of being clearly distinguishable from any other part of the transmission system to which it relates and from any other electricity solution related to that transmission system. (Translation: must be able to tell what is owned by who)

Consumer benefit criterion

- A cost-benefit analysis in respect of a project must demonstrate that the non-tendered consumer impact does not outweigh the tendered consumer impact. (Translation: must pass a CBA – RIIO vs CATO)

What we will be competing – a whole system approach

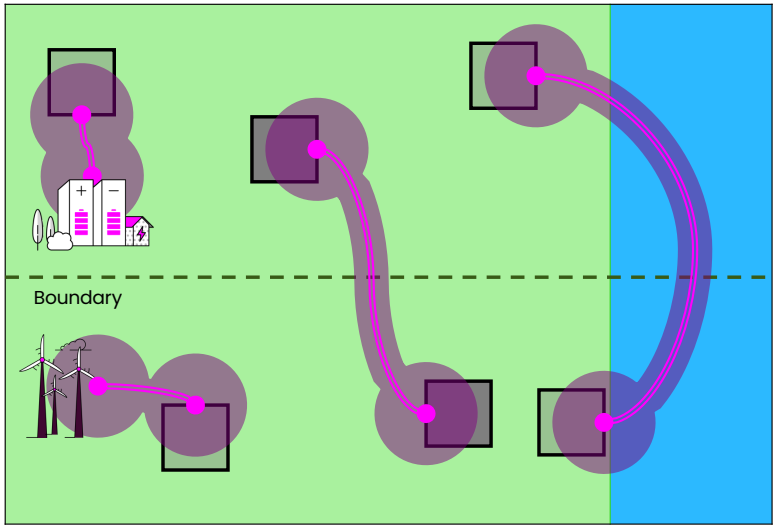
The early competition model has been designed to in line with other NESO directives:

Centralised Strategic Network Planning (CSNP)

- The CSNP will be the framework for identifying and assessing transmission investment options
- The location of the connection points will be defined.
- Route corridor constraints including environmental and social impact constraints will be identified as part of the technical requirements and specification, where they formed part of the option assessment.

Connections, additional works and connections reform

- A CATO will have obligations to address connections requests and carry out additional work to support wider network development.



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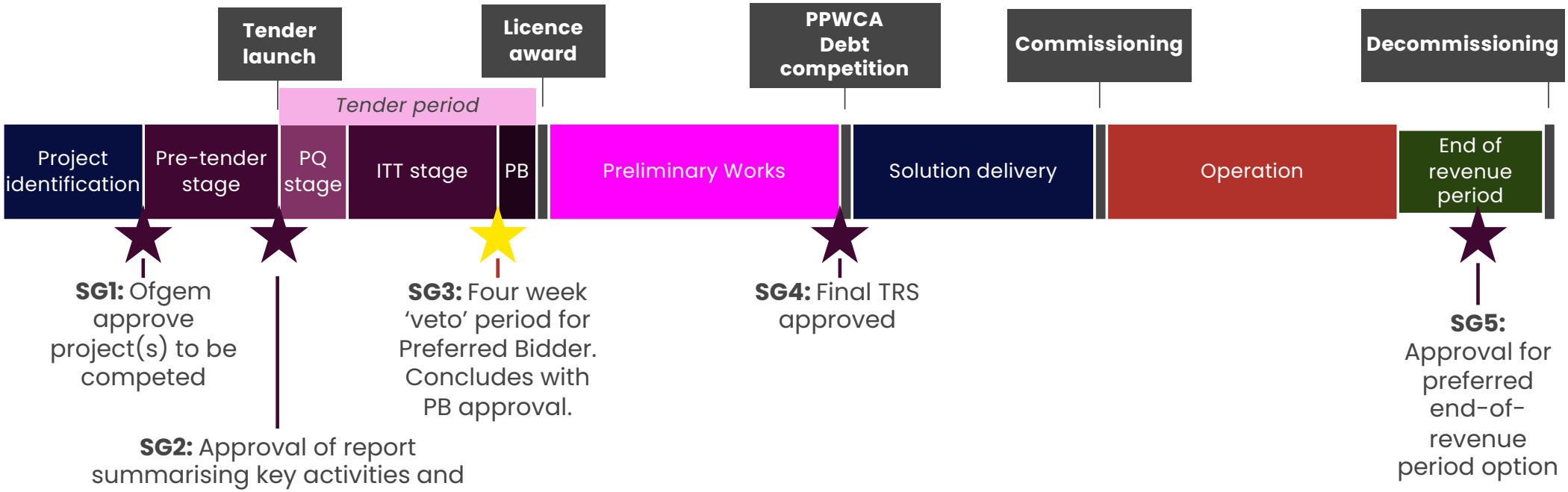
How - End-to-end tender process



PQ: Pre-Qualification | ITT: Invitation to Tender | PB: Preferred Bidder | PPWCA: Post-preliminary works cost assessment

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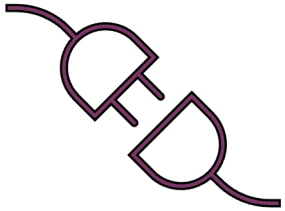
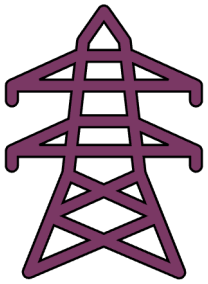
How - Level of detail to be provided to bidders

Interface site details



- Connection point substation details
- Bay reservation status
- Substation technical details, layout, parameters
- Site specific tech specs and codes

Technology & performance requirements



- Solution type (HVAC/HVDC)
- High level SLD
- Capacity parameters (thermal ratings)
- Codes and design standards
- Availability targets
- Technology readiness levels

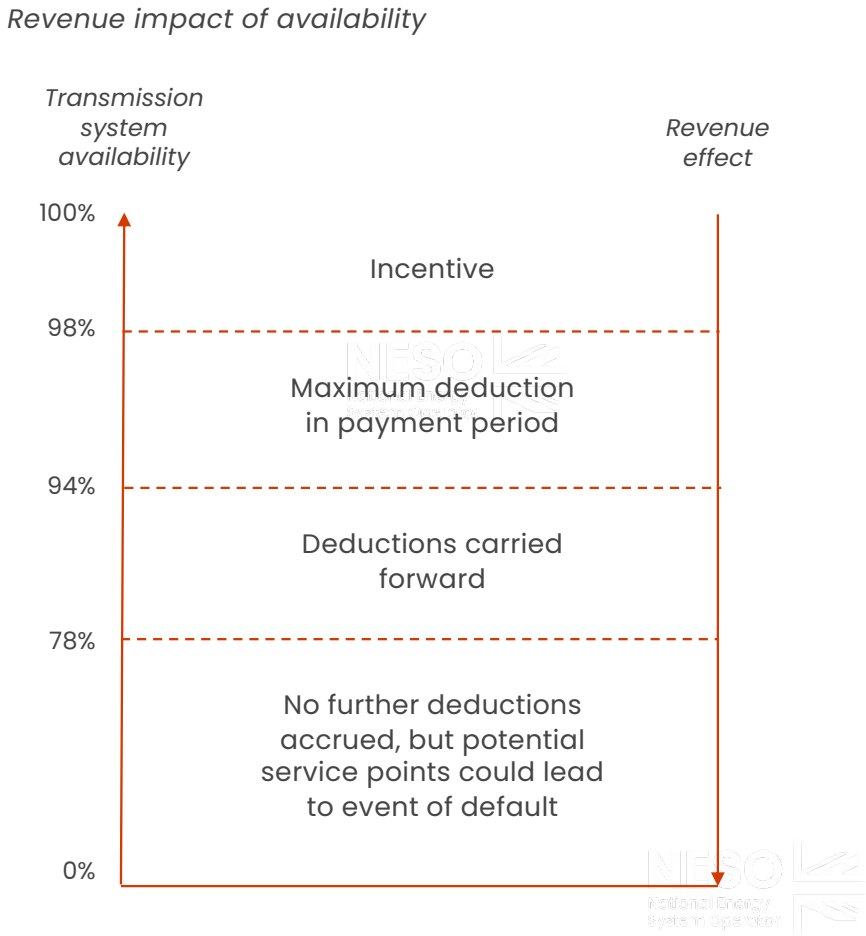
Routing constraints

- Details of options rejected at CSNP stage due to routing constraints

How – Tender revenue stream

- Once successfully commissioned, the successful bidder will start to receive the Tender Revenue Stream (TRS)
- Recalculated following Financial Close, based on PPWCA and debt competition
- Partially indexed each year by CPI-H, the proportion determined at Financial Close to set a 'natural hedge'
- Subject to bonuses/deductions to incentivise behaviour. Primary incentive around unavailability (see following slide). Others in line with existing codes
- Paid monthly

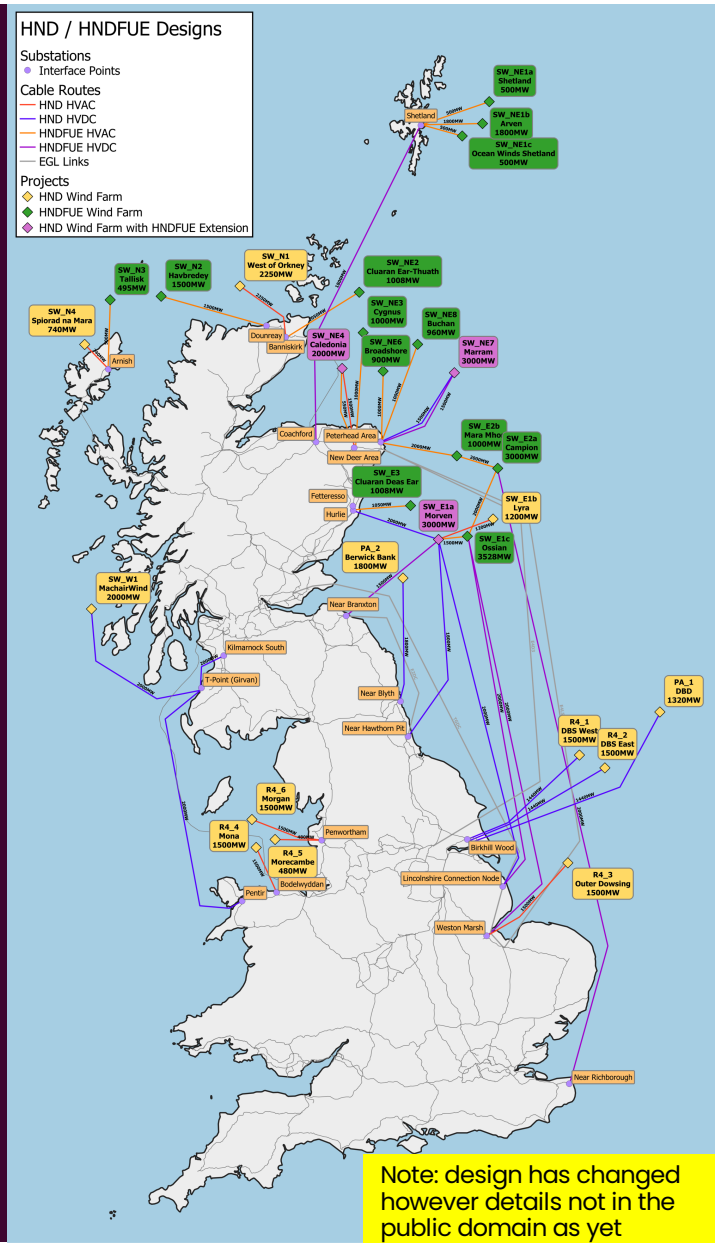
Performance adjustments



Next steps

Potential projects for early competition

- Awaiting decision on WCN2



Note: design has changed however details not in the public domain as yet

Wet onshore projects.

- Assessment of wet onshore “bootstrap” projects from HND/HNDFUE expected in summer 2025

Beyond 2030 refresh

- Expected Q1 2026
- Will assess progression of immature projects identified in the Beyond 2030 report
- 18 onshore projects previously assessed as meeting criteria

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Questions

Thank you!

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