

CMP448 Introducing a Progression Commitment Fee to the Gate 2 Connections Queue

Workgroup Meeting 3, 12 March 2025

Online Meeting via Teams

Welcome and Agenda

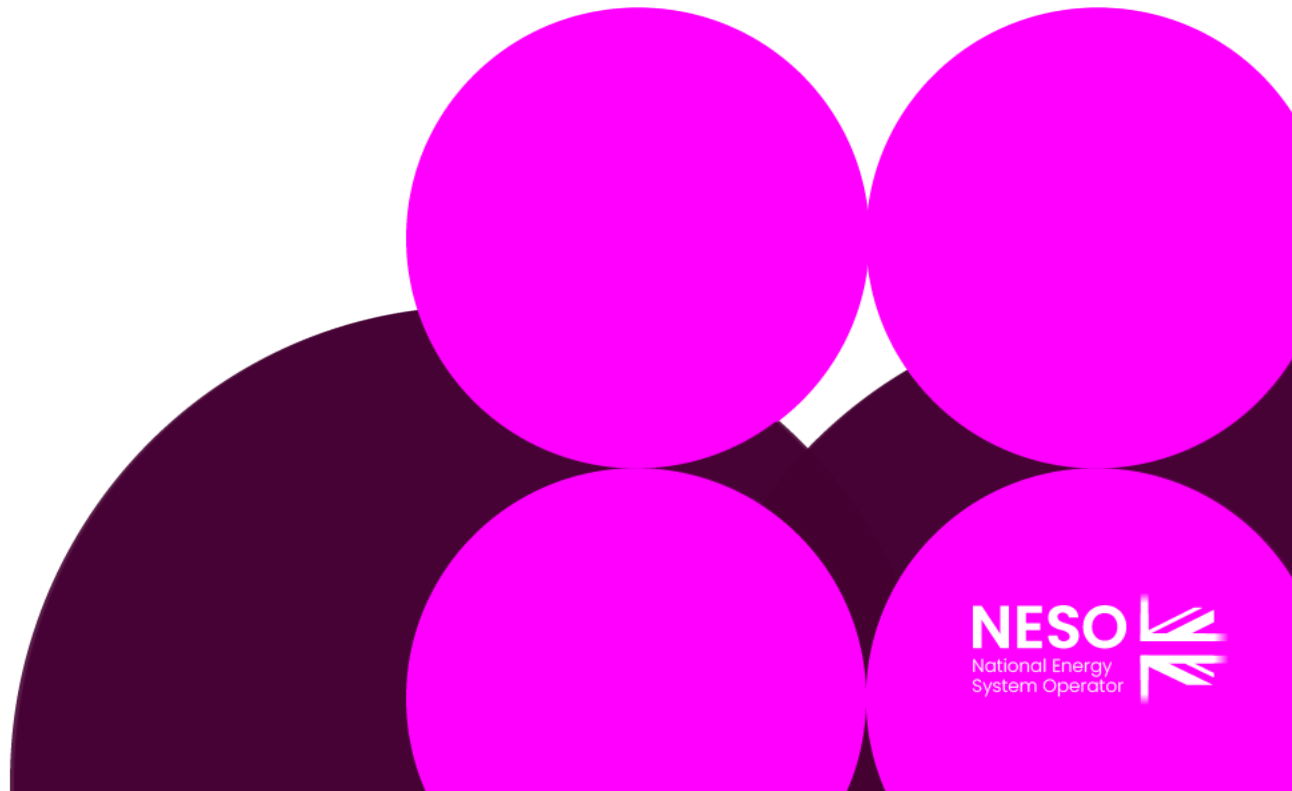
Agenda

WG4

#	Topics to be discussed	
1.	Welcome and Agenda	Chair
2.	Query and Action Log Review	Chair
3.	PCF Design <ul style="list-style-type: none">•Addressing the defect•Alternatives considered•Safeguarding•The value	Proposer
4.	Break	
5.	Workgroup Consultation Initial Feedback Consultation Questions	Chair
6.	Next Steps <ul style="list-style-type: none">•Plan for future Workgroups•Discussions on any possible Alternatives (Any plans to raise an alternative pre consultation to be flagged at earliest opportunity for purposes of the consultation)	Chair
7.	Any Other Business	Chair
8.	Close	Chair

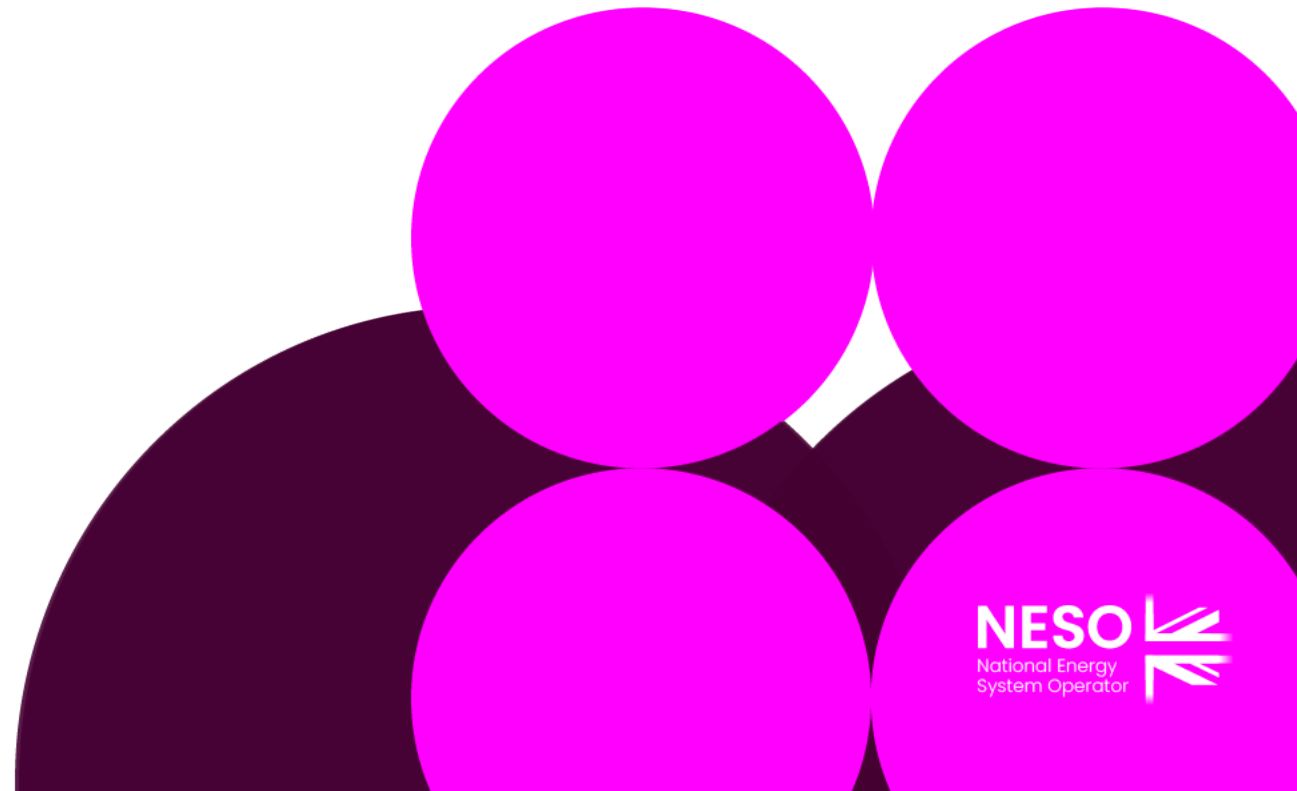
Action and Query Logs

Workgroup Chair - NESO



PCF Design – Addressing the Defect

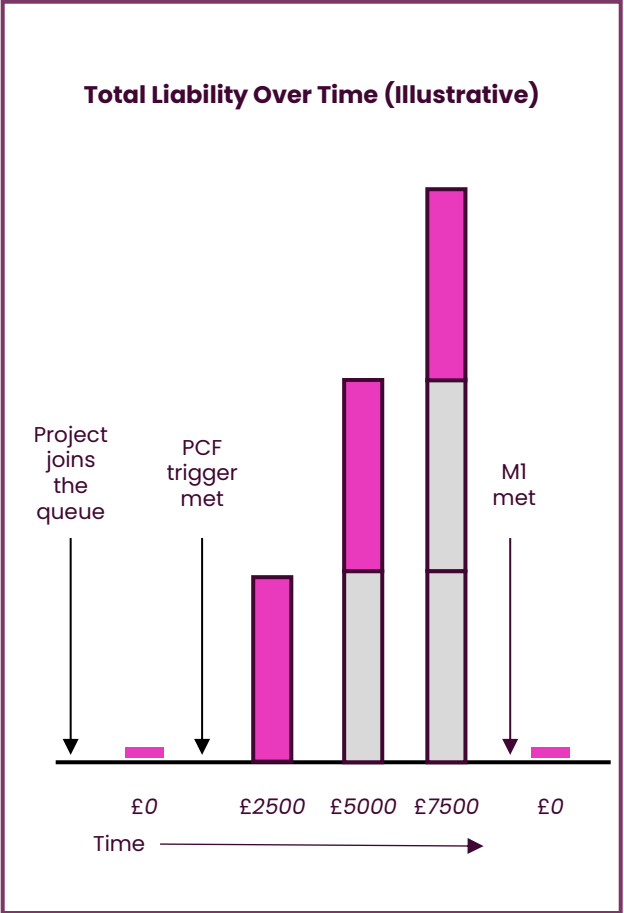
Ash Adams - NESO



Progression Commitment Fee: Solution Overview

Focus of today's session

Intent	<p>The Progression Commitment Fee (PCF) is intended to provide an incentive for:</p> <ul style="list-style-type: none">• Developers of projects that have become unviable to proactively exit the queue in a timely manner.• Developers who are no longer committed to progressing viable projects to sell them to a committed developer, in a timely manner.
Activation	<ul style="list-style-type: none">• Once implemented, the PCF will initially be dormant. It will remain dormant unless a “trigger metric” which is indicative of the health of the connections queue exceeds a defined threshold (a “trigger threshold”).• At this point, the PCF may be activated, subject to decisions to proceed by NESO and Ofgem (see the following slides for further detail on the trigger metric and threshold for activation).
Value	<ul style="list-style-type: none">• Once activated, the PCF applicable to a project will have an initial value of £2,500/MW. A project’s PCF will then increase at a rate of £2,500/MW at 6 monthly intervals up to a maximum cap of £10,000/MW for any individual project.• Projects will be liable for the full value of their PCF upon termination of the project (or the appropriate portion of the PCF upon reduction of capacity) prior to successfully demonstrating achievement of Milestone 1.
Scope	<ul style="list-style-type: none">• If the PCF is activated, it will be applicable to all generation projects that hold Transmission Entry Capacity, Developer Capacity or Interconnector Capacity (including small, medium and large distribution connecting generation) and have accepted a Gate 2 contract offer and not passed Queue Management Milestone 1.
Collection	<ul style="list-style-type: none">• If the PCF is activated, developers of projects between Gate 2 and Milestone 1 will be required to post a security against the PCF, the “Progression Commitment Fee Security” (“PCFS”). The intention is for the PCFS to be securitised as per CUSC Section 15 and must remain in place until developers successfully demonstrate that the project has achieved Milestone 1.• After achieving Milestone 1, developers will no longer be subject to the PCF if they terminate and there will no longer be a requirement to secure against the PCF.



Case for Change

What is the defect?

- A project in the Gate 2 connections queue may become less viable over time and the existing Queue Management framework may not provide a sufficient financial incentive for developers to regularly review the viability of their projects.
- Developers may not be sufficiently incentivised to either exit the connections queue or sell their project to another developer in a timely manner if they do not intend to progress the project themselves.
- Such behaviour could cause connection delays and other detrimental impacts to developers of more viable projects with later connection dates and hinder progress towards CP30 and other decarbonisation plans.

Review from Workgroup 1

Intent

How is the defect addressed by the PCF?

- The period between Gate 2 queue entry and User Progression Milestone 1: Initiated Statutory Consents and Planning Permission (Milestone 1) is the longest in the User Progression milestones and carries the highest risk of projects failing to progress and persisting in the queue longer than necessary.¹
- The PCF is intended to encourage developers whose projects have not passed Milestone 1 to continually re-evaluate the viability of their projects. If a developer does not have full confidence that their project will progress past Milestone 1, the PCF is intended to incentivise the developer to exit the queue or sell the project.

The level of PCF should be:

- ✓ **Low enough so as not to unduly or disproportionately impact a project's viability**, both in terms of overall NPV, and in terms of risk and devex required at early stages, including for small developers.
- ✓ **High enough to provide a reasonable financial incentive for developers to regularly review project viability** and exit the queue in a timely manner if the project becomes less viable.

Note: Timelines for queue management milestones could be different for embedded generation projects. We note that the Workgroup has raised the question of relevance of the PCF for these projects.

Notes:

1. ENA guidance for DNOs is that embedded generation projects requiring TIA should have two months to complete M1 if no environmental impact assessment (EIA) is required, and 14 months to complete M1 if and EIA is required. Source: [ON21-WS2-P2 Updated Queue Management User Guide \(30 Jul 2021\).pdf](#)

PCF Design – Alternative Considerations

Ash Adams - NESO



Key options considered for refining the design

We considered a single PCF value to be applied to all projects in the Gate 2 queue and a PCF value that varies by technology

Design elements	Design options considered	Rationale
PCF Value	Different value of PCF per technology	<ul style="list-style-type: none">Defining discrete technology categories and assigning projects to them creates additional complexity. E.g. treatment of co-located assets and novel technologies.Determining bespoke PCFs would be difficult given the wide range of NPVs for projects within technology buckets and overlap of NPVs between different technologies.Applying different PCFs per technology may risk driving investment towards or away from different technologies based on differences in the PCF for eachDiscounted PCF values for smaller projects/companies may encourage gaming. For example, a single connection may be split into multiple connections.Introducing a single PCF on a per MW basis inherently accounts for variations in project size.The cap acts as a safeguard against an ever increasing PCF value and mitigates disproportionate impacts to projects with less access to finance.Any differential treatment between technologies would require a robust justification, at this time NESO does not believe it would be able to provide such a justification.
	Discounted PCF for smaller projects or smaller companies	
	Single PCF applied to all projects	

Design Options Key:

Selected option

Alternative option

Key options considered for refining the design

For the profile and timing of the fee, we considered 4 options

Design elements	Design options considered	Description	Rationale
Profile and Timing of Fee	No increases	Fee is a flat fee and does not increase over time	<ul style="list-style-type: none">CFI feedback suggested that an increasing fee would better incentivise projects regularly assess their viability, and if necessary, leave the queue at the earliest opportunity.To provide an additional benefit over the queue milestones, the fee should increase at a greater frequency than a project reaches a queue management milestone.A 6 monthly increase aligns with 6-monthly cadence of other existing security arrangements that developers are currently required to provide. This should reduce the admin burden to both developers and NESO.A 6 monthly incentive to assess a project's viability should provide a synergy with the timing of the Gate 2 application windows. This will allow replacement projects to enter the queue as unviable projects are incentivised to leave.Only increasing the fee when a milestone is met would not be appropriate for our defined scope, and would not provide an incentive to proactively terminate prior to a milestone being hit.Further, NESO believes that a 12 monthly increase may only provide for one increase within our defined scope – providing limited additional incentive to consider project viability.
	6 monthly increases	Fee increases by a set amount (£/MW) every 6 months	
	12 monthly increases	Fee increases by a set amount (£/MW) every 12 months	
	Increases as milestones are met	Fee increases by a set amount (£/MW) each time projects complete a milestone	

Design Options Key:

Selected option

Alternative option

Review from Workgroup 2

Key options considered for refining the design

For the value of the fee, we considered 2 options

Design elements	Design options considered	Description	Rationale
Value of the fee	£20k/MW	Flat £20k/MW fee applicable at Gate 2 entry	<ul style="list-style-type: none">CFI feedback suggested that a lower fee would more closely align with developer risk appetite during the earlier stages of development. In line with us amending the proposal to only cover the period G2 entry to M1, we have lowered the maximum value of the PCF.CFI responses also suggested that a termination fee of £20k/MW could disproportionately impact small developers, who may find it more challenging to secure against a £20k/MW fee at early stages of development
	Increments of £2.5k/MW up to £10k/MW	Fee of £2.5k/MW applicable at Gate 2 entry, increases by a further £2.5k/MW at each 6 monthly interval until M1 is reached, up to a maximum of £10k/MW	

Design Options Key:

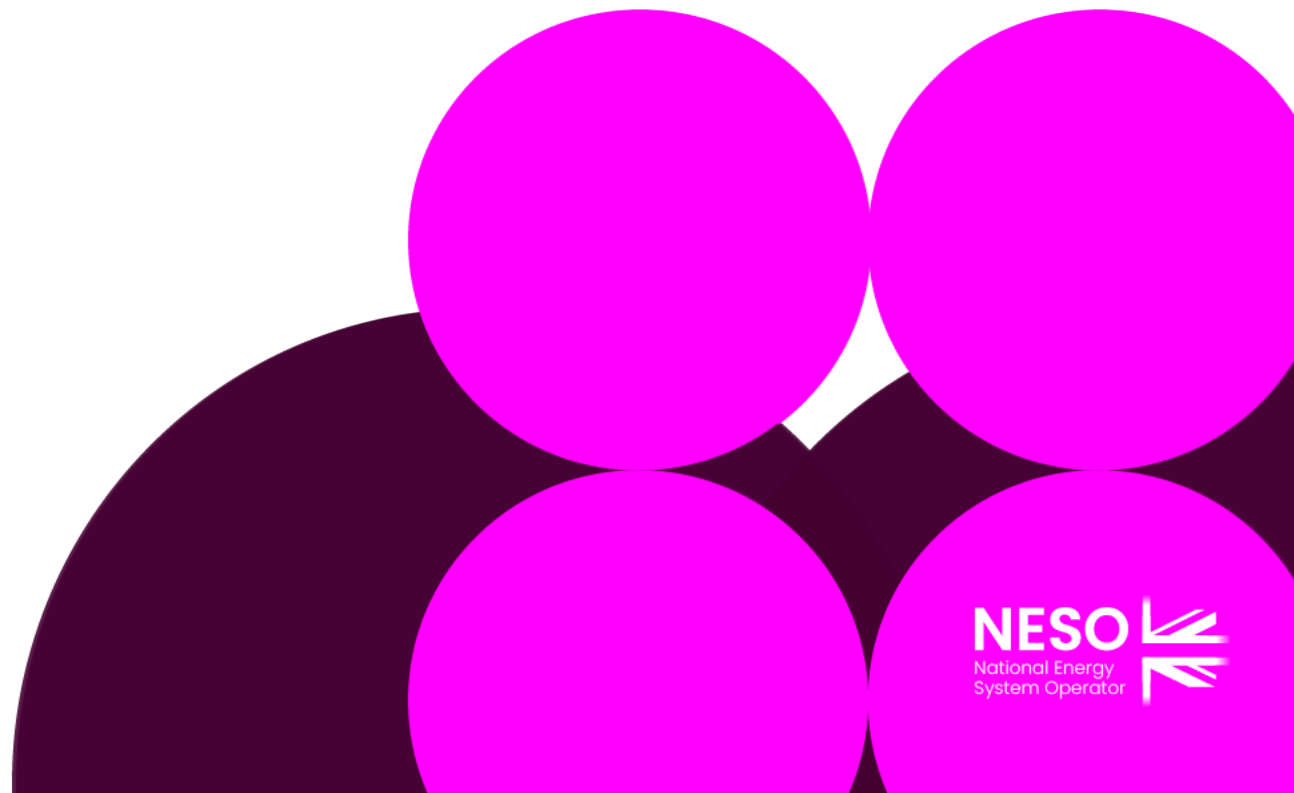
Selected option

Alternative option

Review from Workgroup 2

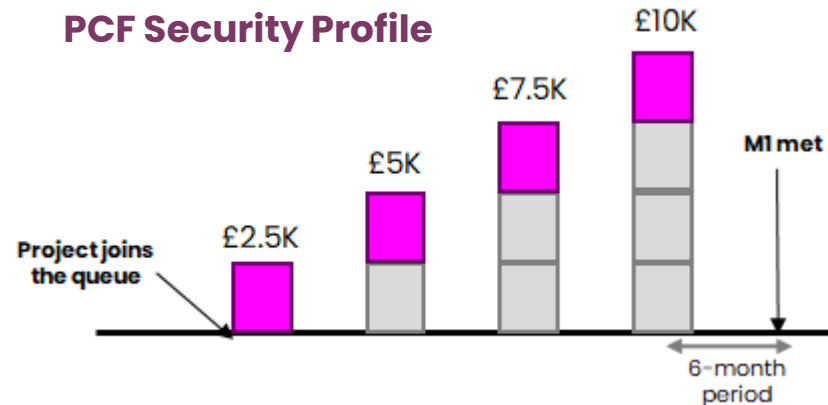
PCF Design – Safeguarding

Ash Adams - NESO



Safeguarding

PCF Security Profile



The value of the PCF should be low enough so as not to unduly impact a project's viability.

Scenario to illustrate the cost of financing the PCF, including as a proportion of project DEVEX

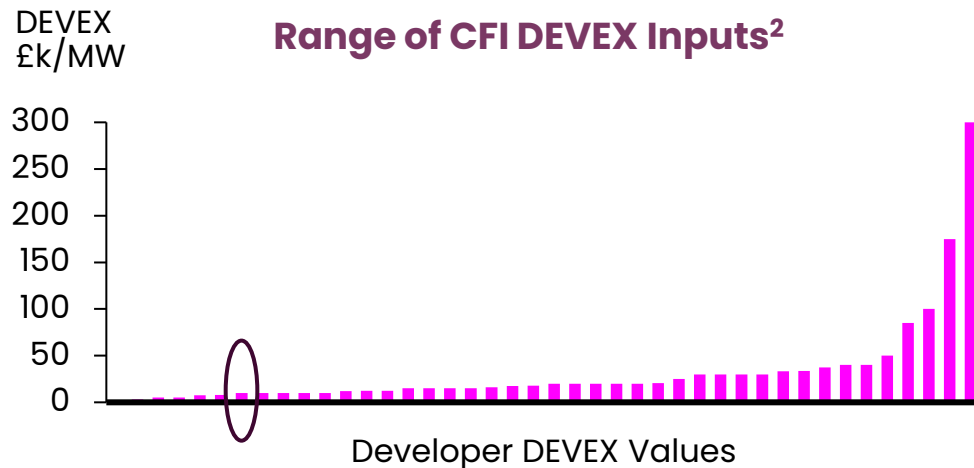
Scenario assumptions:

1. **Security Financing Rate¹**: 8% per annum
2. **Financing Period**: 24 months from joining the Gate 2 queue to passing Milestone M1.
3. **DEVEX²**: CFI responses reported a significant range for DEVEX. We selected £10k/MW.

With these assumptions, the estimated additional cost of financing the PCF is **£1000/MW or 10% of DEVEX**.

NESO's previous proposal for the PCF, (i.e., £20k/MW before Milestone M7), would have an estimated cost of £6,400/MW (assuming 4 years in queue before M7 and an 8% financing rate).

Range of CFI DEVEX Inputs²



Notes:

1. Most of the CFI responses that quoted overall cost of capital ranged from 7% to 13%, excluding outliers. We believe financing costs for acceptable securities would be based on cost of debt, and thus 8% is a conservative estimate.
2. CFI DEVEX estimates for Batteries, Solar, Onshore Wind and Offshore Wind.

PCF Design – The Value

Ash Adams - NESO



Approach to PCF Value Determination

Overview

- Suppose a developer estimates that the NPV of a project is slightly negative, i.e., the present value of all expected future operational cashflows after project commissioning is slightly less than the present value of the expected remaining DEVEX and CAPEX required to commission the project.
- Future CAPEX costs and future operating revenues are uncertain. The price of construction materials may change, or the developer may update the estimate of future revenues based on regulatory change or market developments.
- The developer's estimate of the project NPV may therefore change over time, either favourably or unfavourably.
- A project with a negative NPV at a point in time can either: proceed with development, exit the queue, or "delay" the decision to exit or proceed.
- The option to delay will be the optimal action if there is a low cost to remain in the connections queue. A PCF with sufficient value will make room in the queue for developers with more viable projects by changing the optimal action from "delay" to "exit".
- We use a scenario-based approach to estimate the value of the PCF.

Developer Options

- A project is in the gate 2 connections queue, prior to milestone M1.
- The developer estimates that the NPV of future cashflows is slightly negative.
- The developer's estimate of the project NPV may change over time, either favourably or unfavourably.

Option 1: Continue with project development

This is **unlikely** to be optimal as a developer will likely try to minimise or delay project spend.



Option 2: Exit the queue now

This is likely to be the optimal action if there is an **increasing cost** to remain in the queue.

Option 3: Minimise Devex and re-evaluate after 6 months

This is likely to be the optimal action if there is a **low cost** to remain in the queue.

The PCF makes room in the queue for developers with more viable projects by changing the optimal action from Option 3 to Option 2.

Methodology

Real Option Analysis

- Real option analysis is a financial evaluation methodology that assesses the value of flexibility and strategic decision-making within uncertain business environments. It can be applied to evaluate the value of the choice to continue or abandon a project in the future, depending on changing market conditions.
- Real options are typically valued using models for financial option pricing, adapted to incorporate the specific characteristics of the underlying real asset and the relevant uncertainties.
- The value of a financial option is related to the potential of an underlying market variable to change. In this case, a project's underlying costs and revenues can change over time.
- We value the "option to delay", i.e. the value of not being required to commit now to a project, but instead having the option to decide whether or not to invest after 6 months. We then set the value of the PCF to be greater than the value of this option.

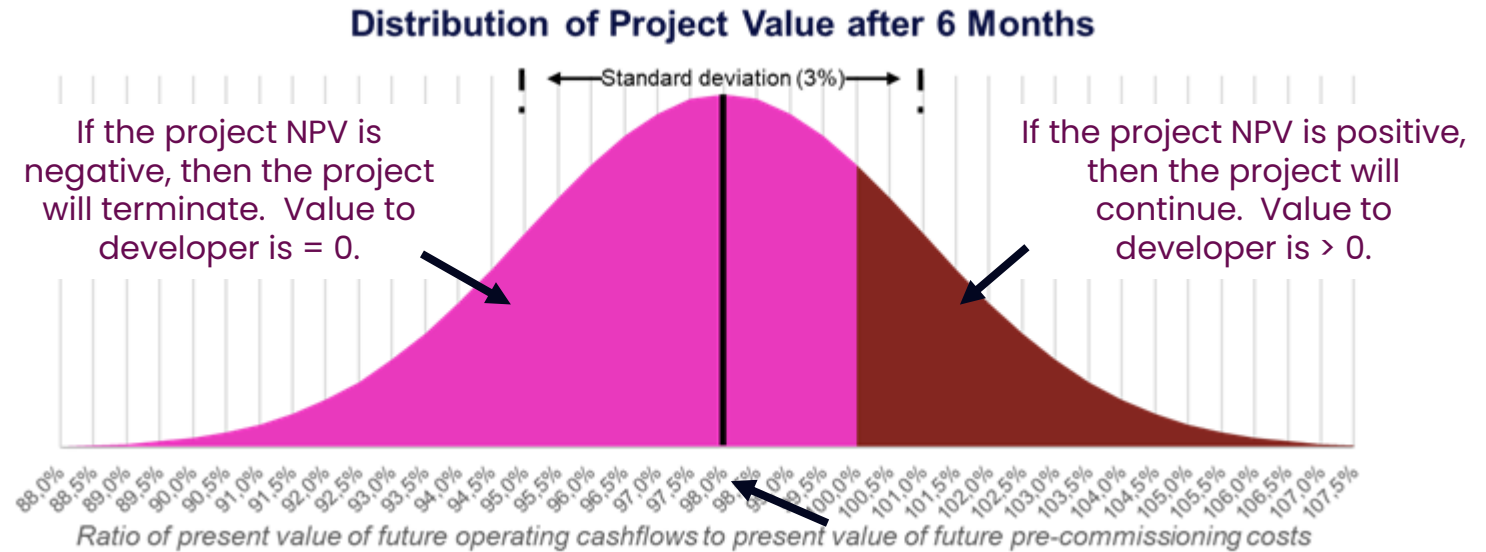
Scenario Assumptions

Negative Project Value

- Suppose that the present value of future operating (post-commissioning) cashflows, discounted at the project's WACC, is equal to 98% of the present value of pre-commissioning costs.
- NPV is therefore negative by 2% of CAPEX
- Further DEVEX is paused.

Change in Project Value

- The project's NPV may change over the coming 6 months. Expected costs may decrease or expected revenues may increase.
- Changes in NPV over 6 months are normally distributed with mean 0 and standard deviation of 3% of the project's pre-commissioning costs.



At time $t = 0$, the present value of all future operating cashflows = 98% of the present value of future pre-commissioning costs

Some future outcomes have termination value = 0 and some outcomes have continuation value > 0 . The expected (i.e., probability-weighted) value to delay is therefore positive.

Option Valuation Results and PCF Value

Valuation Assumptions

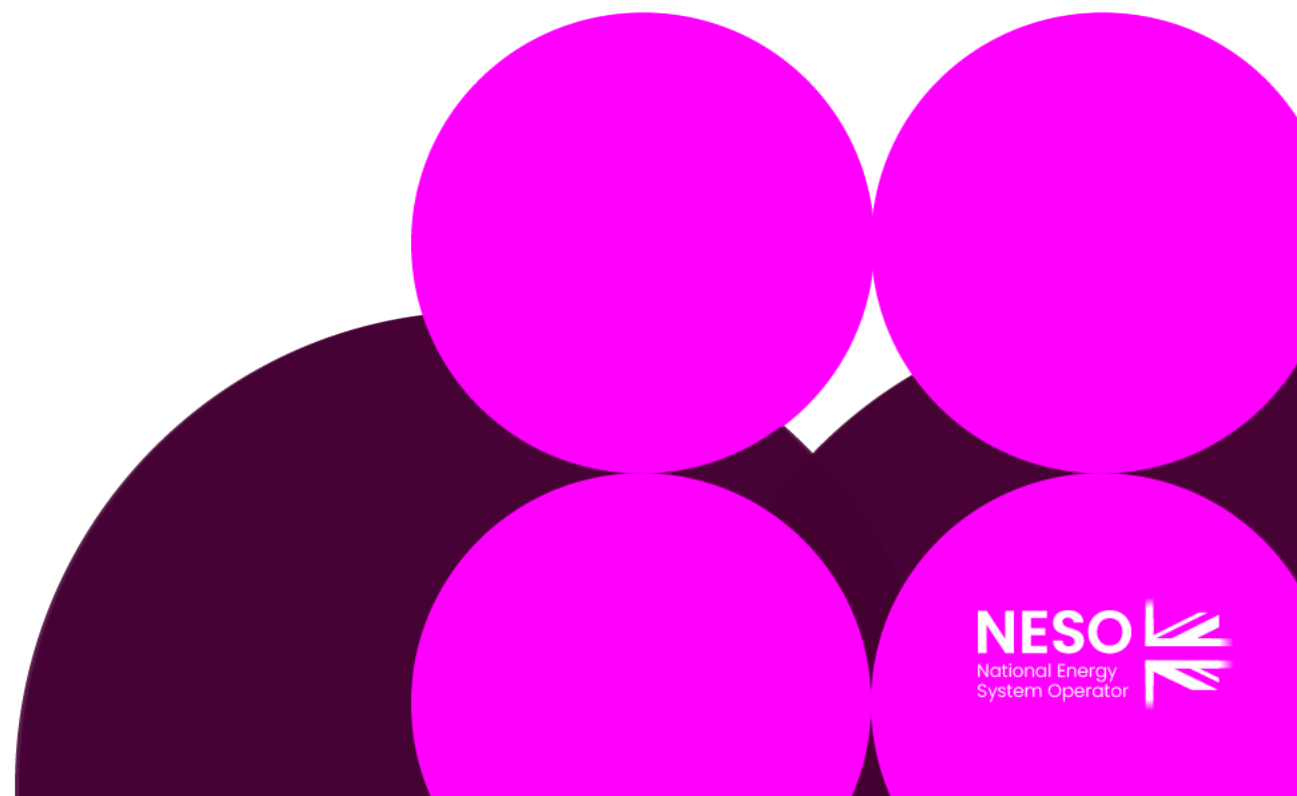
- Suppose a project's **discounted operating cashflows are 98% of the discounted pre-commissioning costs.**
- Additional **DEVEX is paused.**
- Suppose that these operating cashflows and pre-commissioning costs can **change over 6 months** so that the change in the project's NPV **is normally distributed with mean of 0 and standard deviation of 3%.**
- The project will continue if discounted operating cashflows are $> 100\%$ discounted pre-commissioning costs after 6 months, and it will be abandoned otherwise.
- Suppose the project's **remaining required pre-commissioning costs (DEVEX and CAPEX) are £500,000/MW.**

Valuation Results

- Applying a financial option pricing methodology, **the value of the "option to delay" is £0.0044 per pound of pre-commissioning costs.**
- On a per MW basis, **the value of the "option to delay" is £2,218.65/MW.**
- A PCF with a value of **£2,500/MW per 6 months** is sufficient to incentivise the developer to abandon this project without a delay.

Consultation

Workgroup Chair



Next Steps and AOB

Workgroup Chair – NESO

