Public

Workgroup Consultation: Updated reference materials

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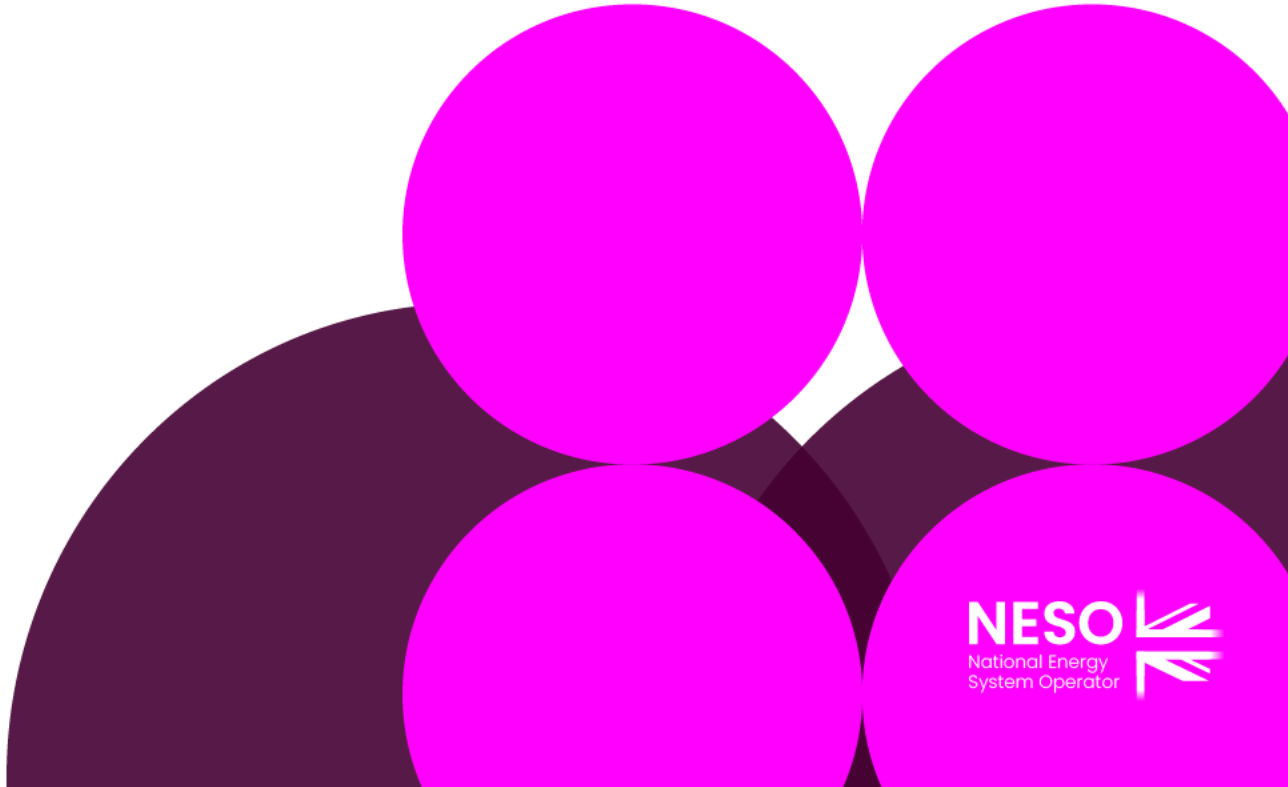
Contents

Workgroup 1



Case for Change

What is the context?

- To support the progress towards Clean Power 2030 and other decarbonisation plans, it is important to be able to facilitate the timely and efficient connection of viable projects to the grid.
- Currently there are in-flight modifications (CMP434 and CMP435) which aim to improve the connections process. If the modifications are approved, the concept of Gate 2 connections queue will be introduced.
- A project with a place in the Gate 2 connections queue is provided connection capacity, but at present it is unclear how many projects in the future Gate 2 queue will ultimately connect.
- The Queue Management process will ensure that projects will be terminated if they do not progress quickly enough and fail to meet milestones.

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.

Case for Change

Why is this change needed?

- 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.
- Without further change, the current defect may not be addressed appropriately even after the wider suite of proposed connections reforms are implemented.
- In our view, an additional arrangement (which can be activated if required) that complements the existing arrangements and in-flight modifications (CMP434 and CMP435) is needed to ensure we are able to act at pace to address the defect should it materialise.

Journey so Far

Date	Action	Description
October 2022	NESO launched Connections Reform	• Many projects are currently waiting too long to connect to the transmission network which is hindering progress towards CP30 and ultimately net zero. There are also projects that are holding capacity and not progressing which significantly impacts the timely connection of more viable projects. • To address these challenges, NESO initiated the Connections Reform programme, to enable more timely connections for projects in the best position to connect and establish a more, coordinated and efficient network design.
November 2023	DESNZ and Ofgem launched Connections Action Plan	• DESNZ/Ofgem launched the Connections Action Plan to speed up connection queue timescales and highlighted 6 key actions to release more network capacity and improve the connections process. • DESNZ/Ofgem suggested 'increasing financial commitments to attain a connection or holding capacity to deter speculative projects' as a potential action to further raise entry requirement. They stated that increasing financial requirements as a condition to attain or hold capacity agreement would create an added incentive for developers to submit highly credible projects that are likely to be advanced.
August 2024 – October 2024	NESO developed the initial "Financial Instrument" (FI) proposal and presented to TCMF	• NESO developed a proposal for a "financial instrument" for project developers seeking to connect: a security of £20k/MW applicable upon entry into Gate 2 queue until completion of Queue Management Milestone 7: Project Commitment, which would be drawn upon if the developer left the queue. • NESO presented the proposal to TCMF and received valuable feedback from industry.
November 2024	NESO put out a Call for Input (CFI) on the "Financial Instrument"	• NESO issued a 'Call for Input' to invite further feedback on the proposal, and received 132 responses from industry representatives, including developers, TOs, DNOs, and community energy-related organisations.
December 2024 – February 2025	NESO developed a new proposal	• Using feedback from the CFI responses, NESO significantly changed the proposal with the aim of creating a more targeted solution that addresses industry and stakeholder concerns.
February 2025	NESO raised a mod request for a Progression Commitment Fee	• NESO raised a mod to introduce a Progression Commitment Fee to the Gate 2 queue that can be activated if required, to incentivise the timely self-removal of unviable projects from the queue.

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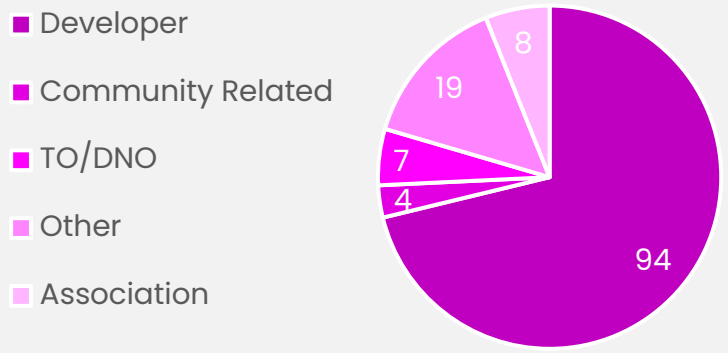
Summary of feedback from the Call for Input

A Call for Input was issued in Nov. 2024 requesting feedback on the initial proposal of a £20K/MW "financial instrument"

Responses Received

Total responses received: **132**

Breakdown of respondents by type



Key Takeaways from CFI Responses

Level of support for the initial proposal

- **5.6%** of respondents were **broadly supportive**
- **49.6%** of respondents were **supportive in principle of a "financial instrument,"** but disagreed with some aspect of the initial proposal
- **44.8%** of respondents believed that a "financial instrument" in any form was the **wrong solution**

Key points of concern about the initial proposal

- Sense that existing reforms such as TM04+, CP30 and existing security arrangements should mitigate the need for new financial requirements
- Concern that the value of the fee (£20K/MW) might impact project viability and profitability, especially of small developers
- Concern that developers could be subject to the fee for reasons outside of their control, for example not receiving planning permission
- Concern that a flat fee could create a perverse incentive for a project in the queue to remain rather than proactively exit

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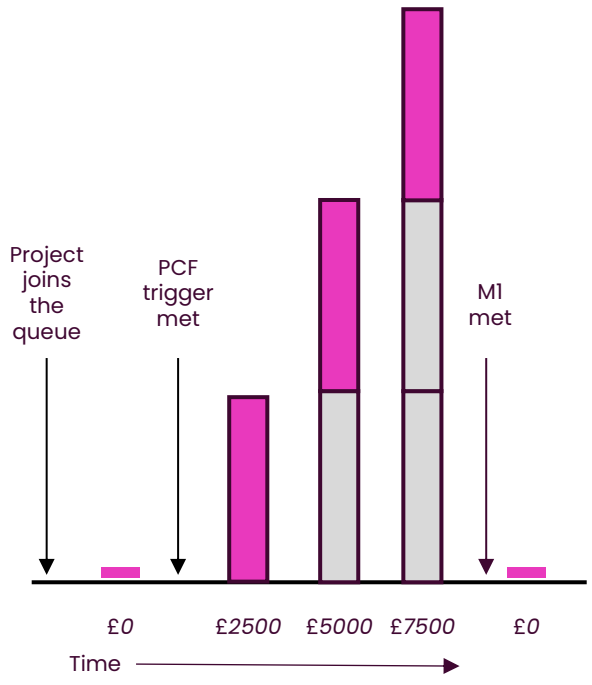
Progression Commitment Fee: Solution Overview

Intent	The Progression Commitment Fee (PCF) is intended to provide an incentive for: • 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	• 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	• 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	• 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	• 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.

Total Liability Over Time (Illustrative)



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How we have changed the solution

	Previous Solution	Proposed Solution	How this addresses CFI feedback
Fee Value	£20k/MW	Up to £10k/MW, in increments of £2.5k/MW	Respondents were concerned that the level of the fee (£20K/MW) might impact project viability and profitability, especially for small developers. The value of the proposed fee has now been capped at £10k/MW
Profile and Timing of Fee	Flat rate fee	Fee increasing with time	Respondents suggested that a flat fee could create a perverse incentive for a project in the queue to remain rather than proactively exit. The fee has been changed from a flat rate, to one that is initially set at a lower amount and then increases every six months thereafter.
Duration of fee application	Gate 2 entry to Milestone 7	Gate 2 entry to Milestone 1	To address the concern that developers could be subject to the fee for reasons outside of their control, the PCF only applies to the pre-planning stage (until Milestone 1)
Activation of the fee	Immediate	If the trigger threshold is met at any measurement point	Respondents suggested that existing in-flight reforms may address issues with the queue. The PCF will therefore only be activated if and when the trigger metric indicates that it is required.
Netting off other securities	Netted off the User Commitment Secured Amount from the required security	No netting off against the User Commitment Secured Amount	The value of the PCF is lower, and netting securities is no longer required to avoid potentially excessive security requirements *Note: Projects are less likely to be exposed to significant User Commitment sums during the period between Gate 2 and Milestone 1*

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Duration of PCF application

The PCF applies to in-scope projects that have accepted a Gate 2 contract offer and not passed Queue Management Milestone 1.

The PCF has been designed to apply only to projects between Gate 2 and Milestone 1 because:

- The longest period between User Progression Milestones is between Gate 2 entry and Milestone 1. During this period, projects are less likely to be exposed to significant User Commitment sums. Consequently, this is the stage where a project can occupy the queue for the longest duration, while also facing the least incentive for proactive and timely withdrawal.
- NESO views the period between Gate 2 entry and Milestone 1 as the period that carries the highest risk of projects failing to progress and persisting in the queue for longer than necessary. The defect that the modification seeks to address is limited to this period of time.
- Project progression towards submission of a planning application (the activity between gate 2 and Milestone 1) is largely within the control of the developer.

Scope of the PCF

If the PCF is activated, it will be applicable to:

- All generation projects (including small, medium and large distribution connecting generation) that:
  - Hold either Transmission Entry Capacity, Developer Capacity or Interconnector Capacity
  - Have accepted a Gate 2 contract offer, and
  - Have not passed Queue Management Milestone 1

Out of Scope:
For avoidance of doubt, Distribution Connected Demand connections triggered by Distribution Network Operators ("DNOs") and Directly Connected Demand are out of scope

Note: This slide has been updated since it was presented at WG1 to clarify wording around activation.

Trigger Rationale

Challenge: We can't be certain how prevalent the problem of project non-progression will be in the future gate 2 queue. Therefore, we propose that we should only activate the Progression Commitment Fee if non-progression is prevalent.

We therefore need two things:

1) **Trigger Metric:** a reliable measure of queue health with respect to project progression to Milestone 1 (measured on a continual basis)

2) **Trigger Threshold:** a pre-defined threshold value above which the measure would signal that the PCF could be activated

If [metric value] > [threshold], then the PCF will apply[1]

Note: *We intend to use a future workgroup to discuss the trigger metric and threshold value in detail. For today, the aim is to explain the purpose and why they are needed as part of the solution.*

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Notes:
1. PCF activation is subject to NESO and Ofgem decisions

Trigger Metric

Upon implementation of the modification, the PCF will initially be dormant. It will remain dormant unless a metric, which is indicative of the health of the connections queue, exceeds a defined threshold.

- **The metric** will measure the cumulative project MWs that are "terminated" from the Gate 2 connections queue including but failing to meet Milestone 1. Any project MWs that are subsequently replaced by another project (or projects) with a connection date within 12 months of the connection date of the original project will be excluded from the metric. This metric will be referred to as the "trigger metric".
- **Trigger measurement:** The trigger metric will be measured from the date of implementation to 31 December 2030 inclusive, the "initial metric period" and then for each five-year period thereafter. NESO will measure the trigger metric at six monthly intervals, the "measurement point" and publish this data.
- **Following termination,** what qualifies as replacement capacity for the purposes of the trigger metric will be assessed by NESO based on a number of factors including but not limited to the location and technology type of the replacement connection in relation to the original. If no replacement capacity can be identified within six months, the terminated capacity will be regarded as not having been replaced by another project (or projects) for the purposes of the trigger metric.

Progression Commitment Fee Activation

- **The "trigger threshold"** will be set at a cumulative total of 6000MW for the initial metric period, which is the approximate equivalent of 5% of the additional capacity (capacity that is not already installed) that is required to be connected before the end of 2030 in order to meet CP30 targets. If the PCF is not activated by the end of the initial metric period, the intention of NESO is to review the trigger threshold ahead of each subsequent 5-year period. Any changes would go through the usual code modification process.
- **If, at any measurement point, the published trigger metric, is greater than 6000MW**, the trigger threshold will have been deemed to be met. The trigger threshold is based on a cumulative total.
- **If the trigger threshold is deemed to have been met** at any measurement point, NESO will have the option to activate or not activate the PCF and will notify Ofgem of its decision within 1 month of the trigger threshold being met. We propose that (subject to Ofgem agreement) Ofgem should then have power to override NESO's decision within 2 months of being notified. For the avoidance of doubt, there will be no ability of any party to activate the PCF unless the trigger threshold is first met.
- **If the trigger threshold is met and the PCF is activated**, users will be provided a **notice period of at least 3 months** from the date of Ofgem's decision. If a User decides to remove the project from the connections queue within this period, they will not be liable for the PCF upon termination[1].

Notes: 1. They will still be liable for the applicable cancellation charge as per the current arrangements

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Profiled Commitment

What amount of security is required?

- The PCF is initially dormant. If it is subsequently activated, project developers in the Gate 2 queue who have not passed Milestone 1 will need to provide security against an initial amount of £2,500/MW
- A project entering the Gate 2 queue post activation of the PCF will be liable for a PCF equal to £2,500/MW at the time of entering the Gate 2 queue.
- The required security will increase at a rate of an additional £2,500/MW every six months[1] up to a maximum of £10,000/MW.
- The security will no longer be required when the project successfully passes Milestone 1.

Why does the required amount of security increase over time?

- The responses to the 'Call for Input' highlighted that an upfront security requirement could create a perverse incentive for projects to remain in the queue. A developer may prefer to postpone the decision to leave rather than face an immediate obligation to pay the PCF.
- The ramping of the liability over time creates an incentive for project developers to periodically reassess the viability of their project and exit the queue sooner than later if they believe the project is becoming less viable.
- Potentially adds an incentive for projects to submit planning applications and meet Milestone 1 sooner if they can

Notes: 1. The PCF for a project entering the Gate 2 queue post activation of the PCF may rise to £5,000/MW at a point in time between zero and six months after entry to Gate 2 depending on the time they enter the queue

Level Rationale

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.

Approach to PCF Value Determination:

- A project with a negative NPV at a point in time can either: commit to development, exit the queue, or "delay" the decision to exit by minimising DEVEX spend and re-evaluating the project after 6 months.
- The option to delay will be the optimal action if there is a low cost to remain in the connections queue.
- The PCF will make room in the queue for developers with more viable projects by changing the optimal action from "delay" to "exit".
- The burden that financing the PFC would place on viable projects was also considered.

Note: *We intend to use a future workgroup to discuss the PCF value in detail. For today, the aim is to explain the rationale and the approach used at a high level.*

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Note: This slide has been updated since it was presented with language clarifications suggested by the workgroup

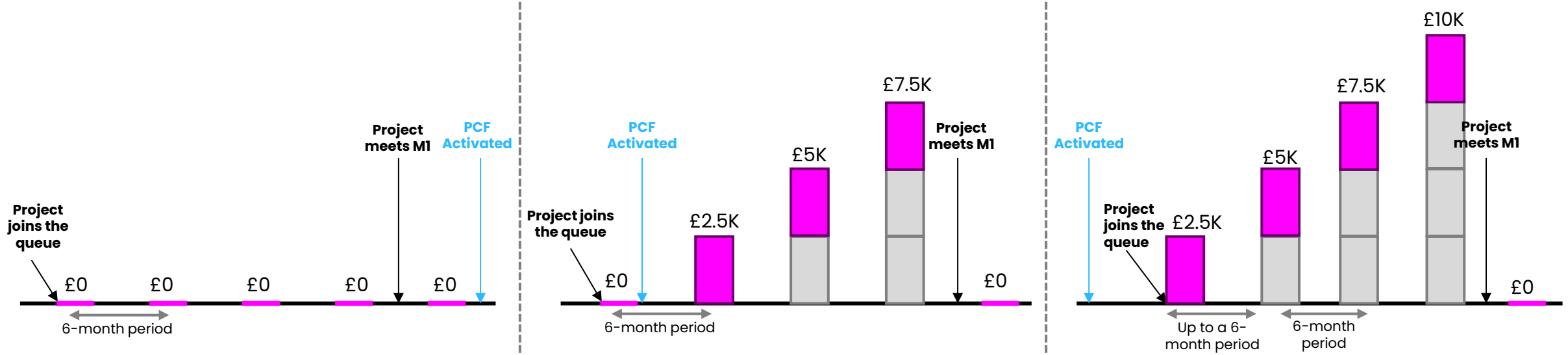
Example Scenarios: Cumulative PCF over time

Scenario 1: If PCF is never activated (or activated after completion of Milestone 1)

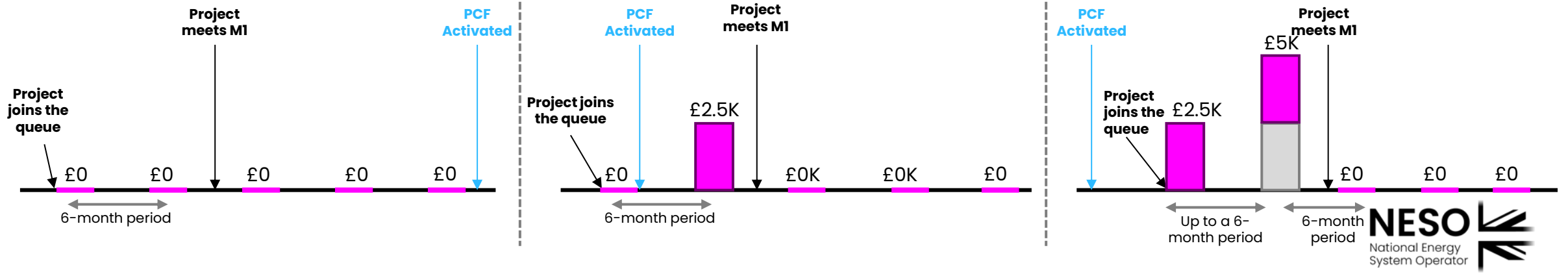
Scenario 2: If PCF is activated before project completes Milestone 1

Scenario 3: If PCF is activated before project enters gate 2

A: Project with 24 months to complete M1



B: Project with 12 months to complete M1



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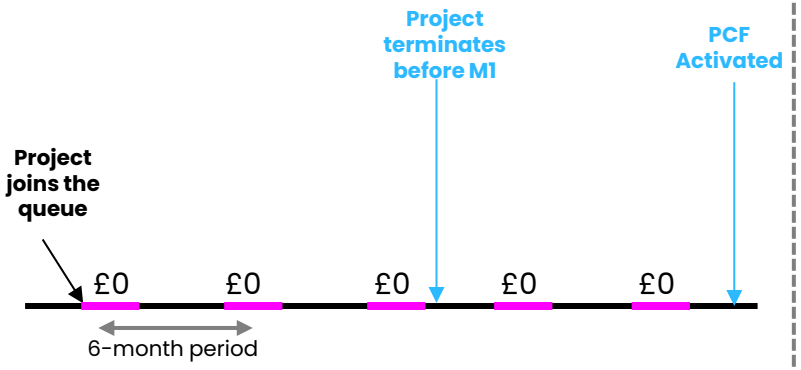
Note: This slide has been updated since it was presented with language clarifications suggested by the workgroup

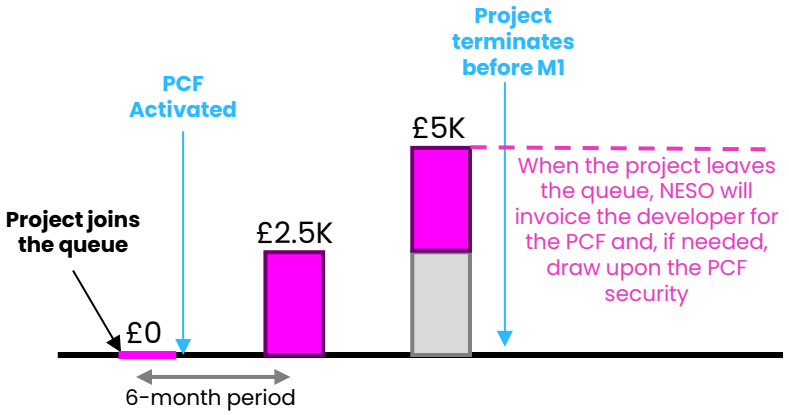
Example Scenarios: Cumulative PCF over time

Scenario 4: If a project self-terminates before Milestone 1 and the PCF has not been activated yet



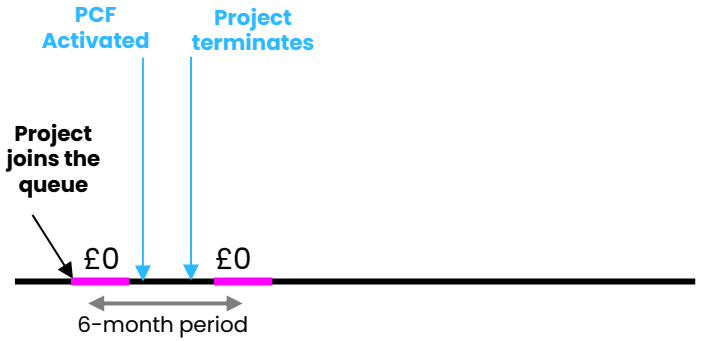
If a project leaves the queue before the PCF has been activated, it will not face a liability

Scenario 5: If a project self-terminates before Milestone 1 and the PCF has been activated



If a project leaves the queue before Milestone 1 but after the PCF has been activated, it will face a liability

Scenario 6: If the PCF has been activated and a project exits during the notice period



If the PCF is activated and a project chooses to exit the queue during the notice period (at least 3 months), it will not face a liability

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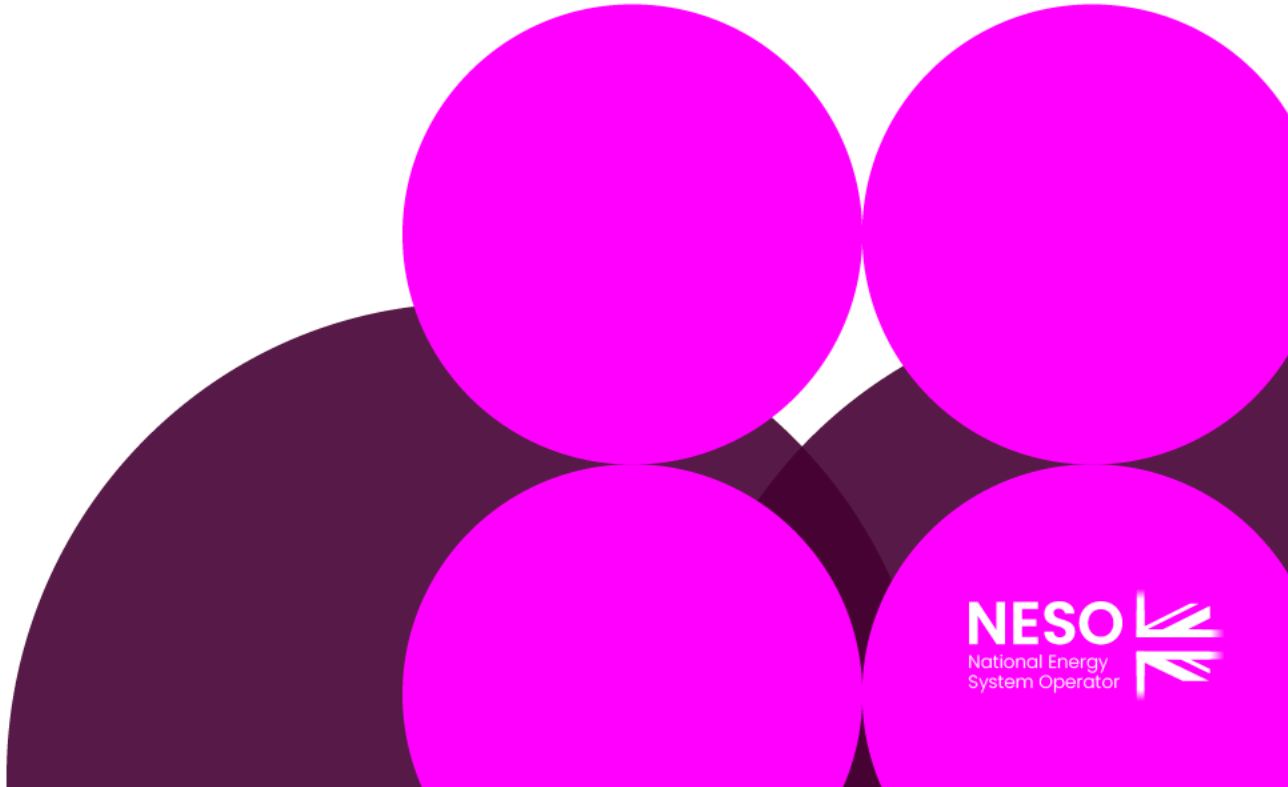
Workgroup 2



Key design elements were reconsidered using CFI feedback

The CFI feedback on our initial proposal provided suggestions and concerns regarding specific aspects of the design. Based on the feedback, we identified **four** key elements of the design that we felt needed to be reconsidered.

Design elements we reconsidered	How we used the feedback to help us reconsider the design
Profile and Timing of Fee	As respondents suggested that a flat fee may incentivise projects to stay in the queue rather than leave, we reconsidered the flat fee structure
Duration of fee application	As respondents were concerned that developers could be subject to the fee for reasons outside of their control, we sought to identify a duration which is largely under the developer's control
Fee Value	As respondents were concerned that the level of the fee (£20K/MW) might impact project viability and profitability, we looked to optimise the fee, to ensure that it is high enough to incentivise developers to proactively exit the queue but low enough to avoid unduly impacting their viability
Activation of the fee	As respondents suggested that existing in-flight reforms may address issues with the queue, we aimed to amend the design so that the fee remains dormant and is only considered if there is compelling evidence that it is required

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Key options considered for refining the design

For the duration of fee application, we considered 3 options

Design elements	Design options considered	Description	Rationale
Duration of fee application	Gate 2 to Milestone 7	Fee applies until Milestone 7 (Project Commitment)	• The period between Gate 2 to Milestone 1 is the longest duration during which unviable projects can persist in the queue without progressing. Applying a fee during this period serves as an incentive for these projects to leave the queue proactively • After Milestone 2, queue progression milestones are more frequent, and NESO believes that a 6 monthly incentive to assess viability would provide a marginal benefit after Milestone 2. • NESO doesn't believe that it would be appropriate to apply an incentive to assess project viability while a project is awaiting a decision on its planning application (a key outcome that determines of viability) because progression at that stage is largely out of the developer's control • Prior to Milestone 1, a developer has control over their progression. Submitting a planning application is an action that is within their control • NESO understands that after Milestone 2, a project is likely to be liable to an increasing cancellation charge under the existing User Commitment Framework.
	Gate 2 to Milestone 2	Fee only applies until Milestone 2 (Secured Statutory Consents and Planning Permission)	
	Gate 2 to Milestone 1	**Fee only applies until Milestone 1 (Initiated Statutory Consents and Planning Permission)**	

Design Options Key: Selected option; Alternative option

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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	• 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

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Key options considered for refining the design

For the governance for activation of the fee, we considered 3 options

Design elements	Design options considered	Description	Rationale
Governance for activation of the fee	Immediate Activation	The fee is activated immediately upon implementation and would apply as soon as a project enters the Gate 2 queue. i.e. no initial dormant period	• We have carefully considered industry concerns and understand that some stakeholders believe that the PCF may not be a necessary additional measure on top of other in-flight reforms. • We have balanced those concerns by proposing a solution that is initially dormant but capable of acting quickly if the defect that we have identified remains prevalent. • NESO believe that defining a metric and threshold that activates the PCF will offer industry clarity and we believe that both NESO and Ofgem should have discretion on whether the PCF is activated once the threshold has been met. This will allow us to account for any unforeseen events.
	Trigger threshold (activated immediately)	Using a pre-defined trigger threshold to measure queue health and activate the fee as soon as it is met, without further decision required from NESO and/or Ofgem	
	Trigger threshold (activated subject to NESO and Ofgem decision)	**Using a pre-defined trigger threshold to measure queue health and indicate that the fee needs to be activated (subject to NESO and Ofgem decision)**	

Design Options Key: Selected option; Alternative option

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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	• 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

Note: We intend to discuss the value of the fee in more detail at a future WG

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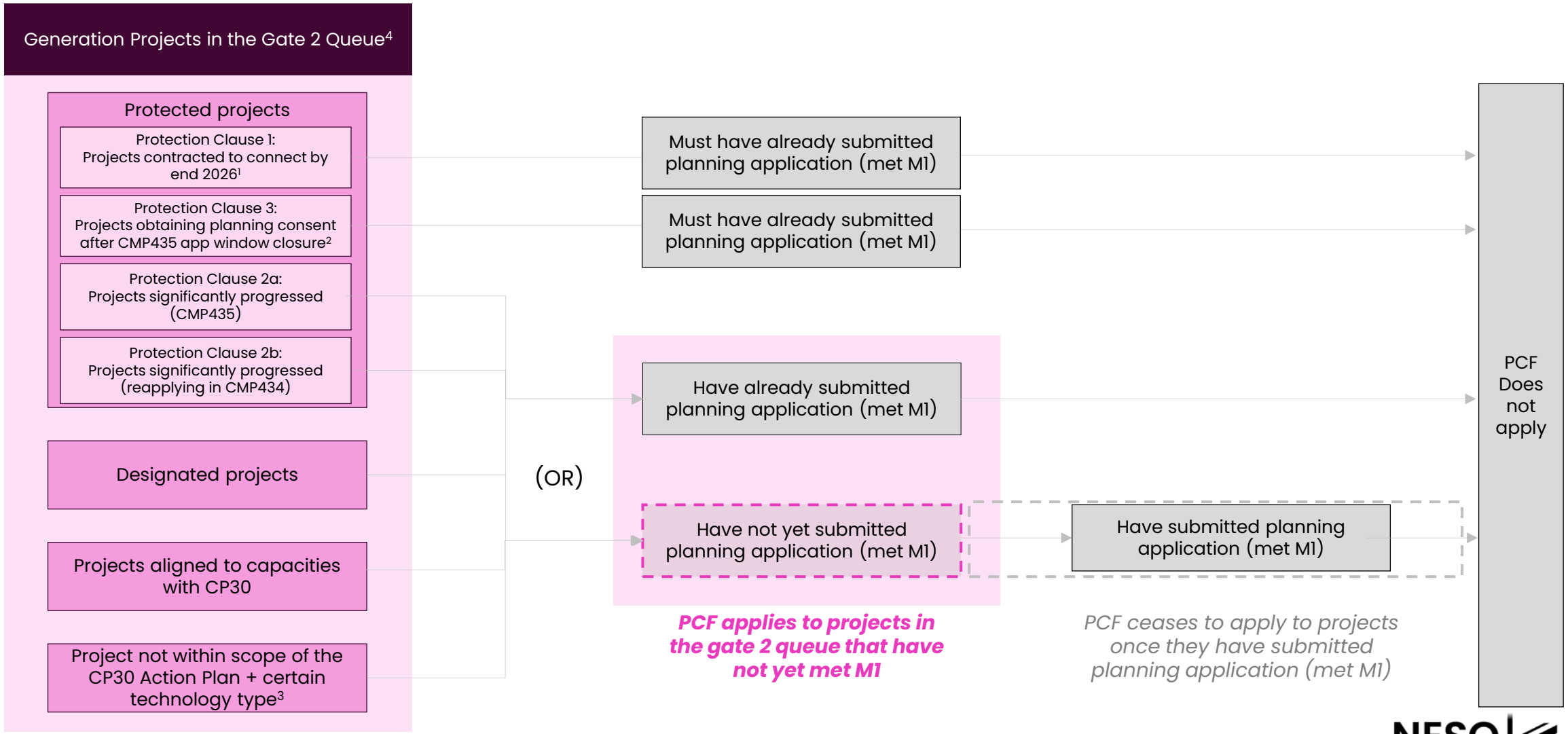
Projects in scope for the PCF



Notes:
1. Projects which are 'contracted to connect by end 2026' must have met M2 to be classified as a protected project
2. Projects which 'obtain planning consent after closure of CMP435 gated application window' must have submitted planning consent to be classified as a protected project
3. These technology types are wave, tidal, transmission connected demand, non-GB generation
4. Note that this illustration is for Transmission-connected generation and projects with BEGA/BELA contracts. Source: Gate 2 Criteria Methodology (pg.8)

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Note: This slide has been updated since it was presented with language clarifications suggested by the workgroup

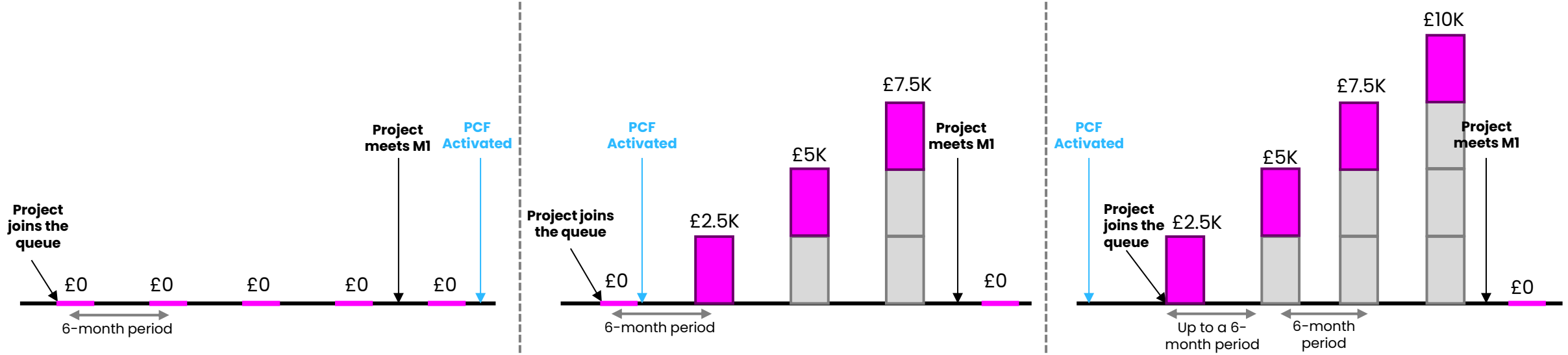
Example Scenarios: Cumulative PCF over time

Scenario 1: If PCF is never activated (or activated after completion of Milestone 1)

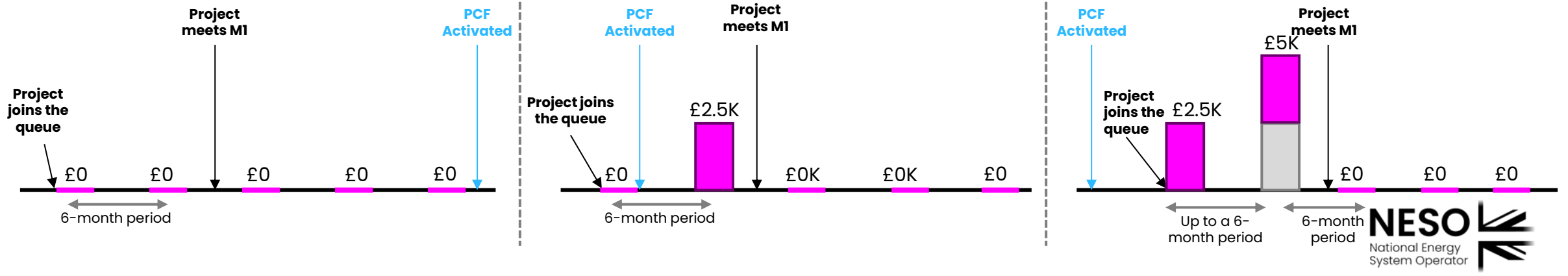
Scenario 2: If PCF is activated before project completes Milestone 1

Scenario 3: If PCF is activated before project enters gate 2

A: Project with 24 months to complete M1



B: Project with 12 months to complete M1



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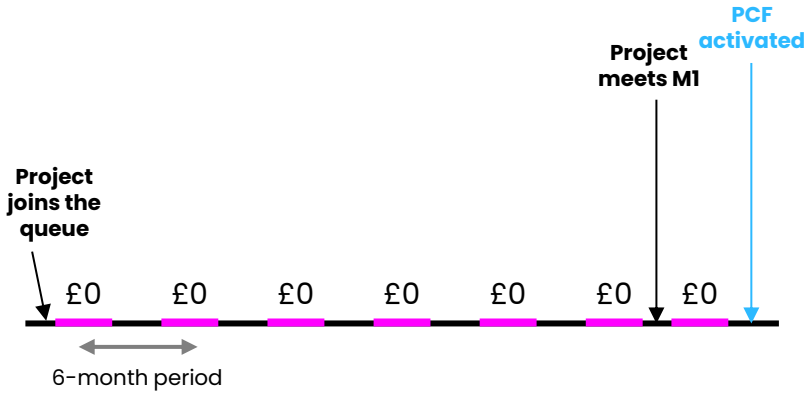
Additional Scenarios: Cumulative PCF over time for a project with >2 years before M1

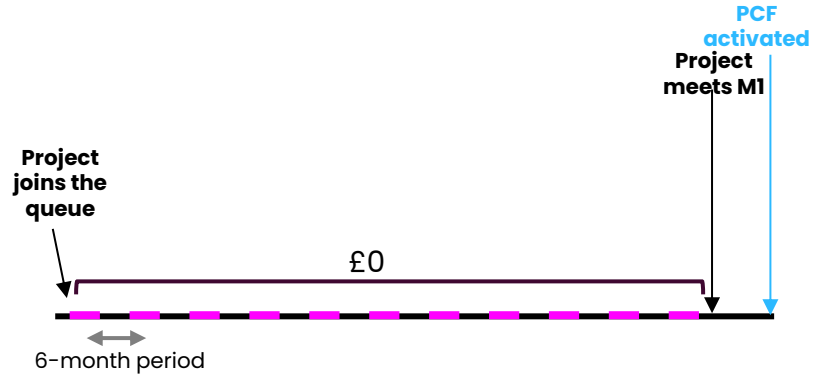
Note: This slide has been updated since it was presented with language clarifications & 5-year timing suggested by the workgroup

Scenario 1: If PCF is never activated (or activated after completion of Milestone 1)

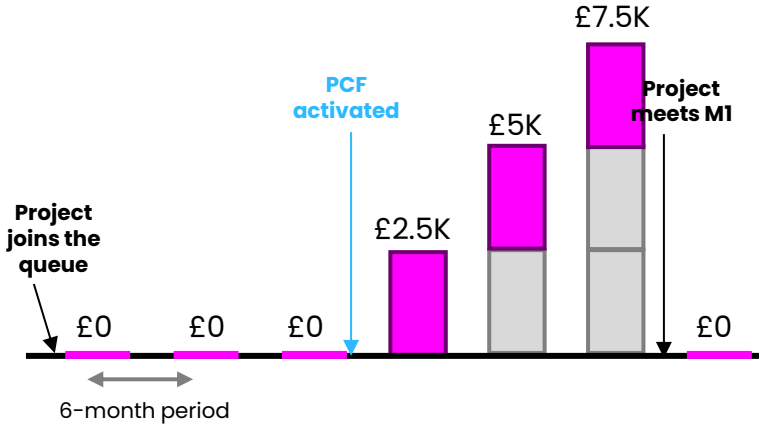
C: Project with 36 months to complete M1

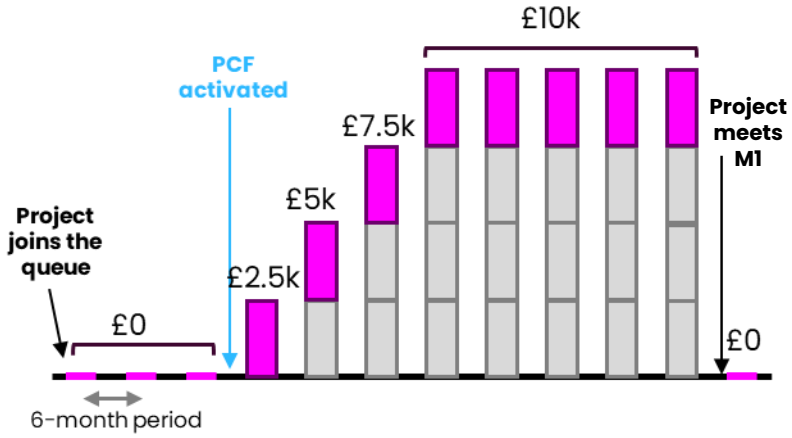


D: Project with 60 months to complete M1

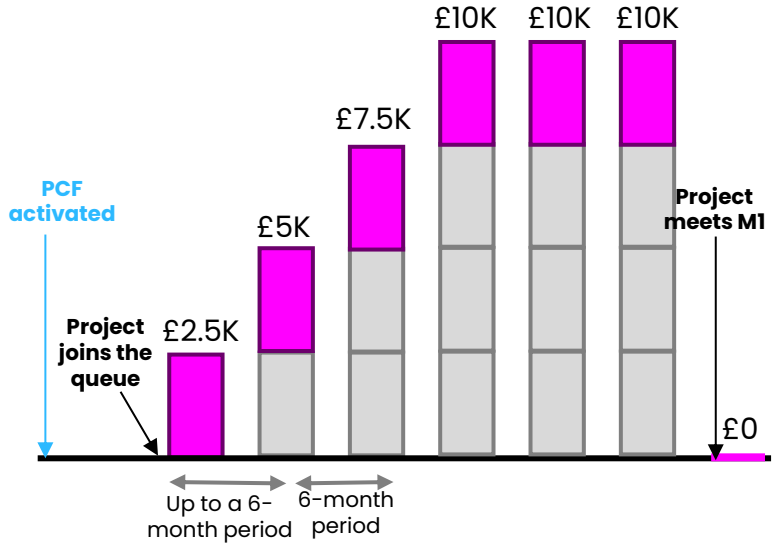


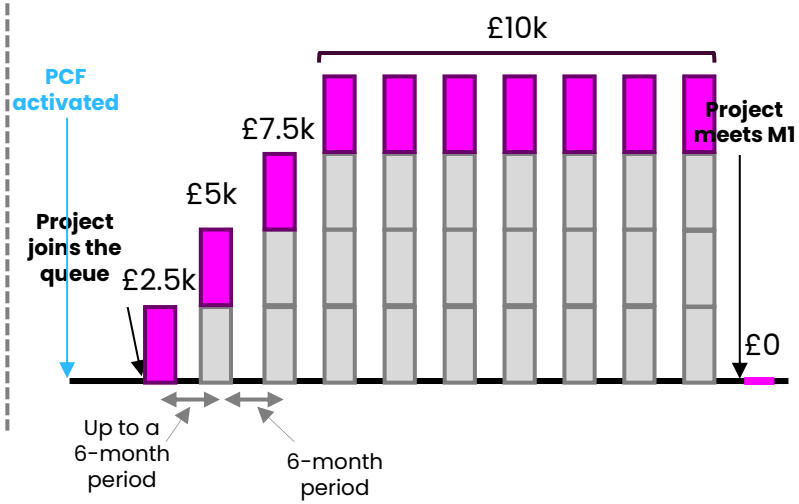
Scenario 2: If PCF is activated before project completes Milestone 1





Scenario 3: If PCF is activated before project enters gate 2

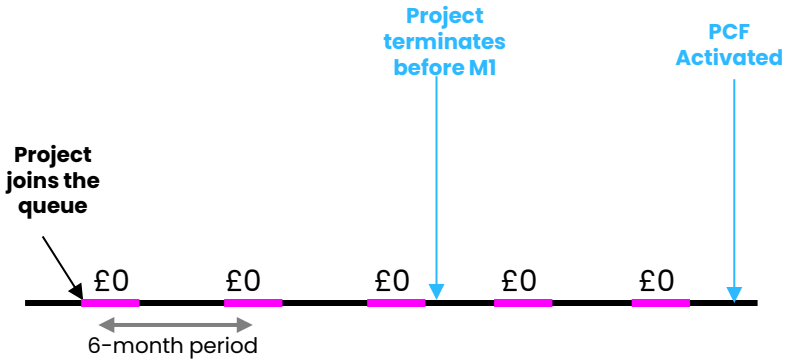




Note: This slide has been updated since it was presented with language clarifications suggested by the workgroup

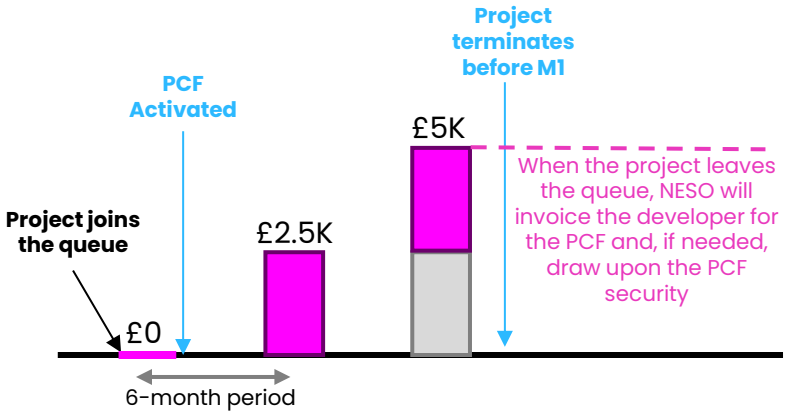
Example Scenarios: Cumulative PCF over time

Scenario 4: If a project self-terminates before Milestone 1 and the PCF has not been activated yet



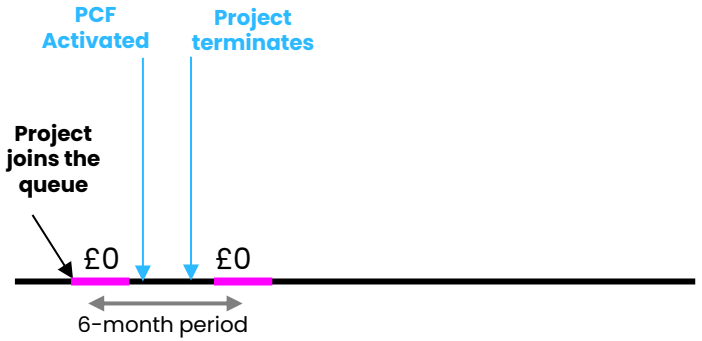
If a project leaves the queue before the PCF has been activated, it will not face a liability

Scenario 5: If a project self-terminates before Milestone 1 and the PCF has been activated



If a project leaves the queue before Milestone 1 but after the PCF has been activated, it will face a liability

Scenario 6: If the PCF has been activated and a project exits during the notice period



If the PCF is activated and a project chooses to exit the queue during the notice period (at least 3 months), it will not face a liability

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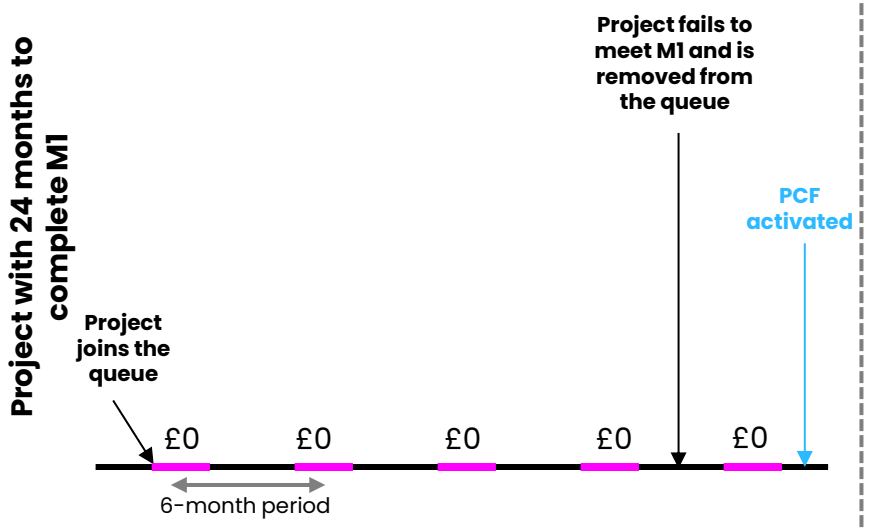
Additional Scenarios: Cumulative PCF over time for projects removed for not completing M1

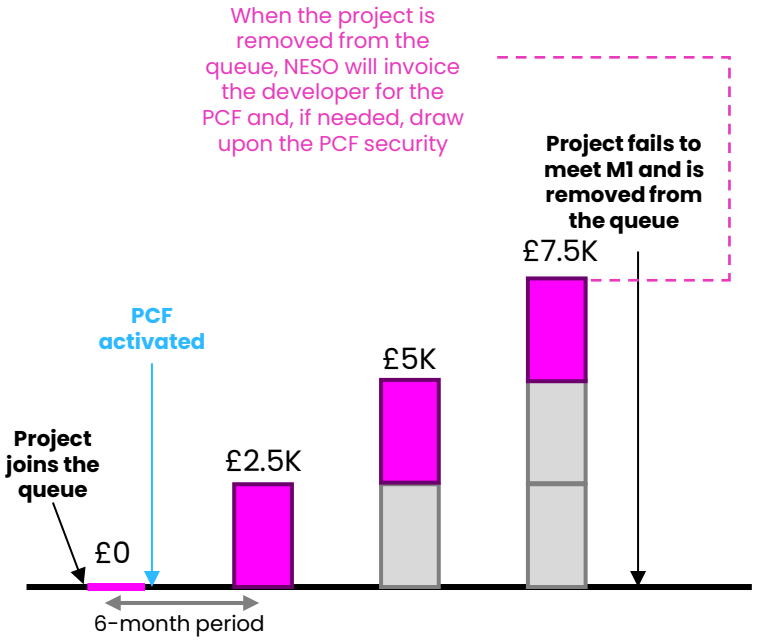
Note: This slide has been updated since it was presented with language clarifications suggested by the workgroup

Scenario 7 : If PCF is never activated (or activated after the project is removed from the queue)



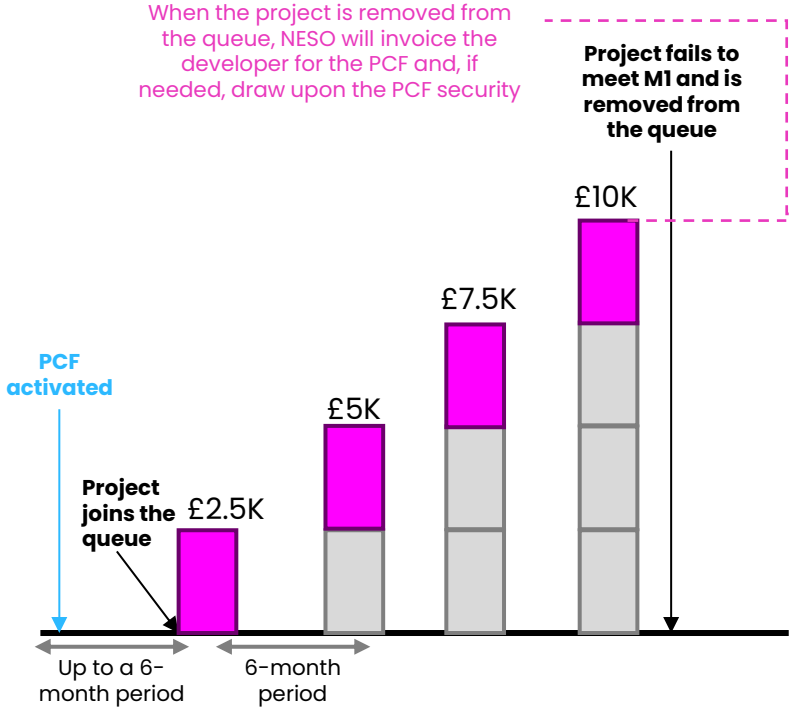
If a project fails to meet M1 and is removed from the queue before the PCF is activated, it will not face a liability.

Scenario 8: If PCF is activated before the project is removed from the queue



If a project is removed from the queue for failure to meet M1 and the PCF has been activated, it will be subject to the liability accumulated until that point.

Scenario 9: If PCF is activated before project enters gate 2



If a project is removed from the queue for failure to meet M1 and the PCF has been activated, it will be subject to the liability accumulated until that point.

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Our starting point on queue health

In the previous workgroup there was some discussion around what is meant by the term queue health in relation to the Terms of Reference

What is the **Defect**:

- Developers are not sufficiently incentivised to proactively assess the viability of their projects on a regular basis and proactively leave the "queue" before Milestone 1 if necessary.

What is the **consequence**:

- This leads to an inefficiency where unviable or stalled projects block other viable projects from connecting at the earliest opportunity.

What is the **queue:**

- In the proposal when we refer to the "queue" in relation to the defect, we are referring to the generation Gate 2 connections queue between Gate 2 entry and User Progression Milestone 1.

What is "**queue health":**

- In the proposal when we refer to the trigger metric being an indicative measure of queue health. We are colloquially referring to the relative prevalence of unviable or stalled projects in the "queue". i.e. a queue in poor health would contain a high amount of unviable or stalled projects

NESO Interpretation of TOR A: we would expect to consider the metric that best indicates that the defect that we have identified is occurring in queue.

NESO Interpretation of TOR B: we would expect to consider the trigger threshold that best indicates that the defect identified is prevalent enough in the queue to warrant action via the activation of the PCF.

Duration of PCF application

Wording of the Defect in the Mod Proposal:

'…For the reasons outlined above, NESO views the period between Gate 2 entry and Milestone 1 as the period that carries the highest risk of projects failing to progress appropriately and persisting in the queue for longer than necessary. The defect that this modification seeks to address is limited to that period of time.'

The PCF has been designed to apply only to projects between Gate 2 and Milestone 1 because:

- The longest period between User Progression Milestones is between Gate 2 entry and Milestone 1. During this period, projects are less likely to be exposed to significant User Commitment sums. Consequently, this is the stage where a project can occupy the queue for the longest duration, while also facing the least incentive for proactive and timely withdrawal.
- NESO views the period between Gate 2 entry and Milestone 1 as the period that carries the highest risk of projects failing to progress and persisting in the queue for longer than necessary. The defect that the modification seeks to address is limited to this period of time.
- Project progression towards submission of a planning application (the activity between Gate 2 and Milestone 1) is largely within the control of the developer.

Discussion: Is it relevant to include the below prompt in the TOR?
Consider if the period that the Progression Commitment Fee applies to, Gate 2 entry to Milestone 1, is appropriate.

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Scope of PCF: exclusion of demand projects

Demand projects are out of scope for this modification and the PCF does not apply to them.

- Historically, the defect has been observed more among generation customers.
- Demand projects are already subject to the Final Sums Methodology which provides a material financial commitment to development.
- We believe that introducing additional commitments for demand projects at this stage may not be appropriate
- However, we have noted in the Mod proposal that CUSC modification CMP417 seeks to extend "User Commitment Methodology" to Users currently on Final Sums Methodology. Depending on the outcome of this modification, NESO may consider raising a further and separate modification in the future to consider broadening the application of the PCF (if approved) in order to ensure appropriate financial incentives for all Users between Gate 2 entry and User Progression Milestone 1.

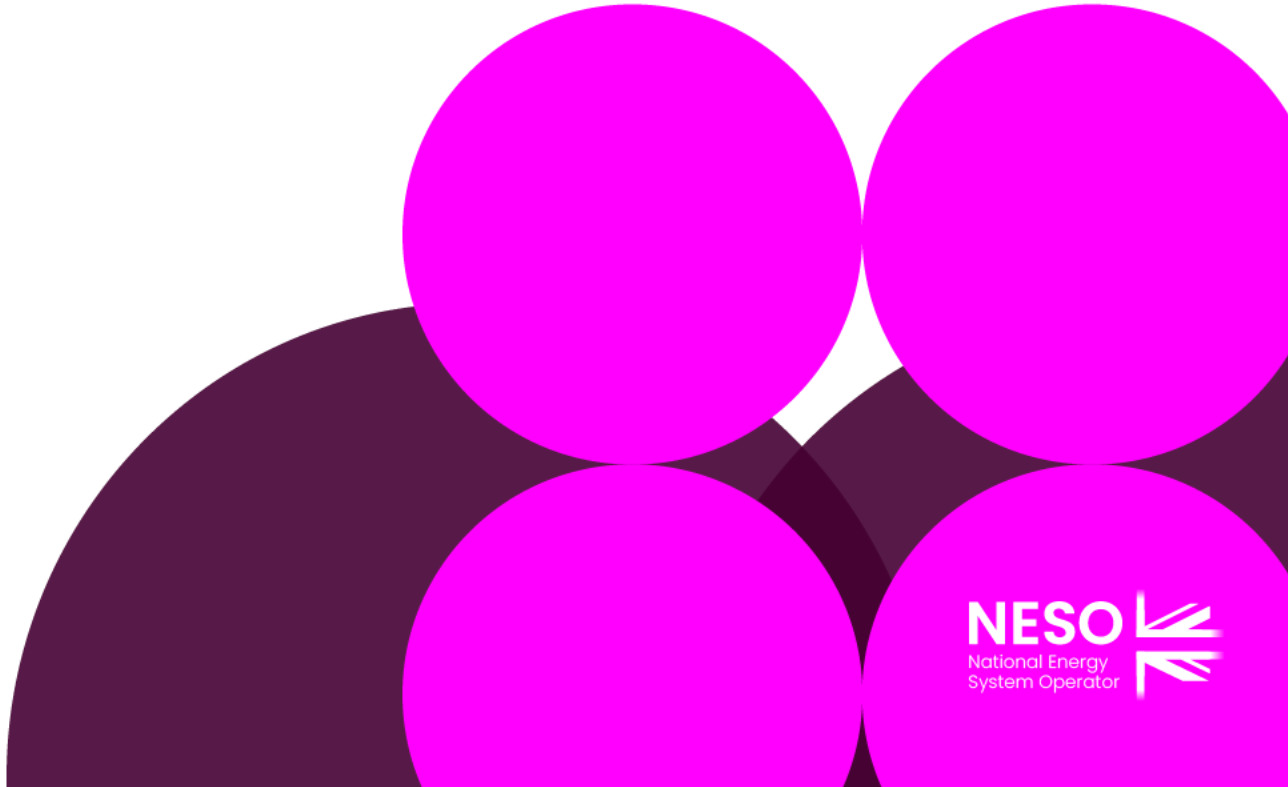
Discussion of TOR E: Consider if not applying the fee to all users will be duly or unduly discriminatory

How we will engage with DNOs and Embedded Generation going forward

1. We will engage with DNOs through our weekly meeting with the ENA Strategic Connections Group: TMO4+ Impacts & Assessments Sub-Group
2. We will also consider how best to engage the DNOs via the Connections Reform Implementation Hub
3. We will liaise with DNOs on how to engage with affected embedded generation as necessary

Note: We will provide a more detailed update on DNO engagement in the next workgroup

Workgroup 3



Note: This slide has been updated since it was presented to clarify wording around activation.

Why do we need a trigger metric?

Challenge: We can't be certain how prevalent the problem of project non-progression will be in the future gate 2 queue. Therefore, we propose that we should only activate the Progression Commitment Fee if non-progression is prevalent.

We therefore need two things:

1) **Trigger Metric:** a reliable measure of queue health with respect to project progression to Milestone 1 (measured on a regular basis)

2) **Trigger Threshold:** a pre-defined threshold value above which the measure would signal that the PCF could be activated

If [metric value] > [threshold], then the PCF could be activated[1]

Notes:
1. PCF activation is subject to NESO and Ofgem decisions

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Trigger Metric

Upon implementation of the modification, the PCF will initially be dormant. It will remain dormant unless a metric exceeds a defined threshold.

- The metric is an **indicative measure of the prevalence of unviable projects in the connections queue** between Gate 2 entry and Milestone 1.
- The metric will measure the **cumulative project MWs that are "terminated" from the Gate 2 connections queue as a result of failing to meet Milestone 1**. Any project MWs that are subsequently replaced by another project (or projects) with a connection date within 12 months of the connection date of the original project will be excluded from the metric. This metric will be referred to as the "trigger metric".
- **Following termination,** what qualifies as replacement capacity for the purposes of the trigger metric will be assessed by NESO based on a number of factors including but not limited to the location and technology type of the replacement connection in relation to the original. If no replacement capacity can be identified within six months, the terminated capacity will be regarded as not having been replaced by another project (or projects) for the purposes of the trigger metric.
- **Trigger measurement:** The trigger metric will be measured from the date of implementation to 31 December 2030 inclusive, the "initial metric period" and then for each five-year period thereafter. NESO will measure the trigger metric at six monthly intervals, the "measurement point" and publish this data.

Note: The definition of and process for replacement capacity is being handled under implementation of CR (CMP434 & CMP435) and is not within scope for this Workgroup. More detail on Capacity reallocation can be found in 7.22-7.25 of the Connections Network Design Methodology

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Key options considered for PCF activation

We considered whether the activation of the PCF should be manual, at any time determined by NESO and/or Ofgem, or whether a trigger mechanism should be used. If the activation was to be via a trigger, we considered the most appropriate trigger metric to use.

Aspect of the metric	Options considered	Description	Rationale
Appropriate metric to use	Manual activation via NESO/Ofgem decision	There is no trigger metric, the PCF is activated upon a decision by NESO and/or Ofgem	• Manual activation of the PCF by NESO and/or Ofgem at any time they believe it required could create additional uncertainty for industry. • A trigger metric that can be published on a regular basis provides transparency to industry in relation to when the PCF is likely to be activated. • Post TMO4+ capacity in the gate 2 queue will be more closely aligned to target amounts. Therefore, the issue of "oversubscription" should largely be resolved with TMO4+/CP30 methodologies. • Further, A trigger metric based on queue "oversubscription" would not necessarily indicate that there is a high number of unviable projects in the queue. • NESO believes that a trigger metric based on capacity termination provides the strongest indication that there are unviable projects in the queue.
	Metric based on CP30 requirements	A trigger metric is based on the amount of capacity in the queue in relation to 2030 or 2035 permitted capacities.	
	Metric based on capacity termination	**A trigger metric based on capacity terminated at or pre-Milestone 1**	

Design Options Key: Selected option; Alternative option

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Key options considered for the metric

The metric will measure the **cumulative project MWs** that are "terminated" from the Gate 2 connections queue including but failing to meet Milestone 1. Any project MWs that are subsequently replaced by another project (or projects) with a connection date within 12 months of the connection date of the original project will be excluded from the metric. This metric will be referred to as the "trigger metric". If no replacement capacity can be identified within six months, the terminated capacity will be regarded as not having been replaced by another project (or projects) for the purposes of the trigger metric.

Aspect of the metric	Options considered	Description	Rationale
Measurement of the total MW	Annual total (resets every year)	The annual total is measured at the end of each year but resets to zero at the beginning of the next year	• Rather than an annual threshold which would reset each year, a cumulative value allows us to target a total "allowable" threshold. • This allows for greater in-year variation, while also ensuring that cumulative impacts of attrition over time are accounted for. • A cumulative total over a five year period allows for alignment of metric period with window to achieve CP30.
	Cumulative total (resets every 5 years)	**The cumulative total is measured as a growing sum over the years. Each year's total is carried on to the next year. Cumulative total resets every 5 years.**	

Design Options Key: Selected option; Alternative option

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Key options considered for the metric

The metric will measure the **cumulative project MWs** that are "terminated" from the Gate 2 connections queue as a result of failing to meet Milestone 1. Any project MWs that are subsequently replaced by another project (or projects) with a connection date within 12 months of the connection date of the original project will be excluded from the metric. This metric will be referred to as the "trigger metric". If no replacement capacity can be identified within six months, the terminated capacity will be regarded as not having been replaced by another project (or projects) for the purposes of the trigger metric.

Aspect of the metric	Options considered	Description	Rationale
Measurement of MW terminations	Sub-queue measure	Total MW is measured by technology or by region	• If the trigger threshold is met only in one region / technology and the PCF is activated there, it could lead to a perverse incentive for developers to shift investment away from that region / technology. • Measuring MW by technology or region could potentially be perceived as discriminatory.
	National measure	**Total MW is measured across GB across all technology types**	

Design Options Key: Selected option; Alternative option

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Key options considered for the metric

The metric will measure the cumulative project MWs **that are "terminated" from the Gate 2 connections queue as a result of failing to meet Milestone 1.** Any project MWs that are subsequently replaced by another project (or projects) with a connection date within 12 months of the connection date of the original project will be excluded from the metric. This metric will be referred to as the "trigger metric". If no replacement capacity can be identified within six months, the terminated capacity will be regarded as not having been replaced by another project (or projects) for the purposes of the trigger metric.

Aspect of the metric	Options considered	Description	Rationale
MW contributing to 'termination' in the queue	Project MW that proactively exit the queue	Projects exit the queue on their own before Milestone 1, without NESO intervention	• Projects that proactively leave the queue before their M1 date are excluded from contributing to the metric because this behaviour is what we aim to incentivise with the PCF.
	Project MW that are terminated from the queue by NESO	**Projects remain in the queue between Gate 2 and Milestone 1 until they are terminated by NESO**	

Design Options Key: Selected option; Alternative option

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Key options considered for the metric

The metric will measure the cumulative project MWs that are "terminated" from the Gate 2 connections queue as a result of failing to meet Milestone 1. **Any project MWs that are subsequently replaced by another project (or projects) with a connection date within 12 months of the connection date of the original project will be excluded from the metric.** This metric will be referred to as the "trigger metric". If no replacement capacity can be identified within six months, the terminated capacity will be regarded as not having been replaced by another project (or projects) for the purposes of the trigger metric.

Aspect of the metric	Options considered	Description	Rationale
MW that count towards replacement	All terminated projects	All terminated projects regardless of whether or when they are replaced	• A primary concern of the PCF and Connections Reform more broadly is to incentivise the targeted capacity to be connected by 2030. With that in mind, terminations per se are not as much of a concern as terminations without (timely) replacement. • NESO aims to support competition by allowing new projects to enter the queue and replace capacity. • Replacements with connections dates within 12 months are excluded from the metric because the impact on total MW connected by 2030 is more limited.
	Terminated projects that result in a delay to capacity being connected	**Project MWs are only counted if they are not subsequently replaced by another project (or projects) with a connection date within 12 months of the connection date of the original project**	

Design Options Key: Selected option; Alternative option

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Key options considered for the metric

The metric will measure the cumulative project MWs that are "terminated" from the Gate 2 connections queue including but failing to meet Milestone 1. Any project MWs that are subsequently replaced by another project (or projects) with a connection date within 12 months of the connection date of the original project will be excluded from the metric. This metric will be referred to as the "trigger metric". **If no replacement capacity can be identified within six months, the terminated capacity will be regarded as not having been replaced by another project (or projects) for the purposes of the trigger metric.**

Aspect of the metric	Options considered	Description	Rationale
Timeframe contribute to replacement	Within 12 months	If no replacement is found within 12 months (2 measurement points), then we will count it as not replaced	• The metric should be updated frequently, as any additional time beyond the application window could result in a noticeable lag • A 6 month window balances a reasonable amount of time for replacement capacity to identified, whilst allowing the process to be as efficient as possible
	Within 6 months	**If no replacement is found within 6 months (following measurement point), then we will count it as not replaced**	

Design Options Key: Selected option; Alternative option

Note: The PCF modification is being developed in parallel to the further developments of the connections network design process. We will confirm the proposed option and how it works within those processes at a subsequent workgroup.

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Selecting the trigger threshold

The "trigger threshold" will be set at a cumulative total of 6000MW for the initial metric period

The trigger should be sensitive enough to be triggered quickly if there is a problem with projects not progressing to M1 in the queue. Therefore, we want a threshold that:

- Will be met if there is a high prevalence of project non-progression
- Will not be met if this issue is not prevalent in the future Gate 2 queue

To estimate when the trigger threshold would be met, we have to make several assumptions:

1. Estimate the composition of the future Gate 2 queue by assuming that projects currently in the queue will apply for and be allocated capacity based on:
    - **Allowed capacity for each technology type in 2035 as set out in CP30:** MW above the allowed capacity will not be allocated a position in the Gate 2 queue
    - **Project maturity:** those projects that already have planning consents will receive capacity ahead of those that do not
    - **Connection date:** projects with earlier connection dates will receive capacity ahead of those with later dates. Projects with connection dates between 2026-2035 inclusive are included in the analysis.
2. Estimate the M1 dates of those projects that have not already submitted planning[1]
3. Simulate when the threshold would be met based on different attrition and replacement rates

Notes:
1. Milestone dates estimated using backward-calculated M1 dates as described in CMP376. Forward-calculated dates have not been used due to date limitations on planning type.

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Note: This slide has been updated since it was presented at WG3 to clarify the definitions of attrition and replacement, noting the analysis is illustrative

Illustrative Scenario: Healthy Queue Base Case

Illustrative Scenario Overview: Healthy Queue Base Case

- Description: Connection delays caused by project non-progression are minimal.
- Assumptions[1]:
  - **i.** **M1 distribution** is based on the base case for projects in scope of the PCF (49%)
  - **ii.** **Attrition** (Terminations from the Gate 2 connections queue for failing to meet Milestone 1, of those projects with M1 dates in that period): **5%**
  - **iii.** **Replacement** (Replacement of projects captured in attrition rate above, where identified within 6 months, with a connection date within 12 months of the connection date of the original project): **75%**

Illustrative Scenario: Healthy Queue Trigger Metric Analysis

Time Period	1H26	2H26	1H27	2H27	1H28	2H28	1H29	2H29	1H30	2H30
Estimated Trigger Metric Value (MW)[2]	0	252	324	456	892	892	892	941	1081	1082

Outcome: the PCF remains dormant until the end of 2030, when the threshold value resets.

Key Trigger threshold not met | Trigger threshold met

Notes:
1. Analysis is based on Impact Assessment Data (December 2024), filtered for allowed capacity for each technology type in 2035 as set out in CP30, project maturity and connection dates; please see selecting the trigger threshold page for full details
2. Estimated based on stated assumptions for attrition and replacement in scenario overview

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Note: This slide has been updated since it was presented at WG3 to clarify the definitions of attrition and replacement, noting the analysis is illustrative

Illustrative Scenario: Deteriorating Queue Health Base Case

Illustrative Scenario Overview: Deteriorating Queue Health Base Case

- Description: Over time, project non-progression and subsequent impacts to viable projects with later connection dates increases to a point where there is risk to CP30.
- Assumptions[1]:
  - i. **M1 distribution** is based on the base case for projects in scope of the PCF (49%)
  - ii. **Attrition** (Terminations from the Gate 2 connections queue for failing to meet Milestone 1, of those projects with M1 dates in that period): **15%**
  - iii. **Replacement** (Replacement of projects captured in attrition rate above, where identified within 6 months, with a connection date within 12 months of the connection date of the original project): **40%**

Illustrative Scenario: Deteriorating Queue Health Trigger Metric Analysis[2]

Time Period	1H26	2H26	1H27	2H27	1H28	2H28	1H29	2H29	1H30	2H30
Estimated Trigger Metric Value (MW)[3]	0	1,815	2,334	3,285	6,419	6,419	6,419	6,774	7,784	7791

Outcome: the PCF threshold will be met as queue health deteriorates.

Key Trigger threshold not met | Trigger threshold met

Notes:
1. Analysis is based on Impact Assessment Data (December 2024), filtered for allowed capacity for each technology type in 2035 as set out in CP30, project maturity and connection dates; please see selecting the trigger threshold page for full details
2. Note that the assumptions in this illustrative scenario are not alone sufficient to estimate the total value collected against the PCF
3. Estimated based on stated assumptions for attrition and replacement in scenario overview

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Public

Note: This slide has been updated since it was presented at WG3 to clarify the definitions of attrition and replacement, noting the analysis is illustrative

Illustrative Scenario: Unhealthy Queue Base Case

Illustrative Scenario Overview: Unhealthy Queue Base Case

- Description: Project non-progression resulting in connection delays to more viable projects with later connection dates remains a prevalent issue post-TMO4+.
- Assumptions[1]:
  - **i.** **M1 distribution** is based on the base case for projects in scope of the PCF (49%)
  - **ii.** **Attrition** (Terminations from the Gate 2 connections queue for failing to meet Milestone 1, of those projects with M1 dates in that period): **30%**
  - **iii.** **Replacement** (Replacement of projects captured in attrition rate above, where identified within 6 months, with a connection date within 12 months of the connection date of the original project): **5%**

Illustrative Scenario: Unhealthy Queue Trigger Metric Analysis[2]

Time Period	1H26	2H26	1H27	2H27	1H28	2H28	1H29	2H29	1H30	2H30
Estimated Trigger Metric Value (MW)[3]	0	5,748	7,390	10,404	20,328	20,328	20,328	21,452	24,650	24,673

Outcome: The PCF threshold will be met.

Key Trigger threshold not met | Trigger threshold met

Notes
1. Analysis is based on Impact Assessment Data (December 2024), filtered for allowed capacity for each technology type in 2035 as set out in CP30, project maturity and connection dates; please see selecting the trigger threshold page for full details
2. Note that the assumptions in this illustrative scenario are not alone sufficient to estimate the total value collected against the PCF
3. Estimated based on stated assumptions for attrition and replacement in scenario overview

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Progression Commitment Fee Activation

- **The "trigger threshold"** will be set at a cumulative total of 6000MW for the initial metric period, which is the approximate equivalent of 5% of the additional capacity (capacity that is not already installed) that is required to be connected before the end of 2030 in order to meet CP30 targets[1]. If the PCF is not activated by the end of the initial metric period, the intention of NESO is to review the trigger threshold ahead of each subsequent 5-year period.
- **If, at any measurement point, the published trigger metric, is greater than 6000MW**, the trigger threshold will have been deemed to be met.
- **If the trigger threshold is deemed to have been met** at any measurement point, NESO will have the option to activate or not activate the PCF and will notify Ofgem of its decision within 1 month of the trigger threshold being met. We propose that (subject to Ofgem agreement) Ofgem should then have power to override NESO's decision within 2 months of being notified. For the avoidance of doubt, there will be no ability of any party to activate the PCF unless the trigger threshold is first met.
- **If the trigger threshold is met and the PCF is activated**, users will be provided a **notice period of at least 3 months** from the date of Ofgem's decision. If a User decides to remove the project from the connections queue within this period, they will not be liable for the PCF upon termination[2].

Notes:
1. Additional capacity estimated using DESNZ 2030 Capacity Range compared to installed capacity in 2024 as listed in Clean Power 2030 Action Plan: Connections reform annex (pg.9, 10).
2. They will still be liable for the applicable cancellation charge as per the current arrangements.

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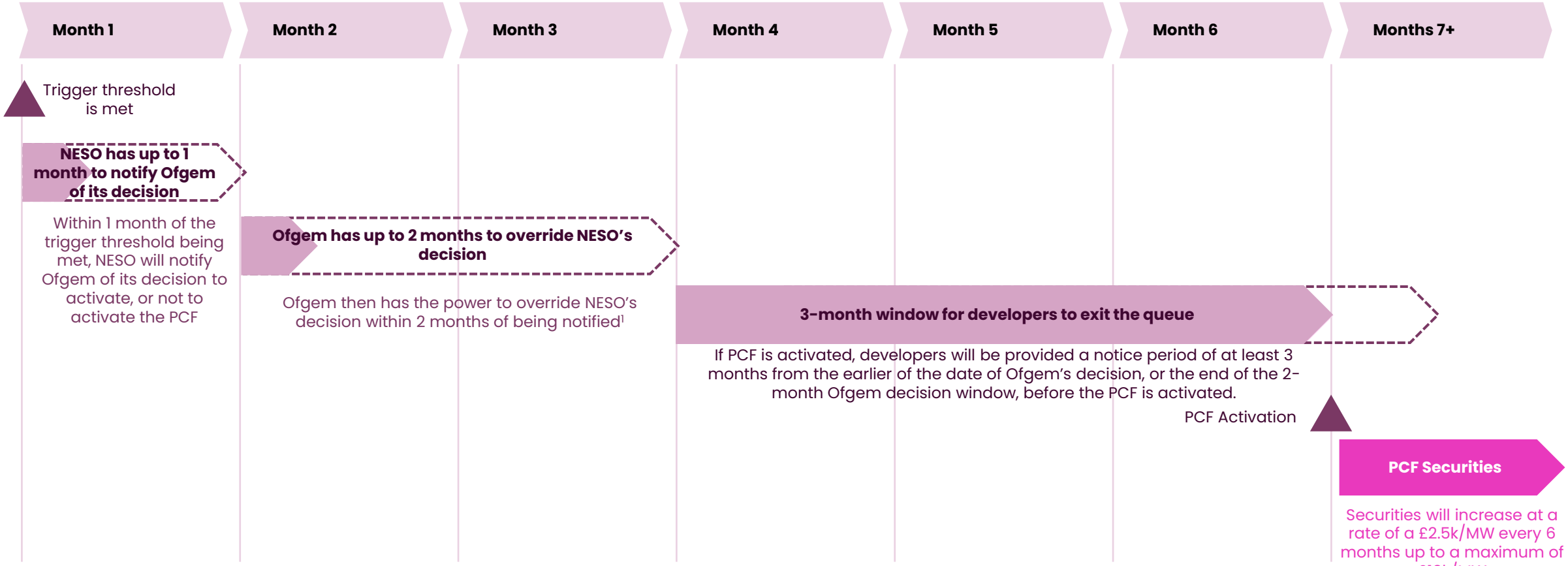
Note: This slide has been updated since it was presented to clarify the role of decisionmaker

Trigger Met to Activation Decision Timeline

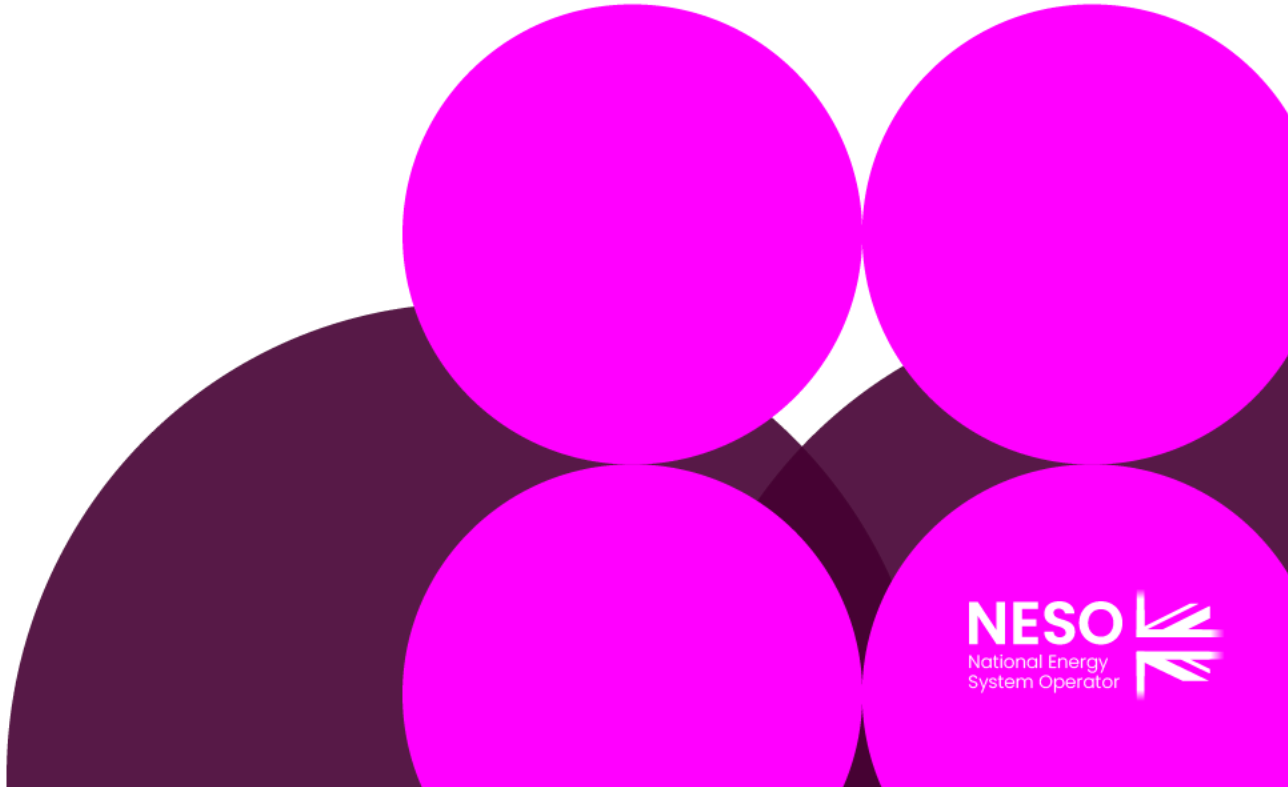
If the trigger threshold is met and the PCF is activated, users will be provided a **notice period of at least 3 months** from the earlier of the date of Ofgem's decision, or the end of the 2-month Ofgem decision window. If a User decides to remove the project from the connections queue within this period, they will not be liable for the PCF upon termination



Note: NESO has noted that a request for an additional industry consultation during this process was requested in WG2

Notes:
1. Subject to Ofgem agreement with this proposal.

Workgroup 4

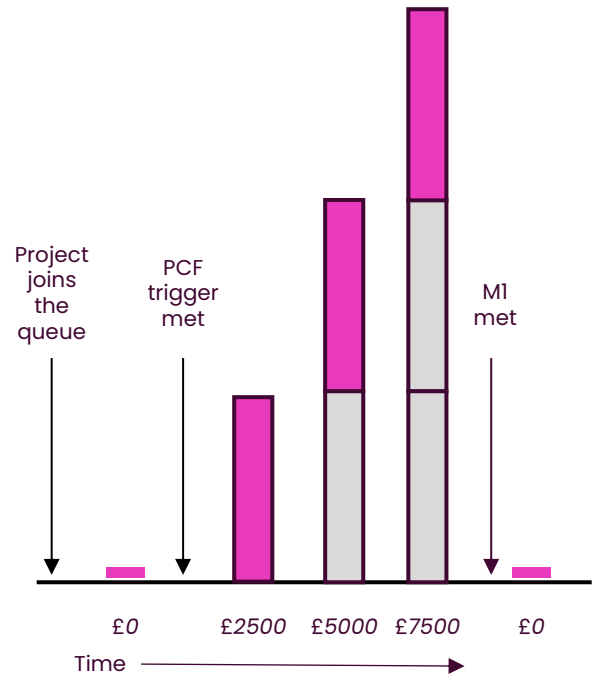


Progression Commitment Fee: Solution Overview

Focus of today's session

Intent	The Progression Commitment Fee (PCF) is intended to provide an incentive for: • 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	• 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	• **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	• 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	• 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.

Total Liability Over Time (Illustrative)



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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

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Note: This slide has been updated since it was presented at WG4 to clarify that projects are liable for increasing User Commitment Fees

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	• 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 each • Discounted 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. However, however, parties will still be liable for increasing User Commitment fees. • 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

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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	• 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

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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	• 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

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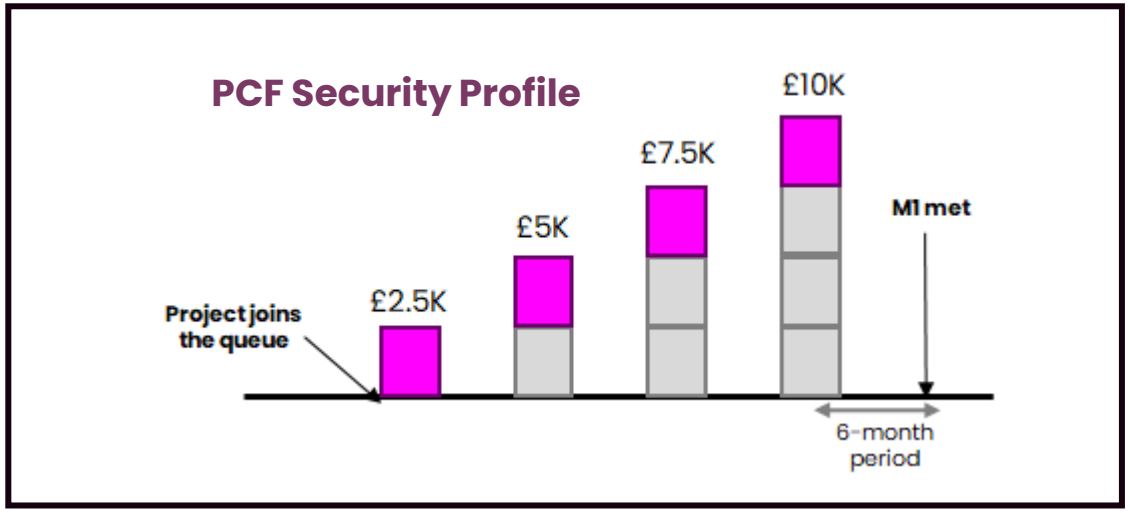
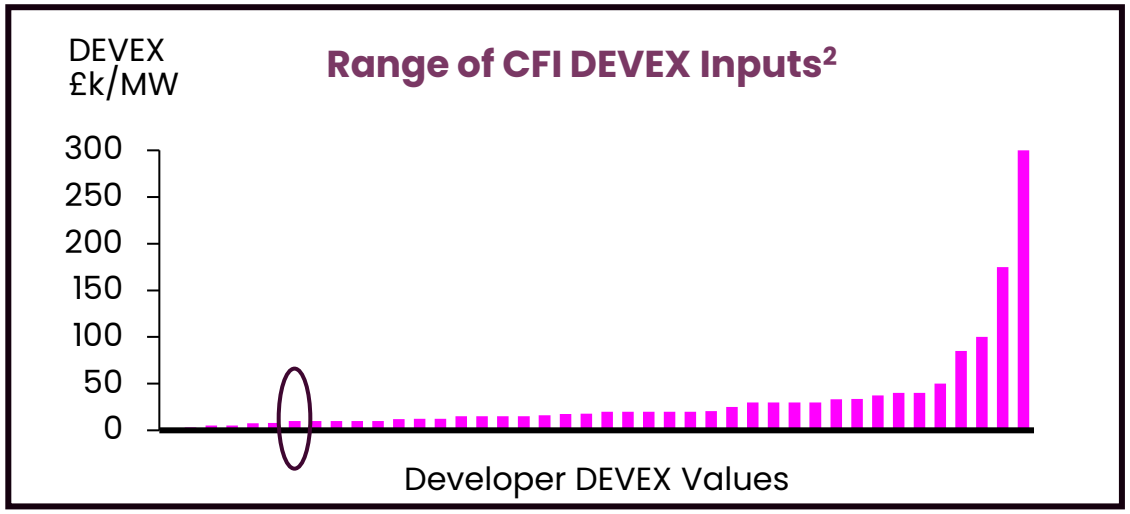
Safeguarding





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 Rate**[1]: 8% per annum
2. **Financing Period:** 24 months from joining the Gate 2 queue to passing Milestone M1.
3. **DEVEX**[2]**:** 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).

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.

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Note: New slide developed as per Workgroup request

Additional safeguarding analysis

Based on a range of security financing rates (6-14%)[1] and financing periods (0.5-5 years)[2], the estimated PCF security financing costs range from £75/MW to £5950/MW.

Key
Original Estimate
Lower Financing Cost
Higher Financing Cost

Financing Cost (£/MW)		Security Financing Rate (%)								
		6%	7%	8%	9%	10%	11%	12%	13%	14%
Financing Period (Years)	0.5	75	88	100	113	125	138	150	163	175
	1.0	225	263	300	338	375	413	450	488	525
	1.5	450	525	600	675	750	825	900	975	1050
	2.0	750	875	1000	1125	1250	1375	1500	1625	1750
	2.5	1050	1225	1400	1575	1750	1925	2100	2275	2450
	3.0	1350	1575	1800	2025	2250	2475	2700	2925	3150
	3.5	1650	1925	2200	2475	2750	3025	3300	3575	3850
	4.0	1950	2275	2600	2925	3250	3575	3900	4225	4550
	4.5	2250	2625	3000	3375	3750	4125	4500	4875	5250
	5.0	2550	2975	3400	3825	4250	4675	5100	5525	5950

Notes:
1. Most of the CFI responses that quoted overall cost of capital ranged from 7% to 13%, excluding outliers; we chose an expanded range of security financing rates as requested by workgroup members
2. The financing period ranges from 0.5 – 5 years, representing an expanded range as requested by workgroup members

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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.

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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.

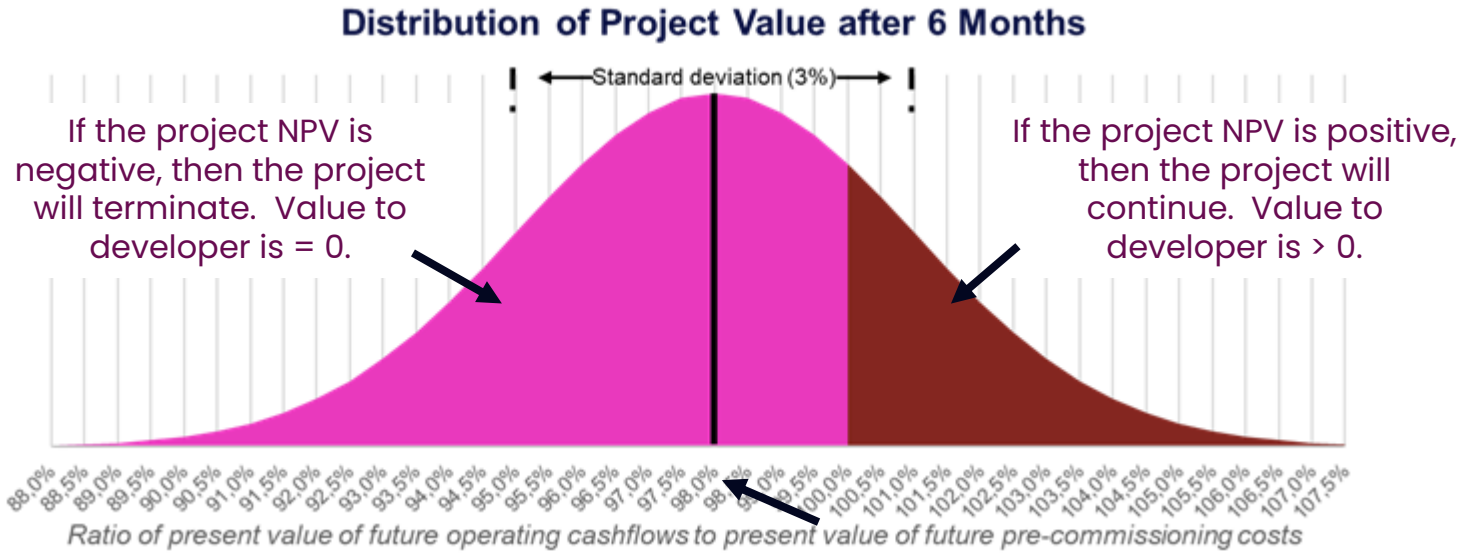
Scenario Assumptions

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.

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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.

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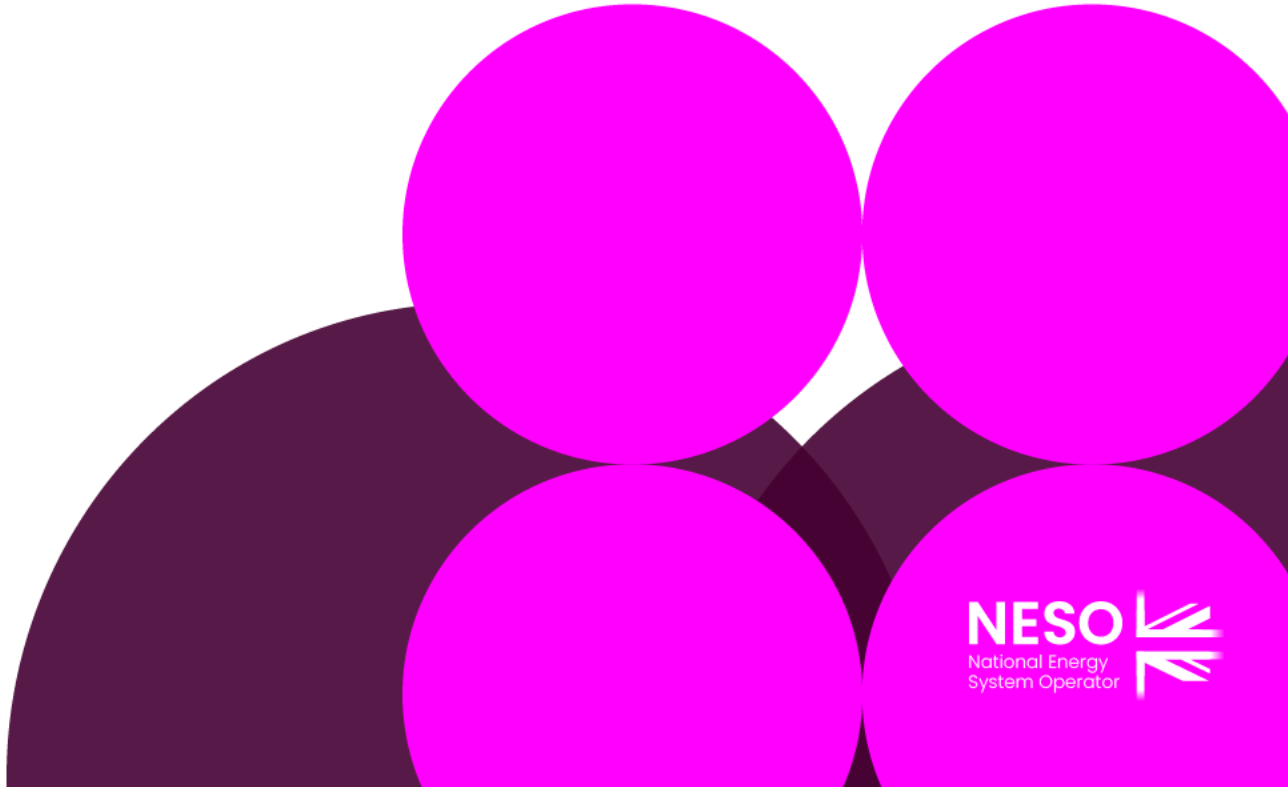
Glossary of terms

Addendum



Note: New slide developed as per Workgroup request

Glossary of terms

This glossary provides NESO's colloquial definitions of terms used throughout the Mod and supporting materials, for avoidance of doubt.

Term	Definition
Trigger Metric	An indicative measure of the prevalence of unviable projects in the connections queue between Gate 2 entry and Milestone 1, which will be tracked over time by NESO to determine whether to activate the PCF. Under the mod proposal, the trigger metric will measure: "the cumulative project MWs that are "terminated" from the Gate 2 connections queue as a result of failing to meet Milestone 1. Any project MWs that are subsequently replaced by another project (or projects) with a connection date within 12 months of the connection date of the original project, provided they can be identified within six months, will be excluded from the metric."
Trigger Threshold	The pre-defined value of the trigger metric that, if reached, will trigger the PCF activation governance process. The PCF will not be able to be activated before the trigger threshold has been met. Once the trigger threshold has been met, NESO will cease to track and publish the metric. Under the mod proposal, the trigger threshold is set at 6GW.
Measurement Point	A point in time at which NESO will measure and publish the trigger metric. Under the mod proposal, this will take place every 6 months.
Initial metric period	The initial metric period is the five years from 2026-2030 over which the metric will be measured cumulatively. If the threshold has not been met within this time, the metric will reset to 0 for the subsequent five-year period, and NESO will review the metric value for that period.

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Note: New slide developed as per Workgroup request

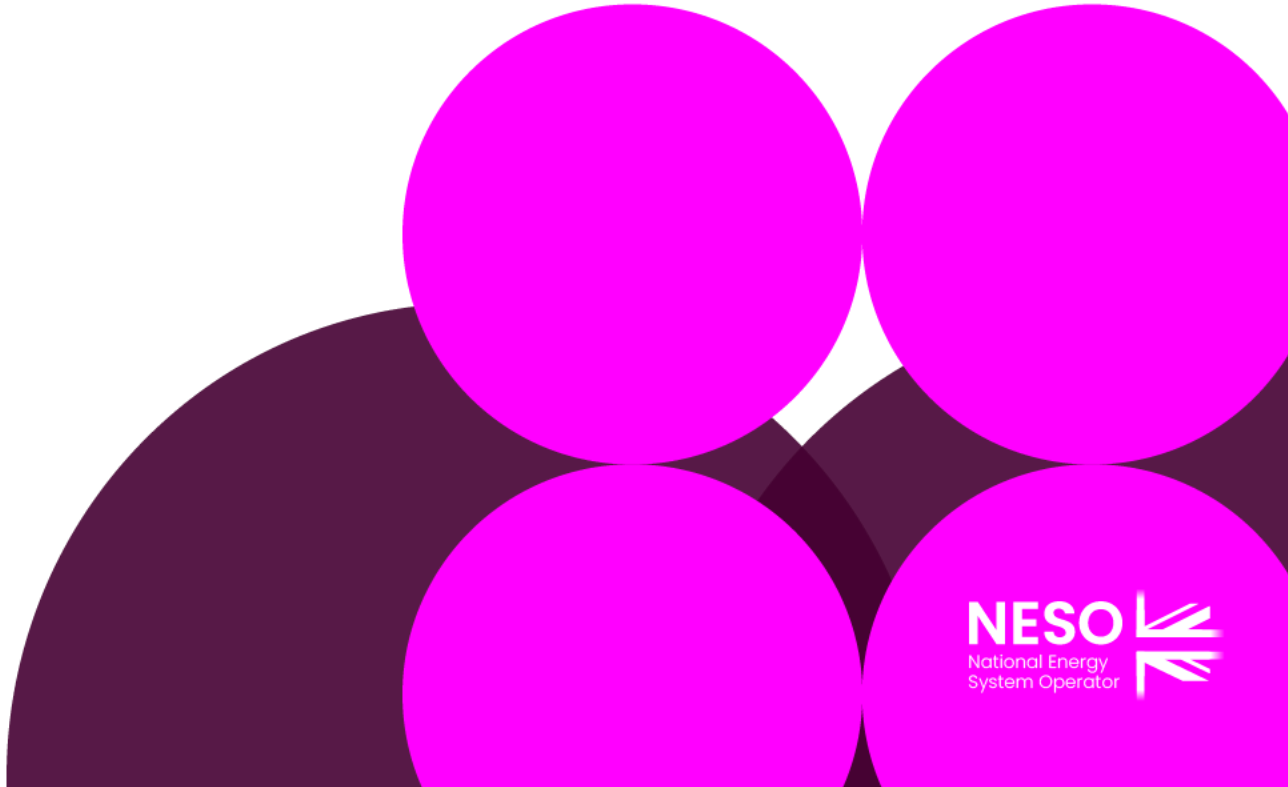
Glossary of terms

This glossary provides NESO's colloquial definitions of terms used throughout the Mod and supporting materials, for avoidance of doubt.

Term	Definition
Queue	In the proposal when we refer to the "queue" in relation to the defect, we are referring to the generation Gate 2 connections queue between Gate 2 entry and User Progression Milestone 1.
Queue health	In the proposal when we refer to the trigger metric being an indicative measure of queue health. We are colloquially referring to the relative prevalence of unviable or stalled projects in the "queue" (as described above) . i.e. a queue in poor health would contain a high amount of unviable or stalled projects in the period between Gate 2 entry and User Progression Milestone 1
PCF is triggered / PCF trigger threshold has been met	We refer to the PCF being triggered, or the PCF trigger threshold being met to mean the measurement point at which the total MW of projects measured as part of the trigger metric has reached the threshold (6 GW). When this happens, this will initiate the governance review in which NESO will recommend and Ofgem will decide whether to activate the PCF.
PCF activation	We refer to PCF activation to mean the moment in time when project developers must begin to secure against the PCF. This would be at least 3 months after the PCF trigger threshold is met.

Capacity Reduction

Addendum



Note: New slide developed as per Workgroup request

Capacity Reduction

If the PCF has been activated and a developer reduces its capacity, then then the developer will be liable to pay a portion of the applicable PCF proportionate to the reduction in capacity. The PCF will be recalculated in line with its revised capacity for the purposes of updating the PCF security required.

Example Scenario 1:
A project reduces its capacity from 100MW to 75MW:
PCF has been activated and the PCF value for the project at the time is £2,500/MW

Before reduction:
PCF for capacity held= £2,500 x 100MW = £250,000

Developer is required to post PCF security of £250,000

After Reduction:
PCF for capacity held = £2,500 x 75MW = £187,500
PCF for capacity terminated = £2,500 x 25MW = £62,500

Developer is required to post PCF security of £187,500 and required to pay PCF of £62,500

Example Scenario 2:
A project reduces its capacity from 100MW to 90MW:
PCF has been activated and the PCF value for the project at the time is £10,000/MW

Before reduction:
PCF for capacity held= £10,000 x 100MW = £1,000,000

Developer is required to post PCF security of £1,000,000

After Reduction:
PCF for capacity held = £10,000 x 90MW = £900,000
PCF for capacity terminated = £10,000 x 10MW = £100,000

Developer is required to post PCF security of £900,000 and required to pay PCF of £100,000

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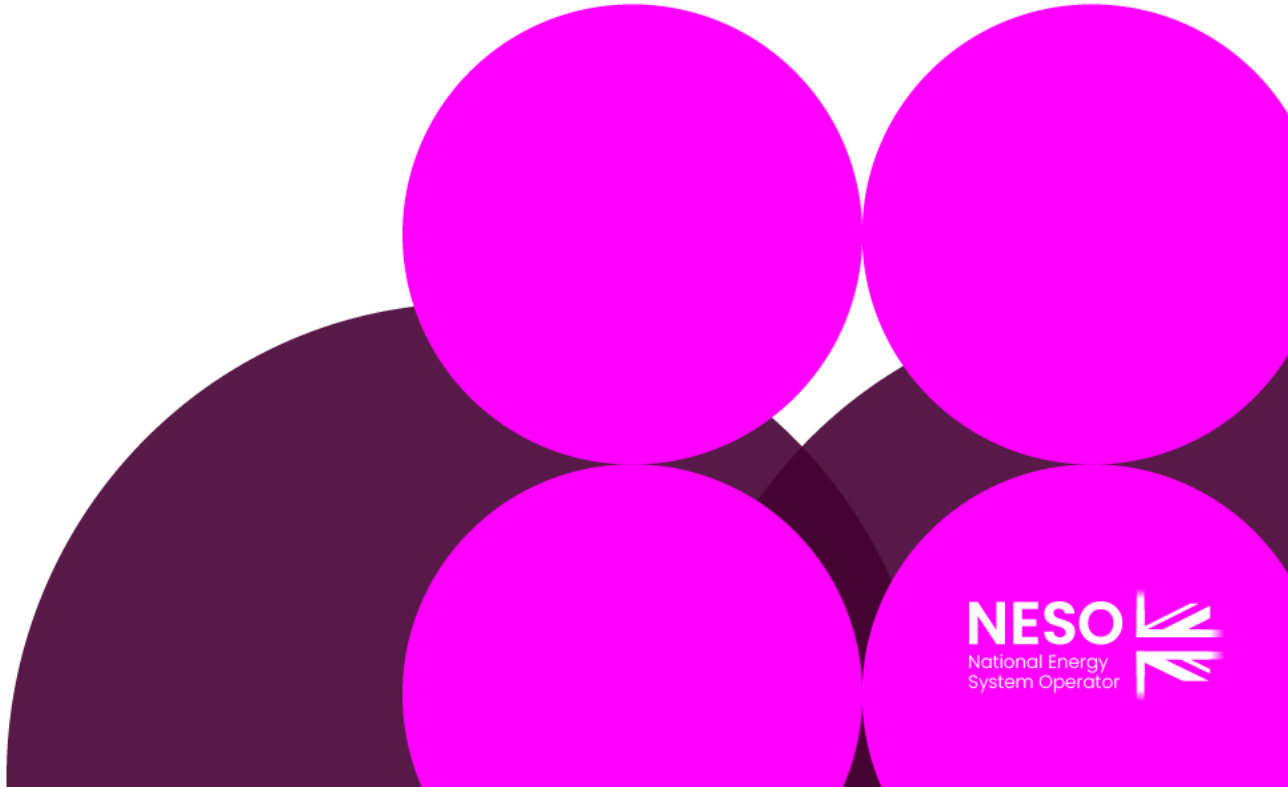
Metric Measurement Scenarios

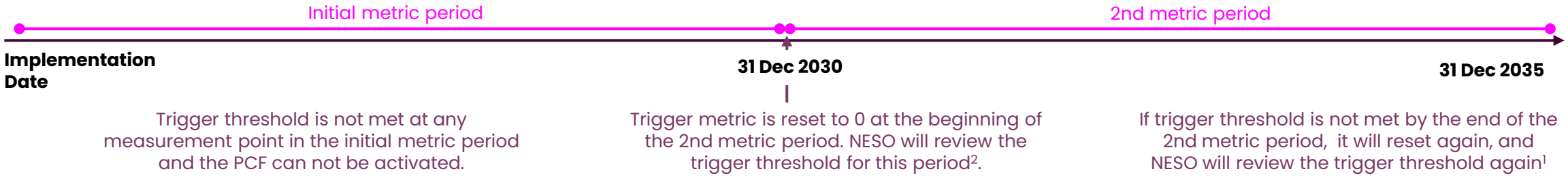
Addendum



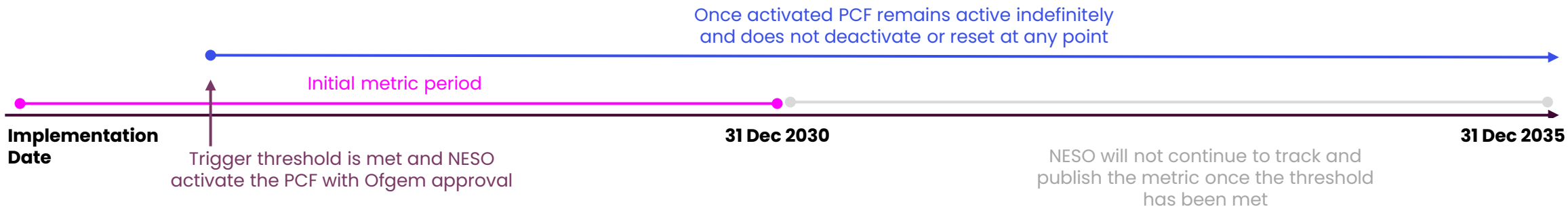
Note: New slide developed as per Workgroup request

Metric Measurement Scenarios

Scenario 1: If the PCF is not activated within initial metric period, then the metric will reset for the following metric period.



Scenario 2: If the PCF is activated, it remains in place indefinitely



Notes:
1. Trigger metric will continue to reset at the end of each metric period if the threshold is not met (unless the above process is changed by a further CUSC modification)
2. And make changes via a CUSC Modification if required

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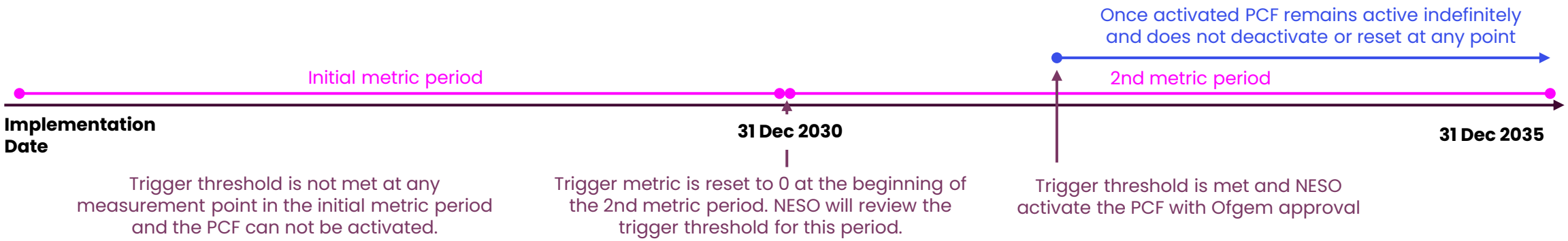
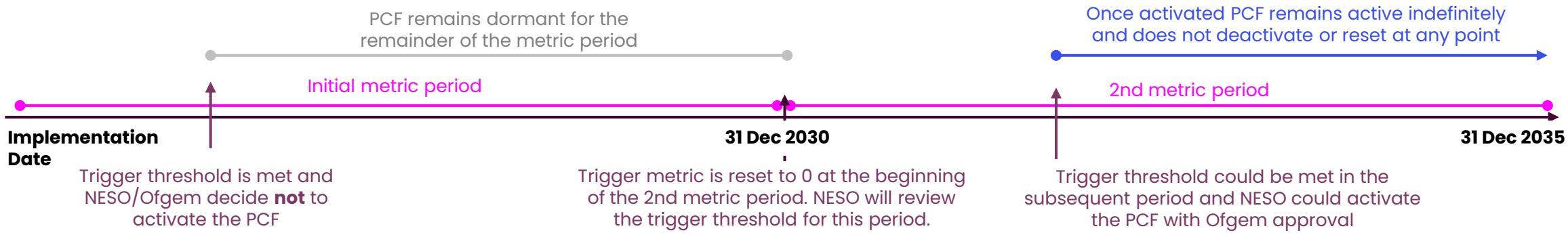
Note: New slide developed as per Workgroup request

Metric Measurement Scenarios

Scenario 3: If the PCF is activated in a later period



Scenario 4: If the trigger threshold is met but the PCF is not activated in the first metric period



Notes:
1. Trigger metric will continue to reset at the end of each metric period if the threshold is not met. (unless the above process is changed by a further CUSC modification)

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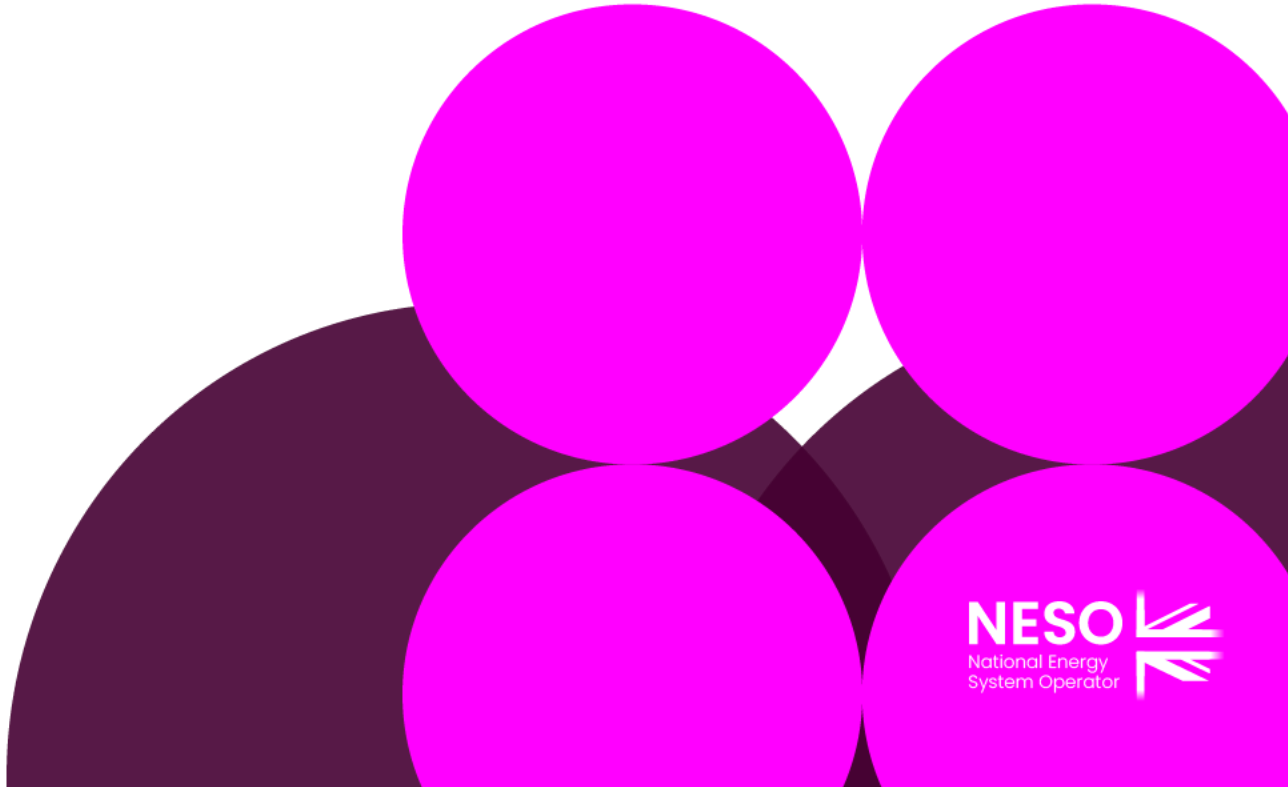
PCF Trigger Date Scenarios

Addendum



Note: New slide developed as per Workgroup request

Overview of PCF Trigger Date analysis methodology

This addendum section provides an overview of the analysis and assumptions used to create the PCF Trigger Date Scenarios

To estimate when the PCF could be triggered, we make several assumptions, which are detailed over the next several slides, including:

- Profile of the Gate 2 queue
- % of the Gate 2 queue that will be in scope for the PCF
- Distribution of M1 dates of projects in the Gate 2 queue in scope for the PCF
- Different attrition and replacement rates that would cause the trigger threshold value of 6GW to be met at different points in time

Note: New slide developed as per Workgroup request

Transmission Connecting Illustrative M1 dates relative to connection dates: backward and proposed forward-calculated milestones[1]

Key points

- M1 dates will be both backward and forward-calculated by NESO in future under the proposed methodology in CMP434: Implementing Connections Reform
- Under the amended methodology, M1 dates will be the earlier of either forward or backward-calculated dates, with forward dates calculated from when the offer has been issued[4]
- In the forward calculation, projects will have the following amount of time to complete M1:
  - Town & Country: 24 months
  - Section 36, DNS & DCO: 36 months
  - Offshore: 60 months
- No Queue Management Milestone can be later than the project connection date, regardless of calculation method (please see ~~strikethrough~~ dates)

Developers will receive the earlier of the backward-calculated or the applicable forward-calculated M1 date

Connection date	Backward calculation[2] assuming offer date H1 2026	Forward calculation[3] assuming offer date H1 2026		
	M1 date	M1 date (Town & Country)	M1 date (Section 36, DNS, DCO)	M1 date (Offshore)
2026	Bilaterally negotiated	~~2028~~[5]	~~2029~~	~~2031~~
2027	Bilaterally negotiated	~~2028~~	~~2029~~	~~2031~~
2028	H2 2026- H1 2027	2028	~~2029~~	~~2031~~
2029	2027	2028	2029	~~2031~~
2030	2027	2028	2029	~~2031~~
2031	2027	2028	2029	2031
2032	2028	2028	2029	2031
2033	2029	2028	2029	2031
2034	2030	2028	2029	2031
2035	2031	2028	2029	2031

Notes:
1. Source: CMP434 Final Modification Report and Annexes (see Annex 5)
2. M1 date is calculated back from the connection date as per CMP376 methodology; until another agreement (Gate 1 or 2) is signed, all QM dates are relevant and enforceable
3. M1 date is calculated forwards from the Gate 2 offer date (based on an agreed standard time period from the date that Gate 2 offer is accepted for each planning type) per proposed CMP434 methodology; until another agreement (Gate 1 or 2) is signed, all QM dates are relevant and enforceable
4. Assuming that no projects seek an adjustment to their M1 date in the Gate 2 post offer signature window
5. Strikethrough dates represent that no queue management date can be later than the connection date, regardless of calculation method

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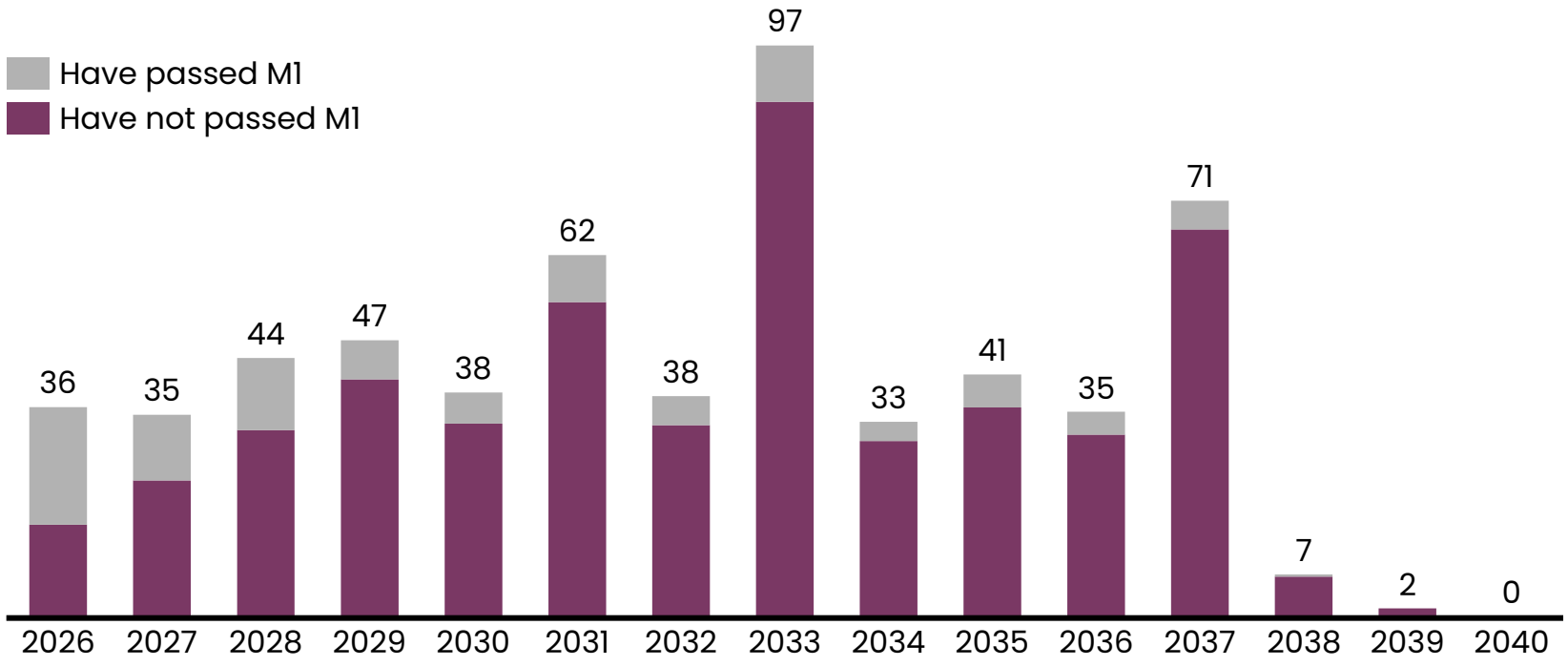
Note: New slide developed as per Workgroup request

Estimated composition of the existing queue

Connection date of current queue[1] by M1 status (GW)



Overview

- Most projects in the existing queue have not passed M1
- The capacity in the existing queue with connection dates in 2026-2040 (587 GW) far exceeds the total incremental capacity needed for 2035 (175 GW)[2]
- This queue will be filtered to produce the new Gate 2 queue as part of Connections Reform, and the contracted connection date could change via that process

Notes:
1. Source: Impact Assessment Data (December 2024) which includes data from NESO FES Publication (2024), Transmission Connections Registers (September 2024), ENA distribution Databook (June 2024), Connections Reform Annex, NESO RFI Responses, NESO internal data sets, Regen NESO Transmission Pipeline Report
2. NESO estimate that the incremental capacity needed in 2026 to meet the 289GW 2035 target is 175GW.

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Note: New slide developed as per Workgroup request

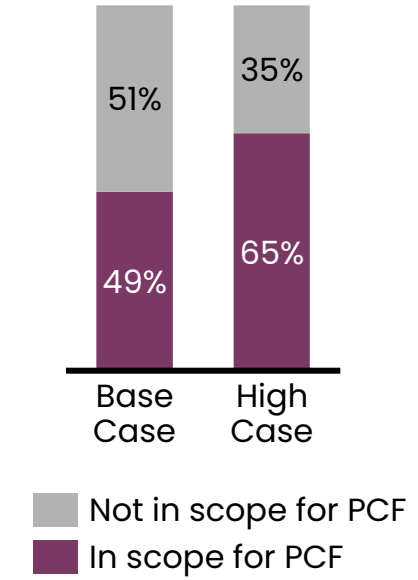
Modelling to estimate the formation of the Gate 2 queue and the potential portion in-scope for the PCF[1]

The composition of the Gate 2 queue is not yet known

Capacity in the Gate 2 queue will be allocated on a regional and technology-specific basis to meet the requirements set out in CP30, for required capacity up to 2035. This process is due to take place in the second half of 2025.

Estimated proportion of Gate 2 Queue in scope for the PCF

- We estimate that there will be approximately **175 GW** of incremental capacity in the Gate 2 queue with connection dates between 2026-2035[1,2]
- The total MW in the Gate 2 queue in scope for the PCF will be dependent upon these assumptions:
  - Proportion of projects in the existing queue that apply for a Gate 2 position
  - Proportion of projects granted capacity within the Gate 2 application window that have not yet submitted planning consents (met M1)
- **We estimate that over half of the Gate 2 queue[2] would be in scope for the PCF** i.e. they would not yet have met M1 when they enter the queue, for connection dates 2026-2035
  - **Base case assumptions[3]:** all projects currently in the queue apply for and receive capacity in the gate 2 queue, and projects that have already met Milestone 1 will be offered capacity ahead of those that haven't. **86.6 GW (49%)** in scope for PCF, of which **65.9 GW** has an M1 date before 2030
  - **High case assumptions[3]:** assuming a lower success rate of projects moving from current queue to Gate 2. In this example, half of those projects awaiting planning consent (~40GW) do not receive it and therefore do not apply for a Gate 2 position. **115.5GW (65%)** in scope for PCF, of which **92.6GW** has an M1 date before 2030



Notes:
1. Source: Impact Assessment Data (December 2024) and additional analysis.
2. Incremental capacity estimated by subtracting currently installed capacity and capacity with connection dates before 1 January 2026 from the 2035 Max Capacity scenario. Note this is a different estimate than what has been published by DESNZ, because the DESNZ value includes projects with 2025 connection dates (7.7 GW) and consumer-led flexibility (29 GW).
3. Base and High cases are estimated taking into account the available capacity for each technology type, and the proportion of the existing queue that has already met M1 for each technology type. It does not account for regional capacity limits.

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Note: New slide developed as per Workgroup request

Estimated base case M1 milestone profile for projects in scope of the PCF in the future Gate 2 queue

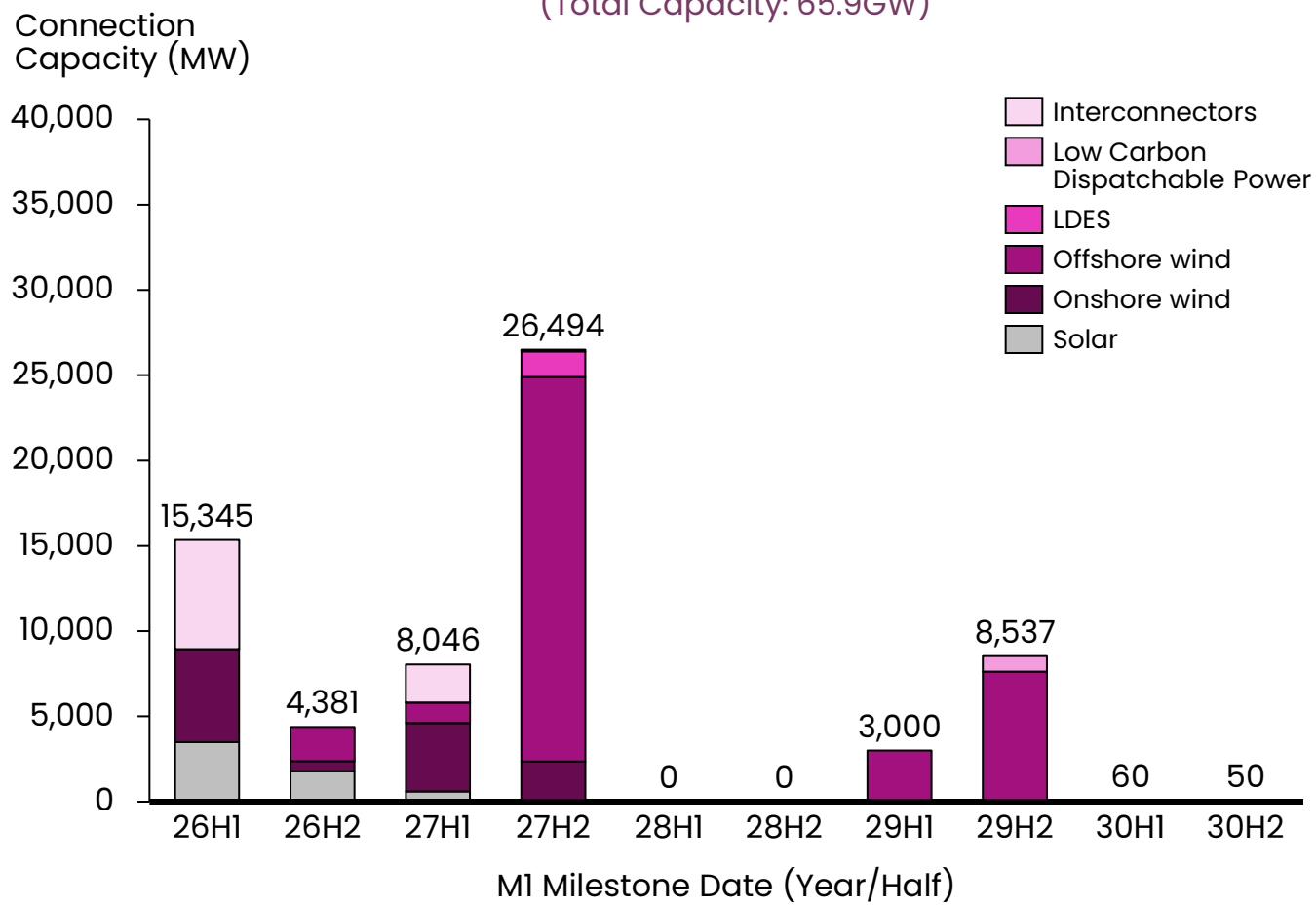
Methodology for M1 Profile

- The distribution of M1 milestone dates informs when the PCF threshold could conceivably be triggered
- We estimated M1 milestone dates for projects in scope of the PCF under the technology capacity limits of the base case analysis[1]
- The M1 date distribution has been estimated for the Gate 2 queue using backward calculated milestone dates only [2,3]
- Based on the 86.6GW Base Case, we excluded projects with connection dates beyond 2034, given their M1 date would come after 30H2. Total capacity on this basis is 65.9GW[4]
- Forward calculated milestones have not been considered due to limitations of planning type data available

M1 Distribution Comments

- With backward calculated M1 dates, projects connecting between 2029-2031 can only have M1 dates in 2027, based on an assumed contract start date of 1st January 2026
- Under the capacity limits applied, there are no projects in scope of the PCF (pre-M1) connecting in 2032, and hence no M1 dates in 2028
- In the base case, there is no "extra space" within capacity limits for 2035 for additional applications to enter the queue, other than via replacement[4]

Estimated M1 distribution using backward calculated milestones
(Total Capacity: 65.9GW)



Notes
1. This analysis does not account for regional capacity limits.
2. Backwards calculated milestones with an assumed contract start date of 1st January 2026.
3. M1 dates for projects with contracted completion dates 0-2 years in the future are bilaterally negotiated.; assume that these project M1 dates all occur in 1H26 to consider a worst-case scenario
4. Project capacity was allocated to technology capacity limits ordered by connection date. Therefore, exact technology limits have not been met

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Note: New slide developed as per Workgroup request

Estimated high case M1 milestone profile for projects in scope of the PCF in the future Gate 2 queue

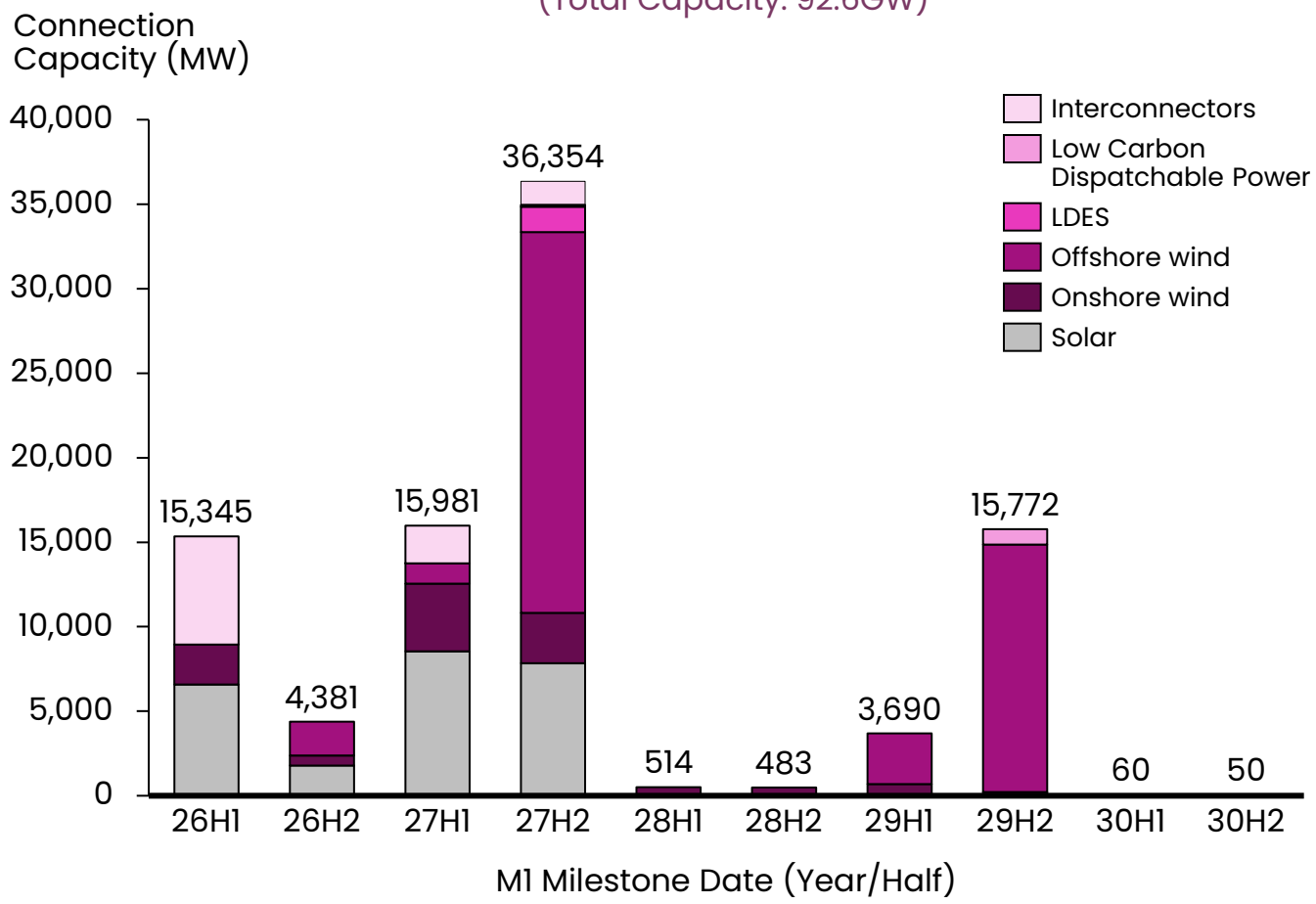
Methodology for M1 Profile

- The distribution of M1 milestone dates informs when the PCF threshold could conceivably be triggered
- We estimated M1 milestone dates for projects in scope of the PCF under the technology capacity limits of the high case analysis[1]
- The M1 date distribution has been estimated for the Gate 2 queue using backward calculated milestone dates only [2,3]
- Based on the 115.5GW High Case, we excluded projects with connection dates beyond 2034, given their M1 date would come after 30H2. Total capacity on this basis is 92.6GW[4]
- Forward calculated milestones have not been considered due to limitations of planning type data available

M1 Distribution Comments

- With backward calculated M1 dates, projects connecting between 2029-2031 can only have M1 dates in 2027, based on an assumed contract start date of 1st January 2026
- In the high case, there is only "extra space" for LDES within capacity limits for 2035 for additional applications to enter the queue, other than via replacement[4]

Estimated M1 distribution using backward calculated milestones
(Total Capacity: 92.6GW)



Notes
1. This analysis does not account for regional capacity limits.
2. Backwards calculated milestones with an assumed contract start date of 1st January 2026.
3. M1 dates for projects with contracted completion dates 0-2 years in the future are bilaterally negotiated.; assume that these project M1 dates all occur in 1H26 to consider a worst-case scenario
4. Project capacity was allocated to technology capacity limits ordered by connection date. Therefore, exact technology limits have not been met

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Selecting the trigger threshold

The "trigger threshold" will be set at a cumulative total of 6000MW for the initial metric period

The trigger should be sensitive enough to be triggered quickly if there is a problem with projects not progressing to M1 in the queue. Therefore, we want a threshold that:

- Will be met if there is a high prevalence of project non-progression
- Will not be met if this issue is not prevalent in the future Gate 2 queue

To estimate when the trigger threshold would be met, we have to make several assumptions:

1. Estimate the composition of the future Gate 2 queue by assuming that projects currently in the queue will apply for and be allocated capacity based on:
    - **Allowed capacity for each technology type in 2035 as set out in CP30:** MW above the allowed capacity will not be allocated a position in the Gate 2 queue
    - **Project maturity:** those projects that already have planning consents will receive capacity ahead of those that do not
    - **Connection date:** projects with earlier connection dates will receive capacity ahead of those with later dates. Projects with connection dates between 2026-2035 inclusive are included in the analysis.
2. Estimate the M1 dates of those projects that have not already submitted planning[1]
3. Simulate when the threshold would be met based on different attrition and replacement rates

Notes:
1. Milestone dates estimated using backward-calculated M1 dates as described in CMP376. Forward-calculated dates have not been used due to date limitations on planning type.

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Note: This slide has been updated since it was presented at WG3 to clarify the definitions of attrition and replacement, noting the analysis is illustrative

Illustrative Scenario: Healthy Queue Base Case

Illustrative Scenario Overview: Healthy Queue Base Case

- Description: Connection delays caused by project non-progression are minimal.
- Assumptions[1]:
  - **i.** **M1 distribution** is based on the base case for projects in scope of the PCF (49%)
  - **ii.** **Attrition** (Terminations from the Gate 2 connections queue for failing to meet Milestone 1, of those projects with M1 dates in that period): **5%**
  - **iii.** **Replacement** (Replacement of projects captured in attrition rate above, where identified within 6 months, with a connection date within 12 months of the connection date of the original project): **75%**

Illustrative Scenario: Healthy Queue Trigger Metric Analysis

Time Period	1H26	2H26	1H27	2H27	1H28	2H28	1H29	2H29	1H30	2H30
Estimated Trigger Metric Value (MW)[2]	0	252	324	456	892	892	892	941	1081	1082

Outcome: the PCF remains dormant until the end of 2030, when the threshold value resets.

Key Trigger threshold not met | Trigger threshold met

Notes:
1. Analysis is based on Impact Assessment Data (December 2024), filtered for allowed capacity for each technology type in 2035 as set out in CP30, project maturity and connection dates; please see selecting the trigger threshold page for full details
2. Estimated based on stated assumptions for attrition and replacement in scenario overview

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Note: This slide has been updated since it was presented at WG3 to clarify the definitions of attrition and replacement, noting the analysis is illustrative

Illustrative Scenario: Deteriorating Queue Health Base Case

Illustrative Scenario Overview: Deteriorating Queue Health Base Case

- Description: Over time, project non-progression and subsequent impacts to viable projects with later connection dates increases to a point where there is risk to CP30.
- Assumptions[1]:
  - i. **M1 distribution** is based on the base case for projects in scope of the PCF (49%)
  - ii. **Attrition** (Terminations from the Gate 2 connections queue for failing to meet Milestone 1, of those projects with M1 dates in that period): **15%**
  - iii. **Replacement** (Replacement of projects captured in attrition rate above, where identified within 6 months, with a connection date within 12 months of the connection date of the original project): **40%**

Illustrative Scenario: Deteriorating Queue Health Trigger Metric Analysis[2]

Time Period	1H26	2H26	1H27	2H27	1H28	2H28	1H29	2H29	1H30	2H30
Estimated Trigger Metric Value (MW)[3]	0	1,815	2,334	3,285	6,419	6,419	6,419	6,774	7,784	7791

Outcome: the PCF threshold will be met as queue health deteriorates.

Key Trigger threshold not met | Trigger threshold met

Notes:
1. Analysis is based on Impact Assessment Data (December 2024), filtered for allowed capacity for each technology type in 2035 as set out in CP30, project maturity and connection dates; please see selecting the trigger threshold page for full details
2. Note that the assumptions in this illustrative scenario are not alone sufficient to estimate the total value collected against the PCF.
3. Estimated based on stated assumptions for attrition and replacement in scenario overview

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Note: This slide has been updated since it was presented at WG3 to clarify the definitions of attrition and replacement, noting the analysis is illustrative

Illustrative Scenario: Unhealthy Queue Base Case

Illustrative Scenario Overview: Unhealthy Queue Base Case

- Description: Project non-progression resulting in connection delays to more viable projects with later connection dates remains a prevalent issue post-TMO4+.
- Assumptions[1]:
  - **i.** **M1 distribution** is based on the base case for projects in scope of the PCF (49%)
  - **ii.** **Attrition** (Terminations from the Gate 2 connections queue for failing to meet Milestone 1, of those projects with M1 dates in that period): **30%**
  - **iii.** **Replacement** (Replacement of projects captured in attrition rate above, where identified within 6 months, with a connection date within 12 months of the connection date of the original project): **5%**

Illustrative Scenario: Unhealthy Queue Trigger Metric Analysis[2]

Time Period	1H26	2H26	1H27	2H27	1H28	2H28	1H29	2H29	1H30	2H30
Estimated Trigger Metric Value (MW)[3]	0	5,748	7,390	10,404	20,328	20,328	20,328	21,452	24,650	24,673

Outcome: The PCF threshold will be met.

Key Trigger threshold not met | Trigger threshold met

Notes
1. Analysis is based on Impact Assessment Data (December 2024), filtered for allowed capacity for each technology type in 2035 as set out in CP30, project maturity and connection dates; please see selecting the trigger threshold page for full details.
2. Note that the assumptions in this illustrative scenario are not alone sufficient to estimate the total value collected against the PCF.
3. Estimated based on stated assumptions for attrition and replacement in scenario overview

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Note: New slide developed as per Workgroup request

Illustrative Scenarios: Base Case No Replacement

Illustrative Scenarios Overview: No Replacement Base Case

- Description: Illustrative scenarios following the same assumptions[1] as the base case scenarios, except that replacement is ignored in the analysis. Only project attrition is considered.

Illustrative Base Case Queue Health Scenarios Assuming No Queue Replacement

Time Period		1H26	2H26	1H27	2H27	1H28	2H28	1H29	2H29	1H30	2H30
Estimated Trigger Metric Value (MW)[2]	Healthy Attrition: 5%	1,008[3]	1,296	1,825	3,566	3,566	3,566	3,764	4,325	4,329	4,332
	Deteriorating Attrition: 15%	3,025[3]	3,889	5,476	10,699	10,699	10,699	11,291	12,974	12,986	12,995
	Unhealthy Attrition: 30%	6,051[3]	7,778	10,951	21,398	21,398	21,398	22,581	25,947	25,971	25,991

Outcome: The PCF threshold will be met earlier in deteriorating or unhealthy attrition scenarios without replacement.

Key Trigger threshold not met | Trigger threshold met

Notes:
1. Analysis is based on Impact Assessment Data (December 2024), filtered for allowed capacity for each technology type in 2035 as set out in CP30, project maturity and connection dates; please see selecting the trigger threshold page for full details
2. Estimated based on stated assumptions for attrition and replacement in scenario overview.
3. Given that replacement is ignored, the analysis assumes the trigger can be executed within the first time period, as no 6-month period is required to identify replacements

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Note: New slide developed as per Workgroup request

Illustrative Scenarios: High Case With Replacement

Illustrative Scenarios Overview: High Case With Replacement

- Description: Illustrative scenarios following the same assumptions[1] as the base case scenarios, except that the M1 distribution is based on the high case for projects in scope of the PCF (65%). Replacement considered.

Illustrative High Case Queue Health Scenarios with Replacement

Time Period		1H26	2H26	1H27	2H27	1H28	2H28	1H29	2H29	1H30	2H30
Estimated Trigger Metric Value (MW)[2]	Healthy Attrition: 5% RR[3]: 75%	0	239	307	556	1,123	1,131	1,138	1,196	1,442	1,442
	Deteriorating Attrition: 15% RR: 40%	0	1,721	2,213	4,006	8,084	8,142	8,196	8,610	10,379	10,386
	Unhealthy Attrition: 30% RR: 5%	0	5,451	7,008	12,685	25,599	25,781	25,953	27,264	32,866	32,888

Outcome: The PCF threshold is met in the same time periods as the Base Case.

Key Trigger threshold not met | Trigger threshold met

Notes:
1. Analysis is based on Impact Assessment Data (December 2024), filtered for allowed capacity for each technology type in 2035 as set out in CP30, project maturity and connection dates; please see selecting the trigger threshold page for full details
2. Estimated based on stated assumptions for attrition and replacement in scenario overview.
3. RR = Replacement Rate

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Note: New slide developed as per Workgroup request

Illustrative Scenarios: High Case No Replacement

Illustrative Scenarios Overview: High Case No Replacement

- Description: Illustrative scenarios following the same assumptions[1] as the base case scenarios, except that the M1 distribution is based on the high case for projects in scope of the PCF (65%), and replacement is ignored in the analysis.

Illustrative High Case Queue Health Scenarios Assuming No Queue Replacement

Time Period		1H26	2H26	1H27	2H27	1H28	2H28	1H29	2H29	1H30	2H30
Estimated Trigger Metric Value (MW)[2]	Healthy Attrition: 5%	956[3]	1,229	2,225	4,491	4,523	4,553	4,783	5,766	5,770	5,773
	Deteriorating Attrition: 15%	2,869[3]	3,688	6,676	13,473	13,569	13,659	14,349	17,298	17,309	17,319
	Unhealthy Attrition: 30%	5,738[3]	7,376	13,352	26,946	27,138	27,319	28,699	34,596	34,619	34,637

Outcome: The PCF threshold will be met earlier under deteriorating attrition relative to the Base Case.

Key Trigger threshold not met | Trigger threshold met

Notes:
1. Analysis is based on Impact Assessment Data (December 2024), filtered for allowed capacity for each technology type in 2035 as set out in CP30, project maturity and connection dates; please see selecting the trigger threshold page for full details
2. Estimated based on stated assumptions for attrition and replacement in scenario overview.
3. Given that replacement is ignored, the analysis assumes the trigger can be executed within the first time period, as no 6-month period is required to identify replacements

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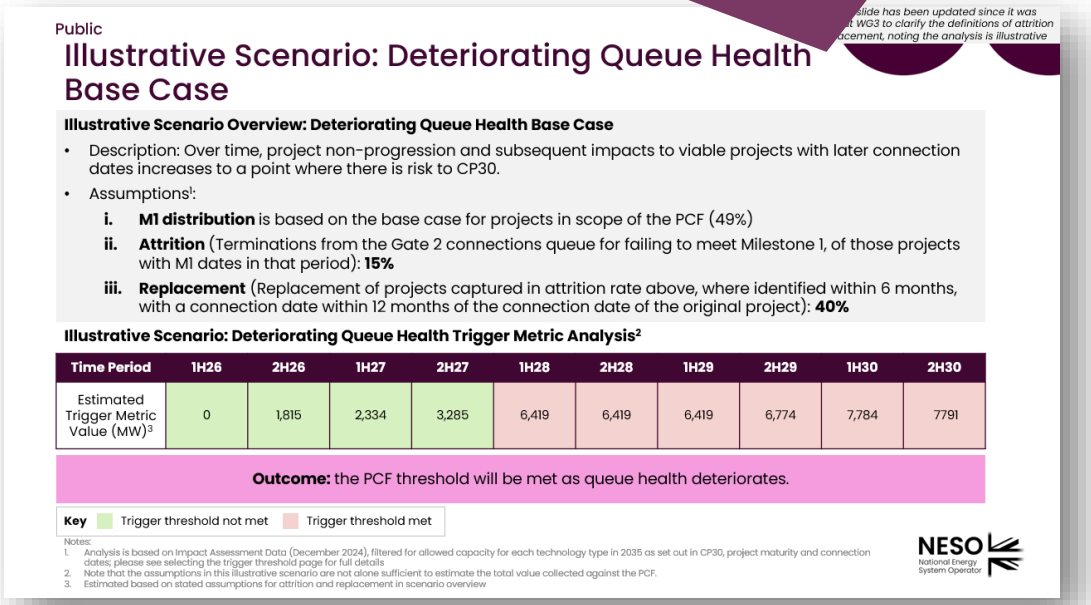
Note: New slide developed as per Workgroup request

Analysing the total value collected against the PCF

During WG3, a question was raised on using the trigger scenarios to estimate the total value collected against the PCF.



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Illustrative Scenario: Deteriorating Queue Health Base Case

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  - ii. **Attrition** (Terminations from the Gate 2 connections queue for failing to meet Milestone 1, of those projects with M1 dates in that period): **15%**
  - iii. **Replacement** (Replacement of projects captured in attrition rate above, where identified within 6 months, with a connection date within 12 months of the connection date of the original project): **40%**

Illustrative Scenario: Deteriorating Queue Health Trigger Metric Analysis[2]

Time Period	1H26	2H26	1H27	2H27	1H28	2H28	1H29	2H29	1H30	2H30
Estimated Trigger Metric Value (MW)[3]	0	1,815	2,334	3,285	6,419	6,419	6,419	6,774	7,784	7791

Outcome: the PCF threshold will be met as queue health deteriorates.

Key Trigger threshold not met | Trigger threshold met

Notes:
1. Analysis is based on Impact Assessment Data (December 2024), filtered for allowed capacity for each technology type in 2035 as set out in CP30, project maturity and connection dates; please see selecting the trigger threshold page for full details
2. Note that the assumptions in this illustrative scenario are not alone sufficient to estimate the total value collected against the PCF.
3. Estimated based on stated assumptions for attrition and replacement in scenario overview

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The total value collected against the PCF would vary widely between the PCF activation scenarios we presented, but also within them.

To estimate the total value collected (not the value secured) in any given scenario, we would need to assume:

1. The attrition rate between Gate 2 and M1 after the PCF has been activated (which may differ substantially from the attrition rate before the PCF is activated)
2. The amount of time projects remain in the queue before terminating (either at or before M1), which would determine the total liability per MW that any project pays (ranging from 2.5K – 10K/MW)

NESO does not consider that it can predict the likely values of either of those figures with a sufficient degree of accuracy. Therefore, NESO does not view that estimating the potential value collected against the PCF would be a meaningful exercise at this stage.

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