SP Electricity North West

Curtailment under Technical Limits

Minded-to consultation

29/09/2025

DSO

Index

1. Introduction

1.1. Purpose of this Document

SP ENW is seeking stakeholder feedback on our minded-to position regarding the curtailment methodology for Part 4 Distributed Energy Resources (DERs) connecting under Technical Limits (TLs) at Grid Supply Points (GSPs). This document outlines the background, context, and options considered, and presents our minded-to position based on stakeholder input.

1.2. Background

As part of the accelerated connections program, in collaboration with the National Energy System Operator (NESO), the industry is looking to identify and address the main challenges currently facing our connection customers and speed up connections. One of the main barriers to connections to the distribution network is the dependency on transmission system reinforcement. Conventionally, customers could not be connected until transmission network reinforcements had been completed.

DER customers wishing to connect to the distribution network at a Grid Supply Point (GSP) (i.e. the boundary between transmission and distribution networks) which cannot connect until transmission network works are completed, are currently categorised by the NESO as *"Part 4"* customers.

To address this, the industry has introduced the concept of **Technical Limits** at GSPs, enabling earlier, flexible connections.

1.3. What are Technical Limits?

From November 2023, NESO introduced Technical Limits (TL) at GSPs.

TLs are operational limits agreed between the Distribution Network Operator (DNO), Transmission Operator (TO) and NESO at each GSP. These limits allow the DNO to manage the power flows at the GSPs and connect qualifying Part 4 distribution customers at these GSPs ahead of transmission reinforcement works, on a flexible basis. That means that a Part 4 connection would be non-firm and uncompensated in case the DER is curtailed or disconnected during constraint events. It is noted that participation in this arrangement is voluntary for qualifying Part 4 customers and is not mandatory.

Expressed in Real Power (MW) value, Technical Limits represent the minimum and maximum acceptable power flow at each GSP beyond which wider Transmission system constraints could be active. TLs are calculated by the NESO, considering all existing App G Part 1 and Part 2 DER and deducting the GSP minimum demand to identify net power flows on the wider Transmission system. Those limits may vary depending on month/time of day, for example summer minimum and winter peak.

The NESO requires DNOs to manage DERs connected under TLs in such a way to prevent TLs breaches. If a TL breach occurs, the DNO must curtail or disconnect the relevant Part 4

DER. SP ENW will manage TL compliance using its Active Network Management (ANM) system, which will automatically curtail Part 4 DERs to prevent breaches.

2. Stakeholder consultation

In February 2025, SP ENW launched a consultation, which remained open for 5 weeks, closing on Friday 21st March 2025, inviting stakeholder feedback on three proposed curtailment methodologies for Part 4 Connections. The aim was to gather views from across the energy sector to inform the development of a fair and transparent approach to managing network constraints at GSPs.

On Monday 10th March 2025, SP ENW hosted a free online webinar to present three proposed curtailment methodologies for managing Part 4 DERs under TLs:

Below is a brief overview of each of the proposed options:

1. **Curtailment Index (CI).** Curtailment is shared equally and proportionately across all connected Part 4 DERs at a GSP over the course of a year, regardless of the connection application, connection offer or connection date.
2. **Last In First Out (LIFO).** Curtailment is applied in reverse order of connection offer acceptance date. DERs with later acceptance dates are curtailed first.
3. **Curtailment Index Batching (CIB).** Similar to CI, but with capped curtailment for the DERs first added to the GSP. New DERs form a separate batch with higher curtailment exposure.

More details and examples for each curtailment option are provided in the webinar slides and recording. During the webinar, SP ENW encouraged attendees to ask queries and share their thoughts on the proposed curtailment methodologies.

3. Consultation results

Following the publication of our consultation in February 2025, SP ENW received five responses from stakeholders across the energy sector. The consultation sought views on three proposed curtailment methodologies for Part 4 Connections:

- Curtailment Index (CI)
- Last In First Out (LIFO)
- Curtailment Index Batching (CIB)

These responses provided valuable insights into stakeholder preferences and the clarity of the consultation materials.

3.1. Summary of Responses:

Methodology Preference

- 60% (3 out of 5) of respondents expressed a clear preference for the LIFO approach.
- 20% (1 respondent) preferred the CI methodology.
- 20% (1 respondent) preferred the CIB methodology.

Note: None of the respondents provided specific reasoning or justification for their preferred methodology.

Consultation Document Feedback

- 80% of respondents agreed that the consultation document provided sufficient detail to enable stakeholders to understand the proposed curtailment methodologies.

3.2. Conclusion

The consultation highlighted a clear preference among stakeholders for the LIFO methodology. Feedback also confirmed that the majority of respondents found the consultation document to be sufficiently detailed and informative. These insights will be used to guide the next steps in refining and implementing curtailment methodologies for Part 4 Connections. It is noted that no respondents provided commentary explaining their preferences; this absence of qualitative feedback limits the ability to fully understand stakeholder rationale and will be considered in future engagement efforts.

4. How the LIFO curtailment methodology works

With the LIFO methodology, a Part 4 constraint at a GSP is resolved by curtailing Part 4 DERs in reverse order of their connection offer acceptance date.

Under LIFO, each DER is assigned a position within a curtailment stack based on when they accepted their connection offer. When a new DER accepts a connection offer for the same GSP, they are placed at the top of the curtailment queue - meaning they will be curtailed first during a constraint event, and existing DERs will move one position lower in the stack.

In the example scenario below:

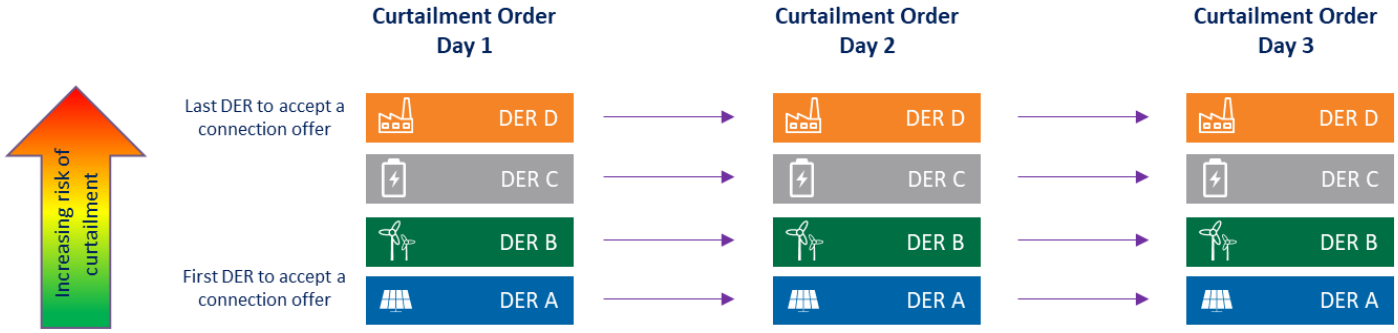
- DER A was the first to accept a connection offer and is placed at the bottom of the curtailment stack.
- DER D was the most recent to accept a connection offer and is placed at the top of the curtailment stack.

During a constraint event:

- DER D - being at the top of the curtailment stack - will be curtailed first.
- The curtailment process follows a strict order, meaning each DER is ***fully*** curtailed before the next lower-positioned DER in the stack is affected.

- DER A - being at the bottom of the curtailment stack - would ***always*** be the last one selected to be curtailed and would only be curtailed if the impact of fully curtailing all the DERs (DER D, DER C, DER B) further up on the curtailment stack did not resolve the Technical Limit breach.

The LIFO approach ensures that DERs already connected to a GSP are **not impacted** by the curtailment risk introduced by later applicants. It rewards early acceptance and provides greater certainty for operational and investment planning.



5. Minded-to Position

Having reviewed stakeholder feedback, SP ENW is minded to adopt the Last In First Out (LIFO) methodology for curtailing Part 4 DERs under Technical Limits. SP ENW's decision to adopt the LIFO methodology is underpinned by the following benefits:

- **Transparency:** Curtailment order is clearly based on the DER's connection offer acceptance date.
- **Rewards Early Acceptance:** This approach incentivises early commitment by ensuring that DERs who accept their connection offer sooner are rewarded with lower curtailment exposure. Their position in the queue is preserved and not impacted by subsequent applicants.
- **Static Curtailment Position:** A DER's position in the curtailment queue remains fixed once the connection offer is accepted; it only changes (improves) when new Part 4 connections are added. New DERs joining later do not increase the curtailment risk of existing DERs.
- **Predictability:** DERs can forecast curtailment risk more accurately, supporting operational and investment decisions.
- **Simplicity:** The methodology is straightforward to implement and understand.
- **Fairness:** Earlier DERs are protected from increased curtailment caused by later connections.
- **Stakeholder-aligned:** LIFO was the preferred option among respondents to the initial consultation.

6. Engage with Us

We are now launching this minded-to consultation to give stakeholders an opportunity to raise any objections or concerns regarding our proposed decision to adopt the LIFO methodology.

We welcome your feedback and encourage you to respond to this consultation by the 31st of October 2025 via email.

6.1. Next Steps

Following the close of the consultation on 31st of October, SP ENW will proceed with finalising the curtailment methodology, informed by stakeholder feedback and internal analysis. The following actions will be undertaken:

- **Publication of Final Decision**: The confirmed curtailment methodology will be published in November 2025.
- **System Integration**: The LIFO methodology will be implemented within SP ENW's Active Network Management (ANM) systems to manage Part 4 DERs under Technical Limits.
- **Stakeholder Communication**: All affected DER stakeholders will be notified and provided with guidance on how the new methodology will be applied.
- **Ongoing Monitoring and Review**: SP ENW will continuously monitor the impact of curtailment decisions and review the methodology to ensure it remains effective and equitable.

SP ENW remains committed to transparency and collaboration with stakeholders as we implement this approach. Further updates will be shared via our website and stakeholder mailing list.