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**Dear Matthew**

**Call for Evidence – Electricity System Operator’s (ESO) end of scheme performance 2021-2023**

We welcome the opportunity to provide evidence on the ESO’s performance during the 2021 to 2023 regulatory period. This letter is being submitted on behalf of SSE’s energy businesses. These comprise the generation assets developed, owned and operated by SSE Renewables and SSE Thermal; Business Energy (SSE’s non-domestic energy supply business) and the distributed energy solutions provided by SSE Enterprise. SSE is a participant in the wholesale energy markets through SSE Energy Supply Ltd which is a wholly owned subsidiary of SSE plc.

SSE has had significant interaction with National Grid Electricity System Operator (NGESO) on a broad range of topics and issues over this period and is well placed to provide fair and constructive feedback on each of its three roles.

As with other industry participants, NGESO faces significant challenges in successfully delivering on its objectives in a rapidly changing energy system. Against this backdrop, and given the complexity of the activities it performs, we consider NGESO broadly does a good job. Nevertheless, there are a number of areas where its performance needs to improve to deliver for stakeholders and consumers.

Specifically, we think improvements are needed in the following areas:

- **Transparency:** Meaningful transparency (including much greater sharing of data in an easily accessible manner) is critical to the smooth running of energy markets. Whilst we have seen a few areas of improvement (e.g. Operational Transparency Forum) these are the exception. There remains a material issue with NGESO failing to make sufficient progress in this area (e.g. Government/Ofgem Energy Data Taskforce).
- **Method of consultation and engagement:** NGESO could improve the way it consults with industry on its deliverables or changes to industry processes. The use of industry working groups is helpful, but they may not by themselves ensure changes are well-considered, particularly if materials are only available at short notice. We would encourage NGESO to consider where it can formalise its consultation processes, by setting out the different stages in advance, publishing written consultations where appropriate, and outlining the criteria it is basing decisions on.
- **Following standard processes:** NGESO has often taken a somewhat ad hoc approach to issues, rather than developing (or following existing) standard processes. This makes it harder for

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us to meaningfully engage. Things progress at different speeds (with no clear reason why) and in our view also risks unintended consequences. For example, the lack of standardisation in the approach to developing and applying new market products equally to all has meant some are very slow to come to market whilst others progress quickly only to be pulled at the last minute.

- **Need for joined up thinking:** Although we recognise the volume of work being undertaken by NGESO (and stakeholders) we have some concerns about some of that work being siloed (resulting in key people being unaware of planned changes). For example, account managers not being aware of the changes being made to the connections process until quite late in the day. It is important that NGESO recognises the potential interactions between workstreams.
- **Clarity over NGESO role:** There will be instances where NGESO can present a neutral expert view on issues, but there are other occasions where it may be appropriate that it looks out for its own interests. However, we are concerned that it is not always clear which of these 'hats' NGESO is wearing. In particular, the NGESO's strong support of locational marginal pricing appears to have been based solely on its own internal analysis and the purported benefits NGESO itself might be able to realise if it is introduced rather than any consideration of the total welfare impact of such a policy<sup>1</sup>.

Given the planned transition to the Independent System Operator and Planner (ISOP) and additional roles that the ISOP may take on (including those highlighted in Ofgem's consultation on local energy institutions), it is particularly important that there are sufficient resources within the ESO to deliver the core system roles. There also needs to be sufficient focus from Ofgem on monitoring performance in these areas. Any transition and new roles must not distract NGESO from its core roles.

We have provided detailed feedback on performance against each of the NGESO roles in the annex to this letter and would welcome the opportunity for a follow up discussion if you would find that helpful.

Yours sincerely,

**Sheona Mackenzie**  
Regulation Manager

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<sup>1</sup> It should be noted that modelled consumer benefits from LMP would be the result of a transfer between different parties rather than as an overall increase in value. Improvements in system benefits/ reductions in costs would in contrast increase overall value.

## **Annex 1: Further detailed views on ESO performance**

### **Activity 1a: System operation**

#### *Balancing efficiently*

There have been ongoing issues with system tagging used by NGENSO. This has sometimes meant that where there has been a requirement for wind curtailment behind one transmission boundary, system action is not reflected in the subsequent action to increase output from generation away from the constrained boundary. This is inefficient as it does not reflect the true implications of a constraint, the costs of which are ultimately borne by consumers. This inefficiency by NGENSO is potentially increasing costs for consumers despite more efficient alternatives being available and is masking the need for network infrastructure investment.

We have also been concerned by NGENSO's utilisation of assets contracted under the Winter Contingency Contracts. The way these were used<sup>2</sup> meant that GB consumers ended up footing the bill to provide security of supply to an interconnected country. Whilst we understand this was unlikely to be NGENSO's intent, it may suggest a lack of appropriate focus on managing costs to GB consumers.

There is a lack of detailed and transparent data on constraint costs<sup>3</sup> (both bids and offers) and on how constraint costs fit into the bigger picture (for example what proportion of total balancing costs are constraint costs, how these costs are split between those curtailed and those dispatched to meet demand and how cost is attributed to each of the significant constraint boundaries). This hampers industry assessment and discussion of the proposals being put forward in REMA.

The lack of effective and transparent disclosure of costs of constraint management also creates a risk of misinterpretation or misunderstanding. For example, NGENSO recently told the BEIS committee that constraint costs make up "the lion's share" of balancing costs. It is unclear how this will be interpreted/contextualised without better transparency of underlying data.

#### *Making trade-offs across time horizons*

We had some concerns last year that NGENSO wasn't dispatching Foyers to pump while there was an excess of wind in the north of Scotland. Following engagement, NGENSO changed its behaviour (leading to occasions where the storage capacity of the upper reservoir at Foyers is better utilised). Whilst it is disappointing that this issue arose, we are encouraged that NGENSO appears to have taken on board feedback and improved its processes for building its expertise on topics to maximise value for consumers.

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<sup>2</sup> On 25<sup>th</sup> January 2023 coal assets were warmed under the Winter Contingency Contracts however analysis indicates that this was to provide security to France as the assets were not required for GB system security.

<sup>3</sup> NGENSO only publishes constraint volumes and costs for 6 boundaries (SSE-SP, SCOTEX, SSHARN, SWALEC, STEX, SEIMP). However, we note that these don't map directly to the balancing market constraint boundaries, making it difficult to ensure consistency.

### *Maintaining security of supply*

Whilst NGESO has managed to maintain security of supply over a difficult winter period, we have ongoing concerns with use of the Winter Contingency Contracts. For example, there is a lack of transparency around procurement which we consider could be preventing a level playing field between parties.

The lack of visibility around the Demand Flexibility Service (DFS) performance outcomes makes it difficult for us to comment on its effectiveness. However, we did flag to NGESO, in advance of the Operational Transparency Forum (OTF) on 1 February<sup>4</sup>, detailed questions concerning DFS and how its effectiveness is being assessed. We still await an answer to the questions we posed to NGESO on this matter. We would encourage NGESO to gather evidence and consider the efficacy of DFS compared to generator response to ensure it is taking the most efficient actions.

### *Balancing market review*

Following a significant increase in balancing costs during September to December 2021, NGESO instituted a review of the balancing market. This review identified 3 short-term options for reform which could result in reduced balancing costs: (i) Forecasting improvement, (ii) Amendments to STOR and (iii) further clarification of the principles of NGESO's decision making.

In our view NGESO has been disappointingly slow to take actions off the back of its own findings. The lack of action means that NGESO is underperforming against its objectives around using and exchanging data. It is important NGESO is held to account in this area.

### **Activity 1b: System restoration**

In April 2021, the Department of Business, Energy and Industrial Strategy (BEIS), now known as the Department for Energy Security and Net Zero (DESNZ), released a Policy Statement setting out the need to strengthen the current regulatory framework by introducing a legally binding target for the restoration of electricity supplies in the event of a nationwide or partial power outage on the national electricity system – a new Electricity System Restoration Standard (ESRS). Although NGESO has made some progress in this area it has opposed the principle of cost recovery for certain parties involved, indicating that other industry parties must bring forward appropriate code modifications if we wish to progress this (which we, as SSE, have done<sup>5</sup>). We are concerned that this frustrates the policy intent, makes implementation more time consuming and could in time undermine the effectiveness and efficiency of the tools used.

Transparency issues are also evident here. At a recent modification workgroup related to restoration (GC156) NGESO presented slides on the issue of costs parties would expect to incur meeting the ESRS needs. These were anonymised to allow NGESO to share them with the group. However, NGESO has refused to publish the slides or share them with members not at the meeting, citing confidentiality

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<sup>4</sup> Slide 40 of [PowerPoint Presentation \(nationalgrideso.com\)](https://www.nationalgrideso.com)

<sup>5</sup> CMP398 and CMP412.

concerns. However, this argument doesn't hold – if they can be shared with some industry parties, they should be shared with all. We can see no justification for NGENSO's lack of transparency.

### **Activity 1c: Transparency, data and forecasting**

#### *Publication of data*

Although NGENSO publishes a range of information and data on system operation this can be somewhat opaque with information being spread across a range of platforms making it harder for industry participants to meaningfully engage. It can be challenging for even well-informed parties to find the information they are looking for on NGENSO's website – with broken links and inconsistent placement of data being fairly commonplace. Updates to the website or structure of datasets can also cause issues, for example even a fairly small change can prevent existing data scraping tools from working properly. NGENSO should consider the potential impact on other parties before making any changes to the format of published data and changes should be clearly communicated in advance.

Communications about website publications can also be less visible than they should be, with important announcements 'buried' in more general update emails. We have urged NGENSO (for a number of years) to follow the Ofgem example and issue a daily email listing all documents published by NGENSO that day. However, to date this has not been actioned. We note that suppliers are held to standards<sup>6</sup> with regards to the availability of information to consumers and would suggest the same principles should be replicated and applied to NGENSO.

At times NGENSO is reluctant to publish data or models, questioning why industry should have access to them. This is at odds with the recommendation of the joint BEIS-Ofgem Energy Data Taskforce<sup>7</sup> that open data should be the default. As the Taskforce identified some four years ago, this outdated way of thinking by NGENSO (and others) is detrimental to the interests of stakeholders and consumers.

Some specific examples of where there is a lack of transparency from NGENSO include:

- the methodology behind, modelling of and calculation of the Security Factor model;
- compliance with the 0 to 2.50 Euro per MWh range for transmission charging; and
- the locational cost and causes of network congestion.

A recent control room visit highlighted that NGENSO may be using different data sources than those it publishes. We are unclear whether this is a case of different source data being used or simply data being presented in different ways (for example, a database that pulls information together in more user-friendly way). However, any differences in the data being used could mean that instead of a level playing field with all parties having access to appropriate data and forecasts, NGENSO may be making decisions based on data and insight not available to other parties. This could lead to perverse incentives and inefficient decisions. Therefore, it is important that parties can recognise the data being used by others and data being used by NGENSO to inform the market is transparent. Whilst we understand NGENSO will from time to time develop new models which it may not feel it can share immediately (as they are still in development), we would expect these to be published in timely manner as a matter of course.

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<sup>6</sup> Supply Licence - Section 31

<sup>7</sup> [Energy Data Taskforce | A Modern Digitalised Energy System \(catapult.org.uk\)](https://www.catapult.org.uk/reports/energy-data-taskforce)

There remains a lack of transparency in the Holistic Network Design (HND) and HND Follow-up Exercise (HND FUE) process. For example, the power flow modelling to support the designs has not been shared with the industry, and it is not always clear which principles NGESO is considering as part of its decision-making or what data other parties are using. This affects other decision-making processes such as the asset classification from Ofgem. This lack of transparency leaves developers with uncertainty about the fairness of the process behind each decision.

#### *The Operational Transparency Forum (OTF) and other engagement*

In 2020 NGESO established the Operational Transparency Forum (OTF) which meets weekly to discuss recent operational actions. This is a helpful step forward in establishing an open dialogue and gives parties an opportunity to put questions directly to NGESO which offers better insight than there has been previously to its decision making and activity. We welcome the publication of the questions posed, and answers given, at this forum.

However, a significant volume of questions raised in the OTF remain unanswered. Further, NGESO at times overlooks the premise of a question. When a query is raised in general terms, NGESO tends to advise that it would need specific detail to provide a response. However, where an illustrative example is provided NGESO has tended to reply that it does not respond to questions about individual units or actions. Whilst we appreciate that NGESO does not comment in detail on individual units, we do not agree that it can't give any meaningful explanation for its actions. It could quite easily provide some detail of why, for example, cheaper units might not be taken by describing the relevant principles without being too specific. This would help parties understand NGESO's thinking better without giving rise to any confidentiality concerns.

Ahead of the OTF on 11 January 2023, we submitted an advance question concerning greater transparency around emergency situations following comments by the ESO at previous OTF webinars regarding various actions it had taken in emergency situations<sup>8</sup>. The importance of this timely communication, by the ESO, to wider industry stakeholders during an emergency situation has of course been highlighted by previous situations, such as the 9 August 2019 demand disconnection event. Communicating to the industry two days after an event is not, in our view, conducive to (i) meeting the wider industry need to respond in such an emergency as highlighted in Ofgem's investigation in 2019 and (ii) meeting the ERNC obligations. It is therefore disappointing, in terms of transparency, that as we approach the fourth anniversary of the August 2019 event, the ESO still exhibits a reluctance to provide timely information to the wider industry stakeholders in the event of emergencies.

We are not unsympathetic to the efforts NGESO has made to increase its transparency, especially over recent months for example by using Twitter to provide further detail when Capacity Market Notices (CMNs) have been issued. However, we are concerned that NGESO is not taking onboard industry feedback (via the OTF) that Twitter is not a suitable tool for communicating industry information. The nature of the circumstances which would result in a CMN being issued will likely mean operational staff are reliant on official publications being issued directly to them by NGESO and would not have time to

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<sup>8</sup> Slide 24 of [PowerPoint Presentation \(nationalgrideso.com\)](https://www.nationalgrideso.com)

review social media for further details. A single easily accessible interface that parties can use to access data should be agreed.

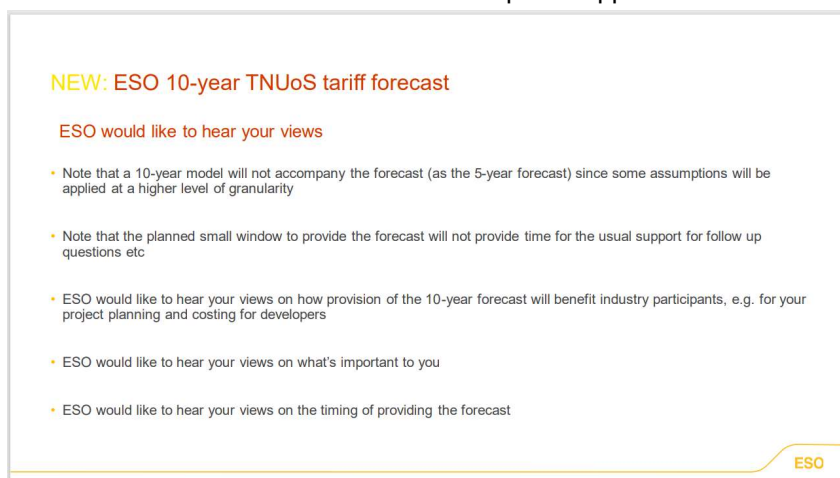
NGESO makes extensive use of working groups when developing policy positions or solutions to problems. Whilst there is a lot of merit in this approach, the method of informing or inviting market participants could be more structured. It is not always possible to easily identify what working groups are happening from NGESO's website. This means that if an organisation or individual has not been included in the ESO's invite they cannot easily engage.

### *Transmission charging transparency*

We normally receive an email notification when NGESO publishes TNUoS tariffs. However, there have been a number of occasions where it republishes tariffs without any communication to industry that an update has been made. Instead, it seems to rely on industry participants regularly checking the website for updates. Similarly, there have been occasions when documents are republished (with the original document being removed) without the date of publication being updated (i.e. date remains the same as the original document, rather than the date corresponding to when the change was made), although the filename of the document does change. This makes it hard for industry participants to keep track of changes. NGESO should be more transparent about changes that take place, explaining what has changed and why.

There was a significant change in TNUoS tariffs between draft and final TNUoS forecasts for 2023/24. We have yet to receive a reply to our request for clarity from NGESO in early March<sup>9</sup>.

NGESO presented at the Transmission Charging Methodologies Forum (TCMF) on 6 April 2023 about the possibility of providing a 10-year TNUoS forecast. While we agree this would be beneficial to industry, we are concerned that there won't be any meaningful transparency. Below is a screenshot from the slides presented by NGESO which indicates that NGESO won't provide an accompanying model for the forecast (this is usually provided alongside forecasts) or answer questions about the forecast. This means industry would not be able to understand the assumptions applied or be able to test their own scenarios.



<sup>9</sup> We originally emailed NGESO to clarify the drivers of change on 2 March. It replied on 6 March with brief reasons. We followed this up with more detailed questions on 10 March, but we have yet to receive a reply (despite following up on 22 March and 2 April).

## **Activity 2a: Market design**

### *Approach to market design*

NGESO has adopted a 'learning by doing' approach to market design which is not always appropriate. Whilst we welcome the desire to allow the market to adapt and evolve, the approach taken can result in a lack of clear leadership and lack of drive to find timely and efficient solutions. Product development tends to be either very slow (for example, Quick Reserve and Slow Reserve have been in the design phase for around two years but won't now launch till late 2023) or so fast that the process does not fully consider or identify the consequences (for example, Balancing Reserve which Ofgem rejected due to concerns about barriers to entry not being fully considered by NGESO).

The approach taken by NGESO can result in a lot of wasted time and effort from market participants. The effect of the existence of OFTOs on the ability of offshore wind assets to participate in some new markets also appears not to have been considered in market design. As an example, in Summer 2022 there were two open tenders which were looking to attract participation from offshore wind farms (Restoration Wind and Constraint Management Pathfinder (referred to as Intertrip)). In both examples little thought had been given to how the OFTOs would be factored into the service implementation. Offshore windfarms are an integral part of the UK Government's drive to net-zero<sup>10</sup>. OFTOs are an integral part of offshore wind farm operations. OFTOs' role being overlooked by NGESO is concerning.

We are also concerned about the continued lack of a level playing field for market participants, with different parties being given materially different contract terms by NGESO for providing the same services. Applying different rules and obligations to different parties in a competitive market could create a perverse incentive for NGESO to rely on services that lower certain costs (ie those covered in its incentive regime) even if it results in higher costs elsewhere (in areas not covered by the incentive regime).. Furthermore, this lack of transparency on what standard terms should be creates an artificial market. A more consistent, harmonised, approach is likely to realise benefits to end consumers.

As noted earlier in our response there is a lack of transparency over constraints.

### *Industry engagement*

Setting out clear and realistic timelines at the start of the engagement process would be more likely to optimise input from industry participants. NGESO does not have a good track record of meeting its own timetables. This is frustrating and makes planning workload and optimising asset participation difficult as there is a high likelihood that the service of tender will not take place as planned. Generators and suppliers are held accountable for deadlines applicable to them, however NGESO is not held accountable for missing deadlines.

Whilst working groups and webinars make it easy for NGESO to reach a cross section of industry (and for the most appropriate people to participate), they do not always give parties a meaningful opportunity to express views or raise concerns. This is particularly true when relevant material is only shared a few hours

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<sup>10</sup> As highlighted within the Government's [Powering Up Britain document](#), the goal is to develop up to 50GW of offshore wind by 2030.



before meetings or, even more regrettably, not shared ahead of the meeting (late circulation of material was also frequently the case for NGESO's recent connection reform design sprints which is relevant for activities 2c and 3a) and there is insufficient time between meetings for individuals to gather views across their organisations. Industry representatives can add a lot of value and insight to these processes, often identifying issues that might not be obvious to NGESO. However, we can only do so if given enough information and time to prepare in order to meaningfully participate. Otherwise, these sessions risk being '*engagement*' in name only. This is a particular issue for larger market participants where individuals attending these sessions are likely to need time to seek views across their organisation before committing to a view. As well as potentially missing out on valuable input, this current approach by NGESO makes it more difficult for the ESO to really understand whether there is an industry consensus.

We appreciate the role that NGESO has taken in developing the HND and HNDFUE. Network design is difficult and the deadline for the 2030 targets has placed significant pressure on NGESO. During the development of the HND 1, there was recognition that stakeholder engagement was limited, and a new approach was taken for the HNDFUE, where different workshops and engagement opportunities with the industry were arranged. The stakeholder engagement developed during the HNDFUE is very welcome, but this process still needs to improve. We noted that, on some occasions, the extent to which the contribution and feedback provided by developers has been taken into account has been limited.

In addition, there has been a noticeable lack of appropriate formal consultation from NGESO on net zero market design. This has led to views expressed by parties not being fully understood or listened to by NGESO. For example, the way in which it explained industry views on phase 3 is somewhat misleading.

### ***NGESO role***

We are mindful that NGESO strongly favours locational marginal pricing and has lobbied on this basis. Its position on the issue appears to have been based solely on its own internal analysis and the purported benefits NGESO itself might be able to realise if it is introduced. Had NGESO sought views from across industry it would have a better understanding of the potential significant implications and impacts from such a radical approach and may well have reached a different conclusion. This is particularly concerning given that NGESO is often seen by policy makers (such as Ofgem and DESNZ) as a relatively neutral expert body. It is important that NGESO makes clear when publicising its position on such issues whether this is the position of a private company or as a trusted independent body. In our view it is inappropriate for NGESO to take a strong stance on this issue given its wider market role. How this type of issue is handled during any transition to the new ISOP model will be particularly important.

### **Activity 2b: EMR**

In general, we consider that NGESO has a positive impact on EMR and the capacity market process. Whilst there is some ambiguity around the rules and processes, this stems from the wider policy rather than the NGESO who we think does a good job in trying to provide as much clarity and insight as it can.

NGESO is proactive with engagement on issues around compliance, for example reminding parties of additional documentation needed (more so than its counterpart in Ireland). We have established good working relationships with colleagues at NGESO which has resulted in helpful opportunities for informal engagement. Often a short call between parties can resolve issues in a timelier way than more formal

communications and we welcome NGENSO's willingness to do this. We have noted an improvement in the handling of calls and email queries, with greater understanding from colleagues at NGENSO on issues. We welcome this. However, we note that in recent months account managers have been less visible meaning we don't have the same benefits of a single point of contact.

We have experienced some issues with pre-qualifications over the last two years with a number of units being rejected only to then be accepted on appeal. On occasion:

- renewables units which are being treated as two units in the capacity market have had one unit be accepted for pre-qualification whilst an identical application for the other unit has been rejected (and then accepted on appeal); whilst
- units which have been through the appeals process in a previous year have then been rejected or adjusted on the same grounds the following year, only to have the appeal upheld (again).

We would expect NGENSO to improve the accuracy of the pre-qualification process by building in lessons learned from previous processes and appeals to ensure consistent decision making and avoid unnecessary work for all parties whilst ensuring maximum value for consumers.

We are disappointed with the lack of progress on the new EMR portal. There are a number of issues with the existing portal which sometimes require workarounds for simple tasks, such as uploading documents. NGENSO has not progressed permanent fixes as it sees the new portal as the answer to these issues. However, repeated delays in its delivery (including the most recent announcement earlier this year that the new portal will not be available for this summer) means we are stuck with an inadequate system.

We have had issues accessing the new portal as part of the testing group. We are also concerned that NGENSO is focusing on making the portal work for parties with single units, whilst not fully considering the impact on those organisations with many units. For example, NGENSO's proposed solution to the issue of having to separately upload company and unit documents would have entailed all company documents to be updated separately for each unit. This would be incredibly cumbersome for those organisations with larger portfolios. It is important NGENSO consider the needs of all market participants in designing the new portal.

### **Activity 2c: Industry codes and charging**

The governance process for the industry codes and charging are long established and generally function reasonably well. However, we have noted on occasion NGENSO has attempted to bypass these processes (for example, by not seeking a derogation to the connections process set out in the licence and CUSC, or looking to change the CUSC before recently implementing the 2 step connections process in England & Wales). This sets a worrying precedent and potentially adds unnecessary risks to the process. We understand that the governance processes can feel cumbersome at times; however, these are the necessary 'check and balances' that these multilateral contracts require. We are also mindful that there are already arrangements in place to deal with urgent modifications.

We are also aware that staff turnover within the NGENSO (including internal moves) has had an impact on the effectiveness of the codes process. There is significant knowledge lost when changes are made to the codes team which has knock on implications for the timely delivery of modifications.

There has been a lack of progress in a number of cases in terms of improving GB rules and standards, including, for example, our proposed Grid Code change GC117 (which would create GB wide standards for network connection) which has been in process since June 2018. In our view this lack of progress is partly due to NGENSO choosing not to prioritise the work and creating barriers to its completion.

NGESO generally has two roles to play in the industry codes and charging processes: code administrator and party to the code. However, at times it can appear that NGENSO puts too much emphasis on the impact on itself rather than the benefit that could be realised for consumers through reduced costs to generators, or the energy system (for example, fixed price BSUoS). In our view, NGENSO needs to take a step back and consider the interests of the energy system first.

As noted earlier in our response, we are concerned about the lack of an appropriate explanation being forthcoming from NGENSO around the significant changes between its draft and final TNUoS charge forecasts for 2023/24 (despite the fact that, as at the time of writing in April 2023, the associated tariffs are now being charged by NGENSO to users). The modelling of TNUoS is complex and changes can happen between draft and forecast figures. However, there seems to be a lack of any intellectual curiosity on the part of NGENSO regarding why its own forecast may have been so materially inaccurate and how it could improve the process in the future, along with an unwillingness, on the part of NGENSO, to help market participants better understand the changes.

### **Activity 3a: Connections and network access**

Earlier this year we wrote to Ofgem setting out our concerns around the changes to the connections process. As set out above (Activity 2c) we have also had concerns that the processes put in place (in the licence and CUSC) to manage changes to the connections processes are not being followed and have raised this in meetings with Ofgem.

As noted earlier in our submission, we also have some concerns about NGENSO's reliance on working groups as the main way of engaging with industry participants. Industry representatives can add a lot of value and insight to these processes, often identifying issues that might not be obvious to NGENSO. However, we can only do so if given enough information ahead of the meeting(s) and time to prepare in order to meaningfully participate. Furthermore, engagement of this type should not replace more formal consultations which give all parties equal opportunity to express their detailed views to NGENSO (and the wider stakeholder community).

The introduction by NGENSO of the new connections portal has not been particularly well managed. There has been little attempt to allow parties to become familiar with the tool before it went live despite it being made compulsory (by NGENSO) for new connection applications to use the portal. We are still unsure whether some of the standard templates we typically use in applications will work with the portal.

### **Activity 3b: Operational strategy and insights**

We are concerned that there is not sufficient clarity from NGENSO on the process being applied for developing the Future Energy Scenarios (FES) and their subsequent use.

- It should be acknowledged that the FES are not put through a market model to test by NGESO as to whether they are internally consistent, or economically efficient.
- It is important that NGESO is clear that FES is a scenario tool for the purpose of informing network investment scenarios and therefore it may be inappropriate to rely on it for other uses.

In addition, we are concerned that NGESO may fail to recognise the opportunities of long duration pumped hydro, or electrolyzers in areas with surplus renewables (i.e. in Scotland in the Consumer Transformation scenario). Any failure to recognise, in the FES scenarios, unsustainable trends such as growth of some technologies due to regulatory arbitrage could have a significant impact on the market.

### **Activity 3c: Optimal network investment**

NGESO does not publish any ex-post evaluation of transmission network investment recommendations. The best way of improving the accuracy and effectiveness is to track and assess the appropriateness of previous recommendations, so that lessons of previous successes and failures can inform continuous improvement. Optimal network investment and how this trades-off against network congestion is a high-profile issue critical for GB, and it is essential that this should be carried out as an annual transparent process.

There has recently been some improvement in the way NGESO colleagues working on FES and NOA have been engaging. They have been open to much better and wider industry consultation in terms of what project pipelines actually look like; in the past they were very focused on their model and the assumptions that are inherent within it, so that is a step in the right direction.

As noted earlier in our response there is a lack of transparency over constraint costs.

We are mindful that NGESO's current support for locational marginal pricing (LMP) has potentially significant implications for the investment landscape – both generation and network investment. We are concerned that the ESO current position is counter to the signals it has been giving in recent years (through the FES and NOA). It is unclear if this 'pivot' in position has been driven by its analysis of constraint costs (which it has had a role in monitoring since connect and manage was put in place around fifteen years ago) or by other factors. If its analysis of constraints costs is the driver, then we would have expected to see this explained through its annual analysis (in either the NOA or ETYS). We are concerned that, without this analytical base for its position, NGESO is given mixed signals to parties looking to invest in the electricity sector.