

SO Incentives Team (Draft Forward Work Plan)
National Grid
National Grid House
Warwick Technology Park
Gallows Hill
Warwick
CV34 6DA

14 February 2019

Dear Team,

DRAFT FORWARD WORK PLAN (FWP) 2019-21

Thank you for the opportunity to comment on the Electricity System Operator's (ESO) proposed activities over the next two years. This response is submitted on behalf of ScottishPower. Our networks business, SP Energy Networks is responding separately from its perspective as a transmission and distribution network licensee.

In general, we think the ESO has performed its core roles reasonably well, engaged effectively with stakeholders and provided useful information and operational feedback. On the whole, we are supportive of the direction and activities the ESO has proposed in this FWP.

However, we feel the ESO needs to act with more urgency and ambition in relation to the procurement of balancing services from Distributed Energy Resources (DER). We elaborate on this our answers to the consultation questions (in Annex 1 attached).

Please do not hesitate to contact me or James Soundraraju (tel: 0141 614 2421, jsoundraraju@scottishpower.com) if you have any questions arising from our response.

Yours sincerely,



Richard Sweet
Head of Regulatory Policy


NATIONAL GRID ESO DRAFT FORWARD WORK PLAN (FWP) 2019-21 – SCOTTISHPOWER RESPONSE

1. Do you have any comments on whether our plans are heading in the right direction to meet current and future market needs?

Overall, we believe the ESO’s plans are heading in the right direction. We welcome the inclusion of system decarbonisation as a theme within the plan and the overarching aim of reducing environmental damage by facilitating the participation of clean energy sources in existing and future markets.

However, we would like to see more ambition and pace in the ESO’s plans for enhanced systems to facilitate procurement of balancing services from Distributed Energy Resources (DER).¹ The delivery of such systems is still regarded by the ESO to be exceeding baseline outputs² and is not scheduled for delivery until Q2 2020-21 (as shown in the FWP excerpts below). We think systems to facilitate procurement of balancing services from DER should be regarded as *meeting* ESO baseline expectations and that participation should come sooner than Q2 2020-21. Customers who invest in DER technology will not maintain an interest or trust in potential revenue streams from balancing services if there are long delays in the ESO’s plans (as has been the case with Frequency Response).

Excerpt 1 – Executive Summary (pg 8)

We are going to deliver these exceeding outputs in 2019-21:	Benefiting energy consumers in 2019-2021 through:	Benefiting energy consumers in the future through:	
Commercial contracts for balancing services from DER	Developing a better understanding of the capabilities of the whole system allowing us to operate and plan the system more economically. Developing new commercial contracts and control systems for DER to provide services to meet transmission needs will increase visibility and controllability of renewables and DER. Initial benefits should be realized through the increased market participation that results from facilitating DER connections, and enhanced visibility and controllability which will allow it to participate in markets for energy and network services. This will increase liquidity and lead to lower prices for energy and services than would otherwise have been possible.	Enabling more DER connections. As more DER connections and market participation are facilitated greater price benefits should be seen in energy and services markets and the costs of operating the system should also be positively impacted. Developing a better understanding of the capabilities of the whole system should facilitate getting the most out of existing infrastructure	
Enhanced systems to facilitate balancing services from DER			
Whole system data exchange			
Whole electricity system thought leadership			
Whole system operability			

Excerpt 2 – Full Deliverables List (pg 83)

Deliverable	Delivery Date	P1	P2	P3	P4	P5	P6	P7
Commercial contracts for balancing services from DER	Q4 2019-20		✓	✓		☑	✓	✓
Enhanced systems to facilitate balancing services from DER	Q2 2020-21		✓	✓		☑	✓	✓

¹ We consider DER to include electricity-producing resources such as generating stations and controllable loads (Demand Side Response) regardless of where they are connected (T or D).

² Ofgem’s ESO Reporting and Incentives Arrangements document defines exceeding as ‘clear and tangible evidence of the ESO taking new steps within that year to deliver better practices, business models and technologies that would not normally be expected by an efficient and competent system operator. These steps should lead to material improvements in the ESO’s performance and unlock additional consumer benefits.’

We believe the ESO's approach to managing system imbalance and operability may be limiting the ambition and pace of DER participation we are calling for. For example, the Operability Strategy Report (excerpt below, emphasis added), unhelpfully generalises renewable energy sources as inflexible.

“Demand reduction, particularly at minimum demand times, where the proportion of price inelastic supply, such as renewables and nuclear generation, is increasing, means there is little flexibility in output from the market position and we are now required to take significant volumes of actions to meet our frequency control requirement” and “Decarbonisation has produced high levels of renewable generation ... This has increased reserve and response requirements and the nature of intermittent renewable generation means that the requirements are more volatile and less predictable”

Most BMU windfarms already possess frequency response capabilities that are able to meet dynamic, second by second requirements. We think it is important that the ESO matches its drive for system decarbonisation (and DER participation) with tangible changes in operating procedures and forward plans.

The ESO's initiative around opening a real-time trading desk for DSR is a positive development and we call for similarly innovative approaches to optimise the capacity readily available in the system from wind power.

We are pleased to see Network Innovation Competition (NIC) and Network Innovation Allowance (NIA) Black Start projects being included in the plan and we would encourage efforts to fast-track them. We are fully supportive of developing new approaches to Black Start, particularly if there is a level-playing field for service provision from conventional generation and DER.

On a practical note, we would welcome the creation of an index that compiles all relevant documentation (reports, roadmaps, plans) that the ESO has recently published and/or is planning to publish. A useful starting point could be the publication of the ‘*Change Landscape*’ map of events and opportunities, along with the ‘*Trends and Initiatives*’ map.

2. Please give us your view on whether we are targeting the right activities, for example those that will deliver most benefit for consumers?

We consider the seven guiding principles (below) underpinning the ESO's FWP to be aligned with its four roles of managing system balancing and operability, facilitating competitive markets, facilitating whole system outcomes and supporting competition in networks. However, we believe the FWP does not go far enough under Principle 3 and needs to consider practicalities under Principle 5 in order to exploit the full range of consumer benefits.

Principle 1: Support market participants to make informed decisions by providing user friendly, comprehensive and accurate information

Principle 2: Drive overall efficiency and transparency in balancing service, taking into account impacts of ESO actions across time horizons

Principle 3: Ensure the rules and processes for procuring balancing services, maximise competition where possible and are simple fair and transparent

Principle 4: Promote competition in the wholesale and capacity markets

Principle 5: Coordinate across system boundaries to deliver efficient network planning and development

Principle 6: Coordinate effectively to ensure efficient whole system operation and optimal use of resources

Principle 7: Facilitate timely, efficient and competitive network investments.

Actions under Principle 3 should be delivering tangible benefits for consumers and the system while promoting the transition to a low carbon future. We believe the timelines that have been targeted for greater participation by DER are conservative. This is evident in the lack of participation of wind in balancing services markets, in particular the provision of frequency response. We have reviewed past actions taken by the ESO in the balancing mechanism (BM) and identified scenarios where the ESO has selected the more expensive option of using CCGTs rather than wind farms to manage system requirements.

Frequency response capabilities have been mandatory for wind farms since 2012. Wind farms are therefore as capable as CCGTs in meeting response requirements. In scenarios where the ESO has chosen CCGTs over wind farms for response, we estimate the additional cost to consumers to be in the order of millions of pounds per day.

ScottishPower welcomes and actively supports the work being done by the Wind Advisory Group (WAG) and calls on the ESO to prioritise and fast-track the findings of the group in the FWP. The ESO may need to revisit policies in light of findings from the WAG and we encourage the ESO to do so promptly. For example, the ESO may have to revisit its policy of limiting new Mandatory Services Agreements with embedded windfarms across Scotland for the provision of reactive power capabilities.

With regards to Principle 5, the ESO needs to ensure that a realistic implementation plan is linked to deliverables (eg Regional Development Programme (RDP) and Proactive RDP Identification). We recommend greater coordination across technical and commercial teams in TO/TSO-DNO/DSO interactions to ensure resources are engaged in developing only those options which are commercially and technically feasible.

3. We present in our plan how our activities will meet and exceed baseline expectations between 2019-21 (see page 5 for definition of exceeding baseline expectations), do you have any comments on this?

We think there is enormous potential for DER participation to increase competition in balancing services and to reduce whole system costs in shorter timescales than the ESO envisages. This capability is already in place but does not appear to be fully utilised by the ESO.

We welcome the roadmaps which aim to facilitate DER participation but we feel the ESO could have, as an efficient and competent system operator, seized more opportunities to develop mechanisms to facilitate more DER participation by now.

The Frequency Response (FR) auction trial, now scheduled for June 2019, is an example of where we believe opportunities continue to be missed. Despite the ESO recognising there is benefit in moving market delivery of FR closer to real time (to take full advantage from Demand Side Response and intermittent renewables), we note that there are no firm plans in this two-year FWP to advance the procurement of FR from week-ahead to day-ahead. On that basis, we think that delivery by the ESO of enhanced systems to facilitate balancing services from DER should be regarded as an activity that meets baseline expectations (rather than exceeding them).

4. Do you agree that our metrics will allow us to track our performance as we deliver against our plans?

The introduction of metrics to assess the performance of the ESO in relation to balancing services procurement is positive but there is scope for improvement. These metrics have the potential to increase confidence that a level playing field exists in balancing services if they are well targeted and the ESO delivers its plans and roadmaps in shorter timescales.

We provide a general comment and more specific feedback in the paragraphs below.

In certain areas (for example 'Information Provision' with 'Frequency of provision' as a metric) the measures are quantitative and do not track the quality or completeness of the deliverable. We appreciate that 'quality' is subjective but we would encourage the ESO to attach stakeholder feedback on whether the deliverable is meeting the needs of stakeholders alongside these quantitative measures. We believe this approach would provide a broader and more credible view of performance.

Metric 2 (Firm Frequency Response (FFR) information provision improvement metric) – The 'Information Provision' metric should also take into account the number of queries the ESO receives after publishing balancing services tender results. It would provide a helpful performance measure on whether the ESO is providing sufficient transparency on the results.

Metric 3 (Energy forecasting accuracy metric) – We tend to agree with the underlying aim of the metric but we think it could be targeted at improving forecasting during the winter months where demand is higher and/or balancing costs are typically more volatile.

Metric 6 (Reform of balancing services markets) – We are supportive of the design of Parts 1 and 2 of this metric. But we believe, for the reasons outlined above, that timelines could be less conservative.

Metric 11 (Whole system, unlocking cross-boundary solutions) – We believe this metric could be improved if it tracks how effectively and quickly innovative solutions are adopted as mainstream solutions.

ScottishPower
February 2019