

ESO Performance team
Ofgem
10 South Colonnade
Canary Wharf
London
E14 4PU

Date:
17th October 2019

Contact / Extension:
Lynne Bryceland
0141 614 3124

Dear team

Mid-year call for evidence on ESO performance

SP Energy Networks (SPEN) represents the distribution licensees of SP Distribution plc and SP Manweb plc. We own and operate the electricity distribution networks in the Central Belt and South of Scotland (SP Distribution) which serves more than 10% of GB's electricity customers. We also own and maintain the electricity transmission network in the Central Belt and South of Scotland (SP Transmission). As a Transmission Owner (TO) we are subject to the RIIO-T1 price control framework and must ensure that we develop an economic, efficient and coordinated onshore transmission system.

As a key stakeholder of the ESO we welcome the opportunity this call for evidence provides to present our views to you. In general terms, we continue to engage regularly with the ESO across our activities in respect of network operation, customer connections and investment planning. These engagements are generally positive and collaborative, demonstrating our shared responsibilities and commitment to delivering for consumers, customers and stakeholders.

As requested, following the 7 key principles approach, we have focused on principles 1,4,5 and 6 being of greatest relevance to our activities as a network operator, and reflective of our interactions with the ESO:

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

Improved Engagement should be recognised

In general, we are seeing an improvement from the ESO in its customer and stakeholder engagement. From a Grid System Operation perspective there are various meetings, forums and workshops that take place on a weekly, monthly and annual basis. For connected customers, we can point to the recent outage changes required at Wishaw 275kV substation that was discussed on an ESO-led conference call with multiple parties. Separately, there a Scottish OC2 forum held in Glasgow on the 17th September 2019. These events were welcomed and are good examples of positive engagement.

Other instances of engagement included allowing our Operational Control Centre (OCC) staff access to the ESO's network simulators to train in Black Start restoration and the ESO supporting data sharing with respect of a transmission network model, allowing our staff to develop and fine tune our own OCC model. Both of these exercises have been helpful from our perspective and we would welcome a continuation of such engagement going forward.

We would welcome an improvement and more pro-active approach in the ESO's modelling capabilities

However, we believe accuracy and transparency of the ESO's system modelling and constraint modelling applications could be improved. By way of illustration, we have set out 2 particular examples below:

Ochil House, 10 Technology Avenue, Hamilton International Technology Park, Blantyre, G72 0HT

Telephone: 0141 614 0008

www.spenergynetworks.co.uk

1. We do consider that the blackout event of 9th August 2019, where ~1 million customers were disconnected due to a low frequency event, highlights issues with the ESO's system inertia modelling and primary and secondary reserve forecasting which must be improved. In our view, this event provides an important opportunity to refine modelling techniques, with a view to more accurately predicting future system performance and reducing the risk of adverse impacts on services to consumers. Whilst we are supportive of the findings and recommendations of the ESO's Technical Report published on the 6th September 2019, it would also have been in the interests of the investigation for Network Operators to have been given visibility of the interim and final reports, in advance of their publication. This would have enabled Network Operators, amongst other things, to provide clarification to the ESO where their data submissions may have been misinterpreted. We have subsequently raised these points directly with the ESO.
2. In relation to constraint modelling, SPT has made a request for funding under STCP 11-4 to enable a 275kV circuit breaker (CB) to be replaced in RIIO-T1 during a 6 month outage on that asset that is currently due to take place. The CB is currently in our RIIO-T2 Business Plan to be changed in 2023. The ESO has rejected the request as their Cost Benefit Analysis (CBA) does not identify any potential constraint savings. We question the accuracy of the ESO's CBA exercise as SPT has not submitted all of our MITS outage data for 2023 to the ESO. We therefore struggle to see how the ESO can have reached this decision, without having all of the relevant data to hand. This approach, adopted by the ESO, limits the opportunity for us to assist the ESO in taking "whole system" decisions, thus minimising system constraint costs over time.

It is widely acknowledged that the rapid pace of change in our electricity system, particularly the transition to low carbon sources and the introduction of significant numbers of HVDC links and other converter-based technologies, presents significant technical challenges that will require new approaches to modelling, simulation and analysis to maintain secure and stable operation of the system. The ESO is demonstrating initiative in this domain with the Stability Pathfinder and NIA projects such as those exploring the potential role of Virtual Synchronous Machine (VSM) technology. However, we believe the ESO could be more proactive in the co-ordinated study of new system challenges or the provision of data and models to support others.

Connecting customers have a critical role to play in this, to satisfy their obligations in the codes and their connection agreements, and to help identify areas of risk requiring system-wide review by the ESO and TOs. An example is the provision of technical information to customers who are obliged to design their equipment to operate in a secure and stable manner and thereby demonstrate compliance with connection requirements. The current approach by the ESO, and the resources they have available, results in some cases in long delays and inadequate information¹. We recognise that this is a complex area and the ESO is restricted by commercial agreements, particularly concerns over confidentiality, but we believe the challenges faced now and over the coming years require a more forthright attitude, and investment in resources, from the ESO with respect to power system modelling and the exchange of information essential to effective whole-system development and operation.

Witnessed Improved engagement with the ESO's Connections Team – which we believe can go further

We recognise and welcome the efforts of the ESO customer connection team and the improved level of engagement with our commercial policy and connections team. However, we do believe this could be improved further to ensure that we have a continually dialogue to avoid any contradictory information being

¹ Mutual Energy asked 12 months ago for system data to support the design of a new control system on the Moyle Interconnector. They have now received a model; however, it lacks essential information that Mutual Energy are now trying to source themselves by contacting other Users directly.

provided to our customers. Recently, the ESO advised a customer that it was permissible for them to build, own and operate a 132kV transmission circuit within Scotland. This is a position we believe they are unable to do legally without obtaining a transmission licence, as set out in the Electricity Act. We believe it is in the best interests of our customers to ensure there is an agreed policy position between the ESO and TO. Where there are differing opinions, we should work through these jointly and in a coordinated manner prior to any engagement with the customer to ensure they receive accurate and consistent information to allow them to take informed decisions regarding their project. We therefore welcome further dialogue from the ESO's connections team to ensure we as an industry are advising customers consistently and correctly.

ESO should communicate with TOs on policy changes more constructively

In relation to non-firm connection requests from distributed energy resources (DER) via Statement of Works (SoW) applications, we believe the ESO has changed their previous position in this regard. They are now of the view that SPT are required to provide a firm solution beyond the Grid Supply Point (GSP), even in instances where the DNO/DER has requested non-firm. We do not believe this position supports efficient and economic development of the network. Whilst the DNO/DER applicants will often pick up wider security and liability costs, they will not have any transmission access rights or Transmission Entry Capacity (TEC). For DER applicants connected to the distribution network on a non-firm basis, we do not believe it is appropriate in such instances to develop a firm infrastructure solution on the wider transmission network whilst offering non-firm solutions at the GSP. SPT work to ensure our customers are fully informed and understand the implications of non-firm solutions as part of our pre application process. We would therefore welcome further discussion on this matter to ensure that there has been no miscommunication from the ESO.

Principle 4 Promote competition in the wholesale and capacity markets.

Constructive engagement with TOs in Competition, however, the ESO must create an Impact Assessment to demonstrate the tangible benefits of competition in each scenario, to ensure it delivers value for consumers.

The ESO has recently been tasked by Ofgem to develop an Early Competition Plan for network infrastructure for RIIO-2. Whilst this is a relatively recent activity, the interaction to date with the ESO has been constructive. As a network operator and key stakeholder in this policy development, the ESO has engaged constructively with us, via webinars, workshops and bilateral meetings to discuss their intentions for the development of the Early Competition Plan. They also appear willing to accept the ideas of network operators and other key stakeholders as they look to prepare an initial draft of their Competition Plan, for submission to Ofgem by December 2019. We hope this constructive collaborative working will continue throughout the development of the Early Competition Plan.

We would however highlight that CBA/Impact assessments should be completed and published to ensure that proposed competitive solutions result in long term benefits for the consumer and are not 'competition, for competition's sake' as we recognise the ESO's RIIO-2 ambition for "competition everywhere".

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

Long Term outage planning process between the ESO & SPT is also working well- these positive steps should be recognised

The ESO has fully engaged with us on the implementation of the new national outage planning application eNAMS (TOGA replacement). Our OCC staff are now working closely with the ESO project team to ensure our outage planning requirements are captured in this new outage planning application.

The Long Term outage planning process between the ESO & SPT is also working well, enabling a robust plan to be developed for the final year of RIIO-T1 and importantly a proposed outage plan for each year of RIIO-T2. This area is monitored by the Network Access Policy working group, Joint Planning Committee – Operational Assessment working group and the STC panel. The ESO is currently managing the within year outage planning process to a standard that enables SPT to achieve the majority of their outage requirements. We believe the ESO's positive steps in this area should be recognised.

In the annual process of exchanging power system models and network development information to inform the Electricity Ten Year Statement (ETYS) and Network Options Assessment (NOA) the ESO has demonstrated effective leadership and a strong collaborative attitude. We believe the ESO's effective leadership in this area should be recognised. The ESO team has responded promptly and effectively to our enquiries and shown flexibility that recognises the complexity of the shared tasks. We believe that the ESO's proposals for further development of the NOA process, as explored through their Pathfinder projects, require further thought to ensure they are ready for implementation without introducing unnecessary risks for consumers.

The customer connection application process between the ESO and SPT works well, however, the quality of information contained within the Scheme Briefing Notes (SBNs) submitted to us by the ESO could be improved. SPT frequently finds the information to be of poor quality which ultimately introduces delays in to the process and our ability to declare the customers application as technically competent. We believe the ESO could undertake further assessment of applications they receive from the customer to improve the ultimate quality. SPT are currently undertaking this task which via the STC should be performed by the ESO. We would ask that the ESO work with SPT in undertaking a review of their role in this part of the customer journey to identify areas for improvement for the benefit to all parties concerned.

Improved Engagement welcomed on the current Tertiary Windings approaches taken by the ESO to ensure effective wholesystem planning

Going forward, the ESO should look to address its current approach to Tertiary Windings. It is vital that DNOs are part of this process to ensure the most reliable solution at the lowest overall cost to the consumer. Currently, we do not believe all of the relevant costs and operational impacts are being taken into account in any CBA before making a decision to accept such a connection, therefore this is not in the spirit of wholesystem planning.

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

Strong Engagement from the ESO on our Dumfries and Galloway Project. However, the ESO must take DNOs' views into account going forward when making decisions (as these have not fully be taken into account).

We have been working closely with the ESO to develop a working solution for our Dumfries and Galloway Active Network Management (ANM) scheme, this also falls within one of the ESO's Regional Development Plans (RDPs). On the whole the engagement has been strong with the ESO and we have been working collaboratively to address some of the challenges implicit in deploying a wide scale ANM, interacting with transmission constraints and managing the principles of access. The RDP team has continuously and frequently engaged with the Dumfries and Galloway project team over the last year. However, we would flag that in trying to define the commercial principles of operation; the ESO proposed solutions largely focused on existing regulatory constructs and quickly dismissed a number of options that could allow the DNO to develop towards DSO responsibilities and functionality. We believe the ESO could explore these options in

more depth in the future to ensure that we are working together as an industry. This will ensure that we deliver maximum benefits for consumers.

'Sustainable Workforce Plan' to be developed to address high staff turnover rates, as this is impacting quality of service.

Whilst we have worked hard to develop strong, effective working relationships with the ESO, we have observed a high turnover of ESO staff across most of the areas of the ESO that we interact with. Such a high turnover rate undoubtedly affects the ESO's ability to provide a high quality level of service and affect average experience levels within key ESO departments. We appreciate that this is a new era for the ESO and it will learn from new experiences following its separation from NGET TO. We do believe that a key lesson learned for the ESO, is that it should re-assess its workforce plans to ensure that these are optimal in the longer term, targeting a reduced staff turnover rate. In RIIO-T2, companies are required to submit a "Sustainable workforce strategy" which should be replicated by the ESO if not already done so.

Should you have any questions in relation to the issues raised in this response, please do not hesitate to contact me.

Yours faithfully



Lynne Bryceland
Transmission Policy and Licence Manager

Ochil House, 10 Technology Avenue, Hamilton International Technology Park, Blantyre, G72 0HT

Telephone: 0141 614 0008

www.spenergynetworks.co.uk