



Scottish & Southern
Electricity Networks

SSEN CCMS Submission

Supporting Evidence

29th January 2018



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2. Introduction

SSEN submitted a Connection Charging Methodology Statement (CCMS) modification proposal for Ofgem's consideration in December 2017. Following further discussion with Ofgem SSEN has collated supporting evidence which is set out in this document.

The changes set out in the modification proposal are required to move flexible connections from trial (e.g. through innovation mechanisms) where bespoke arrangements are set out as an interim measure for each project, to a standard framework under "Business As Usual". The changes proposed related to O&M charges. Changes are required to allow SSEN to recover a new form of costs associated with services that have to be procured from third parties in order to operate and maintain the flexible connection. For example, communication services and support for applications that allow us to monitor and manage such connections to ensure we can maximise customer access to capacity on the network while also protecting the safety and security of the system. These charges will be incurred by SSEN on an annual basis and will be specific to each flexible connection, therefore we propose they are charged directly to the relevant customer on an annual basis.

Alternative means of recovering these costs have been considered e.g. capitalising support costs and charging up front as part of the connection. However, following review of the level of costs (e.g. over a 25-year lifecycle) it is clear this would be cost prohibitive for customers. It would also be inconsistent with the way in which costs are incurred. Consideration was also given to socialising the costs e.g. by recovering costs through use of system charges. As these costs are driven solely by the flexible connection and there are no wider benefits for other network users this was deemed to be inappropriate as it introduces an element of cross subsidy. The approach set out in the modification proposal was determined to be the fairest and most cost reflective means of recovering relevant costs.

3. SSEN evidence

SSEN has been an industry pioneer in the development of flexible connections, firstly with our Orkney Registered Power Zone (RPZ) in 2009, where the UK's first Active Network Management system (ANM) was implemented to manage generation constraint and release new generation capacity. Since the successful completion of that project more advanced systems have been installed on Shetland as part of the Northern Isles New Energy Solution (NINES) Project, and under advanced trial conditions on the Western Isles of Scotland and the Isle of Wight.

These systems actively monitor and manage network conditions, releasing additional capacity while maintaining network integrity by curtailing generation output in response to reducing demand or fault conditions. These innovative types of connection allow us to effectively release capacity on existing networks while avoiding the costs or delay in connection associated with traditional reinforcement. They enable an increased amount of Distributed Generation (DG) to connect to distribution networks.

Thanks to the learning provided by trials and innovation projects, SSEN and wider DNOs have developed a suite of flexible connection solutions to enable generation customers to connect. However, these flexible connections rely on advanced monitoring and control systems, the majority of which are currently provided by third party suppliers. While traditional reinforcement presents an upfront single cost, the support costs associated with flexible connections generate annual costs associated with communication systems, licence fees, IT maintenance and support. SSEN is proposing that these costs are passed on to flexible connection customers on an annual basis rather than being capitalised and included in connection costs. By avoiding increased upfront costs, we feel more connections will be enabled, in turn allowing more distributed generation to connect. Annual charging also reflects the way in which these costs are incurred and the benefit consumed.

SSEN has also considered recovering such costs through the sustained use of innovation funding, such as the Innovation Roll-out Mechanism (IRM). However, we feel that the technology, processes and procedures are now mature enough to be considered Business As Usual (BAU). Furthermore, as innovation funding is sourced from the wider customer base, continued use of innovation funding results in flexible connection specific benefits being funded by wider customers. We feel this is not in our customers' best interests.

4. Customer Interest

Given the dynamics of both the SHEPD and SEPD networks and areas of constraint, we have actively engaged with a wide group of customers and trialled flexible connections for a number of years. Stakeholders are keen that we now move this into BAU. This is reflected in our current ICE commitment.

Following this commitment SSEN has been approached recently by a number of customers who are eager to progress their connections through flexible alternatives to avoid traditional reinforcement costs and / or delays in connection while reinforcement is carried out.. Across both

SHEPD and SEPD networks 26 requests have received in the last 6 months for a Flexible Connection, ranging in size between 300kW and 30MW.

5. Engagement Feedback

The drive to develop flexible connections as BAU has been stakeholder led. SSEN holds frequent engagement events allowing customers the opportunity to feedback on their experiences, comment on our strategy and approach. At recent events we have received strong feedback supporting our approach and pushing for speedy conversion into BAU. The charging modification proposal submitted is a key part of this framework. Without the ability to recover support costs we are unable to facilitate further flexible connections.

Set out below is an example of recent stakeholder feedback from multiple sessions, we would highlight the number of attendees at the Flexible Connections Workshop as evidence of the level of interest in Flexible Connections from our customers.

5.1. Flexible Connections Workshop Feedback

	Flexible Connections SEPD	Flexible Connections SHEPD
	1.2.17	09.02.17
Number of Delegates	41	25
Category		
On a scale of 1-10 how would you rate your experience at todays event?	9	9
On a scale of 1-10 were the right staff in attendance to answer your questions?	9	10
On a scale of 1-10 was the pre-event information satisfactory?	9	9
On a scale of 1 -10 - how do you rate the presentation content?	9	9
On a scale of 1 - 10 how beneficial was your attendance today for you and your business?	9	9
Does you experience of getting connected to our network match your expectations?	91%	70%
Are you aware of our plans and commitments for Connection customers?	91%	100%
Do you feel our plans and commitments for customers will help improve customer experience?	95%	85%
Do you feel that SSEPD offers enough opportunities for customers to engage?	91%	80%

Feedback		
Market Segment	Feedback	Event
Demand	Principles and issues well explained and discussed	ICP & Flexible Connections Workshop 9th Feb 2017 - North
DG	Delays in connection due to transmission constraints are always a problem.	ICP & Flexible Connections Workshop 9th Feb 2017 - North
Demand	Matchmaking generated and demand opportunities and networking	ICP & Flexible Connections Workshop 9th Feb 2017 - North

5.2. Notes from the Connections Customer Steering Panel meeting – 30th November, The Station Hotel, Perth

Customer comments on our ICE Update & Energy Storage Strategy

What do customers want next?

- Clarity on flexible connection timescales
- What options available ahead of reinforcement?
- Customer visibility at any given time of project status, spend and who is the key contact
- Wide scale roll out of Appendix G in SHEPD area
- More upfront discussions with planners during quote process, quote particularly with A & D Fees
- Facilitating capacity sharing, both as part of DSO and in advance of that (commercial innovation)

Is there anything we can do better?

1. Be more proactive rather than reactive
2. Flexible connections process has taken too long to go live, this is frustrating for customers who can't connect because of restraints in the meantime

6. Industry Support

6.1 ENA Open Networks (ON) Project

We have discussed our charging methodology proposals with other DNOs individually and collectively e.g. at the COG meeting in December 2017 and throughout the ON project WS1 and Steering group, prior to submission of our modification proposal. Feedback at these meetings has been positive. The ON Steering group is attended by BEIS and Ofgem and in the context of this issue Philippa Pickford was in attendance at the ON Steering Group Meeting held on the 19th of December 2017 when this proposal was discussed in the context of achieving early deliverables

from the ON project. We would encourage dialogue with Philippa or her team or Stewart Reid our Head of DSO and innovation who chairs the ON WS3 Group.

A number of DNOs have commented that they would be interested to see how this modification proposal develops; our approach has been quoted as a clear example of collaboration, learning by doing and more importantly accelerating the interim deliverables of the ON Project at every opportunity. SSEN does not feel our approach conflicts with the ENA's work, indeed, we are keen that our experiences inform future developments so any learning outcomes generated by this change will be fed back into that project as a BAU example. We are committed to maintaining close interaction with other DNO's, the SO, TNO's and ENA within the Open Networks Project and Ofgem's Charging Forum to help shape a consistent approach to investment funding for flexibility services in future.

7. Summary

SSEN is committed to developing a common framework for flexible connections. In the short term it should be recognised that each DNO may face different challenges, different priorities and stakeholder needs. Given constraints on our network our customers are keen to see flexible connections implemented as BAU as soon as possible. SSEN feel there are significant, immediate benefits for new flexible customers in the short term by (next 3-5 years) by approving this CCMS now.