



Mr Neill Guha  
Price Control Operations – Small & Medium Sized Projects  
Ofgem  
c/o [reopenerconsultations@ofgem.gov.uk](mailto:reopenerconsultations@ofgem.gov.uk)

Dear Mr Guha,

Thank you for the opportunity to respond to Ofgem's Draft Determination regarding the Shetland Enduring Solution. Please find responses to the two questions on the Draft Determination below. Please note that the last paragraph of our response should be treated as **confidential** as it is commercially sensitive.

1. Do you agree with our Draft Determination on SHEPD's Shetland Enduring Solution needs case, optioneering and costs?

Yes – with caveats. Option 1 provides a viable solution that meets the requirements of the system and is cost effective in comparison to the other presented options. We agree that Lerwick Power Station (LPS) is a suitable stand-by solution that can provide the power that Shetland requires in the event of a short-term outage of the HVDC link. However, we feel strongly that in the event of longer-term HVDC outages LPS should be augmented by local, distributed renewable energy generation and this needs to be obliged and maximised within the Solution as the current description could potentially exclude and minimise the valuable and cost-efficient contribution that distributed renewable energy generation could make.

As it stands hereafter, connections for new distributed renewable energy generation in Shetland will be dependent on the availability of the HVDC transmission link. This means that, when the Transmission connection to Shetland is down (i.e. the HVDC cable is inoperable), LPS will be burning diesel while those new local renewable generation assets will be unable to contribute to meeting Shetland's energy demand as their connections will not allow generation to export on to the system. Existing distributed renewable energy assets will also be constrained to an unknown level.

Diesel is highly expensive and clearly an unfavourable fuel source with respect to CO<sub>2</sub> emissions. In situations where the HVDC link is unavailable for periods of hours or days, LPS represents a cost-effective and relatively low-impact standby solution. However, in the event that the HVDC is down for periods of longer than, say, 1 week, distributed renewable generation assets should be able to augment the generation from LPS in line with demand and SHEPD's Last In First Off queueing system.

This would be both more cost-effective to the consumer and reduce CO<sub>2</sub> emissions to the minimum.

We note that the optioneering includes that "the ability to retain LPS for 10 years would provide the option to flex to a low carbon solution or second network link if available". We believe that this flex should be built into the solution from the start and that the above considerations around use of distributed renewable generation should have been included in the optioneering. It should be a requirement and not a choice whether to maximise (within system parameters) the more cost-efficient and carbon-efficient distributed generation after the initial system stabilisation for any unplanned HVDC link outage and especially for any longer-term event. We acknowledge that our proposals may require some additional infrastructure for balancing and frequency response to facilitate contributions from local renewable generation in the HVDC link failure scenarios. We would ask Ofgem to note that

Shetland Aerogenerators Ltd have live planning and grid applications that include a 14.9MW BESS, which could be used for the above applications.

2. Do you agree with our proposal that consumers should not take on any additional costs if the solution fails?

Generally, yes. We agree with Ofgem's conclusion that SSEN's contractual negotiations and procurement activities should be sufficiently robust to mitigate (if not eliminate) the risk of a termination.

However, as a developer and customer of SHEPD we would note that these risks should not be underwritten by businesses with ambitions to connect to the Shetland Distribution System. Notwithstanding the comments above, which we acknowledge may require additional infrastructure, the Enduring Solution for Shetland is centred on LPS – an SSE-owned generation asset. It is, therefore, incumbent on SSEN to manage the provision of a stand-by solution that minimises overall risk and is also carbon- and cost-effective.

We also wish to comment on the 'sensitivity' included in the Cost Benefit Analysis (pages 25-27). The sensitivity scenarios appear to be the fallback option, should the preferred bidder for the battery and FRT components of the Shetland Enduring Solution fail to deliver. We note that in all scenarios, SHEPD project a date of 2029 for the installation of a new battery and FRT operated by SSEN. We are concerned both by the length of time for the provision of a solution in these scenarios and by the cost and carbon implications of this. The potential extra cost to the consumer includes the capital component captured in the CBA table but would also include the operating costs of LPS while SSEN implement the solution – these are likely to be considerable due to the high cost of diesel. As noted above, we feel strongly that SSEN should endeavour to deliver the agreed solution and mitigate the risk of the sensitivity scenarios playing out.

[Redacted]

Again, please treat the above paragraph as **confidential**.

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'Brendan Hall', with several horizontal lines drawn across it.

Brendan Hall, Development Manager