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# Costs of Extended Interim Energy Solution for Shetland

## Consultation


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**Overview:**

In November 2017, we set out our decision to reject the costs of the New Energy Solution for Shetland (SNES). This was based on external developments and new information, which affected our assessment of the best energy solution for Shetland. Following this, it was agreed that Scottish Hydro Electric Power Distribution (SHEPD) would manage an extension of services to meet electricity demand on Shetland to 2025, and would prepare a revised cost submission setting out the estimated cost of doing so to the end of the RIIO-ED1 price control (March 2023), and indicative costs to 2025.

This consultation sets out the detail of these costs, as well as certain costs incurred by NG Shetland Link Ltd (NGSLL) since its announcement as preferred bidder in the SNES competitive process. We give our minded-to position on the amount and treatment of these costs and seek views. This document also provides details of the costs associated with the initial steps to support an enduring solution for Shetland post 2025.

All costs presented in this document are in 2012/13 prices.

# Associated documents

SHEPD's consultation documentation
https://www.ssepd.co.uk/shetlandenergy/documents/

Ofgem's determination of Scottish Hydro Electric Power Distribution plc's (SHEPD) submission required under Charge Restriction Condition (CRC) 18A
https://www.ofgem.gov.uk/sites/default/files/docs/2014/04/ofgem_determination_of_SHEPD_submission_under_crc18a_0.pdf

Additional conditions on Ofgem's 22/04/14 determination on Scottish Hydro Electric Power Distribution plc's (SHEPD) submission under Charging Restriction (CRC) 2Q (formerly CRC 18A)
https://www.ofgem.gov.uk/system/files/docs/2016/04/additional_conditions_letter_15apr2016.pdf

Ofgem's decision on Shetland New Energy Solution
https://www.ofgem.gov.uk/publications-and-updates/decision-shetland-new-energy-solution

# Contents

# Executive Summary

Shetland's electricity supply is largely generated from Lerwick Power Station (LPS), which is approaching the end of its operational life. In April 2014, we directed Scottish Hydro Electric Power Distribution (SHEPD) to run a competitive process to identify the most efficient solution for Shetland's energy future.

In May 2017, SHEPD announced that a joint bid by NG Shetland Link Ltd (NGSLL)–Aggreko won the competitive process which involved building a distribution link between Shetland and the Scottish mainland. In July 2017, we published a consultation on the costs of this solution and the associated licensing arrangements. In November 2017, following external developments and new information, we rejected the costs of this proposed solution as these developments meant that a more cost-effective option was available.

Following this decision, we asked SHEPD to investigate alternative options to ensure security of supply on Shetland between 2019/20 and 2024/25, when a new energy solution for Shetland is expected to be in place. SHEPD confirmed that with targeted investment, security of supply can be provided until 2025 through a combination of LPS and additional support measures, and that this can be done at an annual cost significantly below that of the NGSLL–Aggreko solution[1]. Following revisions, SHEPD estimates the costs of the new interim solution to be £164m. SHEPD estimates a further £9m to cover costs for it to prepare for an enduring solution from 2025 and certain costs already incurred by NGSLL–Aggreko since its announcement as preferred bidder in the SNES competitive process.

For the period in the current RIIO-ED1 price control (2019/20 to 2022/23) we propose to allow £118m for the extended interim energy solution (£110m), the preparatory work for the enduring solution (£3m) and the NGSLL–Aggreko SNES costs (£5m). SHEPD originally submitted costs of £133m for this period, which were subsequently revised to £123m following further cost refinement and our review. The £118m we propose to allow is 11% below the original submission and 5% below the revised submission. 33% of these allowed costs are classified as pass-through, ie the costs recovered from consumers are the costs incurred by SHEPD. These are costs that are outside the control of SHEPD and therefore there is little scope for efficiency improvements. The remaining 67% of costs form part of the totex ex ante allowance and are subject to our totex incentive mechanism, where the benefit of underspend or burden of overspend is shared between SHEPD and consumers.

Due to the level of uncertainty of these costs and the need to ensure security of supply in this interim period, we also propose an uncertainty mechanism for the costs that form part of the totex ex ante allowance. This mechanism can be triggered where actual costs incurred are materially more or materially less than the allowance, and will be considered as part of the RIIO-ED1 close out assessment.

[1] The cost to consumers of the NGSLL-Aggreko Solution over its 20-year lifecycle was estimated to be approximately £40m per annum and a Net Present Value (NPV) of the evaluated costs of £581.7m

We are consulting for four weeks and welcome views on our proposed cost allowances, the treatment of those costs and the proposed uncertainty mechanism. Alongside this, we will also be consulting on SHEPD's licence arrangements to ensure SHEPD can recover the additional costs associated with the extended interim energy solution.

Subject to the responses to this consultation, we plan to take a final decision on the adjustment to SHEPD's allowances for the total costs of the solution and the associated licence arrangements by end-June 2018.

# 1. Background and purpose

## Background

1.1. Shetland is not currently connected to the electricity network that serves mainland Great Britain (GB). This means that the islands have to be able to meet all of their own electricity needs. Currently the main source of electricity generation that can respond to customer demand is Lerwick Power Station (LPS), which was built in 1953 and is nearing the end of its operational life.

1.2. Our principal objective under the Electricity Act 1989 is to protect the interests of existing and future consumers. In doing so, we need to ensure both that:

- the people of Shetland continue to have a reliable energy supply after LPS reaches the end of its life; and
- the costs of the energy supply solution for Shetland are efficient. This is important as all GB energy consumers will meet future generation costs on Shetland.[2]

1.3. In view of LPS approaching the end of its operational life and the uncertainty about the future of Sullom Voe Terminal (SVT) power station, which meets around 40% of Shetland's electricity demand, there has been concern as to how the electricity demand on Shetland will be met in the long term.

1.4. As a result, in our final proposals for the fifth electricity distribution price control review (DPCR5) in December 2009[3], we placed a requirement on SHEPD[4], the Distribution Network Operator (DNO) and System Operator (SO) on Shetland, to present to us, by 31 July 2013, an Integrated Plan to manage the supply and demand of electricity on the islands.

[2] The isolated nature of its electricity infrastructure means that costs are significantly higher on Shetland than in the rest of northern Scotland. Consumers on Shetland currently benefit from a cross-subsidy arrangement, which protects the people of Shetland from paying significantly higher prices than consumers on the mainland pay. Given the additional capital costs for the extended interim energy solution, it is proposed that the cross-subsidy is continued, with the cost shared between all GB consumers and not only northern Scotland consumers. See paragraphs 4.34 to 4.37 of the SNES consultation for details https://www.ofgem.gov.uk/publications-and-updates/consultation-cost-new-energy-solution-shetland

[3] Electricity Distribution Price Control Review Final Proposals – Decision document https://www.ofgem.gov.uk/ofgem-publications/46746/fp1core-document-ss-final.pdf

[4] Through charge restriction condition (CRC) 18A of the Scottish Hydro Electric Power Distribution (SHEPD) licence.

1.5. SHEPD[5] submitted an integrated plan to us in July 2013 for a new full-duty dual fuel 90MW power station to be owned by SSE Generation and delivered on Shetland in 2017. We rejected the costs of this proposal as we considered that SHEPD had not sufficiently tested the market for an efficient and economical solution. Specifically, we were not persuaded that the costs put forward were the most efficient and competitive, as SHEPD had not provided sufficient supporting evidence to demonstrate this.

1.6. For this reason, in April 2014 we directed SHEPD to undertake an open, fair and transparent competitive process to identify a new energy solution for Shetland. In May 2017, SHEPD completed the competitive process and notified Ofgem that a joint bid by NGSLL–Aggreko was its preferred bidder. We subsequently consulted in July 2017 on our assessment of the costs for the preferred solution.

1.7. After we had gone out to consultation, however, two external developments made it necessary for us to reconsider our assessment of the best solution for Shetland. The first of those developments was a change to a document sitting under the Industrial Emissions Directive (IED), which means that LPS is not now required to meet enhanced emissions targets until 2030 (as opposed to 2020). The second of those developments was an announcement by the UK Government that wind farms on remote islands, such as Shetland, will be eligible to compete for a contract for difference (CfD) from 2019. These developments significantly altered the perspective on the economics of available options. They meant that there was a more cost-effective way to provide security of supply on Shetland in the near term, which also allowed for the possibility of further savings in the future if an integrated solution is required, notably if a transmission link is needed following the next CfD round.[6]

1.8. As a result, we decided to reject the costs of the NGSLL-Aggreko option and instead asked SHEPD to provide details of how they propose to ensure security of supply on the islands from 2019 to 2025 (the extended interim energy solution), including the costs of achieving this.

1.9. SHEPD has since proposed costs for the extended interim solution. For the purposes of this consultation, the relevant costs are for the period April 2019 up until the end of the RIIO-ED1 price control in March 2023. SHEPD has also provided indicative costs for 2023 to 2025 but as these costs fall into the RIIO-ED2 period,

[5] Scottish and Southern Electricity Networks (SSEN), operating under licence as Scottish Hydro Electric Power Distribution (SHEPD), owns and operates the distribution network of overhead lines and underground cables across the north of Scotland. We use 'SHEPD' throughout the remainder of this document.

[6] In October 2017, BEIS announced that the next CfD auction is planned for spring 2019. Government has sought State Aid approval from the European Commission to amend the CfD scheme to allow Remote Island Wind projects to be eligible to bid into the next CfD auction. The auction will also offer support to less established renewable technologies, such as offshore and marine energy. This opens up opportunities for parties in Shetland to bid into the CfD auction, which could, if they were successful in securing sufficient support, result in the need for a transmission link to export the power.

they are not assessed in this document but will instead be considered as part of the RIIO-ED2 price control review.

1.10. SHEPD has also proposed costs for undertaking preliminary work on the enduring solution for Shetland, and has submitted a request to recover certain costs incurred by NGSLL since their announcement as preferred bidder in the SNES competitive process.

1.11. The main body of this document, Chapter 2, sets out our minded-to position on the following costs and their treatment:

- SHEPD's proposed costs for the extended interim energy solution from April 2019 – March 2023;
- SHEPD's request to recover certain costs incurred by NGSLL following its announcement as preferred bidder in the SNES competitive process; and
- SHEPD's proposed costs of beginning work on an enduring solution for Shetland.

1.12. We also set out an informal consultation on proposed amendments to SHEPD's licence to reflect our minded-to position on the treatment of the above costs (Supplementary Annex 1).

## Responding to this consultation

1.13. We welcome comments on this document by 8 June 2018 RIIO.ED1@ofgem.gov.uk or in writing to:

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1.14. Unless clearly marked as confidential, all responses will be published on our website.

# 2. Assessment of SHEPD's costs

**Chapter Summary**

Provides an overview of the categories of costs SHEPD believes it will incur in accommodating an extended interim energy solution for Shetland from 2019/20 to 2022/23, undertaking initial work on the enduring solution, as well as some of NGSLL's costs incurred after its announcement as preferred bidder in the SNES competitive process. It also sets out our assessment and proposed treatment of those costs.

**Questions**

Q1. Do you agree with our minded-to position on the costs – level and treatment – for the extended interim energy solution?
Q2. Do you agree with our minded-to position on the level and treatment of the Shetland Enduring Solution Process Costs?
Q3. Do you agree with our minded-to position on the level and treatment of the SNES Residual Costs?
Q4. Do you have any comments on the associated informal licence drafting in Supplementary Annex 1?

2.1. There are a number of costs areas associated with extending the existing generation arrangements to 2025 and transitioning to an enduring solution by this date. We have grouped the costs into these three categories, and discuss them in turn below:

- the extended interim energy solution (extension of existing Shetland generation arrangements);
- SNES Residual Costs – NGSLL costs; and
- Shetland Enduring Solution Process Costs.

## The extended interim energy solution

2.2. The extended interim energy solution must continue to provide a secure energy supply on Shetland before an enduring solution is fully implemented. SHEPD has proposed an extended interim energy solution to ensure security of supply on the islands from 2019 to 2025 that comprises a number of different elements.

2.3. The proposed solution is to extend the running of LPS, through the introduction of one additional engine, large-scale battery storage, and associated operational regime changes supported by additional supply from SVT power station. By accommodating these additional elements within the operational regime, it is expected that the use of the older LPS engines will be alleviated, more flexible running of LPS will be achieved, and a greater contribution from renewable sources will be facilitated, displacing fossil fuel burn.

2.4. This proposed extended interim energy solution comprises eight cost categories as listed below, and is essentially an extension of the existing arrangements. SHEPD estimates that the total costs for the six years from 2019/20 to 2024/25, when it is expected that a new enduring solution will be in place, will be £172m.

2.5. The costs in Table 2.1 below, and those subject to our detailed review, are only for the period within the existing RIIO-ED1 price control, ie from April 2019 to March 2023. We detail the original costs submitted by SHEPD, SHEPD's revised costs following our assessment, and our minded-to allowance. The subsequent sections consider each of the cost categories in turn.

**Table 2.1: Proposed costs from 2019 to 2023 (£m, 2012/13 prices)[7]**

| Category | Sub-category | Original proposal | Revised proposal | Minded-to allowance | Cost treatment |
|---|---|---|---|---|---|
| LPS | Capex & Opex | 92.1 | 81.0 | 75.8 | Ex ante allowance |
| | Fuel | 27.8 | 30.0 | 30.0 | Pass-through |
| | EU ETS | 2.3 | 2.3 | 2.3 | Pass-through |
| | Consents & Permits | 0.4 | 0.4 | 0.4 | Pass-through |
| SVT PPA* | Commercially sensitive captured in LPS capex and opex costs above. | | | | |
| ANM Costs | - | 1.0 | 1.0 | 0.9 | Ex ante allowance |
| Enduring Solution Process | - | 4 | 3.3 | 3.0 | Ex ante allowance |
| SNES Residual | - | 5.3 | 5.3 | 5.3 | Pass-through |
| **Total** | | **132.9** | **123.4** | **117.8** | |

* These costs are commercially sensitive as SHEPD will enter negotiations with the owners of SVT in the coming months.

## LPS and SVT Power Purchase Agreement (PPA) costs

2.6. LPS is a 67MW diesel-fired station that currently provides around 50% of Shetland's electricity each year. This makes it the primary source of electricity for Shetland at present. The station is owned by SSE Generation and operated by SHEPD. We set out the proposed costs into two main sections: the ex ante allowance, including SVT PPA costs, and the pass-through costs associated with LPS.

*LPS ex ante capital and operating costs, including SVT PPA*

2.7. This cost category comprises costs associated with the ongoing capital investment in LPS as well as the operational staff costs, which includes an

[7] Annual costs per category are set out in Appendix 2.

Engineering Centre that supports LPS staff on an ongoing basis. Other operational costs – fuel and environmental permits – are captured separately. This category includes the cost of the SVT third party power purchase agreement (SVT PPA). In balancing the need for transparency with commercial sensitivity, we have decided not to publish the proposed SVT PPA costs separately but to include them in the LPS capex and opex costs. This is because negotiations with the owners of the SVT power station will begin in the summer.

2.8. The original submitted cost from SHEPD was £92.1m, the revised costs £81m and our proposed allowed costs £75.8m.

2.9. In reaching the proposed £75.8m, we include an overall 10% efficiency reduction to all LPS ex ante allowances. This is discussed further in paragraph 2.42.

2.10. We assessed all costs within this category, but, for this consultation, have focused on the major capital investment costs proposed in the original submission – two new 7MW engines, one 8MW battery, additional works to support the extension of the existing power station and additional equipment, and insurance. We discuss each in turn below.

New engines

2.11. Under SHEPD's original proposals, two additional 7MW engines were proposed to be installed at the LPS site. SHEPD explained that the purposes of these new engines was to alleviate the running of older existing engines, to act as contingency for the possibility of a terminal failure of these units, and/or in the event that SVT ceases to be part of the energy mix on Shetland. The cost proposed was based on an engineering, procurement and construction (EPC) contract installed price provided by SSE's Engineering Centre.

2.12. After detailed discussion with SHEPD, we requested that it provide a range of scenarios to ensure security of supply on an economic and efficient basis, along with justification for each scenario. Following this, SHEPD undertook analysis and selected two preferred scenarios which allowed security of supply to continue to be met: one which included the continued use of SVT, and the other without SVT. In the preferred "with SVT" scenario, only one additional 7MW engine would be required and this one engine could be provided at a reduced cost (c.30% less). In the "without SVT" scenario SHEPD identified that further capacity will be required, but reflecting on the uncertainty of this scenario SHEPD will take action reactively when required. We propose allowing this reduced cost of the "with SVT" scenario, subject to the 10% efficiency reduction.

Battery storage

2.13. Both preferred scenarios included the need for a battery and both the original and revised submissions proposed an 8MW battery to form part of the energy mix on Shetland.

2.14. SHEPD provided a report on its analysis to explain the requirement for and scale of the battery. The functions of the battery, according to the report, include: its use as a reserve function; to help meet peaks in demand more efficiently than thermal generation; and to allow greater contribution from intermittent renewable sources to be facilitated. The decision to select the 8MW size is based on the typical largest generation loss on the island. We have reviewed SHEPD's analysis and are satisfied with the justification for both the requirement for and scale of the battery.

2.15. In the original submission, SHEPD's estimated cost of the battery included a 5% contingency cost. This was on the basis that developing and implementing a large energy storage proposal is not a business-as-usual activity and there is therefore inherent uncertainty in such innovation. After discussions with SHEPD, it was agreed that the contingency would be removed in place of an uncertainty mechanism that would deal with any overspend (or underspend) that exceeds a material threshold.

2.16. We propose allowing the revised submitted cost but with the 10% efficiency reduction applied.

Extension of LPS work programme

2.17. The third significant element of the submitted LPS capital and operational costs is funding of a works programme to extend the operational life of LPS up until 2025. This includes conversion works, upgrades, refurbishments and replacement parts. Having reviewed the submitted costs, we advised SHEPD that any costs must be to cover work that will be incurred and must not therefore include contingency costs for work that may be incurred. We explained that any contingency costs that are required at LPS would be considered as part of the uncertainty mechanism. Following this, SHEPD provided updated costs, which removed optional costs and also removed any maintenance works associated with a second engine maintenance, which is no longer required. We propose allowing the revised reduced cost but with the 10% efficiency reduction applied.

Insurance

2.18. The final significant cost sub-category under the ex ante LPS costs is insurance. We questioned a rise in the annual costs over the 2019/20 to 2022/23 period compared to previous years. SHEPD advised that the increase is due to a large rise in the Property Damage Sum Insured to cover LPS following a review of insurance values in October 2015. As these costs are competitive against market benchmarks, we are minded to accept them, but like all ex ante LPS capex and opex costs, propose to subject them to the overall 10% efficiency reduction.

Other LPS costs

2.19. Having conducted a thorough assessment of all other LPS works costs, which include operational staff, LPS spares, maintenance, inspection, servicing, overhaul, replacements, repairs, upgrades, safety, IT, civil/electrical, control modes and the engineering centre, we are satisfied with the requirement for each and their

associated cost. We are therefore minded to approve the costs for each of these areas, subject to the overall 10% efficiency reduction. The exception to this is in relation to staffing costs where we accept SHEPD's view of the required costs.

SVT PPA ex ante allowance

2.20. SVT Power Station is a 100MW independently owned gas-fired power station, which meets around 40% of Shetland's electricity demand. The station's primary purpose is to supply electricity to the Sullom Voe gas terminal, but it also provides up to 15MW of Shetland's electricity through a third party PPA with SHEPD.

2.21. SHEPD's previous PPA with SVT ran to the end of April 2017. SHEPD previously renegotiated this contract to enable it to run through to December 2020, when the SNES was expected to start operation, and a year of parallel running of the SNES and LPS was due to begin. While we note that SHEPD has provided a scenario which ensures security of supply is met without SVT, we recognise that there are certain challenges around this and it is likely that a SVT PPA will form part of the extended interim energy solution. Negotiations with SVT around extending the PPA will not begin until the summer of 2018 and SHEPD has advised that any agreement is unlikely to be finalised until the latter part of 2018.

2.22. As noted above, in balancing the need for transparency with commercial sensitivity, we have decided not to publish the proposed SVT PPA costs separately but include them in the LPS capex and opex costs.

2.23. Nevertheless, as with the other ex ante allowances, we propose a 10% efficiency reduction on the proposed SVT PPA costs. We note that SHEPD currently has an agreement with SVT until December 2020 and as such, due to the certainty around costs up to this period, we are not proposing to apply an efficiency reduction to these costs. Any efficiency reduction would therefore only apply for the 27 months between January 2021 and March 2023.

LPS pass-through costs

2.24. We propose that costs outside SHEPD's control are recovered via pass-through. That is, the costs incurred by SHEPD are the costs recovered from customers, and those costs are not subject to the totex efficiency incentive. Three cost categories fall under this: fuel, consents and permits and EU Emissions Trading Scheme (ETS) costs.

2.25. Fuel costs are dictated by electricity demand on Shetland and market prices that are subject to uncertainty and volatility. Environmental permit costs and emission charges are set by the Scottish Environment Protection Agency (SEPA), the European Union (EU) and the Health and Safety Executive (HSE). SHEPD has no control over these costs.

2.26. Although proposed as pass-through costs, it is important to estimate these costs in order to provide greater certainty of the total extended interim energy solution costs, which customers will ultimately pay for. The current total estimates

for these costs for the four-year period is £32.8m, up from the £30.5m in the original submission following our review. This is due to the use of a more expensive and environmentally-friendly fuel which is expected to be required by SEPA.

2.27. We are minded-to allow these costs via pass-through. We set out our analysis of each category below.

Fuel

2.28. SHEPD estimates the quantities of fuel necessary for the period 2019/20 to 2022/23 based on the projected running profile of LPS in response to demand, contribution from SVT and intermittent generation, and historic fuel ratios of the different engines at LPS. SHEPD has advised that the average cost of fuel provided is based on SHEPD's January 2018 fuel price forecasts and totals around £30.0m (up from £27.8m in the original submission).

Environmental consents and permits and emission costs

2.29. The total cost of securing environmental permits is estimated to be £0.4m, which did not change between the original and revised submissions. This covers the costs of the permits themselves as well as the annual emissions tests on all LPS engines by a certified company to ensure the company complies with the permits. The three main permits that LPS is required to have are: SEPA Pollution Prevention and Control (PPC) permit; the EU ETS permits; and HSE/SEPA Control of Major Hazards (COMAH) permits.

EU ETS

2.30. LPS is also required to comply with phase 111 of the EU ETS, which is regulated by SEPA in Scotland. This requires LPS to calculate annual $CO_2$ emissions per year from the combustion of various fuels on site. SHEPD has provided a costs estimate of £2.3m for the period, which increased very slightly from the original submission. These forecast costs are derived from the estimated volumes of energy to be produced by LPS, the estimated tonnes of $CO_2$ emitted through this generation, and the estimated cost of required allowances to cover these emissions.

**Shetland ANM Costs**

2.31. As part of the Northern Isles New Energy Solution (NINES)[8], SHEPD put in place an Active Network Management (ANM) system to assist SHEPD in its SO activities in operating in a more economic and efficient manner. As part of the extended interim energy solution, SHEPD has proposed the activities, and the relevant costs (£1m), of the ANM system during this interim period. The key

[8] Information on the NINES project can be found here: http://www.ninessmartgrid.co.uk/our-project/

components of these costs are upgrades to the ANM system and associated ANM operational licence fees and support costs.

2.32. We recognise the role the ANM system has in ensuring that system operation on Shetland is conducted in the most economic and efficient manner. We note that system upgrades and updates are required as part of any IT asset, and that annual licence and support costs are required to use this system. As such, we are minded to approve the originally submitted LPS ANM costs, which did not change in the revised submission, but these will be subject to an overall 10% efficiency reduction, which is discussed further in paragraph 2.42. This brings the costs down from £1m to £0.9m.

## Shetland Enduring Solution Process Costs

2.33. SHEPD requested additional allowances to begin implementing procedures to ensure security of supply on Shetland in the longer term, i.e. post 2025. SHEPD notes that a number of scenarios could unfold in the near future. For example, a further competitive process will be required if a transmission link solution progresses and a standby solution is required, or if a transmission link does not go ahead a full new solution is needed. Regardless of the solution, there are potential implications for different Distribution System Operation (DSO) models.

2.34. As the DSO on Shetland, SHEPD intends to carry out feasibility and stakeholder engagement exercises over the next few years to confirm the viability of a transmission link solution, and to identify whether procurement of a service from the solution may be the most cost-efficient option to meet demand.

2.35. SHEPD sees the process as twofold:

- DSO feasibility workstream: assessing whether a transmission link solution is the optimum and most efficient means of meeting Shetland's long-term energy needs.
- Standby procurement: workstream based on the assumption that a transmission solution option is progressed. Under this scenario, a competitive process would be required for stand-by services to complement supply via that transmission link and to ensure security of supply.

2.36. SHEPD has used SNES process costs to estimate the costs of undertaking this process. The total cost to undertake this work is estimated to be £3.3m. We accept these costs, subject to a 10% efficiency reduction. Therefore, we propose to allow £3m.

## SNES Residual Costs

2.37. In reaching our decision in November 2017 to reject the costs of the SNES, we were aware that NGSLL had incurred some costs in the period between being announced as preferred bidder by SHEPD, and Ofgem's final decision on SHEPD's recommendation. Although we considered this to be a matter for SHEPD and NGSLL-

Aggreko as the contracting parties for the SNES, we concluded that if SHEPD sought to recover any such costs through their licence, this would be subject to a cost assessment.

2.38. In 2017, NGSLL sought assurance from SHEPD that it would underwrite its costs legitimately incurred in undertaking a seabed survey if the SNES project was ultimately cancelled, given that it would require to start the survey ahead of contract award in order to meet the required SNES services start date and their associated delivery programme. In May 2017, SHEPD raised this issue with Ofgem and, following discussions, we agreed that SHEPD could make a submission to seek to recover these underwritten costs. We set out the criteria by which SHEPD's request for recovery of NGSLL's costs would be considered. These were as follows:

- the costs were limited to only seabed survey costs and third party project costs which must have been necessarily incurred prior to contract award in order to deliver in line with the SNES project timescales;
- the costs must have been incurred in the period between the publication of Ofgem's minded-to-decision and the announcement of our decision (19 July 2017 to 23 November 2017 inclusive);
- the costs must be demonstrated to have been reasonably and efficiently incurred;
- the costs must be supported by invoices; and
- the costs must be demonstrated to provide enduring value for consumers, including potential value to any future energy solutions.

2.39. In February 2018, NGSLL submitted to SHEPD a claim in respect of costs it had incurred following Ofgem's minded-to decision in July 2017. The majority of these costs were associated with undertaking the seabed survey.

2.40. SHEPD subsequently scrutinised these costs, with the aid of an Independent Auditor, which ensured that they were rigorously checked and that they complied with the set criteria. In March 2018, SHEPD submitted to Ofgem a report outlining the associated costs and how these complied with Ofgem's pre-defined criteria, recommending that £5.3m represented eligible costs. We have reviewed the costs and are satisfied with SHEPD's recommendation that they comply with the criteria. As such, we propose to allow SHEPD to recover the full £5.3m.

2.41. As these costs are to directly compensate a third party for the work they undertook and because SHEPD had no ability to influence these costs, we propose that they are recovered through the pass-through mechanism in 2019/20 only.

## Uncertainty and efficiency of ex ante cost allowances

2.42. To incentivise SHEPD to minimise costs within their control, we propose to apply an efficiency reduction to all of the ex ante allowances: LPS capex and opex, SVT PPA, ANM and the Shetland Enduring Solution Process Costs. Under this

proposal, we would reduce SHEPD's ex ante cost allowance by c10%.[9] We believe this will encourage SHEPD to achieve the best possible outcome with regard to costs for providing this extended interim energy solution. The exceptions to this are in relation to SVT PPA where we note that SHEPD currently has an agreement with SVT until December 2020 and also in relation to staffing costs where we accept SHEPD's view of the required costs.

2.43. At the same time, we recognise that there is still uncertainty around these costs. Therefore, in balancing the need to ensure value for money for consumers with security of supply, we propose to include an uncertainty mechanism. If, by the end of the price control period in 2023, SHEPD's costs have exceeded the ex-ante cost allowances by more than a pre-defined materiality threshold, SHEPD can apply for the allowances to be revised upwards. Ofgem can also trigger the mechanism to revise costs downwards, to reflect actual efficient cost incurred. We propose that this uncertainty mechanism, including the level of the materiality threshold, is considered and consulted on as part of the close out of the RIIO-ED1 price control.

[9] All proposed costs under ex ante allowances of the LPS capital and operational expenditure would be subject to a 10% efficiency reduction, but only the proportion of the SVT PPA ex ante allowances yet to be negotiated would be subject to the 10% efficiency.

# Appendix 1 - Feedback on this consultation

1.1. We want to hear from anyone interested in this document. Send your response to the person or team named at the top of the front page.

1.2. We've asked for your feedback in each of the questions throughout it. Please respond to each one as fully as you can.

1.3. Unless you mark your response confidential, we'll publish it on our website, www.ofgem.gov.uk, and put it in our library. You can ask us to keep your response confidential, and we'll respect this, subject to obligations to disclose information, for example, under the Freedom of Information Act 2000 or the Environmental Information Regulations 2004. If you want us to keep your response confidential, you should clearly mark your response to that effect and include reasons.

1.4. If the information you give in your response contains personal data under the Data Protection Act 1998, the Gas and Electricity Markets Authority will be the data controller. Ofgem uses the information in responses in performing its statutory functions and in accordance with section 105 of the Utilities Act 2000. If you are including any confidential material in your response, please put it in the appendices.

**General feedback**

1.5. We believe that consultation is at the heart of good policy development. We are keen to hear your comments about how we've conducted this consultation. We'd also like to get your answers to these questions:

1. Do you have any comments about the overall process of this consultation?
2. Do you have any comments about its tone and content?
3. Was it easy to read and understand? Or could it have been better written?
4. Were its conclusions balanced?
5. Did it make reasoned recommendations for improvement?
6. Any further comments?

1.6. Please send your comments to stakeholders@ofgem.gov.uk

# Appendix 2 – Proposed annual costs

**Proposed costs by year from 2019/20 to 2022/23 (£m, 2012/13 prices)**

| Category | 2019/20 | 2020/21 | 2021/22 | 2022/23 | **Total** |
|---|---|---|---|---|---|
| Interim energy solution ex-ante allowance | 27.8 | 17.7 | 15.9 | 15.4 | **76.7** |
| Interim energy solution Pass-through allowance | 8.6 | 8.2 | 8.0 | 8.0 | **32.8** |
| SNES Residual (Pass-through) | 5.3 | 0 | 0 | 0 | **5.3** |
| Enduring Solution Process (Ex-ante) | 1.3 | 0.8 | 0.6 | 0.3 | **3.0** |