

To: Electricity Distribution
Network Operators and other
interested parties

Date: 17 June 2019

To whom it may concern,

Consultation on our minded-to position to revise allowed expenditure for Subsea Cable Costs under special licence condition CRC 3F

Ofgem¹ introduced a number of uncertainty mechanisms for costs that were uncertain at the time of establishing the first RIIO electricity distribution price control (RIIO-ED1), which runs from 1 April 2015 to 31 March 2023. This includes re-opener mechanisms, which enable adjustments to electricity distribution network operators' allowances to accommodate costs associated with specific uncertain cost categories. These mechanisms are set out in Special Condition CRC 3F² of the Electricity Distribution Licence.

Subsea Cable Costs was one such uncertain cost category. The mechanism was introduced to allow Scottish Hydro Electric Power Distribution (SHEPD)³ to recover efficient costs of protecting subsea cables should they be required to do so. In 2015, Marine Scotland published the National Marine Plan⁴, which provides a framework for all marine activities in Scottish waters, including how subsea electricity cables are laid and protected on the seabed. The National Marine Plan states that subsea cables should be buried to maximise protection, unless it can be demonstrated that burial is not a feasible option. In these cases, cables should be suitably protected "where practicable and cost-effective and as risk assessment directs".

Since 2015, SHEPD has been developing a risk assessment tool (based on Cost Benefit Analysis (CBA) techniques) to understand if it needs to change its engineering practices to meet the requirements of Scotland's National Marine Plan, in terms of how subsea electricity cables are installed on the seabed.

The application window for this mechanism has been deferred twice⁵ over the course of ED1, to allow SHEPD to fully test and deploy the CBA tool and to incorporate this into their application. The deferred application window for this mechanism ran from 1 February 2019 to 28 February 2019.

¹ References to the "Authority", "Ofgem" "we" and "our" are used interchangeably in this document to refer to GEMA, the Gas and Electricity Markets Authority. The Office of Gas and Electricity Markets (Ofgem) supports GEMA in its day to day work.

² Charge Restriction Condition 3F: Arrangements for the recovery of uncertain costs.

³ This mechanism was only made available to SHEPD.

⁴ <https://www.gov.scot/publications/scotlands-national-marine-plan/>

⁵ [https://www.ofgem.gov.uk/system/files/docs/2018/03/direction_sseh_subsea_cable_costs_second_application_w
indow.pdf](https://www.ofgem.gov.uk/system/files/docs/2018/03/direction_sseh_subsea_cable_costs_second_application_window.pdf)

On 28 February 2019, SHEPD, which is part of Scottish and Southern Electricity Networks (SSEN), gave notice to Ofgem, of a proposed relevant adjustment of £58.9m (in this document all figures are in 12/13 prices) for the period 2015/16 to 2022/23. The level of additional funding requested exceeds the materiality threshold for Subsea Cable Costs (£4.54m).

Based on our analysis of SHEPD's application, and subject to further consideration of consultation responses, we propose to adjust SHEPD's allowances by £42.5m. We consider that SHEPD's submission is in consumers' interests, but we do not consider the proposed costs are acceptable. We therefore propose, based on our analysis of the application and subject to consideration of consultation responses, to adjust SHEPD's allowances by £42.5m rather than the requested £58.9m. Further detail is set out in Appendix 1.

We would like to hear the views of interested parties in relation to our minded-to position for adjusting the allowances associated with Subsea Cable Costs set out in this open letter. We would especially welcome responses to the specific question:

Do you agree with Ofgem's assessment and the proposed adjustment of £42.5m to SHEPD's allowed expenditure for Subsea Cable costs?

Responses should be received by 15 July 2019 and sent to:

Mark Hogan
Systems & Networks
Ofgem
10 South Colonnade
Canary Wharf
London
E14 4PU
Email: Mark.Hogan@ofgem.gov.uk

Unless marked confidential, all responses will be published by placing them in Ofgem's library and on its website www.ofgem.gov.uk. Respondents may request that their response, or part of response, is kept confidential. We shall respect this request, subject to any obligation to disclose information, for example, under the Freedom of Information Act 2000 or the Environmental Information Regulations 2004. Respondents who wish to have their responses remain confidential should clearly mark the document/s to that effect and include the reasons for confidentiality. It would be helpful if responses could be submitted electronically.

Yours faithfully,

Steven McMahon
Deputy Director, Systems and Networks, Electricity Distribution and Cross Sector Policy

Appendix 1: Detailed analysis of SHEPD’s proposed adjustments

Set out in this appendix are our current views, which are subject to consideration of consultation responses.

Step 1: Compliance with CRC 3F

We consider that in its application, SHEPD has demonstrated that it complies with all the requirements under CRC 3F and we are satisfied that:

- the costs submitted are based on auditable evidence and justification, and were not included in SHEPD’s Opening Base Revenue Allowances;
- there were no previous adjustments under this condition that should be taken into account;
- the costs submitted constitute a material amount⁶;
- the costs submitted were incurred or are expected to be incurred after 1 April 2015;
- the costs submitted constitute an adjustment to allowed expenditure that cannot be made under the provisions of another condition in SHEPD’s licence; and
- the application includes statements setting out:
 - the uncertain cost activities to which the proposal relates;
 - the changes to SHEPD’s allowed level of expenditure that are proposed and the Regulatory Years to which those changes relate; and
 - the basis of calculation for the changes to SHEPD’s allowed level of expenditure.

SHEPD gave Notice of a proposed relevant adjustment during the Subsea Cable Costs deferred application window, which ran from 1 February 2019 to 28 February 2019.

Step 2: Cost efficiency assessment – this sets out our minded to position on Volumes, Costs and Indirect Costs.

We considered the following questions when assessing SHEPD’s submission.

- Is the proposed investment proportionate and necessary to comply with the National Marine Plan and marine licensing regime?
- Has SHEPD properly considered the appropriate options for meeting the needs of the National Marine Plan and marine licensing regime?
- Are the requested incremental costs associated with the National Marine Plan and marine licensing regime economic and efficient?

We set out our assessment of the key cost categories presented to us in SHEPD’s submission below.

Subsea Cable Inspections

As part of its submission SHEPD is requesting £6.2m for inspection costs. We propose to allow no additional allowance for this programme of work.

SHEPD have explained to us that inspections are an important part of its risk-based approach to asset management which support its determination of which subsea cables are at risk of failure and therefore need to be repaired or replaced. SHEPD set out that under

⁶ As specified in Appendix 8 to CRC 3F of the special licence conditions.

the National Marine Plan and marine licence regime, the inspections required in order to discharge its obligations are more onerous than its previous subsea inspection programme.

Our initial view is that the inspection process set out in its RIIO-ED1 business plan should have met the standards required such that SHEPD would be able to prioritise its programme of work to meet the requirements of the National Marine Plan.

Proactive cable replacement protection costs

As part of the RIIO-ED1 business plan, SHEPD requested an allowance of £44.6m to proactively replace⁷ 112km of subsea cables. In its final determination⁸, Ofgem gave an allowance of £36.9m to replace c.85.1km

As part of its application under this mechanism, SHEPD have requested additional allowances to protect 95.2km of subsea cable under its proactive subsea cable programme. We are minded to reject the volumes that SHEPD has submitted to us and accept the protection costs for the efficient view of volumes decided in Ofgem's final determination: 85.1km. We have applied a reduction to SHEPD's request based on our efficient view of volumes set in RIIO-ED1.

Our minded to position gives a lower allowance than submitted by SHEPD for its proactive protection of cables. We propose to adjust SHEPD's RIIO-ED1 allowances by £33.7m for their replacement programme. This is £4m lower than the £37.3m proposed by SHEPD.

Subsea Cable Faults

As part of its application under this mechanism SHEPD have requested additional allowances to protect cables that have been replaced due to a fault. SHEPD have requested protection costs of £9.4m in relation to subsea cable faults. We propose to allow £3.1m for this programme of work.

SHEPD have based their application on historical fault rates over the last 10 years and this includes faults on the subsea cable from the cable joint or pole termination, through shore ends, tidal sections, and the deep-water sections. Using its historical fault rates, SHEPD has based its application on a forecast of 3.6 faults per annum over the remaining RIIO-ED1 period.

In our assessment, we have reviewed the fault data provided to us by the DNOs in their annual submissions. Through our analysis of SHEPD's historical fault rates across the DPCR5 and RIIO-ED1 periods (8 years), we have calculated fault rates of 1.2 and 0.4 faults per annum for HV and EHV subsea cables respectively. We have reviewed these fault rates and used the fault rate of 1.2 per annum in our analysis. We have then applied this to SHEPD's application to calculate our initial view.

Our minded to position gives a lower allowance than submitted by SHEPD for its subsea cable fault programme. We propose to adjust SHEPD's RIIO-ED1 allowances by £3.1m for their subsea fault programme. This is £6.3m lower than the £9.4m proposed by SHEPD.

⁷ This does not include protection of cables.

⁸ <https://www.ofgem.gov.uk/publications-and-updates/riio-ed1-final-determinations-slow-track-electricity-distribution-companies>

Marine Licensing Cost Benefit Analysis (CBA)

SHEPD have set out that the policies set in Scotland's National Marine Plan has meant that SHEPD had to change its approach to cable management for the RIIO-ED1 period. SHEPD submitted a marine licence CBA to support its final design for the project. The CBA model was designed to help with the identification of the best value method of cable installation, burial, protection, inspection and maintenance which satisfies all current legislation. SHEPD consulted with a broad range of stakeholders in the development of its CBA and it has presented its evidence to provide assurance to Marine Scotland that it has taken the correct approach.

We are satisfied that the requirement for the CBA was driven by marine licence requirements to protect cables and believe that the use of the CBA has demonstrated that SHEPD has avoided unnecessary protections costs. SHEPD is requesting £0.6m in additional allowances for its marine licence CBA. We propose to accept the costs associated with SHPED's marine licence CBA.

Indirect costs

As part of its submission SHEPD have requested £5m of indirect costs (ie costs that support direct delivery of work on the network). SHEPD have identified that additional internal and external project costs to support the determination of the level and method of protection and coordination of marine licence applications that are required.

We engaged extensively with SHEPD after the submission of its reopener application to obtain clarification and further information relating to its incremental indirect activities. It was necessary to consider funding that has already been provided in RIIO-ED1 for indirect activities, and whether it is appropriate for additional funding to be provided.

Our initial view is that the proposed indirect costs are due to the increased activities SHEPD has had to undertake to protect cables under the National Marine Plan and are necessary and proportionate.

Adjustment

Following our analysis of the volumes, costs and indirect costs, we propose a total adjustment of £42.5m, compared with the £58.9m requested by SHEPD (an overall difference of £16.4m less than requested), for the period of 2015/16 to 2022/23. This is detailed in Table 7 below.

Table 7. Proposed adjustment to total allowances (12/13 prices)

	<i>Ofgem proposed Adjustment</i>	<i>SHEPD submission</i>	<i>Difference</i>
	<i>£m</i>	<i>£m</i>	<i>£m</i>
Inspection Costs	£0m	£6.2m	-£6.2m
Proactive protection costs	£33.7m	£37.7m	-£4m
Subsea fault costs	£3.1m	£9.4m	-£6.2
Cost Benefit Analysis	£0.6m	£0.6m	£0m
Indirect costs	£5m	£5m	0m
Total	£42.5m	£58.9m	£16.4m