Consultation

Making a positive difference for energy consumers

RIIO-2 Re-opener Applications 2025 Draft Determinations – ED Annex	
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We[1] are consulting on our Draft Determinations on re-opener submissions by the Distribution Network Operators (DNOs) in January 2025. Scottish and Southern Electricity Networks (SSEN)[2] submitted projects under Special Condition (SpC) 3.2 Part O: Hebrides and Orkney Re-opener (HOt) and Electricity North West Limited (ENWL) submitted projects under SpC 3.2 Part K: Load Related Expenditure Re-opener (LREt). We are proposing to allow £100.995m of the £360.190m requested, which will enable more connections, resolve capacity constraints and meet new load growth from consumers.

We particularly welcome responses from those with an interest in electricity transmission and distribution networks. We also welcome responses from other stakeholders and the public.

This document outlines the scope and purpose of the consultation, the consultation questions, and explains how you can get involved. Once the consultation is closed, we will consider all responses. We want to be transparent in our consultations. We will publish the non-confidential responses we receive alongside a decision on next steps on our website at ofgem.gov.uk/consultations. If you want your response – in whole or in part – to be considered confidential, please tell us in your response and explain why.

[1] The terms 'the Authority', 'Ofgem', 'we' and 'us' are used interchangeably in this document. The Authority is the Gas and Electricity Markets Authority. Ofgem is the office of the Authority.
[2] The submission was from SSEN Distribution (SSEN) the trading name of Scottish Hydro Electrical Power Distribution plc (SSEH) and Southern Electric Power Distribution plc (SSES). The projects were submitted on behalf of SSEH.

Please clearly mark the parts of your response that you consider to be confidential, and if possible, put the confidential material in separate appendices to your response.

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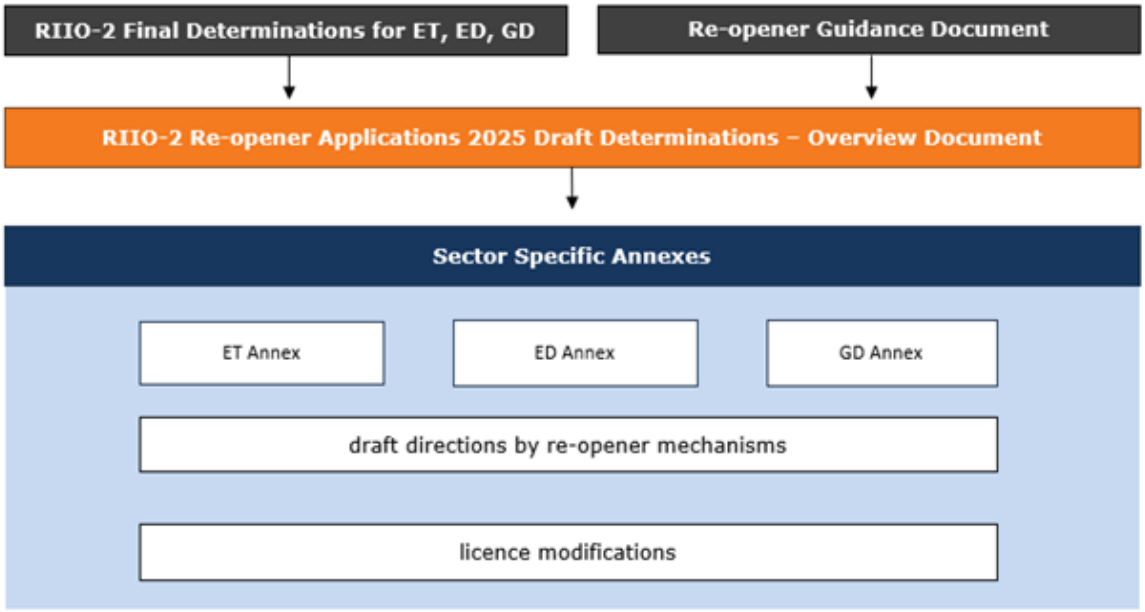
1. Introduction

1.1 This document is one of the annexes published alongside the RIIO-2 Re-opener Applications 2025 Draft Determinations (DDs). It focuses on the re-opener mechanism and the assessment of projects submitted in the electricity distribution (ED) sector. For general information including consultation approach, stages, how to respond, etc, please refer to the RIIO-2 Re-opener Applications 2025 Draft Determinations – Overview Document.

Figure 1 Navigating our Draft Determinations



Hebrides and Orkney Re-opener

1.2 When we made our RIIO-ED2 Final Determinations (RIIO-ED2 FDs) in November 2022, the customer needs for proposed projects in the Hebrides and Orkney islands[3] was unclear. This was because of outstanding third-party decisions, the outcome of which were likely to significantly affect supply and demand.

1.3 We agreed with SSEN's proposal to utilise a re-opener that could be triggered after SSEN had finalised a whole system review of needs that considers these external decisions.[4] As such, we decided not to fully fund those projects and instead introduced the Hebrides and Orkney Re-opener[5] for SSEN to request

[3] For a list of the projects, see 3.2.105(a) in Appendix 1.
[4] RIIO-ED2 Final Determinations SSEN Annex (ofgem.gov.uk) at paragraph 4.6
[5] SpC 3.2.105(c). A copy of SSEN's SpCs as made in February 2023 can be found at Decision on the proposed modifications to the RIIO-2 Electricity Distribution licences | Ofgem

additional funding. The Hebrides and Orkney re-opener covers costs associated with the outcomes of additional whole system analysis in the Scottish Islands, to contribute to net zero carbon targets, and ensures long-term security of supply to them.

1.4 To allow SSEN to undertake the pre-requisite pre-construction works required to deliver the whole system solution for the Hebrides and Orkney in an efficient and timely manner, we also decided to provide £20.630m in ex ante funding.

1.5 SSEN applied for four projects under the earlier 2024 Hebrides and Orkney re-opener window with our 2024 Final Determinations awarding additional allowances totalling £108.420m.

1.6 SSEN has now conducted additional whole system analysis and applied for funding under the Hebrides and Orkney 2025 re-opener window for six separate project costs.

Load Related Expenditure Re-opener

1.7 In our RIIO-ED2 FDs, a key objective is to help deliver net zero at lowest cost to consumers, while maintaining world-class levels of system reliability. Load Related Expenditure (LRE) is the investment needed to upgrade the electricity networks to relieve network constraints and to cater for expected future increases in supply or demand, for example from required connection of low carbon technologies or new generation.

1.8 As stated in the RIIO-ED2 FDs, the purpose of the LRE re-opener is to enable additional investment in DNOs primary network, if required and justified. The re-opener ensures networks have sufficient funding in RIIO-ED2 to enable net zero while also protecting consumers from paying higher costs than necessary.

What are we consulting on?

1.9 In the January 2025 re-opener window, SSEN and ENWL submitted applications for additional ED2 funding under the Hebrides and Orkney and LRE Re-opener mechanisms, respectively. SSEN applied for £158.590m related to six separate projects. ENWL has applied for £201.600m additional funding for a revised LRE programme.

1.10 We are consulting on our assessment of the needs case, optioneering, and efficient costs for these submissions, and welcome views from stakeholders on our DDs relating to the projects detailed in Chapter 3 (for the Hebrides and

Orkney Re-opener) and Chapter 4 (for LRE Re-opener). All monetary figures in this document are in 2020/21 prices to align with the RIIO-ED2 FDs price base.

Context and related publications

1.11 This document is intended to be read alongside:

1) RIIO-ED2 SSEN Final Determinations
2) RIIO-ED2 Re-opener Guidance and Application Requirements Document

For Hebrides and Orkney Re-opener

1.12 The scope of this consultation is limited to the projects submitted by SSEN in the 2025 application window. Additional information on these projects can be found in the re-opener submission documents on SSEN's website.

1.13 This document is intended to be read alongside:

1) SpCs (and SpC 3.2 Parts O and R in particular) of the Licence
2) RIIO-ED2 Re-opener: Scottish and Southern Electricity Network's Skye-Uist Project (Decision)
3) Final Determinations on RIIO-2 re-opener applications 2024: Electricity Transmission, Electricity Distribution and Gas Distribution – ED Annex

For LRE Re-opener

1.14 The scope of this consultation is limited to the application submitted by ENWL in the 2025 application window. Additional information on these projects can be found in the re-opener submission documents on ENWL's website.

1.15 This document is intended to be read alongside:

1) SpCs (SpC 3.2 Part K in particular) of the Licence

2. Summary of our Draft Determinations

2.1 **Table ED1** below summarises our Draft Determinations for the Hebrides and Orkney and LRE Re-openers covered in this annex.

2.2 Under the Hebrides and Orkney Re-opener submissions, we are proposing to allow the requested funding at £7.890m (5% of submitted project costs). In a similar way as in RIIO-ED2 FDs, this funding's purpose is to support SSEN to continue developing network options identified across RIIO-ED2 and into RIIO-ED3, that will deliver benefits to current and future users.

Table ED1: Draft Determinations for the re-openers in ED

Sector Group	Network	Company requested - Number of Projects	Company Forecast costs (£m)	Ofgem's DD - Projects Approved	Ofgem's DD - Projects Not Approved	Ofgem's DD - Cost adjustment (£m)	Ofgem's DD - Allowance (£m)
Electricity North West	ENWL	18	201.600	15	3	-108.495	93.105
Scottish and Southern Energy	SSEH	6	158.590	Partial approval*	N/A*	-150.700	7.890

**Not applicable: We agree with the needs cases but are not yet in a position to approve full funding for the proposed solutions. Please see Chapter 3 for further explanation.*

3. Hebrides and Orkney Re-opener

Questions

ED.Q1. Do you agree with our assessment of the of the needs case for the projects under Hebrides and Orkney Re-opener submission?

ED.Q2. Do you agree with assessment of the costs of projects under the Hebrides and Orkney Re-opener submission?

ED.Q3. Do you agree with our assessment of the development funding for the projects under Hebrides and Orkney Re-opener submission?

Purpose of the re-opener mechanism

3.1 As mentioned in paragraph 1.2, we introduced the Hebrides and Orkney Re-opener to enable SSEN to carry out whole system analysis and request additional funding for investments necessary to secure supply to the Hebrides and Orkney islands in Scotland.

3.2 The purpose of this re-opener mechanism is to allow for upward adjustment of baseline allowances once customer needs are clearer and there is more certainty over future electricity supply and demand.

Applications received

3.3 In its January 2025 Hebrides and Orkney Re-opener submissions, SSEN submitted funding requests related to four separate project proposals, as well as requests for additional indirect and supporting analysis funding:

SSEN's application

a. Inner Hebridean Islands of Islay-Jura: Install two new 33kv cables between the mainland and the islands (connecting Islay to Carradale GSP on mainland), and to uprate two existing overhead lines (between Lochgilphead – Knocklearach and Bowmore – Knocklearach). The project is intended to meet expected increase in demand, primarily associated with the decarbonisation of whisky distilleries on the islands and remove reliance on Bowmore Power Station (BPS);
b. Orkney islands: A new 66kV specification circuit to Orkney to support future island demand and to reduce dependence on Kirkwall Power Station (KPS), ensuring long-term system resilience;
c. Outer Hebrides and Skye: Additional funding to commence development work on an additional 33kV circuit between Ardmore – Harris GSP and on

a new 33kV circuit between Clachan switching station – Harris GSP to provide long-term resilience to both Skye and the Outer Hebrides; and

d. Inner Hebridean Islands of Mull, Coll and Tiree: Additional development funding to progress early-stage activities related to a new circuit between Mull and mainland Scotland and an additional 11kV cable from Mull to Coll, during ED3, to meet future network resilience and demand requirements.

3.4 We consider these projects to be eligible for the Hebrides and Orkney Re-opener application. Following decisions being made by third parties that were likely to affect supply and demand, SSEN has conducted additional whole system analysis to assess contribution to net zero carbon target delivery and ensure long-term security of supply for the Hebrides and Orkney.

3.5 As such, we consider the submission meets the eligibility requirements under SpC 3.2.105(c), i.e. SSEN has incurred or expects to incur costs associated with the outcomes of additional whole system analysis in the Scottish islands to contribute to net zero carbon targets and ensure long-term security of supply, including alternative activities to installing the cables outlined in SpC 3.2.105(a). The cost estimates are higher than the Materiality Threshold (£2.160m).

3.6 **Table ED2** below summarises our Draft Determinations for the Hebrides and Orkney Re-opener covered in this chapter.

Table ED2: Draft Determinations on the Hebrides and Orkney Re-opener submissions in 2025 (£m, 2020/21)

Company Proposed Project	Company requested - Forecast costs (£m)	Ofgem's DD - Cost adjustment (£m)	Ofgem's DD - Allowances (£m)
Islay - Jura	104.01		
Orkney	17.04		
Outer Hebrides and Skye	24.62		
Mull, Coll and Tiree	2.07		
HOWSUM 2024 application - Closely Associated Indirect (CAI) costs	9.49		
Whole system analysis adjustment	1.36		
Total	158.590	-150.700	7.890

Needs case and optioneering assessment

3.7 As part of its submission, SSEN provided engineering justification, including the needs case, details of its optioneering and, where appropriate, associated cost benefit analysis (CBAs). The full list of options SSEN considered for each project can be found in Appendix 4.

3.8 In accordance with the Re-opener Guidance, SSEN also sets out the detail on how the proposed expenditure aligns with its future business strategy, including consideration of how it relates to its RIIO-ED2 licence or to other statutory obligations. For instance, how the proposal fits in with the long-term whole system needs of the island groups.

3.9 We assessed the needs case outlined in the submitted engineering justification papers and analysed the options scope, risks, costs and benefits to inform the need for intervention and SSEN's preferred options. We agree that there is likely need for solutions to secure supply to the Scottish Islands, and remain ready to provide allowances for the right solutions that meet long term demands and deliver value for consumers. However, we don't believe that the current proposals from SSEN optimise the opportunity for island communities and consumers.

3.10 We require further evidence to justify SSEN's preferred solutions. In particular in response to this consultation we need SSEN to assess options that could achieve the required levels of resilience using fewer but higher capacity cables. Our detailed analysis of the projects and our evidence requirements can be found in the remainder of this chapter.

3.11 We will continue to engage with SSEN and any further evidence provided through the consultation period by SSEN and other stakeholders will be taken into account in our final decisions.

Islay-Jura

SSEN's proposals

3.12 SSEN has proposed, within RIIO-ED2, to install two new 33kV cables between the mainland and the islands, connecting Islay to Carradale GSP on mainland. During ED3, additional 33kV circuits will be provided from Port Ann to Islay and Jura, along with the installation of a 33kV auto-close scheme at Port Ellen. Beyond ED3, SSEN proposes an upgrade of the existing 33kV overhead lines between Lochgilphead – Knocklearach and Bowmore – Knocklearach by 2040.

3.13 According to SSEN, the main driver of this project is to meet expected increases in demand, as informed by SSEN's 2023 Distribution Future Energy Scenarios (DFES) and stakeholder engagement with the whisky distilleries. As a centre for the global whisky industry, the proposed interventions between Islay-Jura have been selected to support this demand growth, while meeting SSEN's Island Resilience Policy and decarbonisation of Distributed Embedded Generation (DEG).

The proposed project will remove reliance on BPS by 2033 which currently ensures reserve supplies for the islands.

3.14 SSEN also developed its proposed option to meet the company's Island Resilience Policy. The policy applies only to the loss of subsea cables as opposed to mainland or on-island networks. For island groups with demand of more than 4 MW, the policy seeks to ensure sufficient capacity to maintain sustained long-duration supplies to the full islands demand in the event of the loss of two in-feeding subsea cables (referred to as N-2 resilience). We note that this policy goes above the mandatory minimum requirements of Engineering Recommendation P2/8 [6] which sets the minimum levels of security of supply that Distribution licensees must achieve on Great Britain's (GB) distribution networks.

3.15 SSEN presented 13 options, as well as a 'do nothing' counterfactual.[7] SSEN included four of these options (options 2, 3, 4, and 13) in its submitted CBA, and proposed **Option 2** as the preferred option.

- **Option 2 (SSEN's preferred option)**: Install three new 33kV circuits to Islay (one from BAT Wind I and one from BAT Wind III and one from Port Ann GSP) and install a second Islay-Jura submarine cable. The capital cost of Option 2 is forecast by SSEN to be £84.186m during RIIO-ED2. SSEN suggests that this option meets all primary drivers, is the most cost-effective option and provides the region with N-2 resilience as well as provision of sufficient capacity for demand growth until at least 2050;
- **Option 3**: Install two new 33kV circuits to Islay (one from BAT Wind I and one from Port Ann GSP), one new 132kV circuit from Crossaig to Islay, and the second Islay-Jura submarine cable;
- **Option 4**: Install two new 33kV circuits (one from BAT Wind I and one from Port Ann GSP), one new 66kV circuit from Crossaig to Islay, and the second Islay-Jura submarine cable; and
- **Option 13**: Install two new 33kV circuits to Islay (one from BAT Wind I and one from new Crossaig 132/33kV) and the second Islay-Jura submarine cable.

[6] Engineering Recommendation P2/8 is a Distribution Network planning standard. It sets the minimum levels of security of supply that Distribution licensees must achieve on GB Distribution Networks. ENA EREC P2 Issue 8
[7] See Appendix 4.

Needs case assessment

3.16 We agree that there is the need for some level of load-related reinforcement due to the expected future increase in peak demand. SSEN assessed the options against a future peak maximum demand of >35MW. However, the levels of future demand are uncertain and, for the reasons outlined below, we are not convinced that the need for N-2 resilience must be met with the proposed number of subsea cables.

Optioneering assessment

3.17 We note that SSEN expects just over half of the estimated demand forecast by its DFES to come from whisky distilleries. This is based on a central case scenario where half of distillery decarbonisation occurs via electrification, the data for which was obtained from a survey of the Scottish Whisky Association (SWA) with limited response levels. SSEN also noted that other options to decarbonise distilleries on Islay are limited. We therefore consider SSEN's demand forecast to be uncertain.

3.18 SSEN's submitted CBA was based on a scenario where distillery decarbonisation is achieved fully through electrification. It showed that SSEN's preferred solution has only marginally the highest NPV. Because of this, we need stronger evidence around the certainty of distillery electrification demand, and need to better understand how sensitive the CBA outcomes are to assumptions around demand.

3.19 Furthermore, we need to understand more detail on why a three cable solution, using higher capacity cables, is not more cost effective. While a few of the proposed options included 66kV and 132kV subsea cables, which have sufficient capacity to meet the full islands demand alone, all options assume the need to retain some 33kV connections, and four subsea cables are required to provide N-2 resilience to the full islands demand. This is because network resilience planning studies assume the most onerous faults occur, so under an N-2 scenario the islands remain fed via 33kV. This approach doesn't examine the long-term economic benefits of providing N-2 resilience to the full island demand through a three subsea cable solution, which is feasible using 66kV subsea cables.

3.20 In the 2024 Hebrides and Orkney Re-opener submission, for the Pentland Firth East 3 (PFE3) project, we noted that among the reasons that we had previously rejected a past application for a similar subsea cable in 2019 (PFE2) were our reservations around whether SSEN's proposed solution was the optimal one from a consumer perspective. In our decision on SSEN's 2024 application, we

considered that that SSEN should carry out type-testing for larger 33kV subsea cable as this would enable a wider number of options to be considered. We consider that the suggested type-testing could open up more efficient options for consumers on the Islay-Jura project.

3.21 In the absence of evidence that type-testing of larger cables would have provided, SSEN has had to assume a rating of 35.5 MVA for the proposed 33kV subsea cables. A single cable with this rating would be insufficient to supply the future expected peak demand of about 39MW. This means that two 33kV circuits are required to supply the full island demand, and four subsea cables are required for N-2 resilience. If the cables can in fact be rated greater than 35.5 MVA, then it may be possible to achieve N-2 resilience with fewer than four subsea cables. While we acknowledge the circuit rating may be limited by the onshore overhead line rating, SSEN must demonstrate that the additional cost of onshore reinforcements needed outweighs the cost saving from reduced number of subsea cables.

3.22 We therefore require SSEN to provide evidence to demonstrate that options using larger subsea cables are unviable or less efficient than its proposed solution and consider that SSEN's optioneering is currently insufficiently robust to demonstrate that its proposed solution is economic and efficient.

Island Resilience Policy

3.23 Via SQ, SSEN provided a CBA to demonstrate the merits of its Island Resilience Policy. While we acknowledge the Value of Lost Load for long duration loss of supply to be significant, we consider the assumptions underpinning the probability of N-2 event, and subsequent outage duration are insufficiently justified. The frequency of N-2 events within the CBA are far higher than we would expect. We will engage with SSEN further on these assumptions in order to understand whether they are economically robust.

3.24 We also note that SSEN's proposal goes above the levels required to comply with its Island Resilience Policy and for compliance with Engineering Recommendation P2/8.[8] This is because no options presented consisted of two subsea cables fed by a single onshore circuit. We understand that this may be due to the limited capacity of the onshore assets within the options. However, SSEN has not

[8] Engineering Recommendation P2/8 is a Distribution Network planning standard. It sets the minimum levels of security of supply that Distribution licensees must achieve on GB Distribution Networks. ENA EREC P2 Issue 8

assessed the potential of using lower-cost higher-rated onshore assets to facilitate such a design. We also note that increasing the capacity of the onshore assets will allow for higher capacity subsea cables, potentially enabling the viability of a three subsea cable solution. We have therefore not yet seen sufficient evidence that SSEN's preferred solution is the efficient option.

3.25 As noted above, SSEN's proposed solution doesn't consider providing N-2 resilience to the full islands group demand via a three subsea cable solution, opting for a fourth subsea cable. SSEN has not evaluated the cost or feasibility of relying on Distributed Embedded Generation (DEG) or flexibility in an N-2 event, rather than a fourth subsea cable, which may prove economical in the long-term. While we acknowledge the uncertainty in future DEG or flexibility, we consider it must be evaluated as it may influence the technical specifications of any proposed solutions.

3.26 Based on the analysis above, we are proposing to not accept SSEN's preferred option. While we agree that there is the need for some level of load-related reinforcement, we consider the needs case to provide N-2 resilience to the full islands demand via subsea cables to be currently unjustified.

Orkney

SSEN's proposals

3.27 The existing network infrastructure of Orkney comprises two 33kV circuits from Thurso GSP on the mainland to Scorradale substation, which supplies Orkney with 14 33kV/11kV primary substations via four 33kV circuits. Additionally, Kirkwall Power Station (KPS) provides back-up power supplies to the islands in the event of a disruption to subsea cable supplies.

3.28 SSEN, through network assessment, has identified that the existing network infrastructure needs to be enhanced to support future island demand through RIIO-ED2 and to reduce dependence on KPS, meeting SSEN's Island Resilience Policy through staged intervention . According to SSEN, the main driver of this project is to meet the increasing demand (in accordance with the 2023 DFES projections) with an inclusion of additional 10MW of distillery demand as well as to meet future generation requirements on the islands. Cable sizing is essential to ensure the anticipated power transfer between the islands and the mainland.

3.29 SSEN has proposed to install a new 66kV specification circuit from Thurso South to a new primary substation at South Ronaldsay via John O'Groats on the

mainland. Although rated at 66kV, the proposal is for the cable to initially run at 33kV but with the expectation of transitioning to 66kV operation in ED3 once enabling local network upgrades have been delivered.

3.30 The options considered and presented by SSEN[9] included an initial 10 options and a 'do nothing' counterfactual. Five initial options (Options 2, 3, 7 and 8) were included in SSEN's CBA, with a further option (Option 7A), based on Option 7 but with initial operation of the new 66kV circuit from Thurso South to South Ronaldsay at 33kV, subsequently added. SSEN has proposed **Option 7A** as the preferred option.

- **Option 2**: Reinforcement of existing Pentland Firth East (PFE) and Pentland Firth West (PFW) cables with three new 33kV subsea cables, a second transmission link with interim use of flexibility (South Ronaldsay – John O'Groats route);
- **Option 3**: Reinforcement of existing PFE and PFW cables with three new 33kV subsea cables, the second transmission link with interim use of flexibility (South Ronaldsay – Hoy cable route);
- **Option 7**: Additional 66kV cable (operated at 66kV) followed by 66kV upgrade of PFE and PFW cables;
- **Option 7A (SSEN's preferred option)**: Additional 66kV cable (operated at 33kV during RIIO-ED2) followed by 66kV upgrade of PFE and PFW cables. The capital cost of Option 7A during RIIO-ED2 is forecast by SSEN to be £12.746m.
- **Option 8**: Upgrade of 66kV PFE and PFW cables followed by additional 66kV cable.

Needs case assessment

3.31 In SSEN's 2024 Hebrides and Orkney Re-opener submission, for the PFE3 project, we approved the replacement of the faulted PFE2 with a new PFE3 cable. This was intended to mitigate the risk of reliance on diesel generation in the event of a failure of the remaining Pentland Firth West (PFW) cable. SSEN selected a 33kV subsea cable as the preferred option. This was demonstrated to be cost-effective in the short term, as the alternative would be to delay the project by two years in

[9] See Appendix 4.

order to type-test a larger 33kV or 66kV solution. This is because a extended use of diesel generation through to 2029.

3.32 However, that assessment only considered the period to 2029. We expressed concerns at the time regarding the long-term suitability of the selected cable as from 2024-25 PFE3 alone is insufficient to meet full Orkney demand, meaning a PFW failure would require KPS operation. Also from 2028, the expected transmission to Orkney may be used to support supply to the island, but no assessment was provided to demonstrate that the Orkney distribution network could withstand a potential fault from the transmission network. As such, the link may need to operate open from the distribution network, limiting its ability to provide resilience.

3.33 We made clear in our 2024 FDs decision that although we felt that in the circumstances it was necessary to approve funding for PFE3, due to the short term considerations, we expected appropriate consideration of long-term whole system requirements in any future investment proposals for Orkney.

3.34 SSEN stated that the current network supplying Orkney will have insufficient capacity to meet the forecast demand from 2028 under a single outage of the Orkney transmission link, requiring reinforcement to comply with Engineering recommendation P2/8.[10] We note that P2/8 compliance is currently achieved via the running of KPS. However, SSEN did not consider whether the option of continued running of KPS under this N-1 scenario would be an acceptable short-term solution, and whether doing so would make long-term options that SSEN has rejected (such as a three cable 132kV solution) preferrable to its proposed solution.

3.35 Therefore, while we agree that there is likely a need for investment, we are not yet in a position to consider the proposed timing of the investment and consequently SSEN's proposed solution to be justified.

Optioneering assessment

3.36 We require further evidence to demonstrate whether options using larger cables could meet the full island demand. The highest rated asset considered in SSEN's optioneering is 66kV, the rating of which is assumed to be insufficient to meet the full island demand forecast via a single subsea cable. SSEN's proposed solution

[10] Engineering Recommendation P2/8 is a Distribution Network planning standard. It sets the minimum levels of security of supply that Distribution licensees must achieve on GB Distribution Networks. ENA EREC P2 Issue 8

therefore, requires four subsea cables (three 66kV, and one transmission link) to provide N-2 resilience to the full island demand.

3.37 SSEN has not considered any 132kV solutions, under which a single subsea cable could supply the full island demand forecast. This is because, in order to maintain N-1 resilience, such a solution would require installation of a new GSP on Orkney by 2028. SSEN does not consider this feasible due to planning and consenting requirements. However, SSEN has not considered the running of KPS under N-1, which would potentially defer the need for immediate network reinforcement. If immediate investment is not required then a 132kV solution may become the preferred option. We therefore consider that this option should be evaluated.

3.38 Further, SSEN has not considered any options to install a 132kV subsea cable, but initially operate it at 66kV, potentially allowing sufficient time to install the necessary GSP. This contradicts what SSEN previously stated in relation to the PFE3 project, where it stated that should it opt for a 66kV solution then its preference would be to install a 132kV rated subsea cable to be operated at 66kV. We therefore consider that in order to justify that its optioneering is economic and efficient, SSEN should consider potential 132kV solutions.

Island Resilience Policy

3.39 We note that SSEN has not provided a CBA to demonstrate the merit of its Island Resilience Policy for this investment proposal. However, we anticipate the outcome would be similar to that provided for Islay-Jura. As mentioned previously, we have concerns regarding the assumed frequency and duration of N-2 events, and will seek to engage with SSEN on this further.

3.40 SSEN's proposed solution comprises four subsea cables, each with dedicated onshore sections. As is the case with Islay-Jura (see paragraphs 3.24 to 3.26 above), this proposal goes above the levels required to comply with its Island Resilience Policy and for compliance with engineering recommendation P2/8. Similar to Islay-Jura, SSEN has not assessed the feasibility or cost-effectiveness of alternative options, such as relying on DEG in an N-2 scenario. We need to have further evidence on these areas in order to consider the optioneering to be sufficiently robust.

Outer Hebrides and Skye

SSEN's proposals

3.41 SSEN is proposing to install a second 33kV subsea cable between Ardmore and Harris. The Outer Hebrides strategic plan has the primary objective to support long-term energy resilience and removal of reliance on DEG by the end of ED3.

3.42 SSEN's request is for an additional £3.050m to cover preparatory development work on the proposed cable. SSEN has requested new development funding for activities to be undertaken in RIIO-ED2, with the intention of progressing design work ahead of a full proposal in the ED3 Business Plan.

3.43 In addition to the funding request for preparatory work, SSEN has requested funding to cover the cost of fuel and carbon for the four stations (Battery Point, Arnish, Loch Carnan and Barra Power Station) that need to operate during the identified planned outages by SSEN Transmission on Skye and Outer Hebrides. The total request for the operational costs is £19.650m.

Needs case assessment

3.44 We agree that increasing network capacity and enhancing resilience on Skye and Outer Hebrides, is likely to be necessary in the future. We, therefore, agree that the continuation of development work is justified.

3.45 Our view is that funding for operational costs for the four impacted power stations falls outside the scope of the current re-opener which has been established primarily to fund investments in new infrastructure, upgrades to existing network, or for implementing whole system solutions around the Scottish Islands. As such, we propose to reject this element of the funding request.

Mull, Coll and Tiree

SSEN's proposals

3.46 For the three islands of Mull, Coll and Tiree in the Inner Hebrides, SSEN's proposal is for an additional 33kV circuit between Tullich switching station on the mainland to Lochdonhead on Mull, an additional 11kV circuit between Dervaig on Mull and Coll, and the replacement of Tiree DEG. The total amount of funding requested to progress early-stage activities associated with these interventions is £2.070m.

3.47 The ED3 projects that have been identified in need of the additional development funding are for a new circuit between the mainland and Mull, replacement of the DEG on Tiree, an additional Skye to Harris circuit, a new circuit from mainland to Islay and strategic whole system analysis.

Needs case assessment

3.48 As with the Outer Hebrides and Skye, we agree that meeting increasing demand and enhancing resilience on these islands, is likely to be necessary in the future. We also agree that there are future generation requirements on the islands that we likely need to consider in our future decisions.

3.49 According to SSEN's DFES projections, the existing Mull archipelago network will not support the projected demands out to 2050 without additional investment. In addition, cable sizing is essential to ensure the anticipated power transfer between the islands to meet their future generation requirements as well as to remove reliance on DEG that currently operates as a back-up supply Coll and Tiree. Therefore, we agree that the continuation of development work is justified.

Overall assessment of needs cases and optioneering

3.50 We agree that investment is needed to address the challenges facing the Scottish Islands. However, concerns we have previously expressed relating to SSEN's approach to optioneering remain, and our view is that further work is required in order for SSEN to justify its specific proposals.

Cost assessment

Project and development costs: Islay-Jura; Orkney; Outer Hebrides and Skye; Mull, Coll and Tiree

3.51 Given our view that further work is required for SSEN to justify its specific proposals, we do not think it would be appropriate to approve the requested project funding at this stage.

3.52 SSEN previously received baseline allowance of £20.630m for Hebrides and Orkney development at RIIO-ED2 Final Determinations. Our view is that, given the progress that has been made in developing the solutions to date, it would be appropriate to provide some additional funding for SSEN to continue developing the solutions, and for it to make a further request for full funding at a point in time when the solutions are suitably developed and justifiable.

3.53 We note that SSEN has requested additional development funding of £7.890m to enable the completion of outstanding works for RIIO-ED2 and support the transition to delivery in ED3. We propose approving additional allowances equal to this amount. Our expectation for this allowance is to enable SSEN to advance network option development essential to RIIO-ED2 and lay the groundwork for ED3, supporting the long-term interests of consumers now and in the future. We expect future submissions to be supported by a comprehensive engineering process that demonstrates all credible options have been properly explored.

3.54 This funding is linked directly to the solutions for Islay-Jura, Orkney, Outer Hebrides and Skye, Mull, Coll and Tiree, and therefore, in order to avoid double funding, will be netted off any future allowances relating to these island solutions.

Additional SSEN requests for funding

3.55 SSEN has also included in its applications requests for additional funding for:

- Indirect costs (£9.490m); and
- Whole system analysis costs (£1.360m)

Our draft determination is to reject both requests, as explained below.

Indirect costs

3.56 SSEN requested a recovery of additional CAI costs utilising the 10.8% scaling for its 2024 applications. SSEN's request is that additional funding provided through a re-opener should be matched with an increase in indirect allowances to cover overhead costs.

3.57 We consider these additional CAI costs to be covered by the ex ante funding of £20.630m awarded to SSEN in RIIO-ED2 and therefore propose rejecting this request.

Whole system analysis costs

3.58 SSEN requested additional allowances of £1.360m for whole system analysis, including to inform the delivery of ED3 and 2050 whole system plans. In our view it would not be appropriate to approve additional allowances as these are business as usual Business As Usual (BAU) activities, and, as the HOWSUM mechanism applies only to SSEN, other DNOs have not been afforded the opportunity to make similar requests.

Our Draft Determinations

3.59 Taking all the evidence currently available to us into consideration, our Draft Determinations position is to approve additional allowances of £7.890m to enable SSEN to continue to invest in the Hebrides and Orkney region and to further refine and develop its detailed proposals.

3.60 As the energy regulator our priority is to protect current and future energy consumers by ensuring that the energy solutions are going to be beneficial for them, and are based on clear, robust information and sound engineering justification. We expect network companies to demonstrate this thorough evaluation of all viable solutions and to progress in a direction that delivers the best long-term outcomes for consumers. In order to provide approval we require all funding submissions to be robust from an engineering perspective, underpinned by a thorough and transparent optioneering process, where all viable options are investigated, and the truly cost-efficient and long-term beneficial ones are put forward for approval.

3.61 We will continue to engage with SSEN during the consultation period to ensure our reasoning for not proposing full approving the current funding request is fully understood, and for SSEN to understand what additional evidence it might provide to justify its proposals. We have pointed out in this chapter some areas where we feel additional work and where further evidence is needed for SSEN to justify its specific proposals related to Islay-Jura and Orkney. For convenience we have listed the main areas below:

<u>Islay - Jura</u>

- Further evidence to inform more robust assessment of future demand;
- Sensitivity analysis against variable group demand;
- Evaluation of a three-subsea-cable solution, using either higher rated 33kV subsea cables, or three 66kV subsea cables;
- Provision of further evidence to justify proposed levels of resilience; and
- Explore the feasibility of relying on DEG in an N-2 event as an alternative to installation of a fourth subsea cable.

<u>Orkney</u>

- Explore continued running of KPS under N-1 to allow for time needed to progress a 132kV solution;

- Further evidence to justify the exclusion of 132kV solutions from the optioneering; and
- Explore the feasibility and cost-effectiveness of alternative options, such as relying on DEG in an N-2 scenario as an alternative to installation of a fourth subsea cable (third distribution subsea cable).

4. Load Related Expenditure Re-opener

Questions

ED.Q4. Do you agree with our assessment on the needs case of the Engineering Justification Papers (EJPs) submitted under the LRE re-opener?

ED.Q5. Do you agree with our assessment on the optioneering of the EJPs submitted under the LRE re-opener?

ED.Q6. Do you agree with our approach to use disaggregated benchmarking models to inform the efficient costs of ENWL's application?

ED.Q7. Do you agree with our draft determinations of efficient costs for ENWL's application under the LRE re-opener?

ED.Q8. Do you agree with our view that the proposed reinforcement (the loop circuit) to A-road service stations should be classed as sole use and charged to the connecting customer?

The LRE re-opener mechanism

4.1 In the RIIO-ED2 FDs, we provided LRE ex ante allowances to enable up-front investment to support Net Zero where there is high confidence in its needs case and to allow DNOs to respond quickly to future changes in demand. We also established an LRE Re-opener for the DNOs to request additional funding if required to cater for the uncertainty in LRE activities as described in SpC 3.2.75 (as listed in Appendix 2).

4.2 The scope of the LRE Re-opener is defined in Appendix 8 of the Re-opener Guidance and Application Requirements Document. The LRE Re-opener can be triggered in relation to costs in the following cost categories, where these costs incurred or expected to be incurred, are caused by an increase in load on the network:

- CV1 - Primary reinforcement (including additional justification for flexibility services, if required);
- CV2 - Secondary reinforcement, excluding the areas covered by the LRE volume drivers;
- CV3 - Fault level reinforcement;
- CV4 - New Transmission Capacity Charges;
- C2 – Connections; and
- Load Related Strategic Investment.

Applications received

4.3 In the January 2025 application window, we received one application from ENWL requesting additional funding for LRE within ED2.

4.4 ENWL submitted a full revised RIIO-ED2 LRE plan with total estimated value of £315.000m. When existing LRE ex ante allowance of £113.400m is netted off it gives total additional funding request of £201.600m, with breakdown in **Table ED3** below.

Table ED3: Funding request from ENWL

Template	Cost Category	Funding Request (£m)
CV1	Primary reinforcement	113.700
CV2	Secondary reinforcement	25.800
CV3	Fault level reinforcement	5.500
CV4	New Transmission Capacity Charges	-
C2	Connections	56.600
	Load Related Strategic Investment	-
	Total	**201.600**

4.5 In accordance with the requirements in re-opener guidance, ENWL submitted an overarching narrative and 18 EJPs to support its application.

4.6 ENWL also submitted proposals to modify SpC 3.11 (Net to Gross adjustment for LRE) and SpC 3.3 (Evaluative Price Control Deliverable).

Approach to Assessment

4.7 We have assessed the submissions in accordance with the relevant SpCs and the Re-opener Guidance and Application Requirements Document.

4.8 We considered the application and its justification for the funding requested in accordance with our Principal Objective and statutory duties. In line with the Re-opener Guidance and Application Requirements Document, our assessment of each cost category covers the following areas:

- Needs case assessment;
- Assessment of options and preferred options; and
- Cost assessment.

Needs case assessment

4.9 As part of its submission, ENWL set out the detail behind its plans relating to the engineering justification and the proposal's needs case.

4.10 The EJPs act as a robust decision support tool. They should be transparent about options scope, and which risks, costs and benefits were considered by ENWL as part of its analysis to inform the need for intervention and its proposed solutions.

4.11 As part of the needs case, ENWL is also required to provide justification for why this project is being proposed now rather than in its RIIO-ED2 proposal, as well as drawing out the reasons why each project cannot be included in the RIIO-ED3 submissions.

Assessment of options

4.12 We have undertaken a technical review of the solutions considered by ENWL and determined whether we are satisfied that ENWL has given suitable consideration to all viable options. The materials we reviewed comprised of ENWL's submission documents and supporting evidence (eg CBA) and responses to supplementary questions.

4.13 In addition, we also reviewed the efficiency of the proposed engineering solutions to determine whether the proposal is a proportionate solution to the identified needs case, ensuring the scope has not expanded without further justification beyond scope required to meet the identified need.

Draft Determinations on Needs Case and Optioneering

4.14 With the exception of some projects for Electric Vehicle Charge Points (EVCP) and some secondary network reinforcement programmes, we are satisfied that there is a need for all projects supported by EJPs. We are satisfied that ENWL has appropriately considered all viable options, and that, from a consumer perspective, its preferred option is the optimal one in relation to each of the EJPs.

4.15 **Table ED4** summarises our views on the needs case on the EJPs. Details on the rationale for rejecting the needs case and optioneering of the projects for EVCPs at Motor Service Areas (MSA), A-road service stations (ARSS) and bus depots, and some secondary network reinforcement programmes are given in paragraphs 4.16 to 4.30 below.

Table ED4: Draft Determinations on Needs Case on EJPs

No. of EJPs assessed	Needs Case approved	Needs case rejected or partially rejected	Optioneering approved	Optioneering rejected or partially rejected
18	15	3	15	3

EVCPs at Motor Service Areas, A-road Service Stations and bus depots

4.16 For the eight MSAs, the proposed investments aimed at providing sufficient firm capacity[11] for the accepted EVCP connections, and non-firm capacity at the level of non-firm connection for the anticipated 2035 EVCP demand because ENWL assumed the EVCPs will provide Demand Side Response (DSR).

4.17 ENWL provided analysis on the shortfall of capacity at the MSAs by comparing the projected EVCPs demand against the existing capacity. In all but one of the proposed schemes ENWL's proposal is for Extra High Voltage (EHV) reinforcements (the remaining one is a High Voltage (HV) reinforcement). This is because ENWL has assessed that there is insufficient HV capacity to meet its expected high 2035 demand forecasts.

4.18 ENWL proposes to install new primary substations at the MSAs, with non-firm EHV arrangement and provisions to upgrade to firm EHV arrangement if required in future. Before the upgrade, ENWL proposes HV interconnection in addition to the new primary substation to create sufficient firm capacity for the accepted EVCP connections.

4.19 It is this HV interconnection that would lead to the works being classified as infrastructure investments and for the costs consequently to be socialised and paid for by consumers through their electricity bills. If not classified as infrastructure then the works would ordinarily be paid for by the specific customer requesting the connection. However, we consider the design approach unjustified, particularly the HV interconnection, because:

- If the EVCPs do provide DSR then only non-firm capacity is required;
- In the event that the EVCPs require firm connections then the firm capacity released by the HV interconnection is insufficient for the future EVCP

[11] A connection is firm or non-firm depending on how many circuits supply the site and the arrangement of those circuits. Non-firm connections have only one circuit into the site and are the simplest type of connection. Firm connections have two or more circuits into the site.

demand. The incremental EHV approach will therefore be short-lived, and staggered investment at the sites will likely be uneconomical in the long run. Further, ENWL considers the 2035 demand forecast only, beyond this further EHV reinforcement will be required regardless of whether or not the EVCPs provide DSR;

- ENWL confirmed that the HV interconnection would normally be run in open position, that is it is not connected normally and will only be closed when needed. Hence, although the HV interconnection firms up some existing non-firm capacity (as opposed to also releasing capacity to the existing HV network), it would provide only increased resilience and would not add new capacity to the HV network;
- ENWL has not evidenced that firming of capacity released into the existing network via the interconnectors is needed, nor has it evidenced that it is sufficient and the most economical solution for the long-term needs of the demand group.

4.20 Similar issues exist in the proposals for EVCPs at ARSS and bus depots. For EVCPs at ARSS and bus depots, the anticipated 2035 EVCP demand can be accommodated via the HV network. However, ENWL does not yet appear to have received any connection requests for EVCPs at the proposed locations. The investment therefore appears to be in anticipation of EVCP connection requests. In contrast to EVCPs at MSAs, ENWL assumes that these EVCPs will not provide DSR, and therefore will require firm connections. The rationale for this difference in assumptions has not been adequately explained.

4.21 For ARSS, ENWL proposes to install distribution substations at the ARSS sites connected via a looped cable to an existing HV feeder (expected to meet the 2028 forecast EVCP demand), or a dedicated HV feeder with HV interconnection to the existing HV network (expected to meet the 2035 forecast EVCP demand). The looped connection schemes would serve only the ARSS EVCPs, we therefore consider that the reinforcement should be classed as sole use and charged to the connecting customer.

4.22 For the HV interconnected schemes, our concerns regarding the longevity and benefit of the interconnection to consumers are similar to those outlined for MSAs above. ENWL has not demonstrated that a firm connection via two dedicated feeders is not a more economical long-term solution.

4.23 One concern we have is that although the intention is for the additional capacity to be used for EV charging, in reality ENWL has no control over the connections requests it will receive and the nature of the connecting parties. This means that

there is no guarantee that if consumers were to pay for the proposed works that, in return, they would receive the additional EV charging capacity that they thought they were paying for.

4.24 Taking into account the above, we do not consider it in the interest of consumers to fund the proposed investment and propose to reject the needs case and optioneering of the proposed investment for EVCPs at the MSAs, ARSS and bus depots.

Secondary Reinforcement

4.25 In addition to the supply to EVCPs at ARSS and bus depots, ENWL also proposed the following secondary reinforcement programme:

- Power quality;
- Opportunistic upsizing of transformers; and
- Splitting HV feeder networks with more than 2,500 customers.

4.26 Power quality is an on-going programme for RIIO-ED2. We consider this work category should continue and propose accepting the needs case and optioneering of this programme.

4.27 In RIIO-ED2 FDs, we introduced two volume drivers with caps to cover the secondary reinforcement expenditure:

- Secondary Reinforcement Volume Driver (SRVD); and
- LV Services Volume Driver (LVSVD).

4.28 In ENWL's view there are limitations of the current volume driver metrics relating to the upsizing of transformers and the splitting of HV feeder networks. As such, it requested additional funding for the two programmes in the LRE re-opener application.

4.29 When we decided to introduce two LRE volume drivers in RIIO-ED2 FDs, we recognised that the mechanisms may need to be revised during the price control period. We stated in the RIIO-ED2 FDs that we will conduct a review of the two LRE volume drivers within year three of the price control period to ensure that the mechanisms are fit for purpose, being used as intended, and that the cap of the two volume drivers is at an appropriate level given changes in demand. We will take into account the issues raised by ENWL for the two programmes in the review, with wider consideration of the impacts to all DNOs.

4.30 We therefore proposing to reject ENWL's current funding request related to reinforcement for, what it refers to as, the "opportunistic upsizing of transformers" and "splitting of HV feeder networks with more than 2,500

customers". Instead these investments should be considered through the volume drivers and associated review.

Cost Assessment

4.31 In RIIO-ED2 FDs, activity-level assessment or disaggregated benchmarking was an essential tool in our cost assessment toolkit for LRE. We consider it appropriate to continue the use of disaggregated benchmarking cost models to inform the efficient cost of the LRE Plan submitted under the LRE Re-opener.

4.32 We explained our benchmarking approach in RIIO-ED2 FDs Core Methodology and explain below how we have applied it in our assessment of ENWL's re-opener application.

Primary Reinforcement (CV1)

4.33 Primary reinforcement covers reinforcement activities undertaken to resolve capacity constraints on the Primary Network (33kV and above). For RIIO-ED2 FDs, we benchmarked the costs to the industry median unit cost. The volumes were adjusted in proportion to a combination of: the industry median value of capacity added (75% of the adjustment), and the proportion of EJPs rejected (25% of the adjustment).

4.34 For the re-opener assessment we have updated the cost benchmark model with the cost and volume information from ENWL's re-opener application. We then kept the benchmark unit costs at the same levels as RIIO-ED2 FDs and produced a model cost before the EJP adjustment.

4.35 Rather than adjusting the volume by a percentage for projects with EJP rejected, as was done for ED2 FDs, we have excluded the costs associated with the specific projects that we are proposing to reject.

4.36 Our draft view of the modelled cost for CV1 after taking out the costs of those projects with EJPs rejected is £104.938m.

Secondary Reinforcement (CV2)

4.37 Secondary reinforcement is work carried out on the secondary network (HV and LV) to enable new load growth. For RIIO-ED2 FDs we used a disaggregated unit cost assessment and adjusted the volumes by comparing DNOs' reinforcement requirements with forecast Low Carbon Technologies (LCT) driven demand growth.

4.38 In RIIO-ED2 FDs we introduced two volume drivers using the unit rates to cover the majority of the cost of secondary reinforcement. We allowed part of the CV2

allowance in RIIO-ED2 baseline allowance (mainly for power quality), and will only consider re-opener funding requests under CV2 if the scope is outside the coverage of the two volume drivers.

4.39 As explained in paragraphs 4.16 to 4.30, we are proposing to accept the power quality programme but reject the needs case and optioneering for projects related to EVCPs and exclude some programmes related to secondary reinforcement, we therefore propose to exclude the related funding for these works.

4.40 After taking out the costs of the projects with EJPs rejected, our draft view on the efficient cost for CV2 is £3.900m, which covers the power quality programme.

Fault Level Reinforcement (CV3)

4.41 Fault Level reinforcement covers work carried out on the existing network where the primary objective is to alleviate fault level issues associated with switchgear or other equipment. For RIIO-ED2 FD we used a combined unit cost modelling and Modern Equivalent Asset Value (MEAV) benchmarking approach.

4.42 We have updated the cost benchmark model with the cost and volume information from ENWL's re-opener application. We then kept the benchmark unit costs at the same levels as RIIO-ED2 FDs and produced a model cost.

4.43 Our draft view of the modelled cost for CV3 is £19.490m.

Connections (C2)

4.44 Connections refers to the provision of new or upgraded points of connection between the network and an end customer, which can be metered or unmetered.

4.45 In RIIO-ED2 FDs, we used industry median unit cost per connections activity voltage and connection type using RIIO-ED1 and RIIO-ED2 data (except for two categories - Single Service LV connections, and LV end connections involving HV work – where RIIO-ED2 data only was used). We used the number of meter point administration numbers (MPANs) connected as the cost driver and accepted the MPAN volumes as submitted by each DNO.

4.46 We then applied a non Price Control Allocation to recognise that some of the overall indirect costs are included in customer contributions for customer funded reinforcement.

4.47 We have updated the cost benchmark model with the information from ENWL's re-opener application. We then kept the benchmark unit costs at the same levels as RIIO-ED2 FDs and produced a model cost.

4.48 We consider it appropriate to retain the non Price Control Allocation at the same level of RIIO-ED2 FDs to ensure consistency.

4.49 Our draft view of the modelled cost for C2 after the non Price Control Adjustment is £78.177m.

Model Costs

4.50 Using the methodology as described in paragraphs 4.31 to 4.49 above, the model costs and our draft determinations (Ofgem's DD) after netting off the ex ante ED2 funding for various cost categories are summarised in **Table ED5** below.

Table ED5: Model Costs and Ofgem's Draft Determinations

Template	Cost Category	Model Costs for ENWL LRE Plan (£m)	Ex ante Funding in ED2 (£m)	Ofgem's DD (£m)
CV1	Primary reinforcement	104.938	44.500	60.438
CV2	Secondary reinforcement	3.900	6.000	-2.100
CV3	Fault level reinforcement	19.490	26.100	-6.610
CV4	New Transmission Capacity Charges	-	-	-
C2	Connections	78.177*	36.800	41.377
	Load Related Strategic Investment	-	-	-
	Total	**206.505**	**113.400**	**93.105**

* with non-Price Control Adjustment (NCPA) of £8.7m (at the same level of RIIO-ED2 FDs)

Other views

4.51 As mentioned in paragraph 4.6, ENWL proposed modification to SpC 3.11. This SpC establishes a process for setting the value of the term $NGLRE_t$ (the new to Gross Load Related Expenditure term). It is a closeout adjustment to allowances where the actual percentage of Gross Load Related Expenditure provided by Specific Customer Funded Reinforcement during the Price Control Period falls outside the Specific Customer Funded Reinforcement Percentage Band. The figures of the baseline percentage and the upper and lower percentage bands for all DNOs are part of the ED2 FDs. ENWL's proposed modification is related to the parameters used in the calculation of the baseline percentage and the upper and lower percentage bands.

4.52 We consider it is beyond the scope of assessment of the LRE Re-opener. Wider consideration and discussion with all DNOs are required. We will separately review the proposal at a later date.

5. Draft Direction and Notice of Licence Modification

Hebrides and Orkney Re-opener

5.1 In accordance with SpC 3.2.110 of the SSEH's licence, we have included the draft text of a direction in Appendix 6 with our proposed modification to the term HOt in Appendix 1 to SpC 3.2 of SSEH's licence.

LRE Re-opener

5.2 In accordance with SpC 3.2.81 of ENWL's licence, we have included the draft text of our notice of licence modification in Appendix 4 with our proposed modification to the term LREt in Appendix 1 to SpC 3.2 of ENWL's licence.

6. Next steps

6.1 We welcome your responses to this consultation, both generally, and in particular on the specific questions in Chapter 3 (for the Hebrides and Orkney Re-opener) and Chapter 4 (for the LRE Re-opener). Please send your response to: reopenerconsultations@ofgem.gov.uk. The deadline for responses is 26 August 2025.

6.2 We will carefully consider all consultation responses and endeavour to conclude our assessment of the 2025 Hebrides and Orkney Re-opener and LRE Re-opener applications with a decision by the end of calendar year 2025.

6.3 To give effect to our decision on the LRE RE-opener, we will also publish a statutory consultation proposing relevant modifications to ENWL's electricity distribution licences in accordance with section 11A of the Electricity Act 1989. We have included the current proposed modifications (subject to our Final Determinations) in Appendix 4.

Appendices

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Appendix 1 SpC 3.2.105 - List of Activities under Hebrides and Orkney Re-opener

3.2.105 The Hebrides and Orkney Re-opener may be used where:

a) the licensee has incurred or expects to incur costs as a result of changes to the scope or timing of work relating to twelve sub-sea cables:

   i. Skye to Uist (North route);
   ii. Skye to Uist (South route);
   iii. Pentland Firth West;
   iv. Pentland Firth East;
   v. Mainland Orkney – Hoy South;
   vi. Orkney (additional 66kV circuit);
   vii. Eriskay – Barra 2;
   viii. South Uist – Eriskay;
   ix. Mull to Coll (double circuit);
   x. Coll - Tiree (double circuit);
   xi. Mainland - Jura (double circuit); and
   xii. Jura - Islay (double circuit); or

b) the licensee has incurred costs associated with ensuring security of supply in the Scottish islands, and can demonstrate efficient whole systems considerations have been taken into account, including considering alternative activities to installing the cables listed in paragraph (a); or

c) the licensee has incurred or expects to incur costs associated with the outcomes of additional whole system analysis in the Scottish Islands to contribute to Net Zero Carbon Targets and ensure long-term security of supply, including any alternative activities to installing the cables outlined in (a); and

d) the change in those costs in paragraphs (a) or (b) exceeds the Materiality Threshold and are not otherwise funded by the SpCs.

Appendix 2 SpC 3.2.75 - List of Activities under LRE Re-opener

3.2.75 The LRE Re-opener may be used where:

(a) the licensee's LRE has increased or is expected to increase, as a result of an increase in:

i. current or forecast load-related constraints on the Distribution System that are in place at the time the licensee makes a LRE Re-opener application relative to the constraints associated with the forecast demand used by the Authority to set ex ante allowances for the Price Control Period; or

ii. the proportion of expenditure associated with load-related constraints on the Distribution System to be funded through Use of System Charges relative to the assumptions used by the Authority to set allowances that are in place at the time the licensee makes a LRE Re-opener application; or

(b) there is a change in conditions on the Distribution System relative to the assumptions used to set allowances; and

(c) the increase or expected increase in LRE:

i. is not provided for by the sum of LRE ex ante non variant allowances specified in Appendix 2 of the Licence, and any previously directed values for LRE_t and $SINV_t$;

ii. is not provided by the operation of SpC 3.9 (Load Related Expenditure Volume Drivers); and

iii. exceeds the Materiality Threshold.

Appendix 3 Consultation Questions

ED.Q1 Do you agree with our assessment of the of the needs case for the projects under Hebrides and Orkney Re-opener submission?

ED.Q2 Do you agree with assessment of the costs of projects under the Hebrides and Orkney Re-opener submission?

ED.Q3 Do you agree with our assessment of the development funding for the projects under Hebrides and Orkney Re-opener submission?

ED.Q4. Do you agree with our assessment on the needs case of the Engineering Justification Papers (EJPs) submitted under the LRE re-opener?

ED.Q5 Do you agree with our assessment on the optioneering of the EJPs submitted under the LRE re-opener?

ED.Q6 Do you agree with our approach to use disaggregated benchmarking models to inform the efficient costs of ENWL's application?

ED.Q7 Do you agree with our draft determinations of efficient costs for ENWL's application under the LRE re-opener?

ED.Q8 Do you agree with our view that the proposed reinforcement (the loop circuit) to A-road service stations should be classed as sole use and charged to the connecting customer?

Appendix 4 Hebrides and Orkney Re-opener options considered

Options considered for Inner Hebrides: Islay - Jura

Option 1: Do Nothing - Do nothing; not compliant with future demand or generation requirements.

Option 2: Install 3 new 33kV circuits to Islay (one from BAT Wind I substation and one from BAT Wind III substation and one from Port Ann GSP) and 2nd Islay-Jura submarine cable.

Option 3: Install 2 new 33kV circuits to Islay (one from BAT Wind I substation and one from Port Ann GSP), 1 new 132kV circuit from Crossaig to Islay, and 2nd Islay-Jura submarine cable.

Option 4: Install 2 new 33kV circuits (one from BAT Wind I substation and one from Port Ann GSP), 1 new 66kV circuit from Crossaig to Islay, and 2nd Islay-Jura submarine cable.

Option 5: Install 1 new 33kV circuit from BAT Wind I substation to Islay and 2 new 66kV circuits from Crossaig to Islay.

Option 6: Install 3 new 33kV circuits to Islay (one from BAT Wind I substation and one from BAT Wind III substation and one from Port Ann GSP via a longer submarine cable) and upgrade Lochgilphead – Islay North – Knocklearach and Bowmore – Knocklearach circuits.

Option 7: Install 3 new 33kV circuits to Islay (one from BAT Wind I substation, one from new Carradale 33kV GSP and one from Port Ann GSP) and 2nd Islay-Jura submarine cable.

Option 8: Install 2 new 33kV circuits to Islay (one from Port Ann, one from BAT Wind I substation) and 1 new 132kV circuit to Islay (from Carradale 132kV) and install 2nd Islay-Jura submarine cable.

Option 9: Install 2 new 33kV circuits to Islay (one from Port Ann, one from BAT Wind I substation) and 1 new 66kV circuit to Islay (from new Carradale 132/66kV) and install 2nd Jura – Islay submarine cable.

Option 10: Install 2 new 33kV circuits (one from Port Ann, one from BAT Wind I substation) and 1 new 132kV (from Crossaig 132kV) circuits to Islay and install 2nd Jura – Islay.

Option 11: Install 2 new 33kV (one from Port Ann, one from BAT Wind I substation) and 1 new 66kV (from new Crossaig 132/66kV) circuits to Islay and install 2nd Jura – Islay.

Option 12: Install 2 new 33kV circuit to Islay (one from BAT Wind I substation, one from Carradale 33kV GSP) and 1 new 66kV circuit to Islay (from Crossaig 132kV).

Option 13: Install 2 new 33kV circuits to Islay (one from BAT Wind I substation and one from new Crossaig 132/33kV) and 2nd Islay-Jura submarine cable.

Option considered for Orkney

Option 1: Do nothing; not compliant with future demand or generation requirements.

Option 2 (33kV): 33kV reinforcement of existing PFE and PFW (Pentland Firth West cable) by 2045, with three new submarine cables (Thurso South and South Ronaldsay via John O'Groats between 2024-2029, Thurso South and Scorradale between 2029-2033 &Thurso South and South Ronaldsay via Hoy between 2040-2050) and a second transmission link by 2040.

Option 3 (33kV): 33kV reinforcement of existing PFE and PFW by 2045 with four new submarine cables (Thurso South and South Ronaldsay via Hoy between 2024-2029, two circuits between Thurso South and Scorradale between 2029-2033 & Thurso South and South Ronaldsay via Hoy between 2040-2050) and a second transmission link by 2050.

Option 4 (33kV): 33kV reinforcement of existing PFE and PFW by 2045, with addition of three submarine cable routes (Thurso South and South Ronaldsay via John O'Groats between 2024-2029, Thurso South and Scorradale between 2029-2033 & Thurso South and South Ronaldsay via John O'Groats between 2040-2050) and a second transmission link by 2040.

Option 5 (33kV): 33kV reinforcement of existing PFE and PFW circuit with addition of three submarine cable routes (submarine cable and onshore UG cable between Thurso South and South Ronaldsay via John O'Groats between 2024-2029, Thurso South and South Ronaldsay via Hoy between 2029-2033 & Thurso South and Scorradale between 2040-2050) and a second transmission link by 2040.

Option 6 (33kV): 33kV reinforcement of existing PFE and PFW circuit by 2045, with addition of three submarine cable routes (submarine cable and onshore UG cable between Thurso South and South Ronaldsay via John O'Groats between 2029-2033, Thurso South and South Ronaldsay via Hoy between 2024-2029 & Thurso South and Scorradale between 2040-2050) and a second transmission link by 2040.

Option 7 (66kV): Additional 66kV cable (Thurso South - South Ronaldsay via John O'Groats between 2024-2029) followed by 66kV upgrade of PFW and PFE.

Option 8 (66kV): 66kV upgrade of PFW and PFE in RIIO-ED2 followed by additional 66kV cable (Thurso South - South Ronaldsay via John O'Groats between 2025-2023).

Option 9 (66kV): Install 66kV Thurso South - South Ronaldsay between 2024-2029. Upgrade PFW circuit to be running at 66kV between 2029-2032 and a second transmission link by 2040.

Option 10 (66kV): Install 63km 66kV Thurso South - South Ronaldsay via Hoy between 2024-2029. Upgrade PFW and PFE circuits to be running at 66kV between 2029-2032.

Option 11 (66kV): One 66kV submarine circuit on the same route between 2024 and 2029, a 66kV submarine cable and onshore OHL between Thurso South and South Ronaldsay via John O'Groats between 2029 and 2032 and a second transmission link by 2040.

Appendix 5 Draft Notice of statutory consultation to modify the Special Conditions for LRE Re-opener

Introductory Note

We are proposing to modify Special Condition 3.2 of the electricity distribution licence held by ENWL.

To:
Electricity North West Ltd

Electricity Act 1989
Section 11A(2)

Notice of statutory consultation on a proposal to modify the Special Conditions of the electricity distribution licence held by Electricity North West Ltd

1. The Gas and Electricity Markets Authority ('the Authority') proposes to modify the Special Conditions ('SpC') of the Electricity Distribution Licence ('the Licence') held by Electricity North West Ltd granted or treated as granted under section 6(1) of the Electricity Act 1989 ('the Act') by amending Appendix 1 of SpC 3.2.

2. We are proposing these modifications to the Licence to amend the term LREt in Appendix 1 of SpC 3.2 of the Licence and give effect to the decision of the Authority dated [xx] to approve additional allowances for ENWL under the Load Related Expenditure Re-opener (Part K of SpC 3.2).

3. The effect of these proposed modifications is to provide LRE re-opener allowances in line with our Final Determinations on the LRE Re-opener.

4. Further detail on the reasons for the proposed modifications can be found in our [RIIO-ED2 2025 Re-openers Final Determinations] document available on our website.[12] The full text of the proposed modifications to Special Condition 3.2 is set out in Annex 1, with the new text to be added shown double underscored.

5. A copy of the proposed modification/modifications and other documents referred to in this Notice have been published on our website (www.ofgem.gov.uk). Alternatively, they are available from information.rights@ofgem.gov.uk.

[12] Link to Final Determinations

6. Any representations with respect to the proposed licence modification/ modifications must be made on or before [date] to: Sai Wing Lo, Office of Gas and Electricity Markets, 10 South Colonnade, Canary Wharf, London, E14 4PU or by email to ReopenerConsultations@ofgem.gov.uk.

7. We normally publish all responses on our website. However, if you do not wish your response to be made public then please clearly mark it as not for publication. We prefer to receive responses in an electronic form so they can be placed easily on our website.

8. If we decide to make the proposed modification/modifications it/they will take effect not less than 56 days after the decision is published.

Pete Wightman
Deputy Director, Price Control Operations

Duly authorised on behalf of the Gas and Electricity Markets Authority

Appendix 1

Uncertain Costs without Evaluative Price Control Deliverables allowances (£m)

	23/24	24/25	25/26	26/27	27/28	Total allowance (all years)
$PSUP_t$	0	0	0	0	0	0
REC_t	0	0	0	0	0	0
ESR_t	0	0	0	0	0	0
EVR_t	0	0	0	0	0	0
SWR_t	0	0	0	0	0	0
$DIGI_t$	0	0	0	0	0	0
SAR_t	0	0	0	0	0	0
LRE_t	0	~~0~~ 11.894	~~0~~ 21.913	~~0~~ 28.604	~~0~~ 30.694	~~0~~ 93.105
HVP_t	0	0	0	0	0	0
WDV_t	0	0	0	0	0	0
HO_t	0	0	0	0	0	0
SES_t	0	0	0	0	0	0
$SEFEC_t$	0	0	0	0	0	0

New text is double underscored and text removed is double struck through.

Appendix 6 Draft Direction for Hebrides and Orkney Re-opener

Introductory Note

Following our assessment of SSEH's January 2025 Hebrides and Orkney Re-opener application, we have set out our minded to view above. Any decision to add additional allowances for a project, will be implemented into the Licence via a direction. This Appendix provides notice of the proposed direction that we intend to issue to implement our Re-opener Decision, as required by SpC 3.2.125. We intend to confirm the direction at the same time as setting out our decision, taking into account responses to our minded to position and representations on the proposed direction. Any representations with respect to the minded to position or associated draft direction below must be made on or before 26 August 2025.

Proposed Direction

To: Scottish Hydro Electric Power Distribution Plc

Direction issued by the Gas and Electricity Markets Authority ("the Authority") under Special Condition ("Spc") 3.2.109 of the Electricity Distribution Licence ("the Licence") held by Scottish Hydro Electric Power Distribution Plc ("the Licensee") to modify the value of licence term HOt.

1. The Licensee is the holder of a licence granted or treated as granted under section 6(1)(c) of the Electricity Act 1989.

2. SpC 3.2 Part O: Hebrides and Orkney Re-opener of the Licence provides a mechanism by which the licensee may apply for a direction modifying the value of term HOt in Appendix 1 to SpC 3.2.

3. In January 2024, the Licensee submitted a Re-opener application under SpC 3.2 Part O for modification to the term HOt.

4. Further details of the reasons for and effect of this direction can be found in our decision document published alongside this direction.

5. The Authority hereby issues a direction under SpC 3.2.109 to the HOt in Appendix 1

of SpC 3.2 as follows:

Appendix 1

Uncertain Costs without Evaluative Price Control Deliverables allowances (£m)

	23/24	24/25	25/26	26/27	27/28	Total allowance (all years)
$PSUP_t$	0	0	0	0	0	0
REC_t	0	0	0	0	0	0
ESR_t	0	0	0	0	0	0
EVR_t	0	0	0	0	0	0
SWR_t	0	0	0	0	0	0
$DIGI_t$	0	0	0	0	0	0
SAR_t	0	0	0	0	0	0
LRE_t	0	0	0	0	0	0
HVP_t	0	0	0	0	0	0
WDV_t	0	0	0	0	0	0
HO_t	34.67	0	~~6.22~~ 6.67	~~64.40~~ 64.81	~~3.13~~ 10.16	~~108.42~~ 116.31
SES_t	0	0	0	0	0	0
$SEFEC_t$	0	0	0	0	0	0

New text is double underscored, and text removed is double struck through.

6. This direction will take effect immediately.

7. If you have any questions in relation to this direction, please contact: ReopenerConsultations@ofgem.gov.uk.

Yours sincerely,

Peter Wightman

Deputy Director, Price Control Operations

Duly authorised on behalf of the Gas and Electricity Markets Authority

Appendix 7 Privacy notice on consultations

Personal data

The following explains your rights and gives you the information you are entitled to under the General Data Protection Regulation (GDPR).

Note that this section only refers to your personal data (your name address and anything that could be used to identify you personally) not the content of your response to the consultation.

1. The identity of the controller and contact details of our Data Protection Officer

The Gas and Electricity Markets Authority is the controller, (for ease of reference, "Ofgem"). The Data Protection Officer can be contacted at dpo@ofgem.gov.uk

2. Why we are collecting your personal data

Your personal data is being collected as an essential part of the consultation process, so that we can contact you regarding your response and for statistical purposes. We may also use it to contact you about related matters.

3. Our legal basis for processing your personal data

As a public authority, the GDPR makes provision for Ofgem to process personal data as necessary for the effective performance of a task carried out in the public interest. i.e. a consultation.

4. With whom we will be sharing your personal data

No external agencies.

5. For how long we will keep your personal data, or criteria used to determine the retention period.

Your personal data will be held for 12 months after the consultation is closed.

6. Your rights

The data we are collecting is your personal data, and you have considerable say over what happens to it. You have the right to:

- know how we use your personal data
- access your personal data
- have personal data corrected if it is inaccurate or incomplete
- ask us to delete personal data when we no longer need it
- ask us to restrict how we process your data

- get your data from us and re-use it across other services
- object to certain ways we use your data
- be safeguarded against risks where decisions based on your data are taken entirely automatically
- tell us if we can share your information with 3rd parties
- tell us your preferred frequency, content and format of our communications with you
- to lodge a complaint with the independent Information Commissioner (ICO) if you think we are not handling your data fairly or in accordance with the law. You can contact the ICO at https://ico.org.uk/, or telephone 0303 123 1113.

7. Your personal data will not be sent overseas.

8. Your personal data will not be used for any automated decision making.

9. Your personal data will be stored in a secure government IT system.

10. More information For more information on how Ofgem processes your data, click on the link to our "ofgem privacy promise".