

Ofgem
10 South Colonnade, Canary Wharf, London
EH14 4PU
By email:
RIIOElectricityTransmission@ofgem.gov.uk

Dear James,

21st January 2022

Please find the response from Muirhall Energy to Ofgem's Isle of Skye project – Initial Needs Case consultation.

Muirhall Energy is a leading independent developer of renewable energy projects, based in Lanarkshire, Scotland. Our projects are making a significant contribution to Scottish and UK Government climate change targets and providing local communities across Scotland with funds to invest in the challenges and opportunities that matter to them. Muirhall Energy worked with Scottish Renewables (SR) and Scottish and Southern Electricity Networks (SSEN) in forming an industry response to the consultation, therefore this document is in addition to their submissions.

In response to this consultation, Muirhall Energy would like to focus on the following points:

- The planet is in the midst of a climate emergency. Therefore, opportunities to connect renewable energy projects onto the UK grid network should be supported and encouraged. Furthermore, demand for renewable energy will only rise as the electrification of heat and transportation increases in line with the Scottish and UK Governments Net Zero targets.
- The Fort Augustus-Skye overhead line was built in sections between 1956 and 1989 and, despite intensive maintenance over that period, has an increasing risk of failure. Given the current state of disrepair, the fact that line has already exceeded its capacity limit and also relies on standby diesel generation for demand security, reinforcement of the overhead line is essential.
- The replacement overhead line should support the delivery of a Net Zero UK, improve network reliability and security of supply. Therefore, it is critical that the replacement line proposed anticipates future renewable generation. This will avoid an iterative approach to network development that will be more expensive in the long-term and that will ultimately be placed onto energy consumers to pay. On that basis, Ofgem should progress with Option 4a. In proposing this option, SSEN have considered all relevant stakeholders and communities views to deliver an optimal solution.
- We are concerned that within Ofgem's consultation, Option 1b - limiting the capacity of the line, has not been ruled out at this stage in the consultation. Option 1b would not provide enough electrical transfer capability to connect the generation capacity required by developers currently requesting connections, nor facilitate future generation looking to connect in the region. Therefore, should not progressed.
- Finally, we request that Ofgem's regulatory assessment aligns with the planning process and that a FNC decision is reached ahead of the planning consent decision. Otherwise, delays to project delivery will occur.

We respectfully put forward this response to Ofgems Needs Case, as it critical in the deliverability of several Muirhall projects based within SSEN.

Please see direct responses to each consultation question on the pages that follow.

Yours sincerely,

Matthew Dowds

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Ofgem Skye Project Initial Needs Case Consultation – Muirhall Energy Responses

Question 1: Do you agree with the technical need for investment on the transmission network?

Muirhall Energy agree with the technical need for investment in the Skye Transmission Network.

There is clear evidence showing that the existing Skye 132kV OHL is nearing the end of its economic and operational, having been in the 1970 the structure has degraded and is no longer fit for purpose. The local environment in that area of Scotland accelerates the rate of deterioration, therefore parts of the overhead line are in state of disrepair such that they represent a danger to the public and overhead line engineers.

SHETL have identified fittings, earth-wires, tower steelwork, wood pole replacement, and the replacement of phase conductors whereby intervention is needed across most of the circuit. Parts of the circuit have already had to be replaced. Therefore, we believe there should be absolutely no doubt on the urgent requirement for the reinforcement of the transmission network in the region.

The level of reinforcement is in Muirhall Energy's view the focus of this consultation.

Considering how crucial these reinforcements are for the region in terms of security of supply, safety for the public and SHETL, allowing the development of new renewable generation and the expected challenges facing a build which will stretch 160km across highly constrained terrain Muirhall Energy believe that anticipatory and ambitious investment is required to complete this reinforcement efficiently. The works must be robust and future proof and avoid being obsolete or requiring further reinforcement in the next 5 – 10 years.

Ofgem must also consider the cost of inadequate infrastructure which will be far greater than the costs of the transmission investment. With currently over 1GW of potential new generation in the Skye area it is critical that the technical solution delivered aligns with the United Kingdom's Net Zero ambitions.

Question 2: Do you agree with our initial conclusions on the three drivers for the Skye project?

SHET detailed three key drivers for the Skye project in its INC submission:

- 1) Asset condition (non-load related driver);
- 2) Need for additional capacity to allow new generation to connect (load related driver); and
- 3) Security of supply to maintain normal electrical supply to the residents of Skye and the Western Isles.

Muirhall agree these are the key drivers for the Skye reinforcement project. As recently as March 2021, up to 16,000 homes on Skye were left without power after high winds damaged sections of the existing line¹. A number of schools were closed and businesses were disrupted. In addition, mobile diesel generators were utilised last year to mitigate the number of customers impacted during fault events. The use of such generators is evidently disappointing and adds to the carbon intensity of the transmission network, in conflict with UK and Scottish targets.

Security of supply for the residents of Skye is a central driver for the reinforcement project, a problem caused by the current asset condition. As assessed by SHET, the current line is 'reaching the end of its operational life and requires replacement in order to maintain security of supply for homes and

¹ <https://www.bbc.co.uk/news/uk-scotland-highlands-islands-56346111>

businesses on Skye'². This assessment is visually demonstrated in Appendix 2 of OFGEMs own consultation document which shows various failures, decay and extreme wear³.

In addition, the replacement line must be capable of enabling significant additional generation capacity. The Scottish Government are consulting on plans which aim to add an additional 8-12GW of onshore wind capacity in Scotland by 2030, doubling the existing installed capacity. Muirhall Energy alone has approximately 300MWs of capacity contracted on Skye from 2025 and is only one of multiple developers committed to projects on the Isle. The Skye reinforcement project must enable such projects to progress without restriction or delay.

Question 3: Do you agree with our initial conclusions on the technical options considered?

Muirhall Energy generally agrees with the initial conclusions on the technical options considered for the Skye Transmission Network.

- A refurbishment-only option does not offer value to consumers and does not allow the renewable generation required to meet the UKs targets to be connected. Therefore, this option should not be considered.
- Option 0 & 1b would not deliver a robust solution and will require further reinforcement. The security of supply is also diminished. Therefore, Option 0 & 1b should not be progressed.
- Option 4a is the preferred solution as it delivers critical infrastructure works in an acceptable timeframe. It also has a greater chance of consent and therefore is the most deliverable solution. Therefore, option 4a should be progressed.
- Option 4a01, similarly to option 4a, delivers a solution which is robust, consentable, improves security of supply and allows for renewable generation. However, it requires a further 5 years to complete the full solution which is not preferred. The option also represents a greater risk due to the additional needs case being required for the Invergarry 400kV substation. The increased cost to consumer also increases the risk of funding potentially not being approved for the reinforcement and time being wasted delivering a solution that will not be progressed. Therefore, option 4a01 should be considered.
- Option 5a, although the level of renewable generation which would be capable of connecting onto the network is attractive, the risk of exceeding the level of generation that could ultimately be built would seem too high and not be worthwhile risking the delivery of the project in a reasonable timescale. Such as if funding from Ofgem was not approved after a connection is cancelled or the time taken for public inquiries in the event of the additional planning challenges the project would face. Therefore, option 5a should not be considered.

² <https://www.ssen-transmission.co.uk/media/5792/skye-reinforcement-project-alignment-consultation-document-september-2021.pdf>

³ <https://www.ofgem.gov.uk/publications/isle-skye-project-initial-needs-case-consultation>

Question 4: Do you agree with our initial conclusions on the cost benefit analysis and the appropriateness of the option taken forward?

Muirhall Energy generally agrees with the initial conclusions on the cost benefit analysis and the appropriateness of Option 4a for the Skye Transmission Network. However as stated in our response to Question 3, Option 1b and 4a01 should be considered but not is not preferred over Option 4a.

Although Muirhall Energy understand that it is useful for Ofgem to consider lower levels of generation to understand potential impacts on their preferred solution, described in section '2.29', this ultimately leads to the delivery of a short-term investment planning approach which will be inefficient, require increased cost and more importantly require more time to reinforce the network. If a reduced generation option is being considered, an option which builds 1b then requires 4a to be built within 5 years of option b should be included for comparison to show the cost of getting this decision wrong. This excludes the environmental cost of not reducing the UKs carbon footprint.

Muirhall Energy appreciate there is a risk to consumers with investment in the transmission network, however if we consider the introduction of the National Planning Framework 4, the incentives of becoming a 'greener' nation and the positive impact renewable projects will have in the communities, we believe option 4a is a project that must be delivered.

Question 5: Are there any additional factors that we should consider as part of our Initial Needs Case assessment?

By sizing the reinforcement project appropriately, taking into account future generation capacity, sizeable community investment sums will be unlocked to Skye communities. Our own development plans are estimated to contribute over £30m Gross Value Added (GVA) within the Highland Council between construction and operation activities⁴.

In addition, Muirhall is committed to a community investment fund of £7k per MW. This commitment could total over £2m per annum upon operation of our Skye projects. Furthermore, Muirhall Energy will offer up to 10% community ownership of its Skye project and is currently assessing how best to improve internet connectivity for local settlements such as Struan and Ose.

Evidently, this investment and community gain can only be achieved alongside the development of a significant onshore wind farm. The Initial Needs Case assessment should be cognisant of the overall economic benefit waiting to be enabled by a capacity boosting reinforcement project.

Question 6: Do you agree with our proposal to make a decision on use of the CATO model before the invitation to tender stage of SHET's proposed procurement of the supply chain for delivery of the Skye project? If not, do you have views on an alternative appropriate timing for that decision?

Muirhall Energy fundamentally believes that there should be increased competition for Transmission Owners and Distribution Network Operators across all connection applications. Multiple parties should be competing to deliver the connection works at lowest cost and on the earliest possible connection date. CATO does not go far enough in terms of allowing competition for these types of work, however it is better than the current monopoly process which has historically been used and preferred over the SPV Model and CPM.

CATO should be developed and in place such that the current deliver timelines for Option 4a are not delayed or impacted. Ofgem should be able to deliver CATO and a decision on the needs case in a

⁴ BiGGAR Economics Study, 2021.

timely manner which allows the delivery programme to be maintained for projects connecting in 2025.

Question 7: Do you have a view on the consumer impact of delay to delivery of the Skye project and how any detriment could be quantified?

The consumer impact associated with further delay is significant and wide ranging. Future line outages, inevitable without intervention, will result in a host of negative consumer outcomes. Outages may result in health problems through disruptions to home heating or accidents during periods without electricity; students will lose contact time with their schools compounding an existing problem caused by the ongoing COVID pandemic, and; the local economy will suffer as workers experience productivity loss and general disruption.

Accurately quantifying the costs of these impacts is not straightforward though measuring the effects on local businesses or logging school closures would highlight some of the problems. However, in our view, it is simply not acceptable to consider a scenario whereby security of supply is not achieved. The existing line is approaching the end of its operational life and requires replacement. In addition, as outlined elsewhere in this consultation response, the replacement line should provide the additional capacity sought by SHET, for the benefit of Skye as a whole.