Creag Dhubh to Dalmally 275kV Connection

Project Update and Alternative Connection Options Consultation



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We are launching a virtual consultation exhibition to gain views and feedback on our updated proposals for the Creag Dhubh to Dalmally 275kV Connection (formally known as North Argyll) Project.

Information on our proposals is available within this project update booklet, and we also invite you to join our virtual consultation where further information on the options will be available. There will also be live chat sessions via the virtual exhibition at the following dates and times:

- Tuesday 1st September 2020 2-4pm
- Wednesday 2nd September 2020 10-12pm
- Wednesday 2nd September 2020 6-8pm

For more information, please visit the project website: www.ssen-transmission.co.uk/projects/ creag-dhubh-dalmally-275kv-connection



About the project

Scottish & Southern Electricity Networks

The overall aim of the project is to reinforce the existing transmission network connections in the Argyll region, to enable renewable energy projects to connect to the GB transmission network and to ensure security of supply.

(1)

(3)

The existing transmission network for Argyll was originally designed to serve a rural area with low demand for electricity.

Requests from renewable generation developers to connect to the network in this area exceed the current capacity of the existing transmission network, meaning a new transmission circuit is required to meet demand from generation developers and ensure security of supply.

We have been consulting locally on this project (formerly referred to as the North Argyll Project) since March 2016.

The original proposals consisted of a new 275/132kV substation (Creag Dhubh) near to the existing Inveraray to Taynuilt 132kV overhead line, with a new 275kV overhead line circuit between the proposed Creag Dhubh substation and the existing Dalmally substation.

We presented our preferred overhead alignment from Creag Dhubh substation to the existing Dalmally substation during a consultation event in March 2018.

In recognition of the feedback received (and in combination with previous comments dating back to 2016), we committed to explore underground cable options and assess the potential for alternative overhead line options that would avoid crossing the Strath of Orchy.

We have completed further studies to inform the options assessments and now provide a summary of the alternatives, alongside the preferred overhead line solution from 2018.

This booklet provides a summary of the three options:

an overhead line to the existing Dalmally substation.

(2) an underground cable connection to the existing Dalmally substation.

an alternative overhead line connection location east of Dalmally and new Switching Station.

We will be launching a virtual consultation platform on Monday 31st August and would encourage you to view the platform for further detailed information on each option. You can also join an interactive chat session to ask us any questions and provide your feedback on the options.

Please visit our webpage for further information: www.ssen-transmission.co.uk/projects/creag-dhubhdalmally-275ky-connection

If you cannot participate in the virtual consultation, please complete the feedback form at the back of this booklet and send to the project Community Liaison Manager, who can also be contacted for any further information or gueries.

We hope this information proves useful, thank you for taking the time to read this booklet and we look forward to hearing your views.

Project history

March 2016

Project Introduction Consultation

The North Argyll project is introduced to local stakeholders.

We share the project scope and search areas being considered for a new overhead line to connect to the existing Dalmally substation.

October 2016

Route Options Consultation

A preferred route for the new overhead line is shared with the local community alongside alternative options considered. Feedback received in Dalmally specifically indicated a general objection to the project. Community members cited concerns regarding proximity to residential properties, visual impact and the proximity of the project to the existing Scottish Power transmission line. There were requests that the line be undergrounded in Dalmally due to these concerns.

Throughout 2017

Initial Cable Investigations

During analysis and review of all feedback received during the consultation process (including the March 2016 consultations) a decision was made to carry out an investigation into potential underground cabling route options around Dalmally.

May 2019

Further Underground Cabling Investigations Announced

March 2018

Preferred Alignment Consultation

We share our preferred proposals between the preferred substation site (Creag Dhubh)

received is in objection to the preferred route and subsequent alignment, citing landscape and visual concerns.

January 2018

Cabling Update Meeting Glenorchy and Innishail CC

Members of our project team the results of a Cable Feasibility

Three potential options were identified, each constrained



In recognition of the consultation announce plans to further explore undergrounding across the Strath of Orchy and appoint a design contractor to conduct



Late 2019

Cabling Investigation Results

Two potentially feasible cabling options are identified, however, due to the high risk of environmental pollution and engineering challenges; a decision is made to investigate other potential connection options which would aim to respond to the community's landscape and visual concerns.



Glen Lochy switching station

An alternative connection location, avoiding the Strath of Orchy is identified to the east of Dalmally; which would link to the existing overhead line between Dalmally and Inverarnan substation.



September 2020

Virtual Consultation

Three options presented for consultation:

- 1. an overhead line from Creag Dhubh to the existing Dalmally substation (preferred solution from 2018),
- 2. an underground cable connection to the existing Dalmally substation; and
- 3. an alternative overhead line connection location east of Dalmally and new Switching Station.



Option 1: Overhead Line (Preferred in 2018)

Option includes:

- A new 275/132kV Creag Dhubh substation adjacent to the existing Inveraray to Taynuilt 132kV overhead line.
- A new 275kV overhead line between the proposed Creag Dhubh substation and the existing Dalmally substatic (owned and operated by Scottish Power)

The preferred overhead line option was presented during public consultation events in March 2018. You can find out more about these proposals by **downloading the March 2018 Consultation Booklet from the project webpage**¹ or by contacting the Community Liaison Manager to request a hard copy.

This option was considered preferable following a technical, environmental and economic assessment.

Feedback from this consultation (and previous public engagements) expressed opposition to an additional overhead line at the head of Loch Awe, crossing the Strath of Orchy.

We therefore committed to exploring options for an underground cable to cross the Strath of Orchy. You can find out more about the underground cable options on the next page.

Potential risks associated with this option:			
1. Landscape	3. Residential proximity		
2. Visual	4. Ground conditions		

Environmental Red Amber Green (RAG) assessment for preferred overhead line Route (2017 consultation)

Landscape	
Visual	
Ecology	
Ornithology	
Cultural Heritage	
Land Use	
Hydrology Geology	

To illustrate the level of risk associated to each consideration, please see the below Red Amber Green (RAG) table.

A high risk is shown as red, a medium risk is shown as amber and a low risk is shown as green.

Engineering RAG assessment for preferred overhead line Route (2017 consultation)		
Road Crossings		
Elevation		
Number of Deviations		
Residential Proximity		
Access Routes		
Route Length		
HV Crossings		
Ground Conditions		
Terrain		



¹ March 2018 Consultation Booklet: https://www.ssen-transmission.co.uk/media/4487/mar-18-north-argyll-booklet.pdf



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Option 2: Underground Cable Routes

Option includes:

- A new 275/132kV Creag Dhubh substation adjacent to the existing Inveraray to Taynuilt 132kV overhead line.
 A new 275kV overhead line between the proposed Creag Dhubh substation and a sealing end compound.
 Construction of a 275kV sealing end compound (transition from overhead line to cable) located west of Croftintuime.
 A 275 kV underground cable from the sealing end compound to the existing Dalmally substation.

SSEN Transmission completed an initial cable feasibility study in 2017. Following the March 2018 consultation events, we committed to carrying out a further detailed underground cable constructability assessment. To do this, we employed a design and build contractor to complete further studies of the proposed cable routes. Using indicative underground cable alignments it was possible to assess: the potential risks; engineering issues; likely environmental effects; and, estimated costs.

Three route options were identified initially. However, following more detailed review of technical constraints, one (Route A3) was not considered further. The remaining two options (Route A2 and Route A5) were included in the detailed constructability assessment.

Potential risks associ	ated with this option:
1. Infrastructure crossings	4. Terrain

2. Road crossings	5. Peat
3. Flooding	6. Access

Environmental RAG assessment of Cable Route Options (2019)				
Guidance Criteria – Environmental	Option A2	Option A5		
Natural Heritage – Designations				
Natural Heritage – Protected Species				
Natural Heritage – Habitats				
Natural Heritage – Ornithology				
Natural Heritage – Hydrology/Geology				
Cultural Heritage – Designations				
Cultural Heritage – Cultural heritage assets				
People – Proximity to Dwellings				
Landscape and Visual – Designations				
Landscape and Visual – Landscape Character				
Landscape and Visual – Visual				
Land Use – Agriculture				
Land Use – Forestry				
Land Use – Recreation				
Planning				

Further information on the underground cable constructability assessment can be downloaded from the project webpage.

The identification of significant risks and costs associated with the underground cable options, led SSEN Transmission to consider an alternative solution to a Dalmally switching station connection; one which could be considered environmentally, technically and economically preferable.

Further information on the potential Glen Lochy connection is available overleaf.

Engineering RAG assessment of Cable Route Options (2019)				
Guidance Criteria – Engineering	Option A2	Option A5.1	Option A5.2	
Infrastructure crossings				
Road Crossings				
Contaminated Land				
Atmospheric Pollution areas				
Flooding (Operation)				
Trees Root Protection Area				
Terrain				
Peat				
Rock				
Geology, Hydrology and Hydrogeology				
Access				
Angle/Deviations (Cable Bending)				
Flooding (Construction)				
Surface Water				
Circuit Design				
Access				
Link Boxes				
Fault Repairs				
Distance from Constraints				
Distance from Existing Circuits/Network				
Proximity to Windfarms				
Urban Environments				







Option 3: Glen Lochy Overhead Line and Switching Station

Option includes:

- A new 275/132kV Creag Dhubh substation adjacent to the existing Inveraray to Taynuilt 132kV overhead line.
- A new 275kV overhead line between the proposed Creag Dhubh substation and a switching station near Glen Lochy. • A new Glen Lochy switching station, to connect the new 275kV overhead line with the existing Scottish Power 275kV overhead line between Dalmally and Inverarnan Substation.

We have assessed an alternative connection location, 2km east of Dalmally, which would enable a new overhead line connection to the existing 275kV overhead line whilst avoiding the Strath of Orchy.

As indicated on the map opposite, we have identified potential Routes for the new overhead line. The Route selection process identifies a wide corridor in which a preferred Alignment for the overhead line can be determined. This aims to progress towards a preferred overhead line Alignment in a systematic manner, which is

Potential risks associated with this option (of the preferred route):

1. Railway crossings

Environmental RAG assessment of Glen Lochy OHL Route Options (2020)				
Guidance Criteria – Environmental	Route A1	Route A2	Route B1	Route B2
Natural Heritage – Designations				
Natural Heritage – Protected Species, Habitats, Ornithology				
Natural Heritage – Hydrology/Geology				
Cultural Heritage – Cultural Heritage Assets				
People – Proximity to Dwellings				
Landscape and Visual – Designations, Landscape Character, Visual				
Land Use – Agriculture				
Land Use – Forestry				
Land Use – Recreation				
Planning				

Engineering RAG assessment of Glen Lochy OHL Route Options (2020)				
Guidance Criteria – Engineering	Route A1	Route A2	Route B1	Route B2
Altitude				
Terrain				
Waterbodies				
Slope				
Peat				
Rock				
Flooding				
Road Networks				
Access Tracks				
OHL Crossings				
Railway Crossings				
LV/HV Crossings				
Operations & Maintenance				

technically feasible, economically viable, and could be anticipated to cause the least disturbance to the environment and to those

At the alternative connection location, a new switching station

would be required to connect the new overhead line to Scottish

substation. The adjacent map illustrates the proposed switching

A RAG assessment was also carried out on the switching station site options presented, and will be available to view within the

Power's existing overhead line, between Dalmally and Inverarnan

who live, work and visit the area or use it for recreation.

station sites which would facilitate this connection.

virtual consultation.







Next steps

Our virtual consultation platform will launch on Monday 31st August, where further information regarding our proposals will be available alongside an opportunity to join interactive chat sessions.

However, we will still be available to engage via email, telephone and online meeting, to ensure we reach stakeholders in a manner most suitable to them.

We are continuing to work on the Glen Lochy option, undertaking further survey and assessments, as have been done for the other options.

We intend to carry out further public engagement in early 2021 following collation and review of feedback from this event and are keen to receive feedback from as many local interested people as possible.

A Report on Consultation will be published in October 2020, which will record feedback received during this consultation exercise; and, the response from SSEN Transmission to the consultation feedback.

The feedback form in this booklet can be detached and sent back, or you can fill in an interactive feedback form available from the project website:

www.ssen-transmission.co.uk/projects/creag-dhubh-dalmally-275kv-connection

We will be seeking feedback from members of the public and Statutory Bodies until 16:00, Friday 25 September 2020.

If you require a hard copy of any of the additional information highlighted in this booklet, please just contact the Community Liaison Manager via the details opposite.

Keep in touch

If you have any questions or require further information regarding SSEN Transmission's Shetland Projects, please do not hesitate to contact the project Community Liaison Manager:

Kelly Scott Community Liaison Manager



E: kelly.scott@sse.com



Scottish and Southern 1 Electricity Networks, 1 Waterloo Street, Glasgow, G2 6AY

Additional Information

Information will also be made available via our social media channels:

Find us on Facebook:

SSEN Community

Follow us on Twitter:

@ssencommunity

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Your Comments Please complete in **BLOCK CAPITALS.** (Please tick one box per question only)

Q1 Has the need for the project been clearly explained?	
Yes No	
Please provide a sentence below to explain your answer:	
Q2a Which of the Options would you consider the best option for SSEN Transmission to develop	op?
Option 1 Overhead Line (Preferred in 2018) Option 2 Underground Cable Routes Option 3 Glen Lochy Overhead Line	
Please provide a sentence below to explain your answer:	
O2h Which of the Options would you consider the locat surfamely antion for	
SSEN Transmission to develop?	
Option 1 Overhead Line (Preferred in 2018) Option 2 Underground Cable Routes Option 3 Glen Lochy Overhead Line	
Please provide a sentence below to explain your answer:	
Q3 Do the alternative connection options presented at this consultation (Option 2 and Option 3) respond to any concerns you had over the project?	
Yes No	
Please provide a sentence below to explain your answer:	
Q4 Are there any perceived risks or benefits associated with this project, that you believe have not been included in the Virtual Consultation? (If you viewed this)	

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In order to record your views and improve the effectiveness of our consultation, please complete this short feedback form.

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Address

Telephone

Email

If you would like to be kept informed of progress on the project please tick this box.

If you would like your comments to remain anonymous please tick this box.

Thank you for taking the time to complete this feedback form. Please submit your completed form by one of the methods below:

Email: kelly.scott@sse.com

Mail: Kelly Scott, 1 Waterloo Street, Glasgow, G2 6AY

Online: www.ssen-transmission.co.uk/projects/creag-dhubh-dalmally-275kv-connection

Download: Comment forms and all the information from this consultation booklet will also be available to download from the project website.

Any information given on the feedback form can be used and published anonymously as part of Scottish and Southern Electricity Networks consultation report. By completing this feedback form you consent to Scottish and Southern Electricity Networks using feedback for this purpose.

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