

Pre-Application Consultation Report

Knocknagael Substation Extension

June 2025



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1. INTRODUCTION

- 1.1.1 This Pre-Application Consultation (PAC) Report is submitted by Scottish Hydro Electric Transmission plc, operating and known as Scottish and Southern Electricity Networks Transmission (SSEN Transmission), as part of an application for full planning permission under the Town and Country Planning (Scotland) Act 1997 (as amended) ('TCPA 1997') for Knocknagael Substation Extension at the existing Knocknagael Substation, Essich Road, Inverness.
- 1.1.2 The PAC Report is submitted as a requirement of S35C of the TCPA 1997 in accordance with requirements prescribed in the Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013 (as amended) (The DMRs) and particularly with reference to Section 7B, which prescribes specific content for PAC Reports.
- 1.1.3 In general, the PAC Report provides an overview of the consultation programme and describes: the findings from the PAC process; the steps taken to meet statutory requirements; the feedback received during the PAC process, and how we responded.
- 1.1.4 This PAC Report is comprised of five parts:
- 1: Introduction;
 - 2: Project Background – outlines the background to the project and provides a description of the key elements and non-statutory consultation undertaken;
 - 3: The Consultation Process – describes the submission of Proposal of Application Notices (PANs); the dates and venues for consultation events; any additional consultation required (or otherwise) by the local planning authority;
 - 4: Feedback and How the Project Has Responded– summarises the written responses to consultation and the views raised at public events, as well as the number of written responses received and attendees at events and describes how we took account of views raised during the pre-application consultation process, and how members of the public were given feedback on our consideration of the views raised; and
 - 5: Conclusion.
- 1.1.5 Appendices are attached to provide evidence of consultation carried out, under the terms of the abovementioned Regulations.

2. PROJECT BACKGROUND

2.1.1 Scottish and Southern Electricity Networks (hereafter known as SSEN Transmission), operating under licence held by Scottish Hydro Electric Transmission plc, owns, operates and develops the high voltage electricity transmission system in the north of Scotland and remote islands and has a statutory duty under Schedule 9 of the Electricity Act to develop and maintain an efficient, co-ordinated and economical electrical transmission system in its licence area.

2.2 Site Description

2.2.1 As part of the works required to connect the Loch na Cathrach generation into the wider grid, it is necessary to undertake a substation extension at Knocknagael. The works will involve an extension of the existing footprint of the substation at Knocknagael. The proposed connection is for a single 275kV circuit which requires a connection on one side of the bus section (one side of the existing Knocknagael substation). The proposed development is in line with SSEN Transmission's commitment and licence obligation to facilitate the connection of renewable generators to the grid through an economical, efficient and coordinated approach to transmission reinforcement.

2.3 Proposed Development

Construction Activities

2.3.1 Key tasks during construction of the substation are as follows:

- Enabling work (e.g. forestry clearance, public road improvements and establishment of temporary works such as construction drainage and site compound/welfare);
- Construction of cut/fill to provide a level platform;
- Construction of permanent access roads and drainage;
- Construction of civil engineering infrastructure;
- Installation of mechanical/electrical equipment;
- Inspections and commissioning; and
- Removal of temporary works, landscape design implementation (if required) and site reinstatement.

Access During Construction

2.3.2 Construction access to the proposed development will be via a new proposed temporary entrance off Essich public road. Permanent access during operation will be via the existing Knocknagael substation access road off the public road.

2.3.3 Access arrangements are described and shown in the information submitted as part of the planning application to The Highland Council (THC).

Biodiversity Net Gain

2.3.4 SSEN Transmission has a target for projects gaining consent to achieve positive effects for biodiversity. This is aligned to the Scottish Government's NPF4 Policy 3 aim for proposed developments to contribute to biodiversity enhancement.

Programme

- The programme for the Proposed Development is subject to change but it is anticipated that construction of the Proposed Development would take place over approximately a 32-month period following the granting of consents, with an anticipated completion date of Summer 2028.

2.4 Requirement for Pre-application Consultation

- 2.4.1 Regulation 4 of the DMRs requires that pre-application consultation is carried out for all national and major developments. National and major development types are defined by the Town and Country Planning (Hierarchy of Development) (Scotland) Regulations 2009 ('the Hierarchy Regulations').
- 2.4.2 National developments are developments or classes described as such in National Planning Framework 4 (NPF4). Development is major development if it meets the thresholds or criteria associated with different development types in the Schedule attached to the Hierarchy Regulations. All developments that are not national or major are classified as local developments and are not required to undergo pre-application consultation.
- 2.4.3 Knocknagael Substation Extension is a National Development.

2.5 Early Non-Statutory Consultation

- 2.5.1 The project carried out early non-statutory consultation events on the Loch na Cathrach scheme, focusing on site selection options for the extension and the associated cable route options to connect the consented Pumped Storage Hydro Scheme with Knocknagael substation. Consultation on the project included a face-to-face public engagement event. The purpose of this event was to provide information and to seek the views and comments of members of the public, local stakeholders and statutory consultees. The event took place on Thursday 28 April 2022 at Lochardil House Hotel in Inverness, from 14:00 to 19:00. The consultation material was made available in booklet format at the event and online, allowing members of the public and opportunity to access and view the material until the feedback period closed on Friday 27th May 2022.

2.6 Pre-application Consultation with Local Planning Authority

- 2.6.1 A pre-application consultation meeting was held with The Highland Council on 18 January 2023. An overview of the Proposed Development including the proposed Knocknagael substation extension and the associated UGC connection (regarded as benefitting from Permitted Development rights and is therefore not considered as constituting a Major or National development) was provided.
- 2.6.2 THC provided a written response on 15 February 2023 setting out its consultation response in regard to key issues that should be considered as part of the environmental assessment process and as part of the planning application process.
- 2.6.3 The pre-application response from THC confirmed any subsequent planning application must be accompanied by a Pre-application Consultation report.

3. THE CONSULTATION PROCESS

3.1 Overview

- 3.1.1 This section describes the consultation process and demonstrates how statutory PAC requirements have been met. The PAC process is specified in Section 35B of the TCPA 1997, and in Regulation 7 of the DMRs.

3.2 Proposal of Application Notice (PAN)

- 3.2.1 A PAN must be submitted to the Local Planning Authority (LPA), containing the information prescribed in 35B(4) of the TCPA 1997 and Regulation 6 of the DMRs, including an account of what consultation the applicant intends to undertake and information as to when such consultation is to take place, with whom and what form it will take.
- 3.2.2 A PAN was submitted to The Highland Council on 27th March 2024, triggering the beginning of the statutory consultation period. The PAN provided the Council with an outline of the application details, dates of public events, publicity arrangements, and confirmation of the site location.
- 3.2.3 Copies of the PAN(s) and attachments are provided in Appendix A.
- 3.2.4 No additional information or consultation was requested from The Highland Council in response to the PAN submission. An acknowledgement letter was received on the 23rd April 2024. The PAN was reported to the South Planning Applications Committee on the 18th June 2024 and a link to the report was received via e-mail on the 18th June 2024.
- 3.2.5 In addition to the PAN and attachments being sent to the LPA, below is a list of other parties these were sent to via e-mail on 27th March 2024
- Dores and Essich Community Council
 - Strathnairn Community Council
 - Stratherrick and Foyers Community Council
 - Cllr Chris Balance
 - Cllr Helen Crawford
 - Cllr David Fraser
 - Cllr Emma Knox
 - Cllr Alasdair Christie
 - Cllr Jackie Hendry
 - Cllr Andrew MacKintosh
 - Kate Forbes MSP
 - Drew Hendry MP

3.3 Newspaper Notices

- 3.3.1 Newspaper adverts must be published in respect of public events, the form of which is described in Regulation 7 of the DMRs. Notice of these public events must be published at least 7 days in advance in a newspaper circulating in the locality of the proposed development. The second (or final) public event must be held at least 14 days after the first public event.
- 3.3.2 In respect of the first consultation event, a newspaper notice was published in The Press and Journal, Highland Edition on Friday 5th April 2024.
- 3.3.3 In respect of the final consultation event, a newspaper notice was published in The Press and Journal, Highland edition on Friday 31st May 2024
- 3.3.4 Copies of the newspaper notices are provided in Appendix B.

The notices directed readers to the project website and Community Liaison Manager contact details for further information.

3.4 Advertising Public Events

3.4.1 In addition to the publication of the newspaper notices, the public events were advertised in the following ways:

- Public consultation posters providing general introductory information on the proposals and advertising the planned public events were published in two newspapers, shown in Appendix C.

Event 1: The Press and Journal, Highland edition on Friday 5th April 2024.

Event 2: The Press and Journal, Highland edition on Tuesday 4th June 2024

- Public consultation posters were circulated to the Dores and Essich, Stratherrick and Foyers and Strathnairn Community Councils for sharing with their communities and on their media platforms.
 - Maildrops were issued for both events to all properties within a 10 km section around the substation, including the cable route, encompassing 4,643 residential properties and 60 commercial properties, shown in Appendix C. These landed on doorsteps around the 9th April 2024
 - Emails to the elected Councillors and MSPs in the area.
 - Notification was made via social media, by means of the SSEN Transmission Facebook and X (Twitter) feed.
- 3.4.2 The project website Loch na Cathrach Pumped Storage Grid Connection (ssen-transmission.co.uk/lochnacathrach).

3.4.3 The Applicant produced a public consultation poster to provide some general introductory information on the proposals and for advertisement of the planned public events, attached in Appendix D. This was also put in notice boards at the venue and in other local public places.

3.5 Public Consultation Events

First Consultation Event - PAC 1

3.5.1 The first public consultation event was held at Green Drive Hall, Inverness on Wednesday 17th April 2024 from 14:00 - 18:30.

3.5.2 The consultation feedback period ran for 4 weeks from 17th April until 15th May 2024.

3.5.3 The purpose of the first public event was to provide an opportunity for members of the public, local stakeholders and statutory authorities to view information about the project, ask questions and provide feedback in person.

- The Applicant produced a number of consultation materials to explain the proposals, including information banners shown in Appendix D.
- Additional visual aids including A2 maps of the project proposals.
- Consultation booklets available for attendants to take away, with contact details, key dates, and information on how to provide comments online shown in Appendix E.
- Feedback forms, including the closing date for feedback, a template for which is shown in pages 23-24 of Appendix E.

3.5.4 A sign-in register was used to understand the number of attendees. A total of 48 attendees were recorded.

3.5.5 Following the consultation event, SSEN Transmission issued an update on the project website thanking members of the public for attending and advised all material that had been displayed was available for download (ssen-transmission.co.uk/lochnacathrach).

- 3.5.6 SSEN Transmission received two pieces of written feedback throughout the consultation period. Verbal feedback from the event was also captured and responded to in the final event materials.

Final Consultation Event PAC - 2

- 3.5.7 The final public consultation event was held at Green Drive Hall, Inverness on Wednesday 12th June 2024 from 14:00 - 18:30.
- 3.5.8 The purpose of the final public event was to give feedback to members of the public in respect of comments received as regards the proposed development from earlier consultation, and to provide further opportunity to view information about the project, ask questions and provide feedback in person.
- 3.5.9 Consultation materials comprised the same as that used for the first public event with the addition of materials attached as Appendix E. In line with PAC requirements, consultees at the final event were provided a summary of comments received at the first event. This was published in the consultation material for the final event, and can be seen at pages 18-19 in Appendix F.
- 3.5.10 Interested parties were informed via consultation materials in respect of all public events that the purpose of this consultation was to provide feedback to the prospective applicant only, and that an opportunity to comment on the proposals directly to the LPA would be provided at the planning application stages should the proposed development progress to that stage. This is evidenced in documents submitted in the Appendices, including the consultation booklet in Appendix G
- 3.5.11 The feedback period for the final public consultation event was just over 4 weeks and closed on Friday 12th July 2024 at 5pm. Information on this was contained within the consultation booklet and on the project web page.
- 3.5.12 A sign-in register was used to understand the number of attendees. A total of 9 attendees were recorded.
- 3.5.13 No further comments on the Proposed Development were received during or after the final consultation event.

3.6 Additional Steps Taken to Consultation

- 3.6.1 There were no further steps, such as virtual consultation events, undertaken to consult on this project.

4. HOW HAS THE PROJECT RESPONDED TO FEEDBACK

4.1 Public Consultation Feedback and Responses

4.1.1 This section documents how the project has responded to the themes raised by stakeholders through the consultation process. We address each theme in turn below. These responses to the feedback raised were detailed in the Consultation Booklet and Banners for the second public consultation event.

4.1.2 Table 1 below summarises the comments received. Feedback has been grouped into the following themes: Environmental, Construction, Biodiversity Net Gain, and Community Benefit.

Table 1: Summary Feedback from First Public Event

Theme	Response
Environmental Information on well-established and occupied kestrel nest boxes has been provided. Further information can be provided if requested by SSEN Transmission. I am in the area between Essich and Loch Ness most days and monitor all the nesting raptors I find in that area including kestrels, tawny owls, red kites, buzzards and ospreys. If this project is to be completed with minimal disturbance to nesting birds then it is considered it would be advantageous for contact to be maintained with SSEN Transmission.	<p>We appreciate and are grateful for the feedback in this respect and have factored the location and needs of the nest boxes into our environmental assessment. An information request for relevant information has been made by our environmental consultant with the Highland Raptor Study Group with the details set out in the Voluntary Environmental Appraisal.</p> <p>The Voluntary Environmental Appraisal sets out mitigation and commitments to ensure disturbance to raptors is minimised. The Voluntary Environmental Appraisal will be submitted as part of the planning application and, apart from any confidential information, will be publicly available to review.</p>
Construction Concerns around construction traffic coming through Strathnairn area.	<p>We are aware of the concerns of excessive construction traffic in the Strathnairn area caused by the works for this project, the Loch na Cathrach Pumped Storage Hydro scheme itself and other projects in the area. Whilst we are yet to confirm our construction traffic routes we are liaising with other projects in the area to minimise impacts where possible and envisage that the majority of construction traffic for the works at Knocknagael Substation will avoid Strathnairn and instead utilise the A8082 and Essich Road.</p> <p>Our planning application will include a transport statement outlining our plans for construction traffic access. Prior to any works commencing on site a Construction Traffic Management Plan (CTMP) will be in place and agreed with The Highland Council. It is anticipated the requirement for the CTMP would be secured by an appropriately worded planning condition.</p>
Community Benefit Will there be community benefit to the local people,	<p>We would like to thank residents for providing their feedback suggesting community benefits they would like to see implemented within the local area. We will work with the community to further explore the suggestions being</p>

Theme	Response
specifically those areas directly impacted by the project.	<p>made and will seek to review suggestions and better understand local needs, identifying initiatives that could be developed during construction.</p> <p>Our Community Benefit fund launched the first round of funding in November 2024. Future funding for this region will be available for local communities to bid for.</p> <p>We will continue to engage with the local community and community councils to promote community benefit opportunities.</p> <p>Further information can be found on our website: https://www.ssen-transmission.co.uk/information-centre/community-benefit-fund/</p>
<p>Biodiversity Net Gain benefit</p> <p>Is there an opportunity for SSEN Transmission to support a local biodiversity scheme.</p>	<p>Details of the scheme were noted at the public event in April 2024. Biodiversity net gain (BNG) assessment is reported in the planning application documentation and will be publicly available to review.</p>
<p>Environmental</p> <p>Local ecology and habitats predominantly along the proposed underground cable alignment are of local interest. Are SSEN Transmission aware of these and what will be done to protect them.</p>	<p>We have undertaken a suite of environmental surveys at the substation location and along the proposed underground cable alignment. This includes ecology, ornithology and habitat surveys. The survey results inform the Voluntary Environmental Appraisal . The Voluntary Environmental Appraisal sets out required mitigation and commitments to ensure disturbance to ecology, ornithology and habitats is minimised. The Voluntary Environmental Appraisal will be submitted as part of the Knocknagael substation extension planning application and, apart from any confidential information, will be publicly available to view.</p>

5. CONCLUSIONS

- 5.1.1 This PAC Report documents the consultation which ran for 12 weeks, starting 17th April 2024 to 12th July 2024.
- 5.1.2 The PAN was submitted to the LPA on 27th March 2024. Following this, a first public consultation event was held at Green Drive Hall, Inverness on 17th April 2024, and a final consultation event at Green Drive Hall, Inverness on 12th June 2024.
- 5.1.3 The consultation was designed to facilitate engagement with the local community, community councils, statutory authorities and local leadership in order to invite feedback on the Proposed Development. The common themes from the feedback were:
- Environmental
 - Construction
 - Community Benefit
 - Biodiversity net Gain
- 5.1.4 The approach to public consultation has ensured that the relevant stakeholders have been given the opportunity to comment on the proposals. This has enabled locally important issues and concerns to be identified and subsequently considered in the preparation of the Knocknagael Substation Extension planning application.
- 5.1.5 This PAC process has been informed by the statutory process laid out in the TCPA 1997 and the DMRs as referenced above.

6. APPENDICES

APPENDIX A: KNOCKNAGAEI SUBSTATION EXTENSION PROJECT PROPOSAL OF APPLICATION NOTICE



PROPOSAL OF APPLICATION NOTICE MOLADH BRATH IARRTAIS

The Town and Country Planning (Scotland) Act 1997 as amended by the Planning Etc. (Scotland) Act 2006 and Planning (Scotland) Act 2019

Town and Country Planning (Pre-Application Consultation) (Scotland) Regulations 2021

The Council will respond within 21 days of validation the Notice. It will advise whether the proposed Pre-application Consultation is satisfactory or if additional notification and consultation above the statutory minimum is required.

Please note that a planning application for this proposed development cannot be submitted less than 12 weeks from the date the Proposal of Application Notice is received by the Council and without the statutory consultation requirements having been undertaken. The planning application must be accompanied by a Pre-application consultation report.

The Proposal of Application Notice will be valid for a period of 18 months from the date of validation of the notice by the Council.

Data Protection

Your personal data will be managed in compliance with the Data Protection legislation. You can read our privacy notice for planning related certificates on the Council's website at: https://www.highland.gov.uk/directory_record/1052173/planning_applications_consents_and_notice_of_review

☒ I have read and understood the privacy notice.

Contact Details

Applicant	Scottish Hydro Electric Transmission plc	Agent	N/A
Address	Inveralmond House, 200 Dunkeld Road, Perth, PH1 3AQ	Address	N/A
Phone	07918 302034	Phone	N/A
Email	keith.smith@sse.com	Email	N/A

Address or Location of Proposed Development

Please state the postal address of the prospective development site. If there is no postal address, please describe its location. Please outline the site in red on a base plan to a recognised metric scale and attach it to this completed Notice.

Knocknagael Substation, Essich Road, Inverness.

<p>Description of Development</p> <p>Please include detail where appropriate – eg the number of residential units; the gross floorspace in m² of any buildings not for residential use; the capacity of any electricity generation or waste management facility; and the length of any infrastructure project. Please attach any additional supporting information.</p>
<p>Erection and operation of extension to the Knocknagael Substation comprising new platform area, associated plant and infrastructure, ancillary facilities, laydown area(s), access roads and landscape works.</p>

<p>Pre-application Screening Notice</p> <p>Has a Screening Opinion been issued on the need for a Proposal of Application notice by the Highland Council in respect of the proposed development? If yes, please provide a copy of this Opinion.</p>
<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>

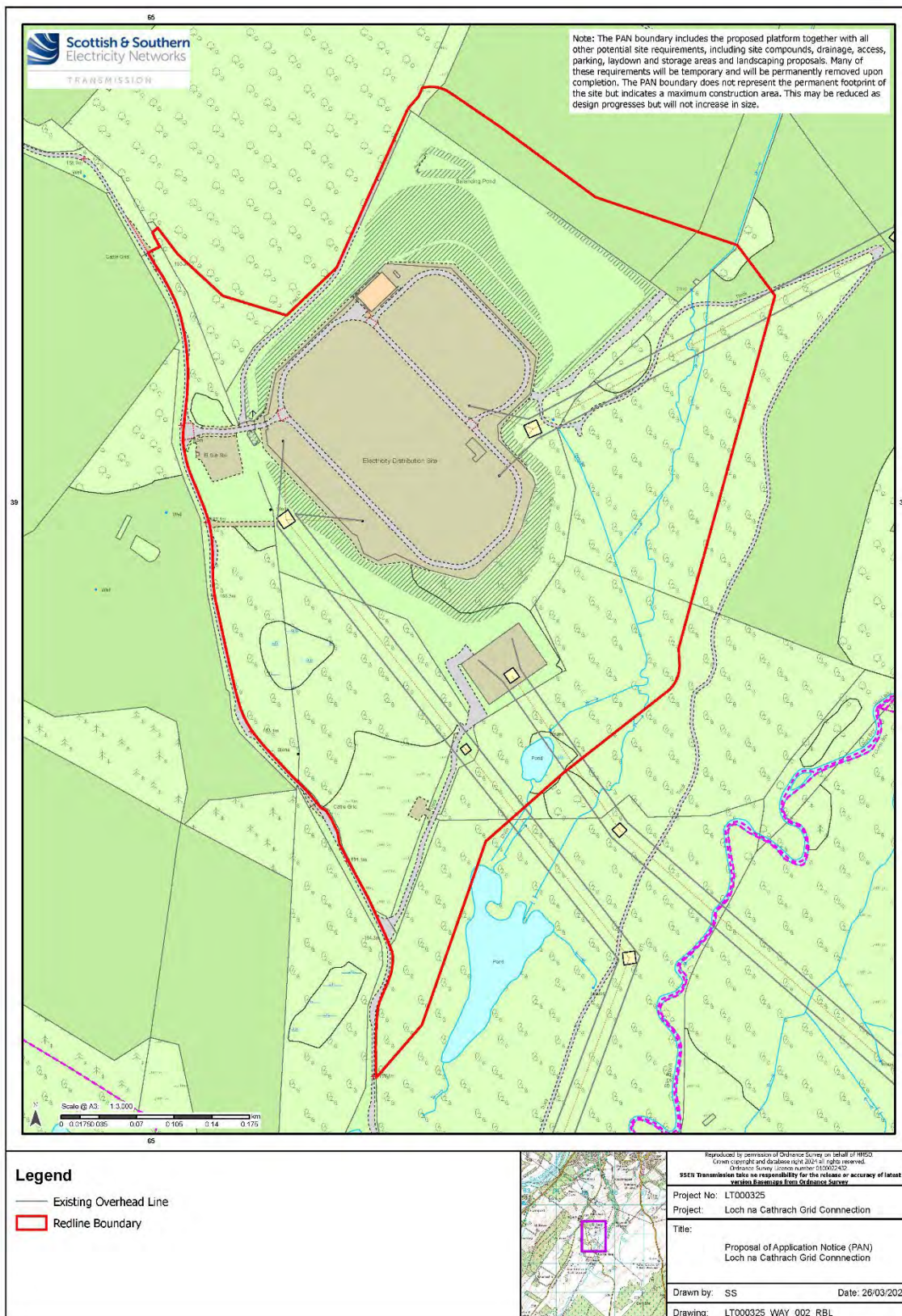
<p>Community Consultation</p> <p>State which other parties have received a copy of this Proposal of Application Notice.</p>	
Community Council/s	Date Notice Served
<p>Stratherrick and Foyers Community Council;</p> <p>Strathnairn Community Council;</p> <p>Dores and Essich Community Council.</p>	27/03/2024
Local Elected Members	Date Notice Served
<p><u>Ward 12 (Aird and Loch Ness) Councillors:</u></p> <p>Cllr Chris Balance - Chris.Ballance.cllr@highland.gov.uk</p> <p>Cllr Helen Crawford - Helen.Crawford.cllr@highland.gov.uk</p> <p>Cllr David Fraser - David.fraser.cllr@highland.gov.uk</p> <p>Cllr Emma Knox - emma.knox.cllr@highland.gov.uk</p>	27/03/2024

Members of Scottish Parliament and Members of Parliament	Date Notice Served
MSP: Kate Forbes - Kate.Forbes.msp@parliament.scot	27/03/2024
MP: Drew Hendry - drew.hendry.mp@parliament.uk	
Names / details of other parties	Date Notice Served
N/A	N/A

Details of Proposed Consultation		
Proposed Public Event 1	Venue	Date and Time
In-Person Public Consultation	Green Drive Community Hall, 36 Green Dr, Inverness IV2 4EU	2pm – 6.30pm, 17 April 2024
Proposed Public Event 2 (at least 14 days after Public Event 1)	Venue	Date and Time
In-Person Public Consultation	Green Drive Community Hall, 36 Green Dr, Inverness IV2 4EU (TBC)	2pm – 6.30pm, 12 June 2024.

Publication of Event		
Newspaper Advert	Name of Newspaper	Advert Date
An advert will be placed in the notices section of this newspaper.	Press and Journal	On or around the 5 April 2024 (for the first public event) and on or around the 29 May 2024 (for the second public event) but in any case, no less than seven days in advance of each event.
Details of any other consultation methods (date, time and with whom)		
Information postcards with invitation to attend event will be sent to properties within a 5km radius of the site and will be delivered by approximately 10 April 2024. Information will also be made available via the project webpage in advance of the public events: https://www.ssen-transmission.co.uk/projects/project-map/red-john-pump-storage-scheme-275kv-connection/ .		

Signed	Keith Smith	Date	27/03/2024
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APPENDIX B: PUBLIC CONSULTATION NEWSPAPER NOTICES

Public Consultation Newspaper Notices Event 1:

[illegible][illegible]

APPENDIX C: PUBLIC CONSULTATION ADVERTISING

Public Consultation Newspaper Adverts Event 1:

Loch na Cathrach Pumped Storage Scheme 275kV Connection (formerly Red John)


Pre-application consultation events

We are holding statutory pre-application consultation events for our proposed substation extension at Knocknagael, just south-west of Inverness. The pre-application process is a key first step in the Town and Country planning process for national planning applications.



SSEN Transmission are required to provide a connection to the Intelligent Land Investments Group's Loch na Cathrach Pumped Storage Hydro (PSH) Scheme (450 Megawatts (MW)) near Dores, Highlands approximately 14km south-west of Inverness.

We would like to extend an invitation to local members of the community and all interested parties to attend an exhibition to discuss our plans with the project team and let us know your thoughts on our proposals. Comments and queries can be made for up to 28 days after the event.

Comments should not be submitted to The Highland Council at this time as they will not be taken into consideration. Statements made to the prospective applicant and their representatives are not representations to the Council. If a planning application is subsequently submitted, then there will be an opportunity to make a direct representation to the Council at that time.



TRANSMISSION

The event will be held at the following location:

Wednesday 17 April

2–6:30pm


Green Drive Hall

36 Green Dr, Inverness IV2 4EU

@sentransmission
 @SSETransmission

If you have any questions, please do not hesitate to contact our Community Liaison Manager:

Ryan Davidson
1 Waterloo Street, Glasgow, G2 6AY
Tel: +44 7901 133 919
Email: ryan.davidson@sse.com



Find out more and register for project updates, visit the project website by scanning the QR code, or use the following URL:
<https://shorturl.at/rtJQ3>

Public Consultation Maildrop Letter and Flyer Event 1:

Loch na Cathrach (formerly Red John)

Pre-application consultation events

We are holding statutory pre-application consultations events for our proposed extension to the Knocknagael Substation. The pre-application process is a key first step in the Town and Country planning process for national planning applications.

About the project
SSEN Transmission are required to provide a connection to the Intelligent Land Investments Group's Loch na Cathrach Pumped Storage Hydro (PSH) Scheme (450 Megawatts (MW)) near Dores, Highlands approximately 14km south-west of Inverness

Under our Network Operators Licence we are required to deliver the connection in a technically efficient, co-ordinated and economic manner, whilst having the least practicable impact on people and the environment. The connection for Loch na Cathrach is to be provided at 275 Kilovolts (kV) (275,000 volts) and is currently proposed to be via Underground Cable (UGC).


Comments should not be submitted to The Highland Council at this time as they will not be taken into consideration. Statements made to the prospective applicant and their representatives are not representations to the Council. If a planning application is subsequently submitted, then there will be an opportunity to make a direct representation to the Council at that time.




The events will be held at the following date and location:

Wednesday 17 April, 2–6:30pm
Green Drive Hall
36 Green Dr, Inverness IV2 4EU

We would like to extend an invitation to local members of the community and all interested parties to attend an exhibition to discuss our plans with the project team and let us know your thoughts on our proposals. Comments and queries can be made for up to 28 days after the event.



TRANSMISSION



Find out more and register for project updates, visit the project website by scanning the QR code, or use the following URL: <https://shorturl.at/rtJQ3>



@sentransmission



@SSETransmission

Public Consultation Newspaper Adverts Event 2:

Loch na Cathrach Pumped Storage Scheme 275kV Connection (formerly Red John)

Pre-application feedback event




We are pleased to be holding a second pre-application consultation event for our proposed extension to the Knocknagael Substation following our initial event in April and feedback period which closed on 15 May 2024.

We are holding this event to present our proposed design for planning submission, following feedback received from the first PAC event and ongoing design developments. We will also present our responses to feedback received as part of the statutory consultation, which is required for major and national planning applications.

About the Project



SSEN Transmission are required to provide a connection to the Intelligent Land Investments Group's Loch na Cathrach Pumped Storage Hydro (PSH) Scheme (450 Megawatts (MW)) near Dores, Highlands approximately 14km south-west of Inverness.

We would like to extend an invitation to local members of the community and all interested parties to attend an exhibition to discuss our plans with the project team and let us know your thoughts on our proposals.


The event will be held at the following location:

Wednesday 12 June
2–6:30pm
Green Drive Hall
36 Green Dr, Inverness IV2 4EU

 @sentransmission
 @SSETransmission

If you have any questions, please do not hesitate to contact our Community Liaison Manager:

Ryan Davidson
1 Waterloo Street, Glasgow, G2 6AY
Tel: +44 7901 133 919
Email: ryan.davidson@sse.com



Find out more and register for project updates, visit the project website by scanning the QR code, or use the following URL:
<https://shorturl.at/rtJQ3>

Public Consultation Maildrop Flyer Event 2:

Loch na Cathrach (formerly Red John)



Feedback event

We are pleased to be holding a second pre-application consultation event for our proposed extension to the Knocknagael Substation following our initial event in April and feedback period which closed on 15 May 2024.

We are holding this event to present our proposed design for planning submission, following feedback received from the first PAC event and ongoing design developments. We will also present our responses to feedback received as part of the statutory consultation, which is required for major and national planning applications.

About the project
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Under our Network Operators Licence we are required to deliver the connection in a technically efficient, co-ordinated and economic manner, whilst having the least practicable impact on people and the environment. The connection for Loch na Cathrach is to be provided at 275 Kilovolts (KV) (275,000 volts) and is currently proposed to be via Underground Cable (UGC).

The event will be held at the following date and location:

Wednesday 12 June, 2–6:30pm
Green Drive Hall
36 Green Dr, Inverness IV2 4EU

We would like to extend an invitation to local members of the community and all interested parties to attend an exhibition to discuss our plans with the project team and let us know your thoughts on our proposals.





If you have any questions, please do not hesitate to contact the Community Liaison Manager:

Ryan Davidson
1 Waterloo Street, Glasgow, G2 6AY

Tel: +44 7901 133 919
Email: ryan.davidson@sse.com



Find out more and register for project updates, visit the project website by scanning the QR code, or use the following URL: <https://shorturl.at/rtJQ3>

 @sentransmission
 @SSETransmission

APPENDIX D: CONSULTATION BANNERS EVENT 1

Knocknagael substation to Loch na Cathrach Storage switching station UGC

The map below shows the preferred alignment identified for the 275kV underground cable connection from the new Loch na Cathrach Pumped Storage Scheme to the existing Knocknagael Substation. The alignment is considered to be the optimum solution based on a balance of environmental, technical and cost factors, whilst also minimising disruption to the general public.

Since our last consultation event in December 2022 we have made amendments to our proposed alignment to further minimise the impact on veteran trees identified during our forestry surveys. In addition, following the change from a double to a single circuit connection there is no longer the requirement for the cable to diverge on its approach to

Knocknagael Substation with only one cable connecting in to the new bay extension. The preferred alignment avoids forestry as far as practicable hence limiting the extent of felling, whilst minimising potential effects on private water supplies and properties as well as avoiding areas of class 1 and 2 peat. It also provides excellent accessibility for construction works, and maintenance thereafter. The preferred alignment would also limit interaction with local archaeology assets and minimise effects on habitats of higher sensitivity including blanket bog.

Environmental survey and assessment for the UGC works will be reported in a Voluntary Environmental Appraisal to ensure appropriate environmental mitigation recommendations are identified in advance of construction works.

Preferred cable alignment

The alignment is currently considered to be the environmentally preferred alignment due to the potential to minimise effects on cultural heritage and habitats and reduce disturbance to protected species. The environmental

survey and assessment will be reported in a Voluntary Environmental Appraisal to ensure appropriate environmental mitigation recommendations are identified in advance of construction works.



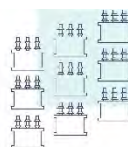
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ssen-transmission.co.uk/projects/project-map/
red-john-pump-storage-scheme-275kv-connection



Knocknagael substation extension

Preferred substation extension option

In developing the substation extension the landscape and visual aspect of the proposal will be contained within the existing setting of electrical infrastructure and will therefore minimise the potential effects. A landscape and visual assessment will be carried out to understand how the proposed development will be viewed within the surrounding area and propose recommendations to mitigate these. The assessment will be included in the planning application.

The construction of the substation extension will require vehicles to deliver plant, machinery and workers to the site. Access to the site would be off the existing public road to the West of the substation. The local road network was used to construct the existing Knocknagael substation and it is

considered the same roads could be used to construct the extension. An appropriate construction traffic management plan would be developed to ensure road safety for all other road users during the construction works for suitable management of all vehicle movements.

Environmental survey has not identified any potential significant constraints to the extension at Knocknagael substation. Environmental survey and assessment will be reported in the planning application to ensure appropriate environmental mitigation recommendations are identified in advance of construction works.



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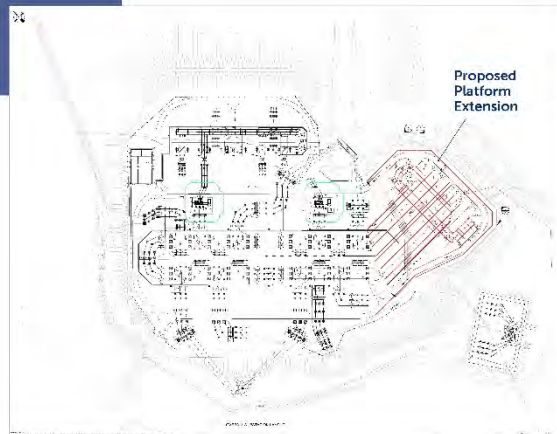
Knocknagael substation extension

The figure below shows the preferred option currently in design development for the extension of the Knocknagael substation to allow for the additional bay required to accommodate the consented Loch na Cathrach Pump Storage Scheme.

Since our last consultation event in December 2022 the Loch na Cathrach Pump Storage scheme connection requirement has changed from a firm (resilient) connection to a non-firm connection. This now means that only one circuit is required to connect to the bus section at Knocknagael. As a result there is now a requirement to extend out one side of the existing busbar.

To achieve these electrical extension works, some cut and fill earth activities will be necessary to extend out to the existing

platform to enable the installation of the new electrical equipment to be constructed upon. Works to the existing drainage system will be required to ensure the larger platform area is adequately drained. Temporary access tracks and lay down areas will be identified and developed to facilitate construction works within the site compound, whilst the permanent access to the substation will be reviewed and potentially relocated to accommodate the extended site.



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Environmental considerations



Landscape and visual

The southern section of the alignment extends into the northern edge of the Loch Ness and Duntelchaig Special Landscape Area.

This area is dominated by the vast linear feature of Loch Ness and its dramatic landform trench, flanked by steep, towering wooded slopes that leads to undulating moorland ridges and a contrasting remote interior plateau of upland lochs, small woods and rocky knolls.

The local area transitions from an area of broad steep sided glen in the south, to flat moorland plateau with farmland, with a small section of rolling farmland and woodland in the north at Knocknagael substation.

Cultural heritage

There are a number of listed buildings, scheduled monuments and Gardens and Designed Landscapes located in the area. There are also several non-designated assets in the wider area. These indicate a broad and diverse range of previous function and use, dating from the Neolithic to the 19th century.

As a result of the known archaeological presence there is a high likelihood of unknown archaeology assets present in the area. The planning application will include a cultural heritage assessment to identify any on-site archaeological investigation that would be required before construction works commence and if required a Written Scheme of Investigation would be prepared which would set out a strategy for archaeological mitigation in advance of the construction works.

Forestry

There are a number of forestry compartments in the wider area designated as ancient woodland inventory sites (AWIS), with the compartments most prevalent in the southern section of the alignment. In Scotland, Ancient Woodland is defined as land that is currently wooded and has been continually wooded, at least since 1750. Further survey and assessment will be reported in the planning application along with any proposed mitigation.

Land use

A number of core paths are present in the area along with the Caledonia Way National Cycle Path (National Route 78) and the Loch Ness 360 trail.

Land capability for agriculture in the area is generally categorised as supporting mixed agriculture and improved grassland.

Hydrology and geology

There are numerous field drains and burns in the area associated with historic land improvement and natural process. There are also mapped areas of class 2 peat within the local area. Class 2 peat is described as areas dominated by peat soil and peatland habitats. There are known Private Water Supplies (PWS) within the 'study area' under consideration. Further assessment will be included in the planning application to confirm any required mitigation.



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Environmental considerations

Site survey and desk-based assessment has been undertaken to gather data and understand the key environmental constraints and opportunities within the local area. This process has helped to identify the key environmental issues for this project. Site survey focusing on these commenced in Spring 2022.

Natural heritage designations

Loch Ashie Special Protection Area (SPA) and Site of Special Scientific Interest (SSSI), located approximately 3km east of Loch Ness, is designated for regularly supporting a non-breeding population of the Annex 1 species Slavonian grebe *Podiceps auritus*, representing 10% of the UK population of this species. Loch Ashie is the most important moult site in Scotland for this species.

Torvean Landforms Site of Special Scientific Interest (SSSI) (Geological) and Geological Conservation Review (GCR) area, is located approximately 2km to the northwest.



Ornithology, habitats and protected species

Non breeding populations of slavonian grebe associated with the Loch Ashie SPA and SSSI, are present in the area. Suitable habitat for Schedule 1 species including peregrine, merlin, kingfisher and brambling is present and these species are known to occur within the area. Suitable nesting habitat for Birds of Conservation Concern (BoCC) including greenfinch, yellowhammer, song thrush, linnet and cuckoo is present within the area.

A breeding bird survey identified two lekking black grouse at two locations between the north shore of Loch Ashie and the alignment. It is possible that this is a newly established lekking location, representing an expansion of the local distribution of this species and which may be particularly sensitive to disturbance. Black grouse is listed as a priority species on both the LBAP and SBL and is red-listed for the severe decline in its UK breeding population and moderate decline in its UK breeding range. The area local to the alignment is considered to support two breeding territories of curlew, with nest sites assumed to be located beyond the site boundary, and the site providing feeding areas for the breeding birds.

The site also provides nesting and breeding habitat for crossbill and red kite. Crossbill is a highly mobile species in response to conifer seed production; the impact of loss of habitat is not expected to have a significant effect on its abundance or distribution, since the population is resilient to habitat change.

Habitats present within the area comprise coniferous plantation woodland and areas of broadleaved woodland, unimproved, semi-improved and improved grassland, arable fields and heathland. There are areas of woodland recorded on the Native Woodland Survey of Scotland (NWSS) as Annex 1 habitat, Caledonian forest. There is also an area of blanket bog to the south on the west side of General Wade's Military Road.

European protected species known to occur in the area include otter, wildcat and bat species. UK Biodiversity Action Plan (BAP) species including red squirrel, pine marten, and brown hare are also known to occur in the area. Suitable habitat for these species is present.



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Our underground cable routing and design process

Key stages

For new UGC projects, the process follows four principal stages, each iterative and increasing in detail and resolution, bringing cost, technical and environmental considerations together in a way which seeks the best balance.

Stage 1: Strategic options assessment/routing strategy

The starting point in all UGC projects is to establish the need for the project and to select the preferred strategic option to deliver it. This process will be triggered by the preparation of a number of internal assessments and documents which identify the technology to be used and the point on the existing transmission network where a connection can be made. In the case of the Loch na Cathrach PSH this point is at Knocknagael Substation.

Stage 2: Corridor selection

Corridor selection seeks to identify possible corridors which are as short as practicable, which are not constrained by altitude or topography and which would avoid, where possible, any interaction with man-made infrastructure and features of environmental sensitivity. Corridors may be 1km wide or may extend over many kilometres in width, depending on the scale and length of the project. For the project included in this consultation, the corridor stage is omitted as the location of the Loch na Cathrach PSH and point of connection on the network naturally define a corridor of a few kilometres in width. Routing a new UGC any further afield than this would be too expensive and add unnecessary infrastructure to the landscape.

Stage 3: Route selection

Route selection seeks to find a route within the corridor which avoids where possible physical, environmental and amenity constraints, is likely to be acceptable to stakeholders, and is economically viable, taking in to account factors such as altitude, slope, ground conditions and access. The dimensions of a route will depend on the context provided by the corridor. A route may be several kilometres in length and may range from 200m to 1km in width, depending on the scale of the project, the nature and extent of constraints and the character of the area in question. A number of route options are usually identified and assessed, leading to a preferred route being selected.

Stage 4: Alignment selection

Alignment selection seeks to identify an alignment within the preferred route and to define the access strategy which will be adopted in terms of, for example, the nature and extent of temporary and/or permanent access tracks and possible road improvements. It will be influenced by local constraints, such as individual properties, their aspect, and amenity; ground suitability; habitats; and cultural heritage features and setting. There may be more than one distinct alignment option through the preferred route. It is more likely however that variants to sections of an alignment may arise where there are different ways to avoid a constraint.

What happens next?

Following further stakeholder engagement with the public, statutory bodies and landowners, the proposed alignment will be finalised and taken forward for formal environmental assessment and consent application where required.

Key engineering considerations:

- Construction costs and buildability (largely affected by ground conditions, such as peat/rock/flooding/contaminated land, etc).
- Operations and maintenance requirements.
- Outage requirements and network constraints.
- Vicinity to other existing electrical OHL and underground structures, as well as existing substation infrastructure.
- Vicinity to any other utility, overhead or underground.
- Existing land boundaries and ownership.
- Environmental constraints.
- Communications masts and infrastructure.
- Urban development.
- Forestry and biodiversity.
- Technology costs and design parameters.
- Site accessibility.
- Route length.



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Our underground cable routing and design process

SSEN Transmission has developed and implemented formal guidance for the selection of routes and alignments for its new Underground Cable (UGC).

The main aim of the Guidance is to provide a consistent approach to the selection of new UGC alignments and is underpinned by our statutory obligations to: 'Develop and maintain an efficient, coordinated and economical electricity transmission system in its licenced area' and in so doing, to 'have regard to the desirability of preserving the natural beauty, of conserving flora, fauna and geological and physiographical features of special interest and protecting sites, buildings and objects of architectural, historic or archaeological interest; and do what we reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites buildings or objects'.

These duties capture the principal objective of the routing process which is to balance technical and cost considerations with environmental considerations, to select a proposed alignment which is economically viable, technically feasible, minimises impacts on important resources or features of the environment and reduces disturbance to those living in it, working in it, visiting it or using it for recreational purposes. Site selection follows a similar process to that of the UGC routing detailed on the next page, following a number of refinement stages to determine the most appropriate site, based on environmental, engineering and economical factors. In this instance the site of connection is at the existing Knocknagael Substation and therefore a site selection study is not required. However, in selecting the most suitable area in which to extend the existing Knocknagael Substation to accommodate the connection the same criteria will be used in order to select the optimum solution.



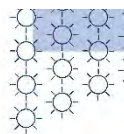
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Our consultation process

At SSEN Transmission, we are committed to delivering a robust and transparent consultation process underpinned by inclusion and accessibility. As a stakeholder led business, we understand the importance of involving communities and key stakeholders throughout each stage of our development process.

This period of engagement in the development phase is vital in shaping our proposals and to do this effectively, we need to capture feedback from stakeholders, harness local knowledge to identify key risks and explore potential community benefit opportunities.

Today we are presenting our approach to developing this project, including technology options, environmental considerations, the routing and site selection process and presenting maps which aim to give stakeholders and community members a better visual representation of the work on the project to date.

We have undertaken early engagement with the local community at a public event in April 2022, presenting a high-level overview and invited feedback on our proposed route and substation extension options. Following feedback we presented our alignment for the underground cable and preferred substation extension proposals in December 2022. Following further design development we are now presenting our latest underground cable alignment and proposal for the extension of the substation platform.

Further consultation

A further public consultation event will be held in late Spring/early Summer 2024 to update interested members of the public on progress of the project and prior to the main planning application submission. Further pre-application consultation will take place with The Highland Council and statutory consultees in Spring 2024 to inform the environmental assessment process.

If you require additional support to submit your views, please contact our Community Liaison Manager Ryan Davidson who will happily assist you.

What we're consulting on today

Following further design and project development we have updated the UGC alignment and substation extension option presented in December 2022.

Sharing our approach to developing this project and the rationale behind our proposals, we are keen to hear stakeholder views regarding our proposed works and if there are further considerations you believe need to be taken in to account during the next stage of the development process.

Who we're consulting with

We are keen to hear feedback from a broad range of stakeholders including but not limited to local residents, landowners, businesses, non-statutory consultees and statutory consultees such as local authorities, NatureScot, SEPA, Historic Environment Scotland and Scottish Forestry.



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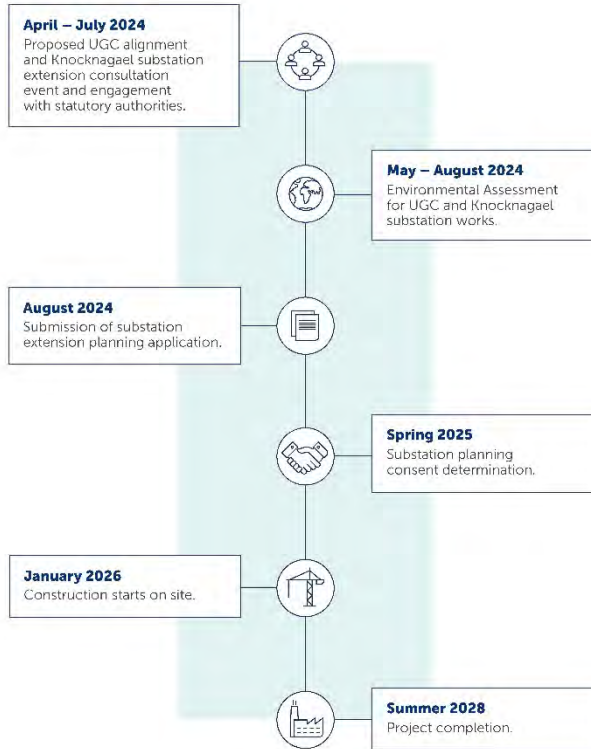


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Project overview



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Project need and overview

SSEN Transmission are required to provide a connection to the Statkraft's Loch na Cathrach Pumped Storage Hydro (PSH) Scheme (450 Megawatts (MW)) near Dores,

Project overview

Loch na Cathrach PSH Connection works include:

- Construction of a new 2 bay 275kV Air Insulated Substation (AIS) Switching Station at the Loch na Cathrach PSH Scheme.
- Installation of 9km of 275kV underground cabling between Loch na Cathrach PSH Scheme and Knocknagael Substation.
- An extension to the existing Knocknagael platform to accommodate the new 275kV cable connection to Loch na Cathrach PSH Scheme.

Under our Network Operators Licence we are required to deliver the connection in a technically efficient, co-ordinated and economic manner, whilst having the least practicable impact on people and the environment. The connection for Loch na Cathrach is to be provided at 275 Kilovolts (kV) (275,000 volts) and is currently proposed to be via Underground Cable (UGC).

Since our last consultation event in December 2022 the Loch na Cathrach Pump Storage scheme connection requirement has changed from a firm (resilient) connection to a non-firm connection. This now means that only one circuit is required to connect.

As a result there have been changes to the proposals for the Knocknagael substation extension and UGC alignment. The UGC will connect to the main transmission network at the existing Knocknagael 275kV substation. In order to facilitate this connection an extension is required to the existing Knocknagael substation platform to accommodate the additional electrical equipment required. At the Loch na Cathrach end of the UGC connection, a new switching station will be constructed within the Loch na Cathrach PSH site. The switching station constructed at the Loch na Cathrach PSH scheme has been consented as part of the Loch na Cathrach PSH scheme consent.

Planning process

A planning application for the construction and operation of the proposed Knocknagael substation extension will be submitted under the Town and Country Planning (Scotland) Act 1997 (as amended).

The underground cable will benefit from Permitted Development rights as set out under Class 40 1(a) of The Town and Country Planning (General Permitted Development) (Scotland) Order 1992.

A temporary stone access track may be required to install the UGC. A planning application for the stone track will be submitted to the Highland Council under the Town and Country Planning (Scotland) Act 1997 (as amended). This will be a separate planning application to the substation extension application.



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APPENDIX E: CONSULTATION BOOKLET EVENT 1

Loch na Cathrach Pump Storage Scheme 275kV Connection

Have your say

We value community and stakeholder feedback. Without this, we would be unable to progress projects and reach a balanced proposal.

The feedback period

We will be seeking final comments and feedback from members of the public, statutory consultees and other key stakeholders regarding our proposals until **Wednesday 15 May**.

How to provide feedback

Submit your comments and feedback by completing and returning the feedback form at the back of this booklet which is also online via the project webpage, emailing or writing to your Community Liaison Manager.

Our Community Liaison team

Each project has a dedicated Community Liaison Manager who works closely with community members to make sure they are well informed of our proposals and that their views, concerns, questions or suggestions are put to our project teams.



Throughout the life of our projects, you will hear from us regularly. We aim to establish strong working relationships by being accessible to key local stakeholders such as community councils, residents' associations and development trusts, and regularly engage with interested individuals.

Recite^{me}

To support everyone online, we provide accessibility and language options on our website through 'Recite Me'. The accessibility and language support options provided by 'Recite Me' include text-to-speech functionality, fully customisable styling features, reading aids, and a translation tool with over 100 languages, including 35 text-to-speech.

Please select "Accessibility" on our website to try out our inclusive toolbar."

You can also follow us on social media:

 @assentransmission  @SSETransmission

What we're seeking views on

During our last public consultation event in December 2022, we wanted to know your thoughts on the development under consideration and if you agreed with the option we'd identified as best.

Now that we have taken forward a proposed option, we want you to share your thoughts and opinions on our plans, where you think we can make improvements, concerns about the impact of our work and what you think of any changes and refinements we've made.

We'll be actively looking to mitigate the impacts of the site as much as possible over the coming months, but it would be helpful to understand what you believe we should be doing to help minimise these impacts and if there are any opportunities to deliver a local community benefit you would like us to consider.

We encourage all interested community members to fill in a feedback form when submitting feedback, however if you prefer, you can email us to provide

Community Liaison Manager

Ryan Davidson

 Scottish Hydro Electric Transmission,
1 Waterloo St, Glasgow, G2 6AY

 +44 7901 133 919

 ryan.davidson@sse.com

Additional information:



The best way to keep up to date is to sign up to project updates via the project webpage:
ssen-transmission.co.uk/lochnacathrach



Loch na Cathrach Pump Storage Scheme 275kV Connection

Your feedback

Thank you for taking the time to read this consultation booklet.
In order to record your views and improve the effectiveness
of our consultation, please complete this short feedback form.

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

Q1. Have we adequately explained the need for this project?

☐ Yes ☐ No ☐ Unsure

Comments:

Q2. Do you feel sufficient information has been provided to enable you to understand what is being proposed on and why?

☐ Yes ☐ No ☐ Unsure

Comments:

Q3. Are you satisfied that our approach taken to select our preferred UGC alignment and Knocknagael Substation extension options have been adequately explained?

☐ Yes ☐ No ☐ Unsure

Comments:

Loch na Cathrach Pump Storage Scheme 275kV Connection

Q4. Do you agree with our preferred alignment and substation extension option, if not, why?

☐ Yes ☐ No ☐ Unsure

Comments:

Q5. Are there any factors, or environmental features, that you consider may have been overlooked during the preferred UGC alignment and substation extension process?

☐ Yes ☐ No ☐ Unsure

Comments:

Q6. Do you have any particular concerns or queries on the proposed connection project?

☐ Yes ☐ No ☐ Unsure

Comments:



Loch na Cathrach Pump Storage Scheme 275kV Connection

Q7. Do you have any other comments (positive or negative) or concerns in relation to the need for the project, the transmission infrastructure requirements or about the preferred UGC route and substation extension option?

Comments:

Full name: **Email:**

Telephone: **Address:**

We would like to send you relevant communications via email such as invitations to stakeholder events, surveys, updates on projects, services and future developments from the Scottish and Southern Electricity Networks group listed below. If you are happy to receive email updates please opt in by ticking the box below. You can unsubscribe at any time by contacting us at stakeholder.admin@sse.com or by clicking on the unsubscribe link that will be at the end of each of our emails.



If you would like to be kept informed of progress on the project, 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:

Post: Scottish Hydro Electric Transmission, 1 Waterloo St, Glasgow, G2 6AY

Email: ryan.davidson@sse.com

Online: www.sse.com/consultation/ LochnaCathrach/275kVConnection

For information on how we collect and process your data please see our privacy notice available at today's event. This can also be obtained online at: [sse.com/consultation/ LochnaCathrach/275kVConnection/privacy](https://www.sse.com/consultation/ LochnaCathrach/275kVConnection/privacy)

Comments forms and all the information from today's event will also be available to download from the project website.

We intend to use Artificial Intelligence (AI) to assist our experienced teams in the analysis of your feedback, so we can categorise key points raised more quickly. You can learn more about how we're utilising AI at: [sse.com/consultation/ LochnaCathrach/275kVConnection/AIFAQ](https://www.sse.com/consultation/ LochnaCathrach/275kVConnection/AIFAQ)

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.

Scottish and Southern Electricity Networks is a trading name of: Scottish and Southern Energy Power Distribution Limited Registered in Scotland No. SC213459, Scottish Hydro Electric Transmission plc Registered in Scotland No. SC213461, Scottish Hydro Electric Power Distribution plc Registered in Scotland No. SC213460, (all having their Registered Offices at Inverlorn House 200 Dunkeld Road Perth PH1 3AQ), and Southern Electric Power Distribution plc Registered in England & Wales No. 04094290 having its Registered Office at Number One Forbury Place, 43 Forbury Road, Reading, Berkshire, RG1 3JH which are members of the SSE Group.

Knocknagael substation to Loch na Cathrach Storage switching station UGC

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Environmental survey and assessment for the UGC works will be reported in a Voluntary Environmental Appraisal to ensure appropriate environmental mitigation recommendations are identified in advance of construction works.



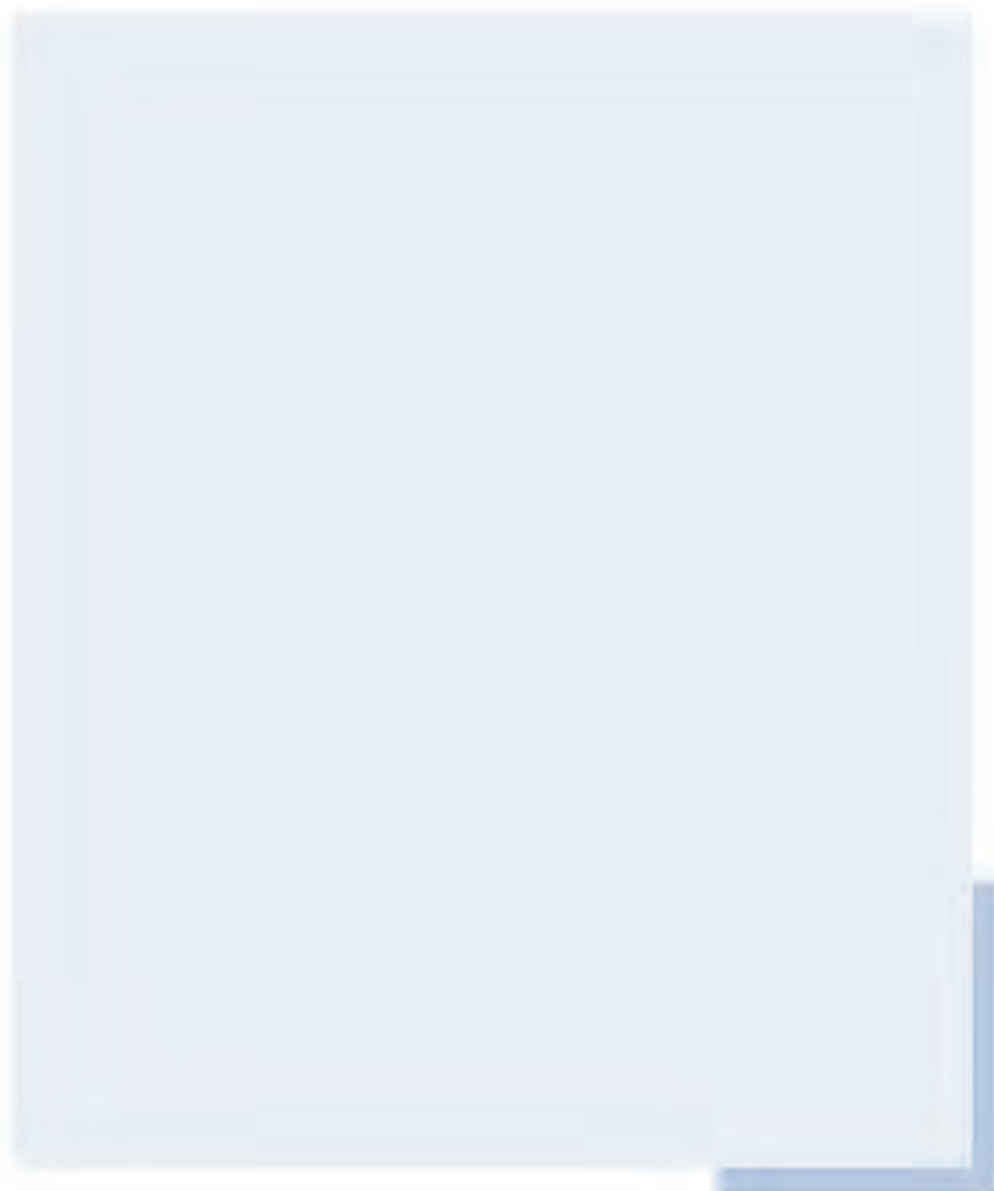
Preferred cable alignment

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Loch na Cathrach Pump Storage Scheme 275kV Connection

Notes



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Loch na Cathrach Pump Storage Scheme 275kV Connection

Preferred substation extension option

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was used to construct the existing Knocknagael substation and it is considered the same roads could be used to construct the extension. An appropriate construction traffic management plan would be developed to ensure road safety for all other road users during the construction works for suitable management of all vehicle movements.

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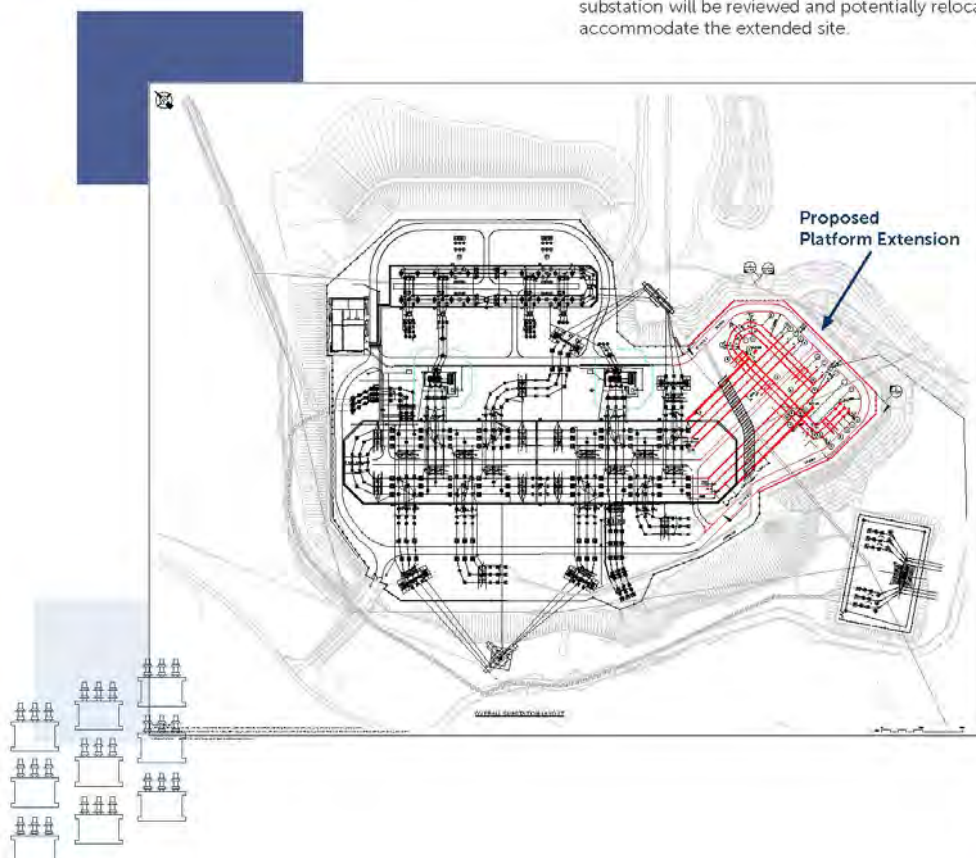


Knocknagael substation extension

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Environmental considerations



Site survey and desk-based assessment has been undertaken to gather data and understand the key environmental constraints and opportunities within the local area. This process has helped to identify the key environmental issues for this project. Site survey focusing on these commenced in **Spring 2022**.

Natural heritage designations

Loch Ashie Special Protection Area (SPA) and Site of Special Scientific Interest (SSSI), located approximately 3km east of Loch Ness, is designated for regularly supporting a non-breeding population of the Annex 1 species Slavonian grebe *Podiceps auritus*, representing 10% of the UK population of this species. Loch Ashie is the most important moult site in Scotland for this species.

Torvean Landforms Site of Special Scientific Interest (SSSI) (Geological) and Geological Conservation Review (GCR) area, is located approximately 2km to the northwest.



Ornithology, habitats and protected species

Non breeding populations of slavonian grebe associated with the Loch Ashie SPA and SSSI, are present in the area. Suitable habitat for Schedule 1 species including peregrine, merlin, kingfisher and brambling is present and these species are known to occur within the area. Suitable nesting habitat for Birds of Conservation Concern (BoCC) including greenfinch, yellowhammer, song thrush, linnet and cuckoo is present within the area.

A breeding bird survey identified two lekking black grouse at two locations between the north shore of Loch Ashie and the alignment. It is possible that this is a newly established lekking location, representing an expansion of the local distribution of this species and which may be particularly sensitive to disturbance. Black grouse is listed as a priority species on both the LBAP and SBL and is red-listed for the severe decline in its UK breeding population and moderate decline in its UK breeding range. The area local to the alignment is considered to support two breeding territories of curlew, with nest sites assumed to be located beyond the site boundary, and the site providing feeding areas for the breeding birds.

The site also provides nesting and breeding habitat for crossbill and red kite. Crossbill is a highly mobile species in response to conifer seed production; the impact of loss of habitat is not expected to have a significant effect on its abundance or distribution, since the population is resilient to habitat change.

Habitats present within the area comprise coniferous plantation woodland and areas of broadleaved woodland, unimproved, semi-improved and improved grassland, arable fields and heathland. There are areas of woodland recorded on the Native Woodland Survey of Scotland (NWSS) as Annex I habitat, Caledonian forest. There is also an area of blanket bog to the south on the west side of General Wade's Military Road.

European protected species known to occur in the area, include otter, wildcat and bat species. UK Biodiversity Action Plan (BAP) species including red squirrel, pine marten, and brown hare are also known to occur in the area. Suitable habitat for these species is present.

Loch na Cathrach Pump Storage Scheme 275kV Connection



Landscape and visual

The southern section of the alignment extends into the northern edge of the Loch Ness and Duntelchaig Special Landscape Area.

This area is dominated by the vast linear feature of Loch Ness and its dramatic landform trench, flanked by steep, towering wooded slopes that leads to undulating moorland ridges and a contrasting remote interior plateau of upland lochs, small woods and rocky knolls.

The local area transitions from an area of broad steep sided glen in the south, to flat moorland plateau with farmland, with a small section of rolling farmland and woodland in the north at Knocknagael substation.

Cultural heritage

There are a number of listed buildings, scheduled monuments and Gardens and Designed Landscapes located in the area. There are also several non-designated assets in the wider area. These indicate a broad and diverse range of previous function and use, dating from the Neolithic to the 19th century. As a result of the known archaeological presence there is a high likelihood of unknown archaeology assets present in the area. The planning application will include a cultural heritage assessment to identify any on-site archaeological investigation that would be required before construction works commence and if required a Written Scheme of Investigation would be prepared which would set out a strategy for archaeological mitigation in advance of the construction works.

Forestry

There are a number of forestry compartments in the wider area designated as ancient woodland inventory sites (AWIS), with the compartments most prevalent in the southern section of the alignment. In Scotland, Ancient Woodland is defined as land that is currently wooded and has been continually wooded, at least since 1750. Further survey and assessment will be reported in the planning application along with any proposed mitigation.

Land use

A number of core paths are present in the area along with the Caledonia Way National Cycle Path (National Route 78) and the Loch Ness 360 trail.

Land capability for agriculture in the area is generally categorised as supporting mixed agriculture and improved grassland.

Hydrology and geology

There are numerous field drains and burns in the area associated with historic land improvement and natural process. There are also mapped areas of class 2 peat within the local area. Class 2 peat is described as areas dominated by peat soil and peatland habitats. There are known Private Water Supplies (PWS) within the 'study area' under consideration. Further assessment will be included in the planning application to confirm any required mitigation.

Loch na Cathrach Pump Storage Scheme 275kV Connection

Key stages

For new UGC projects, the process follows four principal stages, each iterative and increasing in detail and resolution, bringing cost, technical and environmental considerations together in a way which seeks the best balance.

Stage.1



Strategic options assessment/routing strategy

The starting point in all UGC projects is to establish the need for the project and to select the preferred strategic option to deliver it. This process will be triggered by the preparation of a number of internal assessments and documents which identify the technology to be used and the point on the existing transmission network where a connection can be made. In the case of the Loch na Cathrach PSH this point is at Knocknagael Substation.

Corridor selection

Stage.2



Corridor selection seeks to identify possible corridors which are as short as practicable, which are not constrained by altitude or topography and which would avoid, where possible, any interaction with man-made infrastructure and features of environmental sensitivity. Corridors may be 1km wide or may extend over many kilometres in width, depending on the scale and length of the project. For the project included in this consultation, the corridor stage is omitted as the location of the Loch na Cathrach PSH and point of connection on the network naturally define a corridor of a few kilometres in width. Routing a new UGC any further afield than this would be too expensive and add unnecessary infrastructure to the landscape.

Route selection

Stage.3



Route selection seeks to find a route within the corridor which avoids where possible physical, environmental and amenity constraints, is likely to be acceptable to stakeholders, and is economically viable, taking in to account factors such as altitude, slope, ground conditions and access. The dimensions of a route will depend on the context provided by the corridor. A route may be several kilometres in length and may range from 200m to 1km in width, depending on the scale of the project, the nature and extent of constraints and the character of the area in question. A number of route options are usually identified and assessed, leading to a preferred route being selected.

Stage.4



Alignment selection

Alignment selection seeks to identify an alignment within the preferred route and to define the access strategy which will be adopted in terms of, for example, the nature and extent of temporary and/or permanent access tracks and possible road improvements. It will be influenced by local constraints, such as individual properties, their aspect, and amenity; ground suitability; habitats; and cultural heritage features and setting. There may be more than one distinct alignment option through the preferred route. It is more likely however that variants to sections of an alignment may arise where there are different ways to avoid a constraint.

Loch na Cathrach Pump Storage Scheme 275kV Connection

What happens next?

Following further stakeholder engagement with the public, statutory bodies and landowners, the proposed alignment will be finalised and taken forward for formal environmental assessment and consent application where required.

Key engineering considerations:

- Construction costs and buildability (largely affected by ground conditions, such as peat/rock/flooding/contaminated land, etc).
- Operations and maintenance requirements
- Outage requirements and network constraints
- Vicinity to other existing electrical OHL and underground structures, as well as existing substation infrastructure.
- Vicinity to any other utility, overhead or underground
- Existing land boundaries and ownership.
- Environmental constraints
- Communications masts and infrastructure
- Urban development
- Forestry and biodiversity
- Technology costs and design parameters.
- Site accessibility
- Route length



Loch na Cathrach Pump Storage Scheme 275kV Connection

Biodiversity net gain

We recognise that we have significant interaction with the environment through the activities we undertake in Scotland as we seek to develop and improve the transmission network. With this work comes a legal responsibility to design and build our projects in a manner which protects the natural and built environment.

We are committed to protecting and enhancing the environment by minimising the potential impacts from our construction and operational activities on biodiversity. To this end, we have committed to net gain of biodiversity on all projects gaining consent. This means that during the development, construction and operation of our projects, we will leave a positive environmental legacy at all of our SSEN Transmission sites. As this project

progresses through the development process, we will actively seek ways to avoid and minimise impacts on biodiversity, through careful routing design to avoid areas of highest biodiversity value, to implementing habitat restoration and improvement measures in areas within and surrounding the proposed development. Some examples of biodiversity improvements that have been implemented on other recent projects include:

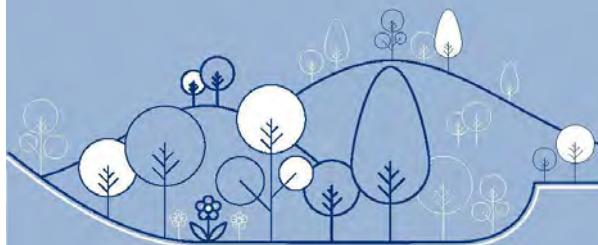
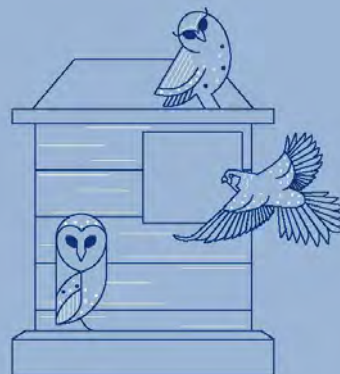


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Loch na Cathrach Pump Storage Scheme 275kV Connection

Creag Rhiabach bird boxes:

Installation of wooden bird boxes made from reused and recycled construction materials to support local raptor populations at key locations across the highlands, including kestrels, tawny owl and barn owl.



Argyll Coast and Countryside Trust (ACT) Woodland Planting Collaboration

Argyll's rainforest is a unique and rare habitat of ancient and native woodland. This collaboration with ACT will help deliver SSEN Transmission's compensatory tree planting commitments in Argyll while helping towards ACT's woodland planting ambitions, supporting its charitable objectives including biodiversity gain, health and wellbeing improvement for local people, outdoor learning opportunities and climate change workshops.

Thurso South Substation:

Creation of approximately 10 hectares of pollinator habitat to support the rare endemic great yellow bumblebee and contribute to wider conservation efforts for this species.



Please let us know if you have ideas for biodiversity improvement projects in your local area that SSEN Transmission could get involved with.

Loch na Cathrach Pump Storage Scheme 275kV Connection

Our underground cable routing and design process

SSEN Transmission has developed and implemented formal guidance for the selection of routes and alignments for its new Underground Cable (UGC).

The main aim of the Guidance is to provide a consistent approach to the selection of new UGC alignments and is underpinned by our statutory obligations to: 'Develop and maintain an efficient, coordinated and economical electricity transmission system in its licenced area' and in so doing, to 'have regard to the desirability of preserving the natural beauty, of conserving flora, fauna and geological and physiographical features of special interest and protecting sites, buildings and objects of architectural, historic or archaeological interest; and do what we reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites buildings or objects'. These duties capture the principal objective of the routing process which is to balance technical and cost considerations with environmental

considerations, to select a proposed alignment which is economically viable, technically feasible, minimises impacts on important resources or features of the environment and reduces disturbance to those living in it, working in it, visiting it or using it for recreational purposes. Site selection follows a similar process to that of the UGC routing detailed on the next page, following a number of refinement stages to determine the most appropriate site, based on environmental, engineering and economical factors. In this instance the site of connection is at the existing Knocknagael Substation and therefore a site selection study is not required. However, in selecting the most suitable area in which to extend the existing Knocknagael Substation to accommodate the connection the same criteria will be used in order to select the optimum solution.



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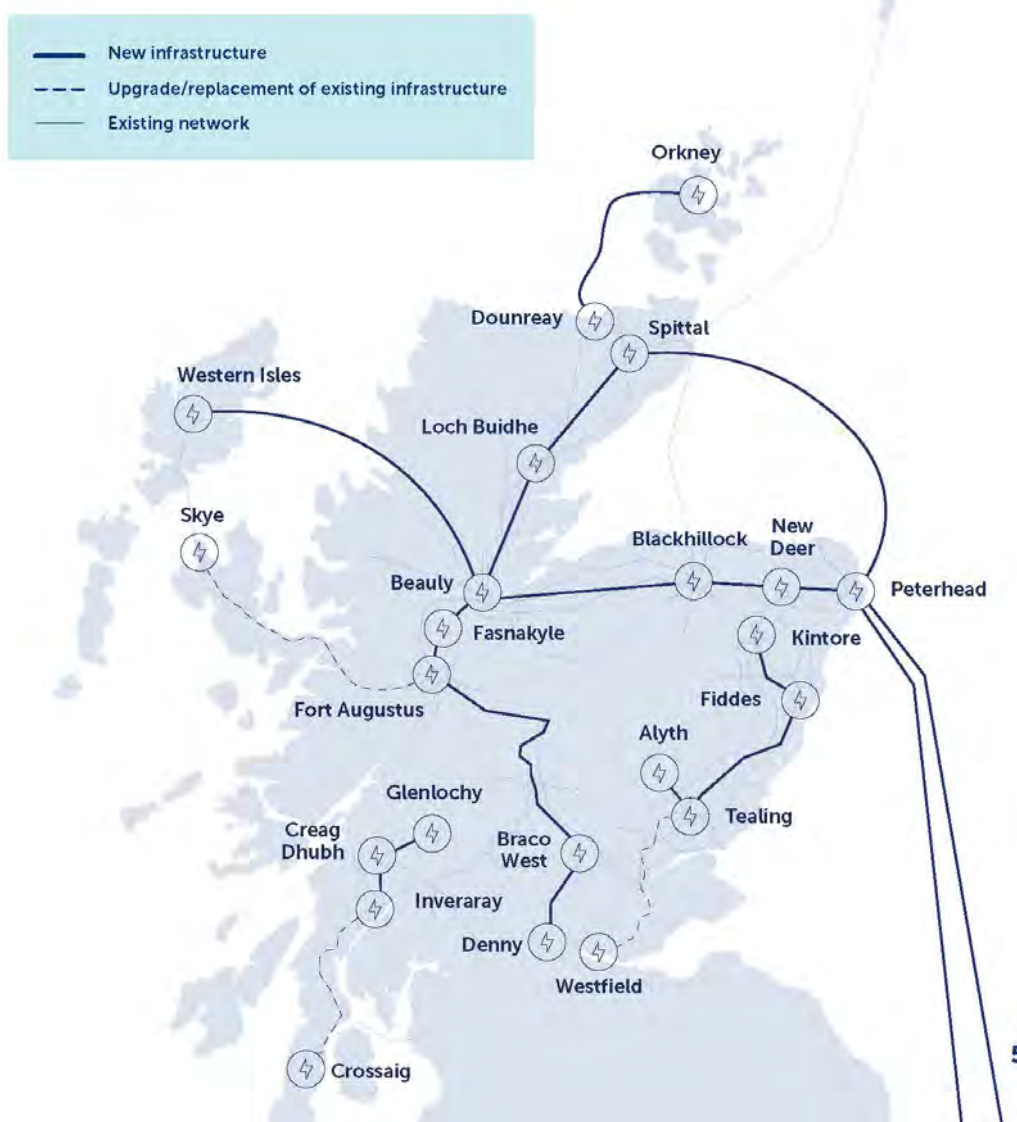
Loch na Cathrach Pump Storage Scheme 275kV Connection

Future network investment requirements

Our 2030 targets are the first step on the transition to net zero. The UK Government has a target to decarbonise our electricity system by 2035 and fully decarbonise our economy by becoming net zero by 2050, with the Scottish Government committing to net zero five years earlier, by 2045.

To achieve these targets, further investment in new low carbon electricity generation and the enabling electricity transmission network infrastructure will be required.

The next stage of strategic network planning across Great Britain is underway and we expect the independent Electricity System Operator, National Grid ESO, to publish details of this in March this year. It is expected this will include a combination of new onshore and offshore network requirements.



Loch na Cathrach Pump Storage Scheme 275kV Connection

Project need and overview

SSEN Transmission are required to provide a connection to the Statkraft's Loch na Cathrach Pumped Storage Hydro (PSH) Scheme (450 Megawatts (MW)) near Dores, Highlands approximately 14km south-west of Inverness.

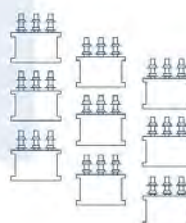
Project timeline



Project overview

Loch na Cathrach PSH Connection works include:

- Construction of a new 2 bay 275kV Air Insulated Substation (AIS) Switching Station at the Loch na Cathrach PSH Scheme.
- Installation of 9km of 275kV underground cabling between Loch na Cathrach PSH Scheme and Knocknagael Substation.
- An extension to the existing Knocknagael platform to accommodate the new 275kV cable connection to Loch na Cathrach PSH Scheme.



Loch na Cathrach Pump Storage Scheme 275kV Connection

Under our Network Operators Licence we are required to deliver the connection in a technically efficient, co-ordinated and economic manner, whilst having the least practicable impact on people and the environment. The connection for Loch na Cathrach is to be provided at 275 Kilovolts (kV) (275,000 volts) and is currently proposed to be via Underground Cable (UGC).

Since our last consultation event in December 2022 the Loch na Cathrach Pump Storage scheme connection requirement has changed from a firm (resilient) connection to a non-firm connection. This now means that only one circuit is required to connect. As a result

there have been changes to the proposals for the Knocknagael substation extension and UGC alignment.

The UGC will connect to the main transmission network at the existing Knocknagael 275kV substation. In order to facilitate this connection an extension is required to the existing Knocknagael substation platform to accommodate the additional electrical equipment required. At the Loch na Cathrach end of the UGC connection, a new switching station will be constructed within the Loch na Cathrach PSH site. The switching station constructed at the Loch na Cathrach PSH scheme has been consented as part of the Loch na Cathrach PSH scheme consent.



Planning process

A planning application for the construction and operation of the proposed Knocknagael substation extension will be submitted under the Town and Country Planning (Scotland) Act 1997 (as amended). The underground cable will benefit from Permitted Development rights as set out under Class 40 1(a) of The Town and Country Planning (General Permitted Development) (Scotland) Order 1992.

A temporary stone access track may be required to install the UGC. A planning application for the stone track will be submitted to the Highland Council under the Town and Country Planning (Scotland) Act 1997 (as amended). This will be a separate planning application to the substation extension application.

Loch na Cathrach Pump Storage Scheme 275kV Connection

Our consultation process

At SSEN Transmission, we are committed to delivering a robust and transparent consultation process underpinned by inclusion and accessibility. As a stakeholder led business, we understand the importance of involving communities and key stakeholders throughout each stage of our development process.

This period of engagement in the development phase is vital in shaping our proposals and to do this effectively, we need to capture feedback from stakeholders, harness local knowledge to identify key risks and explore potential community benefit opportunities.

Today we are presenting our approach to developing this project, including technology options, environmental considerations, the routing and site selection process and presenting maps which aim to give stakeholders and community members a better visual representation of the work on the project to date.

We have undertaken early engagement with the local community at a public event in April 2022, presenting a high-level overview and invited feedback on our proposed route and substation extension options. Following feedback we presented our alignment for the underground cable and preferred substation extension proposals in December 2022. Following further design development we are now presenting our latest underground cable alignment and proposal for the extension of the substation platform. If you require additional support to submit your views, please contact our Community Liaison Manager Ryan Davidson who will happily assist you.



Loch na Cathrach Pump Storage Scheme 275kV Connection

What we're consulting on today

Following further design and project development we have updated the UGC alignment and substation extension option presented in December 2022. Sharing our approach to developing this project and the rationale behind our proposals, we are keen to hear stakeholder views regarding our proposed works and if there are further considerations you believe need to be taken in to account during the next stage of the development process.

Who we're consulting with

We are keen to hear feedback from a broad range of stakeholders including but not limited to local residents, landowners, businesses, non-statutory consultees and statutory consultees such as local authorities, NatureScot, SEPA, Historic Environment Scotland and Scottish Forestry.

Further consultation

A further public consultation event will be held in late Spring/early Summer 2024 to update interested members of the public on progress of the project and prior to the main planning application submission. Further pre-application consultation will take place with The Highland Council and statutory consultees in Spring 2024 to inform the environmental assessment process.



Powering change together

The time has come to further enhance Scotland's energy infrastructure, providing power for future generations as we move towards net zero.

The shift to a cleaner, more sustainable future is about more than climate change. It's about ensuring future generations have the same opportunities to thrive as we have all had.

Countries around the world are investing in their energy infrastructure to support the demands of modern economies and meet net zero targets. The UK is leading the way in building a modern, sustainable energy system for the future.



We all have a part to play

When it comes to net zero, we have to be in it together. The UK and Scottish governments have ambitious net zero targets, and we're playing our part in meeting them.

We work closely with the National Grid Electricity System Operator to connect vast renewable energy resources—harnessed by solar, wind, hydro and marine generation—to areas of demand across the country. Scotland is playing a big role in meeting this demand, exporting two thirds of power generated in our network.

But there's more to be done. By 2050, the north of Scotland is predicted to contribute over 50GW of low carbon energy to help deliver net zero. Today, our region has around 9GW of renewable generation connected to the network.

At SSEN Transmission, it is our role to build the energy system of the future.

We're investing £20 billion into our region's energy infrastructure this decade, powering more than ten million UK homes and 20,000 jobs, 9,000 of which will be here in Scotland.



Scan the QR code with your smartphone to find out more about how these policies have been assessed and determined.

Who we are

We're responsible for maintaining and investing in the electricity transmission network in the north of Scotland. We're part of SSE plc, one of the world's leading energy companies with a rich heritage in Scotland that dates back more than 80 years. We are also closely regulated by the GB energy regulator Ofgem, who determines how much revenue we are allowed to earn for constructing, maintaining and renovating our transmission network.

What we do

We manage the electricity network across our region which covers a quarter of the UK's land mass, crossing some of the country's most challenging terrain. We connect renewable energy sources to our network in the north of Scotland and then transport it to where it needs to be. From underground and subsea cables and overhead lines to electricity substations, our network keeps your lights on all year round.

Working with you

We understand that the work we do can have an impact on our host communities. So we're committed to minimising our impacts and maximising all the benefits that our developments can bring to your area. We're regularly assessed by global sustainability consultancy AccountAbility for how we engage with communities. That means we provide all the information you need to know about our plans and how they will impact communities like yours. The way we consult is also a two-way street. We want to hear people's views, concerns, or ideas and harness local knowledge so that our work benefits their communities: today and long into the future. You can share your views with us at ssen-transmission.co.uk/talk-to-us/contact-us/

Loch na Cathrach Pump Storage Scheme 275kV Connection

The Pathway to 2030

Building the energy system of the future will require delivery of significant infrastructure over the next few years. In partnership with the UK and Scottish governments, we're committed to meeting our obligation of connecting new, renewable energy to where it's needed by 2030.

Achieving Net Zero

By 2030, both the UK and Scottish governments are targeting a big expansion in offshore wind generation of 50GW and 11GW respectively. The Scottish Government has also set ambitious targets for an additional 12GW of onshore wind by 2030.

Across Great Britain, including the north of Scotland, there needs to be a significant increase in the capacity of the onshore electricity transmission infrastructure to deliver these 2030 targets and a pathway to net zero.

Securing our energy future

And it's not just about net zero. It's also about building a homegrown energy system, so that geopolitical turmoil around the world doesn't severely impact the UK and push up energy prices.

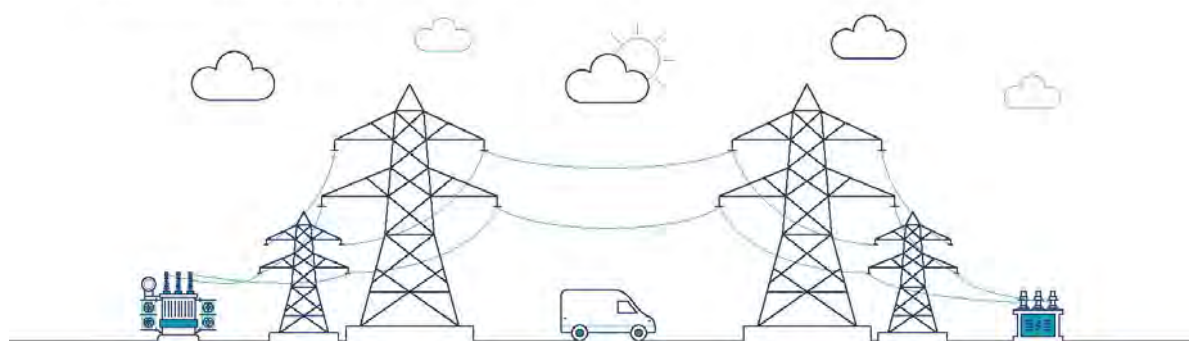
The UK Government's British Energy Security Strategy further underlines the need for this infrastructure, setting out plans to accelerate homegrown power for greater energy independence. The strategy aims to reduce the UK's dependence on and price exposure to global gas wholesale markets through the deployment of homegrown low carbon electricity generation supported by robust electricity network infrastructure.

Meeting our 2030 targets

In July 2022, National Grid, the Electricity System Operator (ESO), published the Pathway to 2030 Holistic Network Design (HND). This set out the blueprint for the onshore and offshore transmission infrastructure that's required to support the forecasted growth in the UK's renewable electricity. It's an ambitious plan that will help the UK achieve net zero.

What does this mean for you?

The North Highlands will play a key role in meeting these goals. The extensive studies that informed the ESO's Pathway to 2030 HND confirmed the requirement for a new 400kV substation in the Beaulieu area to connect the proposed new 400kV overhead line reinforcements from Spittal and Peterhead, together with the new Western Isles link. We're leading some exciting projects to power change in the UK and Scotland. To support the delivery of 2030 offshore wind targets set by the UK and Scottish Governments, and to power local communities, we need to upgrade our existing network. In some key areas, we need to develop entirely new infrastructure, and quickly.





TRANSMISSION

Loch na Cathrach Grid Connection

(previously Red John Pumped Storage)

Pre-Application Consultation Booklet

April 2024



Loch na Cathrach Pump Storage Scheme 275kV Connection

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The consultation event will be taking place on:

Wednesday 17 April, 2–6.30pm
Green Drive Hall, 36 Green Dr, Inverness IV2 4EU



APPENDIX F: CONSULTATION BANNERS EVENT 2



Environmental considerations

Site survey and desk-based assessment has been undertaken to gather data and understand the key environmental constraints and opportunities within the local area. This process has helped to identify the key environmental issues for this project. A Voluntary Environmental Appraisal is currently being developed to report the findings.

Natural heritage designations

Loch Ashie Special Protection Area (SPA) and Site of Special Scientific Interest (SSSI), located approximately 3 km east of Loch Ness, is designated for regularly supporting a non-breeding population of the Annex 1 species Slavonian grebe *Podiceps auritus*, representing 10% of the UK population of this species. Loch Ashie is the most important moult site in Scotland for this species.

The Inner Moray Firth SPA, located approximately 7.5 km to the north of Knocknaegal Substation, is designated for its populations species of European importance including Osprey.



Ornithology, habitats and protected species

Non breeding populations of Slavonian grebe associated with the Loch Ashie SPA and SSSI, are present in the area. Two Schedule 1 birds (Red Kite and Osprey) were recorded during survey. Suitable habitat to support other breeding birds and a number of common and widespread bird species (including Birds of Conservation Concern (BoCC)) were also identified during survey.

A breeding bird survey identified two lekking Black Grouse at two locations between the north shore of Loch Ashie and the alignment. It is possible that this is a newly established lekking location, representing an expansion of the local distribution of this species and which may be particularly sensitive to disturbance. However, no Black Grouse were identified during a follow up survey.

Broadleaved woodland and scrub in the area provides foraging and commuting habitat for bats and surveys have identified trees around Knocknaegal Substation as having features with bat roosting potential. Bats are recorded within the wider area and are likely to use these habitats.

European protected species known to occur in the area, include otter, water vole, pine marten, badger, red squirrel and wildcat. UK Biodiversity Action Plan (BAP) species including European hare are also known to occur in the area. Suitable habitat for these species is present.

Habitats present within the area comprise coniferous woodlands (both plantation and semi-natural) and areas of broadleaved woodland, unimproved, semi-improved and improved grassland, arable fields and upland heathland. There are areas of woodland recorded on the Native Woodland Survey of Scotland (NWSS) as Annex 1 habitat, Caledonian forest. There is also an area of blanket bog to the south on the west side of General Wade's Military Road.

The planning application will include ecology and ornithology assessments and informed by associated site survey that has been completed since 2022. The assessment will set out anticipated effects and appropriate mitigation to reduce any effects.



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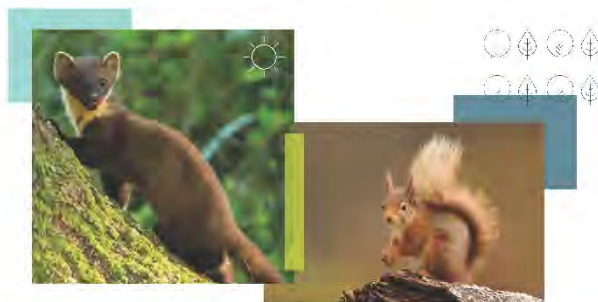


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Environmental considerations



Landscape and visual

The planning application will include a landscape and visual assessment. This will be informed by site survey and photomontages, and will include a proposed landscape and habitat management plan which will set out proposed earthworks and planting proposals as mitigation predominantly surrounding the proposed substation extension works. The underground cable but virtue of it being underground will likely only have potential to create temporary landscape and visual effects during construction. Upon completion of installation of the UGC it will not be visible other than for a limited number of joint bays, marker posts and short sections of permanent stone tracks for access to these locations.

The southern section of the alignment extends into the northern edge of the Loch Ness and Duntelchaig Special Landscape Area. Loys Castle Garden and Designed Landscape is located approximately 2 km north-east of the substation. This is a key reason for why the grid connection is proposed as an underground cable rather than an overhead line.

Cultural heritage

There are a number of listed buildings, scheduled monuments and Gardens and Designed Landscapes located in the area. There are also several non-designated assets in the wider area. These indicate a broad and diverse range of previous function and use, dating from the Neolithic to the 19th century. As a result of the known archaeological presence there is a high likelihood of unknown archaeology assets present in the area. The planning application will include a cultural heritage assessment to identify any on-site archaeological investigation that would be required before construction works commence and if required a Written Scheme of Investigation would be prepared which would set out a strategy for archaeological mitigation in advance of the construction works. Appropriate commitments would be agreed with The Highland Council in advance of any works.

Forestry

There are a number of forestry compartments in the wider area designated as ancient woodland inventory sites (AWIS), with the compartments most prevalent in the southern section of the alignment. In Scotland, Ancient Woodland is defined as land that is currently wooded and has been continually wooded, at least since 1750. Forestry survey has taken place to inform the avoidance of forestry as part of the design process. As such the requirement for tree felling has been minimised as far as practicable. Forestry assessment will be reported in the planning application along with proposed mitigation.

Land use

A number of core paths are present in the area along with the Caledonia Way National Cycle Path (National Route 78) and the Loch Ness 360 trail. Land capability for agriculture in the area is generally categorised as supporting mixed agriculture and improved grassland. An access management plan will be developed by the Principal Contractor prior to works commencing to ensure existing public paths remain accessible. A construction traffic management plan will also be developed to control construction traffic activity which is compatible with existing public road use.

Hydrology and geology

There are numerous field drains and burns in the area associated with historic land improvement and natural process. There are also mapped areas of class 2 peat within the local area. Class 2 peat is described as areas dominated by peat soil and peatland habitats. The design has sought to avoid these areas of peat. There are known Private Water Supplies (PWS) within the area under consideration. Further assessment including a PWS risk assessment will be included in the planning application to confirm any required mitigation to protect PWS and the water environment.

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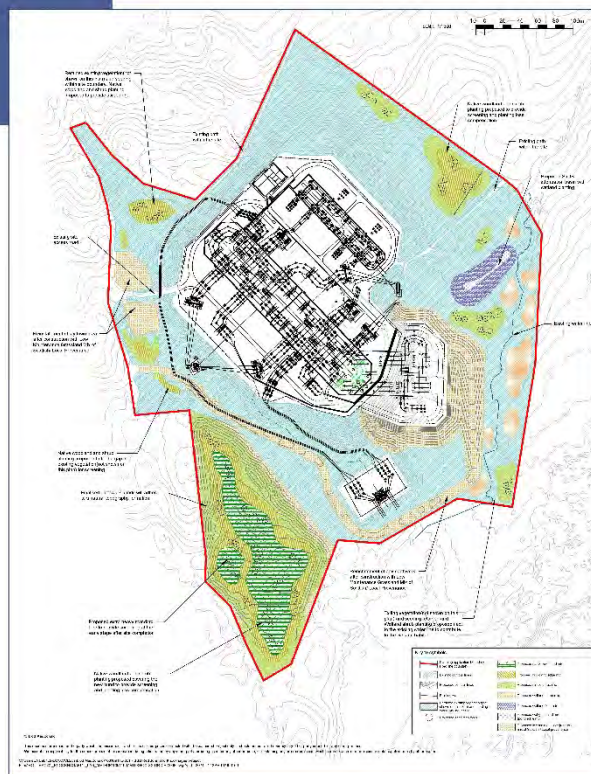
Knocknagael substation extension

The figure below shows the preferred option currently in design development for the extension of the Knocknagael substation to allow for the additional bay required to accommodate the consented Loch na Cathrach Pump Storage Scheme.

The Loch na Cathrach Pump Storage scheme connection requirement has changed from a firm (resilient) connection to a non-firm connection. This now means that only one circuit is required to connect to the bus section at Knocknagael. As a result there is now a requirement to extend out one side of the existing busbar.

To achieve these electrical extension works, some cut and fill earth activities will be necessary to extend out to the existing

platform to enable the installation of the new electrical equipment to be constructed upon. Works to the existing drainage system will be required to ensure the larger platform area is adequately drained. Temporary access tracks and lay down areas will be identified and developed to facilitate construction works within the site compound, whilst the permanent access to the substation will be reviewed and potentially relocated to accommodate the extended site.



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Loch na Cathrach Feedback

Following submission of the Proposal of Application Notice (PAN) in April 2024, the first of two pre-application consultation events were held at Green Drive Hall on 17 April 2024, with a total of 48 attendees.

During the feedback period, which closed on 15 May, feedback in the form of two emails was received for this project.

This feedback and verbal feedback received at the event, is summarised and responded to within the following table.

We have included event feedback through the PAN and pre-application process, as well as design feedback, within the following pages via themes. They are:

Theme	Feedback	Feedback
Environmental	<p>Information on well-established and occupied kestrel nest boxes has been provided. Further information can be provided if requested by SS-N Transmission.</p> <p>I am in the area between Essich and Loch Ness most days and monitor all the nesting raptors I find in that area including kestrels, sawny owls, red kites, buzzards and ospreys. If this project is to be completed with minimal disturbance to nesting birds then it is considered it would be advantageous for contact to be maintained with SS-N Transmission.</p>	<p>We appreciate and are grateful for the feedback in this respect and have factored the location and needs of the nest boxes into our environmental assessment.</p> <p>An information request for relevant information has been made by our environmental consultant with the Scottish Raptor Study Group as part of the ongoing environmental assessment.</p> <p>The Voluntary Environmental Appraisal will set out any required mitigation and commitments to ensure disturbance to raptors is minimised.</p> <p>The Voluntary Environmental Appraisal will be submitted as part of the planning application and, apart from any confidential information, will be publicly available to review.</p>

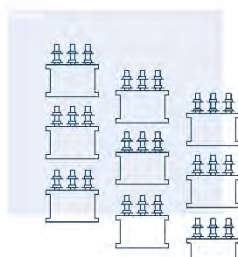


✉ ryan.davidson@sse.com ☎ +44 7901 133 919

🔗 ssen-transmission.co.uk/lochnacathrach

Loch na Cathrach Feedback

Theme	Response
Construction Concerns around construction traffic coming through Strathnairn area.	We are aware of the concerns of excessive construction traffic in the Strathnairn area caused by the works for this project, the Loch na Cathrach PSH scheme itself and other projects in the area. Whilst we are yet to confirm our construction traffic routes we are liaising with other projects in the area to minimise impacts where possible and envisage that the majority of construction traffic for the works at Knocknagael Substation will avoid Strathnairn and instead utilise the A9062 and Essich Road. Our plans for construction traffic access will be confirmed as the project progresses and are keen to hear suggestions on how to minimise impact from the local community.
Community Benefit Will there be community benefit to the local people, specifically those areas directly impacted by the project.	We would like to thank residents for providing their feedback suggesting community benefits they would like to see implemented within the local area. We will work with the community to further explore the suggestions being made and will seek to review suggestions and better understand local needs, identifying initiatives that could be developed during construction.
Biodiversity Net Gain benefit Is there an opportunity for SSEN Transmission to support a local biodiversity scheme.	Details of the scheme were covered at the public event in April 2024. Biodiversity net gain assessment is still ongoing and to be reported. Once this is complete an update to the group will be provided to update on potential opportunities. The BNG assessment and outcome will be reported in the planning application and will be publicly available to review.
Environmental Local ecology and habitats predominantly along the proposed underground cable alignment, are of local interest. Are SSEN Transmission aware of these and what will be done to protect them.	We have undertaken a suite of environmental surveys at the substation location and along the proposed underground cable alignment. This includes ecology, ornithology and habitat surveys. The survey results will inform the Voluntary Environmental Appraisal which is currently being written. The Voluntary Environmental Appraisal will set out any required mitigation and commitments to ensure disturbance to ecology, ornithology and habitats is minimised. The Voluntary Environmental Appraisal will be submitted as part of the planning application and, apart from any confidential information, will be publicly available to view.



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APPENDIX G: CONSULTATION FEEDBACK BOOKLET EVENT 2

Loch na Cathrach

(previously Red John Pumped Storage)

Feedback event

June 2024



Loch na Cathrach Pump Storage Scheme 275kV Connection

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routing and design process			

The Feedback event will be taking place on:

Wednesday 12 June, 2–6.30pm
Green Drive Hall, 36 Green Dr, Inverness IV2 4EU



Powering change together

The time has come to further enhance Scotland's energy infrastructure, providing power for future generations as we move towards net zero.

The shift to a cleaner, more sustainable future is about more than climate change. It's about ensuring future generations have the same opportunities to thrive as we have all had.

Countries around the world are investing in their energy infrastructure to support the demands of modern economies and meet net zero targets. The UK is leading the way in building a modern, sustainable energy system for the future.



We all have a part to play

When it comes to net zero, we have to be in it together. The UK and Scottish governments have ambitious net zero targets, and we're playing our part in meeting them.

We work closely with the National Grid Electricity System Operator to connect vast renewable energy resources—harnessed by solar, wind, hydro and marine generation—to areas of demand across the country. Scotland is playing a big role in meeting this demand, exporting two thirds of power generated in our network.

But there's more to be done. By 2050, the north of Scotland is predicted to contribute over 50GW of low carbon energy to help deliver net zero. Today, our region has around 9GW of renewable generation connected to the network.

At SSEN Transmission, it is our role to build the energy system of the future.

We're investing £20 billion into our region's energy infrastructure this decade, powering more than ten million UK homes and 20,000 jobs, 9,000 of which will be here in Scotland.



Scan the QR code with your smartphone to find out more about how these policies have been assessed and determined.

Who we are

We're responsible for maintaining and investing in the electricity transmission network in the north of Scotland. We're part of SSE plc, one of the world's leading energy companies with a rich heritage in Scotland that dates back more than 80 years. We are also closely regulated by the GB energy regulator Ofgem, who determines how much revenue we are allowed to earn for constructing, maintaining and renovating our transmission network.

What we do

We manage the electricity network across our region which covers a quarter of the UK's land mass, crossing some of the country's most challenging terrain. We connect renewable energy sources to our network in the north of Scotland and then transport it to where it needs to be. From underground and subsea cables and overhead lines to electricity substations, our network keeps your lights on all year round.

Working with you

We understand that the work we do can have an impact on our host communities. So we're committed to minimising our impacts and maximising all the benefits that our developments can bring to your area. We're regularly assessed by global sustainability consultancy AccountAbility for how we engage with communities. That means we provide all the information you need to know about our plans and how they will impact communities like yours. The way we consult is also a two-way street. We want to hear people's views, concerns, or ideas and harness local knowledge so that our work benefits their communities: today and long into the future. You can share your views with us at: ssen-transmission.co.uk/talk-to-us/contact-us/

Loch na Cathrach Pump Storage Scheme 275kV Connection

Project need and overview

SSEN Transmission are required to provide a connection to the Statkraft's Loch na Cathrach Pumped Storage Hydro (PSH) Scheme (450 Megawatts (MW)) near Dores, Highlands approximately 14km south-west of Inverness.

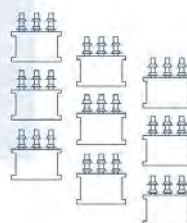
Project timeline



Project overview

Loch na Cathrach PSH Connection works include:

- Construction of a new 2 bay 275kV Air Insulated Substation (AIS) Switching Station at the Loch na Cathrach PSH Scheme.
- Installation of 9km of 275kV underground cabling between Loch na Cathrach PSH Scheme and Knocknagael Substation.
- An extension to the existing Knocknagael platform to accommodate the new 275kV cable connection to Loch na Cathrach PSH Scheme.



Loch na Cathrach Pump Storage Scheme 275kV Connection

Under our Network Operators Licence we are required to deliver the connection in a technically efficient, co-ordinated and economic manner, whilst having the least practicable impact on people and the environment. The connection for Loch na Cathrach is to be provided at 275 Kilovolts (kV) (275,000 volts) and is currently proposed to be via Underground Cable (UGC).

Since our consultation event in December 2022 the Loch na Cathrach Pump Storage scheme connection requirement has changed from a firm (resilient) connection to a non-firm connection. This now means that only one circuit is required to connect. As a result there have been changes to the proposals for the Knocknagael substation extension and UGC alignment.

The UGC will connect to the main transmission network at the existing Knocknagael 275kV substation. In order to facilitate this connection an extension is required to the existing Knocknagael substation platform to accommodate the additional electrical equipment required. At the Loch na Cathrach end of the UGC connection, a new switching station will be constructed within the Loch na Cathrach PSH site. The switching station constructed at the Loch na Cathrach PSH scheme has been consented as part of the Loch na Cathrach PSH scheme consent.



Planning process

A planning application for the construction and operation of the proposed Knocknagael substation extension will be submitted under the Town and Country Planning (Scotland) Act 1997 (as amended). The underground cable will benefit from Permitted Development rights as set out under Class 40 1(a) of The Town and Country Planning (General Permitted Development) (Scotland) Order 1992.

A temporary stone access track may be required to install the UGC. A planning application for the stone track will be submitted to the Highland Council under the Town and Country Planning (Scotland) Act 1997 (as amended). This will be a separate planning application to the substation extension application.

Loch na Cathrach Pump Storage Scheme 275kV Connection

Our consultation process

At SSEN Transmission, we are committed to delivering a robust and transparent consultation process underpinned by inclusion and accessibility. As a stakeholder led business, we understand the importance of involving communities and key stakeholders throughout each stage of our development process.

This period of engagement in the development phase is vital in shaping our proposals and to do this effectively, we need to capture feedback from stakeholders, harness local knowledge to identify key risks and explore potential community benefit opportunities.

Today, we are presenting feedback following our first Pre-Application Consultation event held in April 2024. We will also provide detail on the next steps and how communities can continue to engage with the project team until planning is submitted to the Highland Council.

Throughout the development of the project, we have engaged with the local community, starting with early engagement in April 2022, presenting a high level overview and invited feedback on our proposed route and substation extension options. Following feedback, we presented our alignment for the underground cable and preferred substation extension proposals in December 2022. In April 2024, we presented our latest underground cable alignment and proposal for the extension of the substation platform. If you require additional support to submit your views, please contact our Community Liaison Manager Ryan Davidson who will happily assist you.



Loch na Cathrach Pump Storage Scheme 275kV Connection

What we're presenting today

Following our first Pre-Application Consultation event, we are presenting our final proposals for the underground cable alignment option and the substation extension. This will include our response to public feedback and how we have taken these into consideration if and where applicable.

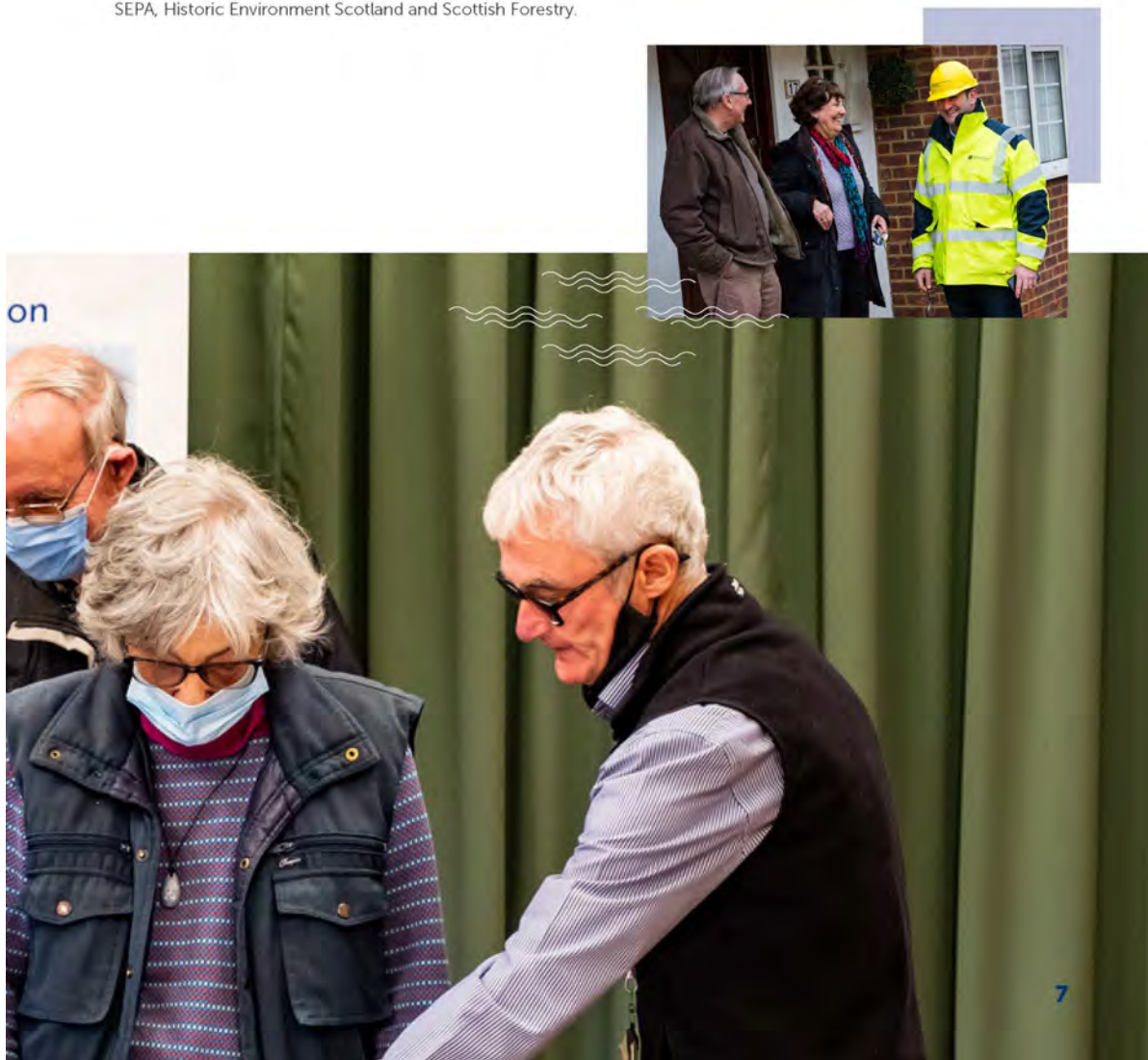
Who we consulted with

We consulted and received feedback from a broad range of stakeholders including but not limited to local residents, landowners, businesses, non-statutory consultees and statutory consultees such as local authorities, NatureScot, SEPA, Historic Environment Scotland and Scottish Forestry.

Next steps

Communities and stakeholders can continue to engage with the project team and any feedback received prior to planning submission will be reviewed for consideration.

Once the planning application has been submitted, we will provide notification to all interested parties registered for project updates.



Loch na Cathrach Pump Storage Scheme 275kV Connection

Biodiversity net gain

We recognise that we have significant interaction with the environment through the activities we undertake in Scotland as we seek to develop and improve the transmission network. With this work comes a legal responsibility to design and build our projects in a manner which protects the natural and built environment.

We are committed to protecting and enhancing the environment by minimising the potential impacts from our construction and operational activities on biodiversity. To this end, we have committed to net gain of biodiversity on all projects gaining consent. This means that during the development, construction and operation of our projects, we will leave a positive environmental legacy at all of our SSEN Transmission sites. As this project

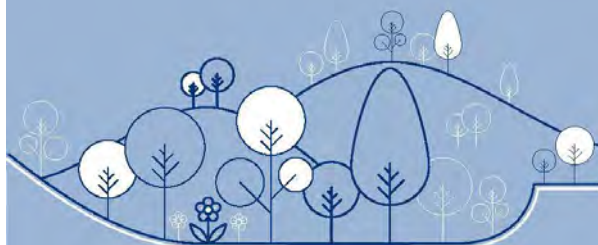
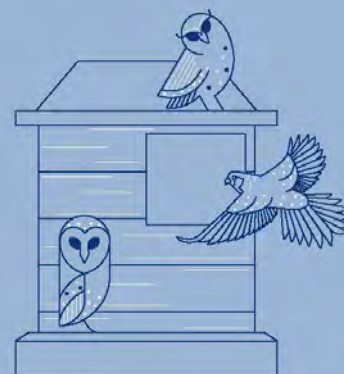
progresses through the development process, we will actively seek ways to avoid and minimise impacts on biodiversity, through careful routing design to avoid areas of highest biodiversity value, to implementing habitat restoration and improvement measures in areas within and surrounding the proposed development. Some examples of biodiversity improvements that have been implemented on other recent projects include:



Loch na Cathrach Pump Storage Scheme 275kV Connection

Creag Rhiabach bird boxes:

Installation of wooden bird boxes made from reused and recycled construction materials to support local raptor populations at key locations across the highlands, including kestrels, tawny owl and barn owl.



Argyll Coast and Countryside Trust (ACT) Woodland Planting Collaboration

Argyll's rainforest is a unique and rare habitat of ancient and native woodland. This collaboration with ACT will help deliver SSEN Transmission's compensatory tree planting commitments in Argyll while helping towards ACT's woodland planting ambitions, supporting its charitable objectives including biodiversity gain, health and wellbeing improvement for local people, outdoor learning opportunities and climate change workshops.

Thurso South Substation:

Creation of approximately 10 hectares of pollinator habitat to support the rare endemic great yellow bumblebee and contribute to wider conservation efforts for this species.



Please let us know if you have ideas for biodiversity improvement projects in your local area that SSEN Transmission could get involved with.

Our underground cable routing and design process

SSEN Transmission has developed and implemented formal guidance for the selection of routes and alignments for its new Underground Cable (UGC).

The main aim of the Guidance is to provide a consistent approach to the selection of new UGC alignments and is underpinned by our statutory obligations to: 'Develop and maintain an efficient, coordinated and economical electricity transmission system in its licenced area' and in so doing, to 'have regard to the desirability of preserving the natural beauty, of conserving flora, fauna and geological and physiographical features of special interest and protecting sites, buildings and objects of architectural, historic or archaeological interest; and do what we reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites buildings or objects'. These duties capture the principal objective of the routing process which is to balance technical and cost considerations with environmental

considerations, to select a proposed alignment which is economically viable, technically feasible, minimises impacts on important resources or features of the environment and reduces disturbance to those living in it, working in it, visiting it or using it for recreational purposes. Site selection follows a similar process to that of the UGC routing detailed on the next page, following a number of refinement stages to determine the most appropriate site, based on environmental, engineering and economical factors. In this instance the site of connection is at the existing Knocknagael Substation and therefore a site selection study is not required. However, in selecting the most suitable area in which to extend the existing Knocknagael Substation to accommodate the connection the same criteria will be used in order to select the optimum solution.



Loch na Cathrach Pump Storage Scheme 275kV Connection

Key stages

For new UGC projects, the process follows four principal stages, each iterative and increasing in detail and resolution, bringing cost, technical and environmental considerations together in a way which seeks the best balance.

Stage.1



Strategic options assessment/routing strategy

The starting point in all UGC projects is to establish the need for the project and to select the preferred strategic option to deliver it. This process will be triggered by the preparation of a number of internal assessments and documents which identify the technology to be used and the point on the existing transmission network where a connection can be made. In the case of the Loch na Cathrach PSH this point is at Knocknagael Substation.

Corridor selection

Stage.2



Corridor selection seeks to identify possible corridors which are as short as practicable, which are not constrained by altitude or topography and which would avoid, where possible, any interaction with man-made infrastructure and features of environmental sensitivity. Corridors may be 1km wide or may extend over many kilometres in width, depending on the scale and length of the project. For the project included in this consultation, the corridor stage is omitted as the location of the Loch na Cathrach PSH and point of connection on the network naturally define a corridor of a few kilometres in width. Routing a new UGC any further afield than this would be too expensive and add unnecessary infrastructure to the landscape.

Route selection

Stage.3



Route selection seeks to find a route within the corridor which avoids where possible physical, environmental and amenity constraints, is likely to be acceptable to stakeholders, and is economically viable, taking in to account factors such as altitude, slope, ground conditions and access. The dimensions of a route will depend on the context provided by the corridor. A route may be several kilometres in length and may range from 200m to 1km in width, depending on the scale of the project, the nature and extent of constraints and the character of the area in question. A number of route options are usually identified and assessed, leading to a preferred route being selected.

Stage.4



Alignment selection

Alignment selection seeks to identify an alignment within the preferred route and to define the access strategy which will be adopted in terms of, for example, the nature and extent of temporary and/or permanent access tracks and possible road improvements. It will be influenced by local constraints, such as individual properties, their aspect, and amenity; ground suitability; habitats; and cultural heritage features and setting. There may be more than one distinct alignment option through the preferred route. It is more likely however that variants to sections of an alignment may arise where there are different ways to avoid a constraint.

Loch na Cathrach Pump Storage Scheme 275kV Connection

What happens next?

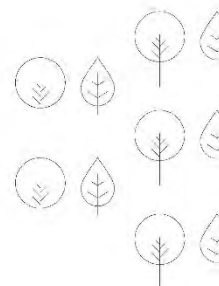
Following further stakeholder engagement with the public, statutory bodies and landowners, the proposed alignment will be finalised and taken forward for formal environmental assessment and consent application where required.

Key engineering considerations:

- Construction costs and buildability (largely affected by ground conditions, such as peat/rock/flooding/contaminated land, etc).
- Operations and maintenance requirements
- Outage requirements and network constraints
- Vicinity to other existing electrical OHL and underground structures, as well as existing substation infrastructure.
- Vicinity to any other utility, overhead or underground
- Existing land boundaries and ownership.
- Environmental constraints
- Communications masts and infrastructure
- Urban development
- Forestry and biodiversity
- Technology costs and design parameters.
- Site accessibility
- Route length



Environmental considerations



Site survey and desk-based assessment has been undertaken to gather data and understand the key environmental constraints and opportunities within the local area. This process has helped to identify the key environmental issues for this project. A Voluntary Environmental Appraisal is currently being developed to report the findings.

Natural heritage designations

Loch Ashie Special Protection Area (SPA) and Site of Special Scientific Interest (SSSI), located approximately 3 km east of Loch Ness, is designated for regularly supporting a non-breeding population of the Annex 1 species Slavonian grebe *Podiceps auritus*, representing 10% of the UK population of this species. Loch Ashie is the most important moult site in Scotland for this species.

The Inner Moray Firth SPA, located approximately 7.5 km to the north of Knocknaegal Substation, is designated for its populations species of European importance including Osprey.



Photo: Evelyn Grant

Ornithology, habitats and protected species

Non breeding populations of Slavonian grebe associated with the Loch Ashie SPA and SSSI, are present in the area. Two Schedule 1 birds (Red Kite and Osprey) were recorded during survey. Suitable habitat to support other breeding birds and a number of common and widespread bird species (including Birds of Conservation Concern (BoCC)) were also identified during survey.

A breeding bird survey identified two lekking Black Grouse at two locations between the north shore of Loch Ashie and the alignment. It is possible that this is a newly established lekking location, representing an expansion of the local distribution of this species and which may be particularly sensitive to disturbance. However, no Black Grouse were identified during a follow up survey.

Broadleaved woodland and scrub in the area provides foraging and commuting habitat for bats and surveys have identified trees around Knocknaegal Substation as having features with bat roosting potential. Bats are recorded

within the wider area and are likely to use these habitats. European protected species known to occur in the area, include otter, water vole, pine marten, badger, red squirrel and wildcat. UK Biodiversity Action Plan (BAP) species including European hare are also known to occur in the area. Suitable habitat for these species is present.

Habitats present within the area comprise coniferous woodlands (both plantation and semi-natural) and areas of broadleaved woodland, unimproved, semi-improved and improved grassland, arable fields and upland heathland. There are areas of woodland recorded on the Native Woodland Survey of Scotland (NWSS) as Annex I habitat, Caledonian forest. There is also an area of blanket bog to the south on the west side of General Wade's Military Road.

The planning application will include ecology and ornithology assessments and informed by associated site survey that has been completed since 2022. The assessment will set out anticipated effects and appropriate mitigation to reduce any effects.

Loch na Cathrach Pump Storage Scheme 275kV Connection



Landscape and visual

The planning application will include a landscape and visual assessment. This will be informed by site survey and photomontages, and will include a proposed landscape and habitat management plan which will set out proposed earthworks and planting proposals as mitigation predominantly surrounding the proposed substation extension works. The underground cable but virtue of it being underground will likely only have potential to create temporary landscape and visual effects during construction. Upon completion of installation of the UGC it will not be visible other than for a limited number of joint bays, marker posts and short sections of permanent stone tracks for access to these locations.

The southern section of the alignment extends into the northern edge of the Loch Ness and Duntelchaig Special Landscape Area. Leys Castle Garden and Designed Landscape is located approximately 2 km north-east of the substation. This is a key reason for why the grid connection is proposed as an underground cable rather than an overhead line.

Cultural heritage

There are a number of listed buildings, scheduled monuments and Gardens and Designed Landscapes located in the area. There are also several non-designated assets in the wider area. These indicate a broad and diverse range of previous function and use, dating from the Neolithic to the 19th century. As a result of the known archaeological presence there is a high likelihood of unknown archaeology assets present in the area. The planning application will include a cultural heritage assessment to identify any on-site archaeological investigation that would be required before construction works commence and if required a Written Scheme of Investigation would be prepared which would set out a strategy for archaeological mitigation in advance of the construction works. Appropriate commitments would be agreed with The Highland Council in advance of any works.

Forestry

There are a number of forestry compartments in the wider area designated as ancient woodland inventory sites (AWIS), with the compartments most prevalent in the southern section of the alignment. In Scotland, Ancient Woodland is defined as land that is currently wooded and has been continually wooded, at least since 1750. Forestry survey has taken place to inform the avoidance of forestry as part of the design process. As such the requirement for tree felling has been minimised as far as practicable. Forestry assessment will be reported in the planning application along with proposed mitigation.

Land use

A number of core paths are present in the area along with the Caledonia Way National Cycle Path (National Route 78) and the Loch Ness 360 trail. Land capability for agriculture in the area is generally categorised as supporting mixed agriculture and improved grassland. An access management plan will be developed by the Principal Contractor prior to works commencing to ensure existing public paths remain accessible. A construction traffic management plan will also be developed to control construction traffic activity which is compatible with existing public road use.

Hydrology and geology

There are numerous field drains and burns in the area associated with historic land improvement and natural process. There are also mapped areas of class 2 peat within the local area. Class 2 peat is described as areas dominated by peat soil and peatland habitats. The design has sought to avoid these areas of peat. There are known Private Water Supplies (PWS) within the area under consideration. Further assessment including a PWS risk assessment will be included in the planning application to confirm any required mitigation to protect PWS and the water environment.

Knocknagael substation extension

The Loch na Cathrach Pump Storage scheme connection requirement has changed from a firm (resilient) connection to a non-firm connection. This now means that only one circuit is required to connect to the bus section at Knocknagael. As a result there is now a requirement to extend out one side of the existing busbar.

To achieve these electrical extension works, some cut and fill earth activities will be necessary to extend out to the existing platform to enable the installation of the new electrical equipment to be constructed upon. Works to the existing drainage system will be required to ensure the larger platform area is adequately drained. Temporary access tracks and lay down areas will be identified and developed to facilitate construction works within the site compound, whilst the permanent access to the substation will be reviewed and potentially relocated to accommodate the extended site.



Diagram illustrating the arrangement of chairs in a room. The chairs are arranged in three rows and three columns, totaling nine chairs.

Loch na Cathrach Pump Storage Scheme 275kV Connection

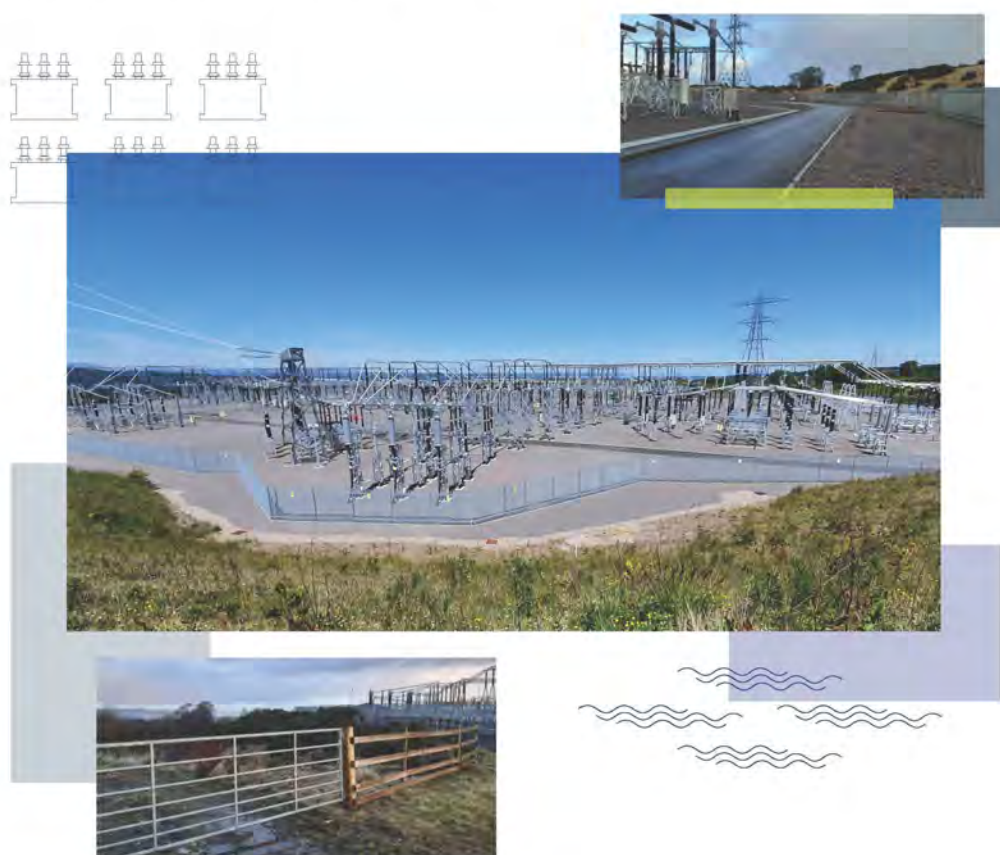
Preferred substation extension option

In developing the substation extension the landscape and visual aspect of the proposal will be contained within the existing setting of electrical infrastructure and will therefore minimise the potential effects. A landscape and visual assessment will be carried out to understand how the proposed development will be viewed within the surrounding area, to identify any significant effects and propose recommendations to mitigate these effects. The assessment will be included in the planning application.

The construction of the substation extension will require vehicles to deliver plant, machinery and workers to the site. Access to the site would be off the existing public road to the West of the substation. The local road network

was used to construct the existing Knocknagael substation and it is considered the same roads could be used to construct the extension. An appropriate construction traffic management plan would be developed to ensure road safety for all other road users during the construction works for suitable management of all vehicle movements.

Environmental survey has not identified any potential significant constraints to the extension at Knocknagael substation. Environmental survey and assessment will be reported in the planning application to ensure appropriate environmental mitigation recommendations are identified in advance of construction works.



Knocknagael substation to Loch na Cathrach Storage switching station UGC

The map below shows the preferred alignment identified for the 275kV underground cable connection from the new Loch na Cathrach Pumped Storage Scheme to the existing Knocknagael Substation. The alignment is considered to be the optimum solution based on a balance of environmental, technical and cost factors, whilst also minimising disruption to the general public.

Amendments to our proposed alignment to further minimise the impact on veteran trees identified during our forestry surveys have been implemented in the design below. In addition, following the change from a double to a single circuit connection there is no longer the requirement for the cable to diverge on its approach to Knocknagael Substation with only one cable connecting in to the new bay extension.

The preferred alignment avoids forestry as far as practicable hence limiting the extent of felling, whilst minimising potential effects on private water supplies and properties as well as avoiding areas of class 1 and 2 peat. It also provides excellent accessibility for construction works, and maintenance thereafter. The preferred alignment would also limit interaction with local archaeology assets and minimise effects on habitats of higher sensitivity including blanket bog.

Environmental survey and assessment for the UGC works will be reported in a Voluntary Environmental Appraisal to ensure appropriate environmental mitigation recommendations are identified in advance of construction works.



Preferred cable alignment

The alignment is currently considered to be the environmentally preferred alignment due to the potential to minimise effects on cultural heritage and habitats and reduce disturbance to protected species. The environmental survey and assessment will be reported in a Voluntary Environmental Appraisal to ensure appropriate environmental mitigation recommendations are identified in advance of construction works.



Loch na Cathrach Pump Storage Scheme 275kV Connection

Loch na Cathrach Feedback

Following submission of the Proposal of Application Notice (PAN) in April 2024, the first of two pre-application consultation events were held at Green Drive Hall on 17 April 2024, with a total of 48 attendees.

During the feedback period, which closed on 15 May, feedback in the form of two emails was received for this project.

This feedback and verbal feedback received at the event, is summarised and responded to within the following table.

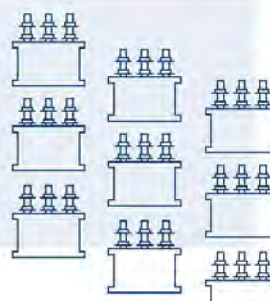
We have included event feedback through the PAN and pre-application process, as well as design feedback, within the following pages via themes. They are:

Theme	Feedback	Response
Environmental	<p>Information on well-established and occupied kestrel nest boxes has been provided. Further information can be provided if requested by SSEN Transmission.</p> <p>I am in the area between Essich and Loch Ness most days and monitor all the nesting raptors I find in that area including kestrels, tawny owls, red kites, buzzards and ospreys. If this project is to be completed with minimal disturbance to nesting birds then it is considered it would be advantageous for contact to be maintained with SSEN Transmission.</p>	<p>We appreciate and are grateful for the feedback in this respect and have factored the location and needs of the nest boxes into our environmental assessment.</p> <p>An information request for relevant information has been made by our environmental consultant with the Scottish Raptor Study Group as part of the ongoing environmental assessment.</p> <p>The Voluntary Environmental Appraisal will set out any required mitigation and commitments to ensure disturbance to raptors is minimised.</p> <p>The Voluntary Environmental Appraisal will be submitted as part of the planning application and, apart from any confidential information, will be publicly available to review.</p>



Loch na Cathrach Pump Storage Scheme 275kV Connection

Theme	Response
<p>Construction</p> <p>Concerns around construction traffic coming through Strathnairn area.</p>	<p>We are aware of the concerns of excessive construction traffic in the Strathnairn area caused by the works for this project, the Loch na Cathrach PSH scheme itself and other projects in the area. Whilst we are yet to confirm our construction traffic routes we are liaising with other projects in the area to minimise impacts where possible and envisage that the majority of construction traffic for the works at Knocknagael Substation will avoid Strathnairn and instead utilise the A8082 and Essich Road. Our plans for construction traffic access will be confirmed as the project progresses and are keen to hear suggestions on how to minimise impact from the local community.</p>
<p>Community Benefit</p> <p>Will there be community benefit to the local people, specifically those areas directly impacted by the project.</p>	<p>We would like to thank residents for providing their feedback suggesting community benefits they would like to see implemented within the local area. We will work with the community to further explore the suggestions being made and will seek to review suggestions and better understand local needs, identifying initiatives that could be developed during construction.</p>
<p>Biodiversity Net Gain benefit</p> <p>Is there an opportunity for SSEN Transmission to support a local biodiversity scheme.</p>	<p>Details of the scheme were noted at the public event in April 2024.</p> <p>Biodiversity net gain assessment is still ongoing and to be reported. Once this is complete an update to the group will be provided to update on potential opportunities.</p> <p>The BNG assessment and outcome will be reported in the planning application and will be publicly available to review.</p>
<p>Environmental</p> <p>Local ecology and habitats predominantly along the proposed underground cable alignment are of local interest. Are SSEN Transmission aware of these and what will be done to protect them.</p>	<p>We have undertaken a suite of environmental surveys at the substation location and along the proposed underground cable alignment. This includes ecology, ornithology and habitat surveys.</p> <p>The survey results will inform the Voluntary Environmental Appraisal which is currently being written.</p> <p>The Voluntary Environmental Appraisal will set out any required mitigation and commitments to ensure disturbance to ecology, ornithology and habitats is minimised.</p> <p>The Voluntary Environmental Appraisal will be submitted as part of the planning application and, apart from any confidential information, will be publicly available to view.</p>



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Loch na Cathrach Pump Storage Scheme 275kV Connection

Have your say

We value community and stakeholder feedback. Without this, we would be unable to progress projects and reach a balanced proposal.

Feedback

We intend to submit our planning application in Autumn 2024. Our formal feedback period will close on **12 July 2024**, however we will welcome final comments from members of the public, statutory consultees and other key stakeholders regarding our proposals until we submit our planning application.

How to provide feedback

Submit your comments and feedback by emailing or writing to your Community Liaison Manager.

Our Community Liaison team

Each project has a dedicated Community Liaison Manager who works closely with community members to make sure they are well informed of our proposals and that their views, concerns, questions or suggestions are put to our project teams.

Throughout the life of our projects, you will hear from us regularly. We aim to establish strong working relationships by being accessible to key local stakeholders such as community councils, residents' associations and development trusts, and regularly engage with interested individuals.

What we're seeking views on

During our last public consultation event in April, we wanted to know your thoughts on our project plans, where you thought we could make improvements, and any changes and refinements we'd made.

At this event we have provided responses to the feedback we received and have identified changes and refinements to the project. We are now asking for any final comments or feedback ahead of submitting planning applications for the Coachford 400kV substation project.

We'll be actively looking to mitigate the impacts of the site as much as possible over the coming months, but it would be helpful to understand what you believe we should be doing to help minimise these impacts and if there are any opportunities to deliver a local community benefit you would like us to consider.


Recite me

To support everyone online, we provide accessibility and language options on our website through 'Recite Me'. The accessibility and language support options provided by 'Recite Me' include text-to-speech functionality, fully customisable styling features, reading aids, and a translation tool with over 100 languages, including 35 text-to-speech.

Please select "Accessibility" on our website to try out our inclusive toolbar."

Community Liaison Manager

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Additional information:



The best way to keep up to date is to sign up to project updates via the project webpage:
ssen-transmission.co.uk/lochnacathrach

You can also follow us on social media:



@assentransmission



@SSETransmission



APPENDIX H: LIST OF STAKEHOLDERS

Number	Consultee
1	SEPA, Planning North
2	NatureScot
3	Scottish Water
4	Transport Scotland
5	Highland Council
6	Forestry and Land Scotland
7	Scottish Forestry
8	Historic Environment Scotland (HES)
9	Ness District Salmon Fishery Board
10	Royal Society for the Protection of Birds (RSPB)
11	Sustrans Scotland
12	BT
13	Civil Aviation Authority - Airspace
14	Defence Infrastructure Organisation
15	Fisheries Management Scotland
16	Joint Radio Company
17	John Muir Trust
18	Mountaineering Scotland
19	NATS Safeguarding
20	Scottish Rights of Way and Access Society (ScotWays)
21	Scottish Wildlife Trust
22	Scottish Wild Land Group (SWLG)
23	Visit Scotland
24	Glasgow Airport Safeguarding
25	Edinburgh Airport Safeguarding
26	The Coal Authority
27	Ness and Beaully Fisheries Trust
28	Scottish Raptor Study Group
29	Inverness Disability Access Panel

APPENDIX I: EVENT PHOTO

