

ANNEX G: SUMMARY OF ROUTE STAGE CONSULTATION FEEDBACK FROM LOCAL COMMUNITY & GENERAL PUBLIC - MAY 2022

Public and Local Community Feedback by Topic – Route Stage Consultation – May 2022

Feedback Comments	Response by SSEN Transmission
Grid Connections	
<p>Queries were raised in relation to use of underground cable for only the Glenshero connection and whether the choice of OHL or UGC was made by the developers or by SSEN Transmission. A further request for clarification was made on whether SSE, as the developer of Stronelairst Wind Farm, had opted for UGC.</p>	<p>SSEN Transmission’s licence obligations are to develop an efficient, co-ordinated and economical system of electricity transmission. As such SSEN Transmission is obliged to seek the most cost-effective solution, which is usually an OHL. The developer can opt for an underground cable connection, in which case the developer is liable for the additional costs associated with the cable connection. this option has been selected by Glenshero and Stronelairst.</p> <p>Stronelairst Wind Farm has already been built and is not part of this proposal.</p>
<p>The factors determining the use of OHL or UGC were queried, including how much influence the cost of each option had in the choice.</p>	<p>Overhead lines are generally preferable for maintenance reasons. In the event of a fault on an overhead line, the fault can be detected and rectified in a matter of days; however, if the fault occurs in an underground cable the time needed to locate and rectifying the fault increases and could potentially take months to fix. In a worst-case scenario, whole sections of cable may need to be replaced resulting in temporary disturbance to landowners and the local environment whilst these works are undertaken.</p> <p>Installation of underground cables require a larger footprint than an OHL. The construction of a steel lattice tower typically requires a temporary compound of 50 metres by 50 metres, with associated temporary access linking them to the nearest permanent track or road. In comparison a typical cable installation requires a trench, approximately 6 m wide and 1.5 m deep, to be excavated along the entire route for each circuit installed. This would sit within a construction corridor at least 30 m wide which includes a haul road and storage areas for topsoil and subsoil which are excavated and then backfilled into the trench once the cable is installed. This could potentially increase disturbance to landowners and the local environment during construction.</p> <p>It is acknowledged that further detailed environmental and engineering survey work will be required to find an acceptable OHL alignment and design solution through this sensitive landscape and environment, which could result in a review of the preferred route option and/or use of appropriate localised mitigation methods, such as underground cable sections. In deciding the appropriate mitigation, Technical, Environmental, Cost and feedback from consultation will all be considered.</p>
<p>It was noted that use of OHLs for Cloiche and Dell wind farms would be irrational when Stronelairst and Glenshero wind farms have opted for UGC connections, and may prompt</p>	<p>Use of OHL connections for Dell and Cloiche wind farms is SSEN Transmission’s contracted position as set by the wind farm developers. Further detailed environmental and engineering survey work will be required to find an acceptable OHL alignment and design solution through this sensitive landscape and environment, which could result in a review of the preferred route option and or use of appropriate localised</p>

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Glenshero Wind Farm to switch to OHL connection.	mitigation methods, such as underground cable sections. In deciding the appropriate mitigation, Technical, Environmental, Cost and feedback from consultation will all be considered.
Queries were raised in relation to the OHLs being single or double circuit and whether the extra arms on double circuit towers may encourage additional wind farm development in the future.	<p>Although the OHLs currently proposed are single circuit connections, the OHL towers shown are double circuit towers and are indicative of the suite of towers that may be used. Further development of OHL towers is required as the project progresses as further technical and environmental studies are undertaken. The overhead line conductor selection study is currently ongoing and the output from this will define the potential maximum capacity of each line.</p> <p>SSEN Transmission only build to what we are contracted to provide. There is an opportunity being explored to combine both single circuit OHLs onto one double circuit tower line. This is under review, and SSEN Transmission hope to report back on the outcome of this review at the next consultation.</p>
Concerns over double circuit steel lattice towers strung with single circuit connections have not been adequately addressed.	Noted. Additional information will be provided in future public exhibitions on the design choices made as part of the proposals.
If OHL connections are deemed to not be feasible for technical reasons only, single circuit steel lattice towers should be used until a point at which both connections can be supported on a single set of double circuit steel lattice towers and continue as such until Melgarve substation.	The recommendation is noted. Single vs double circuit tower design is an ongoing consideration in the design development process.
The reason for not using wood poles rather than steel lattice towers was queried, with suggestions on how wood poles could be made suitable by using different materials or additional stays.	<p>Due to the altitude of the route, ice loadings and wind speeds experienced between the wind farms and Melgarve substation, wood poles are not suitable.</p> <p>SSEN Transmission follows recognised UK and international specifications and standards as well as its own internal specifications when it comes to design works. In this case the wind speed is calculated from the land height / topography and not the relative height of the overhead line structure to the ground, hence wind speeds are calculated the same for each structure at a certain point on the ground. The combination of wind and heavy ice loading mean that spacing between wood poles at the altitudes present at Melgarve become unfeasible. There is a separate innovation project being developed to look at using steel poles as replacements for wood poles in high altitude situations but that has only recently been submitted via the innovation funding system and therefore has not yet had any technical development carried out to allow it to be considered here at this stage.</p>

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<p>The reason for not using single circuit pylon designs for single circuit connections was queried.</p>	<p>Modern single circuit arrangements consist of a double circuit pylon with a single circuit strung which can allow for a separate additional circuit to be added at a future time with minimal extra work to the towers on the route thus somewhat future proofing a single circuit design. This also allows for more standardisation of the pylon suite.</p> <p>Historic single circuit towers tend to have a delta formation (two arms on one side and one on the other) or be arranged horizontally. SSEN Transmission don't have any modern single circuit tower designs in use for new lines.</p> <p>SSEN Transmission chose to show a picture of the double circuit pylon as the connection for Cloiche and Dell follow the same preferred route which gives the opportunity to combine both onto one double circuit pylon. This opportunity is under review, and SSEN Transmission aim to report back on the outcome of this at the next consultation.</p>
<p>It was queried whether SSEN Transmission has future connection contracts with the wind farm developers.</p>	<p>SSEN Transmission do not have future connection contracts with Cloiche, Dell and Glenshero.</p>
<p>The difference in cost between an OHL and UGC was queried.</p>	<p>UGC is more expensive than OHL. The cost ratio between OHL and UGC can be affected by a number of different factors such as technology type (double or single circuit), ground conditions, altitude, access, etc. UGC can range between being 10 % to 100 % more expensive than OHL.</p>
<p>It was suggested that a number of comments may be forthcoming on the visual impacts of the OHL and that visualisations would be desired.</p>	<p>Visualisations of the OHL can be provided once the project has been sufficiently developed. Detailed Landscape and Visual assessments will be undertaken for any forthcoming applications for s37 consent and planning permission.</p>
<p>Clarification was requested on the consenting process for OHLs and UGCs and whether the class of planning consent determines the connection type.</p>	<p>A new OHL requires a Section 37 consent. UGC connections are generally covered under permitted development unless the works are within or in proximity to a designated area, in which case they may be subject to a planning application to the local planning authority.</p> <p>The class of planning consent does not dictate the connection technology. The connection technology is selected first and from this the type of consent is selected.</p>
<p>It was noted that the proposed routes figure was difficult to understand, and clarification was requested of the route options under consideration.</p>	<p>SSEN Transmission apologise that it was not clear to see, there is a pdf copy of this map available on the website below. This map shows all of the route options that were appraised for the connection of Dell to Melgarve, Cloiche to Melgarve and the one route option for the connection of Glenshero to Melgarve. A summary of these options is given below. More detailed descriptions can be found in the Consultation Document (November 2021) also published on https://www.ssen-transmission.co.uk/projects/melgarve-cluster/.</p>

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	<p>Cloiche Wind Farm Connection options (shown in orange hatching):</p> <ul style="list-style-type: none"> • Route Option C1 represents the most western route option • Route Option C2A and C2B are the more central options of those considered for the Cloiche connection. The routes travel in a generally southern direction, away from the proposed Cloiche Wind Farm on-site substation to Melgarve substation • Route Option C3 travels in a generally eastern direction for approximately 3 km where it would overlap with the route of the proposed Route Option G1 travelling south towards Melgarve substation for approximately 5 km. <p>Dell Wind Farm Connection (shown in green hatching):</p> <ul style="list-style-type: none"> • Route Option D1 connects the proposed Dell Wind Farm on-site substation to the operational Melgarve substation via one of the proposed Cloiche Route Options as noted above. Route Option D1 represents the more western route option of the two options considered for the Dell connection. • Route Option D2 connects the proposed Dell Wind Farm on-site substation to the operational Melgarve substation via the area surrounding the proposed Glenshero on-site substation. Route Option D2 represents the more eastern route option of the two options considered for the Dell connection, leaving Dell substation and travelling in a south south-easterly direction where it would overlap with the route of the proposed Route Option G1 travelling south towards Melgarve substation for approximately 5 km. <p>Glenshero Wind Farm Connection (shown in purple hatching):</p> <ul style="list-style-type: none"> • Route Option G1 connects the proposed Glenshero Wind Farm on-site substation to the operational Melgarve substation. It travels South from Glenshero Wind Farm on-site substation to Melgarve substation.
Melgarve substation	
<p>The current and future size of Melgarve substation was queried, along with its potential visibility following completion of works and its current and future capacity.</p>	<p>The current site is approximately 2.8 ha (this is the area within the substation fence-line boundary and does not include external slopes). The draft design at this stage anticipates the Melgarve substation to require an extension of 25 % of the current site. This is subject to detailed design works with the aim to minimise this as much as possible. SSEN Transmission do not anticipate the extension will make the development any more visible; however, further detailed design, and landscape and visual assessments, will be undertaken in due course to confirm this.</p> <p>The current Stronelairg Wind Farm connection to Melgarve has an output of 227.8 MW. The contracted total of the three proposed new wind farms is 417.8 MW thus giving a potential overall total of 645.6 MW. SSEN Transmission unfortunately cannot provide a definitive number on Melgarve substation's capacity at this time; it is affected by a number of</p>

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	different factors such as the level of redundancy, security, etc. required by the transmission system.
Further information was requested on the extension of the substation, such as the size of ground footprint, electrical infrastructure required, and landscaping works proposed.	Design options are currently being developed in order to provide the optimal design solution. This will allow detailed drawings to be submitted as part of the formal planning consent application. In order to connect all three windfarms, Melgarve substation must be expanded to accommodate two new transformers and associated connection infrastructure. Various configurations are being considered, all options require the extension of the platform.
Comments were raised noting that the community had previously been advised Melgarve substation had sufficient capacity for all wind farms at the planning stage and asked for clarification.	Previous statements about the capacity of Melgarve substation would have reflected the planning situation at the time. The project team are currently investigating the options to connect the three wind farms into Melgarve substation, with several options being investigated at present. Optioneering assessments are ongoing at this time, however Melgarve substation does not have sufficient capacity to accommodate all three wind farms currently in planning in the area.
General Project	
The total value of the project was queried as well as the funding mechanism.	SSEN Transmission cannot disclose the project value at this moment in time. The developer associated with each connection will fund some of the costs, while other costs are initially borne by SSEN Transmission and recovered via Ofgem funding mechanisms. SSEN Transmission can provide further detail if required.
A query was raised in relation to the duration of construction of the project.	Construction of the current scope of work is estimated to be completed in approximately three years. This is based on all three wind farms materialising and on their current connection dates. Should any wind farms vary their connection dates or fail to materialise then this may change.
It was queried whether any objections had yet been made by any outdoor groups of other public bodies to the project.	No objections have been made by outdoor groups or other public bodies to date.
Queries were raised as to the current planning status of the wind farms to be connected and the impacts on the Melgarve Cluster project if these wind farms should fail to receive consent or be developed.	Cloiche Wind Farm is still to receive planning permission. Dell Wind Farm has been consented. Glenshero Wind Farm is currently in the appeals process and the developer is awaiting determination by the Scottish Ministers. If Cloiche Wind Farm were to be refused planning permission the overall project would not change unless the developer terminates their construction agreement with SSEN Transmission. If they were to terminate then it is likely that the extension of Melgarve Substation would not require to be as large; however, this would need to be reviewed against the requirements of the other connections.

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	<p>If the Dell developer terminates their construction agreement with SSEN Transmission then all transmission infrastructure associated to the Dell connection would not be required, i.e. the OHL connecting Dell to Melgarve will not be required.</p> <p>If the Glenshero developer terminates their construction agreement with SSEN Transmission then all transmission infrastructure associated to the Glenshero connection would not be required, i.e. the UGC between Glenshero and Melgarve will not be required.</p>
<p>Concerns were raised in relation to potential disruption of the community and tourism in the area. Proposed mitigation measures to reduce disruption were requested.</p>	<p>Assuming planning is approved, construction will start in 2023 and go through to 2026. Construction Traffic Management Plans will be implemented during the construction period to limit the impact on residents and road users. SSEN Transmission will set up a Community Liaison Group prior to construction starting. This is in order to keep the local community and businesses up to date with construction activities during the construction period. SSEN Transmission will also look to coordinate with wind farm developers to ensure impacts are managed.</p>
<p>Concerns were raised in relation to potentially disruptive transport effects for nearby settlements and roads during construction and no information was presented on intended routes or duration of transport movements. It was noted that the community is very sensitive to transport disruption, based on previous experience with development in the area and use of small and private routes which have only recently been made available to the community again.</p>	<p>The transport assessments and development of construction traffic management plans will be undertaken at a later stage in the development of these projects, in advance of the submission of planning applications. However, SSEN Transmission would anticipate the same transport routes to be used as previous projects. This is all subject to detail design and feedback from the consultation phases and planning application process. If the previous route is the preferred solution then it is likely that there will not be any need for additional construction or upgrade required, therefore disruption will be limited to traffic using the accesses. Consultation with the roads authority and Community Liaison Group will be undertaken in due course and SSEN Transmission's projects are normally undertaken with a planning condition of working times which are agreed with the local council.</p> <p>At this stage in the project, SSEN Transmission does not have defined design information to be able to provide detailed transport plans. If there are particular areas of concern, SSEN Transmission would be happy to meet the community to discuss further.</p> <p>SSEN Transmission are in communication with Jahama Estate as landowners of Glenshero Wind Farm and will coordinate with them during the construction period to make sure impact to the communities is minimised.</p>
<p>Queries were raised in relation to public rights of way, any restrictions that may be imposed during construction, and whether there would be an opportunity to comment on outdoor access plans given another nearby developer's failure to do so and</p>	<p>SSEN Transmission would not anticipate that access for public recreation would be adversely affected by works. As part of pre-commencement documentation an outdoor access plan will be developed and implemented during construction.</p> <p>SSEN Transmission will consult locally on the outdoor access plan. If there are particular areas of concern, please respond on the feedback form so these can be included.</p>

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blocking an old right of way with locked gates.	If required, SSEN Transmission are happy to meet with the community to discuss this further.
Potential for financial contributions from the project for community benefit was queried.	<p>SSEN Transmission are a regulated business and are not permitted to pay community benefit due to project costs being met by electricity customers across Great Britain. All project costs have to be approved in advance by Ofgem, the electricity industry regulator. However, SSEN Transmission may require to carry out some improvements to local infrastructure as part of the project delivery.</p> <p>There are indirect, but tangible, benefits which arise during the construction of these projects and SSEN Transmission often seek opportunities to leave a legacy. It is likely that construction workers will stay in local hotels & B&Bs. School visits or volunteer days in the local area may be possible during this period.</p>
Queries were raised in relation to the virtual exhibition itself: how does SSEN Transmission ensure everyone has access to the same information as per an in-person exhibition, and have there been any complaints raised in regard to hosting the exhibition virtually?	<p>The virtual consultation events have been designed to be as interactive as face-to-face events, allowing presentation of key project information and plans, as well as providing opportunities to ask questions about the project. Visitors are able to engage directly with the project team, via an instant message chat function, where they can ask any questions they might have about the project and share feedback on the current proposals. All material that would have been presented at an in-person consultation is available via the online virtual platform.</p> <p>SSEN Transmission wrote to 822 properties within the vicinity of the Melgarve Cluster proposals to advise that unfortunately the planned in-person public consultations needed to be moved to our online platform due to the increasing levels of COVID-19 across the country. SSEN Transmission also contacted the local community councils and locally elected members. No complaints have been received following this necessary move to help keep the public safe and reduce any risk of infections. Laggan community council advised they found the move understandable.</p>
The reason for holding a virtual consultation rather than postponing to a later date to allow for an in-person exhibition was queried.	<p>Unfortunately, as COVID-19 continues to be an evolving situation and infection rates continue to increase across the country, SSEN Transmission felt it would not be possible determine a date in the near future where a potentially large gathering could be held. Therefore, SSEN Transmission took the decision to utilise the virtual consultation platform instead of delaying to an unknown time and potentially delaying the programme. Once COVID restrictions lift there are plans for future consultations to be both face-to-face and virtual. This is so that anyone that is unable to travel to a face-to-face event has the option of accessing the event virtually. SSEN Transmission welcome any comments on how to improve the virtual platform for the future.</p>
It was noted that online documents were confusing as the construction dates conflict	Apologies for the confusion, the Dell project energises in Spring 2026, some of the completion or "snagging" works may extend into Summer 2026.

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with what is presented at the exhibition.	
The date of the next consultation was requested.	It is likely to be in late Spring 2022.