Erskine to Devol Moor 132kV Overhead Line Replacement

Feedback on Consultation

January 2019

Consultation on Erskine to Devol Moor (EDM) Overhead Line Replacement Project

Scottish Power Energy Networks (SPEN) undertook pre-application public consultation in relation to the replacement of the existing overhead line between Erskine and Devol Moor substations between February and March 2018. The aim of this was to seek the views of statutory consultees, the general public and other interested parties, including landowners, with regards to the preferred route of the overhead line.

During this process feedback was received on several issues which have allowed SPEN to test and review the assumptions made in identifying its initial preferred route. I am writing to you today to confirm that SPEN has now confirmed a proposed route for the overhead line (refer to attached route plan) between the Erskine and Devol Moor substations. The proposed route will now be subject to a detailed design process to identify pole locations prior to Environmental Impact Assessment (EIA) being undertaken and a consent application being made to the Scottish Ministers under Section 37 of the Electricity Act 1989. In addition, this letter sets out SPEN's response to the main feedback received during the consultation, including how this has influenced the route of the overhead line, where appropriate.

For the purposes of this response, feedback has been grouped into the following headings:

- Consideration of an alternative route, informed by consultation feedback, in the vicinity of High Hatton and Laigh Hatton (west of Bishopton)
- Protection of Private Water Supplies (PWS);
- SPEN consideration of Undergrounding; and
- Electric and Magnetic Fields (EMFs)

<u>Consideration of Alternative Route at High and Laigh Hatton</u>

The process of routeing the replacement Erskine to Devol Moor overhead line has had to balance many different considerations including environmental issues, visual amenity, land use and "committed development". In regards to the latter, this includes areas subject to a valid planning application (including where these have not yet been implemented) or identified through the local authority's Local Development Plan (LDP) which are of a size and nature with potential to influence the route of the overhead line. SPEN must also consider how the route of the overhead line would impact on that development e.g. visual amenity of proposed residences, viability of proposed land use etc, as is the case for existing development/residences.

Committed development sites were identified through the LDPs from both Renfrewshire and Inverclyde Councils and also with reference to the local authority weekly planning lists which provide details on planning applications submitted to the local authorities each week. SPEN continued to review this information throughout the routeing process however, in order to finalise the assessment of route options, a 'cut off' date of October 2017 was applied. This information was then plotted as part of SPEN's initial baseline mapping and used to identify and appraise the potential overhead line routes which formed the basis of the public consultation in early 2018.

During the consultation, SPEN was made aware of a proposed holiday lodge development on land which the preferred route crossed immediately south of the A8 road crossing, approximately 1km west of Bishopton. Consideration of the potential impacts on this

development highlighted visual amenity issues given proximity to the proposed lodges and the route being situated in their main aspect. This subsequently led to consideration of alternative routes in the area.

Routeing in this area had to consider several constraints including, land use, landscape character, residential visual amenity of properties around High Hatton Farm and Laigh Hatton, the European designated Inner Clyde Special Protection Area (SPA), potential effects on the setting of cultural heritage features and the crossing of both the A8 and Glasgow to Greenock electrified railway line. This process led to the identification of an alternative route to the west of the steading of Laigh Hatton (refer to figure 1).

In order to inform this process, SPEN undertook a further round of 'localised' consultation with landowners and residents at High Hatton Farm and Laigh Hatton in order to understand any further issues which may influence routeing in this area. This process ran between 02/11/18 and 23/11/18. During this time, the planning application for the holiday lodge was refused by Renfrewshire Council. However, as there is a right of appeal which may lead to a successful consent being granted by either the local authority appeals committee or Scottish Government at a later date, SPEN must continue to treat the site as "committed development" for the purposes of making a decision on the proposed route of the overhead line.

On the balance of the issues set out above, SPEN has decided to incorporate the alternative route section to the west of Laigh Hatton into the proposed route. A map showing the proposed route from Erskine to Devol Moor is shown in Figure 2.

Protection of Private Water Supplies during construction

Protection of Private Water Supplies (PWS) during the construction period is absolutely critical. Therefore, as part of our environmental assessment, information on known PWS has been obtained from Inverclyde and Renfrewshire Councils and consultation with owners is being undertaken. This will inform the hydrology walkover surveys which will be undertaken along the entire route length to verify the existing PWS. This information will then be used to identify any supplies which could be affected by the works and develop appropriate mitigation to ensure that there is no interruption to supply or water quality during construction works. This may also include some localised 'micro-siting' of pole locations to avoid particularly sensitive areas. As the route we have shown in the consultation plans is 80m in width there is still scope to take account of local issues such as this as we develop the detailed route alignment. Further details on how SPEN propose to mitigate this issue during construction will be provided in the Environmental Impact Assessment Report (EIA-R) that will be submitted in support of the Section 37 application to the Scottish Ministers.

Undergrounding

During the consultation period SPEN received some responses asking whether the use of undergrounding had been considered for the Erskine to Devol Moor overhead line project.

SPEN takes its responsibilities to the public and the environment seriously. We adopt a proactive approach, balancing environmental considerations with the need to provide services at a cost that customers can afford.

High voltage, high capacity overhead lines are the economic and reliable choice for the bulk transmission of electricity throughout the world. It is therefore SPEN's view that wherever practical, an overhead line approach is taken when planning and designing major electrical infrastructure projects such as this. However, it is appreciated that there are specific circumstances in which an underground approach should be considered. If, through the routeing process, it is determined that an underground cable section is required then the approach is to minimise the length of underground cable necessary to overcome the constraint to routeing. This must be consistent with a balance between technical and economic viability, deliverability and environmental considerations.

SPEN's overall approach is based on the premise that the major effect of an overhead line is visual due to its relative scale to objects in the vicinity such as buildings and trees. There is no technical way of reducing this other than choice of towers or wood poles, and only limited ways of achieving screening through planting. Therefore, the most effective way of causing the least visual disturbance is by careful routeing.

The development of suitable overhead line routes is part of an iterative and methodical process. If constraints emerged at a future stage of the process which made a particular section of overhead line route impossible, e.g. during the environmental impact assessment or technical design of the proposed route, SPEN would need to look anew at alternatives. This could include re-examining previously discounted areas because the routeing methodology for underground cables is different to that for an overhead line. However, where no suitable continuous overhead line option exists, SPEN would make a clear and transparent decision on the undergrounding of a section of line. This will take into account feedback from consultation with stakeholders and the public in relation to the protection of a particular resource, in terms of the benefits or drawbacks of underground cable as an alternative to an overhead line. This decision will take into account the environmental benefit that could be achieved through undergrounding, without incurring excessive cost, and the effects of the technical issues associated with undergrounding on the overall reliability and availability of the connection.

In relation to cable routeing, an underground cable has different technical requirements and environmental considerations than an overhead line. For example, an underground cable will have less visual impact than an overhead line but may have greater impact on ecological habitats, species, hydrology and private water supplies and on archaeological remains, given the level of ground disturbance. For these reasons, the route for an underground cable may be different from that of an overhead line.

In relation to cost, undergrounding is generally significantly more expensive than building overhead lines, but varies considerably from project to project depending on a range of factors, including whether the line is buried in roads, directly in open agricultural land or whether more complex tunnelling and civil engineering is required. Repair impacts are also higher than for overhead lines as are the costs associated with any later uprating. Based on current market rates, the construction cost for 132kV single circuit underground cabling is estimated, depending on topology and geology, to be greater than three times the cost for a 132kV single circuit wood pole installation. The actual multiplier depends on many factors including, but not limited to, the following; circuit rating, circuit length, installation method, environmental issues, circuit cable lengths in comparison with circuit overhead line lengths, ground conditions and access requirements.

Electric and Magnetic Fields (EMFs)

Over the course of the consultation, several responses were received raising questions over the effects of EMFs on public health. This is an important question that has been investigated in greater detail in recent years.

The Energy Networks Association (ENA), which is a trade association made up of various utility companies (including Scottish Power), has produced a document titled EMFs "The facts" which explains this issue and explains the research undertaken with regard to health in greater detail. This document can be found at:

http://www.energynetworks.org/assets/files/electricity/she/emfs/EMF_The_Facts_250917.pdf

Next Steps

The proposed route (shown in Figure 2) will be subject to an application to the Scottish Ministers for Section 37 consent under The Electricity Act 1989 and deemed planning permission under Section 57 of the Town and Country Planning Act 1997. Further to this, the development will also be subject to an Environmental Impact Assessment (EIA) that will identify and assess the potential significant effects of the development on issues such as landscape and visual, ecology, ornithology, hydrology and cultural heritage interests within the study area.

This assessment will be detailed in the associated EIA Report (EIA-R) which will be submitted in support of SPEN's Section 37 application for the overhead line which will be submitted to the Scottish Ministers in late Summer 2019. At this time, the Scottish Government will undertake a formal public consultation period during which those who wish to make representation on the project can do so directly to the Ministers. The Section 37 submission will be advertised in the local press however SPEN will write to you prior to this time in order to make you aware of when the formal consultation period will take place and who to write to should you wish to make further representation.

In the meantime, should you require any further information on the Project, please do not hesitate to contact us at devolmoor.projectmanager@sppowersystems.com.