

Note for Alister Jack MP on Environmental Considerations on the KTR Project

The following note sets out SP Energy Network's (SPEN) approach to the routing and environmental impact assessment on the Kendoon to Tongland (KTR) 132kV Reinforcement Project. The note summarises the legislative framework under which SPEN operates and describes how environmental, technical and economic considerations have been taken into account in the development of the Project.

The note also refers to the various documents which have been circulated for consultation with stakeholders and communities with an interest in the Project over the last three years. All documents are available to view on the KTR Project website at www.spendgsr.co.uk

SPEN's Statutory and License Duties

As a transmission licence holder for southern Scotland, SPEN is required under Section 9(2) of the Electricity Act 1989 to:

- develop and maintain an efficient, co-ordinated and economical system of electricity transmission; and
- facilitate competition in the supply and generation of electricity.

SPEN is required in terms of its statutory and licence obligations to provide for new electricity generators wishing to connect to the transmission system in its licence area. SPEN is also obliged to make its transmission system available for these purposes and to ensure that the system is fit for purpose through appropriate reinforcements.

Schedule 9 of the Electricity Act 1989 imposes a further statutory duty on SPEN to take account of the following factors in formulating proposals for the installation of overhead transmission lines: *“(a) to have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest; and, (b) to do what it reasonably can to mitigate any effects which the proposals would have on the natural beauty of the countryside or any such flora, fauna, features, sites, buildings or objects.”*

As a result of the above, SPEN is required to identify electrical connections that meet the technical requirements of the electricity system, which are economically viable, and cause, on balance, the least disturbance to the environment and the people who live, work and enjoy recreation within it.

SPEN's Overall Approach to Routing

The Government, Ofgem and the electricity industry, including SPEN, have reviewed their positions on overhead lines. They remain of the view that the need to balance economic, technical and environmental factors, as a result of statutory duties and licence obligations, continues to support an overhead line approach in most cases.

It is therefore SPEN's view that wherever practical an overhead line approach is taken when planning and designing new or reinforced transmission lines.

SPEN's overall approach is based on the premise that the major effect of an overhead line is visual, as a result of its scale relative to objects in the vicinity such as buildings and trees, and that as there is no technical way of reducing this other than choice of towers, the most effective way of causing the least visual disturbance is by careful routeing.

The Routeing and EIA Process

The KTR Project comprises three broad steps, these being:

- Line Routeing
- Environmental Impact Assessment (EIA)
- Applications for consent

Step One: Line Routeing

Step one comprised a detailed review of environmental, technical, economic considerations and the application of established step-by-step routeing principles to identify 'preferred' routes for the required 132kV overhead lines.

This process uses a set of step by step principles to identify and assess potential route options and considered the following matters:

- length of route;
- biodiversity and geological conservation (natural heritage);
- landscape and visual amenity (including recreation and tourism, which is acknowledged as being one of the key issues for the wider Glenkens and Dumfries and Galloway area);
- cultural heritage and archaeology;
- land use;
- forestry;
- flood risk.

SPEN is committed to ongoing consultation with interested parties, including statutory and non-statutory consultees and local communities. Whilst there is no statutory requirement to consult during the early routeing stages, SPEN nonetheless considered it good practice to introduce consultation at that stage. Two rounds of consultation were undertaken by SPEN during step one (consultation round one – in 2015 – and two – in 2016).

This routeing phase was completed in early 2017 and the 'proposed' routes progressed to the EIA stage.

Step Two: Environmental Impact Assessment

Step two comprises an Environmental Impact Assessment (EIA) of the 'proposed' routes. This is required under The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017, given the nature and scale of the KTR Project. The objective of the EIA process is to avoid, reduce and where possible, offset likely significant impacts on the environment through the iterative design process. The findings of the environmental baseline surveys inform the proposed alignment of the overhead lines including towers/poles, working areas and accesses, alongside the technical design input.

At this stage a further round of consultation, consultation round three, was undertaken upon which consultees were invited to provide feedback on the proposed alignment of the overhead lines. This is the stage that SPEN is at currently. Since the close of the third round consultation in early 2018 SPEN has been considering the feedback from the consultation alongside further environmental surveys and technical survey to inform modifications to the overhead line route alignments prior to a 'design freeze'. Once the design has been frozen, SPEN will publish our Summary of Feedback Report for the Third Round consultation which will confirm the 'development envelope' for the EIA. We will then undertake the EIA for each alignment to assess the effects, culminating in the production of an Environmental Impact Assessment Report (EIA-R).

The EIA will assess the significant effects of the construction, operation and removal of the proposed overhead lines. This will consider the following matters:

- landscape and visual
- ecology
- ornithology
- forestry and woodland
- cultural heritage
- socio-economics, tourism and recreation
- hydrology and flood risk
- traffic and transport
- construction noise
- operational noise and Electric Magnetic Fields (EMFs)

The EIA will also set out SPEN's proposed mitigation measures to avoid or reduce these effects.

Step Three: Application for Consent

Following completion of the EIA Report, SPEN will apply to Scottish Ministers for consent under Section 37 of the Electricity Act 1989, to install, and keep installed, the proposed lines and for the removal of the existing 'N' and 'R' route overhead lines which KTR will replace. At the same time, SPEN will apply for deemed planning permission for the lines and associated works, under Section 57(2) of the Town and Country Planning (Scotland) Act 1997.

Circumstances for the Consideration of Undergrounding

For the reasons set out above, SPEN's view remains that, wherever practical, an overhead line approach is taken when planning and designing new or reinforced transmission lines. However, SPEN appreciates that there are specific circumstances in which an underground approach should be considered.

If, in certain circumstances, it is determined that an underground cable is required instead of an overhead line, the approach is to minimise the length of cable necessary to overcome the constraint to overhead line routing, which is consistent with a balance between technical and economic viability, deliverability and environmental considerations i.e. in line with SPEN's statutory license obligations as a transmission license holder.

As a guide, SPEN will consider undergrounding a 132kV overhead line under the following circumstances, where no suitable route for an overhead line can be identified:

- within a National Park or an Area of Outstanding Natural Beauty (AONB) or a National Scenic Area (NSA);
- within areas of local character or amenity not subject to a landscape or scenic designation which are considered to have no capacity to accommodate an overhead line;
- where the likely visual impact on residential areas or areas of historic importance or other areas is considered very significant¹;
- where the likely visual impact on a publicly accessible and recognised view or prospect visited and enjoyed by a large number of people within an area of importance for its scenic beauty, character, amenity or historical importance which may include such features as listed buildings and conservation areas is very significant;
- where from a review of the relevant environmental information it is concluded that the combination of likely adverse effects is very significant and that this cannot be satisfactorily avoided, reduced or offset;
- where technical and/or environmental constraints are such that no suitable overhead line route can be identified

Under such circumstances, SPEN will make a clear and transparent decision on the undergrounding of a section of line. This will take into account feedback from consultations with stakeholders and the public in relation to the protection of a particular resource in terms of the benefits/disbenefits of underground cable as an alternative to overhead line.

In regards to the KTR Project, through the routeing and environmental work – including stakeholder and public consultations – carried out over the last three years, SPEN have not identified any areas where an overhead line route is not achievable. However, as line routeing and EIA is a fully iterative process, we will continue to review and assess this as we progress through the EIA to understand the effects of the Project.

Further Undergrounding Study for the EIA Report

Separate to the above, the Scoping Opinion for the KTR Project issued by the Scottish Ministers in October 2017 stated that SPEN's EIA Report should *"include information on alternative measures, including undergrounding, which have been considered to avoid, prevent or reduce and if possible offset the likely significant adverse landscape and visual effects where these have been identified through consultation feedback from affected communities or the routeing process e.g. 'pinch points' or cumulative effects on sensitive receptors."*

On this basis, SPEN proposes to undertake a separate study to identify technically feasible cable routes for the 'pinch points' identified through the three rounds of consultation undertaken on the Project. Once these cable routes have been identified, a comparative study focussing on landscape, environmental, technical and economic considerations will be undertaken against the currently proposed overhead route alignments for the relevant sections. Following completion of this study,

¹ 'Very significant' is identified through Environmental Impact Assessment (EIA) and represents a degree of likely significant adverse effect, accepting that an overhead line is likely to have a significant adverse visual effect, that calls into question the continuity of an overhead line.

SPEN will consider its conclusions as part of the EIA process. The subsequent conclusions report will be included as a technical appendix to the final EIA Report.