**Black Law Wind Farm Extension Grid Connection**

<table>
<thead>
<tr>
<th>Description of the project</th>
<th>Purpose of the project</th>
<th>Key Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Black Law Wind Farm Extension Grid Connection consists of a 132kV overhead line (OHL), mounted on wood poles running approximately 14.5km south-west from the proposed Black Law Windfarm Extension substation. It also includes an underground cable running approximately 4.5km southwards, from the OHL termination point to the existing Linnmill substation in the Clyde Valley. An extension to Linnmill substation to accommodate additional electrical switchgear is also proposed. Construction will take approximately 6 months and will require the felling of approximately 9.98 ha of forestry to maintain a safe operating distance for the OHL and underground cable.</td>
<td>The purpose of the project is to connect the consented Black Law Wind Farm Extension near Forth, South Lanarkshire to the electricity grid. The client was ScottishPower Energy Networks (SPEN) as agents for ScottishPower Transmission (SPT).</td>
<td>Routeing: identification of a route that minimised landscape and visual impacts whilst taking account of other environmental considerations. Managing surveys: given the length of the route, access was required to land belonging to several different landowners. Iterative design: further to the routeing stage, more detailed modifications were required to optimise the route and final design of the project from both a technical and environmental perspective.</td>
</tr>
</tbody>
</table>
## Lessons learnt

At the initial routeing stage, identification of a route that balanced environmental considerations with technical requirements was challenging and required close working with the EIA team and the client. Feedback from consultees, local communities and landowners was also an integral part of this process.

Modification of the location of individual wood poles was also undertaken to take into account specific environmental and technical constraints including buffer zones for protected species and watercourses. Again, close working between the EIA team, environmental specialists and the client was central to developing a route that minimised environmental impacts and was technically feasible in terms of construction and operation.

The cumulative assessment landscape and visual impact assessment proved to be challenging due to the number of small scale ‘feed in tariff’ (FiT) wind turbine schemes that were installed in the vicinity of the route during the EIA process. A record of these FiT turbines was kept throughout the EIA process, informed by field work and consultation with the local authority. Again, close working and communication was key to ensuring this was effectively managed and that the ES was as up to date as possible at the time of completion.

## Lessons learnt cont. -

LUC managed access for the EIA field surveys and this was a key issue given the extent of the area required to be accessed and the number of different land owners involved in the project. This required excellent communication and organisational skills and was facilitated through the production of a map land ownership and a landowner contact sheet.

Overall the iterative EIA process proved effective in identifying the optimal route for the grid connection. This was facilitated by good communication within the team and with the client, consultees, landowners and other stakeholders.

## Contact details

**Author** – Donald McArthur  
**Registrant** – Joanna Wright  
**Company** – LUC  
**Email** - jo.cottin@landuse.co.uk

For access to more EIA case studies and hundreds of non-technical summaries of Environmental Statements visit: [www.iema.net/qmark](http://www.iema.net/qmark)