Dumfries and Galloway Strategic Reinforcement Project
Consultation response from Joan McAlpine MSP

As a South of Scotland MSP I have received a considerable volume of correspondence from constituents concerned about the Dumfries and Galloway Strategic Reinforcement Project. I am therefore contributing to this consultation in order to reflect those concerns and urge SPEN to address them. As the financing of this project - and any improvements to it - are regulated by OFGEM - I will send a copy of this submission to them. As I am based in Dumfries the majority of correspondence I have received is from constituents affected by the Eastern part of the proposed route ie zones 5 and 7, where the pylons are proposed in areas which had not previously had a transmission route.

ROUTE
My affected constituents are perplexed as to why the proposed route diverts so significantly from the current one. The consultation document states that the existing route now runs through areas which, after the pylons were placed there decades ago, had received protection as sites of environmental and scenic value. However the proposal as it stands will run pylons through beautiful countryside which has never had them before. From an amenity point of view it would seem "the lesser of two evils" to upgrade pylons where they already exist in the landscape. There are legitimate questions to be asked about how and where such a line should be routed. These include visual impact arising from the size, scale and siting of the network and the associated implications for tourism industries and cultural heritage, wildlife, the local environment and property values in particular. There is considerable anger that residents were presented with maps by SPEN which had already determined the corridor for the route before consultation began. As the route proposed will run pylons for the first time through areas of unspoiled countryside, attractive villages and hamlets, it will significantly affect the amenity of those who live there.

UNDERGROUNDING
Reflecting their desire for constructive engagement, my constituents have offered several suggestions for consideration around the design of the project. One relates to the potential for undergrounding the network. However the consultation documents suggest that undergrounding has been ruled out by SPEN without being properly considered. I am seeking assurance that this option will be fully and seriously explored and that any specific financial implications will not be allowed to obscure what constitutes legitimate community concerns regarding the design of the project as it stands.

The stated position of Scottish Power Energy Networks (2015: 23) on power line routing is summarised as follows:

"SPEN’s approach ensures that systematic appraisal of a number of route options is carried out, that the views of consultees and the local community are considered and appraised, and that the route alignment is the one which balances technical feasibility and economic viability with the least disturbance to people and the environment. Professional judgement is used to establish the balance."

However, the document goes on to say that ‘The evidence available… will support an overhead line approach in most cases’ therefore ‘wherever practical, an overhead line approach is taken when planning and designing new or replacement lines’ (SP Energy Networks, 2015: 23).

Unfortunately, this generalised presumption at the outset in favour of one approach at the exclusion of all others will inevitably undermine the opportunity for alternatives to be explored fairly and suggests that any appraisal of views which challenge the preferred approach is unlikely to
achieve “balance” when it is possible to simply devalue and discount lay contributions by reference to “professional judgment”.

While it is said partial or full undergrounding can create ‘significant system planning and operational implications’ (Kiessling et al: 18), there are circumstances in which this alternative approach is preferable – most notably where the reduction in visual impact is a primary concern (National Grid, 2015: 3) - and Scottish Power Energy Networks ‘appreciates that there are specific circumstances in which an undergrounding approach should be considered’ (SP Energy Networks, 2015:

I would point to evidence that overhead lines are (for obvious reasons) more susceptible to problems associated with exposure to weather systems. Given the incidence of storm damage and power cuts in Dumfries and Galloway, it seems only fair that the operator properly assesses the opportunity to improve customers’ experience by undergrounding the network.

There is new thinking in regard to undergrounding at a global level, with some experts advocating the use of DC transmission which is more feasible underground. For example see this piece in the MIT Technology Review http://www.technologyreview.com/news/507331/abb-advance-makes-renewable-energy-supergrids-practical/

Given the scale of this project and the enormity of what is at stake for the affected communities, undergrounding in this case warrants (at the very least) serious consideration. All options, including the latest innovative technologies should be explored and cost should not be the driving factor.

HEALTH AND WELLBEING
A number of my constituents have expressed concern regarding the affect that overhead power lines at high voltage may have on the health and wellbeing of those living close by. One constituent who was hoping to start a family is so concerned that she and her husband will move home should the power line be built - even though their current home is likely to drop in value as a result of the scheme.

I am aware of a number of pieces of work exploring the relationship between power lines and childhood cancer, leukaemia in particular. The following study by Kroll et al http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2965853/#!po=59.5238 showed a very slight increase in leukaemia. However a later 2014 study says there is no link. The later study increases distance from lines from 600m to 1km and includes 132 kHz lines as well as very high voltage.

In addition concerned constituents have pointed to the work of Prof Henshaw, who has studied the matter and has written an open letter on power lines and health here: http://www.es-uk.info/docs/20100501-powerlines-health.doc

I am aware that Cancer Research UK say: "There is little strong evidence to link power lines to adult cancers, or to most types of childhood cancer. But some studies have suggested a statistical link between exposure to magnetic fields and a higher risk of childhood leukaemia. At the moment, we don't have enough convincing evidence to be sure whether the link is real, but if it were, the impact would be small - only around 1% of childhood leukaemias."

However even a very small increase is too much of an increase for anyone potentially affected. I therefore seek your express guarantee that any relevant public health evidence will be assessed appropriately and taken into account when making decisions regarding the routing of the network and siting of substations. Constituents must have their health concerns addressed directly.
NEED FOR UPGRADE
SPEN have failed to explain adequately why the upgrade is necessary to help both domestic customers and businesses in Dumfries and Galloway itself. There is a strong theme in the correspondence I have received from constituents which suggests the upgrade is simply for the purpose of "exporting renewables to England" and will not benefit people living in the region. SPEN say the upgrade is needed to improve the resilience and increase the capacity of the network in the south of Scotland but do not clearly outline the benefits to most local people (as opposed to windfarm developers). Certainly local residents and businesses require reliable grid connections well into the future. The current transmission line is at capacity and between 50 and 80 years old. However SPEN have failed make a strong case as to why capacity in the transmission system must increase from a 132 kHz line to a 400 kHz line. This is a large leap and more information on projected demand from within the community itself is needed. If it is the case that economic development in Dumfries and Galloway will be hampered WITHOUT an upgrade, I would have expected a volume of correspondence from business asking for my support that the upgrade to go ahead. Naturally as someone keen to see more quality jobs and increased investment in D&G, I rank this as an important consideration. However I have not received such correspondence. Anecdotally I am informed that grid connections for business already require a wait and that capacity is an issue going forward. This includes farmers keen to get their small scale renewables projects connected to the grid. But that anecdotal evidence has not translated into a cogent, well argued economic development case for the upgrade in my experience.

MITIGATION/COMPENSATION

It is fair to say that the correspondence I have received from affected constituents is against the upgrade and certainly against the route. Even if the proposal changes markedly in response to these concerns, it is likely that some constituents will still be adversely affected - as is the reality with any major infrastructure development. It is simply not acceptable that those most directly affected are not considered for compensation. I understand that mitigation money as been made available by Ofgem elsewhere, notably in the Beally to Denny scheme. While it has not been done before, I do not think it unreasonable to use some of these funds to compensate individuals and communities.

I understand that OFGEM have made a £500m landscape mitigation fund available to national parks in England and Wales affected by power line upgrades. Does this apply in Scotland? Given that the legislation around national parks is different in Scotland, will a mitigation scheme take account of that? There are a great many areas of Scotland which would surely "qualify" for national park status in England, but which are unprotected. This includes, in my view, much of Dumfries and Galloway.

The advent of windfarm "community benefit" has also created an expectation of compensation. If the project went ahead in any form, SPEN should seriously consider its social obligations to the area. Given that fuel poverty is higher than the national average in Dumfries and Galloway a scheme/fund which directly - and significantly - addressed that problem would seem appropriate. There is already a model for this type of initiative from West Coast Energy. See here http://www.nea.org.uk/media/media-releases/media-2013/media-080513-01

SUBSTATIONS
In addition to visual impact of pylons there is concern about the size and siting of substations. There is also concern about the noise they cause. I note that substations elsewhere in the world are enclosed. Has that been considered here? It would reduce both noise and visual impact.

SUBSEA CABLE
A significant number of those who have contacted me are persuaded that the "raisin d'être" for the upgrade is the export of renewable energy, which they argue is mainly generated in the west of the
constituency. They assert that rather than transmitting this energy overland through Dumfries and Galloway, a sub sea cable should be built, hence eliminating the need for pylons. Unless SPEN can make a clear and convincing case that the transmission upgrade is necessary to benefit residents/businesses in Dumfries and Galloway itself, then this proposal for a subsea cable will continue to gather support.

ONSHORE WIND POLICY
A number of my constituents have argued that the UK government's withdrawal of support for onshore wind means this line upgrade is not necessary as fewer wind farms will now go ahead. There is however confusion around this matter. Can SPEN please clarify this, pointing to any work done on projected generation capacity?

SIZE OF PYLONS
There is a degree of alarm around the perceived risk of collisions, given the height of the pylons and the frequency with which low-flying aircraft are present in several of the areas identified in the network proposals. I ask that you address this specific issue directly in your engagement with my constituents.

NOISE
Many of my constituents have registered their anxiety around the potential for noise and traffic disruption arising from what will constitute significant infrastructural works in their local area. As the consultation progresses, I trust that any disruption will be minimal and therefore there will be no negative economic implications for residents or local agricultural producers. Additionally, as highlighted by my constituents, I am seeking absolute guarantee that compulsory land acquisition will be avoided at all costs and that there will be no significant restrictions on land access or public rights of way.

WILDLIFE
With regard to the perceived environmental impacts of the project, many constituents have identified as a concern the possible consequences for local biodiversity, specifically disruption to the migratory routes and feeding patterns of birdlife. It has been suggested that the plan to encourage the breeding of Golden Eagles in the south of Scotland could be undermined.

LOSS OF WOODLAND
The SPEN consultation document concedes likelihood of significant woodland loss. Will SPEN be re-planting elsewhere? What will happen to any timber cleared?

ALLEGED SPEN CONFLICT OF INTEREST
I accept that Scottish Power Energy Networks are required by UK legislation to maintain a fit for purpose grid and that this obligation is enforced by Ofgem. I also understand that SPEN is a separate company from Scottish Power, which is a generator. However a number of my constituents believe there is a conflict of interest in that some of the onshore wind projects in Dumfries and Galloway which will benefit from the increased grid capacity of this project, are operated by Scottish Power.

In conclusion
I cannot emphasise strongly enough the importance of understanding that my constituents’ concerns around this project do not constitute “NIMBYism” and nor are they informed by a desire to protect a vista from intrusion just for the sake of it. Put simply, visual impacts do not occur in a vacuum: as outlined comprehensively by my constituents in their communications with me, in a scenic area like Dumfries and Galloway, infrastructural developments must be understood in the context of their longer-term implications for the economy both locally and nationally. The potential
consequences for tourism and cultural heritage, the local environment, and property values (see Sims and Dent, 2005) combined should give us all pause for thought about the appropriateness of the technical decisions behind the project as has been presented to us at this early stage.

There has been a widespread expression of frustration and dismay at what my constituents correctly assert is an insufficient and rushed consultation. They have raised concerns around the means by which the plans were initially communicated- with only limited opportunities for residents to have a meaningful input “upstream” in the project design. This is compounded by a perceived lack of transparency about how or why strategic options relating to the project so far have been variously appraised. Many of my constituents have asked that you make explicit the local benefits of the upgrade. With an estimated completion date of 2023, I appreciate that the consultation is at a very early stage and it is a long time until Scottish Power Energy Networks can apply for planning permission. I understand that a number of decisions await the outcome of the consultation, such as the size of the pylons, the costs and the route itself. However, it is crucial that residents’ views are fully taken into account at this stage and that the longer-term design of the project, should it proceed, reflects a genuine comprehension of stakeholder feedback about the various issues mentioned above.

References