

Mr Simon Coote Head of Energy Consents and Deployment The Scottish Government Energy and Climate Change Directorate 4th floor 150 Broomielaw Atlantic Quay Glasgow G2 8LU

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Dear Sirs

SP TRANSMISSION LIMITED ("SPT") OVERHEAD TRANSMISSION LINE FROM WHARRY BURN, DUNBLANE TO DUNIPACE, DENNY STIRING VISUAL MITIGATION SCHEME

I attach the Stirling Visual Impact Mitigation Scheme ("the Scheme"). The Scheme sets out SPT's proposals to mitigate the visual impact of the 400kV line in the Stirling area in compliance with Condition 19 of the Section 37 consent granted by the Scottish Ministers dated 6 January 2010 under the Electricity Act 1989 to install an overhead electricity line from Wharry Burn, Dunblane to Dunipace, Denny ("the Consent").

## Introduction

In summary the mitigation set out in the Scheme consists of an extensive programme of works including screen planting, landscaping, tower painting and undergrounding of lower voltage lines.

The Scheme has been prepared and informed by the detailed engineering and environmental studies and assessments by experts who specialise in transmission infrastructure and the routeing of overhead lines through the landscape. These studies were not limited to consideration of the possible mitigation measures suggested within the Briefing Note of 28 January 2010 prepared by the Energy Consents and Deployment Unit but looked beyond these to other measures which meet the terms of Condition 19. The studies explored the resizing of towers, tower painting, screen planting, landscaping, undergrounding of low voltage lines and undergrounding and re-routing of the transmission line along with the associated costs.

The Scheme also took account of the extensive voluntary consultation exercise undertaken by SPT over a 6 week period from 29 September 2010 which included:-

- 1. Six public "drop in" meetings held at various venues during October 2010 attended by 80 members of the public:
- 2. Four public consultation meetings held between 25-28 October 2010 which were attended by over 200 members of the public;
- 3. Individual one to one meetings also took place with various landowners, action groups and parliamentarians; and
- Review and analysis of all comments and representations received or made by any other interested parties, including Stirling Council, since the Consent was granted.

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It is important to note that no new evidence emerged during the consultation which has altered the conclusions reached in terms of the recommended route.

As you are aware, SPT as a holder of an electricity transmission licence is required to comply with certain statutory and licence obligations. This includes an obligation to develop and maintain an efficient, coordinated and economical system for the transmission of electricity and to facilitate competition in the supply and generation of electricity.

The financial costs of all mitigation measures proposed and the environmental benefits which would result have to be evaluated against SPT's obligations above to establish whether they can be justified. The costs of undergrounding the 400kV overhead line would, for example, be considerably more expensive than the equivalent overhead line solution and having undertaken a detailed evaluation of a total of 22 possible undergrounding routes, SPT has rejected this option. As the financial burden is ultimately placed on electricity consumers, Ofgem would have to be satisfied that the measures were justified. In short, the benefits resulting from any mitigation measures require to be justified against the additional costs when assessed within the regulatory framework applicable to electricity networks in Great Britain.

## Undergrounding

The outcome of all the studies carried out by SPT at the Public Inquiry into the 400kV line were updated prior to the voluntary consultation exercise and updated again following its conclusion based on the responses received. Based on all of the evidence including these studies, SPT remains satisfied that undergrounding of the 400kV line cannot be justified on the grounds of cost, technical difficulties and the very limited environmental benefits. It appears that the ongoing debate in terms of undergrounding has lost sight of the realities of doing so which may require a trench for the cables as wide as a motorway and the sealing end compound structures at either end would be similar to the dimensions of a football pitch.

This conclusion re-affirms that of the Scottish Ministers who also felt that undergrounding could not be justified for the same reasons.

In rejecting undergrounding, SPT also considered as part of the Scheme, the "Joint Paper: Feasibility and technical aspects of partial undergrounding of extra high voltage power transmission lines" jointly published by ENTSO-E and Europacable in January 2011 ("Joint Paper"). The Joint Paper is somewhat superficial as it relies on comparative cost ratios taken from selected publications and does not give values which may be scrutinised.

Furthermore the Joint Paper concedes that the ratios provided do not take account of the specific site requirements such as the use of tunnels, existing infrastructure, joint bays, transition stations, maintenance costs, etc. In fact the report specifically acknowledges that Europacable can only provide general statements regarding cost factors of partial undergrounding.

In addition the Consent is for a high powered link which will carry 3400A per circuit which will require at least two cables per phase according to the Joint Paper. Therefore the ratios of 3 applicable to low rating cables would not be applicable. Also the Joint Paper does not suggest an upper limit for high power links or route options containing tunnels. There is therefore no specific information contained within the Joint Report which contradicts the conclusions of the expert reports prepared by SPT on undergrounding costs.

As you will know the Joint Paper broadly aligns with the information previously placed before the Scottish Ministers by Europacable as part of the Public Inquiry. SPT's evidence was preferred to that of Europacable during the Public Inquiry.

As you are also aware the Scottish Ministers, in granting the Consent, accepted that the route for the proposed 400kV overhead line "was logical and justified" and that "none of the strategic alternatives considered would offer the same balance of advantages as the Beauly Denny proposal".

There was also a misconception amongst some of the respondents to SPT's most recent consultation exercise that the decision not to undertake more extensive visual mitigation or undergrounding would result in an increased financial benefit to SPT. This is incorrect. Indeed, the reverse is true in that if

undergrounding could be justified, the additional costs would lead to higher energy charges being levied by SPT through our regulatory funding mechanism that would ultimately be borne by electricity consumers, rather than the equivalent overhead line solution.

While the terms of the Scheme may not meet the expectations of all the interested parties it has been recognised by your department and SPT that the discussions of possible further mitigation of the visual and landscape impact were unlikely to achieve a consensus view on what can be done without delaying the project significantly.

However SPT has throughout the extensive public inquiry, subsequent voluntary consultation on Condition 19 and in response to individuals' issues as they have arisen attempted to engage with all interested parties to explain their position and present proposals which address where possible the concerns raised in line with SPT's licence duties and obligations.

Unfortunately the same approach has not been adopted by some of the key stakeholders and in particular Stirling Council who resolved on the 11 March 2010 to condemn the granting of the Consent by the Scottish Ministers and declared a preference for undergrounding the 400kV line. SPT considers that this resolution has overshadowed discussions and has prejudiced the ability of Stirling Council to engage in a constructive manner in relation to Condition 19. I would ask the Scottish Ministers to consider the implications of the resolution of 11 March 2010 in its 30 day consultation with Stirling Council.

As you know, Scottish Ministers granted consent for an overhead electricity line. Had the Scottish Ministers considered that an overhead line solution was unacceptable, they could have withheld consent effectively requiring SPT to bring forward an underground solution. They did not do so. Scottish Ministers granted the Consent based on the evidence before them and the desire to have the line constructed without delay. In doing so they endorsed the view of Reporters that the advantages of any underground options were not so great as to justify withholding approval on the basis of landscape and visual impact.

While the majority of those responding to the voluntary consultation may have expressed disappointment that undergrounding of sections of the 400kV overhead line was not being promoted, the position nonetheless remains that the additional costs cannot be justified when considered against SPT's licence and statutory duties. Jim Mather MSP stated to the Economy, Energy and Tourism Committee of the Scottish Parliament on 13<sup>th</sup> January 2010 that: "We cannot require the companies (SPT &SHETL) to underground. What we can require them to do is mitigate. That leaves them the option to mitigate by undergrounding." I trust you will agree that the option has been carefully considered by SPT but it does not form part of the Scheme.

## Implementation of the Consent

As you are aware this matter has been in the planning process for over 8 years and the Consent is necessary to allow the Scottish Government to meet its commitment to ensure that 40% of the electricity generated in Scotland should come from renewable sources by 2020. This will allow Scotland to contribute to tackling global warming and assist in creating a viable new industry with associated employment within Scotland which has particular benefits for more remote areas and communities. No doubt the Scottish Ministers recognise the national importance of this project and will reach the correct balance in relation to the reservations of the local stakeholders.

In addition the consumers through National Grid are currently paying approximately £80million a year in constraint costs in Scotland due to a lack of existing transmission infrastructure. If the Consent is not implemented timeously the constraint costs which are ultimately met by the consumer could increase by more than £100million per annum. Any further delay to the commencement of construction is likely to delay the energisation of this line by up to 4 years.

The current construction programme anticipates commencement of construction on the road access improvements relating to the Denny North Substation in July 2011. It is imperative that all necessary consents are granted prior to this date. One of the reasons why Scottish Ministers approved a whole line solution was because early delivery of the project was necessary in the national interest. That

very much remains the case. If the Scottish Ministers delay in approving the Scheme this may increase the constraint costs paid by the consumer and threaten the Scottish Governments renewable generation targets.

Finally copies of all of the written representations received by SPT as part of its voluntary 6 week consultation have been provided to you on a confidential basis as the consultess have not expressly provided their consent to the publication of their representations.

I look forward to receiving your decision in the near future.

Yours faithfully

Prank Mitchell

Director, SP Energy Networks