

OFGEM TRANSMISSION ACCESS REVIEW
Enhanced Transmission Investment Incentives: Initial Proposals
November 2009

A response by Comhairle nan Eilean Siar

In submitting this response, Comhairle nan Eilean Siar reaffirms its commitment to the development of renewable energy in the Western Isles both as a means of achieving Scottish, UK and European targets and as a means of regenerating the island economy. The Comhairle has a clear appetite for consenting renewable projects and is convinced of the potential for clean energy regeneration in and around these islands. Although this area represents the best wind and wave regime in Europe, access to that resource has historically been hampered by lack of Grid access. Anticipatory spend on network reinforcement will be absolutely vital if this great resource is to be accessed in the national interest and the Comhairle urges OFGEM to promote this anticipatory spend. Work carried out by the Comhairle confirms that the amount of energy requiring to be exported to market from the Western Isles will shortly exceed the capacity of the 450MW interconnector being proposed by SHETL. Once marine technology reaches maturity, the scale of the resource in this area will be measured in Gigawatts. Comhairle nan Eilean Siar will be pleased to discuss any aspect of this response with OFGEM or any representatives of OFGEM.

CHAPTER 2

Question 1 Do respondents consider we have appropriately summarised the views of respondents to our September consultation?

The views seem appropriately represented. The Comhairle would support the view that progress towards a truly anticipatory approach is too slow, particularly given the potential scale of marine generation off the Western Isles. The Comhairle questions the appropriateness of the consultation assessment method as it takes no account of highly significant local factors and diverts resources and momentum away from necessary strategic works.

Question 2 Do respondents have any comments on the initial findings of our consultants or views on the issues raised by the TO's?

The Comhairle has significant concerns about a methodology that arrives at the conclusion that the case for the SHETL Western Isles HVDC link is not convincing. The consultant's site lacks information in reaching that conclusion, but local parties such as the Comhairle have not been engaged by the consultants. The consultants award the Western Isles HVDC link a 'Q' against all criteria – need, scope, timing, planning and technical readiness.

The **need** case is proven by the scale of resource in and around the Western Isles and the volume of potential generation in the advanced stages of development. If there is little evidence of actual contracted connections to the Grid, it is because there is no Grid to connect to – this lack of infrastructure should not be used as justification for questioning the viability of essential upgrades. Comhairle nan Eilean Siar, as Consenting Authority or Principle Consultee, has a clear appetite for consenting renewables projects in and around

the Western Isles and is enthusiastically committed to the achievement of 2020 carbon targets by taking the Western Isles into play as the area of Europe's best renewable resource – on and off shore. The following projects have been consented or recommended by the Comhairle:

- Arnish Moor Windfarm (3.9MW);
- Pentland Windfarm (15MW);
- Beinn Mhor Power (140MW) – with Scottish Ministers for determination and 300MW contracted;
- Feiorsabhal Windfarm (46MW);
- Six Community Energy Company Windfarms (total 24MW); and,
- Siadar Wave Scheme (4MW).

These consented projects represent 232MW of generation.

The following project is in the planning system:

- Pairc Wind Farm (78MW)

And the following projects are about to enter the planning system:

- Lewis Wind Power (150MW). Jim Mather, Scottish Minister for Enterprise, Energy and Tourism commissioned an 'Economic and Community Benefit Study' into the onshore wind resource in Lewis following refusal of the original Lewis Wind Power project. This study has identified locations for 50 turbines which can be sited West and South of Stornoway in harmony with environmental designations. Although the Study talks about 150MW total output, this could be 200MW by the time of deployment due to technological advances in turbine design; and,
- Bernera Wave Farm (50MW – 60MW). Pelamis are aggressively pursuing the deployment of a wave array in Loch Roag, West Lewis.

These projects which are in planning, or about to enter the planning system, represent at least 278MW of generation.

Development of all the above projects – consented, in planning or in advanced development - will result in a Grid demand of 512MW (much of it within the extended TPCR4 price control) requiring not just the proposed 450MW Western Isles HVDC but a doubling of that link's capacity to 900MW as discussed below. The socio-economic impact associated with this level of generation in the Western Isles is essential for the future well-being of the islands. Traditional industries are in decline and depopulation is a significant challenge. Renewable energy is viewed as a critical and significant development prospect for the islands. The Steering Group is disappointed that the consultants' assessment makes no provision for these compelling social and economic arguments. Instead, the consultant's content themselves with a simple technical assessment.

Add to the above the potential for marine generation West of Hebrides and the total generating capacity by 2020 could be upwards of 1.6GW. The Scottish Government study identified the marine potential West of Hebrides as 150MW at 2020, rising to 1GW thereafter.

A recent Planning Guidance exercise into onshore wind throughout the Western Isles confirms that 1GW of generating capacity can comfortably be accommodated throughout the islands in harmony with environmental designations and other constraints.

The Steering Group is therefore concerned that OFGEM's consultants are not convinced of the case for a strategic 450MW HVDC link to the Scottish mainland.

The **scope** of the Western Isles HVDC link is easy to prove if one looks beyond the simplistic 'Grid contracted' formula employed in this consultation. As stated above, there are firm proposals for 512MW of renewable generation in the Western Isles, all awaiting Grid connection. Comhairle nan Eilean Siar has a clear history of decisive and favourable consenting / recommending of renewables projects and socio-economic imperatives make the rapid development of a significant renewables industry a matter of strategic importance for the island community. The Western Isles are the area of Europe's best resource in terms of wind and wave and it would appear nonsensical to bypass this resource in favour of sub-optimal (but easier) deployment in other areas. The Comhairle is fully supported by the area TO in this assessment and, in turn, is pleased to lend its full support to SHETL's case for speculative provision of 900MW HVDC capacity in the land section of the proposed Western Isles HVDC link.

In terms of **timing**, the Western Isles HVDC link is the most advanced of all SHETL's investment proposals for TPCR4 but this point has been completely missed by the consultants' assessment. This link has been scoped, planning consent is in place (subject, as with every other SHETL upgrade, to Beaulieu – Denny) and the project is ready to run with an October 2012 delivery date. The Comhairle cannot see why more information is required against this criterion in order to make the case convincing.

Planning consent is in place for the Western Isles Converter Station for the proposed HVDC link. Although planning consent is not yet in place for the Beaulieu Converter Station which is contingent on consent being issued by Scottish Ministers for the Beaulieu – Denny line. However, all SHETL's investment proposals are predicated on the outcome of Beaulieu – Denny and the Comhairle fails to see why the Western Isles case is classified as questionable when other, Beaulieu – Denny dependent, schemes are classified as meeting the criteria. The Steering Group restates that, from its perspective, the Western Isles HVDC link is ready to go with an achievable delivery date of October 2012.

Technical readiness is not an issue for the Comhairle in respect of the Western Isles HVDC link. The consented Converter Station employs proven technology with potential to double its capacity. The Western Isles HVDC employs proven 150kV technology deployed well within its design limits. 200kV technology is now in early deployment elsewhere but the Western Isles link represents proven technology, prudently deployed. The Comhairle is not aware of any issues in terms of the technical readiness of the Western Isles HVDC link and challenges the consultants' view in this area.

The above point by point assessment of the consultants' five core criteria shows that there is no case for awarding the Western Isles HVDC link 'Q' status across all five criteria. The generalisations contained in the consultation document may seem harmless but they will influence investment decisions and could lead to the abundant Western Isles resource being bypassed with calamitous socio-economic and carbon reduction consequences.

CHAPTER 3

Question 1 Do respondents have any comments on our proposed funding framework for additional investment within TPCR4?

It makes sense to run a pragmatic approach to investment funding to the end of TPCR4 so that parallel projects in late TPCR4 / early TPCR5 are not running under different funding regimes.

Question 2 Do respondents have any views on the appropriate funding mechanism for provision of pre-construction funding?

Since the consultation supports the funding of all identified projects to pre-construction stage, the Comhairle has no view on this.

Question 3 Do respondents have any views on our proposed approach to identifying projects eligible for construction funding?

Projects eligible for construction funding must be selected on a strategic basis. Basing construction funding on contracted connections is to miss a great opportunity for longer term generation in areas of best resource. A contracted connection approach is fundamentally flawed because it predisposes existing connection options. There is no additional transmission capacity in the Western Isles so developers are unwilling to commit to connection contracts. However, there is ample resource in the Western Isles and a proven appetite for consenting and supporting renewables generation on social and economic grounds as well as carbon reduction grounds. OFGEM has to find a way, going into TPCR5, to fund strategic network reinforcements, even beyond a 900MW Western Isles HVDC link. Consideration has to be given to funding for the Cape Wrath to Irish Sea HVDC link which will complement the Shetland to Moray and Peterhead to Hawthorn Pit links already being proposed in the ENSG report. The scale of resource in and around the Western Isles, to be measured on the Gigawatt scale after 2020, justifies strategic investment in large scale connection to the North West of Scotland.

Question 4 Do respondents have any views on our proposal to fund construction costs up to the end of TPCR4 for specific projects? Do respondents agree that it may be appropriate to provide funding up to an earlier end date for projects in certain circumstances?

The Western Isles HVDC link has been poorly assessed. It must be re-assessed as a matter of urgency in light of socio-economic input from local agencies and the consenting appetite of Comhairle nan Eilean Siar should be recognised and allowed to influence project selection. OFGEM consultants could write off the Western Isles link by the stroke of a pen in a desktop capacity study but there is so much depending on this connection in carbon, environmental, economic and social terms that the consultants should ensure that they have all the available information to hand before coming to a recommendation. In particular, the capacity for the Western Isles to produce 512MW within an extended TPCR4 should be noted and acted upon.

Question 5 Do respondents agree that the same rate of return should apply as for other investment undertaken within TPCR4?

The Comhairle has no view on these TO specific issues.

Question 6 Do respondents have any views on the appropriate treatment of projects beyond TPCR4 or on any interaction with our decision on the timing of TPCR5?

Given the step change in marine technology and generation anticipated during the lifetime of TPCR5, the new price control period should be introduced to coincide with aggressive strategic investment by TO's in enabling infrastructure. For the Western Isles, that means infrastructure capable of exporting Gigawatts of electricity in the period following 2020.

Question 7 Do respondents have any comments on any other aspect of our Initial Proposals?

If, for any reason, SHETL are not funded to build the 450MW (or 900MW potential) HVDC link, the only alternative is a 150MW AC link which will not cater for the amount of generation consented, in planning or in advanced development. A 150MW AC link will also cost £30m more than a 150MW HVDC link and will have significantly greater environmental impact. The Comhairle urges OFGEM to support SHETL's convincing case for a 450MW (or 900MW potential) HVDC link.

Construction of a 450MW Western Isles HVDC link on day one will lead to a proven eight to ten year "no regret" period before it slowly becomes less economic to have built a 450MW link with only 150MW contracted. This assumes the unlikely scenario of no further contracted capacity coming on line beyond the 150MW contracted on day one. The Comhairle is therefore convinced that construction of an HVDC link of less than 450MW makes no economic sense.

For an incremental £25m spend, SHETL can 'future proof' the HVDC link and lay a second 450MW cable alongside the first in the 76km land section from Little Loch Broom to Dingwall. SHETL will not be permitted to re-excavate that track within ten years due to environmental constraints and there are significant economies of scale in excavation and cable manufacture which OFGEM must have the foresight to seize.

CHAPTER 4

Question 1 Do respondents have any views on our proposed approach for taking forward our work on TO incentives to facilitate further investment within the current transmission price control?

OFGEM should continue to invest during TPCR4 to maintain momentum and to prepare the network for the step up in renewable generation anticipated during TPCR5. The foundation should be laid now for very significant anticipatory spend during the next price control period.

Question 2 Do respondents have any views on our proposed consultation process going forward?

The Comhairle would like to meet with OFGEM's consultants in order to better inform the decisions which seem to be being taken in respect of SHETL's proposed Western Isles HVDC link. The Comhairle can provide a significant amount of background information which makes investment in a 900MW HVDC link strategically prudent.