SUBMISSION FROM HIGHLANDS & ISLANDS ENTERPRISE

Background

Highlands and Islands Enterprise (HIE) welcomes the opportunity to participate in the Economy, Energy and Tourism Committee’s (EETC) review of the Scottish Government’s draft second Report on Policies and Proposals (RPP2).

HIE is the Scottish Government’s economic and community development agency for the north and west of Scotland. In line with the Government Economic Strategy (GES), our purpose is to generate sustainable economic growth in every part of the Highlands and Islands, and do so through a focus on four priorities, as follows:-

- Support businesses and social enterprises to shape and realise their growth aspirations
- Strengthen communities and fragile areas
- Develop key sectors, particularly distinctive regional opportunities
- Create the conditions for a competitive and low carbon region

The natural resources of the Highlands and Islands constitute the greatest concentration of potentially exploitable renewable energy resources in the UK, being home to some of Europe’s strongest, sustained wind regimes along with some of the world’s best wave and tidal regimes. The region is therefore, through increased renewable generation, very well placed to contribute substantially to Scotland’s emission reduction targets over the period 2013-2027.

Highlands and Islands Enterprise (HIE)’s vision for the region is that it will be recognised as an exemplar through the continuing development of a world class industry in sustainable and renewable energy using our people, knowledge, natural resource and technology for the economic and social benefit of the Highlands and Islands.’

HIE is committed to delivering lasting economic and social benefit to the people of the Highlands and Islands from the development of renewable energy, and in particular the development of a world leading marine (wave and tidal) energy industry, capitalising on the “first mover” advantage gained by Scotland through pioneering initiatives such as the European Marine Energy Centre (EMEC) and the Pentland Firth and Orkney Waters commercial leasing round.

One of the main barriers to the development and deployment of renewables across the Highlands and Islands (H&Is) is grid access and charging. HIE is active in influencing the way in which the grid upgrades required for the region to contribute to carbon reduction targets and economic development objectives are triggered, accessed and charged for.

Whilst the “call for views” covers a range of topics on energy efficiency and renewable generation, the main focus of this submission on Transmission Charges, Interconnection and Grid Upgrades, recognising the criticality of these in securing greater levels of renewable generation and associated investment and economic impact. We also offer views on Renewable Heat, and the 2030 Decarbonisation Target.
Transmission Charging

We understand the EETC considered written evidence on 6 February 2013 from the Office for Gas and Electricity Markets’ (Ofgem) on its fundamental review of transmission charges, Project TransmiT.

Rather than provide further background, HIE’s evidence provides an update of events since that submission.

A Team Scotland approach comprising HIE, Scottish Renewables, Scottish Government, the European Marine Energy Centre (EMEC), and the local authorities representing Shetland, Orkney and the Western Isles, is being pursued to address transmission charging through Project TransmiT. We have pooled resources to field two independent technical experts on the Project TransmiT Working Group responsible for developing Ofgem’s recommendations into charging proposals. We have also commissioned research to evidence and support sensible, implementable charging options being developed by Team Scotland and its nominated experts.

Proposed reductions in charges for mainland Scotland will not be realised through Project TransmiT

In its written submission to the EETC on 6 February 2013, Ofgem indicate that the anticipated charges for mainland renewables generators could be reduced by up to 50%. However, following a scheduled five yearly review by National Grid of the costs it needs to recover through the Great Britain Transmission Charging Methodology, charges in the north of Scotland will now increase by c.£5/kW in April 2013. Regardless of the outcome of Project TransmiT, the expected reductions will no longer be achievable.

There are also clear and present risks to Scotland achieving anticipated reductions through Project TransmiT as generators with vested interests in largely traditional thermal generation in the south of the UK (understandably) work to dilute any benefits that might accrue to Scotland from Project TransmiT. These are outlined below.

1. Volume rather than capacity based charges: the EETC has previously heard that the proposed reduced charges for renewables generators are premised on a volume or usage basis rather than on a capacity basis (charged for what is used rather than the size of the project). However, some participants have proposed that a range of carbon intensive and low carbon generation needs to exist in an area in order for the modelled discounts to apply. This approach has been labelled ‘Diversity’. By that definition, there is no diversity of plant in the north of Scotland and therefore no discount should be applied to generators in the north. While this approach is flawed and in reality it is unlikely to be accepted by Ofgem, it does make a solution where only some reductions are realised in mainland Scotland more palatable. In effect it moves the middle ground away from the halving of charges modelled for Ofgem in 2010.

2. Dilution and cost escalation: The same participants are diluting proposals which would reduce charges for the Scottish islands such as the ability for low carbon generation to share the same grid assets and the removal of HVDC
converter station costs from transmission charges. Combined with the fact that island interconnector costs are escalating, we are accepting that it is likely that Project TransmiT may only deliver a partial answer for the islands and that complimentary policy solution may be required — not that this should excuse the industry process and Ofgem from doing everything possible to develop lower, yet cost reflective charges for the islands and in effect, triggers a 'least cost policy solution.

The Project TransmiT Working Group will present final options for consideration by Ofgem in April 2013. Ofgem will publish an impact assessment before making a final decision on the charging methodology in the summer with a view to implementation in April 2014 or earlier.

At the outset of Project TransmiT in autumn 2010 it was anticipated that it would provide an equitable outcome for renewables generation in the north of Scotland and the islands. However, given the combination of cost escalations on island interconnectors and through NG’s cost recovery model combined with the potential for dilution of cost reductions it is increasingly likely that it will not deliver the reductions originally envisaged and that further, complementary options must be explored.

**Policy Options**

Recognising the concern over Project TransmiT delivering for island generation, steps have been taken to consider a range of policy interventions. HIE acknowledges the work of industry bodies such as Scottish Council for Development of Industry and Scottish Renewables in making the case for a policy solution to connecting the Scottish islands.

Following encouragement from Alistair Carmichael MP and Fergus Ewing MSP’s personal commitment to securing an enduring solution to connecting the islands, the UK Secretary of State for Energy, Ed Davey, established an Inter-Governmental Group to look into concerns about the speed of progress of renewable projects on the Scottish Islands.

Chaired by the Department of Energy and Climate Change (DECC), the group has commissioned a study to assess the potential benefits of connecting the Scottish islands to the national transmission grid and to consider the need for further action to bring forward anticipated levels of generation from the islands.

Redpoint and TNEI consultants have been jointly awarded the contract and will report back to the Steering group comprising representatives from DECC, Scottish Government, National Grid, Scottish Hydro Electric Transmission, HIE and the three Scottish islands councils by end March 2013. This is to tie in with critical path for delivering the Western Isles interconnector, which is currently the most time critical of the island links, and to be able to provide costed options for Ministers’ consideration in April.

Although it will take some time to implement any solution, the aim is to provide Ministers with robust data to enable a decision on whether to implement a policy solution in time to facilitate developer investment in the Western Isles
interconnector by July 2013 - in time to allow the October 2016 completion date to be met.

The timescales are challenging and a number of variables could prevent key dates for the Western Isles interconnector being met. However, the work of the group aims to bring certainty to connection of the islands.

Without pre-empting the outcomes, the options HIE believe should be explored are:

- An uplift in ROCs for the Scottish islands
- An extension of the RO beyond 2017 to provide price certainty for Scottish islands projects
- An uplift of CfDs for the Scottish islands
- Treating the islands as strategic investments and using EIB or National Economic Recovery funding to attract a lower cost of capital for construction – reducing the costs by as much as 25%.
- Shetland Fuel Subsidy – the ageing Lerwick Power Station (diesel fired) currently receives c.£19m pa to meet Shetland’s electricity demands. This is UK Government subsidy administered by Ofgem. An interconnector would lead to both a reduction in size of the replacement power station and reduction in operational subsidy which if redirected towards the costs of the interconnector would be akin to a straight swap between carbon intensive and low carbon generation.
- A transmission charge adjustment (cap) under section 185 of the electricity act

Transmission Upgrades

In January 2012, Ofgem fast tracked approval of up to £4bn of transmission infrastructure upgrades. In order to drive up the level of local content in these and other of their investments in the H&Is, SSE is piloting its open4business portal in the region. The portal will give the local supply chain complete visibility of SSE’s and their prime contractors’ activities and give them the opportunity to compete for business.

As well as connecting significant potential for further onshore renewables developments in the H&Is, transmission upgrades are required to connect planned offshore renewables developments in the H&Is in which Scotland currently maintains a world lead.

The island interconnectors have been enshrined within the blueprint for UK grid planning and construction: the future Electricity Networks Strategy Group (ENSG) report. ENSG is co-chaired by DECC and Ofgem.

Despite these projects becoming part of the UK blueprint for the grid required to deliver 2020 carbon reduction targets, they are all experiencing major delays. Fundamentally HIE believes that this is down to project developers being unable to financially commit to them in absence of certainty over transmission access costs and use of system charges. This is where HIE has focussed its efforts on the basis that by increasing certainty, it can begin to drive confidence and investment in renewables across the H&Is.
1. **Western Isles Interconnector**: 450MW High Voltage Direct Current (HVDC) planned for completion in October 2016. There are a number of issues on the critical path:

- Project developers must provide £10s of millions of securities in February 2013, well in advance of knowing their final transmission charges.
- Ofgem must approve the economic case for building the interconnector by around May/June in the face of cost escalations of around £300m.
- If further support is required to bring projects forward in the Outer Hebrides and if it is in the UK’s best interests to do so, Ministers must have enough data and facts to commit to that support which relies on reporting from the Intergovernmental Group.
- SSE must contract with the preferred bidder by 1st of July in order to be scheduled into the production cycle for cable which is in scarce supply.

2. **Orkney Interconnector**: 180MW AC technology planned for June 2018 (originally 2016 but delayed for technical reasons). All of the capacity is being underwritten by marine projects and the two year delay doesn’t appear to have had any real impact on their planned build out due to uncertainty around charges and technology. However, the delay has led to a moratorium on all new connections over 3kW (equivalent of a powerful vacuum cleaner) as the distribution is full to capacity. To date, Orkney has been a real success story with Scottish Hydro Electric Power Distribution (SHEPD) managing to squeeze over 20MW of new renewables onto the distribution network using smart grid techniques. They continue to focus attention on developing additional solutions to facilitate the connection of small and micro projects in advance of the interconnector but on the understanding that most of the main gains have already been implemented. HIE is working with Orkney Islands Council, Scottish Government, SSE and marine project developers to identify possibilities for connecting distribution scale wind on the 2018 interconnector. It is unlikely however that the 2018 could be accelerated.

3. **Shetland Interconnector**: now planned for 2018, this 600MW HVDC solution is solely dependent on Viking Energy’s up to 450MW wind farm.

4. **Beauly to Denny**: has been delayed by a year to 2015 due to issues at the Denny end of the planned upgrade, within the Scottish Power area.

**Heat from Renewable Sources**

HIE’s own desk based research shows that around 45% of the population of the H&Is is off gas and a significant proportion is off grid. Renewable heat should be a viable alternative but despite the Renewable Heat Incentive (RHI) and loan schemes, high switching costs remain an issue.

In addition to influencing the funding structure of the RHI, HIE has made a number of investments in renewable heat market creation activity and supply chain businesses. The Sustainable Energy and Microgeneration (SEaM) centre based at Inverness college is Scotland’s only BPEC (British Plumbing Employers Council) accredited training facility. Supported by HIE, the centre has trained over 100 renewable heat boiler installers. We continue to support renewable heat design, supply, install and operate businesses such as Highland Wood Energy as well as supporting account
managed businesses to adopt renewable heat technologies. HIE has invested over £6m in Balcas’ wood pellet manufacturing facility in Invergordon to support the development of the sector in the H&Is.

2030 Decarbonisation target

HIE welcomes Scottish Government’s publication of the 2030 target, recognising the importance of certainty, continuity and scale beyond 2020 in terms of developing a supply chain and attracting inward investment. However, industry feedback demands that UK Government follows quickly with a UK target to stimulate and secure investment now.

Conclusions

Energy, and in particular renewable energy, is a key priority for HIE, recognising the comparative advantages which the region possesses in terms of natural energy resources, particularly offshore.

Decarbonising our electricity generation market is critical to achieving emissions reductions targets. The H&Is have the potential to make a significant, cost effective contribution to Scottish, UK and European emissions reductions targets through the development of its natural resources to generate renewable electricity. However, it is critical that key policy and regulatory issues are resolved to facilitate private sector investment and provide an enduring solution and route to market for the region’s enviable natural resources.

Pressure must be maintained on Project TransmiT in the final months of a three year review to deliver transmission charge reductions for mainland Scotland in line with figures modelled for Ofgem in 2010. In light of the increasing capital cost of connecting the islands, it is even more important for Project TransmiT to deliver a cost reflective charging methodology for the Scottish islands which leads to lower charges to unblock planned private sector investment. The expectation that it will deliver a solution for the Scottish islands must be maintained, accepting as a minimum that it must trigger the least cost policy option if charges remain too high to enable projects to be built.

The Inter Governmental Islands Charging Group must assess the benefits of connecting the Scottish islands, including their contribution to emissions reductions and present broadly costed options for a policy solution to Ministers, should it be required, by April. This timescale must be maintained in order to create confidence and secure several billions of pounds of private sector investment in renewables and infrastructure development and the region’s contribution to emissions reductions.

Highlands and Islands Enterprise
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