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RESPONSE TO:

NATIONAL PLANNING FRAMEWORK 2

Guidance on Windfarms

70. Government planning policy on renewable energy is set out in the Scottish Planning Policy on Renewable Energy (SPP6). The SPP identifies the national policy considerations which require to be reflected in development plans or supplementary planning guidance, including areas which should be afforded significant protection. It gives a clear role to local and national park authorities in relation to local considerations, the identification of broad areas of search for locations capable of accommodating onshore windfarms, and setting criteria which accord with national policy. The Government wants to see the approach to windfarm siting set out in SPP6 put into practice urgently and has asked local authorities to engage with communities and other parties with a view to preparing supplementary planning guidance. That guidance should provide greater clarity for developers and local communities and help to speed up the decision-making process.

Comment:

In setting out 'broad areas of search', it may be helpful to avoid the premise that windfarms are necessarily bound to cause significant adverse impact on protected areas. If search areas already preclude such locations then, there would be a lack of opportunity to undertake investigation designed to test whether or not such development may be of less than significant impact.

The wording of the EU Directives concerning NATURA 2000 designations – specifically states that there should be “no a priori prohibition of new activities or developments within Natura 2000 sites. This needs to be judged on a case by case basis”.

Regeneration

105. The success of the Scottish Land Fund and its successor the Growing Community Assets fund, the Highlands and Islands Community Energy Company and the growing importance of social enterprise, illustrate the potential for stimulating regeneration activity on the back of community ownership and involvement. The move towards new powers for reformed community councils, including the power to direct a proportion of existing local spending in their area to meet local priorities, will help

communities to regenerate themselves; while the Government's new strategic fund for targeted action to tackle poverty and deprivation will help to transform the prospects of deprived communities across the country. The Government intends to consult on extending to the whole of the country the services which HIE provides to facilitate community land purchase.

Comment:

In economically fragile areas, which have a rich source of renewable energy resources – such communities should be encouraged and empowered to be active in partnerships with large-scale developers. Otherwise there is a risk that very high resources – which should be harnessed to assist with the achievement of challenging National targets for renewable power – may remain under-exploited due to a lack of appropriate investment.

ENERGY PRODUCTION, DISTRIBUTION AND USE

124. The European Union has responded by committing to 20% of energy use from renewable sources by 2020. The Scottish Government supports this objective and has in place its own, higher target for electricity generated from renewable sources. It also wants to see the development of technologies which derive clean energy from fossil fuels; the harnessing of renewable sources of heat; decentralised energy production, including local heat and power schemes and micro-generation; and continued improvements in energy efficiency.

Renewable Energy

125. The harnessing of renewable sources such as wind, waves, tides, water and the sun is effecting a radical change in Scotland's energy economy, and the location of these resources means that rural areas are well placed to contribute to and benefit from the development of that economy. As wave, tidal, biomass, hydrogen and deep water offshore wind technologies continue to develop, these sources will become more competitive and commercially attractive, allowing them to make large contributions to Scotland's energy mix over the next 25 years. Hydro-power and onshore wind are the renewable technologies likely to make the largest contributions initially. Biomass could be making a significant contribution by 2010 and marine technologies have the potential to make a major contribution in the longer term.

Comment:

This all depends upon these peripheral areas having suitable connections to the transmission grid with a right of access to power markets, at an economic cost.

126. Scotland has one of the best environments not just in Europe but in the world for wave and tidal generation and, while the technology is not yet market-ready, the opportunities are enormous. Energy must be seen as a key economic resource. As the potential output of Scotland's renewable energy resources is several times greater than current Scottish consumption, the potential for export is substantial - and Scotland can also export energy technology.

Comment:

It is important that access to the grid is available for demonstration sized arrays of emerging technology. Under the present plans for Transmission Access many of the prime resources for tidal and wave energy in Scotland – particularly around the North isles - will have limited or no nearby connectivity, even for relatively modest developments.

128. The aim is to develop this extensive renewable energy potential while safeguarding the environment and communities. The Government is committed to developing and sustaining our energy industries, establishing Scotland as a leading location for the development of renewable energy technology and an energy exporter over the long term. It is encouraging a mix of renewable energy technologies, with growing contributions from offshore wind, wave, and tidal energy, and greater use of biomass. The potential of some of these technologies has a strong spatial dimension. For, example, the north and west coasts offer opportunities for harnessing the energy of tidal streams at locations which are well sheltered from ocean swells and prevailing winds, while the east coast presents opportunities for offshore wind. Information on environmental sensitivities will be important in selecting appropriate locations for development. The Scottish Government is therefore committed to following up its Strategic Environmental Assessment for marine energy with more detailed work.

Comment:

The Strategic Environmental Assessment for Marine Energy has, so far, identified only a limited potential (a maximum of 2.6 GW in the study area) as an exploitable resource, given a number of constraints to development. At these levels it would be difficult to mobilise sufficient inward investment from the private sector to enable a new industry to be sustainable in Scotland.

162. Energy is a major resource for rural areas. The Government is committed to realising the power generating potential of renewable sources of energy and encouraging the use and supply of energy crops as biofuels. Development of onshore windfarms has been proceeding apace, but the longer-term potential is likely to lie with new technologies such as wave and tidal power, biomass and offshore wind. Coastal areas will play a key role in Scotland's bid to become a world leader and exporter of marine power technology. New high quality jobs are being created through developments such as the marine energy research centre on Orkney and wind turbine fabrication in a number of rural locations. The farming industry is keen to develop the potential of biofuel crops and the harvesting of Scotland's forests will provide a source of fuel for heat and power generation. Community-based renewable energy projects can make an important contribution to sustainable development in rural Scotland, particularly on the islands and in remoter mainland areas.

Comment:

Peripheral areas, which are close to high levels of renewable resource, are only likely to benefit as primary or secondary centres of a new industry if they can attract significant investment. Investment is unlikely unless:

The resource is exploitable and not subject to excessive planning risk – i.e. not limited by over arching constraints, or uncertainty about how to assess environmental impact.

There is sufficient exploitable resource linked to transmission infrastructure to enable a strong national (Scotland –wide) production base.

ENERGY

Electricity Transmission

226. The pattern of the existing grid (see Map 17) reflects the relationship of existing power stations to settlement. New capacity for the generation of electricity from renewable sources is being developed across Scotland. However, much of this is in remoter coastal and upland areas and requires to be transmitted to centres of population across the electricity grid. The capacity of parts of the system needs to be increased to facilitate this transmission. Given the long lead-in time for electricity transmission projects, much of this investment must be made soon to provide the capacity to meet future needs.

228. In addition to the "baseline projects", the Scottish transmission owners have identified a number of further key system reinforcements. Sub-sea links from the Outer Hebrides, Orkney and the Shetland Islands will be essential to realise the substantial renewable potential of the island archipelagos. Upgrades to the existing Beaulay - Dounreay, Beaulay - Keith and East Coast transmission lines will be required. Central Scotland and Argyll are other areas where the transmission system needs to be strengthened. While grid reinforcement is likely to take place along existing routes, some new connections and route modifications may be necessary (See Map 18).

Comment:

The transmission links to the Scottish Islands are essential if the best resources of wind wave and tide are to be tapped.

Map 20 identifies those reinforcements, which the Scottish Government proposes to designate as national developments. In identifying these reinforcements, no assumption is being made about the need for transmission, or transmission routes, between Beaulay and Denny. The need for such transmission is currently being considered, together with related issues, at a Public Local Inquiry and will inform Ministers' determination of SHETL and SP's application under section 37 of the Electricity Act."

Comment:

The plan to identify the transmission routes to the Scottish Islands (Orkney, Shetland and Western Isles) among National Developments should be supported and expedited.

Sub-sea Super-grid

230. *The Scottish Government is committed to a strategic approach to electricity transmission and looking to how the system might evolve beyond the currently programmed land-based upgrades, with a particular focus on export. The interconnectors to England may require further upgrading if this potential is to be realised. The Scottish Government is working with the Republic of Ireland and Northern Ireland to investigate the potential for developing sub-sea cable routes to harness marine energy resources. It is also in discussion with the Norwegian government and the European Commission on proposals for a North Sea super-grid, to take electricity from Scotland and Norway direct to major continental markets. By connecting geographically dispersed regions, a super-grid would offer the additional advantage of smoothing out variations in output from sources such as windfarms as weather patterns move across Europe. The Scottish Government will use the consultation on the National Planning Framework to seek views on how a sub-sea super-grid might be developed, and to begin to consider its potential environmental effects.*

Comment:

The concept of a 'super grid' to link areas of high generation potential – including strategically significant levels of renewables – to UK, Scandinavian and European (mainland) markets is an essential element in long term planning. It should not, however, distract from ensuring that the UK grid reinforcements connect to peripheral areas in Scotland under the immediate round of 're-wiring'.

ANNEX: NATIONAL DEVELOPMENTS - STATEMENTS OF NEED

7. Grid Reinforcements to Support Renewable Energy Development

Description of development

Establishing a 275/132kV substation at Sloy.

Overhead line and substation works to increase north-south transfer capacity in Central Scotland.

A new 275kV South-West Scotland transmission line.

Strengthening the Scotland - England interconnectors to increase export capacity to 3.2GW.

Upgrading the East Coast transmission route to 400kV.

Upgrading the existing Beaulay - Dounreay overhead transmission line.

Reinforcing the Beaulay - Keith overhead transmission line.

Reinforcement of the sub-sea cable link between Orkney and the Scottish mainland.

New sub-sea cable links for the Outer Hebrides and the Shetland Islands.

Location

Throughout Scotland, from the English Border to the Shetland Islands.

Elements covered by designation

Overhead transmission lines, underground and sub-sea cable routes and associated converter stations and substations.

Need for development

The capacity of parts of the electricity transmission system needs to be increased to facilitate the development of renewable energy resources.

Need for designation

These strategic grid reinforcements are essential to providing the transmission capacity necessary to realise the potential of Scotland's renewable energy resources and maintain long-term security of electricity supply.

Matters to be addressed at consent stage

The routes of any new overhead lines and underground or sub-sea cables; the locations of sub-sea cable landfalls; the siting and design of any new structures; landscape and visual impacts; effects on bird species, other aspects of biodiversity, soils, hydrology and hydrogeology, the coast and the marine environment; effects on the historic environment; as appropriate, measures to minimise and mitigate impacts on the environment and communities.

Environmental assessment, environmental impact assessment and appropriate assessment (under the Habitats Directive) of the development will all be required. Some of the marine components of this programme of reinforcements have been identified and assessed in the Marine Renewables SEA.

Action Programme

The transmission system owners, the Great Britain System Operator and Ofgem will need to work together to deliver these reinforcements in consultation with planning authorities and key agencies.

Timescale	Lead Organisation(S)	Action
Post 2008	Transmission system owners / Great Britain System Operator/ Ofgem / planning authorities / The Scottish Government	Planning and delivery of reinforcements

wealthier and fairer	v	contribute to sustainable economic development	v
greener	v	strengthen global links	
safer and stronger	v	improve internal connectivity	v
smarter		help meet climate change, renewable energy or waste management targets	v
healthier		essential elements of a national infrastructure programme	v
		more than regional importance	v

Comment:

We fully support the Scottish Government in its proposal to include the reinforcement of the sub-sea cable link (upgrade to Transmission voltage) from Orkney to the Scottish Mainland as a National Development.

We do however suggest that the following should also be attached to enable such infrastructure to be realised and used effectively:

- a) A more streamlined planning process properly resourced at the level of the Scottish planning office.
- b) A move away from the assumption that developments and associated infrastructure designed to exploit renewable resources would normally constitute a significant adverse impact on protected land or marine areas. An immediate effect

may be to restrict somewhat the all-encompassing nature of the precautionary principle.

- c) A use of system charge, which is reasonably cost reflective and which does not discriminate against generation from renewable resources in peripheral areas. Note – under present conditions each Island group, once connected to the grid, would constitute its own ‘generation charging zone’. The fact that such a small zone may be limited in the amount of generation using the infrastructure, together with its remoteness from areas of high demand, would tend to mean levels of use of system as 2, 3, or 4 times higher than adjacent zones on the mainland.
- d) That the capping mechanism agreed as a measure for the UK Minister to apply – under S185 of the Energy Act - should indeed be applied to the use of system charges for the Scottish Islands.
- e) Adoption of innovative grid capacity sharing between parties of proven renewable generation technology (such as on-shore wind) and emerging, nearby, wave and tidal technologies – which are as yet unproven and therefore unlikely to achieve early connection in their own right.

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14.4.08