

ROYAL SOCIETY OF EDINBURGH INQUIRY INTO ENERGY SUPPLY.

I am writing on behalf of Rural Scotland in response to the Royal Society's request for evidence during its inquiry into energy supply. Rural Scotland was formed in 1926 as the Association for the Protection of Rural Scotland and is one of Scotland's longest established environmental organisations. Its key aim is the protection of Scotland's landscape and the amenity of rural areas.

We welcome the Royal Society's launch of this inquiry and agree on the importance of energy as a major issue of our time. Rural Scotland is primarily concerned with the impact that energy supply, particularly electricity, potentially has on our landscape. Given our experience and remit, we will thus restrict our input to the inquiry to our views on how production and transmission can affect the countryside and what needs to be done. Our response therefore does not address all the questions you have raised and indeed raises alternative ones.

Our key message is, if Scotland's use and supply of energy is to be sustainable in the future, it must avoid causing damage to its world renowned landscape and scenery which is of vital importance to Scotland's prosperity and well-being and is revered by local inhabitants and visitors alike.

Key recommendations.

In considering the sustainable supply of energy in Scotland, the limits upon energy production and transmission can not only be those of exploiting all available energy resources. The damage that energy production and transmission does to the environment dictates that the consumption of Scotland's energy must be targeted to levels where the capacity of the environment, including Scotland's distinctive landscape, is not exceeded. Establishing the limits to use and potential saving of energy, as well as supply, must be in the foundations of any framework for energy in the future.

In that respect, while we should seek to be self sufficient, there are also limits to how much energy, particularly electricity, Scotland can produce in order to meet present and future needs beyond its borders. If the landscape is not to be irrevocably damaged, given the current plethora of terrestrial wind farm proposals which are distributed haphazardly across Scotland's countryside, then national locational strategy and locational guidance is urgently required.

In this respect, the map drawn up by Scottish Natural Heritage provides positive guidance on which parts of Scotland's landscape are of varying degrees of sensitivity to wind farm development and it should be

1. employed as a first reference point by developers and authorities in determining where wind farms will or will not be acceptable.
2. used by authorities in deciding whether applications should be granted or refused on landscape grounds.

Preparation of national locational strategy and guidance should follow production of a clear new national plan for Scotland for the future transmission of electricity via the grid network which has been subject to

- * firstly, an inclusive and transparent process of public consultation and,
- * secondly, strategic environmental assessment which sets out the landscape implications of grid developments, particularly where they are intended to, or will make possible, construction of industrial complex scale wind farms in remote sensitive scenery, often remote from the main centres of consumption.

Finally, as a general rule, electricity production should take place wherever possible as close to the point of use in order to maximise the efficiency of transmission and minimise energy loss and environmental impact.

General Questions.

Q2 It is desirable to be self-sufficient in energy into the future but also desirable that

Scotland's energy resources are harnessed for uses that are sustainable rather than inefficient and wasted.

Energy Supply

Q4 Clearly there would appear to be a fundamental need to generate electricity in a way which minimises carbon dioxide emissions or the creation of radioactive waste as both global warming and waste storage can have an irreversible impact upon the landscape.

Energy Demand

Q9 Clear advances are required in the efficiency of transport and space heating. The latter might be encouraged by financial inducements for home insulation and much stricter Building Regulations. In this respect taxation inducements should switch from targeting eg electricity production through schemes such as the climate change levy and ROCS to inducements to consumers to take action to reduce energy and electricity consumption and improve efficiency.

Environmental and Social Issues

Q11 It can be argued that every form of energy generation has some measure of environmental impact, such as atmospheric pollution, disturbance to habitats or visual intrusion. These impacts change in character and degree according to the type and location of energy generation.

Gaseous discharge is currently thought to be the most threatening impact globally, because of the influence of enhanced green house gas discharge on global warming and climate change. However, at a regional and local scale the loss of habitats, diminishing areas of wild land, visual impact, reduction in tourism and recreational experience as well as the disposal of solid waste have all been experienced in Scotland at varying times over many years.

Measures to minimise these impacts in more recent energy generating schemes have been only partially successful. Whereas decisions on proposed energy generating proposals should carefully consider the merits of each individual case, it is also vital to have a sound national, locational strategy for energy generation.

Scotland is rightly renowned for its variety of landscapes and their scenic quality. This scenic resource is the dominant reason why visitors come to Scotland and it represents a very significant financial asset for the tourist industry. The current number of planning applications for wind farms across Scotland, threatens to undermine the scenic resource and jeopardise the prosperity of the rural tourist industry. Therefore, it is essential that there should be effective national, locational guidelines for new wind farms that guide developers away from sensitive areas and towards places where a carefully considered scheme could be acceptable as recommended by Scottish Natural Heritage.

Several Local Planning Authorities have produced Locational Strategies for their own areas but the value of these is undermined by the absence of an effective national context. It is a matter of very considerable regret that the Scottish Executive has not accepted the case for producing a national locational strategy for wind farm developments and the associated transmission system. It is suggested that central Government should be proactive in the identification and location of new energy provisions, rather than just adopting a regulatory role. To this end the new National Planning Framework has a vital role to play.

Q12 It is difficult to know what might be the order of increase in energy costs if the objectives of environmental improvement and economic growth are to be met. However, it should not be forgotten that the condition of the environment is an important factor in determining the "Quality of Life" of residents in Scotland. Furthermore, short- term savings in energy generating costs could be off set in the medium to long-term by greater costs arising from pollution and environmental degradation. For example, there is still no long-term solution to the problem of radioactive nuclear waste.

Q13 The repeated abandonment of sites in the remoter parts of Scotland (eg Invergordon, Ardeseer), or management of large areas of land with only skeleton staff, (eg hydro schemes

or conifer plantations) are a testament to the long standing problems of introducing high impact schemes where the employment during the construction phase is greater than that required for managing production.

Depending upon the location of new generation plants the local labour force may be inadequate to meet construction requirements and the accommodation of temporary construction workers can bring its own environmental and social impacts. Wind farms fall into this category.

In conclusion, Rural Scotland wishes to emphasise the importance of ensuring that future installations for the generation and transmission of electricity are made without jeopardy to Scotland's renowned scenic quality. The most recent planning applications for wind farms are being made in respect of large numbers of very large scale wind turbines so sites will have to be very carefully chosen if significant visual impacts are to be prevented. To avoid an over dependence upon wind power, we consider Government should be more pro-active in its support for research and development of alternative renewable energy sources, as well as securing energy conservation and increased efficiency. We trust you find the above remarks of assistance and look forward to hearing the conclusions of the Inquiry.

Yours sincerely

Bill Wright, Director
RURAL SCOTLAND

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