OFGEM'S THREE YEAR STRATEGY 2004-2007

RESPONSE OF

COMUNN DION NA PAIRC

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We wish to highlight the following key challenges for the energy industry:

1. **Security of the energy supply is the main priority. This rules out prioritising intermittent renewable energy. It rules out an energy policy which includes increasing the proportion of electricity being supplied from wind turbines. Subsidies on wind turbine development should be stopped because they are promoting an almost useless technology which will send the price of electricity spiralling and bring accelerating numbers of people back into fuel poverty. All hydro-electricity should be classified as "renewable".**

2. **To establish a viable, scientific energy policy requires removal of the emphasis on onshore wind turbines in the Highlands and especially the islands of Scotland. The physical constraints of bringing intermittent electricity from the Highlands and Islands make it economically unviable and environmentally undesirable. Wind energy, a source which is dependent on subsidy to make it at all viable, is not sustainable. Developers are attracted by the large subsidies, not by a genuine concern to cut carbon emissions and far less by genuine concern for the communities upon which they wish to impose their turbines.**

3. **The present transmission system is reliable for delivering power in response to demand. It should be a priority to make it more efficient in preventing energy losses in transmission.**

4. **Given that almost half the energy used in Britain is used by vehicles, it should be a priority of research to develop a carbon-free fuel.**

5. **Britain should aim to become self-sufficient in energy through giving top priority to scientific research to improve energy generation and to improve efficiency in all forms of energy use.**

6. **Ofgem should take steps to dispel the "spin" surrounding onshore wind energy which has produced a false and dangerous government energy policy. Most of the windfarms being proposed are the result of paper exercises drawn up in places far removed from the realities of life in the Highlands and Islands by people (even local politicians) who have no personal experience of or real insight into how local people relate to the environment in which they live productive lives in small, unsensational ways. Windfarm promoters exaggerate rural poverty and rural depopulation[1] in order to enhance the perceived advantages of siting windfarms on crofting land. Unearned windfarm income is no answer to rural economic regeneration.**

[1] Guardian 11 September, 2003. Sub-title "Country needs migrants to offset low birth rate." The village of Calbost is cited as an example of depopulation. The article omits to mention that all the crofts are fully used for crofting purposes by active men and women including the gentleman who makes the false claim "there are no longer the men to work it."

The White Paper on energy is weighted heavily towards developing renewable energy from onshore wind turbines in the Highlands and Islands of Scotland. This mistaken strategy cannot contribute to the four goals of the energy policy:

1. Instead of cutting carbon emissions, turbines will increase emissions in both short term construction, and long term by forcing an increase in conventional back-up electricity because of the unpredictable and intermittent pattern of wind generation.
2. Instead of maintaining the reliability of electricity supplies, turbines will undermine reliability.
3. Instead of promoting healthy markets, current disproportionate and unjustifiable wind energy subsidies will undermine genuine competitiveness of superior, reliable sources of electricity.
4. Instead of maintaining affordable domestic electricity, the increased cost of building turbines in remote islands (with increased transmission costs) will force prices up dramatically. A small windfarm on Shetland has already proved a failure.

Additionally, onshore wind turbines cannot meet the environmental challenge identified in the White Paper:

- Wind turbines are destructive of the natural environment, of both human and wildlife habitat.
- They cannot contribute to sustainable communities because the subsidies upon which they depend are not sustainable.
- They cannot be reconciled with a sustainable diversity of rural development because they impose an unhealthy monoculture and no-go zone for other development.
- They take land out of local control at the rate of one hectare per turbine which is leased to the developing company, while the footprint of the turbine goes into the developer's ownership.
- It has to be pointed out that not one decrofting order has yet gone through the Scottish Land Court for a windfarm development.
- The long-term social, economic and environmental implications of patchwork decrofting orders have never been looked into.

We provide the following exemplar to illustrate the effect of "spin" on windfarm proposals in the Western Isles.

THE IMPLICATIONS OF ONSHORE WIND TURBINES FOR THE ISLE OF LEWIS.

On environmental and economic grounds we question all the unfounded presuppositions and "spin" which are the entire basis for proposing on-shore wind turbines in the Highlands and Islands. In particular we refute whatever arguments are attempted to justify locating hundreds of the largest possible turbines on the Hebridean island of Lewis.

None of the three sites under investigation in Lewis are suitable for turbines:

- **The 125 turbine Scottish & Southern site is Pairc**, a peninsula of roughly three-mile radius with settlements along the shores of the Minch and three fjords, Loch Erisort, Loch Ouirn and Loch Shell. There is no environmental justification for locating 125 turbines on a site which would monopolise most of the common grazings for generations to come, create a no-go zone for other development, and impose an unhealthy monoculture on a vulnerable crofting community for whom the inspiration of the landscape and the

traditional crofting use of the land is the principal asset. Turbines would be in competition with man for the narrow coastal strip on which human survival depends. (Map appended.) Locals and conservationists are opposed to this plan, yet the M.P., M.S.P., Western Isles Council, Western Isles Enterprise, and other grant-orientated groups have closed ranks to push for the development. We suspect this development is being driven by the necessity to erect at least 240 turbines on Lewis to justify the interconnector cable. This is a classic example of an inappropriate scale of development being forced on a small vulnerable rural community for false, uneconomic and socially destructive reasons.

- **The 300 turbine AMEC site is Barvas Moor,** an SSSI on which turbines will not be permitted. The only place where turbines would be sited is along the moorland perimeter right up against the villages, (where the giveaway anemometers have been sited) again putting intolerable pressure on the crofting settlements. Conservation groups have already opposed the plan, yet AMEC persists in pushing for this development.

- **The 125 turbine Beinn Mhor Power site is Eishken**, adjoining Pairc on the western boundary. Eishken is totally unsuitable as a turbine site for mainly nature conservation reasons. It is the picturesque deer forest of Lewis, the traditional hunting ground where turbines would be an environmental desecration. Again conservationists aware of rare protected species are opposed to this development.

All three sites are frequented by significant populations of birds and migrants. All three developments would endanger the future viability of crofting as a way of life. Yet the real success of crofting has been its retention of the highest density of rural population in Western Europe because of its unique system of hereditary land tenure which emphasises the individual's relationship to the land through stewardship, enterprise and family responsibility. The crofting way of life will not survive the imposition of a monoculture of industrialisation by wind turbines. There is no "rural poverty" in Pairc. Croft houses have double glazing, central heating and modern amenities including at least one car.

People who choose to live in crofting areas renounce urban life out of recognition of a form of wealth which is not primarily materialistic. The human spirit requires the inspiration of the hills and landscape and requires to experience solitude. It is what attracts tourists and annual visitors whose roots will always be there even after living for generations in a far country. All of that will be destroyed forever by forests of turbines and their grotesque aftermath. Humans in rural areas need an optimum habitat and diversity of habitat, no less than other endangered species.

Whereas there are many unsubstantiated presuppositions and much "spin" from prominent politicians eager to attract renewable investment, there have been no objective assessments of the proposition to locate 600 turbines on Lewis. The "spin" has to be exploded because:

- There is no room for 600 turbines on the island.
- S & S have said that the smallest number of turbines necessary to justify an interconnector cable is 240. There is no economic, social or environmental justification for 240 turbines on the island.
- The current turbines of choice for S & S and Beinn Mhor Power, 100 metres tall, are projected to cost £2.5 million each.
- The cost of the interconnector cable was estimated at £400 million in 2001. The House of Commons Select Committee on Trade and Industry on 4th December 2001 was not

able to elicit information about the effectiveness of such a project although the dramatic announcement had been made by the then energy minister.

- The topography of Eishken and Pairc is rugged, not the sort of land where any company has previous experience of erecting turbines. Therefore costs would escalate. There would be additional problems of bringing materials to the sites. In Pairc, 38 miles of roads would be required for erecting and servicing the turbines, totally intersecting the common grazings. The project is a conservationist's nightmare, disrupting the natural drainage, natural vegetation, brown trout and sea-trout spawning grounds, populations of red throated divers, golden eagles and sea eagles, and endangering bird migration routes, such as Brent geese.
- The anemometers have only recently gone up, so nobody knows the viability. It is not possible to know the true viability because winds and weather are so variable and unpredictable from year to year. The narrow habitable coastal strip is endangered by the proximity of the anemometers obviously intended to bring turbines as near the coast as possible.
- S & S is on record as stating that onshore wind turbines are not profitable without the subsidy, so what is the point of all the additional expenditure and disruption of installing turbines in the Outer Hebrides when there is no hope of ever realising a real profit from them?
- AMEC's latest statement on the eventual size of turbine indicates that they will put in the biggest possible at the time. (ie over 100 metres.)
- Lewis is mostly low-lying with distant horizons. Turbines will be intrusively visible all over the island and out at sea. They will dominate the view from both sea and air approaches to the island. There is literally nowhere they can be tucked away out of sight.

The emphasis on the development of dozens of small and large windfarms is based on unsubstantiated presuppositions about their viability in the short or long term. The Energy Green paper's assertion on page 54 that "with support from Renewables Obligation and Renewables Obligation Scotland onshore wind is already viable" is totally untrue. Many factors are necessarily omitted from any such calculation because of factors which are impossible to know at this stage:

- How many days would wind and weather permit generation of electricity?
- What would be the total cost of rewiring the entire electricity transmission grid as far south as the markets?
- What would the knock-on effect be on the totally dissimilar, renewable, reliable, regular steady flow of superior hydro-electricity?
- Would that not require an entirely separate cable and pylon infrastructure running the length and breadth of Scotland? Although SHETL claims to be able to cleverly manipulate the existing cable and infrastructure to accommodate new intermittent renewable electricity generators, this is far from convincing.
- Despite the footnote 74 on page 54 of the Energy White Paper, there can be no credible advance calculations of the cost to the transmission and distribution network of balancing the demands of 20% to 30% of electricity being supplied by intermittent generation.
- A submarine cable such as has been mooted to run the length of the west coast of Britain would be prohibitively costly, incur huge loss of energy in transmission, and most importantly be exceedingly vulnerable to terrorist sabotage.
- Windfarm developers do not care if SHETL is forced into liquidation as a result of exorbitant cost of rewiring the network for which it is responsible.

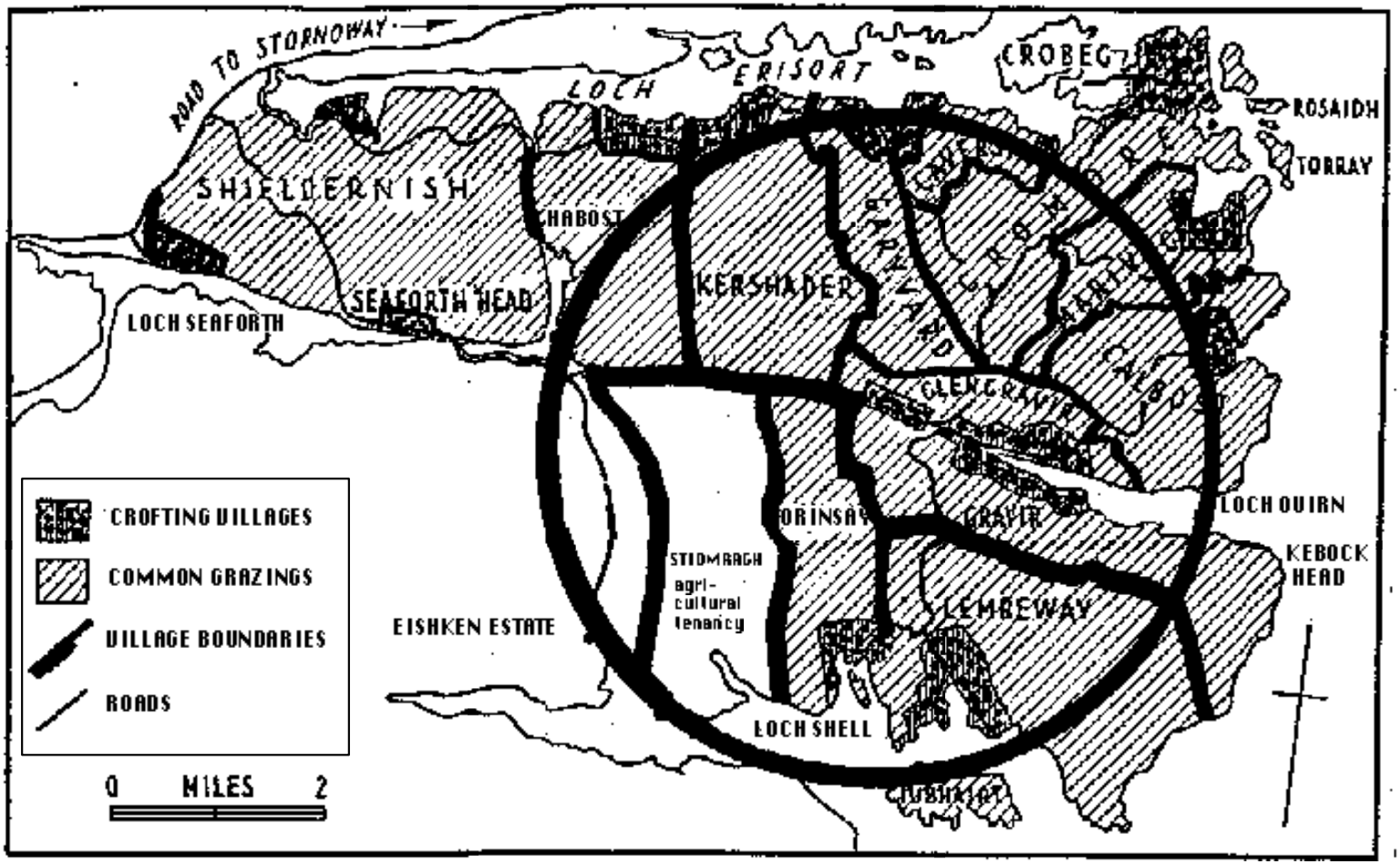
It is a disgrace that Scotland's 13% hydro electricity is not credited as having "renewable" status because it is after all a much superior and dependable source than new-fangled renewables.

"Spin" needs to be eliminated from any dissemination of information about wind-generated electricity.

- Ethical pretences by large companies “buying” approval from environmental groups by making payments to charity funds.[2]
- "AMEC claims that the proposed wind-farm at Edinbane on Skye will supply enough energy for 28,000 average households or for over 68,000 people. The United Kingdom has 59,778,000 inhabitants for which the average power demand is 39,383,000 MW. On this basis the average power required to supply 68,000 average people is 44.9 MW. The maximum output of the Edinbane Wind Farm under ideal conditions is 47.25 MW but the average output assuming an optimistic 30% load factor is a mere 14.1 MW! Enough only to supply the needs of less than 22,000 people or less than 8,000 houses! "[3]
- Such statistics as AMEC state are presented out of context, unrelated to the actual complex world of electricity supply, transmission and use over real time.
- The capacity to be assigned to wind power for operational purposes by NGC in an attempt to provide some sort of real moment-to-moment planning means that, say, 8,000Mw would only count as about 2,500 Mw.
- There is facile obscuring by “spin” of the very real technical problems. e.g. A very large number of turbines are required to meet 2010 & 2020 objectives: 10,000 to 15,000 units depending on size. It has taken 5 decades to put in the circa 12,000 transmission pylons required by the National Grid. It will be impossible to meet renewable energy building targets as turbine erection is more complex.

[2] E.g. Scottish & Southern Energy’s “RSPB Energy” product which makes donations to RSPB and claims “The electricity you use will be matched with generation from renewable sources, so you can make a real contribution to a healthier environment.”
[3] letter by William Oxenholm in Glasgow Herald, 7th October.

JUXTAPOSITION OF WIND TURBINES & LITTORAL SETTLEMENT PATTERN (Proposed)
Pairc Estate showing crofting villages and common grazings in relation to circle of 3 miles radius
Site of proposed 250MW wind farm of 125 turbines (ht. 100m)
Developer: Scottish & Southern Electric Company


ROAD TO STORNOWAY
LOCH ERISORT
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ROSAIDH
TORRAY
SHIELDERNISH
HABOST
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LOCH SHELL
CROFTING VILLAGES
COMMON GRAZINGS
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