

***Wind Energy Workshops
Southwest and Northwest***

***July 7th and 8th
2010***

Discussion Notes



Discussion Topics Raised, Comments on the Day, Responses

- Variability of wind and the potential for off-peak use of electricity for municipal water pumping or storage.
 - Local authorities could investigate their options with respect to off-peak rates and energy use.
 - Lots of research under way looking at ways to mitigate variability of wind with existing storage mechanisms such as hot water and future means such as electric vehicles.
- Community partnership and investment models need to be promoted more and more needs to be done to **allow** communities to invest in a project.
 - With due regard to the fact that only the ‘haves’ in a community may be in a position to invest.
 - Wider benefits for those not in a position to invest should be encouraged.
 - Distribution of benefits should be equitable.
- **Monaghan Model** of community engagement during planning phase cited as good practice.

- Where it is technically possible the existing electricity network will be upgraded in position before new lines are considered.
 - This needs to be communicated to the public.
 - The concept of a ‘smart grid’ needs to be communicated to the public.
- Research needed on cumulative effects on habitats of multiple wind farms in sensitive areas. Could it lead to unforeseen impacts?
- The cost of wind energy?
 - Total costs per MW of installed wind generation capacity can range from €1.3m - €1.9m
 - Factors which influence final cost include:
 - Economies of scale
 - Location –distance from grid, distance from roads
 - Wind resource at site –height of turbines, class of turbines
 - Ground conditions

- We have a National Asset Management Agency for bad projects so perhaps it's time for a Renewable Asset Management Agency of good projects- 'RAMA'
- What is the appeals process following a decision under the Strategic Infrastructure (SI) Act?
 - Judicial review
 - European courts
 - Cost of processes placed largely on utilities which ultimately rests with the consumer.
- Strategic Infrastructure Act is fine in theory but implementation needs to be reviewed.
 - Hearings can be lengthy, unpredictable and expensive.
- Pre-application consultation process on SI projects works very well in co-operation with An Bord Pleanála.

- What is the position of National Parks and Wildlife Service on applications for wind farms in Natura 2000, SAC or SPA lands?
 - Will facilitate formal discussion on applications but it is unclear at present what defines ‘appropriate development’ in these locations as per the requirements of the Habitats Directive.
- European Commission nearing the end of a consultation process on development in Natura 2000 sites
- Are large turbines standardised and interchangeable so that after 15-20 years those parts alone could be swapped out?
 - No, all major parts are proprietary so for example a rotor of one model could not be switched for a rotor of another.
 - The turbine tower has a design life-span usually of approximately 20 years at which point it would, for safety reasons, need to be removed and recycled.

- Has the use of wind energy corridors been considered in Ireland?
 - In Netherlands wind energy projects may be located along motorways or railway lines so that the grid can follow those routes.
 - In Ireland we have an excellent resource which is often remote to these major routes however.
- The location of demand needs to be planned as much as the location of generators.
 - ESBN and EirGrid can't build grid speculatively to encourage future demand at a location.
- What contingencies exist in the event a windfarm is not viable for repowering and the value of salvaged equipment does not pay for the decommissioning?
 - Highly unlikely a site which underwent due diligence for original project will become unviable in the future.
 - In fact improvements in technology will be expected to make the site even more productive if all else remains equal – particularly the support mechanism.

- Have there been studies on the embodied energy of wind turbines and windfarms?
 - A number of studies, both from wind industry bodies and independent academics, have shown that the energy consumed in manufacturing, transporting and building windfarms is repaid within the first year of operation.
- SEAI should assist and co-operate with local authorities in developing strategic renewable energy plans.
 - SEAI will consider applications to develop a template for best practice in this regard through its [RERD&D fund](#)