
Wind Energy and Public Safety: HSE Approach

BWEA30

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Content



- Public Safety: Statistics, the law, and HSE's Policy
- Onshore Wind Power: Risks and HSE position
- Wind Farms: The planning process and HSE's remit.



Injuries to Members of the Public



- In 2006/07 there were 369 fatal injuries to members of the public reported under RIDDOR (from all work places/activities).
- If discount those on the railways (i.e. trespass/suicide) then main areas of risk include:
 - Agriculture (9);
 - **Construction** (7); and
 - **Utility Supply Industries** (3)



HSE and Public Safety - the Law (1)

- **Health & Safety at Work etc Act 1974 (HSWA);** purposes include:
 - Protecting people other than those at work from risks to their H&S arising out of or in connection with work activities.
- Section 3 places general duties on employers (and the s/e) towards persons other than employees.
- Scope of s.3 is very broad; therefore HSC adopted Policy Statement to aid enforcing authorities to determine action where a breach is suspected
(<http://www.hse.gov.uk/enforce/opalert.htm>)



HSE and Public Safety - the Law (2)

- HSE Policy regarding Public Safety:
 - Enforcing section 3 HSWA in areas key to our mission (e.g. major hazards, construction) remains a high priority ;
 - Approach to public safety is reflected in HSE's priority programmes and *incident selection criteria*.
- The *incident selection criteria* - i.e. which incidents will be investigated - are published on HSE website.

HSE and Public Safety - the Law (3)

- **Electricity Safety, Quality and Continuity Regulations 2002 (ESQCR):**
 - Public safety aspects specify standards aimed at protecting public (and consumers) from danger from the operation of electricity generation, distribution and supply equipment.
 - Generators (and other duty holders) required to do all that is *reasonably practicable* to ensure their equipment is safe.
 - Includes requirement to report certain “events”.
 - Was enforced by DTI (Engineering Inspectorate), now HSE.

Onshore Wind Power – Risks to the public



- Turbines frequently located on land open to the public; so account needs to be taken of hazards such as:
 - turbine collapse;
 - component shedding/blade failure;
 - ice throw;
 - fire;
 - lightning.
- When developer seeks planning permission for a wind farm, potential risks to public safety should be assessed within the planning framework process.

Onshore Wind Power – Risks to the public (*HSE position*)



- Set out in HSE's contribution to the *Energy Review* (2006), see: <http://www.hse.gov.uk/consult/condocs/energyreview.htm>
- Some risks to public are best addressed through planning controls as well as H&S legislation.
- Promotion of clear guidelines and their application by planning authorities to deal with risks to the public, relevant standards and industry good practice, should minimise risks to the public (*and employees*).
- HSE will continue to work with all relevant parties to facilitate the production and maintenance of such guidelines.



Wind Farms and Planning/H&S Law

- Planning policy & guidance cascades down from central government providing the framework for wind farm developers to design schemes, including the requirement for environmental assessment.
- HSE has no statutory role in the planning process (*unless site within CD of major hazard site/pipeline*).
- HSE role is to enforce H&S legislation (HSWA and Regulations made under it) to ensure workers and public are, SFAIRP, safe and without risk to health.
- Most H&S law does not come into effect until development has been approved and construction commenced (*one exception = CDM*).
- At that point HSE's interest is in the employers responsibility to control the hazards arising from *construction, operation, use and decommissioning* of the site – including hazards to public (e.g. from turbines).

Summary

- Hazards include turbine collapse, component shedding/blade failure, ice throw, fire, ground stability etc;
- Best addressed through planning controls as well as H&S legislation;
- Serious risk to reputation of the industry;
- Time to move it up the agenda
 - BWEA (through H&S Steering Group) is now taking action to do just that;
- HSE is committed to work with relevant parties to produce guidance for planners and developers.