

## DECOMMISSIONING WIND TURBINES

A wind farm is expected to have an operational life of approximately 20 to 25 years. After this time, the project owner will either decommission the site, restoring the area to its previous land use, or negotiate with landowners to upgrade the equipment and extend the wind farm's operational lifespan.

Decommissioning means that the wind turbines, site office and any other above ground infrastructure is removed from the site, and roads and foundation pads are covered and revegetated to return the ground to its former state.

Sometimes parts of the wind farm that continue to serve a functional purpose may be left behind, such as powerlines and other regular electricity infrastructure.

### *Who is responsible?*

Decommissioning the site is always the responsibility of the owner of the wind farm. Generally, landowner contracts contain clauses explicitly setting out the amount of time between the wind farm's end of life and the decommissioning, and the expectations around rehabilitating the site.

### *Decommissioning requirements*

The initial approval for a wind farm is likely to require that the developer has a comprehensive decommissioning and rehabilitation plan in place. This plan needs to address all significant aspects of the decommissioning process.

### *Case studies*

Only one wind farm in Australia has needed to be decommissioned to date. The Salmon Beach wind farm, the first wind farm in Australia, consisted of six 60 kilowatt turbines near Esperance in southern Western Australia. It operated from 1987 for nearly 15 years, and was eventually decommissioned due to the age of the turbines and the fact that much larger and more cost-effective units were available. The turbines were decommissioned by project owner Western Power, and one turbine remains proudly on display in Esperance as a historic marker of the birthplace of wind energy in Australia.

A small number of wind farms in the United States have been abandoned for extended periods, notably Kamaoa wind farm in South Point, Hawaii, and Tehachapi wind farm in Southern California. These examples are mentioned frequently by anti-wind groups in the United Kingdom, Australia, and other places. Kamaoa did stand in disrepair for several years however it was decommissioned by Apollo Energy, the project owner, in early 2012. Unfortunately there are still some abandoned wind turbines around the Tehachapi area.

Strict planning requirements in Australia mean that the US situation described above has not occurred here, and will not occur in the future. The wind industry agrees that it is always the responsibility of the wind farm owner to decommission obsolete turbines, and is committed to ensuring that an Australian wind farm is never abandoned.