

WOOLNORTH

Wind Farm Construction

Date: 2002

Principal: Hydro Tasmania

Project Value: \$6.7M



TASK

This contract involved the construction of six 1.75MW wind turbines and a 22kv transmission line to Smithton for Hydro Tasmania. Construction of a control building, control and electrical systems for operation of the wind farm and civil road works were also included in the specification.

Shaw completed the construction of 7km of site roads to provide access to tower locations. Hardstands were constructed adjacent to each tower to permit erection with a 600tonne crawler crane. 10m x 10m x 2m tower bases were required as foundation for each base. HV cables were required across the site and terminated in the control building.

CHALLENGES

Shaw completed construction of the 6 wind tower bases, over 7km of road and the wind farm control building. HV cables were also laid across the site.

The roads were of gravel construction; a total of 60,000m³ was excavated and over 21,000m³ of gravel imported to site. Hardstand areas were also completed at each wind tower location to enable tower construction.

The wind tower bases consisted of 200m³ of concrete in each base. An on site batch plant was set up to ensure a constant supply of concrete. Base rings were cast into each pour, these were dual lifted into position by crane and tied integrally in to the reinforcing steel.

Over 120 tonne of reinforcement was used on the project.

OUTCOMES

All aspects of the project were completed on time and to budget. Shaw also remained onsite until the end of tower construction to assist the tower erection contractor.