

Careys Mill

Parrett Works, Martock, Somerset

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| Site | Watermill |
| Catchment | River Parrett |
| System | Grid Connected |
| Commission Date | April 06 |
| Turbine type | Double regulated Kaplan |
| Supplier | Home Built |
| Design output kW | 6 (peak) |
| Projected annual energy capture | 26MWh |
| Mean flow m ³ /s | 0.759 |
| Rated design flow m ³ /s | 0.635 |
| Gross Head m | 1.8 |

Grade 2* listed Careys Mill had been out of commission since the 1950's. There was a great deal of work required to clear the mill race and the intake tunnels of silt and to rebuild walls and sluice gates. The low head of 2.2 m necessitated a Kaplan turbine which would have been very expensive to buy. The owner who is an engineer therefore made his own turbine and installed it in the original turbine house. The turbine is working effectively on an actual head of 1.8m despite the Environment Agency going against an agreement to reinstate the original weir height. An Abstraction licence, land drainage consent and a Transfer licence were all required as was both planning permission and listed building consent. Currently (Oct 07), all surplus energy is purchased by EDF.

A local engineering firm involved with manufacturing renewable energy generation equipment has further refined the Careys Mill Kaplan design and is able to take orders for Kaplan turbines of this size.

Careys Mill.



Repairing the entrances to the brick arched intake tunnels.



Turbine installation

