

Catagunya

Power Station

Derwent Catchment



Catagunya Power Station is the seventh of ten stations in the Lower Derwent / Nive Scheme. The station was commissioned in 1962 and houses two Boving turbines coupled to ASEA generators.

Catagunya Power Station is located on the Derwent River downstream of Wayatinah Power Station. Water drops 44 metres through two concrete-encased steel penstocks into the power station. Two sets of radial gates are installed at the entrance to the flume, and also at the forebay leading to the penstocks.

The dam has a regulating discharge gate together with a backup emergency gate to allow a controlled flow of water when the station is not operating and for riparian purposes.

Each turbine has a semi-embedded spiral casing, and water flow is controlled by two radial gates at the entrance of each penstock, designed to cut off full flow.

There is a 45 tonne overhead crane between the unloading bay and assembly bay as well as a 110 tonne overhead crane designed to handle a fully assembled rotor with poles.

The station output is fed to 11 kV indoor air break circuit breakers and two 11 kV/220 kV power transformers and 220 kV air blast isolators (to break the transformer energising current) then onto TasNetworks' transmission line.



Fast facts

Scheme:	Lower Derwent / Nive
Year commissioned:	1960
Power station structure:	• 39 m long x 30 m wide • Two generating sets, assembly bay, unloading bay, services block and outdoor transformer yard. • Machine bay and assembly bay is 39 m long x 16 m wide
Static head:	45 m
Generating set:	• Two vertical shaft generating sets • 25MW Francis turbine directly coupled to a 3 phase, 50Hz, 30MVA synchronous generator
Turbine manufacturer:	Boving
Generator manufacturer:	ASEA
Rated head:	44 m
Rated output:	30 MVA
Rated discharge:	66 m ³ /s
Power factor:	0.8
Rated speed:	188 rev/min
Rated voltage:	11 kV



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