

# Reece

# Power Station

## Pieman Catchment

Reece Power Station is located at the foot of the Lower Pieman Dam, and is the lowest of the four power stations in the Pieman River Scheme. It was commissioned in 1987 and houses two machines comprising Francis turbines coupled to Fuji generators.

The dam and power station are named after the Honourable Eric Reece who was the Premier of Tasmania (1958–69 and 1972–75) and a great supporter of the Hydro-Electric Commission.

The dam is a rock-filled concrete-faced structure built upstream of the power station. Two virtually identical intake structures and gates control inflow into two independent 250 metre-long tunnels, each dedicated to one machine. Each main intake is identical in design to those at Bastyan and Mackintosh power stations with the main gate designed to cut off full flow. These gates are raised hydraulically and closed by gravity.

Water is supplied to the turbine through a half embedded spiral casing. The 136 MVA generators are the umbrella type with combined thrust and guide bearings mounted below the rotor hubs. A single short shaft connects to the turbine runner. No inlet valves are installed in the power station.

Draft tube gates are provided for each machine, outside the power station. A manually operated riparian valve controls salinity in the river downstream of the dam.

The output from each generating set is fed to TasNetworks' transmission grid via a 13.8 kV/220 kV generator transformer and 220 kV gas insulated phase segregated SF6 switchgear.



### Fast facts

<b>Scheme:</b>	Pieman
<b>Year commissioned:</b>	1986/1987
<b>Power station structure:</b>	<ul style="list-style-type: none"> <li>• 64 m long x 21 m wide</li> <li>• Twin interlocking machine silos and assembly bay</li> <li>• A two storey service building is located near the power station</li> </ul>
<b>Static head:</b>	95 m
<b>Generating set:</b>	Two vertical shaft generating sets: <ul style="list-style-type: none"> <li>• Each with 119 MW Francis turbine</li> <li>• Directly coupled to a 3-phase, 50 Hz, 136 MVA synchronous generator</li> <li>• Provisions for synchronous compensator operation</li> </ul>
<b>Turbine manufacturer:</b>	Fuji
<b>Generator manufacturer:</b>	Fuji
<b>Rated head:</b>	92m
<b>Rated output:</b>	136 MVA
<b>Rated discharge:</b>	142 m <sup>3</sup> /s
<b>Power factor:</b>	0.85
<b>Rated speed:</b>	167 rev/min
<b>Rated voltage:</b>	13.8 kV

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