

CONNECT'S POWER STATION TEAM AVERTS POTENTIAL DISASTER

Thanks to the quick action and collaborative work by Connect staff on Easter Monday, a full shutdown at the Power Station was avoided and a national crisis averted.

Torrential rains over the Easter weekend, particularly on Easter Monday, were some of the heaviest and most prolonged downpours experienced in recent history.

Due to silt build up and overgrown vegetation in the watercourse running throughout Rupert's valley, the huge volume of rainwater caused the watercourse to overrun. Connect staff described gushing water and debris which overtopped Rupert's Run and then entered the Generator Room at the Power Station.



During clean up - water on the main floor of the Power Station

Flooding of the Power Station has the potential to cause damage to this critical national infrastructure, resulting in full shutdown of generators. This in turn would cause a long duration island wide power outage until the generators could be repaired and brought back into service.

On this occasion, water entered the generator hall and into the cable ducts, causing automatic fail-safes to shut down No. 5 and No. 2 generators (two of the 1MW generators). No. 1 generator (a third 1 MW generator) remained online at that point but was also at risk as water reached further into the generator room.

Recognising this risk, quick remedial action was undertaken by the two Power Station shift operators to stem the flow of water. They also alerted other Connect staff who then travelled to the site to assist with the effort.



Location of water breakout to the Power Station (sandbags are currently in place to help prevent further flooding)

Vegetation growth and build-up of silt prevents water flowing freely through the water course

The team worked into the night to put sand and crushed stone in place to divert the water and to clean up the areas that had flooded. The Electricity Generation Manager led work to assess the generators. Luckily, the water had not triggered a fail-safe shut down on No.1 generator so this could stay online. Work then commenced to clean and make safe the areas that had been impacted.

During this time, all electrical load was shared with No.1 and No.2 generators. By 21:00 all generators were safely back in operation, at this time the load demand had decreased so all load was now on No.1 generator.

A debrief has been held in follow-up to this event. The root cause appears to be the significant rainfall over the Easter weekend which could not escape out to sea as the watercourse was blocked. An SHG contractor has commenced clearing the vegetation from the watercourse.

Thanks are extended to the entire team involved in resolving this situation. Particular mention must be made of Glen O'Dean and Colin Thomas, the Power Station shift operators. Their prompt action prevented damage to the generators.



Power Station team



Colin and Glen

28 April 2022

