



GENESIS ENERGY SITE

PROJECT-AT-A-GLANCE

Self-Cleaning Trashracks helps keep the power on for New Zealand hydroelectric plant overridden by serious weed condition.

CUSTOMER: *Tokaanu Power Station*

EQUIPMENT: *Ten (10) Duperon[®] Self-Cleaning Trashracks*

INSTALLED: *March 2006*

“ELIMINATED CONSTRAINTS ON GENERATION”

Hydrogeneration is the dominant source of energy in New Zealand, providing approximately 70% of total electricity. The Hornwort, a submersed, free-floating perennial which can reach nearly 20 feet of height above water, has invaded New Zealand’s waters. The plant quickly proved to be an issue for Genesis Energy at the Tokaanu Power Station, a 240 MW hydroelectric power station.

The Hornwort has a tendency to break from its roots, creating potential for blockage which directly impacts the country’s electrical grid.

The Duperon[®] Self-Cleaning Trashrack was chosen as a proactive measure against the plant. The multiple rakes cross the entirety of the screen; no front return assures no penetration of debris is necessary.

The first “weed-up” of the season proved the choice: large mats of Hornwort were driven into the screen, rapidly creating a head differential of 400mm (15.75 in).

“Without any doubt, this situation would previously have led to a dropped load and generation constraint,” relays Ian Meredith of Genesis Energy. “Within two minutes of starting the SCTs, the head differential dropped to zero.”

“...within 2-3 hours, the weed directly in front of the screen was cleared as well...”

ABOUT DUPERON

Duperon Corporation is the leader in innovative preliminary liquid/solids separation systems. For more than 35 years, Duperon has provided simple yet innovative solutions for a variety of screening and solids handling applications in the water and wastewater industry. Duperon technologies are designed and manufactured in Saginaw, Michigan.

