

DREDGING UP ENERGY SAVINGS

Custom capital upgrades bring greater efficiency to the Port



Project Overview



Drawing of Jet Array System at Terminal No. 4

The Port of Grays Harbor exports many different products, including automobiles, timber and grain. Terminal #4 at the Port is critical for exports because it is the only terminal that can accommodate large ships. Terminal #4 runs parallel to the Chehalis River on the inside corner of a channel, resulting in a natural back eddy, which promotes sediment deposition. The Jet Array system pumps water at high velocity along the seabed to prevent the formation of sediment/siltation and to maintain a depth of 40 feet to allow the large ships to dock without going aground. This system eliminates the need for dredging, which is costly and resulted in the temporary closure of the terminal.

This project is the installation of two new vertical turbine pumps and two VFDs for this system, running in deterministic Winter and Summer modes. The VFDs allowed the pumps to operate at more optimal speeds and save energy.

Annual Results



497,000 kWh
First Year Savings



\$28,800
Avoided Energy Cost



230 tons CO₂
Scope 2 Emission Reduction

What ideas do you have to save energy?

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