

Q. What is the estimated levelized cost of energy associated with the replacement of the runners at each of the New Chelsea and Pitmans Pond hydro plants, isolated from the other work proposed for each of these plants?

A. Table 1 provides the levelized cost of energy associated solely with the replacement of the runners at each of the New Chelsea and Pitmans Pond hydro plants. The levelized cost is a net present value representation of capital expenditure over the 50 year life of the asset against the production increase achieved by the runner replacement. These levelized costs do not include ongoing operating costs, the other capital work planned for these plants in 2013 or any other future capital work.

Table 1
Levelized Cost of Runner Replacement

Hydro Plant	Production Increase	Capital Expenditure	Levelized Cost
New Chelsea	1.0 GWh	\$653,000 ¹	5.2 ¢/kWh
Pitmans Pond	0.7 GWh	\$ 475,000	5.4 ¢/kWh

¹ The capital expenditure provided here assumes that the generator rewind project will be completed at the same time as the runner replacement. Expenditure associated with the disassembly and subsequent reassembly of the generator and turbine are shared between the runner replacement and refurbishment projects. Doing the two projects in isolation would result in additional cost to disassemble and reassemble the generator and turbine. In a vertical unit, removal of the turbine runner necessarily requires the disassembly of the generator.