

Q. GENERATION HYDRO

PUB 37.0

Please provide an economic rationale supporting approval of the expenditures for the related items.

A. The related items, as noted in the response to PUB 36.0 NP, are the turbine overhaul and the penstock coating replacement.

As noted at page 4 of *1.2 Petty Harbour Hydro Plant Refurbishment*, the related items are required to be completed in 2006, regardless of whether the other project items proceed at that time.

The turbine overhaul is required to ensure the safe operation of Unit 2 and to enable the unit to produce its rated power output. The penstock coating replacement is required to provide corrosion protection for the penstock and maintain its life expectancy based on recent industry findings.

Completing the two related items at the same time as the interdependent work results in overall cost reductions estimated to be in the order of \$35,000. These cost savings result from the elimination of additional site supervision, engineering and administration, as well as contractor-related savings.

Completing all of the items in 2006 also avoids an additional 10-week shutdown of the plant in a later year, which could result in additional spilling of water and associated lost production.