

1 Q. CA/KPL-Nalcor-003 indicated only minor increase in installed capacity within the
2 existing hydropower generation pool are possible. Please share the minor options.
3 Has pumped storage been investigated?
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6 A. The minor options are those made available through replacement of turbine
7 runners with more efficient designs that can be optimized to marginally increase
8 capacity and/or energy. Note that increases in efficiency to increase energy
9 production are traded off against maximum capacity, so both gains are not
10 generally available simultaneously.
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12 Pumped storage has not been investigated in detail for the island system because
13 the load characteristics on the island are not well suited to pumped storage
14 solutions. The system is energy constrained on an annual basis and capacity
15 constrained on a seasonal basis. From a capacity perspective the system requires
16 firm generation through the peak winter seasons, while pumped storage is better
17 suited for daily on peak/off peak resource management. Pumped storage does not
18 address annual system energy constraints.