

1 **Q. On page 11, lines 11 to 17 of the Pre-filed Evidence of Messrs. Perry and**
2 **Henderson, it is noted that NP could reduce annual purchased power expense by**
3 **shifting production from the April-November period to the December-March**
4 **period (under the Sample Rate). It goes on to say that additional storage of water**
5 **increases the risk of spill, potentially increasing the cost of production at Holyrood.**
6 **If the production costs on a power system in winter were double the costs in non-**
7 **winter, would it be appropriate to optimize production from hydro plants in**
8 **winter? Do not most utilities with storage hydro facilities utilize software packages**
9 **that maximize hydro production during high cost periods while minimizing the**
10 **probability of spill?**
11

12 **A.** If the production costs on a power system in winter were double the costs in non-winter,
13 it may be appropriate to optimize production from hydro plants in winter if these were
14 the lowest cost production plants in the generation mix available. However, this is not
15 applicable on the Island Interconnected System. Response to NP-171 NLH indicates that
16 the production cost at Holyrood is basically the same for all months of the year. There is
17 also no evidence that indicates that there are seasonal variations in Hydro plant
18 production costs. Therefore, there is no need for NP to make use of a software package to
19 decide the most economic dispatch of NP's hydro plants. The plants are operated to
20 maximize the conversion of water to energy and to minimize the risk of spill throughout
21 the year.