

1 **Pre-filed Evidence**

2 **Ludlow/Delaney**

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4 **Q. Confirm that the alleged fuel displacement figure, and calculated avoided cost, does**
5 **not take in to account the fact that the savings would only be realized during periods**
6 **when Holyrood is required to meet base load (Ludlow/Delaney, p.6, line 3-5).**

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8 A. The assumption that “the fuel displacement figure, and calculated avoided cost, does not
9 take in to account the fact that the savings would only be realized during periods when
10 Holyrood is required to meet base load” is incorrect. The ‘savings’ would be realized
11 regardless of whether the Holyrood plant was operating at that time or not. Hydro
12 generation from Newfoundland Power plants would serve to reduce the use of oil at that
13 time or some other time.

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15 The efficient operation of the combined hydro and thermal generation systems supporting
16 the island integrated grid is such that oil use in thermal generating plants is reduced
17 through minimizing the spillage of water in hydro plants. Any incremental water
18 availability is utilized to the maximum capacity of the hydro generating plants and the
19 hydro reservoir storage capacities.

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21 While there are times when the Holyrood thermal plant is required to support system
22 voltages and to meet peak, the extent to which all hydro generation is utilized, including
23 Newfoundland Power’s hydro plants, is accommodated through reduced oil consumption
24 or increased water storage in hydro reservoirs.

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26 For example if the Holyrood plant is not operating, there is generally sufficient water
27 storage capacity in the island grid’s hydro reservoirs, so that if one hydro unit had to
28 operate to prevent spillage, then another hydro unit’s production would be reduced, and
29 storage in its reservoir would be conserved by a similar amount. Later, the output of the
30 Holyrood plant would be reduced by increased hydro generation from the hydro unit
31 whose storage was previously conserved.