

1 Q. Provide the details by plant of the derivation of the 2004 forecast of 4,582
2 GWh hydroelectric generation based on a 30-year average (Production
3 evidence, Table 7, page 30).
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6 A. The following table provides the expected net generation from each of
7 Hydro's hydroelectric plants based upon records for the most recent 30 years
8 (1973-2002).
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Plant	Conversion Factor GWh/Mm ³	30-Year Inflows Mm ³	Fisheries Releases Requirements Mm ³	Average Spill Mm ³	Useful Water Mm ³	Average Energy GWh
Bay d'Espoir	0.4333	6208.61	32.73	43.30	6132.59	2657
Upper Salmon	0.1295	4560.45	94.33	48.94	4417.18	572
Cat Arm	0.9005	834.04	0.00	20.09	813.95	733
Hinds Lake	0.5380	670.98	14.54	1.61	654.83	352
Granite Canal	N/A	N/A	N/A	N/A	N/A	224
Paradise River	0.0913	524.56	0.00	119.41	405.15	37
Mini-Hydro	N/A	N/A	N/A	N/A	N/A	7.15
TOTAL						4582

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11 With the exception of Granite Canal and the mini-hydro facilities, annual
12 average production is based on historic average water to energy conversion
13 factor for the plant which is applied to the average water available for use at
14 the generating stations. The average water available for use is determined
15 from average historic watershed inflow records with a reduction for water
16 releases due to spill and for fisheries flow requirements.

1 Fisheries Release Requirements are as per agreement with the Department
2 of Fisheries and Oceans and are based on historic average releases.
3
4 The production from the mini-hydro plants is based on actual production,
5 while the estimated production from Granite Canal is based upon a power
6 and energy analysis.