

1 Q. **Reference: Introduction Evidence**

2 Please provide a probabilistic frequency distribution of potential variability of 2013
3 Test Year purchases from Nalcor based on intervals of 25 GWh. (Introduction
4 Evidence, page 1.2, line 8)

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7 A. The Probabilistic frequency distributions of the generation at Star Lake and at the
8 three Exploits Generation facilities - Buchans, Grand Falls and Bishop's Falls - are
9 provided in Charts 1 and 2 on the following pages. A third curve showing the
10 distribution of the total generation is included on Chart 2. These figures
11 demonstrate the variation in the expected purchase cited in the application and are
12 based on the range of results obtained with the 61 hydrological sequences
13 simulated in the Vista modeling. The expected value (average of the 61 sequences)
14 of the purchases is 763 GWh per year (the Test Year value).

15

16 Summary statistics are presented in Table 1 below the plots. It should be noted
17 that each value in the series is unique, so the data points were rounded to the
18 nearest 5 GWh to allow for calculation of a mode.

Chart 1
Frequency Distributions – Star Lake Only

Purchases from Nalcor, GWh/year
Frequency Distribution - Star Lake Only

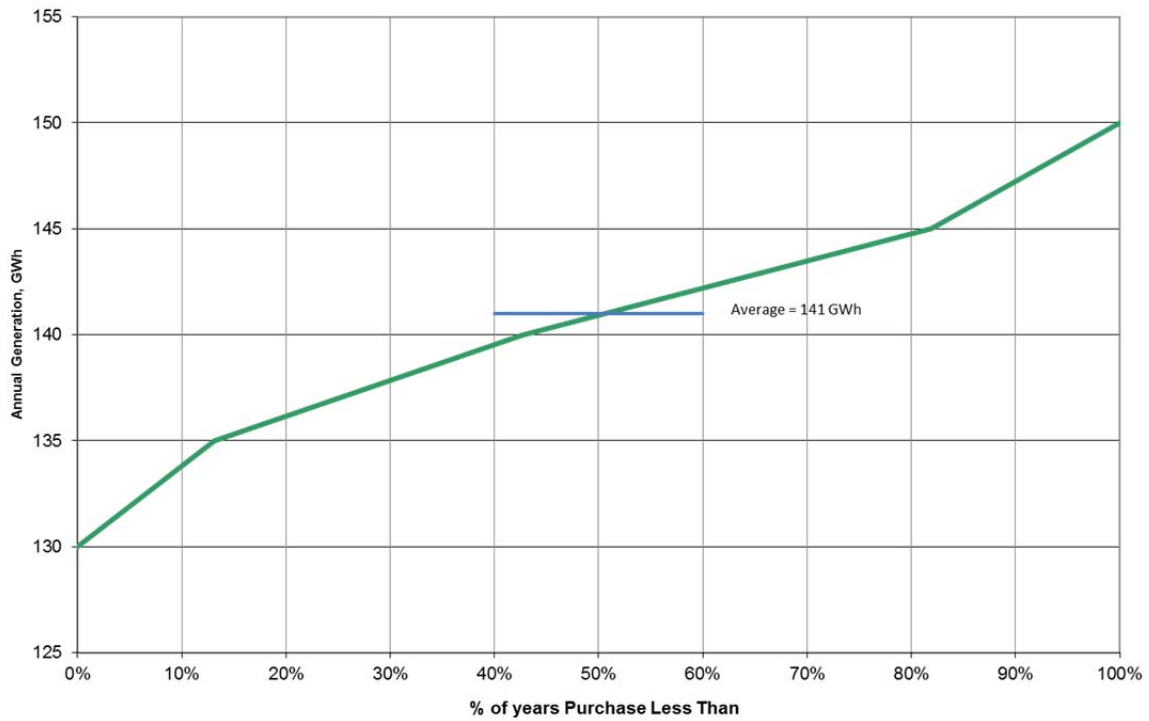


Chart 2

Frequency Distributions Exploits River Plants and Exploits and Star Lake Combined

Purchases from Nalcor, GWh/year
Frequency Distribution

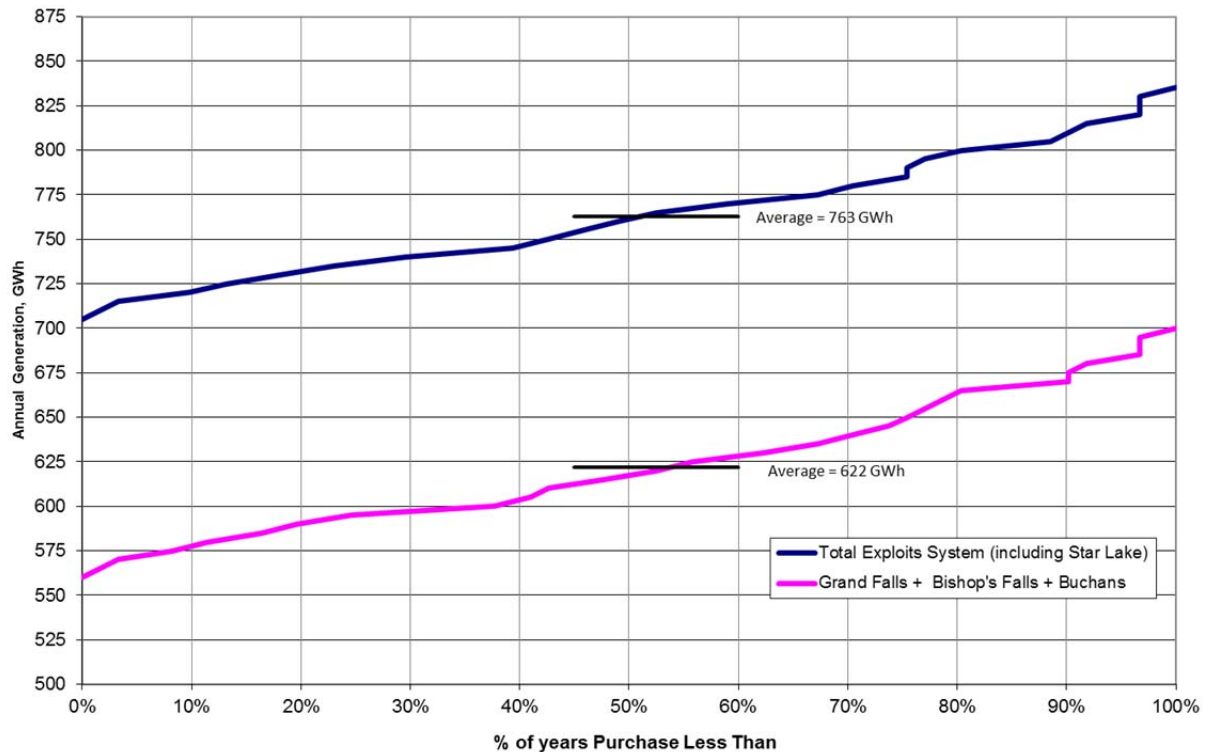


Table 1 - Statistics

	Star Lake only	Buchans + GF + BF	Total Exploits
% Data points greater than average	57%	48%	48%
% Data points lower than average	43%	52%	52%
Mean	141	622	763
Median	142	618	762
Mode	145 (when data rounded to 5 GWh)	595 (when data rounded to 5 GWh)	775 (when data rounded to 5 GWh)