

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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6

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 64 hydrological sequences  
13 simulated in the Vista modeling. The expected value (average of the 64 sequences)  
14 of the purchases is 776 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 (Revised)**  
**Frequency Distributions – Star Lake Only**

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

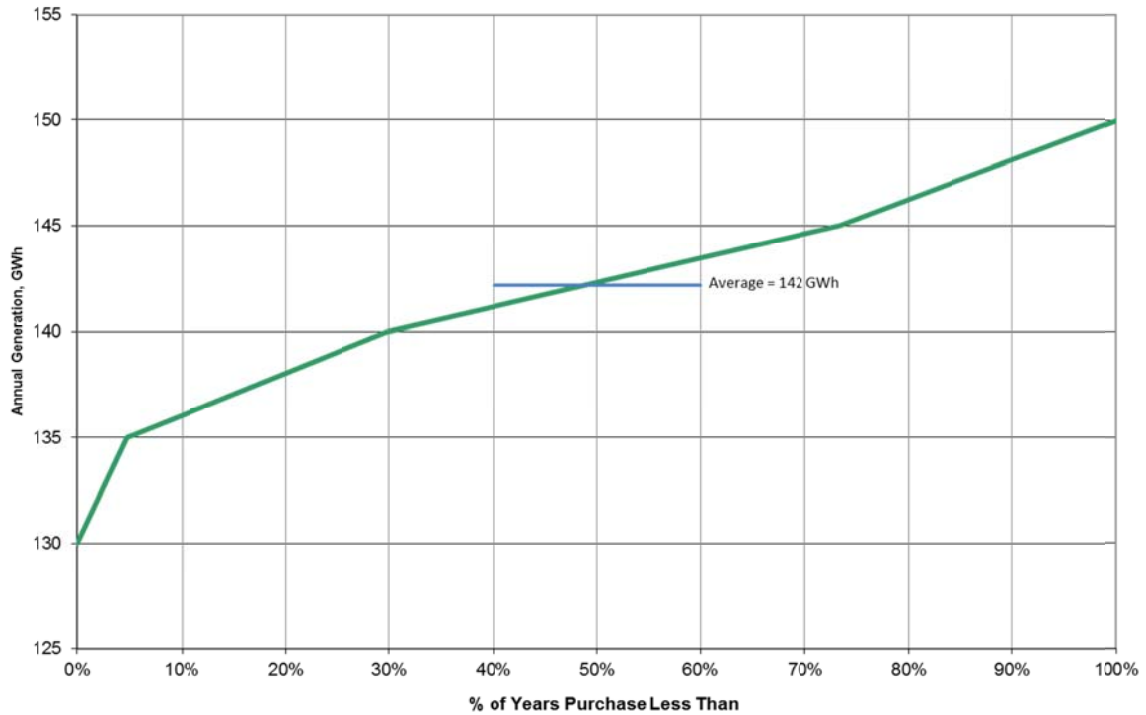
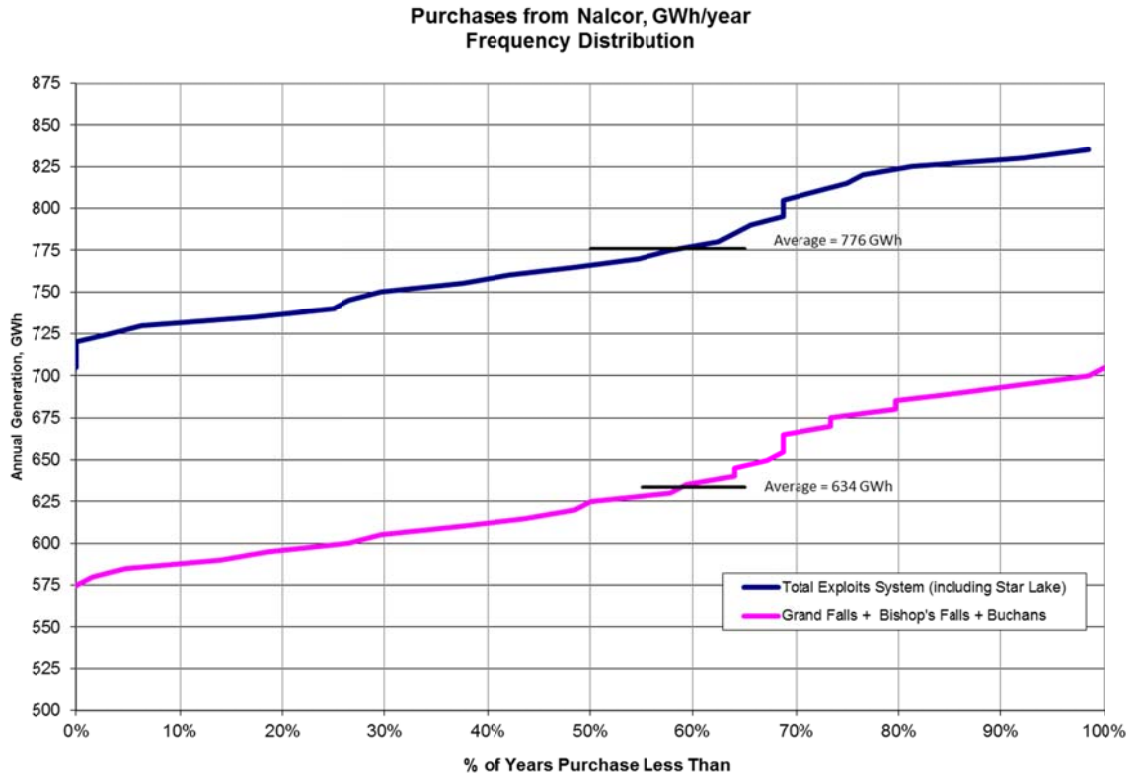


Chart 2 (Revised)



**Frequency Distributions Exploits River Plants and Exploits and Star Lake Combined**

**Table 1 - Statistics**

	Star Lake only	Buchans + GF + BF	Total Exploits
% Data points greater than average	50%	41%	41%
% Data points lower than average	50%	59%	59%
Mean	142	634	776
Median	142	623	767
Mode	145 (when data rounded to 5 GWh)	610 (when data rounded to 5 GWh)	830 (when data rounded to 5 GWh)