Q. **C-6: Install Variable Frequency Drives on Forced Draft Fans, Holyrood; 2013: $697,600; 2014: $2,659,700**

In the report entitled: Install Variable Frequency Drives on Six Forced Draft Fans, located in Volume I, Tab 2, Hydro states, in the Summary, p. i, that:

> *"This project will yield an annual savings of $2.2 million while the Holyrood plant is generating electricity when compared to the status quo of constant speed fan motors."*

On p. 8 of the same report Hydro states that:

> *"Once operational the VFDs will yield an average annual fuel savings of $4.7 million to Hydro while the Holyrood Thermal Plant is generating electricity."*

These numbers are also found in other sections of the report.

Please explain the relationship between the $2.2 million shown on p. i and the $4.7 million shown on p. 8, and show why they are different.

A. The Table below provides the calculations for both the $2.2 million and $4.7 million referenced in the report. The $2.2 million is the average of the cumulative net present value for 2015 and 2016 while the $4.7 million represents the average nominal fuel savings for the same timeframe.

	Status Quo Fuel	VFD Fuel	Savings	Average	Status Quo O&M	VFD O&M	Savings	Cost of VFD	Total Savings	Average
2012	0	0	0		0	0	0	0	0	
2013	0	0	0		0	0	0	0	0	
2014	0	0	0		0	0	0	0	0	
2015	6,280	1,605	4,675		0	0	0	3,357	1,317	
2016	7,653	2,981	4,671	4,700	44	33	11		4,682	3,000
NPV	10,247	3,350	6,897	0	31	23	8	2,561	4,343	2,200