Q. Please provide the breakdown of power transmitted over the existing 2 lines to the Avalon over the last 3 years.

A. Figures 1, 2 and 3 provide the combined hourly MW flows[1] on TL202 and TL206 at Bay d'Espoir for the years 2011, 2012 and 2013 respectively. The hourly flows include load supplied on the Burin Peninsula, Bonavista Peninsula, Trinity Bay and the Avalon Peninsula. Based upon the hourly data, the annual energy delivered is estimated to be 1447 GWh, 1506 GWh and 1541 GWh for the years 2011, 2012 and 2013 respectively. The amount of power and energy delivered via TL202 and TL206 is dependent upon generation dispatch, customer demands, conductor thermal limits, system voltage limits and system stability limits.

The new 230 kV transmission line between Bay d'Espoir and Western Avalon is required to ensure Island Interconnected System stability after the Labrador – Island HVdc Link is commissioned. The system power flows provided below are not necessarily reflective of system conditions after commissioning of the HVdc link.

[1] The hourly MW flows are estimated from hourly data collected by Hydro's Energy Management System (EMS) through SCADA and not from revenue metering.

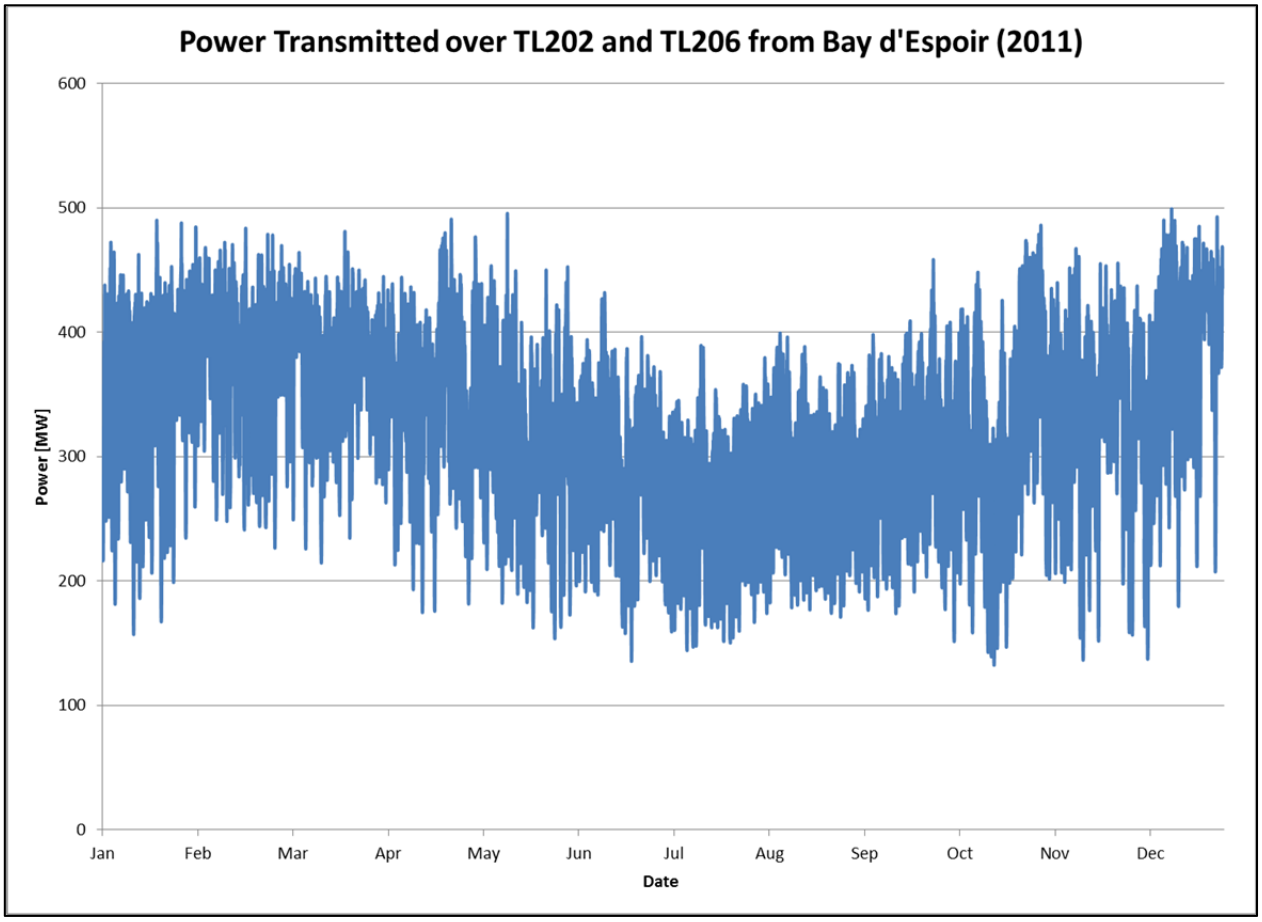

Figure 1 – Power Transmitted over TL202 and TL206 from Bay d'Espoir (2011)

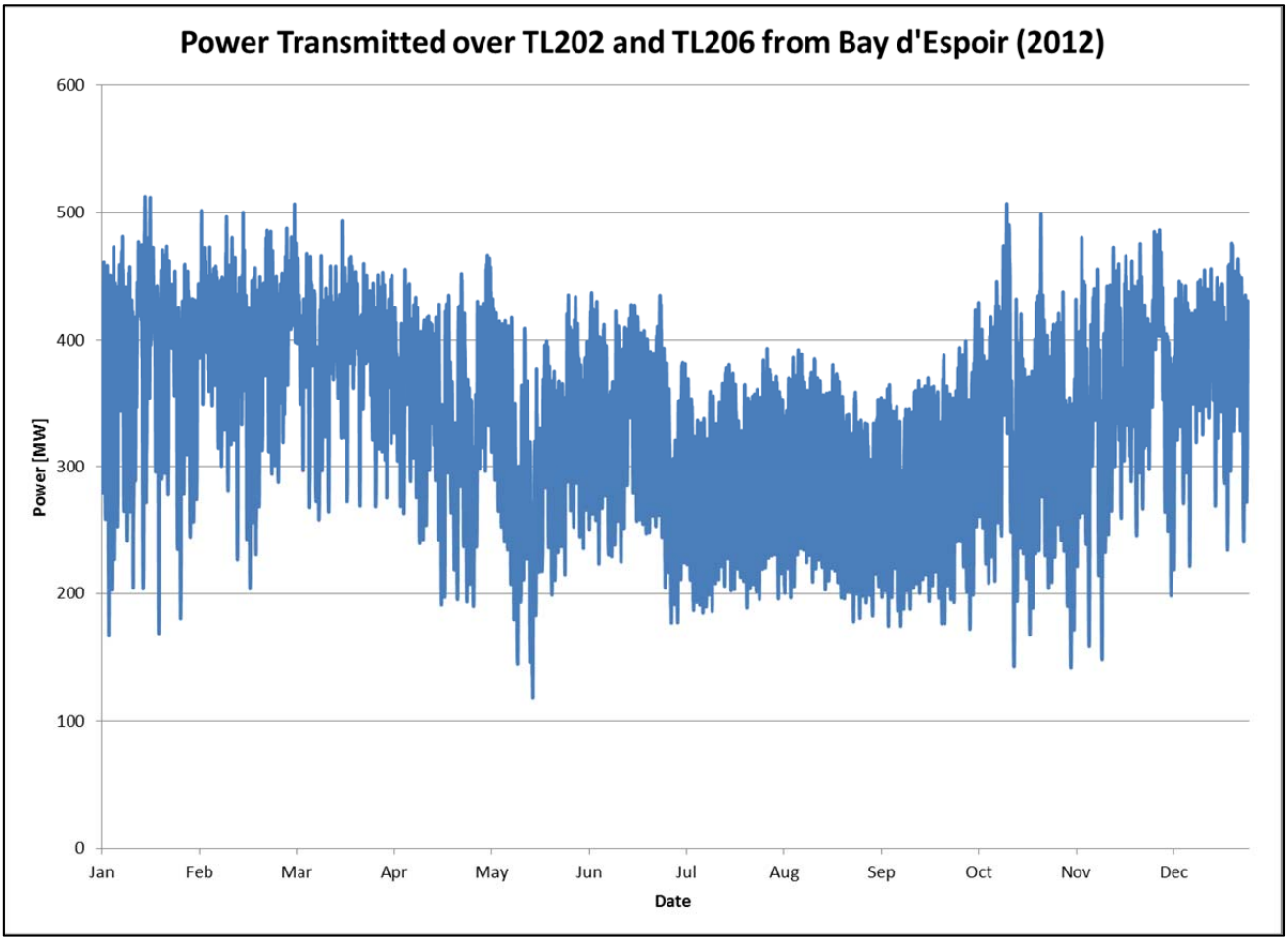

Figure 2 – Power Transmitted over TL202 and TL206 from Bay d'Espoir (2012)

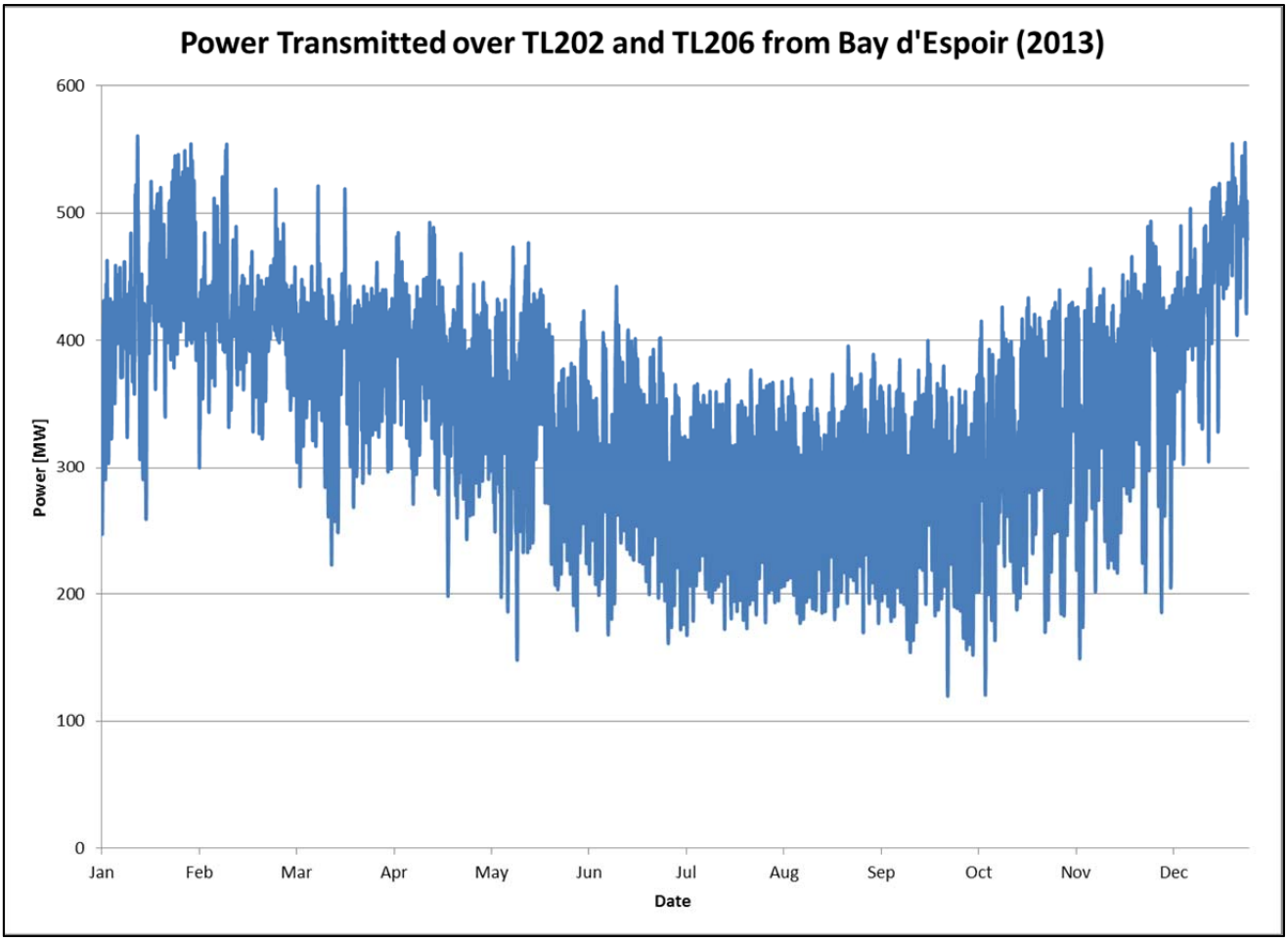

Figure 3 – Power Transmitted over TL202 and TL206 from Bay d'Espoir (2013)