Q: At page 51 Liberty states that, with the outage of one electrode line conductor, the continuous current is limited to a level "which is equivalent to 358 MW being transmitted from Muskrat Falls during monopolar operation". Please confirm that the 358 MW referenced here is power injected to the ac system at Soldiers Pond, and explain how the outage of one electrode line conductor affects the 530.6 MW indicated (page 25, Liberty report) as being transmitted to Soldiers Pond with continuous monopolar operation.

A. The response to PUB-NLH-259 provides the following information:

"In the event one electrode conductor is forced out of service due to a permanent earth or open circuit fault, the electrode line current capacity must be limited to 1023 A so as to not exceed the conductor design temperature of 75°C. Therefore, with one electrode conductor out of service and the LIL in bipolar configuration, the pole current must be limited to 1023 A (716 MW) to ensure an outage to a single pole does not exceed the electrode rating once switched into monopole operation."

Therefore, in monopolar operation the maximum power that can be transmitted continuously from Muskrat Falls will be half of this amount, as the same current limit applies also in monopolar operation. The power of 358MW is defined at the Muskrat Falls HVDC terminals and can be derived by multiplying the current (1023A) with the dc voltage (350kVdc).