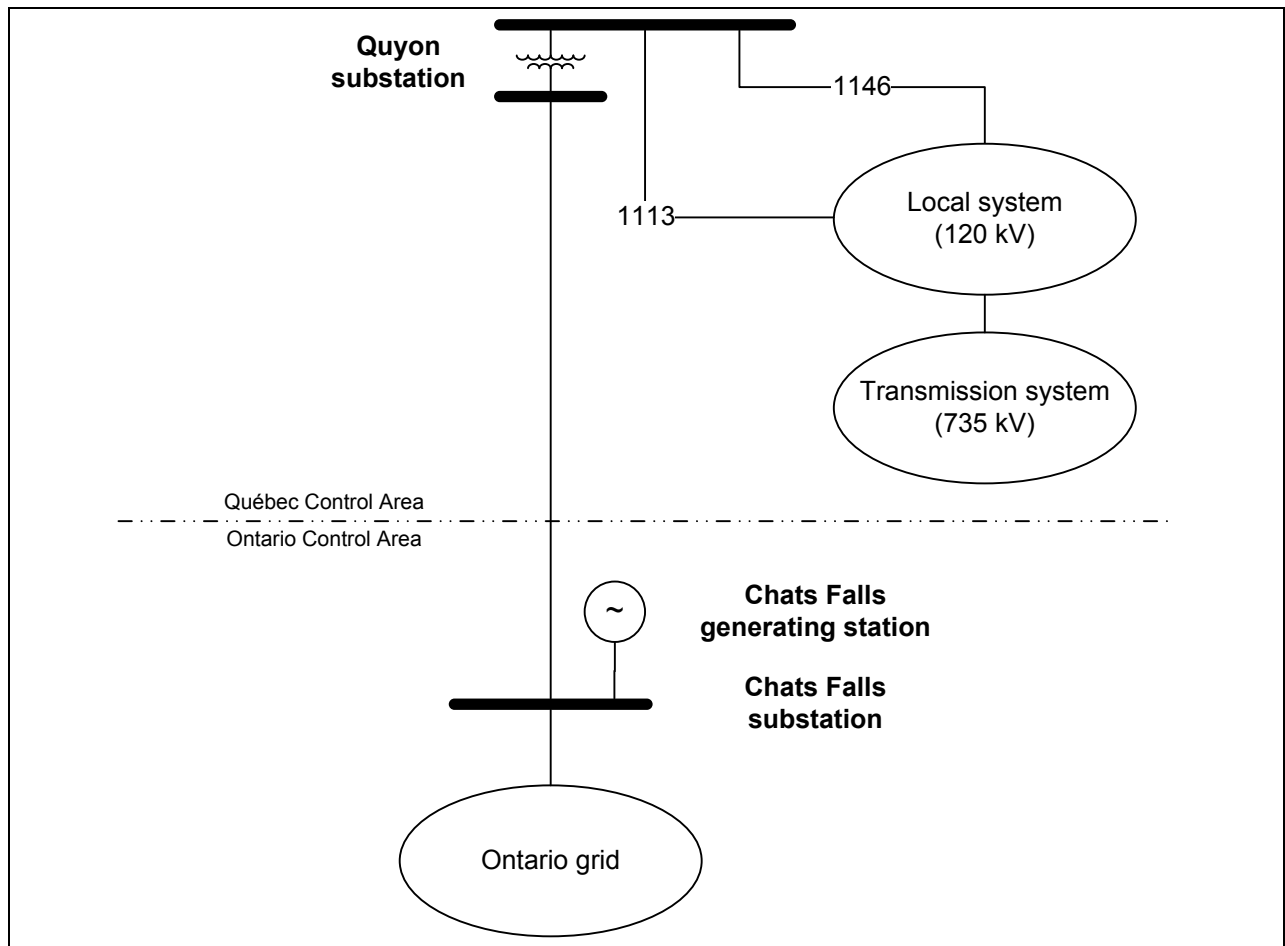


1. Description of point of receipt Q4C

The Québec and Ontario transmission systems are connected by circuit Q4C, operated at 230 kV and linking Quyon substation, owned by Hydro-Québec TransÉnergie (the Transmission Provider) to Chats Falls substation, which belongs to Hydro One (see Figure 1).

Figure 1: Point of receipt Q4C



Point Q4C allows power flows toward the Transmission Provider's system only. This is done by synchronizing a portion of the neighboring system, specifically Chats Falls generating units, with the Transmission Provider's system. It is the operators at Chats Falls generating station who schedule power flows at point Q4C.

2. Transfer capability

2.1. Total transfer capability

The total transfer capability (TTC) of point of receipt Q4C is 140 MW. The thermal capacity of 230/120-kV transformers at Quyon substation sets this limit.

Since no Hydro-Québec Production generating units can be synchronized with the neighboring system and there are no loads on that system that can be connected to the Transmission Provider's system, TTC of point of delivery Q4C is nil at all times.

2.1.1. Capacity under normal conditions (all facilities available)

With all system facilities available, transfer capability to Quyon substation ranges from 120 to 140 MW, depending on ambient temperature.

2.1.2. Capacity under degraded conditions (one or more equipment outages)

In the event of a circuit Q4C outage, the transfer capability of point of receipt Q4C is 0 MW.

In the event of a circuit 1113 outage, the transfer capability of point of receipt Q4C is limited to 50 MW to keep power swings from developing on the Outaouais system.

2.2. Transmission reliability margin

The transmission reliability margin (TRM) quantifies the Transmission Provider's uncertainty regarding the possibility of offering the anticipated transfer capability. The TRM of point of receipt Q4C is nil over all horizons.

2.3. Neighboring system constraints

Under normal conditions, the transfer capability of the Ontario system to point of receipt Q4C is 140 MW regardless of forecast weather conditions in that province. Chats Falls generating station output that can be transmitted to point of receipt Q4C varies, depending on hydraulic conditions.

3. Commercial aspects

Transfer capabilities posted by the Transmission Provider do not account for anticipated operating conditions on the neighboring system.

Hydro-Québec Production owns half of the output of Chats Falls generating station. Since Hydro-Québec Distribution has designated this resource for supplying Québec native load, point of receipt Q4C is subject to a long-term firm transmission service reservation.