

Justification for the proposed Quebec Interconnection-Wide Variance to PRC-006-1

Hydro-Quebec Variance

Earlier in 2009, NPCC identified the need for a variance to the standard for the Québec Interconnection within NPCC. Due to the physical characteristics of the Québec system the UFLS program in Québec arrests frequency at a lower threshold and permits higher frequency overshoot than allowed in the proposed standard. The installed generation in the Québec Interconnection is 98 percent hydraulic generation, allowing wider tolerances on frequency performance without jeopardizing reliability. The variance also establishes a different capacity threshold for the generating units for which underfrequency and overfrequency trip settings must be modeled to address concerns that by 2020, 10 percent of the installed capacity in Québec may be located at plants less than 75 MVA. The Standards Committee appointed a member from the Québec Interconnection to the drafting team to develop the variance for Québec. Working closely with this representative, the team developed the variance to Requirement R3 parts 3.1 and 3.2 and Requirement R4 parts 4.1 and 4.2. The variance to these requirements reference separate under and overfrequency curves included as attachments 1A to the standard.