



NORTHWEST - CANADA (INTERIM)

Path Name

Accepted Rating
 Existing Rating

Location:	Washington and Southern British Columbia.								
Definition:	Sum of the flows on the following lines: <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Line</th> <th style="text-align: left; border-bottom: 1px solid black;">Meter End</th> </tr> </thead> <tbody> <tr> <td>Custer - Ingledown 500 kV lines 1&2 (Westside Intertie)</td> <td>Ingledow (North end)</td> </tr> <tr> <td>Boundary - Waneta 230 kV (Eastside Intertie)</td> <td>Boundary (South end)</td> </tr> <tr> <td>Boundary - Nelway 230 kV (Eastside Intertie)</td> <td>Boundary (South end)</td> </tr> </tbody> </table>	Line	Meter End	Custer - Ingledown 500 kV lines 1&2 (Westside Intertie)	Ingledow (North end)	Boundary - Waneta 230 kV (Eastside Intertie)	Boundary (South end)	Boundary - Nelway 230 kV (Eastside Intertie)	Boundary (South end)
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Boundary - Waneta 230 kV (Eastside Intertie)	Boundary (South end)								
Boundary - Nelway 230 kV (Eastside Intertie)	Boundary (South end)								
Transfer Limit:	<p><u>North to South</u>: 3150 MW (all ties). Flow cannot exceed 2850 MW on both Custer-Ingledow lines 1&2 (Westside Intertie) or 400 MW on the Boundary-Nelway line (one of the two Eastside Interties).</p> <p><u>South to North</u>: 2000 MW (all ties). Flow cannot exceed 2000 MW on both Custer-Ingledow lines 1&2 (Westside Intertie) or 400 MW on the Boundary-Nelway line (one of the two Eastside Interties).</p>								
Critical Disturbance That Limits the Transfer Capability:	<p>The limiting outage is loss of both Custer - Ingledow 500 kV lines.</p> <p><u>North to South</u>: Generator dropping in Canada equal to schedule will prevent separation of the 230 kV interconnection with the Northwest.</p> <p><u>South to North</u>: The 230 kV lines are tripped if they become overloaded causing the Northwest to separate from Canada.</p>								
When:	<p><u>North to South</u>: The 3150 MW path rating was established in December 1997.</p> <p><u>South to North</u>: The 2000 MW path rating was established by internal studies conducted jointly by B.C. Hydro and Bonneville Power Administration.</p>								
System Conditions:	<u>North to South</u> : Studies were conducted on the heavy load summer and light load spring conditions. The ability of B.C. Hydro to deliver 3150 MW is limited only when its system load is above 6300 MW. This limitation is usually only during on-peak hours over the winter months.								
Study Criteria:	All facilities loaded within normal ratings under normal system conditions. All facilities loaded within emergency ratings under outage conditions. The B.C. Hydro criteria for voltage stability will be satisfied for all first contingency loss of a 500 kV line.								
Remedial Actions Required:	<u>North to South</u> : The maximum amount of generator tripping in the B.C. Hydro system is equal to the scheduled export to the Northwest plus internal losses. B.C. Hydro uses a reactive power RAS to loss of both Ingledow-Custer ties when export over these ties exceeds 2000 MW.								
Formal Operating Procedure:	None.								
Allocation: (UNDER REVIEW)	<p><u>North to South</u>: 300 MW is allocated to Cominco when the Waneta - Boundary 230 kV line is in service. The remainder is allocated to B.C. Hydro. All the capacity on the U.S. side is allocated to BPA.</p> <p><u>South to North</u>: All of the capacity is allocated to B.C. Hydro and BPA.</p>								
Interaction w\Other Transfers Paths:	A nomogram showing the relationship between the transfers on this path and the TransAlta - B.C. Hydro path has been developed and is posted on the B.C. Hydro Grid Operations website (http://www.bchydro.com/gridops).								
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