Configuration and capacity of HVDC link

Service measure	Service level
Transfer capacity for each configuration of the HVDC link	**North transfer:** **Pole 1** Pole 1 (half pole only) will be available for limited operation, for North transfer only, within its technical capabilities, but will vary according to any limitations that Transpower may from time to time require (including to meet the requirements of its insurers), and recognising that pole 1 is to be dismantled around 2011. Details of Pole 1 capability at any time are published on Transpower's website at http://www.transpower.co.nz/n1330.html **Pole 2**; **Continuously** DC sent in MW: [700] AC received in MW: [649] **For 5 seconds** DC sent in MW: [840] AC received in MW: [763] **South Transfer:** **Pole Two only**; DC sent in MW: [666] AC received in MW: [612] **For 5 seconds** DC sent in MW: [840] AC received in MW: [763] ***Note:*** *HVDC South transfer is limited to 666 MW due to system stability issues.*
Shunt asset(s) that directly affect the capacity of the HVDC link (Pole 2 and a half pole)	**Pole 2 only** **Benmore Pole 2 220 kV AC filters, F3 and F4** When both F3 and F4 out, Pole 2 out When either F3 or F4 in, Pole 2 in **Haywards Pole 2 220 kV AC filters, F3 and F4** When both F3 and F4 out, Pole 2 out When either F3 or F4 in, Pole 2 in **Pole 2 and one half pole** **Benmore Pole 2 220 kV AC filters, F3 and F4** When both F3 and F4 out, Pole 2 out When either F3 or F4 in, Pole 2 in When F1 out, half pole out When F1 in, half pole in

	Haywards Pole 2 220 kV AC filters, F3 and F4 When both F3 and F4 out, Pole 2 out When either F3 or F4 in, Pole 2 in When F1 and F2 out, half pole out When either F1 or F2 in, half pole in

Note:

A. The full dynamic overload capability of the half-pole (which is 356 MW (sent), for 30 seconds) will remain available in response to modulations, but that the maximum steady state dispatch order is to be no more than 200 MW

B. The plant will only be offered in 12 pulse mode, and NOT be offered in 6 pulse mode. If a valve group tripping occurs during 12 pulse operation, 6 pulse operation (ie just one valve group) may continue until such time as 12 pulse operation is restored. Maximum dispatch order during any such temporary 6 pulse operation is limited to 100 MW.

C. The half-pole converter overload capability of 356 MW (sent) for 30 seconds is unchanged from the half-pole ratings that have been in effect since recommissioning in 1992.