

British Columbia Utilities Commission Re-issued Information Request No. 1.15.4 Dated: 01 December 2004 BC Hydro Response issued 17 December 2004	Page 1
British Columbia Hydro and Power Authority Call for Tenders for Capacity on Vancouver Island Review of Electricity Purchase Agreement	

**15.0 Reference: CFT Report, Appendix J**

1.15.4 Please explain the basis for the assumption that Demand Management and temporary generators will operate 240 hours per year. Based on the actual temperature profiles and major single contingency events over the past five years, how much would the bridging capacity supply have operated each year?

**RESPONSE:**

**The assumption is based on these resources potentially being required for 10 days of peak demand during a first contingency event. A first contingency event could last several days. For example, a 500 kV circuit outage could take a number of days to repair during adverse winter conditions.**

**It was assumed that, once activated, the demand management and temporary generators would be kept activated through the 10 days rather than being dispatched on and off over the 10 days. The 240 hours assumption does not account for the expected generation of the temporary generation during commissioning or maintenance. Nor does it account for system operators calling on these resources during other times of the year when Vancouver Island supply reliability is reduced, as when a 500 kV line is out of service for maintenance.**

**The question: “Based on the actual temperature profiles and major single contingency events over the past five years, how much would the bridging capacity supply have operated each year?” is out of context with respect to planning criteria given that no single largest contingency event, such as a 500 kV circuit outage, has occurred coincident with a design-day temperature event. As well, over the past five years BC Hydro has been able to rely, albeit to a reduced extent, on the HVDC system.**

**In the planning process, BC Hydro needs to assess resource requirements and their expected costs for meeting the forecasted peak demand, based on the forecast’s assumed design-day temperature and under first contingency system conditions. As noted above, if these resources had been available, BC Hydro system operators could have called on them to enhance the reliability of the system. For example, in 2000, when deep snow threatened the 500 KV lines, operators could have called on these resources as insurance because of the increased risk of an interruption.**