

BC Hydro 2008 LTAP Hearing

BC HYDRO UNDERTAKING NO. 39

HEARING DATE:

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TRANSCRIPT REFERENCE:

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REQUESTOR: Commission Panel Chair

QUESTION:

Please provide the levelized Unit Energy Costs (UECs) for each of the Mica Unit 5, Mica Unit 6 and Revelstoke Unit 6 projects, reflecting a similar calculation that BC Hydro completed in the Alcan 2007 EPA proceeding.

RESPONSE:

BC Hydro's calculation of the levelized cost of energy acquired through the Alcan 2007 EPA, expressed in \$/MWh and reflecting the acquisition of additional high value products, was filed as Exhibit B1-15 in that proceeding. That calculation (called the "headline price") was possible because of the significant amount of energy that was being acquired relative to the associated incremental capacity and in that calculation a proxy reference capacity value credit was included. The reference capacity value was based on the avoided costs of Mica Unit 5 and Revelstoke Unit 6 peaking capacity.

BC Hydro does not believe it is possible to do the same calculation with respect to the identified Mica and Revelstoke units in such a way that would provide a meaningful result:

- The primary purpose to construct the three projects is to provide capacity and the associated capacity reliability and energy shaping benefits. A decision to complete any one of these units would be based almost exclusively on this purpose;
- The amount of energy is very small relative to the capability of the units (for example, the capability of any one of the three units in MW x hours is over 4 GW-hours/year). BC Hydro would still advance these projects if they delivered no incremental energy;
- The energy value would be an input to the unit capacity cost calculation at the current reference energy price of \$88/MWh, or as may be adjusted based upon future acquisition processes; and

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- Given that BC Hydro's reference unit capacity value is calculated net of energy and shaping benefits and that the reference units are the remaining Mica and Revelstoke units (as described above), any use of that number as a capacity credit for calculating a levelized unit energy cost would become circular.