

## **Executive Summary**

BC Hydro's proposal in response to the Terms of Reference issued by the Lieutenant Governor in Council on March 25, 2003 pursuant to Section 5 of the *Utilities Commission Act* is presented in two volumes. Volume 1 outlines a proposal for a Heritage Contract to fulfil Policy Action # 1 identified in the Provincial Government release entitled *Energy for Our Future, a Plan for BC* (the Energy Plan). Volume 2 introduces a new rate structure for large industrial and commercial customers in response to Policy Actions # 14 and 21 in the Energy Plan.

The context of the section 5 inquiry is set out in Section 1.1 of Volume 1. In broad overview, Policy Action # 1 calls for a Heritage Contract which has the effect of locking in the value of existing low-cost generation assets for BC Hydro's ratepayers. Policy Action #2 seeks a continuation of the benefits BC Hydro ratepayers have received from electricity trade. The Heritage Contract proposal presented in Volume 1 does both.

Policy Actions # 14 and 21 in the Energy Plan contemplate the development of a new stepped rate for industrial customers. Volume 2 contains BC Hydro's thinking with respect to the considerations involved in developing such a rate.

### Volume 1 – The Heritage Contract Proposal

The Heritage Contract proposal is described in brief in Chapter 2 and elaborated in detail in Chapter 3 of this Volume. Those chapters describe a mechanism that BC Hydro believes will carry into effect the Energy Plan in a way that maximizes the benefits that all of BC Hydro's ratepayers receive from the low-cost Heritage Resources that BC Hydro has built over the last 40 odd years. Rather than summarize the information in those chapters, the executive summary focuses on a number of significant implications of the approach BC Hydro has taken. Those wishing to fully understand the proposal are encouraged to read Chapters 2 and 3.

In designing the Heritage Contract as it has, BC Hydro has had in mind two key public policy objectives, as follows:

- (1) Secure, reliable supply: The Heritage Contract should allow BC Hydro to provide a secure, reliable source of electricity for all current and future British Columbians taking service from BC Hydro under the rate schedules listed in Schedule B of the Terms of Reference (the Heritage Beneficiaries) (Energy Plan Policy Actions #3 and #7);
  
- (2) Low electricity rates: The Heritage Contract should allow BC Hydro to:
  - (a) maximize the value of the generating capabilities of the resources within BC Hydro's control and allow BC Hydro to minimize the cost of acquiring resources for Heritage Beneficiaries (Energy Plan Policy Actions #2 and #3); and
  
  - (b) provide the capability of the resources listed in Schedule A of the Terms of Reference, together with the related civil works and plant (collectively, the Heritage Resources), on the basis of their embedded cost (Energy Plan Policy Action #1).

In serving these objectives, BC Hydro adopted the following four principles:

- (1) The Heritage Contract proposal ought to allocate to the Heritage Beneficiaries only those costs commensurate with the allocation of benefits;
  
- (2) The Heritage Contract proposal should drive economically efficient decisions at the margin for supply, demand, and trade;
  
- (3) The Heritage Contract proposal should be as simple and understandable as possible so that economic incentives will be clear to all participants; and
  
- (4) To maximize system value, those operating the system and those buying and selling power from and for the system should have, to the greatest extent possible, unfettered communications.

The Energy Plan makes it clear that the Heritage Resources are to be owned and operated to benefit the current and future ratepayers of BC Hydro. This requirement has a number of implications.

First, the focus on current and future British Columbians implies that the proposal needs to be structured to confer benefits on new customers, as well as existing ones. A corollary of that implication is that the benefits should be realized by customer classes, as opposed to individual customers. The proposal put forward by BC Hydro and its approach to stepped rate design are both informed by the distinction between conferring an ongoing benefit on all of BC Hydro's ratepayers and providing a once only dividend to those customers who happen to be taking service from BC Hydro at the time the Energy Plan is adopted. BC Hydro does not believe that the government intended an arbitrary allocation of benefits to individual customers.

Second, the Energy Plan also clearly envisages that the ownership and operation of the Heritage Resources by BC Hydro will benefit all classes of customers for an extended period of time. Accordingly, the Heritage Contract proposal is designed to ensure that all customers continue to benefit from the significant operational flexibility that BC Hydro's ample storage capacity permits, and that they pay for supply on an embedded cost basis. A deferral account will be employed in conjunction with the Heritage Contract to smooth the ratepayer impact of variations between the forecast and actual revenue derived from the Heritage Resources each year. This account is fully described in section 3.5 of Volume 1.

An important example of this second implication is the manner in which the proposal deals with the allocation of trade income. The Terms of Reference request that the Commission recommend the appropriate means to allocate all annual trade income received by BC Hydro below \$200 million. BC Hydro believes that trade income below \$200 million should be allocated to the benefit of ratepayers to ensure that those charged with operating the system are indifferent to whether the value of the system is realized in income from trade or by minimizing the cost of the acquiring energy in the future to serve domestic load. By allocating all trade income to ratepayers, BC Hydro's

proposal will ensure that its decisions concerning whether to generate for export or store for future consumption are driven by an unbiased assessment of the income to be obtained from generation at the time the decision is made versus the potential cost of reacquiring energy when it is needed in the future.

The proposal defines trade income in a way that means annual trade income will rarely fall outside the \$0 to \$200 million range. In the exceptional case where it does, the Province, as BC Hydro's owner, will experience the impact. Thus, where trade income exceeds \$200 million per year, BC Hydro may keep the excess for payment to the Province. Where trade income is negative, BC Hydro will absorb the loss and pass on less income to the Province. Thus, the Province incurs the benefits and costs associated with truly exceptional circumstances and ratepayers otherwise obtain whatever income can be derived from trade.

Third, the Heritage Contract proposal is structured to encourage information flow between those charged with operating the system and those who have the responsibility to market its output externally. This structure should form the basis for informed decision-making in all stages of BC Hydro and Powerex's activities. As well, the Heritage Contract proposal does not make it necessary to disturb the present regulatory structures that allows BC Hydro (and Powerex) a relatively free hand to market energy in competitive external markets while ensuring that adequate information is provided to safeguard the interests of ratepayers in regulated domestic markets.

#### Volume 2 – Stepped Rates and Access Principles

The Terms of Reference request the Commission to make recommendations with respect to the principles that should govern industrial customers' access to transmission and to BC Hydro's generation service where they wish to obtain generation from alternative suppliers. BC Hydro believes that in the short term, and to the extent industrial customers require access to transmission, that access should be on precisely the same terms and conditions as existing wholesale customers. Currently, that occurs pursuant to BC Hydro's Wholesale Transmission Service rate schedules. As described in Section 4.3 of Volume 2, responsibility for those schedules will in future be assumed by a new, separate Crown Corporation. That entity should be responsible for

determining the changes, if any, to the terms and conditions of transmission service. In the meantime, the proposal does not require any changes to WTS service.

The ability of industrial customers to choose service from alternate suppliers exposes BC Hydro to some new potentially significant risks. The nature and extent of these risks will depend on the specific design of the stepped rate for those customers. In Volume 2, BC Hydro presents an analysis of alternative stepped rate designs, but recommends that further consultation with stakeholders occur before a design is finalized. BC Hydro believes this consultation and final design process must be allowed to occur before access principles can usefully be developed in response to paragraph 4(c) of the Terms of Reference.