

REQUESTOR NAME: **BC Sustainable Energy Association and Sierra Club of British Columbia**

INFORMATION REQUEST ROUND NO: 3

TO: **B.C. Hydro**

DATE: **November 18, 2011**

PROJECT NO: **3698640**

APPLICATION NAME: **Dawson Creek/Chetwynd Area Transmission Project**

3.33.0 Topic: Efficiency of new load

Reference: Exhibit B-15, BCSEA IR 2.16.2

“BC Hydro is obligated to serve customer load that meets the terms and conditions of BC Hydro’s Electric Tariff. Since those terms and conditions do not refer to the efficiency of electrical load, BC Hydro is unable to require gas producers to meet efficiency criteria as a condition of receiving electrical service.” [BCSEA IR 2.16.2]

“As noted in Exhibit B-1, page 2-10 and the response to BCUC IR 1.37.1, BC Hydro anticipates that the New Plant Design program can achieve savings in the range of 4 to 7 per cent with gas producers. BC Hydro is currently discussing opportunities with all prospective gas producers, and expects most to participate in the program.” [BCSEA IR 2.16.5]

“BC Hydro understands that current electric motor efficiencies range from 95 to 97 per cent.” [BCSEA IR 2.20.6]

- 3.33.1 Could BC Hydro’s Electric Tariff be amended in this proceeding to refer to efficiency criteria as a condition of receiving electrical service? If not, please explain why not.
- 3.33.2 Does BC Hydro agree that, other things being equal, the DCAT project would be more likely to be determined to be in the public interest if there was some assurance that the natural gas production electrical load would be comprised of the most efficient machinery reasonably possible? If not, please explain why not?
- 3.33.3 What would be the best regulatory mechanism to obtain assurance that the natural gas production electrical load would comprised of the most efficient machinery reasonably possible? Would this be accomplished by amending the tariff to make participation in the New Plant Design program a condition of receiving service?

3.34.0 Topic: Cost; Minister’s Review

Reference: Exhibit B-1, 2.6 BC Hydro Corporate Objectives; 4.9 Estimate of Rate Impact; Minister’s June 2011 Review of BC Hydro, Exhibit C4-2, Appendix 1; Exhibit B-6, BCSEA IR 1.5.3; Exhibit B-6, COPE IR 1.3.1; Exhibit B-15, BCSEA IR 2.18.1

In BCSEA IR 2.18.1, BC Hydro was asked to update the status of the implications of the Minister’s Review for the Project, for example in terms of timing, cost and rate impacts. BC Hydro’s response as of October 27, 2011 was that the status remains unchanged.

3.34.1 Please provide a current update on the status of the implications of the Minister's Review for the Project, for example in terms of timing, cost and rate impacts?

3.35.0 Topic: Project justification

Reference: Exhibit B-1, 2. Project Justification; Exhibit B-6, BCSEA IR 1.6.1; Exhibit B-15, BCSEA IR 2.19.1

BC Hydro was asked: "In addition to sections 38 and 39 of the *Utilities Commission Act* and section 2.1 of SD No. 9, is BC Hydro subject to any direction, guidance or encouragement from the Provincial government to pursue the Project? If so, please explain."

BC Hydro's response was: "As set out in section 2.6 of the Application, BC Hydro took into account the provincial government's objectives as set out in section 2 of the *Clean Energy Act*. The relevant subsections are discussed at pages 2-16 to 2-18 of Exhibit B-1."

3.35.1 In addition to sections 38 and 39 of the *Utilities Commission Act*, section 2.1 of SD No. 9, and the provincial government's objectives as set out in section 2 of the *Clean Energy Act*, is BC Hydro subject to any direction, guidance or encouragement from the Provincial government to pursue the Project? If so, please explain.

3.36.0 Topic: GHG emissions consequences

Reference: Exhibit B-1, 2.6.1 Energy Objectives (a) Reduce B.C. GHG emissions; Exhibit B-15, BCSEA IR 2.20.7

BC Hydro was asked, "Would using electricity to power gas production load that would otherwise be met with natural gas simply allow more natural gas to be available for production and eventual combustion, albeit perhaps outside of B.C.?"

BC Hydro responds: "Yes. However, as stated in responses to BCSEA IRs 1.10.4 and 2.23.5, the increased availability of lower GHG-intensive natural gas relative to higher GHG-intensive fossil fuels such as coal and oil is widely viewed as a key aspect of global efforts to reduce GHG emissions."

3.36.1 Please provide or reference any sources BC Hydro relies on for the proposition that "the increased availability of lower GHG-intensive natural gas relative to higher GHG-intensive fossil fuels such as coal and oil is widely viewed as a key aspect of global efforts to reduce GHG emissions."

3.37.0 Topic: GHG emissions consequences

Reference: Exhibit B-1, 2.6.1 Energy Objectives (a) Reduce B.C. GHG emissions; Exhibit B-15, BCSEA IR 2.23.1

BC Hydro was asked: "Please provide any studies or documentation that support the conclusion that incremental natural gas exports from B.C. would have a net negative effect on global GHG emissions."

BC Hydro's response is: "BC Hydro is not aware of the existence of such reports which deal specifically with incremental natural gas exports from B.C."

3.37.1 Is BC Hydro aware of the existence of any reports that deal with the impact on global GHG emissions of incremental gas exports from any jurisdiction? If so, please provide or reference them.

3.38.0 Topic: GHG emissions consequences

Reference: Exhibit B-6, response to BCSEA IR 1.10.4; Exhibit B-15, response to BCSEA IR 2.23.2

“The production from the Montney gas basin is likely to be exported to other jurisdictions (U.S., Asia) and the utilization (combustion) of the increased production is unlikely to have any impact on GHG emissions in British Columbia. There are likely to be positive GHG consequences in other jurisdictions as the increased availability of natural gas will enable the displacement of higher emission energy sources (coal in the U.S. and coal and oil in Asia).”

In BCSEA IR 2.23.2, BC Hydro was asked: “What reason is there to believe that natural gas exports will displace resources with higher carbon intensity, as opposed to displacing resources with lower carbon intensity such as conservation?”

BC Hydro’s response, *inter alia*, references the response to BCSEA IR 2.23.1 (“**BC Hydro is not aware of the existence of such reports which deal specifically with incremental natural gas exports from B.C.**”).

3.38.1 What reason does BC Hydro have to believe that natural gas exports in general (as opposed to natural gas exports from BC in particular) displace or enable displacement of higher-emission energy sources rather than displacing lower-emission or zero-emission energy sources?

3.39.0 Topic: GHG emissions consequences

Exhibit B-1, 2.6.1 Energy Objectives (c) Encourage Economic Development..., p.2-17; Exhibit B-6, BCSEA IR 1.10.4

“The production from the Montney gas basin is likely to be exported to other jurisdictions (U.S., Asia) and the utilization (combustion) of the increased production is unlikely to have any impact on GHG emissions in British Columbia. There are likely to be positive GHG consequences in other jurisdictions as the increased availability of natural gas will enable the displacement of higher emission energy sources (coal in the U.S. and coal and oil in Asia).” [underline added]

3.39.1 Please explain whether and how BC Hydro’s analysis of the global GHG emissions impact of incremental natural gas exports, from BC or from other jurisdictions, takes into account the particular circumstances (energy prices, available substitutes, government policies, etc.) of the importing market, i.e., North American, Asian or European.

3.40.0 Topic: Impacts on system

Reference: Exhibit B-1; Exhibit B-6, BCSEA IR 1.13.1; Exhibit 15, BCSEA IR 2. 27.1

“BC Hydro’s annual Electric Load Forecast is generally published in the spring of the following year. If it is available during the DCAT Project proceedings, it will be filed.”

- 3.40.1 Does BC Hydro have a draft version of the next Load Forecast that has the numerical results but not necessarily the full textual component? If so, please file it.