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VIA EMAIL

August 31, 2012

BRITISH COLUMBIA UTILITIES COMMISSION
GENERIC COST OF CAPITAL PROCEEDING EXHIBIT A2-20

To: All Registered Parties
(*BCUC-GCOC*)

Re: British Columbia Utilities Commission
Project No. 3698660/G-20-12
Generic Cost of Capital Proceeding

Commission staff submits the following document for the record in this proceeding:

Extract from BCUC Information Request No. 2 to River District Energy Limited Partnership

Yours truly,

Erica Hamilton

/dg
Attachment



River District Energy Limited Partnership District Energy System CPCN	Submission Date: October 24, 2011
Response to BC Utilities Commission Information Request No. 2	Page 1

1.0 Planning Documents

Reference: Exhibit B-3, BCUC 1.1.2, p. 3

RDE quotes from the Design Guidelines one of the additional conditions to be met by the project: “The development parcels for this project will connect to a proposed Neighbourhood Energy Utility (NEU) should the proposed NEU be approved and implemented by the time of development.” (Emphasis added)

In the Design Guidelines, another additional condition reads as follows: “No electrical baseboard will be used in this project for heating residential units. Some electrical baseboard heaters may be used in appropriate locations such as utility rooms in the parkade.”

1.1 Given the ban on electrical baseboards, what alternatives are envisaged for space heating and domestic hot water in the hypothetical situation that the DEU is not approved and/or implemented by the time of development?

Response:

The first buildings to be constructed are two wood-frame, four storey apartments to be built by Polygon on parcels 7A and 7B. The two buildings will form a single strata corporation. Construction of 7A was delayed in the permitting process but has now commenced.

If the DEU were not approved the buildings would be redesigned to include conventional gas-fired boilers. Depending on when it became known that a DEU would not be approved, boilers may be installed in each building or, if construction of 7A had progressed so that redesign or retrofitting was impractical, sufficient boiler capacity would be installed in 7B to supply both buildings.

On-site heat pumps and/or gas boilers are the main alternative for subsequent developments. Heat pumps may be air source or GX.

This change would run contrary to the significant public awareness around the original plan for River District which has been supported by the public as indicated by significant public consultation processes, as well as by the market take up of the first phase of the project as reflected in the response to BCUC IR 2.5.3 below.

1.2 Please discuss the rationale behind the ban on electrical baseboard. Is it because electrical baseboards would not achieve the more stringent energy efficiency standards considered in the River District development?

Response:

The ban on electrical baseboards is rooted in the desire to achieve a higher level of environmental performance at the River District and to help ensure the loads critical for the success of the DEU will

connect to the system.

The history of the decision dates back prior to the ODP. During that time the City was developing plans for a DEU at SEFC. Through that work it became apparent that a DEU at River District (Then EFL) would be a natural fit with Parklane's objective of achieving a higher level of sustainability than the then current practice. A DEU would also provide the opportunity to use alternative energy to assist in achieving a LEED designation (at the time Parklane had decided to target LEED but had not decided on silver or gold). The possibility of a DEU using alternative energy was disclosed in the ODP.

The City does not consider electric baseboards as a sustainable way to achieve deep carbon reductions in high density developments. Although carbon neutral in a legal sense, the City considers BC part of a larger integrated regional electricity market which collectively has much higher emissions than attributable solely to BC Hydro resources. Heat pumps represent a more efficient form of electric heat. And in dense urban areas, there are numerous other low-grade sources of energy that may be a better, more sustainable fit for low-grade heating applications. In addition, large heat sinks in urban areas represent a potential opportunity for addressing other waste management issues (e.g., waste to energy). Finally, other electricity demands continue to grow and there are other sectors for which electricity may be the best or only option to achieve deep carbon reductions (transportation) and these should receive first priority for high-value, low carbon electricity.

The City is committed to its sustainable objectives but remains mindful of the costs. The City does not consider the use of BC's green electricity resources, which cost significantly more than the average embedded cost of energy paid by consumers, for electric resistance heat as an economically sustainable strategy.