

BC HYDRO – 2008 LTAP
EXHIBIT C18-2

BC Hydro 2008 Long Term Acquisition Plan dated June 12, 2008 ~ Project No. #3698514

Comments of
Jack Burkom
Director of Marketing

On behalf of
Brookfield Renewable Power Inc. (“Brookfield”)

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Introduction

This document was prepared by Jack Burkom. I am Director of Marketing at Brookfield Energy Marketing Inc. (“BEMI”) an affiliated company of Brookfield. I have over 10 years of diversified experience in the North American electricity markets including asset valuation, acquisitions, project management, corporate strategy, power trading, power marketing and structured transactions.

Brookfield is a wholly-owned subsidiary of Brookfield Asset Management Inc., and has over 100 years of experience as an owner, operator and developer of hydroelectric power facilities. Its portfolio includes more than 160 generating facilities with over 4,000 megawatts of capacity, almost all of which is sourced from renewable energy. It also has a 6,500 megawatt development pipeline of hydroelectric and wind projects, which include several projects located in British Columbia. Brookfield’s operations are primarily located in North America and Brazil.

Brookfield manages its power operations’ revenues through a centralized energy marketing platform that is responsible for all physical and financial (forward trading) sales of energy products across North American markets, including electricity, capacity, ancillary services, renewable energy credits and other green power attributes, and certified emission reduction credits. Brookfield has ownership interests in 135MW of hydroelectric generating capacity in British Columbia, including 5 hydro stations located on 5 separate river systems.

Over the past 5 years, Brookfield has made investments exceeding \$3 billion in power generation assets over the past 5 years and intends to continue its growth through a multi-billion dollar investment program over the next 5 years in North and South America, as well as other international markets.

1. What is Brookfield’s Electricity Market Experience?

As part of its growth initiatives, Brookfield has analyzed numerous power markets for investment purposes, and has conducted in-depth long-term price forecasting in a number of jurisdictions.

The markets (system operator) analyzed in depth include:

- Ontario (IESO)
- Alberta (AESO)
- British Columbia
- New Brunswick (NBSO)
- New England (ISO-NE)
- New York (NYISO)
- PJM Interconnection
- Midwest ISO (MISO)
- California (CAISO)
- Texas (ERCOT)
- Brazil (ONS)
- Australia (NEMMCO)
- Peru (COES)

Brookfield has also reviewed the electricity market structure and trends in other jurisdictions, such as:

- Manitoba
- Saskatchewan
- Quebec
- North America's Pacific Northwest
- Louisiana
- Missouri
- Chile
- India
- Turkey
- Colombia
- Western Europe
- Scandinavian countries (NordPool)

These power market analyses are conducted to support investment decisions and determine the long-term value of electricity based on a fundamental analysis of:

- the cost and availability of fuels and other natural resources
- the capital, financing and operating cost of various power generation technologies
- power system needs (available supply and load growth)
- regulatory structure: rate-based (vertically integrated utilities), market-based (partial or full unbundling of activities, competitive markets and de-regulation), bilateral contractual market, etc.
- ownership: state or privately-owned, concentration of ownership, vertical integration

Brookfield's fundamental analysis supports its capital allocation decisions when evaluating acquisition and project development opportunities. Of critical importance in making investment decisions is to determine the confidence level in the market signals obtained through the marketplace regardless of the regulatory structure.

2. What is the purpose of Brookfield's filing?

Brookfield and its affiliates are currently party to over forty renewable electricity purchase agreements. In addition, through our acquisition, marketing and development activities we have had the opportunity to review many other renewable electricity purchase agreements. Based upon this experience and investment in various power markets, our ownership and operating presence in British Columbia and the impact of the British Columbia electricity procurement policies on our future investment decisions in the province, Brookfield wishes to provide input regarding the structure of the British Columbia electricity procurement process.

3. Structure of the British Columbia Electricity Market

The majority of British Columbia's electricity is supplied by government owned BC Hydro. Originally a vertically integrated utility, BC Hydro's generation and transmission businesses were separated in 1996 to comply with FERC Order 888. Currently, the BCTC operates BC Hydro's transmission network and works to provide open access to that transmission network to all registered market participants. BC Hydro continues to own and operate approximately 11,000MW of existing, largely hydroelectric, generation. In addition to BC Hydro and the BCTC, Fortis BC operates a vertically integrated electric utility in the south central portion of the province. While the market restructuring in 1996 created open access to the transmission network, there is still limited competition on the generation side of the business in British Columbia as a result of the monopsony position of BC Hydro. While operating control of the transmission assets has been removed from BC Hydro, the generation and distribution functions all still reside under the umbrella of one owner/operator: BC Hydro.

BC Hydro began issuing Requests for Proposals ("RFPs") for new electric generation to the independent power producers in the 1980s. Unfortunately, the attrition rate for participants in these calls has been well over 50% and has resulted in less new generation getting built than desired.

While British Columbia has traditionally been a net exporter of energy, the province has been increasingly importing energy into the province since 2004 and currently relies on imports for

approximately 10% of the total annual load of the province. As a result of this growing supply gap, the government of British Columbia released the BC Energy Plan in February of 2007. This Energy Plan mandates that BC Hydro must produce and acquire “an additional supply of insurance power beyond the projected increases in demand”¹.

4. Potential Perceived BC Hydro Conflict of Interest

In November 2002, the BC government presented a comprehensive, long term energy plan. One explicit goal of this plan was to increase private sector opportunities in the energy sector. Specifically, the plan stated “independent power producers (“IPPs”) will develop new generation, with BC Hydro’s role limited to undertaking efficiency improvements at existing facilities”². Since that time, the government of BC has mandated BC Hydro to begin evaluating the development of a large scale hydroelectric generating station at Site C in Northern British Columbia. Brookfield believes that the government has created a situation where BC Hydro could be perceived as having a conflict of interest in their now concurrent roles as buyer, developer and procurer of energy and capacity. Since the distribution and generation of energy is still largely managed under the monopsonistic control of BC Hydro, BC Hydro may not be perceived to be an independent market participant. The potential competing professional interests of BC Hydro as procurement manager as well as project developer may make it exceedingly difficult for BC Hydro to perform their duties impartially.

Objective #26 of the BC Energy Plan states: “Energy procurement plays a critical role in reaching Government’s self-sufficiency objective, as well as meeting the Government’s objectives for competitive rates, clean or renewable electricity, the development of a vibrant and competitive IPP sector and other fiscal and provincial policy objectives. As such, it is important that all parties.... are satisfied that the approach used by BC Hydro, and the terms and conditions in BC Hydro’s power purchase contracts, meet the objectives set out in this policy”³. If energy procurement plays a critical role in reaching the Government’s self-sufficiency objective then it is imperative that the government establish an independent and transparent entity to perform the procurement role in the province. As the BC Government correctly noted in its 2002 Energy Plan, “to function properly, competitive

¹ http://www.energyplan.gov.bc.ca/PDF/BC_Energy_Plan.pdf page 10

² http://www.gov.bc.ca/empr/down/energy_for_our_future_sept_27.pdf page 9

³ http://www.energyplan.gov.bc.ca/PDF/BC_Energy_Plan_Electricity.pdf page 8

markets require many buyers and sellers. Despite the recent growth in private power, the BC market is still dominated by a large Crown corporation”⁴.

It is important to note that there need not have occurred any inappropriate act for a conflict to exist. The simple appearance of conflict can undermine confidence. In this instance the conflict serves to undermine confidence in the process as well as the market signals that drive investment decisions for IPPs in British Columbia. An analysis of the recent Clean Power Call RFP issued June 11, 2008 reveals a number of areas where a conflict of interest could be perceived:

1. Section 20 (General Terms and Conditions) of the Clean Power Call RFP states that: “each Proponent represents and warrants that its Proposal has been prepared without collusion with any other Proponent, and in particular the price(s), if any, and other elements of its Proposal have been arrived at independently”⁵. While all IPP Proponents are restricted from reviewing or discussing their projects with other Proponents, BC Hydro will have complete pricing information on every proposed project in the province. This cost and pricing information would certainly be of interest to BC Hydro as they proceed with their development efforts at Site C.
2. Bid submission for the Clean Power Call is November 25, 2008. However, Proponents will not be notified of selection for final contract negotiations until June, 2009. At that point, proposals will be subject to BCUC deliberations which could last up to an additional 150 days. Consequently, the time between bid submission and final contract execution could be up to a year. This extraordinary time lag makes it extremely difficult to finalize construction costs as well as financing and hence serves to drive up bid prices and hence costs to ratepayers. A higher bid price in the Clean Power Call RFP may appear to make other BC Hydro development projects look relatively better than what is proposed in response to the RFP.
3. Most renewable power projects have some level of intermittent production as a result of the uncertain renewable resource that powers the associated generators. As such, renewable power developers across the world are accustomed to living with the volume risk associated with developing, financing, constructing and operating a renewable generating project. The

⁴ http://www.gov.bc.ca/empr/down/energy_for_our_future_sept_27.pdf page 16

⁵ BC Hydro Clean Power Call RFP dated June 11, 2008 page 19

BC Hydro Clean Power Call is no different in this respect as the Proponent must wear the production or volume risk associated with the project. However, BC Hydro has introduced two non-standard commercial risks over and above those that would be considered normal for a renewable electricity purchase agreement; non-firm energy pricing and firm energy delivery shortfall liquidated damages. Since intermittent renewable resources have little to no control over their fuel resource these two punitive contract terms serve only to increase the bid price of proposals and hence the cost to taxpayers. The energy produced by the projects and ultimately consumed in the province is not affected by these additional contract costs. The only impact is to increase the risk to the project developer. Again, these risks may lead to higher bid prices in the Clean Power Call RFP and have the appearance of making BC Hydro's other development projects look relatively better than what is proposed in response to the RFP.

4. Section 18 of the BC Hydro Clean Power Call RFP states that: "BC Hydro will determine in its sole and unfettered discretion the most cost effective portfolio of Proposals". A large majority of the evaluation criteria are subjective and non-transparent. This subjective, non-transparent evaluation of proposals again creates an appearance of conflict as BC Hydro is in the process of developing a large hydroelectric generating station with storage far from the load center in the lower mainland of British Columbia. Presumably, renewable proposals that exhibit a better "fit" with BC Hydro's other developments will be looked at more favourably than other proposals which do not.

These few terms and conditions from the recent Clean Power Call provide some examples of the manner in which Brookfield believes that the government may have put BC Hydro in an awkward situation where they are subject to conflicts of interest. Having reviewed numerous renewable electricity purchase contracts across North America, Brookfield would note that the majority are straightforward take-or-pay contracts such as the one recently proposed by the Ontario Power Authority in their Renewable Energy Supply III Contract⁶. The BC Hydro Clean Power Call Specimen EPA has the most non-standard and challenging terms and conditions of any renewable electricity contract we have yet come across.

⁶ http://www.powerauthority.on.ca/GP/Storage/17/1227_SETOR1-5337536-v27-cm_Ontario_Power_Authority_-_Renewable_Energy_Supply_III_Contract.pdf

Brookfield would also note that few other jurisdictions in North America suffer the same attrition rate in bringing new, renewable generating projects on-line as is the case in British Columbia. Most of the other RFPs for new, renewable energy that Brookfield has reviewed have much higher levels of qualification for registration as well as for final contract execution than is apparent throughout the series of calls issued by BC Hydro. This high rate of attrition may create the appearance of a conflict of interest for BC Hydro. As more projects fail to progress to commercial operation, BC Hydro by default becomes the only remaining option to ensure there is construction of the needed electric generating infrastructure in British Columbia.

5. Conclusion

As an alternative mechanism, Brookfield would recommend that the government of British Columbia create an independent, transparent, arms-length entity to manage all electric generation procurement activities from this point forward. Removing any appearance of a conflict of interest will greatly serve to improve the confidence in the market signals driving investment in renewable energy in British Columbia. In addition, Brookfield believes that the creation of an independent, transparent, arms-length entity would also serve to reduce the large attrition rate that has existed with respect to bringing new, contracted renewable generating stations on-line in British Columbia.

