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BRITISH COLUMBIA UTILITIES COMMISSION

ORDER NUMBER E-7-06

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IN THE MATTER OF
the Utilities Commission Act, R.S.B.C. 1996, Chapter 473

and

An Application by British Columbia Hydro and Power Authority
Filing of Energy Supply Contracts
Fiscal 2006 Call Electricity Purchase Agreements

BEFORE: R.H. Hobbs, Chair
A.J. Pullman, Commissioner September 21, 2006

O R D E R

WHEREAS:

A. Commission Order No. G-103-05 dated October 11, 2006 approved a Negotiated Settlement regarding the Resource Expenditure and Acquisition Plan that British Columbia Hydro and Power Authority ("BC Hydro") filed on March 7, 2005 (the "2005 REAP Settlement"); and

B. The 2005 REAP Settlement agreed that BC Hydro's proposed "open call" to the private sector in Fiscal 2006 (the "F2006 Call") was justified and that BC Hydro should proceed as soon as possible with the F2006 Call as set out in the evidence filed in the proceeding and the modifications in Schedule A of the 2005 REAP Settlement, conditional on the Commission's approval of the F2006 Call size and receipt of Commission comment, if any, on the proposed Terms and Conditions of the F2006 Call by October 27, 2005; and

C. Schedule A of the 2005 REAP Settlement stated that the size of the F2006 Call would be for a target of approximately 2400 GW.h/year of firm electrical energy (and associated non-firm electrical energy) from Large Projects, and a target minimum of 200 GW.h/year of electrical energy from Small Projects; and

D. The Commission made no comment on the proposed Terms and Conditions of the F2006 Call; and

E. On August 31, 2006, BC Hydro filed its F2006 Open Call for Power Report on the call for tender process (the "Report"); and

F. On September 5, 2006, BC Hydro, pursuant to Section 71 of the Utilities Commission Act (the "Act"), submitted the 38 Electricity Purchase Agreements that resulted from the F2006 Call as Energy Supply Contracts ("ESC") totalling 7,125 GW.h of firm and non-firm energy; and

G. BC Hydro requests that the Commission hold the ESC and the summary information on bid prices by project on a confidential basis; and

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H. The Report states that BC Hydro has updated its load forecast since the 2005 REAP Settlement was agreed to, and that the F2012 mid-load forecast has increased by 3,340 GW.h/year; and

I. The Report also states that attrition due to the difficulties in bringing the projects to completion is expected to reduce the amount of firm energy available under the F2006 Call by 20 to 30 percent, and that planned and unplanned outages are expected to reduce the amount of energy available by 5 to 10 percent; and

J. The Commission has reviewed the ESC in the context of the 2005 REAP Settlement and the Report and in relation to the requirements of Section 71 of the Act, and determines that the ESC should be accepted for filing pursuant to Section 71 of the Act, for the Reasons for Decision that are attached as Appendix B to this Order.

NOW THEREFORE the Commission orders as follows:

1. The ESC as identified in Appendix A to this Order are accepted for filing pursuant to Section 71 of the Act.

2. The ESC and the summary information on bid prices by project will be held on a confidential basis.

DATED at the City of Vancouver, in the Province of British Columbia, this 21st day of September 2006.

BY ORDER

Original signed by

Robert H. Hobbs
Chair

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British Columbia Hydro and Power Authority
Energy Supply Contracts

No.	Bidder	Project	Plant Capacity (MW)	Total Energy GW/years
1	Plutonic Power Corporation	East Toba and Montrose Hydroelectric Project	196	702
2	AESWapiti Energy Corporation	AESWapiti Energy Corporation	184	1,612
3	Dokie Wind Energy Inc.	Dokie Wind Project	180	536
4	Bear Mountain Wind Limited Partnership	Bear Mountain Wind Park	120	371
5	3986314 Canada Inc.	Glacier Creek Projects	90.5	341
6	Green Island Energy Ltd.	Gold River Power Project	90	745
7	Kwalsa Energy Limited Partnership	Kwalsa Energy Project	85.9	384
8	Anyox Hydro Electric Corp.	Anyox and Kitsault River Hydroelectric Projects	56.5	242
9	Compliance Power Corporation	Princeton Power Project	56	421
10	Upper Stave Energy Limited Partnership	Upper Stave Energy Project	54.7	264
11	Mackenzie Green Energy Inc.	Mackenzie Green Energy Centre	50	441
12	Kwoiek Creek Resources Limited Partnership	Kwoiek Creek Hydroelectric Project	49.9	147
13	Mount Hays Wind Farm Limited Partnership	Mount Hays Wind Farm	25.2	72
14	Canadian Hydro Developers, Inc.	Bone Creek Hydro Project	20	81
15	Songhess Creek Hydro Inc.	Songhees Creek Hydro Project	15	61
16	Plutonic Power Corporation	Rainy River Hydroelectric Project	15	51

British Columbia Hydro and Power Authority ("BC Hydro")
Filing of Energy Supply Contracts

No.	Bidder Name	Project Name	Plant Capacity (MW)	Total Energy GW/years
17	Hydromax Energy Ltd.	Lower Clowhorn	9.99	48
18	Hydromax Energy Ltd.	Upper Clowhorn	9.99	45
19	Highwater Power Corporation (formerly Global Cogenix Industrial Corporation)	Kookipi Creek Hydroelectric Project	9.99	39
20	Cogenix Power Corporation	Log Creek Hydroelectric Project	9.99	38
21	Canadian Hydro Developers, Inc.	Clemina Creek Hydro Project	9.95	31
22	KMC Energy Corp.	Tamihi Creek Hydro Project	9.9	52
23	Valisa Energy Incorporated	Serpentine Creek Hydro Project	9.6	29
24	Synex Energy Resources Ltd.	Victoria Lake Hydroelectric Project	9.5	39
25	Second Reality Effects Inc.	Fries Creek Project	9	41
26	Renewable Power Corp.	Tyson Creek Hydro Project	7.5	48
27	Hupacasath First Nation	Corrigan Creek Micro Hydroelectric Project	6.65	19
28	Axiom River Inc.	Clint Creek Hydro Project	6	27
29	EnPower Green Energy Generation Inc.	Savona ERG Project	5.89	41
30	EnPower Green Energy Generation Inc.	150 Mile House ERG Project	5.89	34
31	Maroon Creek Hydro Partnership	Maroon Creek Hydro Project	5	25
32	Spuzzum Creek Power Corp.	Sakwi Creek Run of River Project	5	21
33	Canadian Hydro Developers, Inc.	English Creek Hydro Project	5	19
34	Synex Energy Resources Ltd.	Barr Creek Hydroelectric Project	4	15
35	Raging River Power & Mining Inc.	Raging River 2	4	13
36	Synex Energy Resources	McKelvie Creek Hydroelectric		

British Columbia Hydro and Power Authority ("BC Hydro")
Filing of Energy Supply Contracts

No.	Bidder Name	Project Name	Plant Capacity (MW)	Total Energy GW/years
	Ltd.	Project	3.4	14
37	Advanced Energy Systems Ltd.	Cranberry Creek Power Project	3	11
38	District of Lake Country	Eldorado Reservoir	0.8	4

IN THE MATTER OF

BRITISH COLUMBIA HYDRO AND POWER AUTHORITY

F2006 CALL FOR TENDERS

ELECTRICITY PURCHASE AGREEMENTS

REASONS FOR DECISION

APPENDIX B

TO ORDER NO. E-7-06

September 21, 2006

Before:

R.H. Hobbs, Chair
A.J. Pullman, Commissioner

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1.0 THE APPLICATION

1.1 Historical Background

On March 7, 2005 British Columbia Hydro and Power Authority ("BC Hydro") filed its 2005 Resource Expenditure and Acquisition Plan ("2005 REAP") with the British Columbia Utilities Commission ("Commission"). The 2005 REAP included a request for approval of the need for the F2006 Call for Tenders ("F2006 Call").

On July 8, 2005, BC Hydro filed with the Commission the testimony of Mary Hemmingsen which set out the major proposed F2006 Call terms and conditions and details concerning tender evaluation, methodology and mandatory requirements.

Following a Negotiated Settlement Process ("NSP") held on September 20-22, 2005, the parties to the NSP unanimously agreed that the F2006 Call was justified in terms of BC Hydro's projected energy requirements and that BC Hydro should proceed as soon as possible with the F2006 Call as set out in the 2005 REAP with the modifications set out in Schedule A of the NSP. The Commission approved the Negotiated Settlement on October 11, 2005 pursuant to Commission Order No. G-103-05. The Call was issued on December 8, 2005, bidders were required to register before January 6, 2006, and tenders were due on April 7, 2006.

On July 27, 2006, the Minister of Energy Mines and Petroleum Resources and the President of BC Hydro jointly announced the award of Electricity Purchase Agreements ("EPA") to 38 Independent Power Producer ("IPP") projects representing 1,400 MW of capacity and 7,125 GW.h/year of energy (5,725 GW.h/year of firm energy and 746 GW.h/year non-firm energy from Large Projects) and 654 GW.h/year of non-firm energy from Small Projects. On August 31, 2006 BC Hydro filed with the Commission its report on the F2006 Call ("Report").

On September 5, 2006, following receipt of the executed agreements and verification of the necessary security deposits, BC Hydro filed, pursuant to Section 71 of the Utilities Commission Act ("UCA" or the "Act"), the 38 executed EPAs awarded under the F2006 Call process, together with a summary of the bid prices by project used for the tender evaluation process. BC Hydro requested that the Commission issue

an Order accepting the 38 EPAs as filed as energy supply contracts pursuant to Section 71 of the UCA. BC Hydro also requested that, pursuant to Section 1.9 of the Commission's Rules ("Rules") regarding Energy Supply Contracts ("ESC"), the 38 EPAs and the summary information on bid prices by project be kept confidential for reasons of commercial sensitivity.

On September 7, 2006, BC Hydro held a Workshop to provide interested parties with an opportunity to ask questions about the F2006 Call and the Report.

1.2 Process of the Call

BC Hydro states that, following the Commission's approval of the Negotiated Settlement, it incorporated the NSP modifications and released the final draft F2006 Call documents for comment on October 31, 2005, that this constituted the third opportunity for IPPs and stakeholders to comment on the F2006 Call documents and that approximately 250 comments were received regarding the final F2006 Call draft documents. BC Hydro states that it addressed approximately two-thirds of these comments by making a number of changes to the Call for Tenders ("CFT") and EPA terms and conditions, but stresses that there were no substantive changes to the major CFT terms and conditions that were agreed as part of the NSP. The final F2006 Call documents were issued on December 8, 2005 (Report, p. 7).

BC Hydro states that it met the following commitments which were specifically addressed in Schedule A of the NSP:

- Commercial Operations Date ("COD"),
- Liquidated Damages for Delivery Obligation,
- Compliance with greenhouse gases ("GHG") regulations,
- Firm Imports,
- Discount of Tier 1 power,
- Prequalification Requirements and Project Risk Assessment, and
- Bridging prior to COD

So far as concerns its commitment concerning disclosure of price data BC Hydro states that the NSP committed it to "publish on its website after [the] EPA award the bid prices of all successful and unsuccessful tenders. The intention is to provide sufficient information to allow stakeholders to understand the outcome of the F2006 Call evaluation and basis of the awards; however the specifics of

how bid prices will be disclosed requires further input from IPPs and stakeholders" and that such input was obtained on August 9, 2006 by way of a price disclosure meeting between BC Hydro and the 2005 REAP intervenors (Report, p. 10).

BC Hydro's commitment in respect of the target call size is discussed below.

BC Hydro states that it developed a management framework to administer, manage and execute the F2006 Call, which was designed to ensure that the F2006 Call was executed in a manner consistent with the CFT requirements and to provide a clear assignment of the F2006 Call mandate, rules, duties and responsibilities to those persons involved in the various phases of the process (Report, p. 11).

BC Hydro states that 48 bidders registered for the F2006 Call by the registration date of January 6, 2006. These bidders represented 81 projects representing approximately 2,800 MW and an estimated 12,000 GW.h/year of total energy for Large Projects and 1,500 GW.h/year of total energy for Small Projects. On January 20, 2006, two workshops were held, attended by 154 people (Report, p. 15).

BC Hydro states that it established communications that were limited to formal pathways between BC Hydro's CFT Records Manager and each Bidder's Contact Person. BC Hydro states that 115 Q&As were posted on BC Hydro's website; 14 "Notes to Bidders" were issued electronically to all Bidder Contact Persons when there was pertinent information to communicate with respect to administrative or procedural changes or reminders of key dates or actions; and five addenda were issued and made available on BC Hydro's website. These addenda dealt with amendments to the CFT and EPAs including providing clarifications on the CFT process, such as changes in respect to interconnection matters.

BC Hydro reports that it received 61 tenders from 37 bidders for 53 projects on April 7, 2006 representing approximately 1,800 MW and approximately 6,500 GW.h/year of firm energy. These tenders comprised both Large and Small Projects were submitted and represented five fuel sources and technologies: hydro, waste heat, wind, biomass and coal.

BC Hydro states that it performed a conformity review and rejected two projects from further consideration because they failed to meet the requirements set out in section 14 of the CFT. A further

three projects failed BC Hydro's risk assessment. A total of 48 projects passed on to the evaluation phase.

Following completion of the conformity review, BC Hydro states that it conducted a tender assessment and evaluation of conforming tenders, which consisted of:

1. Mandatory requirements review;
2. Risk assessment;
3. Quantitative bid price adjustment; and
4. Determination of optimal portfolios.

(Report, pp. 15-16)

In summary, BC Hydro states that it has followed the process set out in Mary Hemmingsen's testimony as amended by the NSP and as made clear to all interested parties. BC Hydro states that it has met all of its commitments in this regard and that it has created a clear and competitive process using standard tendering practices and a suitable management framework.

1.3 Evaluation of the Conforming Tenders

BC Hydro states that the first step in the evaluation process was to levelize the tendered bid prices in order to permit a direct comparison between bid prices. To obtain a levelized bid price, it completed a two-step calculation for each tender by determining the present value ("PV") of the cash flow for each tender, based on the bidder's selected options (e.g., percentage of bid price escalated at Consumer Price Index ("CPI"), term, two-part term pricing and COD) and then dividing by the PV of energy flow to be delivered over the term of the EPA. Assumptions used in the PV calculations included a CPI escalator of 2 percent, a nominal discount rate of 8 percent, and a January 1, 2006 reference point (Report, p. 20).

BC Hydro states that once the tendered bid prices had been levelized, the next step was to compute the adjusted bid price ("ABP") for each tender by adjusting the levelized bid price to account for differences in product characteristics resulting from the bidders' chosen tender options, interconnection requirements and project location relative to the Lower Mainland. For Large Projects, the adjustments included Green Credit, Hourly Firm Credit, Greenhouse Gases ("GHG"), Cost of Incremental Firm Transmission

("CIFT"), Network Upgrade costs borne by BC Hydro and (line) Losses. Small Projects received similar adjustments with the exception of Hourly Firm Credit which was inapplicable to them. The following adjustments were made to complete the ABP:

> Green Credit**:** For a project that could achieve EcoLogo certification and that elected to transfer its green attributes to BC Hydro, an evaluation adjustment of up to $3.00/MW.h (based on the percentage of energy eligible for EcoLogo certification) was deducted from the levelized bid price.
>
> Hourly Firm**:** For a project that elected to tender an hourly (as opposed to monthly) firm energy profile, an evaluation adjustment of $3.00/MW.h was deducted from the levelized bid price.
>
> GHG**:** For a project that opted to transfer to BC Hydro all or part of its obligation to purchase GHG offsets or similar compliance units, the levelized bid price was increased by an amount determined from the GHG adjustment table provided in the CFT, based on the tendered guaranteed GHG intensity.
>
> CIFT and Network Upgrades**:** The CIFT and Network Upgrades adjustments were based on studies prepared by British Columbia Transmission Corporation (BCTC) and posted on its website in March, 2006. To calculate the CIFT and Network Upgrades adjustments for each project, the average costs ($k/MW-year) derived in the studies were used as the CIFT and Network Upgrade cost and converted into a $/MW.h adjustment that was added to the levelized bid price of that project, as applicable.
>
> Losses**:** BC Hydro requested BCTC to conduct studies to determine the losses associated with delivering the energy from each project location to the Lower Mainland. These losses were converted into a $/MW.h adjustment that was added to the levelized bid price.
>
> (Report, pp. 21-23)

BC Hydro states that all these adjustments were similar to or the same as described by Mary Hemmingsen in her testimony of July 2005 and that the three adjustments associated with interconnection and transmission were described in a more general fashion in Exhibit B of her testimony, given that the specified figures for CIFT, Network Upgrades and Losses were not known until subsequent studies had been conducted by BCTC (Report, p. 22).

Following the calculation of each project's ABP, BC Hydro indicates that it considered co-dependent tenders and clusters and commissioned additional line loss and distribution upgrade studies to arrive at a final APB for each project. BC Hydro states that no adjustments were required to the projects and that

its two additional conditions (900 GW.h online prior to November 2009 and 50 percent BC Clean target) were met without the need for further modification to rankings (Report, p. 26).

1.4 Portfolio Selection

Based on the Large Project rankings, BC Hydro states that it determined the optimum Large Project portfolio. It summarizes the average adjustments to this portfolio as follows:

	$/MW.h
Levelized Plant Gate Price	74.0
Green Credit	(1.6)
Hourly Firm Credit	(1.5)
GHG Adder	4.0
CIFT Adder	2.8
Network Upgrades Adder	0.9
Losses	8.9
Adjusted Bid Price	87.5

Source: Figure 4, Report, p. 26

To determine the Small Project portfolio BC Hydro states that it determined that there were no interdependency issues involved between Large and Small Projects and that the portfolio would meet or exceed the 50 percent BC Clean electricity target and that it therefore decided to establish the cut-off point for Small Projects at $8/MW.h less than maximum ABP awarded in the Large Project stream. The $8/MW.h was chosen because it was the discount in the EPA for non-firm energy and all Small Projects' energy was non-firm (Report, pp. 27-8). BC Hydro summarizes the Small Project blended ABP as follows:

	$/MW.h
Levelized Plant Gate Price	69.9
Green Credit	(2.6)
Hourly Firm Credit	0.0
GHG Adder	0.0
CIFT Adder	1.5
Network Upgrades Adder	3.3
Losses	4.6
Adjusted Bid Price	76.8

Source: Figure 6, Report, p. 28

1.5 Call Award Volume

The NSP had set out the following target volumes for the F2006 Call:

- 2,500 GW.h/year of firm electrical energy, together with associated non-firm electrical energy from Large Projects; and
- 200 GW.h/ of non-firm electrical energy from Small Projects.

whereas BC Hydro states that the aggregate volumes it has awarded are as follows:

	Firm Electrical Energy (GW.h/year)	Non-Firm Electrical Energy (GW.h/year)	Total Electrical Energy (GW.h/year)
Large Projects	5,725	746	6,471
Small Projects	0	654	654
Sub-total	5,725	1,400	7,125

Source: Table 6, Report, p. 32

In addition, BC Hydro states that it has contracted with Brilliant Expansion Power Corporation for 226 GW.h/year of firm energy under a parallel process (Report, p. 2) and that it has renegotiated its Long-Term Electricity Purchase Agreement ("LTEPA") with Alcan Inc. (Report, p. 36). BC Hydro notes that the Columbia Power Corporation ("CPC") and its subsidiary BEPC are exempt from Section 71 of the *Utilities Commission Act* pursuant to Minister's Order M-22-0001 (M337) dated October 3, 2000. The LTEPA with Alcan is addressed in BC Hydro's Amended Long-Term Acquisition Plan ("LTAP") filed in the 2006 IEP proceeding and does not form part of this Application.

BC Hydro cites three principal reasons for the increased award volume, namely: a greater load/resource gap; allowance for attrition and outages; and increased technological diversity (Report, p. 32).

1.5.1 Load/Resource Gap

BC Hydro states that the load forecast upon which the F2006 Call volumes were based was its December 2004 forecast. It states that the increase in the load forecast in the February 2006 update over the December 2004 forecast is as follows:

Year	High (GW.h)	Mid (GW.h)	Low (GW.h)
F2007	1,640	1,771	1,857
F2008	1,940	2,193	2,421
F2009	1,831	2,205	2,532
F2010	2,243	2,701	3,146
F2011	2,133	2,713	3,232
F2012	2,724	3,340	3,945

Source: Table 7, Report, p. 33

BC Hydro files a revised "2006 System Energy Supply-Demand Outlook" (Report, p. 38), which shows the following deficits from the Mid-Load Forecast:

Year	Deficit*	Existing DSM	Net
F2007	1,300	1,200	100
F2008	1,600	1,600	--
F2009	4,400	1,900	2,500
F2010	5,700	2,200	3,500
F2011	7,900	2,500	5,400
F2012	9,000	2,700	6,300

*Before BC Hydro's non-firm energy/market allowance of 2500 GW.h/year.

In F2012 (the first full year of all awarded projects) BC Hydro forecasts that it will have the following firm sources of new supply:

Source	Firm Energy (GW.h)
Revelstoke 5	100
Alcan Inc	1,000
Brilliant Expansion	200
F2006 Call (net of attrition and outages)	4,000
Total	5,300

Based on the mid-load forecast before DSM of 65,000 GW.h, committed supply of 56,000 GW.h and existing DSM of 2700 GW.h BC Hydro projects a deficit of 1000 GW.h in F2012 after taking into account the new sources of supply set out in the table above (Report, p. 38). Both Revelstoke 5 and the Alcan LTEPA require Commission approval.

Under BC Hydro's energy planning criteria, the non-firm energy/market allowance of 2,500 GW.h/year (which will now comprise the non-firm energy component of the F2006 Call of 1,400 GW.h/year, the non-firm energy component of the Alcan LTEPA of 500 GW.h/year and other market purchases) and the as yet undeveloped demand-side management ("DSM") programs ("EE4 and EE5") would be available to meet this deficit.

Similarly BC Hydro presents a capacity forecast for F2012 showing a deficit of 700 MW after existing DSM programs which BC Hydro proposes to meet as follows:

Source	MW
Revelstoke 5	500
Alcan Inc	100
Brilliant Expansion	100
F2006 Call (net)	600
Total	1,200

Source: 2006 IEP/LTAP Proceeding Exhibit B-1E, p. 8-14

This forecast surplus does not include the impact of either EE4 and EE5 or any Downstream Benefits. In addition both Revelstoke 5 and the Alcan LTEPA require Commission approval, and BC Hydro's method of calculating its reserve margin has not yet been tested in the 2006 IEP/LTAP Proceeding.

BC Hydro develops the following table to demonstrate the surplus or deficit arising from the comparison of the mid-load forecast (ignoring DSM savings from EE4 and EE5 in all cases) and the sources of supply (existing and new).

Surplus/Deficit from Firm Energy Load/Demand Balance*(GW.h/year)

	F06 Target Volume-2,500 GW.h (no attrition or outages)			F06 Call Successful Bids (no attrition or outages)			F06 Call Expected Firm Energy (30% attrition or outages)		
Fiscal Year	**Low**	**Mid**	**High**	**Low**	**Mid**	**High**	**Low**	**Mid**	**High**
2011	-400	-1,800	-3,200	1,300	-100	-1,500	100	-1,300	-2,700
2012	-1,200	-2,800	-4,300	2,200	700	-800	500	-1,000	-2,600
2013	-2,300	-4,000	-5,700	1,200	-500	-2,300	-500	-2,300	-4,000
2014	-3,200	-5,100	-7,000	200	-1,600	-3,500	-1,500	-3,300	-5,300

Source: Table 12, Report, p. 40

*Before BC Hydro's non-firm energy/market allowance of 2,500 GW.h/year.

Considering these load/resource balance outlooks, BC Hydro concludes that awarding additional volumes in the F2006 Call was prudent and that if the combined factor of 30 percent for attrition and outages (discussed below) proves to be an over estimation, it is still prudent to acquire the recommended award volumes because it is preferable to have some surplus at a cost-effective fixed price than to be subject to the risk of acquisitions from the market (Report, p. 40).

1.5.2 Attrition and Outages

BC Hydro states that some of the awarded EPAs will not proceed as a result of attrition despite the CFT process and resulting EPAs being designed to minimize attrition through security requirements; termination requirements; and the F2006 Call risk assessment evaluation process.

BC Hydro states that its analysis of historical attrition experience, new attrition risks and development uncertainties when estimating future delivery of F2006 Call energy prompted it to estimate that a range

of 20-30 percent attrition to the delivery of F2006 Call energy is reasonable (Report, p. 34 and Appendix H).

BC Hydro considers the impact of planned and unplanned outages on the firm energy in the F2006 Call which required that firm energy be tendered without an allowance for planned and unplanned outages and offset this with a 10 percent buffer on hourly and/or monthly firm deliveries before Liquidated Damages become applicable to accommodate such outages. Based on historical data on availability rates of certain technologies and the EPA and CFT provisions, BC Hydro estimates an outage rate (planned and unplanned) for the F2006 Call to be in the range of 5-10 percent (Report, p. 34).

BC Hydro applies a factor of 30 percent to apply to the firm energy to arrive at a net volume of 4,000 GW.h/year of firm energy from F2012 (the first full year of deliveries under the EPAs) onwards after attrition and outages. (Report, p. 38).

1.5.3 Technology Diversity

BC Hydro notes that the increased award volume expands the technological diversity of the portfolio of projects. The award volume comprises projects from all areas of the province and encompasses five resource types (biomass, coal/biomass, waste heat, water and wind). Table 10 identifies the portion of total energy coming from each technology type:

Resource Type	Total Energy (GW.h/year)	Percentage of Total Energy Awarded
Water	2,854	40%
Wind	979	14
Biomass	1,185	18
Coal/Biomass	2,032	28
Waste Heat	75	1
Total	7,125	100%

BC Hydro states that technological diversity in project numbers and energy reduces its reliance on predominantly one resource - water and that a predominantly hydroelectric system exposes it to fuel availability risk because of the annual and seasonal variation in hydrology due to changes in rain and snow pack conditions (Report, p. 35).

1.6 Cost Effectiveness

BC Hydro relies on the competitive CFT process as the primary support for its position that the F2006 Call awards are cost-effective and notes the following facts to support its view that the F2006 Call was a competitive, fair and transparent process:

1. Open Call - BC Hydro adopted an "open" call, meaning that all proven technologies, except nuclear, were eligible to participate. An "open" call encourages competition amongst all sources of supply capable of meeting the mandatory requirements and providing cost-effective energy.

2. F2006 Call Terms, Conditions and Mandatory Requirement Review - In designing the F2006 Call around a CFT process, BC Hydro sought stakeholder and bidder input to ensure that the terms would not unduly discourage bidder participation while at the same time providing adequate assurance to BC Hydro and its ratepayers regarding delivery commitments. The major terms, conditions and mandatory requirements were reviewed and unanimously approved by all 2005 REAP intervenors and the Commission as part of the NSP.

3. Tender Options - which included split bids, term flexibility and COD flexibility as well as caps on LDs, the hourly firm option and assignment of green attributes to BC Hydro.

4. Bidder Participation - at a high level as the following table shows.

	Large Projects	**Small Projects**	**Total F2006 Call**
Pre-Tender Phase - Registration			
Projects	34	47	81
Capacity (MW)	2,470	330	2,800
Total Energy (GW.h/year)	12,000+	1,500	13,500+
Tender Submission			
Number of Bids	24	37	61
Projects	20	33	53
Capacity (MW)	1,591	221	1,812
Total Energy (GW.h/year)	7,184	989	8,173
Post-Tender Phase - Award			
Projects	16	22	38
Capacity (MW)	1,289	150	1,439
Total Energy (GW.h/year)	6,471	654	7,125

Source: Report, pp. 43-45

In addition to its reliance on the fair process BC Hydro states that it compared the levelized prices of the awarded EPAs with:

- market prices in Washington State;
- spot market prices in the Pacific Northwest (PNW);
- market prices in other Canadian jurisdictions; and
- the UEC data in its 2006 IEP.

In Washington State BC Hydro considers the current RFP being carried out by Puget Sound Energy (PSE), and notes that the bid prices received by PSE in 2006 increased by 40-70 percent over all resource types (except hydro which increased by 20-25 percent) over the prices received by PSE in 2004 (Report, p. 48).

BC Hydro develops a long term PNW spot market electricity price forecast as part of its 2006 IEP/ LTAP Application and finds that while its EIA Reference price is lower than its Large Project adjusted bid price in the early years, this trend reverses over time. BC Hydro suggests that generally, spot market prices cannot be relied upon as a comparator to electricity obtained via long term EPAs (Report, pp. 48-9).

BC Hydro compares recent acquisition activity in Ontario, Quebec, PEI and Nova Scotia, and the results of various calls have been made in 2003-2006. Relevant comparisons are summarized below, together with BC Hydro's comparison of awarded prices with the UECs's contained in its 2005 Resources Options Report, included as Appendix F in its 2006 IEP/LTAP Application.

Comparison of Bid Prices with Other Jurisdictions ($/MW.h)

Resource	**PSE(1)**	**Other Canada**	**2006 IEP(2)**	**2006 Call**
Biomass	n/a	$67-$110	$56-$87	$78-$92
Coal	$79-$139	n/a	$43-$83	$67-$82
Hydro	$66-$111	n/a	$47-$88	$56-$95
Wind	$84-$118	$78-$110	$45-$83 (3)	$71-$91

Source: (Report, pp. 47, 50, 51 and 2006 IEP/LTAP Proceeding, Exhibit B-1, p. 5-6)

1. US $ converted to Canadian @ $0.90
2. 2004 dollars
3. Peace River bundles only

BC Hydro concludes that its market price comparisons indicate that the awards are cost-effective (Report, p. 2).

1.7 Rate Impact

BC Hydro states that a rate impact analysis demonstrates the relative effect of an acquisition decision, whether the effect is as compared to current revenue requirements or to the cost of another supply alternative. With respect to the rate impact of the F2006 Call BC Hydro calculates:

i) the impact in the initial years of the EPAs as compared to BC Hydro's F2007 revenue requirement ("Initial Rate Impact Analysis"); and
ii) the relative impact as compared to a range of prices of alternative supply sources ("Relative Rate Impact Analysis").

BC Hydro calculates that the nominal payment in F2012 (the first full year of purchases under the ESC) will be $87.80/MW.h, or $79.50/MW.h deflated to F2007 dollars, while its average cost of bulk power, reflecting its heritage assets, in F2007 dollars is $33.10/MW.h.

Thus based on the delivery volumes, and the price difference described above, BC Hydro's Initial Rate Impact Analysis suggests that the first year rate impact, measured from a base of its F2007 revenue requirement of $2,865 million, would be 8.1 percent. In addition, it would expect no further rate increases due to the F2006 Call ESC and, in fact, the effect of the initial rate impact of 8.1 per cent would diminish over time as a combination of:

i) the cost of electricity purchased through the ESC declines relative to inflation;
ii) its domestic load grows; and
iii) its overall revenue requirements increase.
(Report, p. 52)

BC Hydro states that its domestic load is growing and causing the load/resource gap to increase and that without the new supply from the F2006 Call, it would have to acquire the electricity from alternative sources. The cost of electricity from such alternative sources would also have an impact on rates. Because of this, BC Hydro feels that it is instructive to measure the relative rate impact of the F2006 Call as compared to the cost of electricity if such electricity were acquired from an alternative source of supply (Report, pp. 52-53).

BC Hydro Relative Rate Impact Analysis suggests an impact ranging from +6.0 percent if the alternative supply price was $40 MW/hr to -8.0 percent if the alternative supply price was $120 MW/hr (Figure 14, Report, p. 54).

1.8 Government Policy

BC Hydro points out that the F2006 Call results are aligned with BC Government policy as follows:

- Secure, reliable supply – The 2002 BC Energy Plan (pages 6, 18 and 19) concludes that unless domestic energy sources are developed, British Columbians could find themselves increasingly dependent on imports at wholesale spot market prices and therefore vulnerable to price swings.

BC Hydro notes that the Provincial Government is currently developing an updated Energy Plan, which will, amongst other things, address electricity self-sufficiency. In a letter dated August 28, 2006 to the Commission the Ministry of Energy Mines and Petroleum Resources advises the commission that:

> "The new Energy Plan will not be released until after the BCUC has commenced its review of BC Hydro's 2006 Integrated Electricity Plan (2006 IEP), Long Term Acquisition Plan and the Fiscal 2006 to Fiscal 2008 Revenue Requirements Application. Therefore, to provide some context for the BCUC's review of these applications, I wish to advise you at this time that the new Energy Plan will be consistent with the February 14, 2006 Speech from the Throne which announced the Government's intention for British Colombia to become, "…electricity self-sufficient within the decade ahead." This will have implications for BC Hydro's resource acquisition activities.

and concludes:

> BC Hydro's ability to exceed the original F2006 CFT acquisition target is an encouraging development that bodes well for the objective of achieving self-sufficiency within the next ten years."

- More private sector opportunities - Pursuant to Policy Action #13, the private sector is to develop new electricity generation, with BC Hydro restricted to efficiency improvements and capacity upgrades at existing facilities.

- Environmental responsibility - Policy Action #20 establishes a voluntary goal for electricity distributors to acquire 50 percent of new supply from "BC Clean Electricity" over the next ten years.

BC Hydro points out that 73 percent of the awarded volumes comprise BC Clean electricity (Report, pp. 56-57).

1.9 Confidentiality

BC Hydro requests that the 38 filed EPAs and the summary information on bid prices by project be kept confidential for reasons of commercial sensitivity. In a letter to the Commission dated September 18, 2006 BC Hydro states that it made this request:

i) to fulfil commitments made during the F2006 Call process to maintain confidentiality, subject to order of the Commission and any regulatory process that the BCUC may establish for the F2006 Call;

ii) to protect the broader integrity of the competitive call process; and

iii) to protect the commercial interests of bidders.

The relevant confidentiality provisions are found in Section 20.8 of the Large Project EPA, Section 19.8 of the Small Project EPA and Section 17.4 of the CFT document. At the August 9, 2006 meeting, the

IPP community expressed concerns over the possibility that information submitted associating volumes with tendered prices. BC Hydro further notes that the effect of Policy Action #13 of the 2002 BC Energy Plan is to establish a competitive bidding process as an important means to secure future supply.

2.0 COMMISSION DETERMINATION

2.1 Scope of Section 71 Review

The first consideration for the Commission Panel is whether or not to exercise its discretion and establish a hearing to review the ESC filed by BC Hydro. In the Reasons for Decision to Order No. E-1-05 regarding the CFT for capacity on Vancouver Island the Commission stated:

> "A filing pursuant to section 71 neither requires a hearing nor approval. Nevertheless the Commission does have the authority to determine, following a hearing, that the EPA is not in the public interest and to declare the contract or portions of it unenforceable or make any order it considers advisable in the circumstances" (p. 12).

Paragraph 1.3 of the Rules concerning ESC reads as follows**:**

> "The hearing process pursuant to Section 71(2) of the Act will be required where the Commission initially determines that the contract may not be in the public interest. A hearing could also arise as a result of a third-party complaint."

Paragraph 1.6 reads:

> "It is the intention of the Commission to review and approve [accept] contracts expeditiously, and approval given usually without the requirement for a hearing."

With this Section 71 filing, BC Hydro seeks Commission approval to purchase increased volumes of energy from the F2006 Call at prices that are higher than have been previously accepted by the Commission. The review of this request needs to begin with consideration of previous decisions regarding the F2006 Call.

By Order No. G-103-05, the Commission approved the settlement agreement that established key parameters for the F2006 Call. If the awarded contracts can be considered to be a reasonable consequence of the regulatory parameters established for the F2006 Call, then a hearing process becomes unnecessary, in part, because stakeholders have previously been provided an opportunity to be heard on the same issues and because the previous decisions were made in contemplation of this filing and to facilitate this review. As noted below, in most circumstances, a hearing at this stage in a CFT is

unnecessary. In these circumstances, although additional volumes of energy to be purchased at relatively high prices is a concern, the Commission Panel has concluded that it can fully consider those issues without the benefit of a hearing. This conclusion is reached with due consideration to the F2006 Call, BC Hydro's request that the ESC be kept confidential, and the near-term need for additional power. Of particular significance are the conclusions reached below that the F2006 Call was competitive, fair, and transparent, and that the load forecast has increased from the time of the December 2004 Load Forecast to the February 2006 Load Forecast Update.

2.2 Request for Confidentiality

Paragraph 1.9 of the Commission's Rules reads as follows**:**

> **"**A Contract filed pursuant to Section 71 shall be made available to the public except where the Commission considers that disclosure is not in the public interest. Parties shall provide written submissions in support of any requests that contracts be kept confidential. The Commission will consider the justification provided and make a ruling on the request for Confidentiality."

In Order No. G-119-04 the Commission stated "neither the Act nor the Rules provide for third party input as of right into the matter of the Commission's determination of whether disclosure of an energy supply contract or other information is not in the public interest." Accordingly, the Commission Panel accepts BC Hydro's submission that the 38 filed EPAs and the summary information on bid prices be kept confidential for reasons of commercial sensitivity, set out in its September 18, 2006 letter to the Commission. Furthermore, the Commission Panel finds that the levelized bid prices provided in Table 3 of the Report (Page 21) represent a very useful disclosure of pricing, without jeopardizing the confidentiality of individual contracts. In order to allow valid comparisons, the unlevelized bid prices for individual contracts would need to include additional information such as term, volume, and escalators, which would significantly jeopardize confidentiality.

2.3 Call Process and Cost-effectiveness

The Commission has previously established and applied the cost-effectiveness test to ESC. Following the Commission direction, BC Hydro claims that it has employed the "cost-effective" standard to all

supply acquisitions. An important determination for this decision is whether or not the F2006 Call awards were the outcome of a competitive process that yielded a cost-effective result. In the Decision on the Call for Tenders for Capacity on Vancouver Island (Order No. E-1-05), the Commission said:

> "…once a completive market-based process has been undertaken and firm commitments from bidders have been obtained, a competitive process should, in most circumstances, be accepted as persuasive evidence of the cost-effectiveness of the resultant successful bid" (p. 13).

The Commission made a similar comment in BCHydro's F05/F06 Revenue Requirements (Order No. G-96-05) decision:

> "The Commission Panel recognizes that the appropriate regulatory review of an executed EPA awarded following a competitive process needs to be determined with consideration given to transaction costs and the need for the parties to the contract to proceed as efficiently and expeditiously as possible. In most circumstances, the competitive process should be sufficient to establish that the awarded contract was the most cost-effective bid. …**The Commission Panel also recognizes the views of the IPPs that it is essential that they learn as early as possible where there is significant regulatory concern with respect to any contracts they are entering into with BC Hydro**" (pp. 119-120). (bold not in original)

BC Hydro relies on the competitive CFT process as the primary support for its position that the F2006 Call awards are cost-effective.

The Commission Panel finds that the F2006 Call was designed and implemented to be fair, transparent and competitive and notes that potential bidders and other stakeholders had ample opportunity to comment not only on the proposed process but also on the draft documentation. The Commission Panel finds nothing to suggest that BC Hydro did not carry out the F2006 Call in accordance with the 2005 REAP NSP and the testimony of Mary Hemmingsen. Therefore, the Commission Panel concludes that the process was competitive and has provided a reasonable indicator of near-term market prices for independently produced power in British Columbia.

The Commission Panel also finds that BC Hydro conducted an appropriate tender assessment and evaluation of conforming tenders. The Commission Panel finds that the prices of all conforming tenders were levelized and adjusted in a manner consistent with that set out in the 2005 REAP NSP which

enabled them to be directly compared and thus ranked.

While the Commission Panel finds that the process was competitive and has provided a reasonable indicator of the cost of near-term supply from independently produced power, the Commission Panel does not agree that this conclusion alone is sufficient to determine the cost-effectiveness of the increased volume of contract awards in these circumstances, particularly in light of the higher prices associated with the greater volume of awards than originally contemplated in the NSP. While a competitive tendering process can be an adequate indicator of cost-effectiveness once a need has been clearly established and other alternatives to an extended acquisition have been considered, the competitive tender process alone cannot necessarily be relied on to demonstrate the cost-effectiveness of a much larger acquisition than was originally contemplated.

BC Hydro provides three reasons for the increased award volume: a greater load/resource gap; allowance for attrition and outages; and increased technology diversity. To further support the cost-effectiveness of the award volume, BC Hydro also compares the prices to cost estimates from its 2006 IEP filing, market price forecasts, and the cost of acquisitions in other jurisdictions. The Commission Panel considers the specific issues related to award volume and prices further below.

2.4 Load/Resource Balance

BC Hydro has elected to award a higher volume than was contemplated under the terms of the NSP. The Commission Panel notes that the load forecast prepared by BC Hydro has changed since the December 2004 Load Forecast on which the 2005 REAP NSP was based and that the change indicates that BC Hydro's requirements have increased by approximately 2,700 GW.h in F2011. While this increase has not yet been tested in BC Hydro's 2006 IEP / LTAP Proceeding, the Commission Panel accepts its direction.

While the Commission Panel accepts that the increased load forecast may be sufficient justification to increase the award volume from the F2006 Call, the Commission Panel is concerned by BC Hydro's portrayal of a "gap" as justification for acquiring additional firm and non-firm resources from the F2006 Call.

The Commission Panel notes two inconsistencies in how BC Hydro has portrayed the load/resource balance in various filings. Firstly, BC Hydro has included EE4 and EE5 in the load/resource balance included in its recent evidentiary update for the 2006 IEP/LTAP Proceeding (Exhibit B-1E, Table 8-2, and page 8-11) while EE4 and EE5 are excluded from the load/resource balance in the Report on the F2006 Call. Secondly the Commission Panel notes that BC Hydro's energy reliability criterion in the 2006 IEP/LTAP Proceeding includes an allowance for up to 2,500 GW.h of non-firm energy and/or market purchases to satisfy reliability objectives. The Commission Panel considers that the load/resource balance in the Report on the F2006 Call should have included consideration of the non-firm/market allowance and potential savings from future DSM programs.

For energy planning purposes, BC Hydro has provided explanation of the original justification of its non-firm energy/market allowance (2006 IEP/LTAP Proceeding, Exhibit B-10-1, BCUC IR 2.302.1) and has also indicated it is not proposing to change its energy reliability criterion (2006IEP/LTAP Proceeding, Exhibit B-10-1, BCOAPO IR 1.34.3 and IR 1.36.2). Moreover, BC Hydro's evidence filed in the 2006 IEP/LTAP Proceeding suggests that only under the high gas price scenario is no reliance on the non-firm/market allowance in the economic interests of ratepayers (2006IEP/LTAP Proceeding, Exhibit B-10-1, BCOAPO IR 1.34.3). Further, BC Hydro has indicated that the non-firm energy / market allowance can include domestic purchases of non-firm energy (2006 IEP / LTAP Proceeding, Exhibit B-10-1, BCUC IR 2.302.5), which presumably would include the 1,900 GW.h of non-firm energy BC Hydro proposes to purchase from the F2006 Call and from Alcan. The Commission Panel also notes that domestic purchases of non-firm energy (under fixed prices) would appear to comply with the government's stated but as yet undefined self-sufficiency goal. The Commission Panel accepts that it may be cost-effective to replace the non-firm energy/market allowance with fixed-price resources, but this is an economic consideration and should not be characterized as addressing a reliability deficit.

The Commission Panel expects the issue of BC Hydro's non-firm energy/market allowance will be addressed more fully in the 2006 IEP/LTAP Proceeding and makes no specific determinations regarding the cost-effectiveness of firm resources relative to non-firm resources and/or market purchases in meeting BC Hydro's energy reliability criteria or the targets to be established for future calls. The Commission Panel is not convinced the issue of the non-firm energy/market allowance was adequately addressed in establishing the original CFT firm energy targets under the NSP. However, the Commission Panel relies on the original NSP target of 2,400 GW.h of firm energy, and accepts that the

incremental change in load forecast of 2,700 GW.h in F2011 and 3,300 GW.h in F2012 is sufficient justification to increase the award volume. Based on the 2005 REAP NSP and the subsequent increases in load forecast the Commission Panel accepts BC Hydro's awarded volumes of 5,725 GW.h/year of firm energy from large projects and 1,400 GW.h/year of non-firm energy from both Large and Small Projects.

2.5 Allowance for Attrition and Outage

The Commission Panel notes that BC Hydro has also included an allowance of 30 percent for attrition and outages as part of its justification for the additional award volume. The Commission Panel notes that an allowance for attrition and outages was not explicitly included in the original NSP. Further, the Commission Panel notes that such a policy has not yet been tested in the 2006 IEP/LTAP Proceeding. The Commission Panel accepts BC Hydro's submission that not all of its awarded projects will reach COD, despite BC Hydro's attempts to reduce the incidence of attrition, because many projects still face the hurdles of permitting and securing finance.

However, the Commission Panel notes BC Hydro has made inconsistent statements regarding the level of attrition risk from the F2006 Call. For example, BC Hydro stated in the 2006 IEP/LTAP Proceeding that it is not expecting as much attrition from the F2006 Call because the tenders were not bound by a ceiling price, and because BC Hydro incorporated several features to reduce attrition, including non-refundable registration fees, requirements for paid interconnection studies in advance of registration, increased security requirements, and a Tender Risk Assessment Process (2006 IEP/LTAP Proceeding, Exhibit B-10-1, CPC IR1.1.13). The Commission Panel is also not persuaded by BC Hydro's justification for the specific attrition and outage allowance of 30 percent based on attrition levels from past calls and on an untested allowance for planned and unplanned outages. The Commission Panel also notes the F2006 Call is significantly different from previous calls. The Commission Panel notes that there is considerable range in the size of individual contract awards and that BC Hydro has indicated that it conducted a Risk Assessment on individual tenders. The use of a Monte Carlo-type analysis of expected volumes based on project-specific quantities and attrition risk estimates would have provided a more credible perspective on the overall volume risk associated with the proposed contract awards. Finally, the Commission Panel notes that it is not a forgone conclusion that increasing the volume of awards is necessarily the most cost-effective means for BC Hydro to manage the risk of attrition from a

specific call. For these reasons, the Commission Panel neither accepts nor rejects BC Hydro's argument to increase the award volume to reflect attrition and outage risk, or the specific attrition and outage allowance proposed by BC Hydro. The Commission expects this issue to be addressed more explicitly as part of the current 2006 IEP/LTAP Proceeding. As noted above, the Commission Panel has relied on the increased load forecast to justify a higher award volume in this particular Application.

2.6 Diversity and Government Policy

The Commission Panel shares BC Hydro's view that the introduction of differing resource types into its total portfolio could have benefits. However, the Commission Panel neither accepts nor rejects diversification as a rationale for increasing total contract awards. If diversification is important, it may be achieved by altering the ranking of resources for awarding contracts – e.g., selecting a higher cost contract over a lower cost one if the latter contributes to diversification and the demonstrated benefits offset the additional costs. As noted above, the Commission Panel has relied on the increased load forecast to justify a higher award volume in this particular Application. The Commission Panel expects that the issue of diversification and its treatment in the selection of resources should be addressed more fully in the 2006 IEP/LTAP Proceeding.

With respect to Government Policy, the Commission Panel notes that the 2006 Call complies with the government's stated policies of BC Clean and IPP development. The Commission Panel notes that the substitution of spot market imports by domestic non-firm energy at fixed prices will reduce the Province's reliance on energy imported at spot market prices, and that any difference in prices paid could be considered to be a risk avoidance premium. The Commission Panel expects that this issue will be further tested following publication of the Government's policy at a future IEP/LTAP Proceeding.

2.7 Award Costs

The Commission Panel accepts BC Hydro's submissions, for the purposes of this decision, that the load forecast has increased from the December 2004 Load Forecast to the February 2006 Load Forecast Update by an amount that provides an adequate basis for the Commission to accept the higher volume of the awarded contracts, provided that BC Hydro continues to bear the burden of establishing the load/resource balance deficit required to support the higher volume of the awarded contracts. Therefore,

the remaining issue is whether there is sufficient evidence for the Commission to accept the bid prices and the ABP of the awarded contracts.

The Commission Panel concludes that the awarded contracts were the least-cost of the contracts bid into this CFT. This alone is not necessarily evidence that a higher award volume is cost-effective. BC Hydro also has other options to address its load/resource gap. Given the increase in average prices over previous calls, the Commission Panel is concerned that this risk is higher than what may usually be assumed when accepting ESC. However, the Commission Panel accepts that, given the near-term need for new resources in F2011 and F2012 and the lead-time of other resources available to BC Hydro, it is a reasonable indication of cost-effectiveness of options that are available to BC Hydro in this particular instance, assuming the load resource deficit is confirmed in the 2006 IEP/LTAP Proceeding.

2.8 Rate Impact Analysis

The Commission Panel does not find the Initial Rate Impact Analysis performed by BC Hydro to be particularly relevant or helpful in its determination. The Commission Panel accepts that the cost of power BC Hydro will incur from these ESC will be higher than the price of power BC Hydro currently incurs. BC Hydro's study cannot inform it of what the cost of power would have been had BC Hydro done nothing. Furthermore, the analysis assumes 30 percent attrition, but rate impacts could be higher or lower if attrition is lower or higher than expected, both as a result of changes in total volumes and because the average unit price may be quite different depending upon which specific projects experience attrition. It is also unclear to the Commission Panel whether the Rate Impact Analysis conducted by BC Hydro considers only IPP payments or also includes the additional costs that may be incurred by BC Hydro to acquire the contracted energy (e.g., network upgrades, losses, GHG management). For these reasons, the Commission Panel cannot place any weight on BC Hydro's Initial Rate Impact Analysis. The Commission Panel does agree with BC Hydro that its Relative Rate Impact Analysis will be influenced by whatever price it would have to pay for alternative sources of supply. The "headline" initial rate impact of 8.1 percent might have been less misleading if an estimate of rate impacts as compared to other resources had been provided with the 8.1 percent.

2.9 Residual Risk

In the Commission Panel's opinion, many aspects of this decision would have been easier had a number of issues been tested and decided by the Commission in the 2006 IEP/LTAP Proceeding. However, given the 120 day window in the EPAs it is not possible for the Commission Panel to defer its Section 71 decision until the Commission has issued its decision on the 2006 IEP/LTAP Proceeding. Accordingly the Commission Panel finds that BC Hydro must bear the regulatory rate-setting risks that may arise from:

i) the Commission's findings in the 2006 IEP/LTAP Proceeding regarding the following: non-firm/market allowance; resource diversity; reserve margins; and allowance for attrition and outages;

ii) the regulatory impact of the Governments policy concerning electricity self sufficiency; and

iii) any future Commission determinations or decisions concerning Revelstoke 5; the Brilliant Expansion EPA; the Alcan LTEPA; and future DSM programs.

BC Hydro has not provided a sufficiently detailed or credible risk analysis to establish that the additional contract volume (and associated price and volume risks) as the most cost-effective means of managing attrition and other volume-related risks. The Commission Panel considers that these issues should be further considered in the 2006 IEP/LTAP Proceeding.

The Commission Panel is also concerned that the acquisition of volumes exceeding the load requirements previously noted will result in foregone opportunities from the F2007 and F2009 Calls. The F2006 Call was designed to purchase a small volume of power and has evolved to a CFT that will result in the purchase of a much larger volume of power than it was initially designed for. The prices of the higher priced power from the F2006 Call may unfavorably compare to the prices from a CFT designed to purchase a larger volume of power. At prices as high as those in the F2006 Call, that may be a reasonable expectation. However, the Commission has accepted the prices from the F2006 Call are cost-effective (assuming confirmation of the timing and magnitude of the anticipated load/resource gap in the 2006 IEP/LTAP proceeding) and it would be unfair to BC Hydro to conduct an "after the fact" review based on prices from future CFT. Therefore, the regulatory risk to BC Hydro will be limited to

the risk that the Commission does not accept the load requirements that BC Hydro relies on in this proceeding to support its awarded contracts, particularly related to the non-firm/market allowance.

BC Hydro has chosen to purchase power from the F2006 Call that exceeds the load requirements from the load resource balance set forth in Table 8-2 adjusted for the non-firm energy/market allowance (2006 IEP/LTAP, Exhibit B-1E). Moreover, BC Hydro has chosen to purchase firm energy that exceeds this load requirement and also has chosen to purchase a significant increment of non-firm energy. The prices of these purchases, both firm and non-firm, increases the magnitude of the risk of BC Hydro's choices regarding the volumes to purchase from the F2006 Call.