

BC HYDRO
2004/05 AND 2005/06
REVENUE REQUIREMENTS

FINAL ARGUMENT

ON BEHALF OF

BC Old Age Pensioners' Organization, Council of Senior Citizens' Organizations of BC, federated anti-poverty groups of BC, Senior Citizens' Association of BC, End Legislated Poverty, West End Seniors' Network and Tenants Rights Action Coalition (collectively referred to as BCOAPO)

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Introduction

This is the Final Argument on behalf of BC Old Age Pensioners' Organization, Council of Senior Citizens' Organizations of BC, federated anti-poverty groups of BC, Senior Citizens' Association of BC, End Legislated Poverty, West End Seniors' Network and Tenants Rights Action Coalition (collectively referred to as BCOAPO) on BC Hydro and Power Authority's (BC Hydro; the utility) 2005-2006 Revenue Requirements Application.

This was a challenging proceeding for all parties, particularly intervenors, for a number of reasons. The first was the sheer mass of documentation filed before the hearing commenced. This resulted in intervenors having to focus on issues of particular concern to them rather than attempting a comprehensive review of BC Hydro's proposed expenditures.

Second, BC Hydro is a very different utility today than it was 10 years ago when it last appeared before the Commission in a revenue requirements hearing. The creation of the British Columbia Transmission Corporation and the internal restructuring of BC Hydro made it impossible to make any meaningful comparisons with operations as regulated in the past. As stated by Mr. Wallace, counsel for JIESC, in his opening statement, "for all practical purposes, it might as well be BC Hydro's first application ever" (Transcript v. 3 page 253.)

Third, the regulatory environment with respect to BC Hydro is somewhat different from that which existed in 1994. The Commission has to take into account the provincial government's Energy Plan, the government's response to the Commission's recommendations with respect to the Heritage Contract and, Heritage Special Directive No. HC2 (HSD2).

Within this context, it is BCOAPO's submission that the Commission, in determining BC Hydro's revenue requirement for the two test years should clearly state, consistent with utility regulatory practice, that the onus of proof is on BC Hydro to convince the Commission that, on the balance of probabilities, the rate increase it is proposing and the expenditures it plans to make are appropriate.

In its Final Argument dated June 30, 2004 BC Hydro attempts to reverse this onus when it states at page 31:

“In particular, where BC Hydro is managing to meet appropriate objectives, there is no place for arbitrary cost disallowances, or the arbitrary rejection of revenue or other forecasts. Any such disallowances must be reasoned and rooted in quantitative evidence. That evidence can be from qualified intervenors or BC Hydro witnesses, but in either case must identify more effective methods that BC Hydro could employ, and the net cost effect arising from the use of those methods. Only in those circumstances should the Commission substitute its views on the prudence of expenditures or the veracity of forecasts in respect of objectives that the Commission is also charged with serving.”
(emphasis in original)

There is ample evidence that, in various areas of its operations, BC Hydro has not been especially prudent in its expenditures. A number of these areas, including Power Smart and distribution expenditures are addressed later in this argument. It is important that the Commission not simply rely on information provided by the utility, which was not specifically directly challenged by intervenors but look closely at the operations of the utility, to the extent possible, over the past 10 years as well as its projected activities for the two test years.

It is also important that the Commission keep in mind the significant difference in resources available to BC Hydro compared to those available to intervenors, both individually and collectively. Intervenors did their best to cooperate on a number of issues and attempt to effectively utilize their available resources to assist the Commission.

BCOAPO’s argument will be structured somewhat differently from that of BC Hydro. BC Hydro organized its argument around what it considered four specific applications, as set out on pages 2-5 of its Final Argument. BCOAPO treats this application as a revenue requirement application requiring a number of specific decisions by the Commission (revenue requirement, deferral accounts, utility planning) that traditionally have been part of utility revenue requirement applications. The organization of the argument reflects this.

In BCOAPO's submission, this proceeding is important not only to establish the utility's revenue requirement for the two test years, but also to establish, particularly through the interpretation of HSD2 but also through consideration of the provincial Energy Plan and the government's response to the Commission's heritage contract recommendations, the appropriate general framework for the future regulation of BC Hydro. Because this is BC Hydro's first revenue requirement in 10 years and because it is starting from scratch, it is important to establish an effective regulatory structure, particularly with respect to the utility's long-term planning processes.

In response to BCUC IR No. 3.221.3 (Exhibit B1-25) BC Hydro stated that it "*is not a traditional investor owned utility which pits ratepayers and shareholder against one another, with management on the side of the shareholders.*" It went on, in the response to this information request to discuss the distinctions between it and privately owned utilities.

Counsel for BCOAPO explored this position with Mr. Elton at some length. (Transcript v. 6 pages 760-772)

BC Hydro may believe that ratepayers and shareholders interest are on the same side. BCOAPO disagrees. Given the requirements of HSD No. 2, which, unlike the Energy Plan, has binding effect on the Commission, the relationship between BC Hydro's shareholder and its ratepayers is very similar to this relationship with investor owned utilities. The Commission's responsibility to regulate the utility under the *Utilities Commission Act*, taking into account the interest of the shareholder and ratepayers, is similar to its regulation of its other regulated utilities.

BCOAPO wishes to address two other introductory issues.

First BCOAPO takes no position on the proposed WTS rate reduction.

Second BCOAPO agrees with BC Hydro with respect to the appropriate evidentiary cut-off date for the purpose of this application for the reasons set out on pages 27-29 of BC Hydro's Final Argument. However BCOAPO notes that the reference to BCOAPO counsel's endorsement of

an evidentiary cut-off date refers to comments, not of BCOAPO counsel, but of Mr. Weafer on behalf of his clients.

Legal Issues

This submission will next address the legal issues identified by the Chairman in Transcript v. 5 page 377 and Transcript v. 21 page 3993 and 3994. Many of these issues relate to the interpretation of the Special Direction and together the Commission's decision on these issues will provide the general regulatory framework for future regulation of BC Hydro.

The jurisdiction of the Commission and its powers with respect to interpreting special directions from the government was recently the subject of a BC Court of Appeal decision in BC Hydro and Power Authority v. Terasen Gas (Vancouver Island) Inc., 2004 BCCA 346 dated June 23 2004. Mr. Justice Mackenzie, speaking for the court, stated, at paragraph 23:

"I have set out the statutory provisions at length because they express the determination of the Legislature to insulate the Commission from judicial review of its specialized rate-making jurisdiction and they establish a close policy connection between the government and the Commission through the mechanism of special directions which take precedence over inconsistent provisions of the Commission's governing statutes or regulatory principles otherwise applicable. This implies a high degree of judicial deference within the terms of a special direction but less deference in the interpretation of terms that are mandatory and do not import an element of discretion."

In dismissing the appeal he went on to state at paragraph 47:

"In my view, the Commission recognized that the rate-making treatment of the Deficiency Account was the real complaint and, as concluded above, its treatment of that account accorded with its Special Direction mandate. To the extent that the Special Direction departed from general regulatory principles otherwise applicable, the Special Direction governed. The Commission concluded that the Special Direction and general regulatory

principles were not inconsistent and there was no breach of article 11.01 (b). Once the conclusion is reached that the Commission was correct in interpreting its Special Direction mandate, the Commission's determination was within its rate-making jurisdiction and does not contain any reviewable error. In my view, there is no basis for this Court to disturb the order of the Commission on this ground of appeal."

In other words, if the Commission correctly interprets the government's direction to it in the Special Direction, how the Commission determines, in its discretion, to implement that direction is clearly within its jurisdiction.

Mr. Justice Mackenzie, in this decision, discusses at length the provisions of the *Utilities Commission Act*, which provides the Commission with significant discretion in interpreting how to apply and implement the specific requirements of a special direction. In BCOAPO's submission, this decision strengthens the role of Commission in its regulation of utilities, such as BC Hydro, which are subject to government special directions. It should inform the Commission's consideration of the legal issues arising from this proceeding.

Addressing the specific legal issues:

a) Does the Commission have the jurisdiction to establish an appropriate equity component for BC Hydro?

In BCOAPO's submission, the answer is "yes" but it should not do so in this proceeding. Special Direction HSD2 sets out what should be included in the equity component of BC Hydro's capital structure. However it does not specify any specific debt/equity structure or goal, as was the case in special directions previously issued to the Commission by governments as early as the 1980's which established a goal of an 80/20 debt equity structure.

Within the general framework established by the BC Court of Appeal the Commission is required to include the specific items included in the definition of "equity" in section 1 of the

Special Direction. However it is not restricted as to how those specific items are included in any specific determination of BC Hydro's annual revenue requirements.

The Commission also needs to take account of section 4 of Special Direction HSD2 which sets out the basis for its establishing BC Hydro's revenue requirements. In BCOAPO's submission the provisions of section 4, particularly considering the BC Court of Appeal's decision, are more significant than the definition of "equity" in section 1. The Commission, while it must include all the specific elements stated in the definition of "equity" in determining BC Hydro's equity for the test years, is not restricted to the specific amounts included in BC Hydro's application. It must assess how these items should properly be addressed within its responsibilities under section 4 of the Special Direction and its discretionary jurisdiction under the *Utilities Commission Act*.

Consistent with the decision of the British Columbia Court of Appeal in Terasen Gas (Vancouver Island) Inc., BCOAPO submits that, while contributions in aid of construction is an item that is required by HSD2 to be included in the definition of equity, it does not mean that the method of determining contributions in aid of construction is frozen in time. It is open to the Commission to consider how they are best included in BC Hydro's equity component and to allow for changes in BC Hydro's extension policy which could impact on the amount of contributions in aid of construction in future years.

However BCOAPO does not support the Commission establishing a specific equity component for BC Hydro in this proceeding.

While it is BCOAPO's position that it is within the jurisdiction of the Commission to determine an appropriate equity component, there is not sufficient evidence be found in this proceeding to make an informed decision. It would be open to intervenors in subsequent BC Hydro proceedings or in a specific application to the Commission to have this issue considered by the Commission on the basis of expert evidence, in the same way that the Commission has considered appropriate capital structures for other utilities under its regulatory jurisdiction.

b) Can the Commission approve the heritage deferral account as proposed by BC Hydro?

BCOAPO agrees with the position of BC Hydro on this issue as set out on pages 67-75 of its Final Argument. BCOAPO believes that this approach is consistent, not only with section 7 (a) (i) and Schedule A to Appendix A of HSD2, it is also consistent with the decision of the BC Court of Appeal in the Terasen Gas (Vancouver Island) Inc. decision.

c) BCTC Deferral Accounts

BCOAPO accepts BC Hydro's proposal outlined in the Final Argument (page 65) that the BCTC Transition Deferral Account be used to record any variances between the F2006 forecast of the BCTC Revenue Requirement and the BC Hydro Asset Management/Maintenance Revenue Requirement components of the Transmission Revenue Requirement, and BC Hydro's adjusted forecast of those revenue requirements for F2006 based on the outcome of BCTC's F2006 revenue requirement proceeding.

d) Are the service level agreements contemplated in the master agreement designated agreements?

With respect to the BCTC Service Level Agreements, BC Hydro stated in their Final Argument (page 115) that they expect that the Commission has no jurisdiction to approve the agreements but will articulate its final position when it files those agreements. BCOAPO submits that it would like the opportunity to respond to BC Hydro's position at that time.

e) The test for the prudence review of amounts in the HDA and the NHDA.

BCOAPO agrees with Mr. Morris that *"the amounts in the Heritage deferral account and the non-Heritage deferral account should be subject to prudence review to the same extent these items are subject to reasonable review in a proceeding such as a revenue requirement hearing."* (Transcript v.8 page 1035)

However the issue is when the prudency review should take place. In BCOAPO's submission the review should take place on an annual basis either in connection with a revenue requirement application, if there is one, or separately if there is not. It is important that the prudency review take place as close as possible to the end of the year in which items have been included in the deferral account. This would allow the Commission to make appropriate determinations as to what, if any, adjustments should be made to rates as a result of changes to the deferral accounts.

In many respects, these deferral accounts are not dissimilar to the commodity cost deferral accounts which the Commission has established for its regulated natural gas utilities. In those cases, the deferral accounts relate to commodity costs which are subject to variations mostly outside the control of the utility and the intent is to protect the utility's customers, as far as possible, from extreme variations in their bills.

BC Hydro witnesses stated, on more than one occasion, that BC Hydro believes that its proposed deferral accounts support the purpose of developing smooth, stable rates and removing volatility. (e.g. Transcript v. 9 page 1228)

BCOAPO does not contend that BC Hydro's deferral accounts need to be reviewed on a quarterly basis, as is the case with the natural gas utilities commodity cost deferral accounts but they do need to be reviewed on a consistent and regular basis to ensure they are being properly implemented and to protect consumers' interests.

f) Application of Exhibit A-50 in the determination of the depreciation rates for Burrard Thermal

BCOAPO agrees with the position of BC Hydro as set out on page 25 of its Final Argument with respect to the application of Exhibit A-50. However, as noted later under the heading "Accounting Issues", BCOAPO does not support BC Hydro's proposal with respect to accelerated depreciation of the Burrard Thermal Plant.

g) FRSR Reserve

BCOAPO believe it is clearly within the jurisdiction of the Commission to either establish an FRSR reserve or provide for the amortization of the FRSR.

There are a number of regulatory decisions of the Commission in which it exempted a utility from the provisions of GAAP for appropriate regulatory reasons. This is a clear example in which this approach is not only acceptable, but appropriate, given how the proposed change impacts BC Hydro's customers as set out in the evidence of Mr. Johnson on behalf of the JIESC. (Exhibit C23-5) This approach is also supported by the Court of Appeal decision in Terasen Gas (Vancouver Island) Inc. case referred to above.

h) Is there sufficient evidentiary basis or are their regulatory principles upon which the Commission can determine the capital structure for BC Hydro.

This issue was addressed in response to item a) above.

BC Hydro's Planning Process

One of the difficulties BCOAPO had in assessing BC Hydro's application is that, as was generally agreed, the process leading up to the hearing was really the reverse of what parties have come to expect in utility regulation.

In a normal process there would be a long-term electricity plan, a short-term plan based on the long-term plan and then a revenue requirement application.

This process involved the filing of the Revenue Requirement Application on December 15, 2002. The Application was subsequently updated on February 20, 2004. It was not until March 31, 2004 that BC Hydro filed its Integrated Electricity Plan (IEP) (Exhibit B1-24) and its Resource Expenditure and Acquisition Plan (REAP) (Exhibit B1-23). The REAP covers proposed capital expenditures for the next 4 years, including the test period.

While BC Hydro is requesting approval of the REAP under the provisions of section 45 (6.1) of the *Utilities Commission Act*, it takes the position that the IEP does not require Commission approval. BCOAPO agrees that, in its present form, the IEP is not susceptible to any meaningful stakeholder or Commission review but this does not mean that the Commission should accept it as filed.

BCOAPO did not find it easy to understand BC Hydro's planning process. Generation operations is responsible for short-term planning (up to 3 years), and distribution operations are responsible for long-term planning beyond this period. (Transcript v. 12 pages 1994-1995) However the system planning part of distribution operations is responsible for filing the REAP which covers a 4 year planning process.

It is very important, as BC Hydro comes back under full regulation by the Commission, that a long-term planning process be established that provides the Commission and stakeholders with a clear understanding of how the utility plans to meet future load growth and the priorities which it believe are appropriate for meeting that growth. Without this, there will not be a full and effective regulatory oversight of BC Hydro's long-term planning. In BCOAPO's submission, BC Hydro's planning process, as presently structured, is totally unacceptable for these purposes.

The IEP is not really an electricity plan but a menu of a myriad of available options without any prioritization. In fact it was difficult during the hearing to get a sense of how the planning process prioritized even the short-term programs. As BC Hydro states in its Final Argument (page 84) "*the IEP is a 20-year outlook that identifies options, as opposed to choosing amongst them.*" What is required is a real long-term electricity plan which, while it would obviously undergo revision from year to year, would give the Commission and stakeholders a clear indication of how the utility is proposing to meet future load growth and to give them an opportunity for meaningful input into the process.

Mr. Sanderson attempted to describe, in response to a question from the Chairman, how BC Hydro sees its proposed planning process evolving (Transcript v. 8 pages 1002-1019). The

utility provides a more limited discussion in its Final Argument (pages 84-92). With respect, the explanations raise more questions than they provide answers.

In BCOAPO's submission, BC Hydro's approach does not meet the requirement of section 45 (6.1) of the *Utilities Commission Act*. That section requires BC Hydro to file with the Commission "*in the form and at the times required by the Commission; a) a plan of the capital expenditures the public utility anticipates making over the period specified by the Commission...*"

The Commission has not established a specific timeframe for a plan under this section. BC Hydro has decided to adopt a timeframe of 20 years for the IEP and 4 years for the REAP. In BCOAPO's submission, the former, even if it were an energy plan as contemplated by the *Act*, is too long, and the REAP is too short. In fact, the REAP does not provide anything other than an initial indication of what the utility proposes to do over the 4 year period. This could be changed in each annual REAP. It is BC Hydro's position that it is the REAP rather than the IEP which is intended to provide the Commission and stakeholders with information as to where the utility is proceeding with its long-term planning (BC Hydro Final Argument page 56; page 89).

This is clearly not acceptable. It does not reflect what one would expect from normal utility planning. The Commission should direct BC Hydro to develop an integrated electricity plan which is a plan that makes clear choices as to appropriate options rather than just listing them and a plan which covers an appropriate planning period. 10 years seems to be the period adopted by many other utilities, including, as BCOAPO is advised, Manitoba Hydro and Hydro Quebec.

Short-term capital expenditures could then be dealt with in revenue requirement hearings or, in years where no revenue requirement is applied for, in a document similar to REAP but covering one or two years and reflecting the priorities set out in a proper IEP which has been approved by the Commission.

In BCOAPO's submission, in the same way that BC Hydro propose filing a REAP every year it should be required to comply with section 45 (6.1) by filing a 10 year IEP every year.

This will provide the Commission and stakeholders with much better information with respect to the utility's long-term plans. The IEP and REAP filed by BC Hydro in this proceeding give no indication of how priorities for the next 4 years have been decided or how they would be decided in the future. Specifically in the initial REAP filed by BC Hydro, it is not clear on how the proposed expenditures were chosen, particularly since two of the major ones (Site C and Revelstoke/Mica) were not included in the original capital expenditure plan in BC Hydro's Application. (Exhibit B1-1)

The inclusion of expenditures related to Site C, given that project's long history raised a number of questions during the hearing. The responses did not make it clear why Site C, or at least expenditures keeping it open as a viable option, should be a priority during the test period.

Generation would be responsible for bringing the project forward but it was clear from the evidence of Ms. Farrell that she is not an enthusiastic supporter of this option. (Transcript v. 19 page 3384). She also listed a number of concerns with respect to the development of Site C which would make it an even more risky project than it was more than 20 years ago. (Transcript v. 19 pages 3288-3289)

Given the inclusion of Site C expenditures in the REAP, there appears to be some difference of opinion within the utility as to the priority that should be given to Site C and other large hydroelectric projects that are referred to in the IEP. (Transcript v. 19 page 3375) Generation is not even a proponent of large hydro-electric projects (Transcript v. 19 page 3377).

There was some confusion as to the purpose of the expenditures included in REAP with respect to Revelstoke and Mica. Initially it appeared that BC Hydro was planning to spend money to keep both options open and then to decide, sometime in the future, which might be the more appropriate project. However it became clear in the course of cross-examination by counsel for BCOAPO of panel 6 that, in fact, the generation group had come to the conclusion that Revelstoke was the only viable option (Transcript v. 19 pages 3369-3372)

BCOAPO remains concerned that, without a proper context, questions remain as to the effect of the Commission approving the REAP. On the one hand, as is apparent with the proposed expenditures on Site C and Revelstoke, it may be approving expenditures, at least for the two test years, that may turn out not to have been appropriate because no final decision has been made as to whether these projects will be priorities in the long run. On the other hand BCOAPO is concerned with the extent to which any approval of these expenditures may be interpreted by BC Hydro. This concern arises from the position taken by BC Hydro in its Final Argument with respect to past capital expenditures, in particular the Burrard Upgrade Project, on F2005 and F2006 revenue requirements. The Argument states *“Evidence provided by BC Hydro on this issue supports the prudence of those expenditures at the time they were made. In BC Hydro’s submission it would be inappropriate to second-guess those decisions with the benefit of hindsight particularly in those circumstances the Commission was involved throughout”*(Final Argument page 52)

BCOAPO is concerned that BC Hydro might take a similar position with respect to any of the REAP expenditures approved by the Commission in this proceeding, even if they were to turn out to be, on further review, ill-advised.

BCOAPO submits that the Commission should not approve the REAP as filed but should require BC Hydro to develop, with appropriate Commission staff and stakeholder input a 10 year integrated electricity plan which clearly sets out resource choices and priorities. Obviously these will change from year to year as matters develop. However that is no different from what would happen with respect to the 4 year REAP plans. The difference is the REAP plans do not cover an appropriate long-term planning period and, as previously noted, the IEP is not a capital expenditure plan as BCOAPO contends is contemplated by section 45 (6.1) (a) of the *Utilities Commission Act*.

Obviously the Commission needs to address the capital expenditures proposed by BC Hydro in its original application, particularly those required to deal with reliability and security of service, particularly in the distribution and transmission areas.

BCOAPO agrees that expenditures to maintain security and reliability are important. However it encourages the Commission to look very carefully at BC Hydro's expenditures and ensure that the utility has established that its proposed capital expenditures will result in maintaining or improving existing levels and that there is a mechanism for appropriately measuring this. These issues are discussed in more detail later in this argument.

Developing business plans for specific projects is a necessary aspect of a budgetary process. However, while an individual business plan can establish the case for proceeding with that particular project, there also needs to be a process which does not simply add up the projects whose business plans are approved but provides some mechanism for establishing which are really necessary in the test years and which while may be beneficial in the longer term but not immediately necessary.

As BC Hydro embarks on a new era of Commission regulation, the Commission needs to establish an ongoing regulatory framework that enables it to effectively regulate the utility and allows stakeholders to have meaningful input into the regulatory process. A proper capital planning process is a key element of this ongoing regulatory regime and is clearly a requirement of the provincial Energy Plan and the amendments to the *Utilities Commission Act* which resulted from that plan.

In BCOAPO's submission, BC Hydro's proposed planning process falls short of meeting these requirements.

Power Smart

One of the key elements of BC Hydro's plans for meeting future load is its Power Smart program. It is anticipated it will meet a significant portion of future load growth over the next 10 years. (Exhibit B1-2 page 1) It will have an impact on revenue requirements of approximately \$125 million over the 2 test years. (Exhibit B1-1 Chapter 4 Table 4-1 as updated by Exhibit B1-13) Ms. Van Ruyven testified that about 3600 GWh of 10,000 GWh over the 10-year period is planned to come from Power Smart. (Transcript v. 6 page 754) It is not clear to BCOAPO

whether Power Smarts priority status has been established for the longer term or whether, given the framework of the IEP, it could change. In any event BCOAPO has some concerns with the Power Smart program as presently constituted.

BCOAPO supports demand side management and Power Smart in principle. However, it wants to ensure that Powers Smart money is being spent appropriately.

Because Power Smart expenditures are significant and BC Hydro is relying on Power Smart to help meet a signification portion of new load growth, it is important to determine a) that it will be able to meet its goals and b) that expenditures are appropriate and do not result in unfair intra- or inter-class subsidies.

It is important to remember that the original Power Smart program was essentially terminated in the 1990's. It was re-instituted in 2001(Transcript v. 6 page 706). BC Hydro had to ensure participants that it will not be terminated again, and they can invest with assurance whether they be customers or other participants. This tends to encourage Power Smart to over invest in incentive programs.

A fundamental question is to what extent to Power Smart direct investments assist ratepayers other than recipients. Are they benefiting ratepayers generally to the extent claimed by BC Hydro?

BC Hydro uses three tests to determine the cost-effectiveness of its Power Smart programs. These are: a) Total Resource Cost test (TRC), b) Utility Cost test (UC) and c) Rate Impact Measure (RIM). These tests are described in pages 94-96 of BC Hydro's Final Argument.

In BCOAPO's submission there are two issues of importance in assessing Power Smart expenditures. These are the relationship between the three tests and how these tests are applied by BC Hydro.

BCOAPO agrees that the TRC and RIM test are useful in assessing the cost effectiveness of and, in the case of RIM test equity considerations. BC Hydro's position is that the RIM test is an equity rather than an efficiency test but equity between rate classes and within classes is important. (BC Hydro Final Argument page 96)

BCOAPO called Dr. Marvin Shaffer to provide evidence on these issues, particularly with respect to Power Smart's industrial load displacement programs. Dr. Shaffer's evidence focused on BC Hydro's major Power Smart industrial expenditures in the past few years. These are load displacement programs involving two major projects, one in Prince George (Canfor) and one in Kamloops (Weyerhaeuser). The investment in the Canfor project is \$49 million and in the Weyerhaeuser project is \$18 million. (Transcript v. 13 page 2052)

As stated in Exhibit C10-3 page 1 the purpose of Dr. Shaffer's evidence was *"to assess the rational, impacts, efficiency and equity of these expenditures, particularly in the context of a BC government's energy policy which calls for new rate structures to provide incentive for industry to self generate and conserve"*. The evidence filed on behalf of BCOAPO focused on this area because in the Power Smart based case of 690.6 million, 39% is allocated to the industrial sector (Exhibit B1-2 Chapter page 4; Transcript v. 13 pages 20-21). As noted on page 101 of BC Hydro's Final Argument the Canfor and Weyerhaeuser load displacement programs make up the bulk of BC Hydro's anticipated expenditures in the industrial sector during the test period.

BCOAPO also notes that neither of these project proponents bid into the Customer Based Generation Call (BC Hydro response to BCOAPO IR 1.89.0 (e) page 4 Exhibit B1-13). In BCOAPO's submission if different sources of energy are to be assessed on an equal basis, individual projects should not be given the opportunity of either bidding into a call or negotiating directly with BC Hydro depending on how they saw their interest. As noted in on page 3 to the responses to the same interrogatory, the major terms of the load displacement agreements with Canfor and Weyerhaeuser are different from the major terms of the 2002 Customer Generation/2003 Green Power Generation Calls.

BCOAPO is clearly not asking that these contracts be broken. However they provide the best examples for analyzing how BC Hydro evaluates potential load displacement programs. This is important in determining whether it should continue to emphasize these programs. Dr. Shaffer challenged BC Hydro's RIM analysis of these projects.

There is no major difference in the basic approach of Dr. Shaffer and BC Hydro. However, Dr. Shaffer's evidence is that, in applying the RIM test, BC Hydro should utilize Mid-Columbia market prices. BC Hydro prefers the weighted average of energy call prices. Without the load displacement projects, BC Hydro would, at least in the first few years, probably have to increase its market purchases. Accordingly, Mid-Columbia market prices are an appropriate comparison in calculating the RIM test.

If Mid-Columbia market prices are used, it is clear from Dr. Shaffer's evidence that these two projects would have a RIM of significantly less than 1, which would mean that they are being subsidized by other ratepayers.

On page 97 of its Final Argument, BC Hydro makes a point that from an electricity consumer's point of view, bills matter more than rates. BCOAPO agrees that, particularly with residential consumers, the bottom line on the bill is more significant than the actual rate applied to reach that bottom line. However, aside from applying the TRC and RIM test to a particular Power Smart program, whether load displacement programs or other programs, it is impossible to determine how BC Hydro's investment in any individual program impacts the customer's bill. Even if an individual customer's bill is believed to be lower than it would have been, because of the cost of Power Smart programs compared to other resource options, the question remains: would the bill be lower if the customer, or the customer's class was not subsidizing other customers or other customer classes. It is therefore necessary to evaluate the RIM impact of each individual project.

In his filed evidence, (Exhibit C10-3 page 7) Dr. Shaffer referred to an American econometric study that makes the point that utilities tend to over estimate DSM savings. Dr. Shaffer and BCOAPO do not cite the study as proof that BC Hydro is overstating benefits, but to raise the

issue that the Commission needs to very carefully evaluate BC Hydro's evidence on Power Smart benefits. BCOAPO does not agree with the statement in BC Hydro's Final Argument (page 109) that "*BC Hydro's own evaluation methodologies provide a much better assessment of the extent to which it is accurately forecast energy savings*". That is the very issue in dispute.

A comparison of Dr. Shaffer's calculations of the RIM test with respect to the Canfor and Weyerhaeuser projects with that of BC Hydro clearly raises the issue of whether BC Hydro has, in fact, overestimated the positive impacts of these two projects. In response to Information Request BCOAPO 1.89.0 (b) (Exhibit B1-13), which asked the utility to provide the specific rate impact evaluations that were undertaken in support of each of the industrial incentive plans for 2004/05 and 2005/06, BC Hydro responded: "*There is a significant list of opportunities for incentive projects in F2005 and F2006. Many of these opportunities have not progressed to a stage where specific rate impact evaluations have been finalized. For those investments that are in place, the Canfor 48MW turbo generator project in Prince George is typical.*" This suggests that it is BC Hydro's position that all these projects would have a RIM of greater than 1. If the Canfor project is, in fact typical, on Dr. Shaffer's approach they would all have RIMs of less than 1.

BCOAPO does not take the position that the RIM test should be the only test to be applied to Power Smart programs. It supports the TRC test. Its position is that load displacement programs, and indeed all Power Smart programs, should be subject to rigorous analysis. Where there appear to be cross-subsidies there needs to be a very clear reason for determining that the program should still be implemented.

One issue that has to be determined is what programs might be carried out without the need for a subsidy from BC Hydro. BC Hydro's position is that neither the Canfor nor Weyerhaeuser projects would have proceeded without a BC Hydro investment. However both of these programs in one form or another appear to have been under consideration for some time. And, as noted above, neither, at least in their present forms, were subject to a competitive bidding process. There was a significant judgment exercised by BC Hydro's personnel that large subsidies were required from the utility for these projects to proceed.

With respect to industrial load displacement programs in the future, the question is what impact will stepped rates have on the need for Power Smart investment in load displacement programs. As set out in the provincial Energy Plan, one of the main purposes of introducing stepped rates is to encourage self-generation by industrial customers. (Exhibit C4-3 page 30)

BC Hydro's evidence is that it considered the impact of stepped rates in a general way. In response to BCUC IR 1.55.0 (Exhibit B1-7) BC Hydro referred to a \$60 million saving over the life of the 10-year Power Smart plan. That \$60 million includes a \$48 million reduction in program costs and a \$12 million reduction in overheads. Mr. Marchant referred to this as "a rough estimate based on some rough assumptions about what a stepped rate design might look like." (Transcript v. 13 page 2036)

It will be difficult to ascertain what the real impact of a stepped rate will be until the actual rate is established and implemented. Accordingly, BCOAPO submits that the Commission should direct BC Hydro not to proceed with any further load displacement programs involving a subsidy from BC Hydro until such time as an industrial stepped rate has been established and there is an opportunity to properly evaluate its impact on these programs.

On cross-examination by counsel for BC Hydro Dr. Shaffer indicated that in his view, an approach similar to the "shopping credit" proposal originally put forward by BC Hydro in the Heritage Contract proceedings is an appropriate approach. As noted by Mr. Sanderson, on cross-examination, (Transcript v. 20 page 3669) and by BC Hydro in its Final Argument (pages 106-107), this proposal was not accepted by BC Hydro's customers including BCOAPO. However BCOAPO's position was not that the proposal was necessarily wrong in principle but, because it was so strongly opposed by the utility's industrial customers, it could not be implemented. The concept of an industrial stepped rate will have to evolve if it is to fully meet the goals of the Energy Plan.

BCOAPO is not concerned only with industrial Power Smart programs although those are the main expenditures, representing some 39% of base case expenditures. Residential and commercial programs also need to be properly analyzed.

One residential program that needs to be looked at critically is the Compact Florescent Lighting program (CFL). While intuitively this would seem to be a good program, it needs to be continually reviewed in order to determine whether customers who are being subsidized by the program to utilize the bulbs are actually using them and replacing them with similar bulbs. (Transcript v. 13 pages 2026-2027) For this reason it is difficult to assess the ongoing savings. On the other hand, programs encouraging energy efficient appliances and energy efficient buildings ongoing savings are easier to measure. Investment by BC Hydro either through Power Smart or otherwise in this type of program may be more appropriate.

Mr. Hobson also indicated that, because of the market barriers involved in the CFL program it has higher costs at the front end (Transcript v. 13 page 2023). Even though this is the major residential Power Smart program, it still does not have a RIM of greater than 1 although it is close at .9 (Exhibit B1-81). In its Final Argument, BC Hydro points out that programs with a TRC benefit/cost ration of close to 1 at the *Plan* stage are expected to show quantifiable non-energy benefits at the business case stage that would make TRC benefits/cost ration at least 1. (Page 98) However these benefits are not easy to quantify and, as a result, some judgement is involved.

Just as programs with a RIM less than 1 should not automatically be rejected if there are good reasons within the overall Power Smart program to proceed with them, neither should programs with a RIM in excess of 1 based on supposedly quantified non-energy items be automatically undertaken.

BCOAPO is also concerned with how the Commission and ratepayers can properly assess the value of the non-direct program Power Smart costs such as overhead and administration and education programs and advertising. These constitute 20% of the 10-year base case plan totalling about \$135 million. (Exhibit B1-2 page 4) Again, intuitively they appear to be good ideas but until there can be some manner of determining that they are successful, in meeting their goals the Commission should take a close look at expenditures in this area.

In principle, Power Smart is a good program with a generally good reputation. However it should not be regarded as a sacred cow. It is not sufficient to simply say that conservation and demand side management are “good things” and therefore any expenditures made in those areas should be approved without serious questioning. Expenditures in these areas need to be treated in the same way as any other expenditures by the utility.

While BCOAPO wants to encourage the development of appropriate conservation and demand side management programs in all customer classes, it does not agree with the position taken by the Sierra Club of Canada, (BC Chapter) through its witness, Mr. Woolf that Power Smart should be spending more, not less, on programs, particularly in the residential area, at this time. As Mr. Woolf stated, on questioning by the Chairman, there are different programs throughout North America as different utilities, the programs they implement and the tests they use are more mature than others. (Transcript v. 21 pages 3787-3790) Because BC Hydro has essentially started over with its Power Smart program in the last three years, it needs to move carefully and deliberately in developing new programs. The Commission needs to develop appropriate tests to evaluate existing and future Power Smart programs to ensure that they have positive benefits for all ratepayers, not just recipients of direct or indirect subsidies.

BCOAPO notes that as Dr. Shaffer concentrated on industrial Power Smart programs and did not address residential and commercial programs except in a most general way, Mr. Woolf concentrated on residential and commercial programs and did not address industrial programs, particularly the load displacement programs, except in the most general way. (Transcript v. 21 page 3769)

In BCOAPO’s submission, BC Hydro should work with its stakeholders to develop effective ways of assessing development of various Power Smart programs and their implementation. This could be an approach along the lines of that undertaken by the former West Kootney Power (now Fortis Inc.), which has, arguably, established the most effective demand side management program of any BCUC regulated utility.

Customer Service and Accenture

BC Hydro testified about the importance of maintaining close scrutiny of Accenture Business Services (Transcript v. 15 page 2455). BCOAPO submits that it is necessary for this level of scrutiny to be undertaken. Outsourcing services may provide cost savings and efficiencies but clearly these must not be achieved at the expense of customer service.

In addition, BCOAOP submits that this is an appropriate time to set quality of service standards as was done with Terasen Gas Inc. (Commission Order No. G-51-03, July 30, 2003). Terasen Gas Inc. is accountable for ten service quality indicators and two directional indicators in the Negotiated Settlement of its Multi-Year Performance-Based Rate Plan. BC Hydro is already measuring 13 Critical Service levels and 4 reporting service levels (Exhibit B1-7 BCUC IR 1.104.0 and Exhibit B1-11 BCOAPO IR 1.80.0(a)), many of which could form the basis of service quality indicators for BC Hydro.

The introduction of the new customer care system allowed BC Hydro to tighten up its procedures under the tariff in three areas:

- The notice periods have been substantially shortened: 21 days instead of 45 for regular customers and moving directly to final notice after 7 days for customers who are a credit risk;
- Instituting security deposits; and
- Shortened time period before disconnections. (Transcript v. 15 pages 2585 and 2586)

The changes in BC Hydro's policies are clearly a hardship to low-income customers, many of whom would be subsequently disconnected and subject to reconnection fees and security deposits. It is difficult to balance the interests at stake as it is in all customers' interests for payments of all customers to be made promptly. However, low-income customers having difficulties paying their bills will obviously have more difficulties if they are also assessed reconnection fees and security deposits. Further, it is a travesty to arbitrarily deny electricity to

customers and their families who simply cannot afford to pay for it in a province as rich as British Columbia.

BCOAPO sees this initiative as taking away from BC Hydro's discretion to review the personal circumstances of individual customers. It is concerned that the movement of customer service to Accenture Business Services will only compound the problem. BC Hydro testified that it is expected that 31,250 persons will be disconnected for fiscal 2005 and 2006 (Transcript v. 16 page 2739). BCOAPO urges the Commission to review the tariff in light of these figures and the change in BC Hydro's policies with respect to the tariff.

Deferral Accounts

BCOAPO supports the establishment of the four deferral accounts as applied for by BC Hydro and as discussed commencing at page 61-65 of its Final Argument. In particular BCOAPO agrees with BC Hydro that, in interpreting the special direction requirements for HD2, actual reservoir levels rather than "average" or "normal" conditions should be utilized. To the extent possible, deferral accounts should be consistent with the way the utility manages its operations. The purpose of a deferral account is to deal with differences between forecast and actual figures, not between somewhat arbitrarily selected figures and actual figures.

Accounting Issues

a) FRSR reserve

As discussed above, BCOAPO's position is that the Commission has the jurisdiction to deal with these issues in the manner put forward by Mr. Johnson on behalf of the JEISC (Exhibit C23-5)

Under BC Hydro's proposal the utility's customers who have already paid once will have to pay again. They are also negatively impacted by the fact that this amount is included in the definition of equity thereby earning a return. BCOAPO submits that the Commission should, consistent with past decisions, exempt BC Hydro from GAAP provisions in this instance and

direct BC Hydro to either establish an FRSR resource or provide for the amortization of the FRSR.

b) Accelerated depreciation of the Burrard Thermal Plant

In BCOAPO's submission, BC Hydro has not established the case for accelerated depreciation of Burrard. Various options in the IEP (Exhibit BC1-24) suggest that Burrard Thermal could be operated well beyond 2010. The legislative committee reviewing the future of Burrard has not yet reported and it would be more appropriate to consider the issue of the proper depreciation life of Burrard once its future is clear.

Distribution and Transmission Issues

The application is rife with references to the increasing age of the assets and use of the system. In the context of an application for a rate increase of 8.9%, BCOAPO is concerned over the failure of BC Hydro to demonstrate a long-term plan to manage the costs of maintaining reliability of the system. Specifically, BCOAPO has the following concerns:

a) Lack of Comprehensive Prioritization and Planning

BC Hydro's testimony illustrates the difficulty it has had in implementing comprehensive priority and planning:

COMMISSIONER BIRCH: Okay. What I'm looking for is, is there a possible disconnect between what the executive level is attempting to do, and what the executive level of the organization is actually doing? And that's -- I've been looking for evidence of that because big organizations are difficult to change overnight. On the one hand, I've got the audit report which we talked about in Panel 1, which stated that the capital projects are not prioritized on a comprehensive basis at the capital planning stage, but are prioritized during the year based on identified needs and available resources. So I sort of got that on one hand. And on the other hand we've got this exercise that Mr. Wallace took us

through of the various EG and DF and those documents, which really pointed to a very mechanized way of making capital decisions. Now, it's probably highly appropriate, given the type of thing you're doing. But it's those little tiny decisions taken every day by some lineman or some supervisor, that really are driving your capital program because at the executive level you're just not seeing this. You're just seeing aggregated numbers come up saying it costs \$200 million to do X. My question really comes down to how do you ensure that those folks making those little tiny decisions every day are making them with what you think your priorities are in mind?

MS. VAN RUYVEN: A: That's a really tough question. It is a challenge for every senior executive to drive cultural change down into the decision-making levels in a company that's as complex as B.C. Hydro and so many places in the organization that make decisions. ...We've made a huge stride forward, I believe, in the last year to doing that, but we're not anywhere near where we need to be, and I would agree that there still is a disconnect. (Transcript v. 16 pages 2711-2712)

Compounding the problem is that Transmission continues to be dominated by a bottom up prioritization method (Transcript v. 18 pages 3112-3113). When prioritization of projects is from the bottom up or there is a lack of comprehensive planning and prioritization, the long-term impact on costs is not assessed.

b) BC Hydro does not assess the level of expenditures and the corresponding impact on maintaining or improving reliability of the system

BCOAPO recognizes that there are a number of prioritization tools in place and supports these programs. However, none of these tools assess the level of expenditures and its impact in maintaining or improving reliability of the system. (Transcript v. 18 pages 3112-3113)

Overall, the reliability of the transmission and distribution system performance is very good (Exhibit B1-2, Chapter 6 pages 6-18 and 6-39 and Chapter 7 pages 7-23 and 7-39). Even though the distribution system reliability is third quartile, it still measures 99.96% and the difference

between it and other utilities is a small percentage (Transcript v. 15 page 244). Both the transmission and distribution systems are first quartile for costs (Exhibit B1-2, Chapter 6 page 6-31 and Chapter 7 page 7-31). Customer satisfaction continues to be high (Transcript v. 15 pages 2565-2566, Exhibit B1-2, Chapter 8, pages 8-16 and 8-17). Accordingly, BC Hydro has the opportunity to assess the level of its expenditures and the subsequent impact on reliability. This is particularly important when BC Hydro has a planning and prioritization process that does not set constraints on spending, as illustrated by distribution capital spending (Transcript v. 14 page 2385).

It is encouraging that the testimony of the Distribution Panel indicates that some assessment of the level of expenditures to maintain the system has begun; specifically it conducted an extensive survey of its customers to determine what they value. (Transcript v. 15 pages 2450 and 2451). However, there are significant risks in failing to assess the level of expenditures and the corresponding impact on maintaining or improving reliability of the system as noted by the Distribution Panel:

MS. VAN RUYVEN: A: ... It's not about spending more, but it's about spending differently to improve customer satisfaction. And we think that that's probably the right way to go, with a system as large as ours, we could spend hundreds of millions of dollars on tree-trimming and perhaps not affect customer satisfaction or customer value. (Transcript v. 15 page 2451).

c) Incentives for financial accountability and efficiency need to given a priority

Clearly, financial accountability is a key element in managing costs and BCOAPO submits that incentives for accountability and efficiencies would increase the ability of BC Hydro to effectively manage its costs. The evidence shows that this work has just begun (Transcript v. 15 pages 2484-85) and BCOAPO submits that these initiatives must be developed fully in order to be effective.

In conclusion, BCOAPO submits that the application as applied for will continue to support an atmosphere that assumes that there are unlimited dollars available. BCOAPO submits that a long-term plan to manage the costs of maintaining reliability of the system is needed. The Transmission Panel testified that BCTC has begun to develop such a plan:

MS. PEVERETT: A: However, I think it's fair to say that we certainly understand the concerns of customers on the impact that investments have on rates, and so we are in the process of putting together a long-range model that we can use to model exactly what the impacts on future rates would be, both BCTC's rates and then, if we can, how those might flow through and affect residential customers' rates, for example through the Hydro rates. So that's a model that we have underway, so we can actually look at scenarios over a variety of years, and see what -- what long-range plans we can put ourselves on to make sure that the rates to customers stay at acceptable levels. (Transcript v. 17 pages 2957-58)

In BCOAPO's submission the Commission should direct BC Hydro and BCTC to immediately implement a long-term plan to manage the costs of maintaining reliability of the distribution and transmission systems; such a plan would include the following elements:

- Comprehensive prioritization and planning;
- Measures that assess the level of expenditures and its impact in maintaining or improving reliability of the system; and
- Development of incentives for financial accountability and efficiency as a priority.

Generation Issues

In BCOAPO's view, the generation operations of BC Hydro appear to be well managed.

BCOAPO supports BC Hydro's Resource Smart Program which is one of the responsibilities of generation operations. BCOAPO notes that the REAP (Exhibit B1-23 page 6) suggests that upgrades of both the Mica and Revelstoke projects are to be considered over the next four years.

However, as noted above, the generation panel made it clear that, in its view, Revelstoke was the only viable option. (Transcript v. 19 pages 3369-3372)

BCOAPO also believes that the Burrard Thermal Plant has a role to play in meeting BC Hydro's domestic load. It agrees with the general manner in which BC Hydro generation operations propose to continue to operate this plant. As noted above, it does not agree with BC Hydro's proposal to accelerate depreciation of Burrard Thermal and it recognizes that the future of the plant will, to a great extent, depend on the recommendations of the legislative committee reviewing its operations. In the interim, however, BC Hydro generation operations should continue to operate Burrard Thermal in a manner that maximizes the benefits to BC Hydro's ratepayers.

BCOAPO, however is concerned with BC Hydro's reliance on imported energy to meet domestic loads, particularly over the next few years. It is one thing for BC Hydro to rely on imports for the purpose of maximizing export revenues through Powerex. It is something else to put itself in a position where its own resources, including contracts with IPP's, cannot meet domestic load.

This leaves BC Hydro, and its customers, subject to the vagaries of both the weather and market prices. A combination of a low water year and high market prices would cause significant pressure on BC Hydro's rates. The updated evidence filed by BC Hydro together with its Final Argument, underlines this concern. (Exhibit B1-197)

Conclusion

It is very difficult for BCOAPO, given the resources available to it, the extensive written and oral evidence and the inability to meaningfully compare BC Hydro's proposed test period expenditures with past expenditures, to specify what, on the basis of the evidence, would be an appropriate rate increase.

It reiterates that the onus is on BC Hydro to establish that the rate increase it is requesting is necessary to meet its operations over the test period. In BCOAPO's submission it has not done

this. The Commission will have to weigh the evidence before it to assess what an appropriate rate increase, if any, should be.

This proceeding is very important in that it will establish an ongoing regulatory regime for BC Hydro, within the framework of the provincial Energy Plan, the Heritage Contract and Special Direction HD No.2. In many respect, this will have a more significant impact on BC Hydro's ratepayers than the rates established for the 2-year test period. Accordingly, these submissions have focused primarily on longer-term regulatory issues while attempting to address, to the extent possible, some specific issues relating to the test period revenue requirement.

Submitted on behalf of BCOAPO. this 21st day of July, 2004

Original signed

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