



IN THE MATTER OF

**BRITISH COLUMBIA HYDRO AND POWER
AUTHORITY**

**INDUSTRIAL SERVICE OPTIONS
APPLICATION**

DECISION

July 17, 1996

BEFORE:

**Dr. Mark K. Jaccard, Chairperson
Kenneth L. Hall, P. Eng., Commissioner
Dr. Paul G. Bradley, Commissioner**

TABLE OF CONTENTS

Page No.

EXECUTIVE SUMMARY

1.0	INTRODUCTION	1
1.1	Background	1
1.2	Description of Application	2
1.3	Jurisdictional Issues	2
2.0	RATE SCHEDULE 1848 - REAL TIME PRICING OPTION	3
2.1	Description of the B.C. Hydro Proposal	3
2.2	One- Versus Two-Part Real Time Pricing Options	5
2.3	The Customer Baseline Load ("CBL")	7
2.4	The Energy Charge	9
2.4.1	The Use of Powerex Prices	9
2.4.2	The Margin	12
2.5	Conditions of Service	13
2.5.1	Availability of Service	13
2.5.2	Quality of Service	13
2.5.3	Confidentiality	14
2.5.4	Market Access	14
2.5.5	Working and Non-Working Days	15
2.6	Other Issues	15
2.6.1	Non-Participant Impacts	15
2.6.2	Environmental Issues	16
2.7	Commission Determination	17
3.0	RATE SCHEDULE 1880 - EMERGENCY STANDBY SERVICE	20
3.1	Description of Service	20
3.2	Discussion	21
3.3	Commission Determination	22
4.0	CURTAILABLE SERVICE	23
4.1	Background	23
4.2	Description of Service	23
4.3	Discussion	24
4.4	Commission Determination	25

COMMISSION ORDER NO. G-76-96

APPENDIX A - Appearances

APPENDIX B - Exhibits

EXECUTIVE SUMMARY

On January 22, 1996, the British Columbia Hydro and Power Authority ("B.C. Hydro") filed an Application to provide certain Industrial Service Options to Rate Schedule 1821 customers, i.e., customers who can take electricity at the 5000 kV.A level. Specifically, the Application consists of three service options: (1) Rate Schedule 1848, which consists of a two-part Real Time Pricing Service that would allow Rate Schedule 1821 customers to purchase incremental electricity (i.e., amounts above average historical consumption) at market based prices. The rate is voluntary and is being offered initially on a one year trial basis; (2) the modification of Rate Schedule 1880, which currently provides "as available" interruptible standby service upon request by customers with self-generation, so that customers may have instantaneous access when there is electricity available from the B.C. Hydro system; and (3) approval of certain generic terms and conditions for future implementation of a curtailable service option. By way of Order No. G-5-96, Rate Schedule 1848 was approved by the Commission on an interim basis commencing January 31, 1996. Interim approval of Rate Schedule 1880 was given through Order No. G-50-96, dated May 27, 1996.

In this Decision, the Commission approves each of the three Rate Schedules subject to certain modifications. With respect to Rate Schedule 1848, the Commission accepts the criteria put forward by B.C. Hydro for reducing the CBL for load retention purposes as sufficient to assess when such reductions are appropriate for the one year trial period, but directs the Utility to develop more sophisticated criteria and procedures which consider all relevant aspects of the need for load retention and not simply electricity costs. In particular, the criteria should address the appropriateness of industry versus customer specific reductions in CBL with a view to avoiding undue discrimination amongst customers and ensuring that CBL reductions are kept to the minimum necessary to retain load. These criteria and procedures are to be filed with the Commission at the end of the one year trial period. In all cases of CBL reduction, the over-riding principle should be the maximization of benefits to all customers.

With respect to the energy charge, the Commission accepts the use of Powerex prices and the 0.5¢ margin, as proposed in the Application, for the one year trial period. However, the Commission directs B.C. Hydro to undertake a further evaluation of alternative indicators of electricity market value in B.C. and file a proposal in this regard at the end of the trial period. In addition, the Commission directs B.C. Hydro to re-examine the margin to determine the direct incremental costs which the margin must cover and to eliminate any allowance for risk which has already been provided for in other charges. The results of this examination must also be filed at the end of the trial period.

Further, the Commission directs B.C. Hydro to develop a rate schedule, similar to Rate Schedule 1848, for transmission voltage Rate Schedule 1211 customers which will result in the maintenance of their current contribution to fixed costs.

With respect to the potential environmental impacts of Rate Schedule 1848, the Commission directs B.C. Hydro to monitor, during the trial period, whether the tariff has impacted any proposed self-generation projects, and if so, what, if any, environmental consequences have or may occur. Further, the Commission accepts that the proposal for a specific DSM adder may have merit and should be considered in the margin calculation to be provided after the one year trial period.

Finally, the Commission accepts that any revenue loss or gain which occurs during the one year trial period should be allocated to all customer classes rather than to Rate Schedule 1821 customers solely. The issue of allocation may be revisited after the one year trial period.

The Commission rejects arguments made by certain intervenors that it does not have authority under the *Utilities Commission Act* to allow the types of rates contemplated in Rate Schedule 1848.

As indicated above, the Commission accepts the proposed modifications to Rate Schedule 1880 but directs the Utility to file operating procedures for informing Rate Schedule 1880 customers of the times when the system will not be capable of providing this service as soon as such operating procedures become available or within 90 days of this Decision.

Furthermore, the Commission recognizes that B.C. Hydro is developing a firm standby tariff and therefore expects that the Utility will file tariffs for firm standby service with the Commission by January 1, 1997.

1.0 INTRODUCTION

1.1 Background

British Columbia Hydro and Power Authority ("B.C. Hydro", "the Applicant", "the Utility") is a Provincial Crown corporation whose mandate is to generate, transmit and distribute electricity in British Columbia. B.C. Hydro does so throughout the province except in the West Kootenay and South Okanagan areas, which are served by West Kootenay Power Ltd., and in several municipal areas served by local municipal or investor-owned utilities. B.C. Hydro operates under the *Hydro and Power Authority Act* and is subject to regulation by the British Columbia Utilities Commission ("the BCUC", "the Commission"). All provisions of the *Utilities Commission Act* ("the Act") apply to the Utility except for sections dealing with utility financing and asset disposition (*B.C. Hydro and Power Authority Act*, Section 52(6)).

On January 22, 1996, B.C. Hydro filed an Application to provide certain Industrial Service Options ("the Application") to Rate Schedule 1821 customers, i.e. customers who can take electricity at the 5000 kV.A level. By way of Commission Order No. G-5-96, the Commission set the Application down for a public hearing to commence May 13, 1996. In addition, the Order approved the use of a Real Time Pricing Schedule - Rate Schedule 1848, contained within the Application, on an interim basis commencing January 31, 1996, subject to certain conditions. These conditions are that any customer wishing service under Rate Schedule 1848 will apply to the Commission for permission to access the rate and for approval of the specific Supplementary Electric Service Agreement applicable to serve that customer, and that any Supplementary Electric Service Agreement entered into while the interim order is in effect will contain a term permitting amendment of the agreement to comply with the requirement of any final order made by the Commission in connection with Rate Schedule 1848. As at the date of this Decision, seven customers, comprising approximately 150 MW of load, have chosen to take electricity on Rate Schedule 1848. Interim approval of Rate Schedule 1880, which allows for the provision of emergency, maintenance and special supply to customers with self-generation, was given through Order No. G-50-96, dated May 27, 1996, subsequent to the close of the evidentiary portion of the hearing.

There were four hearing days during which the Commission heard evidence from B.C. Hydro on the Application. In addition, the Commission heard evidence from the Council of Forest Industries, the Mining Association of B.C., and the Electro-chemical Producers (collectively, "the Industrial Customers") and from the BC Energy Coalition ("BCEC"). The evidentiary portion of the hearing ended on May 16, 1996 with final written argument following.

1.2 Description of Application

The Application consists of three service options targeted towards customers who can take electricity at the 5000 kV.A level. Rate Schedule 1848 consists of a two-part Real Time Pricing Service that would allow Rate Schedule 1821 customers to purchase incremental electricity (i.e. amounts above average historical consumption) at market based prices. The rate is voluntary and is being offered initially on a one year trial basis, which commences on the date on which the Commission grants final approval of the tariff. During the trial period, Rate Schedule 1848 customers may choose to terminate the contract without penalty. An evaluation of Rate Schedule 1848 will be conducted at the end of the trial period.

In addition, the Application proposes the modification of Rate Schedule 1880, which currently provides "as available" interruptible standby service upon request by customers with self-generation, so that customers may have instantaneous access when there is electricity available from the B.C. Hydro system.

Finally, the Application seeks approval of certain generic terms and conditions for future implementation of a curtailable service option. Specific terms and conditions, including the payment customers would receive for allowing a part of their load to be curtailable, would be determined based on particular site specific circumstances, e.g., location of load.

The current Application, which is the result of a without prejudice consultation process between B.C. Hydro and representatives from its industrial customers, is the third attempt by B.C. Hydro to provide its industrial customers with greater service options. In 1991, B.C. Hydro filed an Industrial Rate Proposal which included detailed unbundling of its services. The proposal was not endorsed by the Utility's industrial customers and was not accepted by the Commission. In January 1995, B.C. Hydro again filed an Industrial Service Options Rate Design Application which also proposed an unbundling of services. However, during the Electricity Market Structure Review undertaken by the Commission, the Utility decided to withdraw that application and replace it with the current filing.

1.3 Jurisdictional Issues

During the hearing and in final argument, the BCEC challenged the authority of the Commission to approve Rate Schedule 1848, even if the Commission found it to be in the public interest. Specifically, the BCEC stated that the main purpose of Rate Schedule 1848 is to supply Rate Schedule 1821 customers with surplus energy at a rate which is less than the embedded cost of service and not at market based prices as set out in the Application (T: 757, T: 770). The BCEC maintained that the ability to offer discounted

electricity rates is held by the Lieutenant Governor in Council under the *Economic Development Electricity Rate Act* ("EDERA") (T: 758) and is, therefore, not within the powers of the Commission to approve.

In response to this assertion, B.C. Hydro stated that the primary purpose of Rate Schedule 1848 is not to supply energy at a discounted rate but to price surplus energy in a manner which reflects market conditions and makes the most efficient use of B.C. Hydro's resources (T: 819). Furthermore, B.C. Hydro stated that BCEC has misinterpreted the EDERA, which the Utility maintained expands rather than limits the Commission's ability to allow the Utility to charge discounted rates (T: 820/21). Accordingly, B.C. Hydro stated that the Commission possesses the necessary authority to approve Rate Schedule 1848 under the existing rate setting sections of the Act.

The Consumers Association of Canada (B.C. Branch) et al ("CACBC") expressed concerns that the load retention elements of Rate Schedule 1848, which are more fully explained in Section 2.3, might violate free trade or anti-dumping agreements.

In response to this concern, B.C. Hydro stated that "... dumping will only be said to occur under U.S. law where it is felt that a Canadian exporter is under pricing its product relative to domestic prices for the purpose of obtaining an unfair trade advantage over its U.S. competitors." (T: 667). Since the discounted rate portion of Rate Schedule 1848 is the same as the price at which exports to the U.S. are offered, no dumping can be said to occur (T: 667). Similarly, B.C. Hydro maintained that the discounted rate cannot be seen as a subsidy since it is being offered to retain load for the benefit of B.C. Hydro and not to assist industries to compete in foreign markets (T: 667/68).

Based on the arguments presented, it is the Commission's judgment that it has authority under the Act to allow the types of rates contemplated in Rate Schedule 1848. Further, the Commission accepts the arguments presented by B.C. Hydro that no substantive trade issues are likely to arise from the approval of these rates.

2.0 RATE SCHEDULE 1848 - REAL TIME PRICING OPTION

2.1 Description of the B.C. Hydro Proposal

As indicated in Chapter 1.0 of this Decision, Rate Schedule 1848 consists of a two-part Real Time Pricing Service which will allow customers, who take energy at the 5000 kV.A level, to purchase incremental electricity (i.e. amounts above historical consumption) at market based prices. Specifically, Rate

Schedule 1848 consists of a fixed charge, which is designed to collect the individual customer's historic contribution to embedded costs, and an energy charge, which reflects market value.

The fixed charge is determined by applying Rate Schedule 1821 to the Customer's Baseline Load ("CBL"). The CBL is equal to 100% of the customer's average billed consumption over the preceding three years, although this may be adjusted downward under certain circumstances, e.g., to retain load or to encourage economic development (Exhibit 1A, pp. I-B-19/20). To calculate the CBL, the Utility determines, for each month, the customer's kW.h consumption and maximum kV.A demand, the customer's average kV.A for hours between 06:00 - 22:00 for working days, the customer's average kV.A for hours between 00:00 - 06:00 and 22:00 - 24:00 for working days, and the average kV.A for non-working days. Working days are defined as Monday through Saturday, excluding statutory holidays, while non-working days are defined as Sunday and statutory holidays (Exhibit 1A, p. I-B-5; T: 18). When computing the CBL, B.C. Hydro plans to correct for anomalies in load and billing data which render the historical data inappropriate (Exhibit 1A, p. I-B-7). For new customers without an historical load profile, B.C. Hydro plans to estimate the CBL based on the customer's connected load.

The energy charge applies to consumption at the margin of the customer's load and is priced at the Real Time Price ("RTP") rate. Incremental consumption may be purchased on a daily basis or in monthly blocks. For customers who buy RTP energy for daily consumption, the monthly energy charge is the sum of the differences between hourly actual loads and the hourly CBL priced at the RTP daily energy rates over the billing period. Customers who use less than the consumption assumed when setting the fixed charge receive a credit against the fixed charge equal to the decremental consumption multiplied by the RTP rate.

For customers who purchase a monthly block, the price is fixed at the time of purchase. Since the purchase of a monthly block of energy commits B.C. Hydro to provide the energy, if available, to the customer at the fixed price, even if future daily prices would make the sale of the energy to another customer more attractive, such purchases attract a minimum 50% take or pay requirement. In addition, the Utility will bill customers on the assumption that customers who purchase more than one monthly block in a single month will fully consume the first block before consuming any portion of the second block (Exhibit 1A, p. I-B-8).

To determine the price of RTP energy, B.C. Hydro is proposing to use the actual and posted prices of the British Columbia Power Exchange Corporation ("Powerex"), a subsidiary of B.C. Hydro. In support of this choice, B.C. Hydro stated that Powerex's actual transaction prices reflect market conditions in B.C.

because they are the result of trading that has occurred, while the posted prices bound the unobserved market price (Exhibit 1A, p. I-B-5-3).

B.C. Hydro proposes to supply incremental RTP energy on an interruptible basis and will make no new investment to assure delivery of the RTP service. If a customer does not wish to be interrupted, the Application states that B.C. Hydro will attempt to seek alternative supplies which will be sold to the customer at the then market price (Exhibit 1A, pp. I-B-14/15).

B.C. Hydro indicated that Rate Schedule 1848 is desirable for several reasons. Firstly, the energy charge included in Rate Schedule 1821 collects some of the fixed costs associated with serving this class of customer. Accordingly, high load factor customers make a greater contribution to the recovery of fixed costs than they would if all these costs were recovered through the demand charge (T: 636). Allowing Rate Schedule 1821 customers to purchase incremental energy at market based rates may act to mitigate this undesirable effect. Secondly, the recovery of some fixed costs through the energy charge means that the Rate Schedule 1821 energy charge is high relative to the variable cost of production on the B.C. Hydro system and the variable cost of some competing generators. As a result, customers deciding whether to increase off-peak energy consumption do not see the true cost of incremental consumption if they purchase energy on Rate Schedule 1821 (T: 636). B.C. Hydro indicated that, because it is a hydro system which is planned and operated to ensure that domestic loads can be served even in dry conditions, most of the time its variable cost of energy is equal to its water rental fees and incremental operating costs, which together are approximately 0.5¢ per kW.h (T: 637). Thirdly, B.C. Hydro expressed concerns about the equity of selling surplus energy into the export market at prices which are less than those at which surplus energy is made available to domestic customers, particularly if the export buyers are in competition with B.C. industrial producers (T: 638).

2.2 One- Versus Two-Part Real Time Pricing Options

In its Application, B.C. Hydro noted that some utilities, (e.g., Ontario Hydro), offer one-part RTP rates. Under a one-part RTP structure, a participating customer's entire consumption is priced at RTP rates. B.C. Hydro indicated that it has chosen a two-part structure for a variety of reasons, as follows:

- (1) the two-part rate structure ensures that a customer who switches from Rate Schedule 1821 to Rate Schedule 1848 will make the same contribution to embedded costs under the new rate as would have been made under the old. Accordingly, a significant shift in the financial burden of paying for the system is avoided (T: 639);

- (2) the two-part rate structure removes the need to impose some form of fixed charge or exit fee, on customers who move to an RTP rate, to recover fixed costs (T: 640); and
- (3) the two-part rate structure protects customers from the fluctuation of electricity bills due to variations in RTP energy rates (Exhibit 1A, p. I-B-2).

Mr. Lazar, a witness testifying on behalf of the BCEC, argued that there are several problems with the B.C. Hydro proposal, including the selling of incremental energy at spot price, the 0.5¢ per kW.h margin and the lack of inclusion of environmental costs when determining the cost of this service (Exhibit 7A, p. 3). Further, Mr. Lazar indicated that it was impossible to tell if the B.C. Hydro proposal would lead to growth in demand for electricity in B.C., as suggested by B.C. Hydro, or whether it would result only in growth which would have occurred anyway being priced lower than it would otherwise be (Exhibit 7A, p. 2). In response to these problems, Mr. Lazar suggested that B.C. Hydro charge customers a 'full margin' RTP rate (Exhibit 7A, p. 11), where the full margin was defined as the retail rate (Rate Schedule 1821 rate) minus the short-run market value of the avoidable commodity, i.e. the short-run market value of the energy (T: 342). Mr. Lazar estimated the full margin at approximately 1.4¢ per kW.h (Exhibit 7A, p. 11).

Mr. Lazar agreed that his proposal is essentially analogous to a one-part RTP rate and would suffer from the same problems. In particular, Mr. Lazar agreed that his proposal could lead to an under-recovery of revenues, since only those customers for whom the rate is advantageous would choose to participate. However, Mr. Lazar stated that this problem is unlikely to be significant because he expects few customers would take the rate because of the size of the margin (T: 377), although it would remain attractive to any customer whose daily and seasonal use of power is of a less expensive nature than the average usage of the class (Exhibit 7A, p. 11).

In response, B.C. Hydro stated that a one-part RTP rate could result in significant revenue losses from customers with below average load factors, who would pay less than the current 1821 rate, and increase the revenue needed from non-participating customers (T: 663). In addition, customers would not be induced to modify their behavior since they would receive the benefits of the marginal price without changing load. Finally, the price to B.C. customers would remain in excess of that in competing jurisdictions because the 1.4¢ margin recommended by Mr. Lazar is greater than that in other jurisdictions (T: 664).

2.3 The Customer Baseline Load ("CBL")

As indicated above, the CBL is equal to 100% of the customer's average billed consumption over the preceding three years. B.C. Hydro stated that the 100% CBL is needed to ensure that the full embedded costs of the system caused by industrial customers is recovered from these customers (T: 643). However, under certain circumstances, the Utility indicated that it would be willing to adjust the CBL downward. Specifically, the Utility stated that it would consider an adjustment where necessary to retain load or encourage economic development (Exhibit 1A, pp. I-B-18-20).

Under the terms of the Application, a Rate Schedule 1821 customer is eligible for a CBL reduction for load retention purposes if the customer can demonstrate: (1) the ability to self-generate; (2) the ability to relocate loads to other service territories; or (3) the inability to compete with similar producers in other service areas because of electricity prices, resulting in reduced or discontinued production in B.C. (Exhibit 1A, p. I-B-19). With respect to the third criteria, B.C. Hydro stated that a customer's electricity costs must exceed 10% of its variable costs (Exhibit 1A, p. I-B-20) and that it will only look at the relative costs of electricity and not all factors which may influence the costs of production in different jurisdictions (T: 666).

A new or existing customer that is eligible for Rate Schedule 1848 service may obtain a CBL reduction for economic development purposes if the customer can demonstrate that: (1) new loads could not have occurred without the CBL adjustment; (2) new loads have alternate supply sources; (3) the adjusted CBL does not affect the competitiveness of other Rate Schedule 1821 customers in the same sector; and (4) the adjusted CBL would make B.C. Hydro's supply competitive with the customer's alternatives.

The BCEC argued against allowing B.C. Hydro to reduce CBLs and use Rate Schedule 1848 to compete with self-generation opportunities available to industrial customers. The BCEC stated that, if B.C. Hydro uses its RTP rate to prevent large industrial customers from developing self-generation facilities, it could result in the creation of significant lost opportunities from a societal perspective. Potential benefits from self-generation identified by the BCEC include the creation of a new resource with system benefits, the creation of cogeneration facilities with significant environmental benefits, the creation of local employment from developing the resource and deferred capital investment in new resources by B.C. Hydro (T: 781/82).

With respect to retaining the load of customers with the ability to relocate elsewhere or who find themselves uncompetitive in comparison to similar businesses located elsewhere, because of electricity costs, the CACBC expressed concern that it will be difficult to verify whether a reduction in CBL to retain

load is really needed. The CACBC stated that vigilance would be required of both B.C. Hydro and the Commission if inappropriate reductions are to be avoided (T: 736). Furthermore, the CACBC questioned the propriety of B.C. Hydro's trying to retain the load of businesses which are simply not profitable. Although B.C. Hydro had stated that it would look only at electricity costs when comparing the situations of businesses in B.C. to similar businesses elsewhere, the CACBC suggested that an independent analysis of the overall competitiveness of the entity requesting the reduction in CBL should be made (T: 738) and that this analysis should look at all costs and not simply the cost of electricity. If this is deemed to be too onerous, the CACBC suggested that B.C. Hydro change its criteria to restrict reductions in CBL for load retention purposes to those industries for whom the cost of electricity represented one-third or more of total [variable] costs (T: 739).

Similarly, the BCEC stated that B.C. Hydro has failed to propose sufficient criteria to demonstrate adequate consideration of the costs, benefits and risks of load retention (T: 780). If unnecessary reductions are made, the BCEC suggested that it would lead to stranded investments (T: 795). To overcome this problem, the BCEC referred the Commission to the evidence given by Mr. Lazar and his proposal for a one-part RTP rate, discussed above.

The Industrial Customers stated that Rate Schedule 1848 is only attractive to customers who expect to consume more than their CBL during the contract period. They maintained that, since most industrial customers are expecting their existing or planned loads for the next year to be less than their average consumption over the past three years, Rate Schedule 1848 will only be attractive to customers whose CBL has been adjusted downward for load retention purposes (Exhibit 15A, p. 4). Accordingly, they characterized Rate Schedule 1848 as being primarily a load retention rate (Exhibit 15A, p. 7).

To overcome the limited attractiveness of Rate Schedule 1848, the Industrial Customers suggested that the CBL should also be adjusted on a industry-wide basis in response to changes in the business cycle. They stated that, unless this occurs, customers will only access the RTP rate when the business cycle is in an upswing and may not even make this limited use of RTP because business cycles are not predictable and the substantial take-or-pay obligations associated with the RTP rate remain a barrier (T: 684).

In response to the suggestion of an across-the-board reduction based on the business cycle, B.C. Hydro stated that it could lead to a situation in which customers, who would otherwise have taken electricity at the rates contained in Rate Schedule 1821, are served at market prices. If this were to occur, B.C. Hydro suggested that it would not recover from the industrial customers the full costs of facilities built to serve them (T: 644/45). As a result, B.C. Hydro indicated that it would be preferable to adjust for economic downturn only when necessary to retain load (T: 674). However, if such a proposal were accepted by the

Commission, B.C. Hydro stated that the CBL should also be adjusted upwards when economic conditions improved. In the same vein, the CACBC suggested that, if reductions were granted because of cyclical downturns, the savings achieved by industrial customers should have to be repaid when conditions improved (T: 739/40).

In addition to the suggestion that industry-wide reductions in CBL should be instituted in response to changes in the business cycle, there were suggestions that individual customers requesting CBL reductions, who are all within a single industry, should receive the same CBL reduction rather than reductions which reflect individual circumstances. The Utility argued that because there must be legitimate threat of loss of load before a reduction in CBL can be justified, and because not all customers within an industry may have the ability to leave the Utility, reductions in CBL should be done on a customer-by-customer basis (T: 668). Similarly, the CACBC stated that a customer-by-customer basis is required to avoid allowing some customers to receive a windfall (T: 747/48).

The Industrial Customers agreed that the Utility should not reduce the CBL of customers who do not require the reduction but urged the Utility to recognize that customers do compete against each other. Where customers are producing similar products and facing similar competitive threats as a result of lower electricity prices in competing jurisdictions, the Industrial Customers stated that customers should be treated similarly (T: 699/700).

2.4 The Energy Charge

2.4.1 The Use of Powerex Prices

As indicated above, B.C. Hydro proposes to use actual and posted Powerex prices to determine the energy charge under Rate Schedule 1848. The specific pricing rule, proposed in the Application, is as follows:

- (1) if there is a single buy or a single sell transaction, then the RTP rate will be equal to the actual buy price plus a 0.5¢ margin, or the actual sell price;
- (2) if there is both a buy and a sell transaction, the RTP rate will be equal to the lesser of the actual buy price plus a 0.5¢ margin, or the actual sell price;
- (3) if there is no transaction, the RTP rate will be equal to the lesser of the posted buy price plus a 0.5¢ margin, or the posted sell price (Exhibit 1A, p. I-B-11).

B.C. Hydro stated that it is proposing that Powerex prices be adopted because they give a price at the B.C. border and they ensure that domestic customers are getting the advantage of the same prices which are being offered to export purchasers. The Utility stated that it had considered using the California-Oregon border ("COB") price, which shows a similar pricing pattern to the Powerex prices, but prefers the Powerex prices because: (1) if the COB prices were used, customers would have to arrange for transportation and ancillary services in support of that purchase which could add costs that exceed the Powerex sell price or the Powerex buy price plus the 0.5¢ margin; and (2) it ties the RTP price into the actual market conditions from Powerex's perspective as opposed to some arbitrary index which may not reflect conditions in B.C. (T: 647). The CACBC also supported the use of Powerex prices because they are made in B.C. (T: 741).

At the time the Application was filed, Powerex was publicly posting its prices. However, immediately prior to the commencement of the hearing, B.C. Hydro indicated that Powerex would no longer publicly post its prices since it is concerned about the practice damaging its competitive position (Exhibit 1A, p. I-F-DAB-2).

In response to this announcement, the Industrial Customers stated that they are concerned that lack of publicly posted prices "...will compromise the transparency and may compromise the credibility of the posted prices under RTP." (Exhibit 15B, p. 4). More specifically, the Industrial Customers argued that, if B.C. Hydro does away with publicly posted Powerex prices, the relationship between COB and RTP pricing over the past year should be evaluated and careful consideration should be given to developing a COB based index (T: 679). Accordingly, the Industrial Customers requested that the Commission direct B.C. Hydro to evaluate the use of COB and provide a detailed statistical comparison of COB and Powerex prices as part of the RTP evaluation process (T: 679).

Although the Industrial Customers recognized that Powerex prices are B.C. based, they stated that they are based on only one seller's market transactions and may not be fully representative of market prices generally, particularly when the seller's volumes are small. In addition, when Powerex is out of the market, reliance must be placed on the posted price, not on the transaction prices (T: 680). Furthermore, the Industrial Customers suggested that public posting imposes discipline on B.C. Hydro to make postings representative of the market (T: 681).

The Industrial Customers suggested three alternatives for market prices. These are:

- (1) COB prices adjusted by a historic factor for the last year after a proper statistical review of the relationship between COB and Powerex RTP prices over the past 12 months;
- (2) Powerex prices with continued full published posted prices and transactions volumes; and
- (3) Powerex prices, with limited information, but with the option for the Industrial Customers to go to the market themselves to purchase the energy that would have been provided by B.C. Hydro under RTP without providing any margin to B.C. Hydro (T: 681/82).

Trans Mountain Pipeline Company ("Trans Mountain") stated that it is concerned that Powerex based prices will be perceived as lacking in transparency and as being inappropriately influenced by B.C. Hydro's judgment. Accordingly, Trans Mountain suggested using the previous day's non-firm COB price (T: 710/11).

B.C. Hydro indicated that it is willing to use the COB index if others prefer it, and would evaluate the feasibility of COB prices when it undertakes an overall review of the program at the end of the trial period (T: 806), although it continues to view Powerex pricing as beneficial (T: 647). More specifically, the Utility stated that the lack of public posting was not a concern since: (1) it expected that there would be more and more actual transactions over time so that the posted prices would become less important (T: 649); (2) the verification that the appropriate pricing rule is being applied will still take place (T: 649); and (3) Rate Schedule 1848 customers will be advised of RTP prices on a daily basis so that they can make appropriate decisions as to whether to take electricity or not (T: 650/51).

If the Commission chooses to confirm the use of Powerex prices, the Industrial Customers suggested that the rules should be changed. On days on which there is an actual buy transaction but not a sales transaction, the Industrial Customers suggested that the RTP price should be equal to the lesser of the buy transaction price plus the allowed margin, or the posted sales price (T: 690). The Industrial Customers argued that, since the posted sales price is a price at which B.C. Hydro is willing to make energy available to others, it should make the energy available at that price to RTP customers. Further, they suggested that the fact that no sales have been made at the posted sell price means that the actual market price is below the posted price. To set the RTP price above the posted sell price means the RTP price is above the market price (T: 690).

In response to this suggestion, the Utility argued that actual transactions should be used in preference to posted prices where possible, since actual transaction prices are the best indicator of market price. B.C. Hydro rejected the argument that if no sales are made at the posted sell price, it means that the actual market price is lower than the posted price since it indicated that the market is not perfect and might simply reflect a lack of awareness of Powerex's product by potential buyers (T: 651-653).

2.4.2 The Margin

As indicated in Section 2.4.1, if the RTP price is based on either the Powerex posted buy price or actual buy price, an 0.5¢ margin is added to the buy price. The Utility stated that it is not necessary to add a similar margin when the RTP price is based on a Powerex sell price, since sell prices already include a margin (Exhibit 1A, p. I-B-11).

B.C. Hydro stated that the 0.5¢ margin is not based on a detailed cost analysis (T: 654) but suggested that 0.5¢ is similar to the amount other utilities include in their RTP energy rates (Exhibit 1A, p. I-B-12). The Utility suggested that the actual costs associated with buying power and then reselling it, including the risks associated with the transaction, are approximately 0.3¢ per kW.h, leaving 0.2¢ per kW.h to be contributed to the embedded costs of B.C. Hydro (T: 192/93).

Mr. Lazar agreed with B.C. Hydro that 0.5¢ is sufficient to cover the variable costs associated with buy transactions (T: 355/56) but suggested that it is not sufficient to cover the costs of transmission (Exhibit 7A, p. 4). Similarly, the CACBC supported the 0.5¢ margin but stated that the evidence at the hearing suggests that it is more of a ceiling on the amount that could be obtained rather than an estimate of what would be obtained. Accordingly, the CACBC suggested that the Commission should look to setting a minimum level below which the margin would not be allowed to fall (T: 741).

In contrast, the Industrial Customers suggested that the 0.5¢ margin is too high. The Industrial Customers noted that if they had true market access, the buy price would be the price they would pay and that no additional margin would be added (Exhibit 15A, pp. 9/10). Furthermore, the Industrial Customers argued that B.C. Hydro's evidence with respect to the contribution to margin and risk (Exhibit 1B, BCUC IR 1 Q22) indicates that a more appropriate margin would be less than 0.3¢ (T: 692/93).

2.5 Conditions of Service

2.5.1 Availability of Service

As indicated earlier, B.C. Hydro proposes to restrict the availability of Rate Schedule 1848 to 1821 customers. Initially, B.C. Hydro justified the restriction on the grounds that it wishes to avoid the necessity of having to provide RTP service at other than transmission voltages (Exhibit 1B, Trans Mountain IR 1, Q3). Later, B.C. Hydro amended this justification and stated that the restriction is appropriate on the grounds that, except for a small minority of Rate Schedule 1211 customers served at transmission voltages, only Rate Schedule 1821 customers have the time-of-use metering required to administer the rate (T: 260-262; 125). In addition, B.C. Hydro stated that restricting the access makes the process manageable and that if the RTP program proves successful, it will consider extending it to Rate Schedule 1211 customers who have time-of-use metering (T: 660).

Trans Mountain pointed out that B.C. Hydro's original rationale for restricting access does not apply to Rate Schedule 1211 customers served at transmission voltage (T: 709). In addition, Trans Mountain stated that B.C. Hydro has given no indication as to the size of the inconvenience or burden of extending the service to these customers. Accordingly, Trans Mountain maintained that there is no reason not to offer these services to such customers.

In response, B.C. Hydro indicated that allowing Rate Schedule 1211 customers access to Rate Schedule 1848 would mean that they would fail to make their current contribution to the fixed costs of the system, since Rate Schedule 1821, upon which Rate Schedule 1848 is based, is priced lower than Rate Schedule 1211 (T: 815).

2.5.2 Quality of Service

As currently proposed, Rate Schedule 1848 allows B.C. Hydro to curtail or interrupt customers with respect to any energy taken in excess of their CBL. The Industrial Customers argued that the energy should only be interruptible above the customer's maximum kV.A since the CBL is based on average use. They stated that their proposal will give customers the necessary room for normal variations in operations around the average (Exhibit 15A, p. 10). In addition, the Industrial Customers argued that, if B.C. Hydro posts a price for RTP energy on the day before the energy is taken, but then has to interrupt a customer, B.C. Hydro should be required to acquire the energy for the customer but sell it to the customer at the RTP price (T: 695). The Industrial Customers maintain that, if B.C. Hydro had to interrupt energy it had offered the day before, it was evidence that B.C. Hydro has mismanaged its resources.

In response to these suggestions, B.C. Hydro stated that the Industrial Customers had missed the point of the RTP program, which is to make available energy which results from unplanned but common surplus. The Utility stated that it had no intention of managing its resources to ensure its ability to supply non-firm energy to RTP customers (T: 812) but is willing to buy energy on behalf of RTP customers if it received its standard 0.5¢ margin on the transaction (T: 656/57).

The Industrial Customers also suggested that B.C. Hydro should be required to offer a separate generation turn-down schedule which would allow customers with self-generation facilities to turn down their generators and purchase energy at RTP rates (Exhibit 15A, p. 8). In response to this suggestion, B.C. Hydro indicated that it is studying this proposal (Exhibit 1A, p. I-E-AL-3).

2.5.3 Confidentiality

During the hearing there was some discussion regarding the extent to which the information provided to the Commission when an application for a CBL reduction is made should be made public. B.C. Hydro stated that the Commission should have regard to the concerns of customers who are supplying commercially sensitive information but that, as a general rule, all information should be considered public unless a specific request for confidentiality had been made (T: 669/70).

The Industrial Customers suggested that enough information be made public to allow other customers to understand the basic rationale for the reduction but that no specific sources or corporate confidential information be compromised (T: 699). In the absence of such information, the Industrial Customers worried that the public might lose confidence in the RTP program.

2.5.4 Market Access

Although the Industrial Customers offered qualified support for Rate Schedule 1848, due to its load retention benefits, they indicated that they do not view this program as providing them with satisfactory market access (Exhibit 15A, pp. 5/6) and pointed out that their preferred alternative would be direct access to markets for their power requirements (T: 688).

In response to this concern, B.C. Hydro indicated that direct market access would require unbundled transmission and generation rates (T: 641). Further, the Utility noted that, if direct access were to be allowed, the Commission would need to address the question of responsibility for facilities built for firm industrial load (T: 809).

2.5.5 Working and Non-Working Days

As indicated above, the current proposal divides the week into working and non-working days for the purpose of establishing RTP prices. The Industrial Customers argued that the method B.C. Hydro uses for establishing the price for non-working days removes the need to maintain the differentiation between working and non-working days (T: 689).

In reply argument, B.C. Hydro indicated that it has no objection to deleting any reference to working and non-working days and having all days distinguished in the same way between high and low load hours, although this would necessitate a change in the definition of energy used for calculating CBL (T: 809/10).

2.6 Other Issues

2.6.1 Non-Participant Impacts

The Application stated that the RTP program could produce gains for the system as a whole if industrial customers increase consumption when B.C. Hydro has surpluses and decrease consumption when it faces shortages. However, B.C. Hydro acknowledged that, to the extent the changes in customer behavior would have occurred anyway, there is the possibility that B.C. Hydro's net revenues would be less than if the same energy had been purchased under Rate Schedule 1821 (Exhibit 1A, p. I-B-21).

B.C. Hydro identified two choices with respect to the allocation of potential benefits or losses to customers: allocation to all customer classes or allocation to Rate Schedule 1821 customers only. Although B.C. Hydro admitted that a case could be made for allocating only to Rate Schedule 1821 customers, since they are the only class of customer to whom Rate Schedule 1848 is being made available, the Utility suggested that because experience with this program could lead to similar programs being made available to all customer classes, it would be preferable to allocate the costs and benefits of the original trial to all customers and revisit the issue at the next rate design proceeding related to class revenue allocation (Exhibit 1A, p. I-B-22).

The Industrial Customers supported B.C. Hydro's proposal, stating that all customers should make up any shortfall which occurs from the program, since retention of load is a benefit to all customers (Exhibit 15A, p. 9).

In contrast, the CACBC stated that, because Rate Schedule 1821 customers are the only class of customer who can access this rate, any shortfall due to the program should be allocated entirely to them (T: 744). In addition, the CACBC suggested that the number of program participants during the trial period should be capped to protect non-participants (T: 743). The BCEC also expressed concerns that the implementation of this program might reduce gross revenues, although Mr. Lazar agreed that, to the extent load is retained which might otherwise be lost, net revenue would be increased and that this would be a benefit to other rate classes in that less revenue requirement would be shifted to them (T: 354). Accordingly, the BCEC suggested that a more detailed analysis of the cost and benefits of two-part RTP rates and their alternatives be provided before this rate is approved by the Commission (T: 793).

2.6.2 Environmental Issues

In addition to the concerns regarding the effects on the environment of B.C. Hydro retaining load on its system in preference to self-generation, the BCEC identified two other sources of concern with respect to Rate Schedule 1848. First, the BCEC expressed concern that the incremental energy offered to Rate Schedule 1821 customers comes from energy which would otherwise be offered on the export market. Mr. Lazar argued that, when offered on the export market, this electricity displaces electricity from environmentally detrimental resources located elsewhere. Specifically, Mr. Lazar stated that if the energy were not made available for export, then in other jurisdictions "... lower efficiency units would continue to operate, and the adverse effects on both resource depletion and environmental emissions would be exacerbated" (Exhibit 7A, pp. 8/9).

In response to the suggestion that the Commission consider these effects when deciding whether to approve Rate Schedule 1848 on a permanent basis, the Utility stated that there is no reason to believe that its exports displace environmentally detrimental generation. In particular, B.C. Hydro argued that generation sources, such as coal, are primarily providing baseload power and that exports would tend to displace electricity from new gas turbines, which are less environmentally detrimental (T: 659). In addition, B.C. Hydro argued that the Commission's mandate does not extend to a consideration of impacts outside of its area of jurisdiction (T: 658/59).

The BCEC disputed B.C. Hydro's characterization of the relevant U.S. generation resources and noted that the Commission does have a responsibility to consider greenhouse gases which are global in effect (T: 788/89).

The second concern raised by the BCEC was that the margin included in the energy prices does not include a specific allowance for Demand-side Management ("DSM") costs. As discussed in Section 2.2,

Mr. Lazar suggested that B.C. Hydro should institute a full margin RTP rate to incorporate these concerns. Alternatively, Mr. Lazar suggested that B.C. Hydro calculate the margin excluding generation costs but adding DSM costs or include a specific adder, earmarked for recovery of DSM costs, to the RTP rate. Mr. Lazar estimated the appropriate adder at 0.12¢ per kW.h (Exhibit 7A, pp. 10/11)

2.7 Commission Determination

The Commission accepts that there is merit in a rate schedule which allows domestic customers access to B.C. Hydro surplus energy at prices which are comparable to those at which surplus energy is made available to the export market. Further, the Commission accepts that the provision of market priced surplus energy may enhance economic activity within the province by allowing the Utility's customers to take advantage of opportunities which would be unattractive at standard electricity rates. In addition, the Commission accepts the value of a rate schedule which acts to retain load, where it is clear that the load will otherwise be lost and the retention of the load acts to benefit other customers by contributing to net revenue. Finally, the Commission is aware that the design of a single rate schedule which attains all of these goals, without adverse impacts on customers for whom the rate schedule is not applicable, is not easily accomplished.

Based on the evidence and argument before it, it is the Commission's judgment that B.C. Hydro has done much to realize these goals through Rate Schedule 1848. **Accordingly, the Commission approves Rate Schedule 1848 subject to the directions and conditions set out below.**

In approving Rate Schedule 1848, which is a two-part RTP rate, the Commission notes the arguments put forward by B.C. Hydro with respect to the adverse effects a one-part RTP rate can have on non-participating customers. In particular, the Commission is concerned that a one-part RTP rate could lead to substantial shifts in responsibility for the revenue requirement both between and within customer classes. In the absence of any evidence indicating that such a shift is desirable, the Commission is unprepared to allow a rate schedule which would have such a result.

With respect to the BCEC proposal, Mr. Lazar has indicated that, given the specifics of his proposal, such a shift will be minimal, as the rate schedule would have only limited attractiveness. Accordingly, it is unlikely that the goals identified above would be achieved. Although the Commission recognizes that Mr. Lazar's evidence suggests that he does not support these goals, so that the failure of his proposal to achieve them is unlikely to be of concern to him, the Commission is not clear why a rate schedule of limited attractiveness should be approved.

As indicated above, the Commission accepts that the Utility should offer rates which allow load, which it is in clear danger of losing, to be retained, if the retention is to the benefit of other customers. Nonetheless, the Commission agrees with CACBC, BCEC and other intervenors who expressed concern regarding the criteria used by B.C. Hydro to determine if a CBL reduction is required and the difficulty of verifying whether a need truly exists. In particular, the Commission is concerned that B.C. Hydro is placing undue reliance on a comparison of electricity costs in other jurisdictions and is not examining all factors which may affect the relative competitive positions of similar businesses located in different jurisdictions.

Accordingly, the Commission accepts the criteria put forward by B.C. Hydro for reducing the CBL for load retention purposes as sufficient to assess when such reductions are appropriate for the one year trial period, but directs the Utility to develop more sophisticated criteria and procedures which consider all relevant aspects of the need for load retention and not simply electricity costs. In particular, the criteria should address the appropriateness of industry versus customer specific reductions in CBL with a view to avoiding undue discrimination amongst customers and ensuring that CBL reductions are kept to the minimum necessary to retain load. These criteria and procedures are to be filed with the Commission at the end of the one year trial period. In all cases of CBL reduction, the over-riding principle should be the maximization of benefits to all customers.

With respect to the energy charge, the Commission accepts the use of Powerex prices and the 0.5¢ margin, as proposed in the Application, for the one year trial period. However, the Commission directs B.C. Hydro to undertake a further evaluation of alternative indicators of electricity market value in B.C. and file a proposal in this regard at the end of the trial period. In addition, the Commission directs B.C. Hydro to re-examine the margin to determine the direct incremental costs which the margin must cover and to eliminate any allowance for risk which has already been provided for in other charges. The results of this examination must also be filed at the end of the trial period.

With respect to availability of service, the Commission does not accept that B.C. Hydro has shown any substantive reasons why Rate Schedule 1211 customers currently served at transmission voltage can not have access to an RTP rate. However, the Commission is cognizant of B.C. Hydro's concern that access to Rate Schedule 1848 would result in a decrease in the revenue requirement responsibility attributable to this class of customer. **Therefore, the Commission directs B.C. Hydro to develop a rate**

schedule, similar to Rate Schedule 1848, for transmission voltage Rate Schedule 1211 customers which will result in the maintenance of their current contribution to fixed costs. This is to be filed no later than January 1, 1997.

With respect to quality of service, the Commission is not persuaded by the Industrial Customers' argument that, if B.C. Hydro posts a day ahead price for energy but then interrupts a customer who avails itself of that energy, it is evidence that B.C. Hydro has mismanaged its resources. Accordingly, the Commission declines to direct B.C. Hydro to acquire supplemental energy for the customer and sell it to the customer at the RTP rate. If the Commission were to order what the Industrial Customers suggested, this would be tantamount to ordering firm supply at a non-firm price and would be to the detriment of other customer classes who would be required to make-up the shortfall.

With respect to the confidentiality of information received by the Commission when a request for a CBL reduction is made, the Commission will consider all information to be public unless a specific request for confidentiality is made.

The Commission accepts the deletion of the definition of working and non-working days proposed by the Industrial Customers and accepted by B.C. Hydro.

With respect to the potential environmental impacts of Rate Schedule 1848, identified by the BCEC, the Commission directs B.C. Hydro to monitor, during the trial period, whether the tariff has impacted any proposed self-generation projects, and if so, what, if any, environmental consequences have or may occur. Further, the Commission accepts that the proposal for a specific DSM adder may have merit and should be considered in the margin calculation to be provided after the one year trial period.

Finally, the Commission accepts that any revenue loss or gain which occurs during the one year trial period should be allocated to all customer classes rather than to Rate Schedule 1821 customers solely. In coming to this judgment, the Commission accepts that the results of the trial have the potential for benefits to all customer classes. The issue of allocation may be revisited after the one year trial period.

3.0 RATE SCHEDULE 1880 - EMERGENCY STANDBY SERVICE

3.1 Description of Service

B.C. Hydro proposes to modify the terms and conditions of Rate Schedule 1880 to offer an emergency standby service that is instantaneously available. Standby service is a backup generation service available to customers who own self-generation resources for times when all or part of the customer's generating plant is not available. Under the previous Rate Schedule 1880 (Transmission Service - Emergency, Maintenance and Special Supply), B.C. Hydro required customers to give notice of the estimated amount of electricity to be taken and duration of use, and required customers to obtain approval from B.C. Hydro before commencing service. In the Application, B.C. Hydro proposes to offer emergency backup service on an instantaneous basis if the energy is available on the system. Customers will be required to inform B.C. Hydro within 30 minutes of taking service, otherwise customers will be billed at the rates contained in Rate Schedule 1821 (Exhibit 1A, p. I-C-1-3). B.C. Hydro has retained the previous notice and approval conditions for customers who wish to use this service to make an unanticipated short-term sale in the spot market of the customer's product or to make up production after an abnormal operating condition.

This tariff amendment represents the latest of a number of previous attempts to offer standby services to self-generating customers. In September 1994, B.C. Hydro submitted an application for two generation standby services: Rate Schedule 1883--Generation Standby Service (Short Term) and Rate Schedule 1884--Generation Standby Service (Standard). These two services modified a September 9, 1993 application but were withdrawn and replaced with the current Application.

Unlike the 1994 application, the service in this Application does not include firm standby service. B.C. Hydro stated that it will not modify Rate Schedule 1880 to provide firm service but rather it committed to developing a new rate schedule for firm standby service which will take the form of a two-part tariff including a charge for reserved standby capacity and a charge for energy taken (Exhibit 1A, p. I-C-3).

As proposed, the emergency standby service will be interruptible; that is, B.C. Hydro will only offer service if it has energy and capacity available. At its discretion, B.C. Hydro will interrupt service if it determines that supplying this service jeopardizes system integrity and reliability. The Utility will require the customer to activate load shedding relays or will control the relays itself. At the time of the hearing, B.C. Hydro had not yet drafted operating procedures for informing Rate Schedule 1880 customers of times of system constraints and, therefore, seeks approval of the Application without such procedures in place (T: 482).

The rates in Rate Schedule 1880 remain unchanged from the previous schedule. This structure contains the following:

- (1) a demand charge of \$0.00665 per kV.A of Rate Schedule 1880 billing demand times the number of hours in the period of use;
- (2) an energy charge of 2.859¢/kW.h for the first 250 kW.h. per kV.A of billing demand plus 2.599¢ per kW.h for all additional kW.h; plus
- (3) a minimum charge of \$0.479 per kV.A of billing demand in the period that the period of use terminates.

The service is available to customers taking service under either Rate Schedules 1821 or 1848, although the billing demand differs for each of these classes. For customers taking service under Rate Schedule 1821, the billing demand is the difference between the maximum kV.A demand during the period of use, or a portion thereof, and the billing demand under Rate Schedule 1821. For customers taking power under Rate Schedule 1848, the billing demand is the difference between the maximum kV.A during the period of use, or a portion thereof, and the highest kV.A demand in the period immediately prior to the period of use, provided that the highest kV.A is not less than the customer's CBL demand.

3.2 Discussion

Overall, there was no opposition to the proposed modification to Rate Schedule 1880. The Industrial Customers were the only intervening party to raise a concern with the proposed modification. Nonetheless, their concern did not cause them to withdraw their support for the tariff modification (T:702).

The Industrial Customers expressed concern about the definition of billing demand, contained in Rate Schedule 1880, for customers taking electricity supply under Rate Schedule 1848. They argued that the definition of billing demand was unfair to customers under certain circumstances. For example, if a customer is bringing its "...load up to a normal level it could find itself paying for energy normally intended to be covered by its 1848 contract and even in excess of the missing generator's capacity." (T: 701).

The Industrial Customers recommended two solutions. As an administratively simple solution, they recommended defining Rate Schedule 1880 billing demand for Rate Schedule 1848 customers as the "...difference between the highest kV.A demand during the period of use, or portion thereof, and the Customer's Nominated RTP demand applicable to this Rate Schedule." (T: 701). They also offered a second, minimum, solution of using the Customer's average RTP demand level under Rate Schedule 1848 during the previous three months instead of the nominated RTP demand.

B.C. Hydro replied that both suggestions were inappropriate because they would create the opportunity for a customer to take Rate Schedule 1880 demand on Rate Schedule 1848. Moreover, with only one customer taking Rate Schedule 1848 who has self-generation and may require Rate Schedule 1880 service, B.C. Hydro did not expect this issue to be significant. If any concerns arise during the trial period, B.C. Hydro noted that they will be willing to work with the customer to determine a more appropriate method of verifying loss of generation, which may include further metering of the customer's generation unit.

3.3 Commission Determination

On the basis of the evidence, it is the Commission's judgment that the Application as filed with respect to Rate Schedule 1880 is acceptable. Concerning the issue raised by the Industrial Customers with respect to billing demand, while the Commission recognizes that there may be exceptional circumstances where a Rate Schedule 1848 customer may dispute the billing demand, the Commission does not believe that the present definition is unduly restrictive. Moreover, failing successful negotiation, the parties may come before the Commission for adjudication.

The Commission also directs the Utility to file operating procedures for informing Rate Schedule 1880 customers of the times when the system will not be capable of providing this service as soon as such operating procedures become available or within 90 days of this Decision.

Furthermore, the Commission recognizes that B.C. Hydro is developing a firm standby tariff and therefore expects that the Utility will file tariffs for firm standby service with the Commission by January 1, 1997.

4.0 CURTAILABLE SERVICE

4.1 Background

Curtable service allows customers to define a portion of their load as curtable; that is, the customer will agree to shed a portion of its load upon request with prior notice and for a specified duration (e.g., during constrained or critical periods) in exchange for a credit. In the Application, B.C. Hydro did not include detailed terms and conditions for a Curtable Service tariff; instead, the utility proposed principles and generic terms and conditions for designing a specific Curtable Service tariff in the future.

In August 1993, by Order G-74-93, the Commission approved a trial Curtable Load program that was to extend from September 1, 1993, to August 31, 1995. One customer participated in the program, but suspended service in February 1994 when it was granted access to B.C. Hydro's Power Exchange Operation. B.C. Hydro undertook a program assessment resulting in a modified Curtable Credit Schedule (Rate Schedule 1860) submitted as part of the January 1995 Industrial Service Options Application. This proposal was to be implemented system-wide to achieve generation cost savings.

B.C. Hydro withdrew the January 1995 application and replaced it with the generic terms and conditions for curtable service option included in the current Application. B.C. Hydro stated that "...current market and system conditions of generation surplus negate cost-effective implementation of the 1994 [Jan. 1995] option". As a result, B.C. Hydro aims to target the option for area-specific benefits in order to be able to defer transmission investment intended for local reliability (Exhibit 1A, p. I-D-2).

4.2 Description of Service

B.C. Hydro proposed the following principles upon which it will design the specific tariff as required:

- (1) the bill reduction for curtable load should accurately reflect B.C. Hydro's avoided cost of increasing local area transmission capacity; and
- (2) the bill reduction should yield mutual benefits to both participants and non-participants.

Consequently, B.C. Hydro will only consider offering the option to customers in an area with planned transmission investment and where customer participation would result in cost-effective deferral of the transmission investment.

The generic terms state that a customer will nominate a firm service level (FSL) as a minimum kV.A level, below which service will be as reliable as under Rate Schedule 1821. The customer will only be allowed to take service above the FSL if B.C. Hydro does not request the customer to curtail during that period.

B.C. Hydro will offer the customer a \$/kV.A-month payment for the curtailable portion of its load. The payment represents a portion of the value of the curtailable load to the Utility. The Utility will calculate the payment as the difference between the present value of the original capacity expansion plan and the present value of the deferred plan converted to an annualized \$/kV.A-year payment and then split 60/40 between the customer and B.C. Hydro.

B.C. Hydro has not included any specific penalties for non-compliance, but will require the customer to have load shedding equipment and procedures in place to implement curtailment upon request. At B.C. Hydro's discretion, it may require the customer to assign control of such equipment and procedures to the Utility.

The generic terms also allow a participating customer the opportunity to make up production lost due to service curtailment at a mutually agreed time and duration, without additional incremental billing charges.

4.3 Discussion

All intervenors to the hearing supported the principle of curtailable service as an alternative to the construction of facilities to meet growing demand in areas of system constraint.

In addition, the Industrial Customers stated that they would like to receive a similar service at similar rates to the recallable transmission service that was offered by B.C. Hydro to wholesale transmission customers in the B.C. Hydro Wholesale Transmission Services Application (November 1995). They expressed concern that B.C. Hydro's was using "incremental pricing for interruptible sales into the export market and rolled in pricing for interruptible service to the domestic market" noting that it "could have serious consequences for local companies, and possibly significant benefits for British Columbia Industrials' competitors in the United States." (T: 702).

B.C. Hydro disagreed, arguing that it was not appropriate to compare the recallable transmission service offered in the Wholesale Transmission Services Application with the curtailable service proposed in this Application (T: 671/72, 814). The recallable transmission rate offers surplus transmission capacity to wholesale customers not presently on the system. In contrast, the curtailable service proposal offers a

discount to existing firm service customers taking bundled service to avoid a transmission capacity addition.

4.4 Commission Determination

In the opinion of the Commission, the principles included in the generic terms and conditions broadly reflect the notion of incremental costs endorsed by this Commission in past proceedings. As specified, these generic terms reflect the difference in area and time-specific costs of the transmission infrastructure capacity and offer benefits to those customers who contribute to reduce the marginal capacity costs on the system. Although the Commission accepts that payments to customers will reflect local benefits, the Commission also suggests that B.C. Hydro consider any non-local benefits, e.g., generation capacity benefits, which may be achieved through curtailment.

The Commission is also aware that, as further unbundling of utility service occurs, there will be necessary changes to all services provided by the utility to its industrial and other customers. **However, at this time, the Commission is willing to accept the principles for this curtailable load option, which has been designed in the context of bundled retail services.**

The Commission also notes that approval of generic terms and conditions for future implementation does not abrogate the Utility or this Commission of their responsibilities to review the specific terms and conditions of a curtailable service option at the time of filing, nor does it preclude the modification of these generic terms should conditions warrant.

DATED at the City of Vancouver, in the Province of British Columbia, this 17th day of July, 1996.

Original signed by:

Dr. Mark K. Jaccard
Chair

Original signed by:

Kenneth L. Hall, P.Eng.
Commissioner

Original signed by:

P.G. Bradley
Commissioner

SIXTH FLOOR, 900 HOWE STREET, BOX 250
VANCOUVER, B.C. V6Z 2N3
CANADA

a

TELEPHONE: (604) 660-4700
BC TOLL FREE: 1-800-663-1385
FACSIMILE: (604) 660-1102

IN THE MATTER OF
the Utilities Commission Act, S.B.C. 1980, c. 60, as amended

and

An Application by British Columbia Hydro and Power Authority
for Approval of an Application for Industrial Service Options

BEFORE: M.K. Jaccard, Chairperson;)
K.L. Hall, Commissioner; and) July 17, 1996
P.G. Bradley, Commissioner)

O R D E R

WHEREAS:

- A. On January 22, 1996 British Columbia Hydro and Power Authority ("B.C. Hydro") filed an application to provide certain Industrial Service Options within its service area ("the Application"); and
- B. The Commission, by Order No. G-5-96, approved a Real Time Pricing Schedule - Rate Schedule 1848 - on an interim basis, effective January 31, 1996, subject to certain conditions, and issued a Regulatory Timetable which set down the public hearing to commence May 13, 1996; and
- C. The Commission, by Order No. G-50-96, approved Rate Schedule 1880, which allows for the provision of emergency, maintenance, and special supply to customers with self-generation, on an interim basis, effective April 1, 1996; and
- D. The Commission considered evidence and argument regarding the Application at the public hearing, including the filing of written argument by intervenors and rebuttal argument by the Applicant.

NOW THEREFORE the Commission orders B.C. Hydro to comply with the directions contained in the Commission's Decision issued concurrently with this Order.

DATED at the City of Vancouver, in the Province of British Columbia, this 17th day of July 1996.

BY ORDER

*Original signed
by Author*

Kenneth L. Hall
Commissioner

APPEARANCES

M. MOSELEY C. JONES	Commission Counsel
C.W. SANDERSON Z. LAZIC	British Columbia Hydro and Power Authority
J. CAMPBELL	Himself
M.P. DOHERTY W. KRAMPL	The Consumers' Association of Canada (B.C. Branch) British Columbia Old Age Pensioners' Organization Council of Senior Citizens' Organizations of B.C. Federated Anti-Poverty Groups of B.C. Senior Citizens' Association of B.C. West End Seniors' Network
R.B. WALLACE	Council of Forest Industries of British Columbia Mining Association of B.C. Electro-Chemical Producers
M. BOYLE	Trans Mountain Pipe Line Company Ltd.
C. REARDON D. FOLEY	British Columbia Energy Coalition

W.J. GRANT
D.W. EMES
S.A. WENAAS
N.C.J. SMITH

Commission Staff

ALLWEST COURT REPORTERS LTD.

Court Reporters & Hearing Officer

LIST OF EXHIBITS

	<u>Exhibit No.</u>
British Columbia Hydro and Power Authority, Industrial Service Option/Rate Design Application, Volume 1	1A
British Columbia Hydro and Power Authority, Industrial Service Option/Rate Design Application, Volume 2	1B
Affidavit of Service of Publication, dated May 10, 1996	1C
Evaluation Plan: Optional Real Time Pricing, Rate Schedule 1848, Mr. A. Loewen	1D
British Columbia Government, Greenhouse Gas Action Plan	2A
British Columbia Hydro and Power Authority, Greenhouse Gas Action Plan	2B
Excerpt from British Columbia Hydro and Power Authority, 1994 Electricity Plan	2C
Responses to Questions No. 5000 and 5001 by Mr. Doherty and Energy Transfer Pricing Agreement	3
British Columbia Hydro and Power Authority, Sales Management Prices for February 14, 1996 and May 1, 1996	4
Ontario Hydro Table of Contents of Draft Tariff Document, dated March 14, 1996	5
British Columbia Hydro and Power Authority, Proforma Fully Allocated Cost of Service study 1995/96	6
Evidence by Jim Lazar on behalf of British Columbia Energy Coalition	7A
Extracts from Washington Water Power Company tariff	7B
British Columbia Hydro and Power Authority, response to Questions No. 5004, 5007, 5008 and 5009	8
CXY Chemicals Canada Ltd. letter to the B.C. Utilities Commission, dated April 24, 1996	9
British Columbia Power Exchange Corporation, Daily Price Sheet, dated March 16-18, 1996	10
Historical Real Time Pricing prices	11
British Columbia Hydro and Power Authority, response to Questions No. 5002, 5006, 5010 and 5011	12
British Columbia Hydro and Power Authority, 1995 Integrated Electricity Plan, Appendix D Page 6-1	13
Monthly Spot Price chart	14A

LIST OF EXHIBITS
(cont'd.)

	<u>Exhibit No.</u>
Month Spot Price - HLH and Month Spot Price LLH charts	14B
Evidence on Behalf of the Council of Forest Industries, the Mining Association of B.C., and the Electro-Chemical Producers, dated April 23, 1996	15A
Supplementary Evidence on Behalf of the Council of Forest Industries, the Mining Association of B.C., and the Electro-Chemical Producers, dated May 10, 1996	15A
British Columbia Hydro and Power Authority, response to Question No. 5003	16