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BRITISH COLUMBIA
UTILITIES COMMISSION

ORDER
NUMBER G-74-93

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AN ORDER 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

BEFORE: L.R. Barr, Deputy Chairperson; and) August 30, 1993
K.L. Hall, Commissioner)

O R D E R

WHEREAS:

- A. On August 24, 1993 British Columbia Hydro and Power Authority ("B.C. Hydro") applied for Commission approval to vary the Terms and Conditions of its Electric Tariff by introducing a Trial Curtailable Load Program, ("the Program"), as a pilot program and to be made available to its Rate Schedule 1821 customers located in the Lower Mainland and on Vancouver Island; and
- B. The Program will provide B.C. Hydro with greater flexibility in planning, operation and utilization of its integrated system and will provide participating customers with credits to their monthly electricity bills; and
- C. The Program is for a trial period, commencing September 1, 1993 and is proposed to continue for a period of two years; and
- D. The Commission has reviewed the Program and finds that approval is necessary and in the public interest.

NOW THEREFORE the Commission orders as follows:

- 1. The Trial Curtailable Load Program as proposed in the August 24, 1993 B.C. Hydro Application is approved as per Appendix A, attached and as follows:

Term	September 1, 1993 to August 31, 1995
Availability	Customers served under Rate Schedule 1821 located in the Lower Mainland and on Vancouver Island on a trial basis.

- 2. B.C. Hydro will provide the Commission with Reports on experiences in the Program every six months with a Final Report on its conclusion.
- 3. B.C. Hydro is to file for Commission approval each contract executed under the Program, as an Electric Tariff Supplement.

DATED at the City of Vancouver, in the Province of British Columbia, this 9th day of September, 1993.

BY ORDER

Lorna R. Barr
Deputy Chairperson

PRINCIPLES OF AGREEMENT
TRIAL CURTAILABLE LOAD PROGRAM

1. Purpose

- a) B.C. Hydro will negotiate contracts for curtailable loads when a customer's load is in a location and of sufficient quantity that can be curtailed to achieve optimal system planning and utilization and to enhance operating efficiency and flexibility.
- b) The curtailable load option will be negotiated with those customers that are willing and able to curtail load at B.C. Hydro's request in return for a share of the planning and operations savings.
- c) In consideration of the right to curtail load occasionally and temporarily, B.C. Hydro will provide curtailable customers with a credit for the curtailable portion of the customer's load.
- d) In the long run, curtailment will be used as a resource in planning and operation of the B.C. Hydro system. However, in the short run, during the trial program, curtailments may have to be exclusively used to facilitate electricity trade to simulate a more heavily loaded system to gain experience.
- e) The trial period for this program will not exceed the period covering two winter load periods, from commencement. The total curtailable load for the trial period is proposed to be limited to 125 MV.A and to be available only in the Lower Mainland and Vancouver Island.

2. Firm and Curtailable Supply

- a) The customer will specify a Firm Power Level that is not curtailable under this program by B.C. Hydro and below which the customer does not wish to reduce load during a curtailment period.
- b) The customer will generally have a minimum of 25 MV.A of curtailable load capability; however, this minimum is negotiable if a lesser curtailable load capability has a benefit on the B.C. Hydro system. However, B.C. Hydro may limit curtailable load to no more than 25 MV.A per plant location, if there are more than 5 customers interested in the trial program.
- c) The customer will reduce load to the Firm Power Level as specified by a B.C. Hydro request.
- d) The customer shall not be supplied Electricity above the Firm Power Level from any source over B.C. Hydro's facilities while a curtailment is in effect.

3. Curtailment Notification, Duration and Occurrences

- a) B.C. Hydro will provide notice to the customer prior to the commencement of a curtailment period of no less than the minimum notification period option selected by the customer. The minimum notification options are 4 hours, 1 hour and 30 minutes.
- b) Curtailment duration will not exceed the maximum curtailment duration per occurrence. The cumulative hours of curtailment in any one year, beginning with the date of entry into the curtailable load program or its anniversary, will not exceed the cumulative hours of curtailment, as selected by the customer. There are three options for curtailment duration and cumulative hours of curtailment per year. The options are:
 - (i) 4 hours duration and 300 cumulative hours;
 - (ii) 8 hours duration and 600 cumulative hours;
 - (iii) 12 hours duration and 800 cumulative hours.
- c) If a curtailment notice has been given and is subsequently cancelled by B.C. Hydro, either before the start of the curtailment or during the curtailment, then a curtailment is deemed to have occurred. The accumulation of hours of curtailment is deemed to be the maximum duration of curtailment that the customer has chosen. A recovery period shall be allowed as originally agreed, or as otherwise mutually agreed.
- d)
 - (i) During the period November 1 to the end of February, the maximum number of curtailment occurrences will be 40. However, a customer has the option of choosing a lower number of maximum occurrences during this period for a corresponding lower credit, provided it is not less than 20.
 - (ii) During the period March 1 to October 31, the number of curtailment occurrences is limited only by the customer's choice of the cumulative hours of curtailment for each 12 months of the agreement.
- e) B.C. Hydro cannot request the commencement of more than one curtailment occurrence per calendar day.
- f) If B.C. Hydro requests a curtailment of shorter duration than that selected by the customer, the accumulation of hours of curtailment shall be the duration selected by the customer, and a recovery period shall be allowed as if the maximum duration had been requested.

4. Curtailment Credits

- a) For the right to 3 curtailments in each month in a year by B.C. Hydro, the customer will receive Monthly Credit in each billing period based on the following:

$$\text{Monthly Credit} = (\text{PD} - \text{FL}) \times \text{LF} \times \text{W} \times \text{C} \times \frac{\text{RC}}{40}$$

Where:

PD is the customer's highest kV.A demand in the billing period during the periods from 0700 to 2000 hours on weekdays excluding Statutory holidays during a Billing Period

FL Firm Power Level in kV.A specified by the customer

LF is the customer's load factor in the billing period from 0700 to 2000 hours on weekdays excluding Statutory holidays, and excluding any periods during which the customer complied with a load curtailment request

W is the Monthly Weighting Factor as shown below:

November, December, January, February:	W = 1.5
March, April, September, October:	W = 1.0
May, June, July, August:	W = 0.5

C is the credit in \$/kV.A as shown in Appendix 1 for the options chosen by the customer

RC is the number of curtailments chosen by the customer in accordance with 4 c)

- b) B.C. Hydro has the right to curtail a customer's load a maximum of 28 additional times from November 1 to the end of February for a maximum total of 40 curtailments in the period. B.C. Hydro also has the right to curtail a customer's load additional times in the March 1 to October 31 period subject only to the maximum cumulative hours of curtailment chosen by the customer. If the number of curtailments in a billing period exceeds 3 curtailments, B.C. Hydro will pay the customer an additional one-third of the monthly credit for each curtailment occurrence greater than 3 occurrences per billing period.
- c) A customer may choose, prior to the execution of the Trial Curtable Load Agreement, a lower number of curtailments than a maximum of 40 during the November 1 to the end of February period. The monthly credit for a lower maximum will then be pro-rated based on a maximum of 40, provided the minimum number of maximum curtailment occurrences during the November 1 to the end of February period is not less than 20.
- d) B.C. Hydro and the customer may agree on curtailment occurrences or hours of curtailment over and above the options chosen by customer. Any such additional curtailments agreed on by B.C. Hydro and a customer will attract a credit that will be negotiated by B.C. Hydro and the customer.

5. Failure to Curtail

- a) During the first six months that a customer is on the Trial Program and in order to facilitate both the customer and B.C. Hydro gaining experience with this new program, failure by the customer to curtail load on request by

B.C. Hydro to the Firm Power Level or lower, for the curtailment duration, will result in a penalty surcharge as follows:

- (i) The customer is permitted a single denial of a curtailment request during the entire first six month period. If a customer makes such a denial, the customer will forfeit the Monthly Credit for the month in which the denial occurs.
 - (ii) If a customer has used up the one permitted denial, then the first failure to comply with a curtailment request in a billing month will result in a surcharge of 2 times the total monthly curtailable credit for the billing period.
 - (iii) Each subsequent instance of non-compliance in a billing period will result in the application of a surcharge equal to 10 times the total monthly curtailable load credit.
- b) For all months following the first six months that a customer is on the Trial Program. Failure by the customer to curtail load on request by B.C. Hydro to the Firm Power Level or lower, for the curtailment duration, will result in a penalty surcharge as follows:
- (i) The first failure to comply with the curtailment request in a billing period will result in a surcharge of 2 times the total monthly curtailable credit for the billing period.
 - (ii) Each subsequent instance of non-compliance in a billing period will result in the application of a surcharge equal to 10 times the total monthly curtailable load credit.

The penalty surcharge is in addition to the normal demand charges. In some circumstances B.C. Hydro may insist on a "hardwire" interrupt capability. In addition, B.C. Hydro reserves the right to interrupt the whole electricity supply to the customer's plant when the customer has failed to curtail load to the Firm Power Level pursuant to the Trial Curtailable Load Agreement.

6. Recovery Period

- a) A curtailable load customer may make up lost production due to a load curtailment during the recovery period. Any new maximum demand set by the customer during the recovery period will not be taken into account for determining the Billing Demand for B.C. Hydro Rate Schedule 1821 unless the customer exceeds the Recovery Demand agreed upon. The customer will be responsible for any costs for area reinforcements required to meet such a higher demand.
- b) The recovery period is a period agreed to by B.C. Hydro at the time notice of curtailment is given, such as:
 - (i) B.C. Hydro's low load hours, defined as between 20:00 to 07:00, the night preceding the start of the period for which the customer has been given notice of a curtailment.

- (ii) The low load hours, the night following the curtailment, including the first weekend and including a statutory holiday following the curtailment.
- (iii) A time period during the low load hours agreed to by B.C. Hydro and the customer.

7. Initial Term and Termination

- a) The curtailable load options will be offered to the first 5 customers in the Lower Mainland and Vancouver Island regions for a Trial Period covering two winter load periods after commencement of the trial program. During this period the customer and B.C. Hydro will meet to discuss results every 6 months.
- b) During the Trial Period, B.C. Hydro reserves the right to revise the credits, and terms and conditions of the curtailable load policy, pending further system and operations studies and results of the program. B.C. Hydro will give customers 6 months notice of any changes.
- c) During the Trial Period, a customer must remain on the program for a minimum of 12 months, or refund all Monthly Credits accumulated.
- d) During the Trial Period, the customer may, upon giving 6 months notice to B.C. Hydro, switch to a different option from among those offered by B.C. Hydro, or may withdraw from the Trial Curtailable Load Program without penalty upon giving 6 months notice, subject to 7 c) above.
- e) Following the Trial Period and subject to B.C. Hydro's evaluation of the Trial Curtailable Load Program, B.C. Hydro will negotiate agreements for curtailable loads for a minimum term of 4 consecutive years with a 4 year notice requirement.

8. Regulatory Approvals

- a) The Trial Curtailable Load Program is subject to approval by B.C. Hydro Management and the British Columbia Utilities Commission.

APPENDIX 1

TRIAL CURTAILABLE LOAD CREDIT APPLICABLE IN THE LOWER MAINLAND AND VANCOUVER ISLAND REGIONS

Monthly Credits in \$/kVA

Notice Period	Curtailement Duration/Cumulative Hours		
	4 hrs 300 hrs	8 hrs 600 hrs	12 hrs 800 hrs
4 hr	.48	.57	.71
1 hr	.52	.62	.78
30 min	.56	.68	.85