

- 1 Q. Provide details of the price escalation clauses for each of the purchased
2 power contracts that are based on fuel. (Corporate Overview Evidence, page
3 1, lines 18 and 19)
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5
6 A. Hydro presently has four Power Purchase Agreements that tie the price of
7 the energy purchases to the price of petroleum. Those contracts are with:
8 Corner Brook Pulp and Paper, Frontier Energy, Mary's Harbour Hydro, and
9 Hydro Québec. Relevant sections of the agreements are provided below.

CORNER BROOK PULP AND PAPER

Article 3 - Purchase of Power and Energy

3.01 CBPP agrees to sell and Hydro agrees to purchase and pay for all Power and Energy made available by CBPP from the Facility for sale to Hydro throughout the term of this Agreement. The point of sale for Power and Energy delivered under this Agreement shall be the Interconnection Point. For all purposes of this Agreement, to account for the incremental station service load of the Facility, the amount of Energy deemed to be delivered for sale to Hydro by CBPP shall be determined as 96.5% of the Power and Energy metered at the Interconnection Point in every 15 minute interval. The amount of Power and Energy deemed to be delivered to Hydro by CBPP shall also be the amount of Power and Energy deemed to be sold by Hydro to CBPP at the Interconnection Point under any agreement or arrangement that governs those deliveries. Hydro shall not reduce or refuse the delivery of any such Power and Energy at any time except in accordance with the terms of this Agreement.

3.02 Subject to Article 3.01, Hydro agrees to pay for Power and Energy delivered in each month of the term of this Agreement as follows:

3.02(a) Hydro agrees to pay for Energy delivered up to 110 GWh per calendar year (Base Energy), an amount calculated by application of the following formula:

$$BEP_j = FC_j + BEOM_j + VBE_j$$

where j is the month for which payment is payable;

BEP_j is the total payment for Base Energy for Month j ;

FC_j is the fixed energy component payable to CBPP by Hydro for month j calculated in accordance with Article 3.03;

$BEOM_j$ is the variable operating and maintenance component for Base Energy payable to CBPP by Hydro for month j and calculated in accordance with Article 3.04(a);

VBE_j is the variable Base Energy component payable to CBPP by Hydro for month j calculated in accordance with Article 3.05(a).

- 3.02(b) Hydro agrees to pay for Energy delivered in excess of 110 GWh per calendar year (Excess Energy), an amount calculated by the following formula:

$$EEP_j = EEOM_j + VEE_j$$

where j is the month for which payment is payable;

EEP_j is the total payment for Excess Energy in month j ;

$EEOM_j$ is the variable operating and maintenance component for Excess Energy payable to CBPP by Hydro for month j and calculated in accordance with Article 3.04(b);

VEE_j is the variable Excess Energy component payable to CBPP by Hydro for month j calculated in accordance with Article 3.05(b).

- 3.03 The fixed energy component (FC_j) shall be determined in accordance with the following formula:

$$FC_j = (FEC \times FCE) \times BE_j$$

where j is the month for which payment is payable;

FC_j is the total fixed energy payment for month j ;

FEC is the fixed energy component as stated in clause 3.06;

FCE is the fixed charge price escalation factor as defined in Appendix B;

BE_j is the Base Energy purchased under this Agreement by Hydro from CBPP in month j .

- 3.04 (a) The operating and maintenance component ($BEOM_j$) payable to CBPP by Hydro for Base Energy shall be determined by application of the following formula:

$$BEOM_j = (BEOM \times OMe_i) \times BE_j$$

where j is the month for which payment is payable;

i is the calendar year in which month j falls;

$BEOM_j$ is the total operating and maintenance payment for Base Energy in Month j ;

$BEOM$ is the operating and maintenance component for Base Energy as stated in clause 3.06;

OMe is the operating and maintenance component escalation factor as defined in Appendix B;

BE_j is the Base Energy purchased under this Agreement by Hydro from CBPP in month j .

- 3.04(b) The operating and maintenance component ($EEOM_j$) payable to CBPP by Hydro for Excess Energy shall be determined by application of the following formula:

$$EEOM_j = (EEOM \times OMe_i) \times EE_j$$

where j is the month for which payment is payable;

i is the calendar year in which month j falls;

$EEOM_j$ is the operating and maintenance payment for Excess Energy in month j ;

$EEOM$ is the operating and maintenance component for Excess Energy as stated in clause 3.06;

OMe is the operating and maintenance component escalation factor as defined in Appendix B ;

EE_j is the Excess Energy purchased under this Agreement by Hydro from CBPP in month j .

- 3.05(a) The variable Base Energy component (VBE_j) payable to CBPP by Hydro shall be determined by application of the following formula:

$$VBE_j = (VBE \times VER_e) \times BE_j$$

where j is the month for which payment is payable;

VBE_j is the variable Base Energy payment for month j

VBE is the variable Base Energy rate as stated in Article 3.06;

VER_e is the variable energy component escalation factor as defined in Appendix B;

BE_j is the Base Energy purchased under this Agreement by Hydro from CBPP in month j .

- 3.05(b) The variable Excess Energy component (VEE_j) payable to CBPP by Hydro shall be determined by application of the following formula:

$$VEE_j = (VEE \times VER_e) \times EE_j$$

where j is the month for which payment is payable;

VEE_j is the variable Excess Energy payment for month j ;

VEE is the variable energy rate as stated in Article 3.06;

VER_e is the variable energy component escalation factor as defined in Appendix B ;

EE_j is the Excess Energy purchased under this Agreement by Hydro from CBPP in month j .

B.5 Calculation of Variable VERe

The variable VERe is a monthly escalation factor based upon the ratio of the monthly average cost of fuel (in \$Can. per barrel) in CBPP's storage tanks as recorded in the accounting records of CBPP, to \$25.00 (Can.) per barrel. The accounting records are warranted to record such cost of fuel in accordance with the following formula which will not be altered in form or application without the prior written consent of Hydro.

$$VERe_j = \frac{COF_j}{25.00}$$

Subject To

$$COF_j = \frac{FIT_{j-1} \times COF_{j-1} + TCOFD_{j-1}}{FIT_{j-1} + TFD_{j-1}}$$

where

j	is the Month in which the Energy Payment as determined in Clause 3.05 is payable.
COF	is the average cost of Bunker C fuel oil (\$Can./BBL) in CBPP's storage tanks at the start of the month indicated by the subscript; and
FIT _{j-1}	is the amount of Bunker C fuel oil (BBLs) in CBPP's storage tanks at the start of the month which is one month prior to the month in which the Energy Payment is payable; and
TFD _{j-1}	is the total amount of Bunker C fuel oil (BBLs) delivered to CBPP's storage tanks in the month which is one month prior to the month in which the Energy Payment is payable; and
TCOFD _{j-1}	is the total cost (\$Can.) of Bunker C fuel oil delivered to CBPP's storage tanks in the month which is one month prior to the month in which the Energy Payment is payable.

CBPP agrees to provide a certification from its auditors of the calculation of COF_{j-1} in respect of the first month in which an Energy Payment is due.

FRONTIER ENERGY

SCHEDULE B

B.1 Calculation of Energy Payment

Hydro agrees to pay for Energy delivered in each month of the term of this Agreement, an amount calculated by application of the following formula:

$$EP_{ji} = ED_{ji} \times (FC_{ji} / EFF_{i-1})$$

where j is the month for which payment is payable;
 i is the calendar year in which month j falls;
 EP_{ji} is the total Energy Payment for Energy Delivered in Month j of calendar year i ;
 ED_{ji} is the Energy Delivered by the Generator to Hydro under the terms of this Agreement in Month j of calendar year i ;
 FC_{ji} is the average Fuel Cost for diesel fuel consumed in the Ramea diesel generating facility in Month j of calendar year i ; and
 EFF_{i-1} is the average plant Efficiency of Hydro's Ramea diesel generating facility for the calendar year immediately preceding the year for which payment is payable as stated in Section B.2.

B.2 Calculation of Variable EFF_{i-1}

The variable EFF_{i-1} is the average plant efficiency of Hydro's Ramea diesel generating facilities for the immediately preceding year and is the greater of either:

(a) 3.90 kWh/litre of fuel which is the average plant efficiency of Hydro's Ramea diesel generating facility for the year 2002; or

(b) $EFF_{i-1} = KWH_{i-1} / FUEL_{i-1}$

where i is the calendar year during which payment is payable;
 KWH_{i-1} is the total number of kWh produced at Hydro's Ramea diesel generating facilities in the calendar year immediately preceding the year for which payment is payable; and
 $FUEL_{i-1}$ is the total number of litres of diesel fuel consumed at Hydro's Ramea diesel generating facilities in the calendar year immediately preceding the year for which payment is payable.

MARY'S HARBOUR HYDRO

SCHEDULE "8"

Section 1 - Pricing

1.1 The unit price (cents per kilowatthour) which PDD will pay for Electricity will be based on a "Share - The - Savings" principle. An example of the "Share-The-Savings" principle is:

Generator's cost of supply	-	8.00 cents/kWh
PDD's incremental cost of diesel generation in Mary's Harbour	-	12.00 cents/kWh
Difference to be shared	-	4.00 cents/kWh
Share-The-Savings price	-	10.00 cents/kWh

The upper limit on the unit price which PDD will pay for Electricity is 90% of PDD's incremental cost of diesel generation in Mary's Harbour.

PDD's "incremental cost of diesel generation" for its Mary's Harbour diesel generating facilities shall be calculated in the following manner:

PDD's Incremental
Cost of Diesel Generation

$$\frac{\text{Total Annual Fuel Cost}}{(\text{Total Number of Litres of Fuel Consumed} \times \text{Plant Efficiency})}$$

generating facilities.

The term "plant efficiency" (of PDD's Mary's Harbour diesel generating facilities) for the immediately preceding year is the greater of either:

- (a) 3.00 kWh/litre of fuel (actual plant efficiency for the year 1987); or
- (b) The total number of kWh produced at PDD's Mary's Harbour diesel generating facilities in the preceding year divided by the total number of litres of fuel consumed at PDD's Mary's Harbour diesel generating facilities in the preceding year.

HYDRO QUEBEC

- 3.2 After the period prescribed in Section 3.1.1 has ended and for the remainder of the Contract Period the price each month for energy delivered by Hydro-Québec and taken by N&L Hydro at the Delivery Point during that month shall be determined as follows :

$$P = A/2$$

where

P = price for energy for the given month

A = avoided fuel costs on N&L Hydro's L'Anse-au-Loup diesel system for the given month, in \$/MWh, as defined in Subsection 3.3

- 3.3 The avoided fuel cost on N&L Hydro's L'Anse-au-Loup diesel system, per MWh shall be determined as : the "Montreal Rack" price for No. 2 diesel fuel for the previous month as published in the Oil Buyer's Guide or such similarly authoritative periodical as agreed to by the Parties, plus the average differential from the Montreal Rack price that N&L Hydro has experienced during the years 1990 - 1994 for No. 2 diesel fuel delivered at L'Anse-au-Loup, all divided by the average output of the L'Anse-au-Loup diesel plant, calculated as follows :

$$A (\$/MWh) = \frac{MRP + 0.01}{0.00321}$$

where

MRP = average Montreal Rack Price for the previous month (in \$/litre)

0.01 = differential between the Montreal Rack Price and the average price paid for L'Anse-au-Loup diesel fuel for the years 1990-1994 (in \$/litre)

0.00321 = output of the L'Anse-au-Loup
diesel plant (in MWh/litre)