

APPENDIX 8

VANCOUVER ISLAND - CALL FOR TENDERS

EPA PRICING STRUCTURE

(Revised: 03 May 2004)

Certain words and phrases used in this Appendix are defined in Schedule 1 of this Appendix and the EPA. This Appendix provides a summary of pricing principles only. There may be principles applicable to certain project configurations not addressed in this Appendix. Bidders are advised to review the EPA for all pricing-related definitions, terms and conditions. In the event of any conflict between this summary and the EPA, the EPA governs.

Determination Of Capacity For Payment And Dispatch

Commercial Operation Date ("COD")

To determine whether COD has occurred, a performance test or a series of performance tests will be conducted on or prior to the Guaranteed COD Date (1 May 2007). During the tests, the Seller must demonstrate that the Seller's Plant can generate at a rate of not less than 95% of the Bid Capacity for a continuous period of 72 hours. The result of the tests (limited to 105% of Bid Capacity) will be designated as the Nominal Capacity at COD ("NC_{COD}"). If the result is less than 95% of the Bid Capacity but more than 80% of the Bid Capacity, Provisional COD ("PCOD") can be declared at the option of the Seller. If the Seller chooses to declare Provisional COD, a Letter of Credit (LC) for the amount of:

$$\text{LD Factor} \times ((95\% \times \text{Bid Capacity}) - \text{NC}_{\text{PCOD}})$$

will be required from the Seller. The Seller may request a performance test before 1 November 2007 to demonstrate and set NC_{PCOD} to a higher level and declare COD. The Capacity demonstrated during that test (limited to 105% of Bid Capacity) is designated as the NC_{COD} for the remaining Term. If the Seller can not reset NC_{PCOD} to at least 95% of the Bid Capacity by 1 November 2007, the LC will be drawn for an amount that is equal to:

$$\text{LD Factor} \times ((95\% \times \text{Bid Capacity}) - \text{NC}_{\text{COD}})$$

If NC_{COD} is established above 95% of Bid Capacity, the LC will be returned to the Seller.

Capacity Degradation

Nominal Capacity ("NC") will decline on a quarterly basis at a rate expressed in MW equal to the Capacity Degradation Factor x NC_{COD} / 100, where 100 is equal to the number of EPA Years in the Initial Term (25) multiplied by the number of quarters in a year (4).

Quarterly Demonstration Tests

After COD, regular demonstration tests will be conducted on a quarterly basis to determine the levels of Demonstrated Capacity (“DC”) which is the basis for payment, dispatch planning and availability reporting for that quarter.

DC can not be more than 105% of NC. If DC is less than 95% of NC for two consecutive Quarterly Demonstration Tests, a one time non-refundable LD will be payable and NC will be derated to the higher of the two Quarterly Demonstration Tests. Seller will be obligated to pay LDs for any shortfall equal to:

$$\text{LD Factor} \times ((95\% \times \text{NC immediately prior to derate}) - \text{derated NC})$$

LD Factor is a \$/MW amount commencing at \$80,000/MW (\$120,000/MW for full tolling gas-fired plants) and declining on an annual straightline basis over the Initial Term of the EPA.

If NC is derated, the Seller has the right to cure the deficiency via the Quarterly Demonstration Tests within the 6 month period following the second deficient demonstration test. Based on the results of the demonstration tests, NC may be reset at the new level but not exceeding the NC before the immediately preceding derate. Previously paid capacity shortfall LDs are not repaid.

Capacity Weather Adjustments

The NC curve, which is a function of the Bid Capacity and Capacity Degradation Factor, represents a Capacity profile based on average ambient conditions (“AAC”). In order to account for the deviations in Capacity due to different weather conditions, Capacity will be adjusted for different temperature and humidity levels using the Capacity Conversion Table submitted by the Seller.

The following is the Capacity Conversion Table.

Temperature (in degree Celsius)

Humidity	-10	-5	0	5	10	15	20	25	30
100%	A3	A4	A5	A6	A7	A8			
90%	B3	B4	B5	B6	0	B8	B9		
80%	C3	C4	C5	C6	C7	C8	C9		
70%	D3	D4	D5	D6	D7	D8	D9	D10	
60%	E3	E4	E5	E6	E7	E8	E9	E10	
50%	F3	F4	F5	F6	F7	F8	F9	F10	F11
40%	G3	G4	G5	G6	G7	G8	G9	G10	G11
30%		H4	H5	H6	H7	H8	H9	H10	H11
20%		I4	I5	I6	I7	I8	I9	I10	I11

Each Capacity Conversion Factor as tendered represents the deemed difference (expressed as %) between Capacity under a particular weather condition and Capacity under AAC.

10°C temperature and 90% humidity is the AAC. Therefore, the Capacity Conversion Factor (10°C, 90%) or B7 has a value of 0%. The Table will be applied in the following manner:

To convert Capacity at actual weather conditions to Capacity at AAC:

$$\text{AAC Equivalent Capacity} = \text{Capacity based on actual weather} \times (1 + \text{Capacity Conversion Factor});$$

To convert capacity at AAC to Capacity at actual weather conditions:

$$\text{Capacity based on actual weather} = \text{AAC Equivalent Capacity} / (1 + \text{Capacity Conversion Factor})$$

- If the weather condition during any performance test is not at AAC, the result of the demonstration test will be converted to an AAC Equivalent Capacity using the applicable Capacity Conversion Factor. The AAC Equivalent Capacity will then be designated as the NC for performance test(s) before COD, and Demonstrated Capacity for performance tests after COD.

For example, if a performance test after COD is conducted at 0°C and 50% humidity and generates 100 MW, the AAC Equivalent Capacity = 100 MW x (1+F5) and will be designated as the Demonstrated Capacity for the quarter. If F5 is +10.00%, the AAC Equivalent Capacity would be 110.00 MW.

- For determining the level of Scheduled Energy on an hourly basis, adjusted Demonstrated Capacity (“DC_{Adjusted}”) based on the actual weather conditions will be used.

For example, if Demonstrated Capacity (based on AAC) is 100 MW and the actual weather condition for the hour in question is 15°C and 40% humidity, the Scheduled Energy for that hour would be DC_{Adjusted} = 100 MW / (1+ G8) multiplied by one hour. If G8 is -1.00%, the DC_{Adjusted} would be 101.01 MW.

Conversion Factors will be interpolated or extrapolated (first by temperature, followed by humidity) for weather conditions that are not at grid values.

Tariff

Pre-COD Tariff

No price is payable for Capacity and Energy delivered prior to COD with the exception of the Energy (not exceeding 105% of Bid Capacity multiplied by one hour) delivered during the 72 hour COD test which is priced at \$25/MWh.

Post-COD Tariff

On a monthly basis after COD, the Seller will receive the Adjusted Payment Amount for (1) Capacity that is made available, and (2) Eligible Energy.

$$\text{Adjusted Payment Amount} = \text{CC Payment} + \text{OMC Payment} + \text{EC Payment} - \text{Availability Adjustment}$$

Where:

$$\text{CC Payment} = \text{CC} \times \text{DC} \times (1 - H_{\text{FM-Seller}}/H)$$

$$\text{OMC Payment} = \text{OMC}_{\text{COD}} \times \text{DC} \times \text{OMC Escalation Factor} \times (1 - H_{\text{FM-Seller}}/H)$$

$$\text{EC Payment} = \text{EC}_{\text{COD}} \times \text{EE} \times \text{EC Escalation Factor}$$

$$\text{Availability Adjustment} = \text{lesser of } ((N \times \$250/\text{MW} \times \text{DC}) \text{ and } (\$16,667/\text{MW} \times \text{DC}))$$

Where:

CC = Capital Charge;

OMC_{COD} = Operation & Maintenance Charge at COD;

EC_{COD} = Energy Charge at COD;

$N = 100 \times \text{greater of } (0, (97\% - A_{\text{monthly}}))$, where A_{monthly} = the calculated monthly Availability Factor, expressed in % as calculated in the manner set out in Schedule 1;

H = the number of hours in the Billing Month or, in the case of any partial calendar month during the Term, the number of hours in the part of the month included in the Term.

$H_{\text{FM-Seller}}$ = the number of hours in the Billing Month during which the Seller invoked Force Majeure in accordance with the EPA, provided that where a portion of DC_{Adjusted} is available during any hour in which the Seller has invoked Force Majeure, there shall be included in the calculation of $H_{\text{FM-Seller}}$ a portion of that hour equal to the percentage of DC_{Adjusted} that is not available in that hour due to the Force Majeure invoked by the Seller.

Dispatch Payment

For plants that provide Dispatchable Capacity, the monthly Adjusted Payment Amount would be equal to

Adjusted Payment Amount = CC Payment + OMC Payment + EC Payment + SUP – Availability Adjustment

Where:

$SUP = (N_H \times SUC_H) + (N_W \times SUC_W) + (N_C \times SUC_C)$

Where:

N_H = number of Hot Starts;

N_W = number of Warm Starts;

N_C = number of Cold Starts;

SUC_H = Start Up Cost per each Hot Start;

SUC_W = Start Up Cost per each Warm Start ;

SUC_C = Start Up Cost per each Cold Start.

Escalation

OMC, EC, and SUC will be subject to a one time escalation using applicable escalation factors for the period between 1 January 2004 and the COD. Thereafter, there will also be annual escalation using applicable escalation factors starting at the first anniversary of COD. OMC, EC and SUC can be subject to different escalation factors as tendered. Escalation factors can be either a fixed, positive number or a percentage (between 0% to 100%) of Consumer Price Index. CC is not subject to escalation.

Heat Rate Bonus And Penalty – Full Tolling Gas-Fired Plants

The Seller will tender two separate Guaranteed Heat Rates (at AAC in HHV) : (1) applicable Guaranteed Heat Rate at COD (“GHR_{BASELOADCOD}”) when the plant is being dispatched at full output and (2) if applicable, Guaranteed Heat Rate at COD (“GHR_{MTDCOD}”) when the plant is being dispatched at Minimum Turndown.

Both Guaranteed Heat Rates will increase over time at an annual rate (expressed in GJ/GWh) of

$$\text{GHR}_{\text{COD}} \times (\text{Heat Rate Degradation Factor}) / 100$$

For plants that sell 100% of the output to BC Hydro, a Heat Rate Bonus/Penalty (using applicable Guaranteed Heat Rates, depending on whether the plant is being dispatched to run at full output or at MTD) will be calculated on a monthly basis and added to a Tracking Account. The Tracking Account will be settled and paid out completely on the earlier of (i) each anniversary of COD and (ii) when the balance, either positive or negative, exceeds \$3 million. If the Tracking Account has a positive balance on the settlement date, BC Hydro will pay the Seller a Heat Rate Bonus and if the Tracking Account has a negative balance on the settlement date, the Seller will pay BC Hydro a Heat Rate Penalty.

A Heat Rate Penalty will be calculated based on the following formula:

$$\Sigma(\text{GHR}_{\text{actual}} - \text{HR}_{\text{actual}}) \times (\text{GAS}_{\text{commodity}} + \text{GAS}_{\text{toll}}) \times \text{EE}$$

A Heat Rate Bonus will be calculated based on the following formula:

$$\Sigma(\text{GHR}_{\text{actual}} - \text{HR}_{\text{actual}}) \times \text{GAS}_{\text{commodity}} \times \text{EE}$$

Where in the case of both of the foregoing formulae:

EE = Eligible Energy.

GHR_{actual} is the applicable heat rate adjusted to reflect actual weather conditions on an hourly basis. Heat rates will be adjusted for weather using the following formula:

To convert a heat rate at actual weather conditions to a heat rate at AAC:

$$\text{AAC Equivalent Heat Rate} = \text{Heat Rate based on actual weather} \times (1 + \text{Heat Rate Conversion Factor});$$

To convert a heat rate at AAC to a heat rate at actual weather conditions:

$$\text{Heat Rate based on actual weather} = \text{AAC Equivalent Heat Rate} / (1 + \text{Heat Rate Conversion Factor})$$

HR_{actual} is the actual hourly heat rate, calculated as GJ of natural gas delivered to the Gas Delivery Point divided by Eligible Energy for that hour;

GAS_{commodity} = monthly index price expressed in CDN \$/GJ for the Huntingdon spot market delivery ; and

GAS_{toll} = the average of the published interruptible gas transportation tolls for the month, expressed in CDN \$/GJ, of the Gas Transporter(s) with whom BCH may contract from time to time for the purpose of transporting gas from Huntingdon, BC to the Gas Delivery Point.

Periods when the plant is (1) operating on gas which does not meet the specifications in the EPA or (2) at a reduced rate due to Force Majeure declared by the Buyer, or (3) at levels other than full output or MTD at the request of BC Hydro, or 4) during a Start, will be excluded for the purpose of the Heat Rate Bonus/Penalty calculation.

The following is an illustrative example:

- GHR @ AAC for the hour 7500.00 GJ/GWh
- AAC 10°C, 90% humidity
- Actual heat rate for the hour 7800.00 GJ/GWh
- Actual weather conditions: -5°C and 20% humidity level
- $GAS_{commodity}$ \$ 5/GJ
- GAS_{toll} \$1/GJ
- Energy delivered for the hour 0.100 GWh
- The value of I4 in the table below -5.00%
- Heat Rate Conversion Table included below

Heat Rate based on Actual Weather = $7500.00 \text{ GJ/GWh} / (1 + -5.00\%) = 7894.74 \text{ GJ/GWh}$.

Since 7800.00 is less than 7894.74, the bonus calculation is utilized.

The amount of $(7894-7800) \text{ GJ/GWh} \times \$5/\text{GJ} \times 0.100 \text{ GWh} = \$ 47.37$ will be added to the Tracking Account.

Temperature (in degree Celsius)

Humidity	-10	-5	0	5	10	15	20	25	30
100%	A3	A4	A5	A6	A7	A8			
90%	B3	B4	B5	B6	0	B8	B9		
80%	C3	C4	C5	C6	C7	C8	C9		
70%	D3	D4	D5	D6	D7	D8	D9	D10	
60%	E3	E4	E5	E6	E7	E8	E9	E10	
50%	F3	F4	F5	F6	F7	F8	F9	F10	F11
40%	G3	G4	G5	G6	G7	G8	G9	G10	G11
30%		H4	H5	H6	H7	H8	H9	H10	H11
20%		I4	I5	I6	I7	I8	I9	I10	I11

Heat Rate Bonus/Penalty – Starts

For full tolling gas-fired plants that are Dispatchable, the Seller will also be subject to a fuel bonus/penalty if the actual fuel consumed during Starts is less/higher than the contracted fuel amount.

Contracted Fuel During Starts (“CFDS”) = $(N_H \times SUF_H) + (N_W \times SUF_W) + (N_C \times SUF_C)$

Starts Fuel Penalty = $(\text{Actual fuel used} - \text{CFDS}) \times (GAS_{commodity} + GAS_{toll})$ and will be subtracted from the Tracking Account and settled in the manner discussed above.

Starts Fuel Bonus = (CFDS - Actual fuel used) x $GAS_{commodity}$ and will be added to the Tracking Account and settled in the manner discussed above.

Full Tolling Gas-Fired Plants with Duct Firing Capability

If full tolling gas-fired plants are equipped with duct firing capability, the following principles will also apply:

1. The Seller will tender two guaranteed Capacities : the guaranteed Capacity at AAC at COD for hours when the Seller's Plant is operating without duct firing ("Non-Duct Fired Bid Capacity"); and the guaranteed incremental capacity at AAC at COD for hours when the Seller's Plant is operating with duct firing ("Duct Fired Bid Capacity").
2. Bid Capacity = Non-Duct Fired Bid Capacity + Duct Fired Bid Capacity; and NDF Ratio (Non-Duct Fired Ratio) = Non-Duct Fired Bid Capacity / Bid Capacity
3. The results of the tests for the determination of the Nominal Capacity and Demonstrated Capacity will be the demonstrated plant output which includes non-duct fired Capacity and duct fired Capacity.
4. The Seller will tender separate Guaranteed Heat Rates at AAC at COD. These heat rates will increase by degradation in the same manner as described in the previous sections :
 - GHR_{DFCOD} = the guaranteed heat rate at COD at AAC when the Seller's Plant is being dispatched to generate Energy at a rate equal to the Bid Capacity.
 - $GHR_{BASELOADCOD}$ = the guaranteed heat rate at COD at AAC when the Seller's Plant is being dispatched to generate Energy at a rate equal to the Bid Capacity x NDF Ratio.
 - GHR_{MTDCOD} = the guaranteed heat rate at COD at AAC when the Seller's Plant is being dispatched to generate Energy at a rate equal to the Bid Capacity x NDF Ratio x Minimum Turndown (if applicable).
5. When the Seller's Plant is being dispatched to generate Energy at a rate equal to the Demonstrated Capacity, GHR_{DF} will be used to calculate the Heat Rate Bonus/Penalty. When the Seller's Plant is being dispatched to generate Energy at a rate equal to the Demonstrated Capacity x NDF Ratio, $GHR_{BASELOAD}$ will be used to calculate the Heat Rate Bonus/Penalty. When the Seller's Plant is being dispatched to generate Energy at a rate equal to Demonstrated Capacity x NDF Ratio x MTD, GHR_{MTD} will be used to calculate the Heat Rate Bonus/Penalty.

Heat Rate Bonus And Penalty – Partial Tolling Gas-Fired Plants

The principles contained in the immediately preceding section also apply to partial tolling gas-fired plants with the following exceptions:

The Heat Rate Penalty is replaced with the following formula :

$$\Sigma(GHR_{actual} - HR_{actual}) \times (GAS_{commodity}) \times EE$$

The Starts Fuel Penalty is replaced with the following formula:

$$(\text{Actual fuel used} - \text{CFDS}) \times (\text{GAS}_{\text{commodity}})$$

Bidders tendering heat rates for partial tolling gas-fired plants should include sufficient allowance for the amount of System Gas required between the Gas Delivery Point and the plant gate.

Schedule 1 – Monthly Availability Calculation

Dispatchable Plant

$$A_{\text{Monthly}} = \frac{EE + \sum_{j=1}^H (EAF_j \times AC_j)}{\left(\sum_{j=1}^H C_j \right) + (DCA \times (H - N - H_{\text{FM}}))}$$

Where:

“ A_{Monthly} ” = 1 if the denominator of the equation is 0

“EE” = the Eligible Energy for the Billing Month.

“ EAF_j ” = (a) the actual percentage availability for hour j , that the Buyer can demonstrate, by clear and convincing evidence, was the availability of the Seller’s Plant for hour j ; or (b) where (a) is not applicable, $EE / \sum_{j=1}^H C_j$, provided that if the denominator of the equation is 0, (b) = 1

“ AC_j ” means the Capacity, but not exceeding DC_{Adjusted} , available during the hour “ j ”, as reported by the Seller to the Buyer in a notice or notices under subsection 6.6(e) of the EPA, adjusted based on the actual temperature and humidity in the hour minus any Scheduled Energy for the hour, provided that:

- (a) $AC_j = DC_{\text{Adjusted}}$ during an event described in subsection 8.8(a)(ii), (iii), (iv) and (v) of the EPA;
- (b) $AC_j = 0$ during hours in which the Buyer has suspended the Seller’s performance under the EPA in accordance with Article 15 of the EPA

“ C_j ” = Scheduled Energy for hour “ j ” during which the Seller’s Plant is ON

“ DC_{Adjusted} ” means DC adjusted to an AAC Equivalent Capacity based on the actual temperature and humidity in each hour in accordance with Appendix 11 of the EPA.

“DCA” means the average of the values attributed to DC_{Adjusted} for each hour in the Billing Month.

“N” = the sum of portions of all hours during the Billing Month in which the Seller’s Plant is ON, where the portion of each ON hour included is equal to $C_j / DC_{\text{Adjusted}}$.

“ H_{FM} ” = the sum of all hours during the Billing Month in which the Seller or the Buyer has invoked Force Majeure in accordance with this EPA, where the portion of each Force Majeure hour included is equal to $1 - (RA_j / DC_{\text{Adjusted}})$.

“ RA_j ” means the Capacity, but not exceeding DC_{Adjusted} , available during each hour in which the Seller or the Buyer has declared Force Majeure in accordance with this EPA as reported by the Seller to the Buyer in a notice or notices under subsection 6.6(e) of the EPA, adjusted based on the actual temperature and humidity in the hour.

“ON” means that the Seller’s Plant is generating Scheduled Energy.

Must Run Plant

$$A_{\text{Monthly}} = \frac{EE + \sum_{j=1}^H (EAF_j \times AC_j)}{DCA \times H}$$

Where

“EE” = the Eligible Energy for the Billing Month

“EAF_j” = (a) the actual percentage availability for hour j, that the Buyer can demonstrate, by clear and convincing evidence was the availability of the Seller’s Plant for hour j; or (b) where (a) is not

applicable, $EE / \sum_{j=1}^H C_j$, provided that if the denominator of the equation is 0, (b) = 1

“AC_j” is equal to:

- (a) DC_{Adjusted} for each hour during an event described in subsection 8.8(a)(ii), (iii), (iv) and (v) of the EPA; and
- (b) the portion of the DC_{Adjusted} that is not available during each hour when either the Seller or the Buyer has invoked Force Majeure in accordance with the EPA

“ DC_{Adjusted} ” means DC adjusted to an AAC Equivalent Capacity based on the actual temperature and humidity in each hour in accordance with Appendix 11 of the EPA.