THE PROVINCE OF ALBERTA

ELECTRIC UTILITIES ACT

ALBERTA ENERGY AND UTILITIES BOARD

IN THE MATTER of the Power
Purchase Arrangements and other
Determinations of the Independent
Assessment Team

ORDER U2000-190

Decision U99113
Proceeding No. 990277
File No. 5608-1

On July 9, 1999, pursuant to section 45.9(1)(b) of the Electric Utilities Act (the EUA), the Independent Assessment Team (the IAT) filed for approval with the Board a report setting out its determinations on deregulation of electricity generation in Alberta. Included in the report were copies of the Power Purchase Arrangements (PPAs) for Regulated Generating Units listed in part 1 of the Schedule in the EUA.

In accordance with section 45.9(2) of the EUA, the Board issued a Public Notice of Filing on July 12, 1999. The notice set out a two-phase process to deal with variance requests arising from the IAT's report. The notice also provided for a parallel review and error correction process of the PPAs themselves.

On August 27, 1999, the IAT filed a revised report that incorporated the changes that arose from the review and the error correction process that took place subsequent to its July 9, 1999 filing.

On August 30, 1999 the Board issued its Phase 1 Decision U99073. In that decision, the Board decided to proceed to a Phase 2 hearing to consider the issues relating to the matters set out in section 4 of the Phase 1 decision report. As part of the Phase 2 hearing, applications for variance were received from a number of parties. Those applications were considered at a public hearing in Calgary from October 13, 1999 to October 20, 1999.

On December 30, 1999, the Board issued it Phase 2 Decision U99113. In that decision, the Board found that it had not been satisfied by those parties making the variance requests that the IAT had not carried out its duties in accordance with the EUA, or that the PPAs and relevant determinations of the IAT were obviously unreasonable, were not supported adequately by economic analysis, or were not in the public interest. The Board therefore made no variations to the PPAs or the IAT's other determinations.
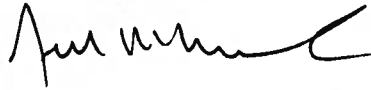
However, the Board did direct the IAT to amend its filing to update certain opening balances and other items in the PPAs to make them consistent with Board Decision U99099 with respect to TransAlta Utilities Corporation, EPCOR Generation Inc., and ATCO Electric Ltd.

On April 24, 2000, the IAT filed the revised PPAs incorporating the revisions necessiated by Decision U99099 and any PPA amendments proposed before or posted after the IAT's August 27, 1999 filing, including those presented at the hearing.

THEREFORE, the Board, pursuant to section 45.91(1)(a) of the *Electric Utilities Act*, S.A. 1995, C. E-5.5, hereby orders that:

1.   The Power Purchase Arrangements and other determinations made by the Independent Assessment Team are approved.

DATED at the City of Calgary, in the Province of Alberta, on May 8, 2000.

ALBERTA ENERGY AND UTILITIES BOARD

August 1, 2000

The Honourable Mike Cardinal
Minister
Department of Resource Development
408 Legislature Building
10800 – 97 Avenue
Edmonton, Alberta T5R 2B6

Dear Minister Cardinal:

DECISION U991133
REVIEW OF THE INDEPENDENT ASSESSMENT TEAM's
REPORT ON POWER PURCHASE ARRANGEMENTS AND
OTHER DETERMINATIONS

On July 6, 2000, I wrote advising you of the Board's view on the need for an amendment to the Board's Order U2000-190 approving the Power Purchase Arrangements (PPAs) as filed on April 24, 2000 by the Independent Assessment Team (IAT). The issue of an amendment to the Board's order arose because the IAT issued a set of errata/clarifications to the PPAs, dated June 26, 2000, that it stated were to be considered as being attached to and forming part of each PPA. The Board notes that without these corrections a number of the equations in the PPAs could be considered to be mathematically insoluble.

Subsequent to the issuance of this first set of errata/clarifications, parties have expressed a wish for greater certainty with respect to the final form of the PPAs. This would be done by way of incorporating the IAT's June 26, 2000 set of corrections in the Board's order as well as any further sets of errata/clarifications issued prior to the PPA auction.

On July 31, 2000, the IAT issued a second set of errata/clarifications that it again stated were to be considered as being attached to and forming part of each PPA. In these unique circumstances, the Board is prepared to assist parties in determining the final form of the PPAs and the Board's approval of them.

The Board hereby amends Board Order U2000-190 to include the errata/clarifications identified by the IAT in its each of its two letters and attachments sent to Mr. L. Charach of the ADRD, dated June 26, 2000 and July 31, 2000 respectively. Both sets of errata/clarifications are to be considered as being attached to and forming part of each PPA.

Yours sincerely,

Neil McCrank
Chairman

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PricewaterhouseCoopers LLP
425 1st Street SW
Suite 1200
Calgary Alberta
Canada T2P 3V7
Telephone +1 (403) 509 7500
Facsimile +1 (403) 781 1825
Direct phone 403 509 7501
Direct fax 403 781 1825

Mr Larry Charach
Director, Electricity Branch
Alberta Department of Resource Development
5th Floor, 9945 - 108th Street
Petroleum Plaza - North Tower
Edmonton, T5K 2G6

26 June 2000
Subject: PPA Change

Dear Mr Charach

The IAT has undertaken a further review of the formulae and related parts of the text of the Schedules to the Power Purchase Arrangements filed with the AEUB on April 26, 2000. Arising from that review, a number of errata and areas for clarification have been identified, one of which, with respect to the formulae for WACD, has previously been communicated to you.

We attach a document which details the areas of errata/clarification, including the one noted above. In virtually all cases, the errata corrections clarify what we believe to have been the obvious intent of PPAs as originally filed. We are not aware of any further errata.

The errata sheet should be considered as being attached to and forming part of each PPA.

Yours very truly

Keith Anderson

Power Purchase Arrangements Errata Sheet
23-Jun-00

Item No.	Article	Name	April 28 PPA	Errata/Clarification	BR	CB	Gen	HRM	Hyd	KH	RB	RD	SH	ST	SDA	SDB	SDC	WA
1	C 3.3	Coal Mining Assets Depreciation Charge - Weighted Index 3 (Mining)	$WI3M_t = (0.25 + (0.75FX_t/1.50) \times INDX9_t / INDX9_{98}$	$WI3M_t = (0.25 + (0.75FX_t/1.50)) \times INDX9_t / INDX9_{98}$ "]" added after 1.50			x											x
2	C 3.4 (B 3.4 in Hyd)	Depreciation Charge for Corporate and Administration Assets	$DPCS_{ay} = ([OCGBV_{ay-con}) - COAD_{ay-con}] / min[5,RL_{ay-con}]) + \Sigma_{ay-i})^y (CICA_{ay} / min[5,RL_{ay}]))$	$DPCS_{ay} = ([OCGBV_{ay-con}) - COAD_{ay-con}] / min[5,RL_{ay-con}]) + \Sigma_{ay-i})^y (CICA_{ay} / min[5,RL_{ay}]))$ "]" added after "RL_{ay-con})."		x	x		x	x	x	x	x	x	x	x	x	x
3	C3.8 (C 3.7 in CB, Gen & RD; B 3.8 in Hyd)	Cost of Preferred Stock	$COP_{ay} = ISC_{ay} \times (SPS_a / 100) \times (ACPS_a / 100)$	$COP_{ay} = ISC_{ay} \times (SPS_a / 100) \times (ACPS_{ay} / 100)$ subscript "y" added to ACPS	x	x	x		x	x	x	x	x	x	x	x	x	x
4	C 3.9 (C3.8 in CB, Gen & RD; B 3.9 in Hyd)	Cost of Debt - Weighted Average Cost of Debt	$WACD_{ay} = 100 \times [(XD_{ay} / 100) \times (CED_{ay} / 100)] + [(1 - XD_{ay} / 100) \times [CND_{ay} / 100])$	$WACD_{ay} = 100 \times [[(XD_{ay} / 100) \times (CED_{ay} / 100)] + [(1 - XD_{ay} / 100] \times [CND_{ay} / 100]]$ additional square brackets "]" added around all but "100 x"	x	x	x		x	x	x	x	x	x	x	x	x	x
5	- Cost of Debt		$COD_{ay} = ISC_{ay} \times (SD_{ay} / 100) \times (WACD_{ay} / 100)$	$COD_{ay} = ISC_{ay} \times (SD_a / 100) \times (WACD_{ay} / 100)$ subscript "y" removed from SD	x	x	x		x	x	x	x	x	x	x	x	x	x
6	C3.10 (C 3.9 in CB, Gen & RD; B 3.10 in Hyd)	- Return on Common Equity	$ROE_{ay} = GBY_y + ERP_{ay}$	$ROE_{ay} = GBY_y + ERP_a$ subscript "y" removed from ERP	x	x	x		x	x	x	x	x	x	x	x	x	x
7		- Cost of Common Equity	$COE_{ay} = max[MROE_{ay}, ISC_{ay} \times (SCE_{ay} / 100) \times (ROE_{ay} / 100)]$	$COE_{ay} = max[MROE_{ay}, ISC_{ay} \times (SCE_a / 100) \times (ROE_y / 100)]$ subscript "y" removed from SCE	x	x	x		x	x	x	x	x	x	x	x	x	x
8	C 3.10 (c)	Aggregate Imputed Income Tax	$AIT_{ay} = [ALIT_{ay} \times (12 - N_{ay}) / 12] + [IT_{ay} \times N_{ay} / ...]$	$AIT_{ay} = [ALIT_{ay} \times (12 - N_{ay}) / 12] + [IT_{ay} \times N_{ay} / 12]$ remove "]" after last "12"	x	x						x						

Power Purchase Arrangements Errata Sheet

23-Jun-00

Item No.	Article	Name	April 26 PPA	Errata/Clarification	Applicable to:													
					BR	CB	Gen	HRM	Hyd	KH	RB	RD	SH	ST	SDA	SDB	SDC	WA
9	C 3.11	Aggregate Mining Tax	Where MCNBVuy is the Mining Closing Net Book Value for this Unit u for the current Year y and for the previous Year (y-1) as calculated in Section C4.1, RBuy is the Mid Year Rate Base for this Unit u for the current Year y as calculated in Section C3.6, COEuy is the Cost of Common Equity for this Unit u for the current Year y as determined in Section C3.10, COPuy is the Cost of Preferred Stock for this Unit u for the current Year y as determined in Section C3.8, and ITRy is the Income Tax Rate for the current Year y.	Where MCNBVuy is the Mining Closing Net Book Value for this Unit u for the current Year y and for the previous Year (y-1) as calculated in Section C4.1, RBuy is the Mid Year Rate Base for this Unit u for the current Year y as calculated in Section C4.4, COEuy is the Cost of Common Equity for this Unit u for the current Year y as determined in Section C3.9, COPuy is the Cost of Preferred Stock for this Unit u for the current Year y as determined in Section C3.7, and ITRy is the Income Tax Rate for the current Year y. Change text: "C4.1" to "C4.4", "C3.10" to "C3.9" and "C3.8" to "C3.7"		x												
10	C 3.14	Fixed Fuel Charge - Weighted Index 2 (Fixed Fuel)	$WI2FF_y = (0.40 \times INDX6_y / INDX8_{98}) + (0.25 \times INDX7_y / INDX7_{98}) + (0.25 \times INDX1_y / INDX1_{98}) + (0.10 \times INDX2A_y / INDX2A_{98})$	$WI2FF_y = (0.40 \times INDX6_y / INDX6_{98}) + (0.25 \times INDX7_y / INDX7_{98}) + (0.25 \times INDX1_y / INDX1_{98}) + (0.10 \times INDX2A_y / INDX2A_{98})$ add "_{y}" after INDX6_{98}	x													
11	C4.4	Rate Base Calculation	$RB_{uy} = 0.5(CNBV_{u(y-1)} + CNBV_{uy}) + 0.5(MCNBV_{u(y-1)} + MCNBV_{uy} + 0.5(CCNBV_{u(y-1)} + CCNBV_{uy}) - 0.5(CADP_{u(y-1)} + CADP_{uy}) + 0.5(NWC_{uy} + NWC_{uy}) + MYLV_{u(y-2001)}$ where:	$RB_{uy} = 0.5(CNBV_{u(y-1)} + CNBV_{uy}) + 0.5(MCNBV_{u(y-1)} + 0.5(CCNBV_{u(y-1)} + CCNBV_{uy}) - 0.5(CADP_{u(y-1)} + CADP_{uy}) + 0.5(NWC_{uy}) + MYLV_{u(y-2001)}$ add "_{y}" after MCNBV clause		x												
12	C5.5 (B 5.5 in Hyd)	Corporate Surtax	$CST_{uy} = FIT_{uy} \times (CSTR_y / 100) \times [1 + ((PTR_y + FTR_y) / (1 - PTR_y - FTR_y))]$	$CST_{uy} = FIT_{uy} \times (CSTR_y / 100) \times [1 + ((PTR_y / 100 + FTR_y / 100) / (1 - PTR_y / 100 - FTR_y / 100))]$ add "/ 100" to each of the rates PTR & FTR	x	x	x	x	x	x	x	x	x	x	x	x	x	x
13	C 5.6 (B 5.6 in Hyd)	Large Corporation Tax	$LCT_{uy} = (NPIS_{uy} + NWC_{uy}) \times (LCTR_y / 100) \times [1 + ((PTR_y + FTR_y) / (1 - PTR_y - FTR_y))]$	$LCT_{uy} = (NPIS_{uy} + NWC_{uy}) \times (LCTR_y / 100) \times [1 + ((PTR_y / 100 + FTR_y / 100) / (1 - PTR_y / 100 - FTR_y / 100))]$ add "/ 100" to each of the rates PTR & FTR	x	x	x	x	x	x	x	x	x	x	x	x	x	x
14	C 5.9 (C 6.9 in CB, Gen & RD; B 5.9 in Hyd)	Federal Transitional Tax	b) or if $ANPIS_{u(y-1)} > \Sigma_e FUCC_{eu(y-1)}$ and if $[(\Sigma_e FUCC_{eu(y-1)} - ANPIS_{u(y-1)}) \times (0.28)] \geq FRDT_{u(y-1)}$ than $FTT_{uy} = min [A, B] \times [1 + ((PTR_y + FTR_y) / (1 - PTR_y - FTR_y))]$ where: ..... c) but in all other cases: $FTT_{uy} = min [B, FRDT_{u(y-1)}] \times [1 + ((PTR_y + FTR_y) / (1 - PTR_y - FTR_y))]$ where:	b) or if $ANPIS_{u(y-1)} > \Sigma_e FUCC_{eu(y-1)}$ and if $[(\Sigma_e FUCC_{eu(y-1)} - ANPIS_{u(y-1)}) \times (0.28)] \geq FRDT_{u(y-1)}$ then $FTT_{uy} = min [A, B] \times [1 + ((PTR_y / 100 + FTR_y / 100) / (1 - PTR_y / 100 - FTR_y / 100))]$ where: ..... c) but in all other cases: $FTT_{uy} = min [B, FRDT_{u(y-1)}] \times [1 + ((PTR_y / 100 + FTR_y / 100) / (1 - PTR_y / 100 - FTR_y / 100))]$ where: add "/ 100" to each of the rates PTR & FTR	x	x	x	x	x	x	x	x	x	x	x	x	x	x

Power Purchase Arrangements Errata Sheet

23-Jun-00

Item No.	Article	Name	April 26 PPA	Errata/Clarification	BR	CB	Gen	HRM	Hyd	KH	RB	RD	SH	ST	SDA	SDB	SDC	WA
15	C 5.10 (CB, Gen & RD; B 6.10 in CB, Gen & RD; B 5.10 In Hyd)	Provincial Transitional Tax	b) or if $ANPIS_{u(y-1)} > \Sigma_e\, PUCC_{cu(y-1)}$ and if $((\Sigma_e\, PUCC_{cu(y-1)} - ANPIS_{u(y-1)}) \times (0.155)) \geq PRDT_{u(y-1)}$, then $PTT_{uy} = min\,[A, B] \times [1 + ((PTR_y + FTR_y))]$ where: ..... c) but in all other cases: $PTT_{uy} = min\,[B, PRDT_{u(y-1)}] \times [1 + ((PTR_y + FTR_y))] / (1 - PTR_y - FTR_y))]$ where:	b) or if $ANPIS_{u(y-1)} > \Sigma_e\, PUCC_{cu(y-1)}$ and if $((\Sigma_e\, PUCC_{cu(y-1)} - ANPIS_{u(y-1)}) \times (0.155)) \geq PRDT_{u(y-1)}$ then $PTT_{uy} = min\,[A, B] \times [1 + ((PTR_y / 100 + FTR_y / 100)) / (1 - PTR_y / 100 - FTR_y / 100))]$ where: ..... c) but in all other cases: $PTT_{uy} = min\,[B, PRDT_{u(y-1)}] \times [1 + ((PTR_y / 100 + FTR_y / 100) / (1 - PTR_y / 100 - FTR_y / 100))]$ where: add "/ 100" to each of the rates PTR & FTR	x	x	x	x	x	x	x		x	x	x	x	x	x
16	C 6.1	Imputed Income Tax	where $ACIT_{u(y-1)}$ is the difference between the forecasted amount for Actual Corporate Income Tax for this Unit u for the Previous Year (y-1) otherwise determined in Article C5.2 and the actual amount calculated using actual indices and actual tax rates for the Previous Year (y-1), $ACST_{u(y-1)}$ is the difference between the forecasted amount for Actual Corporate Surtax for this Unit u for the Previous Year (y-1) otherwise determined in Article C5.5 and the actual amount calculated using actual indices and actual tax rates for the Previous Year (y-1), $ALCT_{u(y-1)}$ is the difference between the forecasted amount for Actual Large Corporations Tax for this Unit u for the Previous Year (y-1) otherwise determined in Article C5.8 and the actual amount calculated	where $ACIT_{u(y-1)}$ is the difference between the forecasted amount for Actual Corporate Income Tax for this Unit u for the Previous Year (y-1) otherwise determined in Article C6.2 and the actual amount calculated using actual indices and actual tax rates for the Previous Year (y-1), $ACST_{u(y-1)}$ is the difference between the forecasted amount for Actual Corporate Surtax for this Unit u for the Previous Year (y-1) otherwise determined in Article C6.5 and the actual amount calculated using actual indices and actual tax rates for the Previous Year (y-1), $ALCT_{u(y-1)}$ is the difference between the forecasted amount for Actual Large Corporations Tax for this Unit u for the Previous Year (y-1) otherwise determined in Article C6.8 and the actual amount calculated Change text: "C5.2" to "C6.2", "C5.5" to "C6.5" and "C5.8" to "C6.8"	x	x						x						
17	C 6.4	Federal and Provincial Capital Cost Allowances	where $ANPIS_{uy}$ is the Adjusted Net Property in Service for this Unit u at the end of the Current Year y as determined in Article C6.8	where $ANPIS_{uy}$ is the Adjusted Net Property in Service for this Unit u at the end of the Current Year y as determined in Article C6.8 Change text: "C6.6" to "C6.8"	x	x						x						
18	C 6.5	Corporate Surtax	$CST_{uy} = FIT_{uy} \times (CSTR_y / 100) \times [1 + ((PTR_y + FTR_y) / (1 - PTR_y - FTR_y))]$	$CST_{uy} = FIT_{uy} \times (CSTR_y / 100) \times [1 + ((PTR_y / 100 + FTR_y / 100) / (1 - PTR_y / 100 - FTR_y / 100))]$ add "/ 100" to each of the rates PTR & FTR	x	x						x						
19	C 6.6	Large Corporation Tax	$LCT_{uy} = (NPIS_{uy} + NWC_{uy}) \times (LCTR_y / 100) \times [1 + ((PTR_y + FTR_y) / (1 - PTR_y - FTR_y))]$	$LCT_{uy} = (NPIS_{uy} + NWC_{uy}) \times (LCTR_y / 100) \times [1 + ((PTR_y / 100 + FTR_y / 100) / (1 - PTR_y / 100 - FTR_y / 100))]$ add "/ 100" to each of the rates PTR & FTR	x	x						x						
20	C 6.11	Net Present Value Factors	where $ATCC_{uy}$ is the Percentage After Tax Cost of Capital for this Unit u for the Current Year y as determined in Article C5.12	where $ATCC_{uy}$ is the Percentage After Tax Cost of Capital for this Unit u for the Current Year y as determined in Article C6.12 Change text: "C5.12" to "C6.12"	x	x						x						

Power Purchase Arrangements Errata Sheet
23-Jun-00

Item No.	Article	Name	April 26 PPA	Errata/Clarification	Applicable to:													
					BR	CB	Gen	HRM	Hyd	KH	RB	RD	SH	ST	SDA	SDB	SDC	WA
21	E 5.4	Monthly Running Energy Payment - Settlement Period Running Gigajoules	$SRGJ_{sm} = (NLHCY_{wy} + (INC1CY_{wy} \times EPOL_{sm}) + (INC2CY_{wy} \times [EPOL_{sm}]^2) + (INC3CY_{wy} \times [EPOL_{sm}]^3)) \times SPD_s$	If $EPOL_{sm} = 0$ then $SRGJ_{sm} = 0$; else $SRGJ_{sm} = (NLHCY_{wy} + (INC1CY_{wy} \times EPOL_{sm}) + (INC2CY_{wy} \times [EPOL_{sm}]^2) + (INC3CY_{wy} \times [EPOL_{sm}]^3)) \times SPD_s$ added "If ...else" clause	x	x	x			x	x	x	x	x	x	x	x	x
22		- Over Generation Gigajoules	$OGGJ_{sm} = max[0, ((NLHCY_{wy} + (INC1CY_{wy} \times OGOL_{sm}) + (INC2CY_{wy} \times [OGOL_{sm}]^2) + (INC3CY_{wy} \times [OGOL_{sm}]^3) \times SPD_s - SRGJ_{sm})]$	$OGGJ_{sm} = max[0, ((NLHCY_{wy} + (INC1CY_{wy} \times OGOL_{sm}) + (INC2CY_{wy} \times [OGOL_{sm}]^2) + (INC3CY_{wy} \times [OGOL_{sm}]^3) \times SPD_s - SRGJ_{sm})]$ remove "T" after SPD	x	x	x			x	x	x	x	x	x	x	x	x
23		-Provisional Settlement Period Running Energy Payment	$PSREP_{sa} = SRGJ_{sa} \times [(INCA_s /100) \times (FUELAIP_{wy} + XVCR_s)] + [((100 - INCA_s) /100) \times FUELBIP_{sm})] + (EPO_{sa} \times INCOL_{sm})$	$PSREP_{sa} = SRGJ_{sa} \times [(INCA_s /100) \times (FUELAIP_{wy} + XVCR_s)] + [((100 - INCA_s) /100) \times FUELBIP_{sm})] + (EPO_{sa} \times INCOL_{sm})$ remove "T" after FUELBIP	x	x	x			x			x		x	x	x	
24		- Over Generation Running Energy Payment	$OGREP_{sa} = OGGJ_{sa} \times [(INCA_s /100) \times (FUELAIP_{wy} + XVCR_s)] + [((100 - INCA_s) /100) \times FUELBIP_{sm})] + max(0, OGO_{sa} - EPO_{sa}) \times$	$OGREP_{sa} = OGGJ_{sa} \times [(INCA_s /100) \times (FUELAIP_{wy} + XVCR_s)] + [((100 - INCA_s) /100) \times FUELBIP_{sm})] + max(0, OGO_{sa} - EPO_{sa}) \times$ remove "j" after FUELBIP	x		x			x			x		x	x	x	
25			$OGREP_{sa} = (OGGJ_{sa} \times DIGC_{sJ}) + max(0, OGO_{sm} - EPO_{sa}) \times INCOI_{sm}$	$OGREP_{sa} = (OGGJ_{sa} \times DIGC_{sJ}) + max(0, OGO_{sm} - EPO_{sa}) \times INCOI_{sm}$ remove "T" after INCOI		x						x						
26	M 5.4	Monthly Running Energy Payment	$SRGJ_{sm} = (NLHCY_{wy} + (INC1CY_{wy} \times EPOL_{sm}) + (INC2CY_{wy} \times [EPOL_{sm}]^2) + (INC3CY_{wy} \times [EPOL_{sm}]^3)) \times SPD_s$	If $EPOL_{sm} = 0$ then $SRGJ_{sm} = 0$; else $SRGJ_{sm} = (NLHCY_{wy} + (INC1CY_{wy} \times EPOL_{sm}) + (INC2CY_{wy} \times [EPOL_{sm}]^2) + (INC3CY_{wy} \times [EPOL_{sm}]^3)) \times SPD_s$ added "If ...else" clause		x					x			x				

PRICEWATERHOUSECOOPERS 🔲

PricewaterhouseCoopers LLP
425 1st Street SW
Suite 1200
Calgary Alberta
Canada T2P 3V7
Telephone +1 (403) 509 7500
Facsimile +1 (403) 781 1825
Direct phone 403 509 7501
Direct fax 403 781 1825

Mr Larry Charach
Director, Electricity Branch
Alberta Department of Resource Development
5th Floor, 9945 - 108th Street
Petroleum Plaza - North Tower
Edmonton, T5K 2G6

31 July 2000
Subject: PPA Change

Dear Mr Charach

The IAT has received a number of additional queries and requests for clarification of certain aspects of the Power Purchase Arrangements.

We attach a document that details the areas of further errata/clarification. The responses clarify what we believe to have been the obvious intent of PPAs as originally filed. We believe this responds to all additional queries which have been raised.

The errata sheet should be considered as being attached to and forming part of each PPA, as applicable.

Yours very truly

[Delivered by e-mail]

Keith Anderson

Power Purchase Arrangements
Responses to Queries
July 31, 2000

Query 1a

"A query on the Fixed Crown Royalty cost. On reviewing the Report, under the Coal Costs page 12:
"The fixed Crown-dependent coal royalty costs (applicable to Sundance and Keephills only) have been identified ex ante as a separate fixed cost item in Schedule C, and will be paid by the Buyer to the Owner as part of the capacity charge (together with the Base Fixed Fuel Charge)."

Is the FCR missing from the Fixed Fuel Charge (C3.14) formula or is it included in the Base Fixed Fuel Charge (BFFC) in the Schedule C Tables?"

Response

The intention was to include the FCR as part of the ACC at C3.15. This intention is implicit but unclear in the BASE FIXED FUEL CHARGE (BFFC) section of the Tables to Schedule C. BFFC in the table is intended to include both components in that table, Base fixed fuel charge and Fixed Crown Royalties. The issue can be clarified in one of two ways:

1. By interpreting BFCC, as intended, as the total of the two items in that section of the table, or
2. By adding " +FCR_{uy} " to the formula for ACC and "…and FCR_{uy} is the Fixed Crown Royalty." To the narrative following the ACC formula at C3.15."

Query 1b

"The two clarifications provided on the web site (included below) would lead to different results. The variable BFFC is included in a calculation that is multiplied by an index factor, which is then included in the Annual Capacity Charge. The second method in the clarification, where the Fixed Crown Royalty gets included, is to simply add it to the Annual Capacity Charge as an UNindexed number. We believe the response to the question should be either:
1) a) Interpreting the value to be used for the variable BFFC as the combination of the two line items in that section of the table or,
              b) adding the following to the narrative in C3.15 "+ (FCR_{uy} * $WI2FF_y$)" OR

2) a) The calculation of IFFC should in fact be IFFC = ($BFFC_{uy}$ * $WI2FF_y$) + FCR_{uy} or
              b) adding "+ FCR_{uy}" to the calculation in C3.15

Could you please clarify whether, for the purposes of the PPA calculations, the Fixed Crown Royalty should be indexed or not."

Response:

The Fixed Crown Royalty should not be indexed. Provision for Crown Royalty rate changes is provided as part of the passthrough charges. The July 18 clarification did not address indexation. Alternative 2) in the above query is the correct clarification.

Query 2

"The Errata Sheet of June 23 , Item No. 9, corrects several erroneous references in the Genesee PPA Section C.3.11 Aggregate Mining Tax. Also, the Errata sheet makes several corrections in regards to the representation of the Federal and Provincial income tax rates, changing the formula from FTR to FTR/100 and PTR to PTR/100.
However, there is no mention in the June 23 Errata of changes in C3.11 Genesee Aggregate Mining Tax regarding the FTR and PTR representation in the several formuli used.
Will CRA, the IAT and/or the ADRD please confirm that the terms FTR and PTR should be properly represented in C.3.11 as FTR/100 and PTR/100."

Response:

As indicated previously, this matter is addressed at Schedule N, Article 3.2 Percentages. The terms FTR and PTR are correctly represented in formulae in Section C3.11. The term FTR is defined in Section C5.2 as the rate specified in Section 123 of the Income Tax Act (Canada). The term PTR is defined in section 5.2 as the rate specified in Section 21 of the Alberta Corporate Tax Act. Both the Income Tax Act (Canada) and the Alberta Corporate Tax Act provide rates in percentages. Therefore the terms FTR and PTR are governed by the definition of percentages in Article N3.2 which states that if a variable is given as a percentage such as C=25%, it will be written as C/100.

Query 3:

"C3.3 Coal Mining Assets Depreciation Charge and C3.4 Depreciation Charge for Corporate and Admin. Assets

In these Sections, the FDPM and DPCS formulas use an aggregation of values for FMICA and CICA, respectively, of current and previous 4 years.

There are no values provided in the PPA schedules or tables for the values to be assumed for the years prior to 2001. Therefore, we assume they are zero.

In addition, the Foreign Exchange rate used in WI3M is assumed to be C$/US$ (e.g. 1.429) and not the US$/C$ rate (e.g. $0.70)."

Response:

FMICA and CICA are capital additions during the PPA period. Any capital additions prior to 2001 have been considered in establishing the opening values at January 1,2001. The assumption is correct.

The PPAs are expressed in Canadian dollars. Any reference to foreign exchange rates is (unless otherwise indicated) in Canadian dollars. (e.g. the foreign currency, $US expressed as its $CDN equivalent, or $1.429 in the above example.)

Query 4

"C4.3 Working Capital

The formula for Necessary Working Capital is based on:

Working Capital components(t) x lead/lag

where

$WRCi(t) = X(t-1)$

where X are the various sub-components making up each WRCi category.

There are no values provided in the PPA schedules or tables for the values to be assumed for the year prior to 2001. Therefore, we assume they are zero. This implies that the NWC value for Year 2001 is zero."

Response:

NWC values for 2001 will be the values established for the 2000 year, either by the AEUB as reflected in their GTA decisions for TransAlta and Epcor, or as provided by ATCO as undertaken by them in conjunction with their negotiated settlement arrangements for 2000. The assumption that the values are zero is therefore incorrect.

Query 5

"E5.2 Calculation of Current Heat Rates

This section shows formulas for the calculation of no load and incremental heat rates of the following form:

$NLHCY = NLHCY(t-1) \times (100+HRD)/100$

The nature of the formula implies that the degradation factor HRD will be in nominal form (e.g. 0.33), not percentage form (e.g. 0.33% or 0.0033). However, Table E provided with the PPA shows HRD in percentage form. This makes a material difference to the heat rate values for the PPA's term.

Percentage Form Numbers for Tables C, D, and E

The above is only one example were percentage form numbers are represented in the PPA schedule as X/100 yet provided in the Tables as X%. In some cases the representation is obvious, but not always. Consequently, PanCanadian is requesting that the IAT provide a complete list of the proper treatment of the percentage form numbers provided in Tables C, D, and E for the PPAs."

Response:

Schedule N to the PPAs includes the following

"3.2   Percentages
In the calculations defined in the Schedules for any variable whose units are given as a percentage (%), the value used will be the number given. By way of illustration, a calculation defined as A = the product of B and C (where B is 20 and C is 25%) will be written as: $A = B \times C/100$. Thus, $A = 20 \times 25/100 = 5$."

This was intended to resolve any uncertainty with respect to interpretation of mathematical conventions.

Query 6

"In the August 27, 1999 Independent Assessment Team report to the AEUB concerning the PPAs for Keephills, Sundance A, Sundance B and Sundance C a reference is made to "Required Minimum Coal Quantities" in Article E3.3 and a reference is made to "Required Minimum Coal Consumption" in Article E5.6. Article E3.3 stated that the Required Minimum Coal Quantities (RMCC) are found in a table in Article E6. The table attached to Article E6 of the August 27, 1999 PPAs contained a schedule of values titled "Minimum Take or Pay Coal Quantity" (with no acronym) and it had been our assumption that for the Keephills and Sundance units, these quantities were the same as the "Required Minimum Coal Quantities" .

The final PPA Schedule E Tables for Keephills, Sundance A, Sundance B and Sundance C have the acronym "TPMIN" included with the words "Minimum Take or Pay Coal Quantity" in the schedule of values. As far as we can determine the acronym "TPMIN" is undefined for the Keephills and Sundance PPAs while Articles E3.3 and E5.6 in the final version of the PPAs remain the same as the August 27, 1999 version, referring to the acronym "RMCC".

Can you confirm that for the final PPAs for Keephills, Sundance A, Sundance B and Sundance C, the acronym "TPMIN" should be considered equal to or the same as "RMCC" in the context of Articles E3.3 and E5.6?"

Response:

Yes, the acronym "TPMIN" should be considered the same as "RMCC" in the context of Articles E3.3 and E3.6.

Query 7: Schedule L - Article L3.1- Buyer's Termination in respect of Force Majeure

The text in Article L3.1 indicates the Buyer shall be entitled to a Termination Payment from the Balancing Pool "of the net present value of the Residual Balancing Pool Amount (RBPA$_{um}$) for all Units". It is [our] understanding from page 85 of the IAT Report and Article L4 of Schedule L that the RBPA$_{um}$ is the sum of

all values of $PBPA_{um}$ which is a simple proportion of the monthly Auction Amount that remains outstanding at the time of the event of Termination. There is no mention of a need to apply a present value formula to the $RBPA_{um}$ in the IAT's Report or in Article L4. To address this issue, it is proposed that the inclusion of the words "net present value" in Article L3.1 is identified as an errata and be removed entirely from Article L3.1 of Schedule L.

Response:

The intention of the IAT was not clearly reflected in the PPAs. While the matter is somewhat complex, the suggested solution of removing the words "...the net present value of..." would effectively accomplish the IAT's intent.

Query 8   PPA Section 4.3(j) - Unprofitability of the PPA Due to Change in Law

Clarification is required of the phrase "render continued performance by the Parties to this Arrangement for the balance of the Effective Term unprofitable to the Buyer in respect of a Unit..."

A literal interpretation of this clause could result in a Buyer being precluded from exercising its right to terminate the PPA pursuant to Section 4.3(j) because the Change in Law did not "render" the PPA "unprofitable" where the PPA was already "unprofitable" prior to the Change in Law.

It is proposed that Section 4.3(j) of the PPAs be clarified in a manner that makes it clear the Buyer shall be entitled to terminate the PPA and shall not be liable for, nor entitled to any Termination Payment if a Change in Law renders the PPA unprofitable, or more unprofitable.

Response:

The IAT has reviewed PPA Section 4.3(j) and confirms that the intention was to provide and exit provision with no right to or liability for a Termination Payment in the event that a Change of Law rendered a PPA unprofitable *or more unprofitable*. This intention would be made more clear in the PPAs with the insertion of the following (in bold italics) at S4.3(j) of the PPAs:

"Notwithstanding any of the foregoing, to the extent that a Change in Law, after giving effect thereto and to this Section 4.3, could reasonably be expected to render continued performance by the Parties to this Arrangement for the balance of the Effective Term unprofitable, *or more unprofitable,* to the Buyer in respect of a Unit, having taken account of any compensation entitlement under Section 4.3(i) or any amount due from the Balancing Pool, then the Buyer may terminate this Arrangement and shall not be liable for, nor entitled to any Termination Payment."

Query 9 Schedule C – Actual Plant Electricity Consumed Charges

One of the components of the Aggregate Passthrough Charges (PC) in Schedule C of the PPAs is the Actual Plant Electricity Consumed Charges (APELEC). It is unclear from the definition of APELEC whether it refers to all, or just a portion, of the electricity consumed in the Plant, including station service load. It is understood from all three Owners that the APELEC does not include station service load as this plant load was accounted for by the IAT when it set the Committed Capacity level for each PPA.

To address this issue, it is proposed that the term "Station Service Load" be expressly defined in Schedule C and the definition of Actual Plant Electricity Consumed Charges (APELEC) expressly state that APELEC does not include Station Service Load.

Response

The definition of APELEC should be interpreted and clarified to make it understood that APELEC does not include electricity which is "bled" directly from the generator for internal station service. In other words the Committed Capacity is net generation, being net of energy used for in station service. The foregoing suggestions should be considered as included in the PPAs.

Query 10: Federal and Provincial Tax Rates.

Clarification question with respect to tax rate definitions in the PPA's, the definition of the Federal Tax Rate specifies that the rate will be defined based on the rates included in Section 123 and Subsection 124(1) of the Income Tax Act. Under proposed legislation, Power Generation will qualify for the manufacturing and processing (M&P) tax rate reduction of 7% under the proposed Subsection 125.1(2). Based on Interpretation Bulletin ACT-CT20, for the purposes of Alberta tax, if activities qualify for the M&P reduction for federal purposes, they qualify for the M&P reduction for provincial purposes. The M&P rate reduction in the Alberta Corporate Tax Act is Section 22.1. The definition of the provincial tax rate in the PPA is solely the rate specified in Section 21, again excluding the M&P rate reduction of 1% from the definition. By defining these two rates exclusive of the sections providing rate relief, the purchaser of the PPA will be compensating the owner for a tax rate 8% higher than what the owner will actually have to pay. Could you please clarify why the definitions have excluded the sections of the related tax acts providing rate relief or if the definitions should have included the additional sections?

Response:

The proposed section(s) of the income tax legislation were not proposed at the time the PPAs were drafted. The intent, however was and is that the PPAs capacity payments reflect the actual Federal and Alberta rates in effect from time to time. We were not able to anticipate the many different way in which governments could implement tax changes. The PPA s will be clarified to reflect the intention to capture changes in tax rates.

Query 11: Federal and Provincial Recorded Deferred Tax

Articles C5.9 and C5.10 of Schedule C of the PPAs address the calculation of Federal Recorded Deferred Tax (FDRT) and Provincial Recorded Deferred Tax (PDRT) respectively. In each of these Articles the variable FDRT and PDRT is preceded by a summation sign (Σ) which appears to correctly indicate that the input should be summed over all units. Is the absence of a summation sign (Σ) preceding the variables FRDT and PRDT on page 1 of the Income Tax tabs in the Article C7 Excel files an oversight by the IAT such that the appropriate correction is to insert the summation sign (Σ) ahead of the FRDT and PRDT variables in the table?

Response

The C7 Tables include amounts described as FDRT for each unit. This amount represents the total FDRT for the company. The FDRT and PDRT for the particular unit is computed by applying the FRDTA and PDRTA respectively to that amount. For clarification, the C7 Tables should include the summation sign (Σ) in front of the FDRT and PDRT variables in the table.