

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION
CASE NO. 2007-00455

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PUBLIC SERVICE
COMMISSION

RESPONSES TO
COMMISSION STAFF'S FIRST DATA REQUEST TO
ALCAN PRIMARY PRODUCTS CORPORATION AND
CENTURY ALUMINUM OF KENTUCKY GENERAL PARTNERSHIP

1. **Staff Request:**

Refer to the direct testimony of Henry W. Fayne ("Fayne Testimony") at page 6, lines 22-23. Is the premium of \$0.25 per MWh above the large industrial rate that has been agreed to by the Smelters represent a purely non-cost-based premium? If no, explain in detail the cost basis for the \$0.25 per MWh premium.

Response:

The premium of \$0.25 per MWh above the large industrial rate represents a purely non-cost-based premium.

Witness Responsible: H.W. Fayne

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2. **Staff Request:**

Is Mr. Fayne aware that, by Order dated October 30, 2007 in Case No. 2007-00177, the Commission conditionally authorized Big Rivers Electric Corporation ("Big Rivers") to construct 13.2 miles of 161 kV transmission line at an estimated cost of \$4.7 million that will be needed to export 850 MW of excess generating capacity in the event that both of the Smelters terminate their proposed power contracts prior to 2023?

- a. If the entire cost of this transmission line is to be paid for entirely by the Smelters, explain in detail how that payment will be made and identify the specific rate mechanism by which that payment will be made.
- b. If the cost of this transmission line is not to be made entirely by the Smelters, explain in detail the reasons why the entire cost should not be allocated to the Smelters.
- c. The Fayne Testimony at pages 10-11 discusses a number of contract provisions which will allow the Smelters to reduce their consumption, with that power being sold off-system to the credit of the Smelters. Explain in detail whether the cost of this transmission line will be reflected as an offset to the amounts that would otherwise be credited to the Smelters for these sales.

Response:

Mr. Fayne and the management of both Alcan and Century are aware that the Commission has authorized Big Rivers Electric Corporation to construct 13.2 miles of 161 kV transmission line at an estimated cost of \$4.7 million that will be needed to export up to 850 MW of excess generating capacity. That transmission capacity is required in the event that both of the Smelters terminate their proposed power contracts prior to 2023. That transmission capacity is also required in the event that one or both of the smelters are unable to receive energy pursuant to Section 10.2 (Undeliverable Energy) of the Retail Contract.

- a. The cost of the transmission line is not intended to be paid entirely by the smelters. Rather, the cost of the transmission line will be capitalized in the same manner as other capital expenditures. As a result, recovery of the cost of the transmission line will occur either through the TIER Adjustment mechanism or as part of any general base rate case filed by Big Rivers.
- b. The entire cost of the transmission line should not be allocated to the smelters. First, the transmission line will have a life and provide benefits well beyond 2023; therefore, it is appropriate to allocate the costs over the period that the benefit is expected. Moreover, if the smelters terminate prior to 2023, Big Rivers and the non-smelter members will receive the benefit of selling the excess power in the wholesale market at rates that are likely to be higher than the smelter rates. The cost of the transmission lines are an appropriate offset to the margins that will then accrue to Big Rivers and the non-smelter members.
- c. The cost of this transmission line will not be reflected as an offset to the amounts that would otherwise be credited to the Smelters for these sales.

Witness Responsible: H.W. Fayne

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3. **Staff Request:**

Refer to the Fayne Testimony, page 14, lines 5-7. Provide all source material which supports the statement that, "industry analysts [project] that the long term LME price will be \$2100 per metric ton"

Response:

Please refer to schedule attached.

Witness Responsible: H.W. Fayne

Schedule Staff Data Request #3

Aluminum Price Forecasts

	Date	2008		2009		2010	2011	LT	
		<u>LME</u>	<u>Midwest</u>	<u>LME</u>	<u>Midwest</u>	<u>LME</u>	<u>LME</u>	<u>LME</u>	
Bank of America	01/04/08	2,535	-	2,756	-	-	-	1,874	-
Barclays*	10/05/07	2,838	-	3,000	-	3,200	-	2,900	Nominal
Bear Stearns	06/13/07	2,425	-	-	-	-	-	2,094	-
BMO Nesbitt Burns	12/07/07	2,513	-	2,425	-	-	-	2,205	-
BNP Paribas	07/09/07	2,545	-	2,665	-	2,500	-	-	-
Credit Suisse	10/04/07	2,425	-	1,984	-	1,984	-	1,984	-
Davenport	12/19/07	2,350	88	2,450	110	1,900	-	2,260	-
Friedman Billings	01/07/08	2,535	-	2,425	-	-	-	-	-
Goldman Sachs	01/10/08	2,400	-	2,500	-	-	-	2,712	2012 \$
JP Morgan	10/26/07	2,306	-	2,150	-	2,150	-	2,000	-
Macquarie Bank	09/14/07	2,756	-	2,866	-	2,425	-	2,205	-
Merrill Lynch	12/06/07	2,601	110	2,535	110	2,535	-	2,425	-
Morgan Stanley	12/14/07	2,866	-	2,866	-	2,646	2,425	2,315	-
Societe General	07/05/07	2,300	-	2,150	-	2,050	-	-	-
UBS	12/03/07	2,730	-	-	-	-	-	2,000	-
CRU	01/15/08	2,328	95	2,282	128	2,373	2,436	1,965	2007 \$
Brook Hunt	12/19/07	2,500	-	2,350	-	2,100	-	1,800	-
Street Average		2,542	99	2,521	110	2,377	2,425	2,248	-
Analyst Average		2,414	-	2,316	-	2,237	2,436	1,883	-
Overall Average		2,527	98	2,494	116	2,351	2,431	2,196	-
Street Median		2,535	99	2,500	110	2,425	2,425	2,205	-
Analyst Median		2,414	-	2,316	-	-	2,436	1,883	-
Overall Median		2,513	95	2,450	110	2,373	2,431	2,150	-

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4. **Staff Request:**

Refer to the Fayne Testimony, page 14, lines 12-14. Explain in detail the meaning of the term "large capital investments" and state the amounts and dates of these investments. Also state whether or not these investments will increase either Smelter's existing output or reduce its existing cost of production.

Response:

Rio Tinto Alcan plans to invest approximately \$40 million to rebuild the anode baking furnace as soon as possible once the Unwind is approved by the Commission. Alcan also intends to invest approximately \$6 million annually to sustain existing operations. These investments are intended to maintain existing operation of the potlines; they will not increase existing output or reduce the cost of production.

Century plans to invest approximately \$46 million during 2008-2009 to improve energy efficiency once the Unwind is approved by the Commission. Century also intends to spend approximately \$14 million annually to sustain existing operations. These investments are intended to maintain existing operation of the potlines and are expected to increase existing output by about 7.5%.

Witness Responsible: H.W. Fayne

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5. **Staff Request:**

Refer to the Fayne Testimony, page 14, line 21, to page 15, line 1. Explain in detail the "financial commitments" that will be made by the Smelters, and indicate the amounts, timing, and purpose of each financial commitment.

Response:

Please see response to Data Request #4.

Witness Responsible: H.W. Fayne

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6. **Staff Request:**

Refer to the Fayne Testimony, page 15, lines 8-10. Explain in detail why the Smelters do not have sufficient information to agree or disagree with the Big Rivers' financial forecast.

- a. State whether any of the joint applicants have refused to provide information that was requested by the Smelters.
- b. Provide a detailed list of the information that the Smelters believe would need to be reviewed to determine whether they agree or disagree with the Big Rivers financial forecast.

Response:

- a. Big Rivers was reasonably responsive to the Smelters' requests for information regarding the financial model and the Smelters conducted a reasonable high-level review of the information provided. However, the financial model was continually being updated as Big Rivers, based on *additional discussions and reviews with WKE*, refined its proposed work plans and as Big Rivers received additional information from its various consultants. Because of the time required to resolve the contractual issues and to prepare the filing, the Smelters were not able to review the final financial model in detail.

Based on their limited review, the Smelters concluded that the financial forecast is indicative of the costs that may be incurred. Therefore, the Smelters agreed to proceed with this transaction and filing. However, the Smelters were unable to conduct sufficient review and due diligence to conclude that the operation performance and costs projected in the financial forecast reflect the levels that appropriately would be established in the annual budgeting process. The Smelters intend to work closely with Big Rivers and the non-smelter members to explore opportunities to minimize cost in a

manner consistent with Prudent Utility Practice through the annual budgeting process.

- b. The Smelters believe that a detailed review of the assumptions and alternatives would be required to determine whether or not the financial model reflects the least-cost alternative to maintain the required level of service to the Smelters and the non-smelter members. The Smelters have concluded that the most effective forum for that review will be the annual budgeting process and dialogue among the members of the Coordinating Committee.

Witness Responsible: H.W. Fayne

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7. **Staff Request:**

Provide a schedule which shows for each of the last three calendar years (2007, 2006, and 2005) the quantities of power, in MWh, purchased by Alcan from Western Kentucky Energy Corp. and the prices paid in dollars per MWh for each purchase. In addition, include on this schedule the quantities of power purchased in MWh, and the prices paid in dollars per MWh, for each individual purchase of power that was supplied by other than Western Kentucky Energy Corp. Each power purchase that was supplied by Big Rivers should be appropriately identified, but no other supplier needs to be identified.

Response:

Please refer to schedule attached.

Witness Responsible: H.W. Fayne

ALCAN ENERGY PURCHASES

	2005		2006		2007	
	MWH	\$/MWH	MWH	\$/MWH	MWH	\$/MWH
Western Kentucky Energy Corp. (WKE)						
Tier 1	416,342	\$31.20	416,355	\$31.20	416,363	\$31.20
Tier 2	1,583,896	\$22.51	1,583,535	\$22.73	1,583,897	\$23.12
Tier 2 Supplemental	34,698	\$15.53	21,051	\$15.75	28,718	\$16.14
Tier 3 Backup	85,429	\$63.54	20,005	\$55.31	42,184	\$64.47
Tier 3 Regular			18,575	\$39.44		
Total WKE	2,120,365	\$25.76	2,059,521	\$24.89	2,071,162	\$25.49
Tier 3 Suppliers Other than WKE						
Big Rivers ⁽¹⁾	205,967	\$30.22	853,117	\$33.14	991,357	\$53.56
Other Supplier #1	736,087	\$28.27				
Other Supplier #2	72,944	\$24.77				
Other Supplier #3			190,800	\$51.98		
Grand Total ⁽²⁾⁽³⁾	3,135,363	\$27.50	3,103,438	\$29.13	3,062,519	\$35.29

Notes:

- 1) Includes all energy purchases under contracts between Kenergy Corp. and Big Rivers for the benefit of Alcan, including third party purchases by Big Rivers for the direct benefit of Alcan, but excludes transmission related and other costs that were paid to Big Rivers.
- 2) The total dollars per MWH paid by Alcan includes an aggregate amount charged by Big Rivers, as shown on the chart below, for Tier 3 transmission and ancillary charges, power factor correction, administrative fees, MISCO pass-through charges and letter of credit fees.

Total Non-Energy Charges	
2005	\$1,724,000
2006	\$1,569,000
2007	\$2,183,000
- 3) For purposes of comparability to big Rivers' Financial Model, retail fees paid by Alcan to Kenergy and all prior period adjustments have been excluded from all calculations of dollars per MWH.

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8. **Staff Request:**

Provide a schedule showing for Century the same information regarding the quantities of power purchased and the prices paid as provided for Alcan in response to the immediately prior question.

Response:

Please refer to schedule attached.

Witness Responsible: H.W. Fayne

CENTURY ENERGY PURCHASES

	2005		2006		2007	
	MWH	\$/MWH	MWH	\$/MWH	MWH	\$/MWH
Western Kentucky Energy Corp. (WKE)						
Tier 1	317,635	\$31.20	317,635	\$31.20	317,635	\$31.20
Tier 2	2,592,607	\$22.51	2,592,607	\$22.73	2,592,607	\$23.12
Tier 2 Supplemental	42,144	\$15.53	46,812	\$15.75	45,716	\$16.14
Tier 3 Backup	28,587	\$72.21	57,613	\$64.71	36,913	\$87.75
Tier 3 Regular	468,661	\$12.16	152,163	\$46.80		
Total WKE	3,449,634	\$23.56	3,166,830	\$25.46	2,992,871	\$24.67
Tier 3 Suppliers Other than WKE						
Big Rivers ⁽¹⁾	703,455	\$31.42	632,850	\$43.58	1,241,623	\$53.10
Other Supplier #1			440,597	\$59.75		
Other Supplier #2						
Other Supplier #3						
Grand Total ⁽²⁾⁽³⁾	4,153,089	\$24.51	4,240,277	\$31.68	4,234,494	\$33.64

Notes:

1) Includes all energy purchases under contracts between Kenergy Corp. and Big Rivers for the benefit of Century, including third party purchases by Big Rivers for the direct benefit of Century, but excludes transmission related and other costs that were paid to Big Rivers.

2) The total dollars per MWH paid by Century includes an aggregate amount charged by Big Rivers, as shown on the chart below, for Tier 3 transmission and ancillary charges, power factor correction, administrative fees, MISO pass-through charges and letter of credit fees.

Total Non-Energy Charges	
2005	\$483,000
2006	\$0
2007	\$2,676,000

3) For purposes of comparability to big Rivers' Financial Model, retail fees paid by Century to Kenergy and all prior period adjustments have been excluded from all calculations of dollars per MWH.

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9. **Staff Request:**

The Fayne Testimony, page 5, lines 1-6, states that the Smelters' current blended cost of power is \$35 per MWh, but in HWF Exhibit 1, page 2 of 2, the average Alcan rate is shown as \$27.76 per MWh and the average rate for Century is shown as \$30.73 per MWh. Explain the differences between the average electricity prices shown in HWF Exhibit 1 and the price stated in the Fayne Testimony, page 5.

Response:

The data reflected on HWF Exhibit 1 reflects public information as reported by CRU; CRU is the standard source of information regarding the aluminum industry. The blended rate of \$35 per MWh described in Fayne Testimony reflects the costs as recorded on each company's books. Please see response to Data Request Items 7 and 8.

Witness Responsible: H.W. Fayne

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10. **Staff Request:**

Refer to the Fayne Testimony, HWF Exhibit 1, page 2 of 2. Provide the workpapers and source documents used to derive the numbers in the column titled, "Average Electricity Price." Also provide a projection of the average electricity price over the 5-year period 2008 through 2012 to the extent that such information is available to either Mr. Fayne, Alcan, or Century.

Response:

Attached is the source document for the data reflected in HWF Exhibit 1, page 2 of 2.

We do not have information regarding the projected average electricity price.

Witness Responsible: H.W. Fayne

1	Ranking Table - Average Electricity Price (US\$/kWh) - 2007 - Nominal						
2	Region	Country	Smelter	Average Electricity Price (US\$/kWh)	Average Electricity Price (US\$/mWh)	Production ('000 t)	Cumulative Production ('000 t)
3	North America	USA	Wenatchee	0.01158	11.58	92.02	92.02
4	North America	USA	Massena East	0.02012	20.12	125.00	217.03
5	North America	USA	Massena West	0.02171	21.71	130.03	347.05
6	North America	USA	Alcoa Tennessee	0.02586	25.86	195.56	542.62
7	North America	USA	Rockdale	0.02770	27.70	247.27	789.89
8	North America	USA	Sebree	0.02776	27.76	197.04	986.93
9	North America	USA	Ravenswood	0.02827	28.27	173.12	1160.05
10	North America	USA	Warrick	0.03065	30.65	269.64	1429.69
11	North America	USA	Hawesville	0.03073	30.73	246.19	1675.88
12	North America	USA	New Madrid	0.03755	37.55	253.00	1928.88
13	North America	USA	Ferndale	0.04098	40.98	163.74	2092.62
14	North America	USA	Mount Holly	0.04384	43.84	228.96	2321.58
15	North America	USA	Hannibal	0.05060	50.60	190.04	2511.62
16	North America	USA	Columbia Falls	0.05800	58.00	58.79	2570.41
17							
18	Source: CRU						

Table H.1: Estimates and forecasts of world smelting production ('000s average tpy)

Smelter	Country	2004	2005	2006	2007	2008	Change	
							2009	2007-9
Canada								
Alma	Canada	404	407	410	416	415	415	(1)
Alouette	Canada	242	478	570	574	575	575	1
Arvida	Canada	195	163	165	166	166	166	-
Baie Comeau	Canada	438	437	432	435	437	438	3
Beauharnois	Canada	51	52	52	52	52	52	-
Becancour	Canada	260	345	404	407	408	408	2
Deschambault	Canada	250	254	252	254	254	254	0
Grande Baie	Canada	196	203	206	207	207	207	0
Kitimat	Canada	244	243	238	244	245	245	1
Latterriere	Canada	220	224	227	229	228	228	(1)
Shawnigan	Canada	93	96	98	99	99	99	0
USA								
Alcoa Tennessee	USA	215	219	214	190	219	219	29
Badin	USA	-	-	-	-	-	-	-
Columbia Falls	USA	34	34	33	60	67	67	7
Dalles	USA	-	-	-	-	-	-	-
Ferndale	USA	96	94	94	168	187	187	19
Frederick	USA	198	172	-	-	-	-	-
Goldendale	USA	-	-	-	-	-	-	-
Hannibal	USA	153	4	2	168	265	270	102
Hawesville	USA	244	246	241	247	246	246	(1)
Longview	USA	-	-	-	-	-	-	-
Massena East	USA	101	125	124	125	125	125	-
Massena West	USA	93	130	128	130	130	130	0
Mead	USA	-	-	-	-	-	-	-
Mount Holly	USA	225	225	225	230	229	229	(1)
New Madrid	USA	247	246	254	259	259	259	-
Ravenswood	USA	172	171	156	173	173	173	(0)
Rockdale	USA	268	270	261	243	267	268	24
Sebree	USA	197	194	194	197	196	196	(1)
Vancouver	USA	-	-	-	-	-	-	-
Warrick	USA	274	274	267	272	272	272	(0)
Wenatchee	USA	1	79	89	98	100	100	2
Unallocated Closures		-	-	-	-	-	(150)	(150)
Veracruz	Mexico	-	-	-	-	-	-	-

Source: CRU Aluminum Quarterly - Jan 2008

Table H.1: Estimates and forecasts of world smelting production ('000s average tpy) (continued)

Smelter	Country	2004	2005	2006	2007	2008	Change	
							2009	2007-9
Western Europe								
Mostar	Bosnia	117	120	121	121	130	135	14
Dunkirk	France	257	258	259	259	259	259	0
Lannemezan	France	50	50	47	34	6	-	(34)
St Jean	France	135	134	134	135	135	135	0
Essen	Germany	152	149	146	162	162	162	0
Hamburg	Germany	132	118	-	68	132	132	64
Norf	Germany	223	225	226	229	228	228	(1)
Stade	Germany	69	60	54	-	-	-	-
Voerde	Germany	93	91	90	92	93	93	1
Distomon	Greece	167	165	165	166	166	166	(0)
Fjarðal	Iceland	-	-	-	50	300	346	296
Nordural	Iceland	92	94	156	228	260	260	32
Straumsvik	Iceland	178	179	168	177	179	179	2
Fusina	Italy	45	44	44	43	44	44	1
Porto Vesme	Italy	152	149	150	140	150	151	11
Podgorica	Montenegro	121	120	123	125	127	128	4
Delfzijl	Netherlands	112	115	106	108	115	118	10
Vlissingen	Netherlands	218	219	179	186	206	213	27
Aardal	Norway	222	233	232	202	197	204	2
Hoyanger	Norway	75	77	60	55	55	55	(0)
Husnes	Norway	164	163	164	159	165	168	9
Karmoy	Norway	278	277	288	293	300	285	(9)
Lista	Norway	92	94	94	94	94	94	-
Mosjoen	Norway	185	184	189	188	188	189	1
Sunndal	Norway	306	362	357	365	395	400	35
Talum (Kidricevo)	Slovenia	118	121	119	105	84	85	(20)
Aviles	Spain	89	89	90	91	90	90	(1)
La Coruna	Spain	86	86	86	85	85	85	-
San Ciprian	Spain	220	222	225	227	225	225	(2)
Sundsvall	Sweden	101	103	102	100	103	106	7
Steg	Switzerland	45	45	12	-	-	-	-
Holyhead	UK	147	146	143	147	145	145	(2)
Lochaber	UK	42	43	43	48	48	48	-
Lynemouth	UK	170	177	173	170	177	178	8
Unallocated Closures	Europe	-	-	-	-	-	(200)	(200)
Asia								
Angul	India	324	359	360	359	380	469	111
Hirakud	India	66	66	75	104	134	143	39
Jharsuguda	India	-	-	-	-	100	250	250
Korba	India	98	140	282	355	355	355	(0)
Mettur	India	36	38	39	38	40	50	12
Renukoot	India	337	359	361	364	364	364	(0)
Asahan	Indonesia	234	252	255	256	255	255	(1)
Kambara	Japan	6	6	7	7	7	7	-
North Korean smelter	North Korea	20	20	20	20	20	20	-

**Table H.1: Estimates and forecasts of world smelting production
('000s average tpy) (continued)**

Smelter	Country	2004	2005	2006	2007	2008	Change	
							2009	2007-9
Middle East								
Alba	Bahrain	530	750	855	857	855	855	(2)
Dubal	Dubai	681	722	787	896	950	950	54
Arak	Iran	119	119	105	108	135	160	52
Bandar Abbas	Iran	92	99	110	110	115	185	75
Sohar	Oman	-	-	-	-	180	350	350
Qatalum	Qatar	-	-	-	-	-	26	26
Seydisehir	Turkey	64	60	60	64	65	65	1
Africa								
Edea	Cameroon	85	86	88	76	94	110	33
Nag Hammadi	Egyptalum	213	251	254	268	270	288	20
Valco	Ghana	-	11	65	11	-	-	(11)
Mozal	Mozambique	548	554	563	562	562	568	6
Ikot Abasi	Nigeria	-	-	-	-	24	81	81
Bayside	South Africa	183	161	191	191	191	191	0
Hillside	South Africa	680	690	704	707	716	716	9
Australasia								
Bell Bay	Australia	162	174	178	178	178	178	(0)
Boyne Island I	Australia	288	294	295	300	303	303	3
Boyne Island II	Australia	252	251	252	251	251	251	0
Kurri Kurri	Australia	155	152	164	170	170	170	0
Point Henry	Australia	190	195	195	194	195	195	1
Portland	Australia	353	330	333	351	353	353	2
Tomago	Australia	495	505	520	522	525	525	3
Tiwai Point	New Zealand	350	351	337	352	352	351	(2)
C&S America								
Puerto Madryn	Argentina	272	270	272	286	396	426	140
Aluminio	Brazil	345	370	405	451	475	475	24
Aratu	Brazil	58	57	59	59	59	59	0
Belem	Brazil	440	450	460	459	459	460	1
Pocos de Caldas	Brazil	90	95	96	96	98	102	6
Santa Cruz	Brazil	95	94	96	93	96	96	3
Sao Luis	Brazil	377	382	437	448	467	474	26
Saramenha	Brazil	51	51	51	49	50	51	2
Atcasa	Venezuela	189	187	178	176	172	172	(4)
Venalum	Venezuela	440	436	440	438	440	440	2

Table H.1: Estimates and forecasts of world smelting production ('000s average tpy) (continued)

Smelter	Province	2004	2005	2006	2007	2008	Change	
							2009	2007-9
China								
Tiantai	Chongqing	4	48	57	58	58	58	-
Various Chongqing	Chongqing	45	48	51	51	52	52	1
Nanping	Fujian	47	52	63	75	75	75	0
Baiyin Ibis	Gansu	128	128	131	140	145	178	38
Gansu	Gansu	27	46	51	66	68	113	47
Lanzhou	Gansu	156	166	172	254	420	430	176
Liancheng	Gansu	149	219	265	280	301	310	30
Various Gansu	Gansu	63	18	18	21	21	21	(0)
Baise Yinhai	Guangxi	50	55	68	96	156	200	104
Desheng	Guangxi	18	17	2	57	108	141	84
Baise Youjiang	Guangxi	0	0	0	0	0	30	
Pingguo	Guangxi	113	140	136	136	160	367	231
Guixin Longlin	Guangxi	20	32	37	58	124	158	100
Laibin	Guangxi	-	-	-	-	-	-	-
Various Guangxi	Guangxi	26	1	-	13	47	73	61
Guizhou	Guizhou	230	232	361	411	415	415	4
Zunyi	Guizhou	61	57	76	111	110	125	13
Various Guizhou	Guizhou	161	160	124	231	319	339	108
Various Hebei	Hebei	37	-	-	-	-	-	-
Various Heilongjiang		11	10	6	6	6	-	(6)
Dengfeng	Henan	59	58	65	102	167	175	73
Huanghe	Henan	82	90	76	123	155	155	32
Jiaozuo Wanfang	Henan	226	207	235	301	406	412	111
Linzhou	Henan	70	70	75	105	105	105	-
Longxiang	Henan	55	52	54	114	140	135	21
Qingyang Qing'oa	Henan	42	39	-	108	198	230	122
Sanmenxia	Henan	100	91	94	113	125	127	14
Shangdian	Henan	117	120	129	145	145	145	-
Shenhuo	Henan	62	168	206	223	267	275	52
Wanji	Henan	185	178	237	355	355	355	-
Xichuan Xinyuan	Henan	57	46	57	72	73	75	3
Xinwang	Henan	47	45	44	60	60	60	-
Xinyuan-Yichuan	Henan	204	305	408	532	612	620	88
Yong'an	Henan	56	56	56	60	60	60	-
Zhengzhou	Henan	58	52	41	56	58	60	4
Zhongfu	Henan	122	165	183	309	335	345	36
Various Henan	Henan	72	74	58	63	65	65	2
Changjiang	Hubei	-	21	62	123	135	162	39
Danjiangkou	Hubei	85	104	102	101	110	110	9
Huasheng	Hubei	38	46	48	83	83	88	5
Yangxin Hongjun	Hubei	36	74	84	82	82	82	-
Yichang	Hubei	-	-	-	-	-	-	-
Various Hubei	Hubei	39	-	-	-	-	-	-
Chuangyuan	Hunan	83	76	101	159	267	300	141
Various Hunan	Hunan	31	14	16	14	14	14	(0)
Baotou	Inner Mong.	228	256	282	300	300	300	-
Baotou East Hope	Inner Mong.	92	145	218	317	452	500	183
Huo Mei Hong Jun	Inner Mong.	-	55	128	215	336	372	157
Tongshun	Inner Mong.	53	52	52	157	187	190	33
Datun	Jiangsu	2	45	60	100	110	113	13
Various Jiangsu	Jiangsu	12	10	3	-	-	-	-
Various Jiangxi	Jiangxi	7	-	-	-	-	-	-
Various Jilin	Jilin	72	3	-	4	91	155	151
Fushun	Liaoning	163	127	109	110	204	300	190

**Table H.1: Estimates and forecasts of world smelting production
('000s average tpy) (continued)**

Smelter	Country	2004	2005	2006	2007	2008	Change	
							2009	2007-9
Various Liaoning	Liaoning	26	18	11	10	21	23	13
Qingtonxia	Ningxia	248	353	557	580	580	670	90
Zhongning	Ningxia	27	5	-	-	-	-	-
Baihe	Qinghai	48	92	97	116	130	145	30
Changqing	Qinghai	47	31	8	-	-	-	-
Qiaotou	Qinghai	124	160	291	310	310	310	-
Qinghai	Qinghai	286	354	382	394	396	396	2
Various Qinghai	Qinghai	54	23	45	117	132	160	44
Greenfield Shaanxi	Shaanxi	-	-	-	-	-	250	250
Tongchuan	Shaanxi	65	72	130	181	213	225	44
Various Shaanxi	Shaanxi	42	48	50	50	75	90	40
Huaxin	Shandong	176	243	280	496	730	880	384
Jiangtai	Shandong	87	110	108	110	112	120	10
Nanshan	Shandong	155	155	151	324	335	335	11
Shandong	Shandong	66	75	94	97	97	100	3
Taian Taishan	Shandong	0	23	31	58	60	64	6
Weiqliao	Shandong	51	83	105	266	442	494	228
Yankuang	Shandong	88	135	138	139	140	140	2
Zouping	Shandong	66	60	52	64	79	123	59
Various Shandong	Shandong	-	-	26	33	55	61	28
Shanxi (Chalco)	Shanxi	-	35	270	280	280	387	107
Shanxi Guanlu	Shanxi	107	113	189	315	316	370	55
Taiyuan	Shanxi	14	36	41	79	79	79	0
Yangquan	Shanxi	58	58	49	66	92	95	29
Zhaofeng	Shanxi	61	76	72	96	114	117	21
Zhenxing	Shanxi	61	62	73	105	114	115	10
Various Shanxi	Shanxi	48	61	69	80	96	96	16
E'meishan	Sichuan	154	153	151	153	165	201	48
Sichuan Meishan	Sichuan	107	124	136	164	269	274	110
Xinguangxing	Sichuan	117	111	115	114	115	120	6
Various Sichuan	Sichuan	27	17	15	16	75	105	89
Xingjiang Tianlong	Xingjiang	21	21	21	22	33	40	18
Various Xingjiang	Xingjiang	33	31	25	20	20	20	-
Dongyuan Qujing	Yunnan	-	18	59	117	131	140	23
Yunnan	Yunnan	182	313	369	426	430	430	5
Various Yunnan	Yunnan	81	56	36	38	52	50	12
Huaneng	Zhejiang	65	69	73	104	131	130	26
Various Zhejiang	Zhejiang	10	2	-	-	-	-	-
Identified Projects		-	-	-	268	922	1,389	1,121
Other China	n/a	268	474	101	144	77	93	(51)
Other China closures		(320)	(330)	-	-	(75)	(450)	(450)

**Table H.1: Estimates and forecasts of world smelting production
('000s average tpy) (continued)**

Smelter	Country	2004	2005	2006	2007	2008	Change	
							2009	2007-9
CIS								
Sungait	Azerbaijan	30	30	30	38	60	60	22
Pavlodar	Kazakhstan	-	-	-	13.4	80	120	107
Bogoslavsk	Russia	183	184	184	189	190	192	3
Bratsk	Russia	956	976	984	994	1005	1010	16
Irkutsk	Russia	285	290	295	303	421	450	147
Kandalaksha	Russia	71	73	74	77	75	75	(2)
Krasnoyarsk	Russia	929	926	948	981	996	1010	29
Nadvoitsy	Russia	77	79	80	81	82	82	1
Novokuznetsk	Russia	305	305	315	320	321	321	1
Sayansk	Russia	482	507	533	701	829	830	129
Taishet (experimental)	Russia	11	11	11	11	11	11	-
Taishet	Russia	0	0	0	0	0	0	-
Uralsky	Russia	125	132	133	134	135	135	1
Volgograd	Russia	156	155	158	157	158	155	(2)
Volkhov	Russia	23	23	23	24	24	26	2
Tursunzade	Tajikistan	358	380	414	418	435	445	27
Zaporozhye	Ukraine	109	114	113	114	115	115	1
Eastern Europe								
Inota	Hungary	34	36	-	-	-	-	-
Konin	Poland	46	55	55	54	55	55	1
Slatina	Romania	219	244	259	264	270	276	12
Ziar nad Hronom	Slovakia	157	159	158	161	165	165	4
Total world		29883	31970	33913	38168	42718	45161	6,993
Unallocated disruption		-	-	-	-	(50)	(50)	(50)

Data: CRU

**COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION
CASE NO. 2007-00455**

**RESPONSES TO
COMMISSION STAFF'S FIRST DATA REQUEST TO
ALCAN PRIMARY PRODUCTS CORPORATION AND
CENTURY ALUMINUM OF KENTUCKY GENERAL PARTNERSHIP**

11. **Staff Request:**

Provide the following information to the extent known to either Mr. Fayne, Alcan, or Century, about power purchased under fixed-price or formula rate contracts by each of the aluminum smelters listed in HWF Exhibit 1, page 2 of 2: Name of each power supplier, annual percentage of power supplied by each supplier, and length of term of each power contract, and average price per MWh paid under each contract in 2007.

Response:

Hannibal: Supplied 50% by Ohio Power and 50% by Columbus Southern Power, both operating subsidiaries of AEP
Fixed rate through 2008
Rate thereafter to be negotiated

Massena: 100% NYPA
30-year agreement in principle
LME-based rate; specific terms unknown

Mt. Holly: Supplied 100% by Santee Cooper Cooperative Firm and Interruptible Tariffs
Contract through 2015

New Madrid: Supplied 100% by Ameren UE
Large Transmission Customer Tariff

Ravenswood: Supplied 100% by Appalachian Power
LME-Based rates through 2009

Warrick }
Alcoa Tennessee } These are all Alcoa smelters which are
Rockdale } served in substantial part by company-owned facilities

Wenatchee To be supplied by Chelan Public Utility District beginning Nov 2011 with 17-year contract

Witness Responsible: H.W. Fayne

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION
CASE NO. 2007-00455

RESPONSES TO
COMMISSION STAFF'S FIRST DATA REQUEST TO
ALCAN PRIMARY PRODUCTS CORPORATION AND
CENTURY ALUMINUM OF KENTUCKY GENERAL PARTNERSHIP

12. **Staff Request:**

What percentage of the annual output of the Alcan Sebree smelter is sold at the market price on the date of the sale, and what percentage of the output is sold at a price negotiated prior to the date of sale?

Response:

The entire output of the Sebree smelter is priced on a monthly basis with the market price as the basic starting place with adders for value added and location premium.

Witness Responsible: H.W. Fayne

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION
CASE NO. 2007-00455

RESPONSES TO
COMMISSION STAFF'S FIRST DATA REQUEST TO
ALCAN PRIMARY PRODUCTS CORPORATION AND
CENTURY ALUMINUM OF KENTUCKY GENERAL PARTNERSHIP

13. **Staff Request:**

What percentage of the annual output of the Century Hawesville smelter is sold at the market price on the date of the sale, and what percentage of the output is sold at a price negotiated prior to the date of sale?

Response:

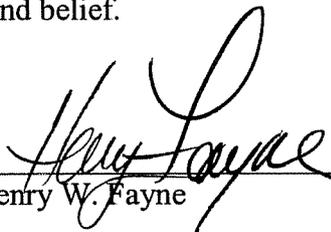
The majority of the output of the Hawesville smelter is priced on a monthly basis with the market price as the basic starting place with adders for value added and location premium.

Witness Responsible: H.W. Fayne

VERIFICATION

STATE OF CALIFORNIA)
) SS:
COUNTY OF _____)

The undersigned, Henry W. Fayne, being duly sworn, states that the response to Items 1, 4 through 6 and 11 through 20 of the Attorney General's First Request for Information are true and correct to the best of his information, knowledge and belief.



Henry W. Fayne

Subscribed and sworn to before me, a Notary Public in and before the County and State,
this _____ day of February, 2008.

Notary Public

My Commission Expires:

CALIFORNIA JURAT WITH AFFIANT STATEMENT

- See Attached Document (Notary to cross out lines 1-6 below)
- See Statement Below (Lines 1-5 to be completed only by document signer[s], *not* Notary)

1 _____
2 _____
3 _____
4 _____
5 _____
6 _____

Signature of Document Signer No. 1 _____ Signature of Document Signer No. 2 (if any) _____

State of California

County of Monterey

Subscribed and sworn to (or affirmed) before me on this

12th day of February, 2008, by
Date Month Year

(1) Henry W. Fayne,
Name of Signer

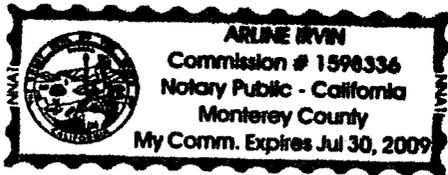
proved to me on the basis of satisfactory evidence to be the person who appeared before me (.) (,)

(and

(2) _____,
Name of Signer

proved to me on the basis of satisfactory evidence to be the person who appeared before me.)

Signature Arline Irvin
Signature of Notary Public



Place Notary Seal Above

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Further Description of Any Attached Document

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Signer(s) Other Than Named Above: _____

RIGHT THUMBPRINT OF SIGNER #1
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