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BIG RIVERS ELECTRIC CORPORATION'S RESPONSE TO THE ATTORNEY GENERAL'S OCTOBER 24, 2008 SUPPLEMENTAL REQUEST FOR INFORMATION TO JOINT APPLICANTS/ED PSC CASE NO. 2007-00455 November 7, 2008

NUV 07 2000 PUBLIC SERVICE COMMISSION

Item 11) Please update responses to all previous data requests from the Office of Attorney General with any additional responsive documents and information since the date of the last response to such data requests. If no update exists for a specific question, the responses indicating that fact can be grouped in a joint response.

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9 Response) In response to this request, Big Rivers has updated the following responses
10 of the Attorney General:

11	Tab A -	Attorney General's Initial Request Item 65
12	Tab B -	Attorney General's Initial Request Item 67
13	Tab C -	Attorney General's Initial Request Item 85
14	Tab D -	Attorney General's Initial Request Item 107
15	Tab E -	Attorney General's Initial Request Item 116
16	Tab F -	Attorney General's Initial Request Item 117
17	Tab G -	Attorney General's Initial Request Item 127
18	Tab H -	Attorney General's Initial Request Item 129
19	Tab I -	Attorney General's Initial Request Item 131
20	Tab J -	Attorney General's Initial Request Item 132
21	Tab K -	Attorney General's Supplemental Request Item 82
22	Tab L -	Attorney General's Supplemental Request Item 87
23	Tab M -	Attorney General's Supplemental Request Item 94
24	Tab N -	Attorney General's Supplemental Request Item 95
25	Tab O -	Attorney General's Supplemental Request Item 99
26	Tab P -	Attorney General's Supplemental Request Item 100
27	Tab Q -	Attorney General's Supplemental Request Item 107
28		
29	Big Rivers believes th	at there are no other updates necessary at this time.

1	BIG RIVERS ELECTRIC CORPORATION'S RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO JOINT APPLICANTS PSC CASE NO. 2007-00455 (Original Response February 14, 2008) November 7, 2008
2	
3	Item 65) Please reference the testimony of David A. Spainhoward, page 16, lines 7-
4	12, regarding purchase of NO _x allowances. Provide work papers and associated
5	supporting documents to support these estimates[d] net costs.
6	
7	Response) The attachment to Big Rivers' response to the Attorney General's Initial
8	Request for Information No. 65 concerning NO_x allowances is updated and attached.
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18	Witness) David A. Spainhoward
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33	Item AG-65 Page 1 of 2

BIG RIVERS ELECTRIC CORPORATION'S RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO JOINT APPLICANTS PSC CASE NO. 2007-00455 November 7, 2008

Emissions & Allowance Summary

Nominal dollars

	2009	2010	2011	2012
NOx Price forecast \$	700	\$ 650	\$ 2,120	\$ 1,951
Yearly beginning NOx allowance inventory x1000	0.000	0.000	0 0 00	0.000
Total system NOx tons emitted x1000	5.248	5 2 1 2	13 779	13.672
System NOx Emissions allocation to City x1000	0 107	0 107	0.290	0 301
BREC NOx tons emitted net City x1000	5 141	5.105	13 489	13.371
yearly allocation of NOx allowances from EPA x1000	4 799	4.799	11 398	11.398
EPA NOx allowances allocation to City x1000	0.147	0.147	0.330	0.341
BREC allocation of NOx allowances net of City x1000	4.652	4 652	11.068	11 057
yearly BREC NOx allowances sold/(purchased) net City x1000	(0.489)	(0 453)	(2.421)	(2 314)
Yearly ending NOx allowance inventory x1000	0 000	0 000	0 0 00	0 000
BREC NOx allowances Sales/(purchases)	(\$342,300)	(\$294,450)	(\$5,132,520)	(\$4,514,614)

BIG RIVERS ELECTRIC CORPORATION'S SUPPLEMENTAL RESPONSE TO THE ATTORNEY GENERAL'S INITIAL **REOUEST FOR INFORMATION TO JOINT APPLICANTS** PSC CASE NO. 2007-00455 (Original Response February 14, 2008) November 7, 2008 1 2 3 Item 67) Please reference the testimony of Michael H. Core, page 7, where it states the higher rates paid by the Smelters under the new agreement "will add approximately 4 \$327 million in present value..." Provide documents and detailed supporting workpapers 5 (in electronic spreadsheet format with formulas intact) that show the derivation and 6 7 calculations to reach this \$327 million figure. 8 9 10 Per the calculation shown below, the overall present value contribution of Response) 11 the Smelters is virtually unchanged since the first response to question 67. The number is arrived at by calculating the amount of payments from the Smelters that exceed what 12 13 would be collected from Big Rivers' large industrial tariff at a 98% load factor, discounted at a rate of 5.75%. 14 15 As shown in the attached spread sheet, the difference consists of 1) the Smelter payment 16 17 of 25 cents over the large industrial tariff, 2) the cost of the TIER Adjustment and 3) surcharges that flow back to the Members. Key changes since the first response to 18 19 question 67 are: 20 21 - Unwind close at 12/31/08 instead of 4/30/08, and thus removal of Smelter contribution 22 amounts for the last 8 months of 2008; 23 24 - Offset to Smelter "Surcharge 2" (Retail Service Agreements 4.11 (b) and (c)) in the 25 amount of \$200,000 per month for 96 months; 26 27 - Increased costs to the Smelters via the TIER Adjustment. 28 29 30 31 32 Item AG-67

Page 1 of 3

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	BIG RIVERS ELECTRIC CORPORATION'S SUPPLEMENTAL RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO JOINT APPLICANTS PSC CASE NO. 2007-00455 (Original Response February 14, 2008) November 7, 2008
1	The reduced Smelter contribution via the Surcharge is slightly more than offset by the
2	increased Smelter contribution via the TIER adjustment, such that the current present
3	value contribution by the Smelters is \$327.9 million.
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7	Witness) Robert S. Mudge
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32	Item AG-67
33	Page 2 of 3

BIG RIVERS ELECTRIC CORPORATION'S SUPPLEMENTAL RESPONSE TO THE ALL ORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO JOINT APPLICANTS PSC CASE NO. 2007-00455 (Original Response February 14, 2008) November 7, 2008

		Contract Reference (Smelter Retail Agreements)	Total	PV	Wtd. Avg.	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
1	<u>\$/ MWH</u>																	40.00	10.05	50.04
2	Large Industrial Rate @ 98% LF+I	AC+PPA+ES-Rebate			46.62	41.29	41.16	45.58	47.97	50.20	42.91	43.52	43.74	48.07	47.39	48.53	48.49	49.62	49.95	50.94
3	Increment:																			
4	Margin	1.1.20 (Alcan)/			0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
5	TIER Adjustment Charge	1.1.19 (Century) 4.7			2.40	-	-	1.79	2.25	1.59	1.64	2.78	2.59	3.55	0.54	3.67	2.97	4.30	3.53	4.75
6	Surcharge 1	4.11 (a)			1.12	0.70	0.70	0.70	1.00	1.00	1.00	1.00	1.00	1.40	1.40	1.40	1.39	1.40	1.40	1.40
7	Surcharge 2	4.11 (b) and (c)			1.02		0.87	0.87	0.87	0.87	0.87	0.87	0.87	1.20	1.20	<u> 1.20 </u>	1.20	<u> 1.20 </u>	1.20	1.20
8	Total				4.80	1.82	1.82	3.62	4.37	3.71	3.76	4.90	4.71	6.40	3.38	6.52	5.81	7.15	6.37	7.60
9	Effective Smelter Rate				51.42	43.11	42.98	49.19	52.33	53.92	46.67	48.42	48.44	54.47	50.77	55.05	54.30	56.77	56.32	58.53
10																				
11	Smeiter TWh					7.30	7.30	7.30	7.32	7.30	7.30	7.30	7.32	7.30	7.30	7.30	7.32	7.30	7.30	7.30
12	<u>sm</u>																			
13	Increment:																			
14	Margin		27.4	18.5		1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
15	TIER Adjustment		262.5	157.1		-	-	13.1	16.4	11.6	12.0	20.3	18.9	25.9	3.9	26.8	21.7	31.4	25.7	34.7
16	Surcharges		235.3	<u>152.2</u>			<u> 11.5</u>	11.5	13.7	13.7	13.7	13.7	13.7	18.9	18.9	18.9		18.9	18.9	18.9
17	Total		525.2	327.9		13.3	13.3	26.4	32.0	27.1	27.4	35.8	34.4	46.7	24.7	47.6	42.5	52.2	46.5	55.4
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1	BIG RIVERS ELECTRIC CORPORATION'S SUPPLEMENTAL RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO JOINT APPLICANTS PSC CASE NO. 2007-00455 (Original Response February 14, 2008) November 7, 2008
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3	Item 85) Provide the complete joint application and supporting documentation for
4	the parties' waiver from the Federal Trade Commission under the Hart-Scott-Rodino
5	Antitrust Improvements Act ("HSR Filing"). If the filing has not yet been made, please
6	state when it is anticipated the HSR filing will be made.
7	
8	a. If the HSR filing has not yet been made, provide each document
9	that is being considered for inclusion when the filing is made.
10	
11	
12	Response) Based upon a projected closing of February 26, 2008, Big Rivers expects
13	to make its HSR Filing in mid-December, 2008. Big Rivers will file the HSR filing when
14	it is complete, but objects to filing an incomplete draft of this voluminous document on
15	grounds of relevancy.
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25	Witness) C. William Blackburn
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	SUP	BIG RIVERS ELECTRIC CORPORATION'S PLEMENTAL RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO JOINT APPLICANTS PSC CASE NO. 2007-00455 (Original Response February 14, 2008) November 7, 2008
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3	Item 107)	Please reference the Application at page 17, paragraph 33. Describe the
4	and all matter	to date with Henderson. In the description include dates, people involved,
6		is discussed.
7		
8		
9	Response)	Please see attached spreadsheet providing a list of meetings with
10		om December 2007 to present.
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15	Witness)	David A. Spainhoward
16		Mark A. Bailey
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		Page 1 of 3

BIG RIVERS ELECTRIC CORPORATION'S SUPPLEMENTAL RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO JOINT APPLICANTS PSC CASE NO. 2007-00455 (Original Response February 14, 2008) November 7, 2008

SCHEDULE OF MEETINGS WITH HENDERSON MUNICIPAL POWER & LIGHT

Date	Attendees	Matters Discussed
12/17/2007	Mike Core, David Spainhoward, Sandy	status of unwind
	Novick, Mark Bailey, Mayor Tom Davis,	negotiations with HP&L
	Co. Judge Executive Sandy Watkins,	
	Community Leaders John Sights and John	
	Logan	
2/25/2008	Mike Core, David Spainhoward, Mark	Unwind
	Bailey, Gary Quick, Wayne Thompson,	
	Paul Thompson, David Sinclair, Ralph	
	Bowling, Allan Eyre, Pam Schneider	
2/28/2008	Mark Bailey, David Spainhoward, Dr.	Unwind
	Smith, Gary Quick, Scott Miller, and	
	perhaps others	
3/6/2008	Gov. Steve Beshear, Senator Dorsey	Unwind
	Ridley, Co. Judge Executive Sandy	
1	Watkins, Dr. William Smith, Gary Quick,	
	Paul Thompson, Mike Core, Mark Bailey	
3/19/2008	Mark Bailey, Bill Blackburn, David	Unwind
	Spainhoward, E.ON & HMP&L people	
5/9/2008	Governor's representatives, David	Unwind negotiations
	Spainhoward, Mike Core, William Denton,	
5	Mark Bailey, Paul Thompson, David	
}	Sinclair, George Siemens, Gary Quick, Dr.	
	William Smith, Senator Dorsey Ridley	
6/11/2008	David Spainhoward, Mark Bailey, Gary	Unwind
	Quick, Wayne Thompson, CB West, Paul	
	Thompson, David Sinclair, Bob Ferdon by	
	phone	
6/27/2008	Mayor Tom Davis, Commissioners Mike	Specially-called Henderson
	Farmer, Robby Mills, Jim White, Paul	City Commission meeting
	Kuerzi, Mike Core, David Spainhoward,	to pass a resolution in
	Mark Bailey, Pam Schneider, Chuck	support of HMP&L
	Stinnett & Ron Jenkins (The Gleaner), Co.	
	Judge Executive Sandy Watkins came late,	
	not sure if he was there during the actual	
	meeting	
8/1/2008	Dr. William Smith (HMP&L Board Chair),	Unwind
	Bill Denton (Big Rivers' Board Chair)	

BIG RIVERS ELECTRIC CORPORATION'S SUPPLEMENTAL RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO JOINT APPLICANTS PSC CASE NO. 2007-00455 (Original Response February 14, 2008) November 7, 2008

8/15/2008	William Denton, Mark Bailey, Gary Quick, Dr. William Smith	Unwind
9/2/2008	Dr. William Smith (HMP&L Board Chair), William Denton (Big Rivers' Board Chair)	Unwind
9/25/2008	Mark Bailey, Gary Quick	Unwind
10/7/2008	Paul Thompson, Wayne Thompson, Gary Quick, Mark Bailey	Unwind
10/30/2008	Paul Kuerzi (Henderson City Commissioner), Mark Bailey	Unwind

1	BIG RIVERS ELECTRIC CORPORATION'S SUPPLEMENTAL RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO JOINT APPLICANTS PSC CASE NO. 2007-00455 (Original Response February 14, 2008) November 7, 2008
2	
3	Item 116) For each year 2008-2013, please provide the computed rate of return on
4	rate base inherent in the financial model projections (Exhibit 8).
5	
6	
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8	Response) Attached is an update of the calculation of projected returns on rate base
9 10	for the years 2009-2014.
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14	Witness) C. William Blackburn
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33	Item AG-116
-	Page 1 of 2

JOINT A PLICANTS PSC CASE NO. 2007-00455 (Original Response Date February 14, 2008) November 7, 2008

ATTACHMENT TO AG INITIAL REQUEST ITEM 116

	2009	2010	2011	2012	2013
Approximate Rate Base (\$M, Beginning of Period)					
Total Utility Plant in Service	1,882	1,987	2,039	2,103	2,146
Accumulated Depreciation & Amortization	(887)	(921)	(957)	(1,001)	(1,047)
Net Plant	995	1,066	1,082	1,102	1,099
<u>Return on Rate Base (\$M, unless otherwise indicated)</u>					
Net Margins	14	13	13	14	13
Plus Finance Related Expenses:					
Interest Expense (Incl. Financing Fees and Restructuring Cost	53	49	48	51	48
Net Sale-Leaseback	-	-		-	-
Total	67	62	61	65	61
Percent	6.7%	5.8%	5.6%	5.9%	5.6%

1 2	BIG RIVERS ELECTRIC CORPORATION'S SUPPLEMENTAL RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO JOINT APPLICANTS PSC CASE NO. 2007-00455 (Original Response February 14, 2008) November 7, 2008
3	Item 117) A munine the 2008 conital structure projected in the financial model
<i>.</i> 4	Item 117) Assuming the 2008 capital structure projected in the financial model
5	(Exhibit 8), please provided Big Rivers' current weighted average cost of capital,
5	showing computations and the cost attributed to each source of capital.
7	
8	
9	Response) The attached schedule updates the cost of capital computation for the 12
10	months ended December 31, 2009 based on the latest Unwind Financial Model. ¹
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15	Witness) C. William Blackburn
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30	¹ Note that the one-time expensing of \$3.85 million in unamortized AMBAC credit enhancement costs
31	relating to the Pollution Control Bonds is excluded from Interest on Long Term Debt in that year.
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33	Item AG-117 Page 1 of 2

B' VERS ELECTRIC CORPORATION'S SUPPLEMENTAL RESPONS 'THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMA' 'TO

JOINT 5, 7LICANTS PSC CASE NO. 2007-00455 (Original Response February 14, 2008) November 7, 2008

1 Cost	of Capital is calculated as follows:					
2						
3	Interest on Long Term Debt	plus	Depreciation & /	<u>Aπ</u>	nortization	+ Property Taxes + Property Insurance
4	Average Principal Balance	pius			Average (Gross Plant in Service
5						
6						
7		2009 Cost of Capital				
8	······································	\$53.1/\$868.3 5.67%				
9	((\$34.4+\$2	2.9+\$4)/\$1934.5		2.13%	
10			Total		7.81%	
11						
12	2009					
13	Interest on Long Term Debt			\$	49.3	
14	Depreciation & Amortizaton		ŝ	\$	34.4	
15	Property Taxes		ç	\$	2.9	
16	Property Insurance		S	\$	4.0	
17	Average Principal Balance 12	2/31/09*	ç	\$	868.3	
18	Average Gross Plant in Service)9** :	\$	1,934.5	
19	-					
20						
21	Calculation of average princip	al balanc	e:			
22	balance @ 12/31/08			\$	871.7	
23	balance @ 12/31/09			\$	864.8	
24	total			\$	1,736.5	
25	total divided by 2		1	\$	868.3	
26						
27						
28	Calculation of average gross	plant in se	ervíce			
29	balance @ 12/31/08		:	\$	1,882.3	
30	balance @ 12/31/09			\$	1,986.7	
31	total			<u>\$</u>	3,869.0	
32	total divided by 2			\$	1,934.5	
33						

	BIG RIVERS ELECTRIC CORPORATION'S RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO JOINT APPLICANTS PSC CASE NO. 2007-00455 (Original Response February 14, 2008) November 7, 2008				
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2					
3	Item 127) Provide reference Exhibit 37/Independent Auditors' Annual Opinion				
4	states at page 10, paragraph VII that "WKEC will make required capital improvements to				
6	the facilities to comply with a new law or change to existing law ("Incremental Capital Costs")" Provide the current view and estimation of such "Incremental Capital Costs"				
7	for:				
8					
9	a) The next five years; and				
10	b) The next ten years, by type/function of capital cost.				
11					
12	Response) a) Over the next five years (2009-2013) the following "Incremental				
13	Capital Costs" are anticipated:				
14					
15	1. Catalyst replacement/regeneration for the selective catalytic				
16	reduction (SCR) systems at the Wilson and HMP&L Station Two stations (approx. \$12.7				
17	million);				
18					
19	2. Stack monitors for mercury emissions for Wilson, Coleman,				
20	Green, Reid, and HMP&L station Two stations (approx. \$2.0 million);				
21					
22	3. SO3-abatement equipment at Wilson Station (approx. \$3.36				
2.3	million);				
24					
25	4. Boilers' tube corrosion protection installed on Coleman &				
26	Green Station units resulting from NOx reduction equipment installed in response to SIP				
27	Call (approx. \$10.85 million).				
28	1) O (I o construction (2014-2018) Die Divers proportivities				
29 20	b) Over the succeeding five years (2014-2018) Big Rivers presently has				
30 21	no "Incremental Capital Costs" planned other than additional ongoing catalyst				
31 32					
.52 33	Item AG-127				
	Page 1 of 2				

	RE	BIG RIVERS ELECTRIC CORPORATION'S ESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO JOINT APPLICANTS PSC CASE NO. 2007-00455 (Original Response February 14, 2008) November 7, 2008			
1	replacement/	regeneration for Wilson and HMP&L Station Two (approx. \$12.1 million).			
2	However, Big Rivers will be monitoring changes in environmental regulations and will				
3	modify its er	vironmental compliance plan accordingly.			
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6	Witness)	David Spainhoward			
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32 33		Item AG-127			
		Page 2 of 2			

	BIG RIVERS ELECTRIC CORPORATION'S SUPPLEMENTAL RESPONSE TO THE ATTORNEY GENERAL'S INITIA REQUEST FOR INFORMATION TO JOINT APPLICANTS PSC CASE NO. 2007-00455 (Original Response February 14, 2008) November 7, 2008
1 2	
3	Item 129) Provide copies of the three Distribution Cooperatives financial annual
4	reports for 2005 to present.
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8	Response) Attached to this response is the Jackson Purchase Energy Corporation
9	2007 annual report, which was not available when this item was originally answered.
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14	Witness) C. William Blackburn
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33	Item AG-129 Page 1 of 1





rom gasoline prices to natural gas, the cost of cnergy is on the rise These increases have begun to affect Jackson Purchase Energy members and the rate you pay for electricity. Even though you will see a small increase soon, JPEC members will still pay some of the lowest rates in the country JPEC has not had a rate increase in more than ten years In fact. JPEC has lowered electric rates by more than 10% in the last 10 years Even after JPEC's new rates are in place. you will still be paying less than you were ten years ago.

In late 2007, JPEC emphasized energy saving in the company's member newsletter, in bill messages and at JPEnergy com. It continues to be the company's goal to help you save money by reducing your energy consumption. Just because JPEC's rates are increasing doesn't mean members' bills have to rise. By reducing energy consumption. consumers should be able to offset the small increase. JPEC's stalf and customer service representatives are energy experts and want to be your source of information concerning ways to reduce your energy consumption.

Many forces are at work pushing energy costs up For petroleum products, these forcet include rapidly growing worldwide demand for oil, political and military turmoil in several oil-producing areas and intural disasters disrupting oil delivery and refining facilities. In the electric industry, these forces include appropriate, but highly expensive, environmental enhancements to power plants as well as increased demand, and uphtening supplies. Further, significant changes to how energy is bought and sold methe wholesale market, and the cost of materials used, has driven up costs

Ð

In 2007, JPEC used nearly 75.000 gallons of fuel in the trucks that install new equipment, repair existing equipment and respond to service interruptions. With an increase of \$1.00 per gallon, which today seems small. JPEC's day-to-day operational cost increased by \$75,000. The organization is working to reduce fuel requirements and encourage greater efficiency. For example, employees are doing a better job of turning off trucks at job sites when they are not in use



The costs of basic building materials continue to skyrocket with no end in sight The price of metals such as steel, copper and aluminum, which are used in transformers, meters, lines, and other items, are at record highs The cost of copper is up nearly 300% and is so valuable, thieves are stealing wire from vacant homes or homes under construction JPEC has experienced some instances of copper ground wires being stolen from poles in the company's service area The practice is not only illegal but also very dangerous -- and not only for the thief. Missing ground wires can create safety hazards for the public as well JPEC is working closely with area law enforcement officials to prevent this dangerous practice

As your cooperative looks into the future, additional forces will put more upward pressure on electric prices JPEC will continue to control costs and use innovative methods to keep rate increases at bay. However, the biggest threat to controlling those costs stems from environmental concerns Carbon dioxide emissions from coal power plants have been singled out as a leading cause of global climate change, and efforts are underway to reduce these emissions even further. Of course, those efforts come at a cost The debate has moved out of the realm of science and into emotion and politics Political solutions to what should be an objective, scientific issue are now in play in Washington and several states It's critical not only for the environment, but also for our nation's economy and wellbeing that political solutions take into account the impact on people who will ultimately bear the costs of whatever laws may be passed. JPEC and our cooperative family will work hard to ensure the political debate is well-informed and that elected officials understand the impact to the common citizen

There are answers beyond politics that can do much to reduce carbon dioxide and save money. The simplest and most cost-effective solution is to use energy wisely. This is nothing new for JPEC Your cooperative has been a champion of energy efficiency and conservation since the first line was energized more than 70 years ago, and that commitment continues today.

A few examples of being energy wise (without dramatically changing lifestyle) include changing regular light bulbs to compact fluorescent bulbs, turning off lights when a room is unoccupied, and making sure homes and businesses are well insulated

In the following pages, you'll read more about specific activities and achievements from the past year such as new green power options for members and customer service enhancements. The report will highlight the reliability of the system and plans for the future. JPEC continues to stress employee and member safety with high-voltage demonstrations to area school students and other groups, such as volunteer fire departments and first responders.

The information in this report is for, you, JPEC's owners. As a member of a cooperative. you are an owner and have an equity position in the company lt always is JPEC's goal to keep memberowners well informed. If you have questions about anything you read in the following pages or questions about something that is not highlighted in the report. please contact a customer service representative





Tray Bensley VP Engineering & Operations

ackson Purchase Energy's staff and management work hard to provide members with safe. reliable electric service. Maybe more important are the efforts JPEC makes to keep that reliable electric service affordable

The Engineering and Operations Department is ultimately responsible for getting power to your door That includes constructing new lines and maintaining existing lines and substations In addition to the obvious, there are many efforts made to keep the lights on and many members are not aware of those efforts There is a lot behind the line that leads to your house, from constant analysis of the electric system to the never-ending cycle of maintenance. And, all those efforts have a cost associated with them

Over the last four years, JPEC has invested nearly \$1 million a year to clear right-of-way and trim trees Maintaining right-of-way is the most significant part of JPEC's efforts to keep electric service reliable

More than \$900,000 cach year is spent in system maintenance efforts, which includes servicing existing equipment and making repairs to existing power lines Maintaining existing power lines and equipment is an essential part of making sure power is there when you need it

In addition to the maintenance of rightof-way and power lines, JPEC spends more than \$1 million annually in system replacements and improvements Our system improvement projects ensure that we are maintaining a good working system by replacing out-of-date lines and equipment with new ones An example of this is replacing old and brittle copper wire that breaks easily with new aluminum wire that will be more reliable during ice and wind storms

The costs associated with providing service to members, obviously, has a direct impact on electric rates JPEC continues to weigh the costs of providing reliable service with the costs that members will have to pay when the monthly electric bill arrives With proper budgeting and smart choices the investment in the system will continue to pay benefits

JPEC makes choices similar to members' own household budgets by deciding what has to be done, what needs to be done and what can wait to be done. The company is always looking for waysto control expenses just like members. Because of this mindset, JPEC continues to offer members ways to control their own expenses. Last year alone JPEC distributed nearly 10,000 compact. Horescent light bubs to help members curb their energy, use and reduce their own costs.





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ackson Purchase Energy employs more than 80 full- and part-time staff members dedicated to providing quality service at the most affordable rates possible While members are the company's primary responsibility, JPEC also has a responsibility to the company's employees The Human Resources Department fulfills this responsibility

Part of that responsibility is to ensure employees are kept informed of the latest advancements within their field of expertise Therefore, employee training is a big part of the department's efforts For the last several years, training for JPEC employees has been increased However, the company has been able to do so with little increase in costs By harnessing the power of the Internet and technology in general, employees have gained valuable knowledge and training through online courses This increases productivity as employees can move through the training at their own pace and when time allows Further, the traditional cost of training, such as paying an instructor or traveling to a training session, is eliminated

As part of employment.-JPEC offets a competitive benefits package designed to increase employee retention and to attract qualified candidates The administration of those benefits is conducted under the umbrella of _ Human Resources There are many legal requirements, both state and federal, that the company is required to abide by in regards to benefit packages

Again, by utilizing technology, many of these efforts have been streamlined For example, employees now register for benefit packages online This gives employees more accountability for benefits selections

In addition to current employee issues, the Human Resources Department is responsible for recruiting new employees Recruitment has become a challenge in recent years due to a higher turnover rate as retirements grow. as well as a potential labor shortage for skilled labor such as line workers The department has been working with the Kentucky Department of Labor and Kentucky's Workforce Development group to ensure the employment pool meets the future needs of the company.

Finally, the increase in retirements' has necessitated an increased focus on succession planning. Led by Human Resources, each department has completed a comprehensive succession plan for managers and supervisors. The best-qualified candidates for management positions often times come from current employees. With succession planning, departments can identify those employees and focus training and education efforts to give those employees a clear career path

Member Relations

Member Relations continues to bring added value to your cooperative membership. Each year as part of Jackson Purchase Energy's Power To Students Campaign, the company gives high school juniors the opportunity to travel to Frankfort. KY and then Washington D C to learn more about our government. In addition, JPEC awards six \$1,000 scholarships to high school seniors planning to attend a Kentucky college or university.

Another part of the Power to Students Campaign is JPEC's support of Newspapers in Education This program delivers newspapers to middle school students one day a week to be used for current events studies, reading and more JPEC has been a part of the Newspapers in Education program for nearly 10 years and hundreds of thousands of newspapers have been delivered to nearly every school in the region

JPEC's commitment to schools and education doesn't stop there The company provides safety presentations and science demonstrations to schools throughout the year, and hosts school tours

Being a good corporate citizen by giving back to the communities served by JPEC is one of the seven cooperative principles that guide the business everyday. To that end, JPEC has again helped support many community-based and non-profit organizations JPEC's support of these groups gives cooperative members an opportunity to benefit from the services offered by these organizations

For example. JPEC supports the Carson in rates Education efforts will continue in Center's Class Act Series The series produces the corning year with an even larger focus shows specifically for school-aged children in the company's online efforts at Shows provide history lessons, science JPEnergy com

lessons and expose children to the arts. More than 20,000 students from 130 schools have attended a show at the Carson Center as part of the Class Act Series Our sponsorship enables the Center to offer students this opportunity at about \$2 per child

Similarly, for several years JPEC has supported efforts of the Paducah Symphony Orchestra Our support has allowed the symphony to supply free concert tickets to students across the region Music education in schools has diminished over the last several years and the Paducah Symphony has been able to pick up the slack with their free student ticket program as well as by sending ensemble groups to perform at area schools These programs would not be possible without the support of corporate gifts from businesses like JPEC

In addition to supporting non-profit organizations, Member Relations also is responsible for communications to JPEC members Information for members is delivered by way of the company's monthly newsletter, on JPEC's website at JPEnergy.com, as well as through modest advertising efforts Much of the information disseminated to members in the past year has revolved around energy efficiency. As the energy experts, JPEC is committed to providing answers to members' energy related questions. Further, after JPEC announced a small rate increase, the company took the next step by telling customers, through the newsletter and advertising, how they can reduce energy use and negate the increase in rates Education efforts will continue in in the company's online efforts at JPEnergy.com





Chuck Williamson VP Finance & Accounting



ackson Purchase Energy's Finance and Accounting Department includes accountants, financial analysts and customer service representatives The Finance and Accounting Department oversees the day-to-day financial health of the organization as well as customer service representatives who establish service for new customers, process current members' payments and answer questions relating to members' electric service

In 2007, customer service training was again the focus Because of the everchanging industry. it is important that JPEC's customer service representatives are well versed in all aspects of the electric energy business. For example, last year, JPEC filed a request with the Kentucky Public Service Commission to allow members to purchase a portion of their electricity from generation that was fueled by a renewable "green" source Big Rivers Electric, JPEC's wholesale power supplier, has contracted with an energy producer who is using waste wood products to produce renewable electricity. The electricity is more expensive to produce; therefore. members who purchase renewable power presently must pay a promium Customer service representatives must be able to explain this option to members as well as make sure the customer's account is properly noted

Last summer, JPEC began a pilot project in the Burna area to read meters electronically The Automated Meter Information project is still in the testing phase It is likely JPEC will deploy AMI meters tothe entire electric system over the next few years The pilot project has been led

by engineering and customer service By including both customer service and engineering, the organization will be able to get a clear picture on how the technology works, as well as how it interfaces with JPEC's billing system.

In another inter-departmental, cooperative effort, the Customer Service Department sits on the Emergency Response Task Force Planning Committee This group constantly reviews and critiques JPEC's response to outages and then tweaks the system to ensure members are restored service as soon as possible.

Also in 2007, JPEC was again awarded Safety Accreditation The Customer Service Department, along with every other department in the company, helped make sure JPEC is one of the safest cooperatives in the state. Safety accreditation is important not only because the company wants to keep employees and members safe, but also because safety accredited cooperatives are eligible for certain insurance reductions Safety accreditation is a win for members and JPEC alike.

The number of members using JPEC's website. JPEnergy.com. continues to increase, as well as the number of members using bank draft and the internet to pay their electric bills Members can look at payment history, review energy use. make a one-time payment, and more at JPEnergy.com These customer service features reduce calls to the company's customer service representatives giving them an opportunity to spend more time with members that call for energy advice or other services ര

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2007 FINANCIAL STATEMENT

STATEMENT OF OPERATIONS FOR THE YEAR ENDING DECEMBER 31, 2007

Operating Revenue and Patronage Capital	\$40,365,878
Cost of Purchased Power	25,264,491
System Operation & Maintenance	5,301,144
Depreciation	3,433,896
Taxes/Other	43,167
Interest Expense	2.697,030
Other Deductions	3,403,959
Total Cost of Electric Service	\$40,143,687
Patronage Capital & Operating Margins	222,191
Total Non-Operating Margins	464,067
Other Capital Credits and Patronage Dividends	133,805
Total Patronage Capital or Margin	\$820,063

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	Total Liabilities & Member Equities	\$88,893,705	
	Deferred Credits & Noncurrent Liabilities		
	Other Current and Accrued Liabilities	502,253	
	Accounts Payable	2,860,116	
٠	Operating Provisions	1,555,510	- "
	Short-Term Notes Payable	800,000	
	Long-Term Debt	46,768.664	
	Membership and Other Equities	34,759,030	
	Consumer Deposits	\$1,409,622	
	LIABILITIES & MEMBER EQUITIES		
	Total Assets	\$88,893,705	
	Other Current and Accrued Assets	1,681,546	
	Other Deferred Debts	1,133,309	
	Expenses Paid in Advance	430.173	
	Material in Inventory	1,642,580	
	Owed to JPEC on Accounts & Notes	2,329,056	
	Cash & Reserves	275,781	
	Investments in Associations, Organizations, Specia Other Investments	ai runos & 2.297,745	
	Net Utility Plant Book Value	79,103,515	
	Less Depreciation	(34,096,756)	
	Total Utility Plant	\$113,200,271	
	ASSETS		

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	BIG RIVERS ELECTRIC CORPORATION'S RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO JOINT APPLICANTS PSC CASE NO. 2007-00455 (Original Response February 14, 2008) November 7, 2008
2	Item 131) Regarding the "Environmental Matters" and "significant financial impacts
3	on the use of fossil fuels for power generation" referenced in the Big Rivers 2005 Annual
4	Report to Members (Exhibit 41), please provide the current best estimates of costs to Big
5	Rivers broken down by fiscal year and capital versus operating expense associated with
6	compliance with:
7	a. The EPA's Clean Air Mercury Rule (CAMR);
8	b. The EPA's Clean Air Interstate Rule (CAIR);
9	c. Performance goals of the Clean Water Act Section 316(b);
10	d. Regulation of carbon dioxide as a pollutant under the Clean Air
11	Act; and,
12	e. Any other state or federal rules likely to cause additional cost in
13	order to meet pollution standards or otherwise comply with those rules.
14	
15	Response) a. Over the next five years (2009-2013) the following costs for
16	CAMR are anticipated:
17	1) Stack manitors for margury amissions for Wilson
18	1) Stack monitors for mercury emissions for Wilson, Coleman, Green, Reid, and HMP&L Station Two stations (approximately \$2.0 million);
19	2))) (a) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c
20	2) No operating expenses for CAMR are planned other than servicing the stack monitors;
21	
22	3) Over the succeeding years Big Rivers presently has no other capital costs or operating expenses planned for CAMR. However, Big Rivers will
23	be monitoring changes in environmental regulations and will modify its environmental
24	compliance plan accordingly.
25 26	b. Over the next five years (2009-2013) the following costs for CAIR
26	are anticipated:
27 28	1) Catalyst replacement/regeneration for the selective catalyst
28 29	reduction (SCR) systems at the Wilson and HMP&L Station Two stations (approximately
30	\$12.7 million);
31	
32	
33	Item AG-131 Page 1 of 7

	BIG RIVERS ELECTRIC CORPORATION'S RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO JOINT APPLICANTS PSC CASE NO. 2007-00455 (Original Response February 14, 2008) November 7, 2008
1	2) See the attachment for anticipated annual variable
2	operating expenses for CAIR;
3	3) Boiler tube corrosion protection installed on Coleman
4	Station & Green Station units resulting from NOx reduction equipment installed in
5	response to SIP Call (approximately \$10.85 million);
6	4) Over the succeeding years Big Rivers anticipates SO2
7	scrubber waste disposal variable costs to increase due to the Green/HMP&L Station Two on-site special waste landfill to reach its capacity and the waste will have to be hauled
8	elsewhere (farther away). The financial model includes costs for the expected increase;
9	
10	5) Over the succeeding years Big Rivers presently has no other capital costs planned for CAIR. However, Big Rivers will be monitoring changes
11	in environmental regulations and will modify its environmental compliance plan
12	accordingly;
13	6) Operation of the CAIR-related NOx removal equipment
14	increases the parasitic load at each plant thus reducing the available net generation output
15	(Mwhrs). Mr. Blackburn addresses the net available generation in Big Rivers response to the Commision Staff's supplemental data request Number 6. The net capacity for each
16	unit is shown in the Updated Production Cost Model filed in October as Exhibit 97.
17	c. Over the next five years (2009-2013), no costs for "316(b)" are
18	anticipated:
19	
20	1) No capital or operating expenses are anticipated by Big Rivers for "316(b)";
21	
22	2) Over the succeeding years Big Rivers presently has no other capital costs for operating expenses planned for "316(b)". However, Big Rivers
23	will be monitoring changes in environmental regulations and will modify its
24	environmental compliance plan accordingly.
25	d. Over the next five years (2009-2013), no costs for carbon dioxide
26	(CO2) capture are anticipated:
27	1) No capital or operating expenses are anticipated by Big
28	1) No capital or operating expenses are anticipated by Big Rivers for CO2;
29	
30	2) Over the succeeding years Big Rivers presently has no other capital costs or operating expenses planned for CO2 regulations. However, Big
31	outer experim coors of operating expenses planter for your again one. The result of the
32	
33	Item AG-131 Page 2 of 7

	BIG RIVERS ELECTRIC CORPORATION'S RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO JOINT APPLICANTS PSC CASE NO. 2007-00455 (Original Response February 14, 2008) November 7, 2008
1 2	Rivers will be monitoring changes in environmental regulations and will modify its environmental compliance plan accordingly.
3	e. Over the next five years (2009-2013), no costs for "Ozone Attainment" or Regional Haze are anticipated:
5 6	1) No capital or operating expenses are anticipated by Big Rivers for "Ozone Attainment" or Regional Haze;
7	2) Out the surger direction Die Diegenerate her as
8	2) Over the succeeding years Big Rivers presently has no other capital costs or operating expenses planned for "Ozone Attainment" or Regional Haze regulations. However, Big Rivers will be monitoring changes in environmental
10	regulations and will modify its environmental compliance plan accordingly.
10	
12	Witness) David A. Spainhoward
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.32	Item AG-131
33	Page 3 of 7

Coleman Station non-fuel variable O&M (in nominal dollars)

Attachment 1

page 1

Year	2009-model	2010-model	2011-model	2012-model	2013-model
······································	Coal	Coal	OTAG-coal	OTAG-coal	OTAG-coal
let Generation (MWhr)	3,434,877	3,457,502	3,427,339	3,342,456	3,482,825
Net Avg MW's					······
verage Heat Rate (BTU/kWh)					
SO2 lb/mmBTU inlet					
Average Service Hours					
Percent SO2 removal					
imestone		0/1 007	044 477	200 000	218,150
TPY limestone	210,669	211,967	211,477	208,669 \$17.33	\$17.81
Cost per Ton of Reagent	\$15.75	\$16.30	\$16.87 \$3,567,620	\$3,616,242	\$3,885,243
Cost of Reagent	\$3,318,034	\$3,455,058	\$3,007,020	φ <u>3,010,24</u> 2	\$0,000,240
<u>Gypsum sales</u> Tons	278,193	289,682	299,119	303,196	325,749
Cost per Ton	(\$1.25)	(\$1.25)	(\$1.25)	(\$1.25)	(\$1,25)
Cost	(\$347,741)	(\$362,102)	(\$373,899)	(\$378,995)	(\$407,187)
	(+++++)	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	······································		
Fly Ash					
Tons of Disposal	182,778	184,349	183,699	181,136	189,455
Cost per Ton of Disposal	\$4.01	\$4.14	\$4.29	\$4.41	\$4.53
Cost of Disposal	\$732,938	\$763,206	\$788,071	\$798,811	\$858,232
Bottom Ash			45.005		47.004
Tons of Disposal	45,695	46,088	45,925	45,284	47,364
Cost per Ton of Disposal	\$4.01	\$4.14	\$4.29	\$4.41	\$4.53
Cost of Disposal	\$183,236	\$190,803	\$197,019	\$199,704	\$214,560
					· · · · · · · · · · · · · · · · · · ·
Off-Spec Gypsum disppsal Tons of Disposal	24,437	24,647	24,560	24,218	25,330
Cost per Ton of Disposal	\$4.01	\$4.14	\$4.29	\$4.41	\$4.53
Cost per Ton of Disposal	\$97,992	\$102,039	\$105,363	\$106,799	\$114,744
Cost of Disposal	<u> </u>	\$102,000			
Di-Basic Acid					
Pounds of Reagent	0	0	0	0	0
Cost per Pound of Reagent	\$0.70	\$0.70	\$0.72	\$0.74	\$0.76
Cost of Di-Basic Acid	\$0	\$0	\$0	\$0	\$0
	······································				
SO2 and ash \$/Mwhr	\$1.16	\$1.20	\$1.25	\$1.30	\$1.34
<u>Total /Year</u>	\$3,984,459	\$4,149,004	\$4,284,174	\$4,342,563	\$4,665,592
					ļ
Sulfur					<u> </u>
MWhr per Gals	0	0	0	0	0
Gallons of Sulfur	0	0	0	\$4.07	\$4.18
Cost/gallon of Sulfur	\$3.75	\$3.85	\$3.96	\$0	\$0
Cost of Sulfur	\$0	\$0		<u>u</u>	<u>φυ</u>
Ammonia NH3 Lbs/ MWhr	0.0000	0.0000	0.0000	0.0000	0.0000
Tons of Ammonia	0.0000	0.0000	0.0000	0	0
Cost / Ton of Ammonia	\$800.00	\$900.00	\$931.50	\$957.12	\$983.44
Cost of Ammonia	\$0	\$0	\$0	\$0	\$0
	4.2				
Lime Hydrate (for SO ₃)					
TPD	0	0	0	0	0
Tons of Lime Hydrate	0	0	0	0	0
	\$130.00	\$135.00	\$139.73	\$143.57	\$147.52
Cost/ton of Lime Hydrate	,		\$0	\$0	\$0
Cost/ton of Lime Hydrate Cost of Lime Hydrate	\$0	\$0	40		
Cost of Lime Hydrate		\$0	\$0	\$0	\$0
					\$0 \$4,665,592 \$1.32

Green Station non-fuel variable O&M

(in nominal dollars)

Year	2009-model	2010-model	2011-model	2012-model	2013-model
	pet coke	Coal	OTAG-coal	OTAG-coal	OTAG-coal
Vet Generation (MWhr)	3,668,755	3,672,767	3,554,020	3,689,862	3,690,343
Net Avg MW's					
Net Average Heat Rate (BTU/kWh)					
SO2 lb/mmBTU inlet					
Average Service Hours	T				
Percent SO2 removal					
Lime	J				
TPY lime	143,777	140,954	135,609	140,638	140,705
Cost per Ton of Reagent	\$78.74	\$86.61	\$95.28	\$97.90	\$100.59
Cost of Reagent	\$11,321,016	\$12,208,006	\$12,920,785	\$13,768,444	\$14,153,558
Disco al				······································	
Sludge Disposal Tons	598,005	626,945	645,616	669,867	670,947
Cost per Ton	\$2.10	\$2.16	\$2.22	\$2.28	\$2.34
Cost	\$1,255,811	\$1,354,201	\$1,433,267	\$1,527,296	\$1,570,016
Fly Ash Tons of Disposal	156,702	164,286	169,179	175,533	175,816
Tons of Disposal Cost per Ton of Disposal	\$2.10	\$2.16	\$2.22	\$2.28	\$2.34
Cost per Toli of Disposal	\$329,075	\$354,858	\$375,576	\$400,216	\$411,410
	<u>ψυκα,υτυ</u>	_\\\\	4010,010	<u></u>	
Bottom Ash		······			
Tons of Disposal	39,176	41,071	42,294	43,883	43,953
Cost per Ton of Disposal	\$2.10	\$2.16	\$2.22	\$2.28	\$2.34
Cost of Disposal	\$82,269	\$88,713	\$93,893	\$100,053	\$102,851
Fixation Lime		······			
Tons of Disposal	12,830	11,572	12,103	12,552	12,557
Cost per Ton of Disposal	\$92.00	\$110.00	\$111.32	\$114.38	\$117.53
Cost of Disposal	\$1,180,385	\$1,272,936	\$1,347,258	\$1,435,644	\$1,475,800
Di-Basic Acid					ļ
Pounds of Reagent	0	0	0	0	0
Cost per Pound of Reagent	\$0.70	\$0.70	\$0.72	\$0.74	\$0.76
Cost of Di-Basic Acid	\$0	\$0	\$0	\$0	\$0
SO2 and ash \$/Mwhr	\$3.86	\$4.16	\$4.55	\$4.67	\$4.80
Total /Year		\$15,278,714	\$16,170,780	\$17,231,652	\$17,713,635
	· · · · · · · · · · · · · · · · · · ·				
Sulfur					
MWhr per Gals	0.00	0.00	0.00	0.00	0.00
Gallons of Sulfur		0	0	0	0
Cost/gallon of Sulfur		\$3.85	\$3.96	\$4.07	\$4.18
Cost of Sulfur	\$0	\$0	\$0	\$0	\$0
Ammonia		······································			
NH3 Lbs/ MWhr	0.0000	0.0000	0.0000	0.0000	0.0000
Tons of Ammonia	0	0	0	0	0
Cost / Ton of Ammonia		\$900.00	\$931.50	\$957.12	\$983.44
Cost of Ammonia	\$0	\$0	\$0	\$0	\$0
Lime Hydrate (for SO ₃)					
TPD	0.00	0.00	0.00	0.00	0,00
Tons of Lime Hydrate	and the second state of th	0	0	0	0
Cost/ton of Lime Hydrate			\$139.73	\$143.57	\$147.52
Cost of Lime Hydrate	Annual Contraction of	\$0	\$0	\$0	\$0
NOx Sub-Total	And the second se	\$0	\$0	\$0	\$0
Total /Year		\$15,278,714	\$16,170,780	\$17,231,652	\$17,713,63

HMP&L Station non-fuel variable O&M

(in nominal dollars-net of City)

Attachment 1

Year	2009-model	2010-model	2011-model	2012-model	2013-model
	coal	coal	OTAG-coal	OTAG-coal	OTAG-coal
Ic' Ceneration (MWhr)	2,398,272	2,400,491	2,306,741	2,289,309	2,399,461
Net Avg MW's					
let Average Heat Rate (BTU/kWh)					······································
SO2 lb/mmBTU inlet					
Average Service Hours					
Percent SO2 removal					
_ime		05.000	04.044	04 409	C4 144
TPY lime	65,182	65,286	61,611	61,193	64,141 \$104.80
Cost per Ton of Reagent	\$78.74	\$86.32 \$5,635,515	\$99.27 \$6,116,128	\$102.00 \$6,241,694	\$6,721,992
Cost of Reagent	\$5,132,407	\$0,000,010	\$0,110,120	\$0,241,034	Ψ0,121,552
Sludge Disposal	······································				
Tons	268,411	268,576	302,568	300,654	315,487
Cost per Ton	\$2.10	\$2.16	\$2.22	\$2.28	\$2.34
Cost	\$563,664	\$580,124	\$671,701	\$685,491	\$738,239
	<u> </u>				
Fly Ash					
Tons of Disposal	72,317	72,434	81,521	81,005	85,001
Cost per Ton of Disposal	\$2.10	\$2.16	\$2.22	\$2.28	\$2.34
Cost of Disposal	\$151,867	\$156,456	\$180,976	\$184,691	\$198,903
		[1		
Bottom Ash					
Tons of Disposal	18,080	18,109	20,380	20,251	21,250
Cost per Ton of Disposal	\$2.10	\$2.16	\$2.22	\$2.28	\$2.34
Cost of Disposal	\$37,968	\$39,115	\$45,244	\$46,173	\$49,726
F' 'on Lime	E 700	r 004	5,759	5,721	5,996
Tons of Disposal	5,792 \$92.00	5,801 \$103.57	\$110.26	\$113.29	\$116.41
Cost per Ton of Disposal Cost of Disposal	\$532,854	\$600,831	\$635,042	\$648,080	\$697,950
	4002,004		4000,042		
Di-Basic Acid					
Pounds of Reagent	0	0	0	0	0
Cost per Pound of Reagent	\$0.70	\$0.70	\$0.72	\$0.74	\$0.76
Cost of Di-Basic Acid	\$0	\$0	\$0	\$0	\$0
SO2 and ash \$/Mwhr	\$2.68	\$2.92	\$3.32	\$3.41	\$3.50
<u>Total /Year</u>	\$6,418,760	\$7,012,043	\$7,649,091	\$7,806,129	\$8,406,809
Sulfur					
MWhr per Gals	5,698.94	5,698.94	5,698.94	5,698.94	5,698.94
Gallons of Sulfur	185	195	422	419	439
Cost/ton of Sulfur	\$510.00	\$550.00	\$600.00	\$616.50	\$633.45
Cost of Sulfur	\$94,314	\$107,059	\$252,998	\$258,192	\$278,060
Ammonio	·				
Ammonia NH3 Lbs/ MWhr	1.7719	1.7719	1.7719	1.7719	1.7719
Tons of Ammonia	934	983	2,070	2,056	2,155
Cost / Ton of Ammonia	\$750.00	\$825.00	\$907.50	\$932.46	\$958.10
Cost of Ammonia	\$700,281	\$810,810	\$1,878,498	\$1,917,064	\$2,064,58
Lime Hydrate (for SO ₃)				0.00	0.00
Lime Hydrate (for SO ₃)	0.00	0.00	0.00	0.00	
TPD	0.00	0.00	0.00	0.00	0
TPD	0				
TPD Tons of Lime Hydrate Cost/ton of Lime Hydrate	0 \$130.00	0	0	0	0
TPD Tons of Lime Hydrate Cost/ton of Lime Hydrate Cost of Lime Hydrate	0 \$130.00 \$0	0 \$135.00	0 \$139.73	0 \$143.57	0 \$147.52
TPD Tons of Lime Hydrate Cost/ton of Lime Hydrate	0 \$130.00 \$0 \$794,596	0 \$135.00 \$0	0 \$139.73 \$0	0 \$143.57 \$0	0 \$147.52 \$0

Wilson Station non-fuel variable O&M (in nominal dollars)

Attachment 1

page 4

Year	2009-model	2010-model	2011-model	2012-model	2013-model
	petcoke	petcoke	OTAG-petcoke	OTAG-coal	OTAG-coal
Net Generation (MWhr)	3,018,776	3,432,875	3,140,591	3,317,450	3,161,215
Net Avg MW's					
Net Average Heat Rate (BTU/kWh)					
SO2 lb/mmBTU inlet	······································				
Average Service Hours					
Percent SO2 removal			······································		
Limestone					
TPY limestone	200,604	227,662	219,467	212,503	187,988
Cost per Ton of Reagent	\$15.93	\$16.32	\$16.89	\$17.36	\$17.83
Cost of Reagent	\$3,195,622	\$3,715,440	\$3,706,799	\$3,689,053	\$3,351,826
Sludge Disposal		······································			·····
Tons	358,723	407,109	393,613	380,138	336,721
Cost per Ton	\$2.10	\$2.16	\$2.22	\$2.28	\$2.34
Cost	\$753,319	\$879,354	\$873,820	\$866,715	\$787,927
······			· · · · · ·		
Fly Ash					
Tons of Disposal	98,233	111,483	107,787	119,403	126,816
Cost per Ton of Disposal	\$2.10	\$2.16	\$2.22	\$2.28	\$2.34
Cost of Disposal	\$206,289	\$240,802	\$239,287	\$272,240	\$296,750
		······			i
Bottom Ash					
Tons of Disposal	24,558	27,871	26,947	29,851	31,704
Cost per Ton of Disposal	\$2.10	\$2.16	\$2.22	\$2.28	\$2.34
Cost of Disposal	\$51,572	\$60,201	\$59,822	\$68,060	\$74,187
· · · · · · · · · · · · · · · · · · ·					
Fixation Lime					
Tons of Disposal	3,200	3,280	6,133	6,789	6,019
Cost per Ton of Disposal	\$100.00	\$110.00	\$121.00	\$124.33	\$127.75
Cost of Disposal	\$319,969	\$360,836	\$742,072	\$844,023	\$768,927
Di-Basic Acid					
Pounds of Reagent	1,722,534	1,958,841	1,901,783	1,838,216	1,697,472
Cost per Pound of Reagent	\$0.70	\$0.70	\$0.72	\$0.74	\$0.76
Cost of Di-Basic Acid	\$1,205,774	\$1,371,189	\$1,369,284	\$1,360,280	\$1, <u>2</u> 90,079
	5474683.971	6326819.91	6691974.575	6760070.737	6198758,73
SO2 and ash \$/Mwhr	\$1.90	\$1.93	\$2.23	\$2.14	\$2.08
Total /Year	\$5,732,545	\$6,627,823	\$6,991,083	\$7,100,370	\$6,569,696
			······		
Sulfur					
MWhr per Gals	190.69	190.69	190.69	190.69	190.69
Gallons of Sulfur	15,637	17,762	17,023	17,399	16,744
Cost/gallon of Sulfur	\$3.75	\$3.85	\$3.96	\$4.07	\$4.18
Cost of Sulfur	\$58,640	\$68,383	\$67,411	\$70,815	\$69,989
Ammonia					
NH3 Lbs/ MWhr	1.8337	1.8337	1.8337	1.8337	1.8337
Tons of Ammonia	1,355	1,389	2,699	3,042	2,926
Cost / Ton of Ammonia	\$800.00	\$900.00	\$931.50	\$957.12	\$983.44
Cost of Ammonia	\$1,084,118	\$1,250,369	\$2,514,283	\$2,911,541	\$2,877,592
	· · · · · · · · · · · · · · · · · · ·				
Lime Hydrate (for SO ₃)	······				
TPD	25.00	25.00	25.00	25.00	25.00
	3,666	3,758	7,910	8,229	7,915
Tons of Lime Hydrate					
Tons of Lime Hydrate		\$135.00	(\$139.73	\$143.57	D 147.32
Cost/ton of Lime Hydrate	\$130.00	\$135.00 \$507.354	\$139.73 \$1.105.220	\$143.57 \$1,181.412	\$147.52 \$1,167,636
Cost/ton of Lime Hydrate Cost of Lime Hydrate	\$130.00 \$476,553	\$507,354	\$1,105,220	\$1,181,412	\$1,167,636
Cost/ton of Lime Hydrate	\$130.00			······································	

Item AG-131 Page 7 of 7

	RESPO	BIG RIVERS ELECTRIC CORPORATION'S DNSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO JOINT APPLICANTS PSC CASE NO. 2007-00455 (Original Response February 14, 2008) November 7, 2008
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3	Item 132)	Provide documents compiled or written by national associations of which
4	-	a member (e.g., NRECA, National Rural Electric Environmental
5		which address potential costs of electric generating company compliance
6		and future regulations pertaining to the environment, pollution and/or
7	-	lity, since January 2005, that are in Big Rivers' possession or available to it
8	as an associa	tion member.
9		
10	Response)	Big Rivers supplements its original response to file the additional
11	information a	attached hereto.
12		
13	With cool	Michael H. Core
14 15	Witness)	Counsel
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33		Item AG-132 Page 1 of 1

NBECA

ENVIRONMENTAL BULLETIN

March 18, 2008

What's Inside This Issue

CLEAN AIR ACT

- EPA SETS STRICTER AMBIENT AIR STANDARDS FOR OZONE: New primary and secondary standards are equal in form and level at 0.075 parts per million
- <u>PEABODY COAL-FIRED PLANT TO PROCEED</u>: Environmental groups have exhausted all legal appeals
- **<u>NEW JERSEY APPEALS NSR RECORDKEEPING RULE</u>**: State argues regulations are lax

CLIMATE CHANGE

- DESERET CASE COULD DETERMINE IF CO2 EMISSIONS ARE PART OF PERMITTING DECISION: EPA may have to consider greenhouse gas emissions when granting permits to new power plants
- **EPA DENIES CALIFORNIA WAIVER REQUEST**: EPA determines that separate California's standards are not necessary
- **<u>GROUPS ALLEGE UNREASONABLE DELAY BY EPA</u>**: EPA criticized for not moving forward on rulemaking finding an endangerment to public health and welfare
- ENERGY AND COMMERCE COMMITTEE RELEASES NEW WHITE PAPER ON CLIMATE CHANGE: According to white paper, states should not be allowed to establish cap and trade programs more stringent than federal program
- EPA REPORTS LIEBERMAN-WARNER COSTS HIGH: Bill will cost twice as much as other legislation
- **<u>RGGI ANNOUNCES RULES FOR CO2 ALLOWANCE AUCTION</u>:** Rules are nation's first for a mandatory CO₂ emissions reduction program
- EPA GREENHOUSE GAS REPORTING RULEMAKING: Reporting program will provide data to inform and support development of national climate policy
- <u>CITIZENS GROUP SUES MICHIGAN OVER FAILURE TO REGULATE</u> <u>COAL-FIRED PLANT FOR CO2</u>: Suit seeks to force the state to regulate CO₂ emissions from coal-fired power plants
- <u>GROUP TAKES MULTIPLE ACTIONS TO PROTECT ENDANGERED</u> <u>SPECIES</u>: Center for Biological Diversity files lawsuits and petitions to protect the Pacific walrus, 10 species of penguins and the polar bear

- <u>ALASKAN VILLAGE SUES ENERGY COMPANIES OVER EROSION</u>
 <u>LINKED TO CLIMATE CHANGE</u>: Lawsuit seeks to have the defendants pay the cost of relocating the village
- BANK OF AMERICA FOLLOWS TREND TO ASSESS CARBON EMISSIONS IN UTILITY FINANCING: Bank will start assessing CO₂ emissions impact costs in risk formulas for underwriting electric utilities
- <u>CBO SAYS CARBON TAX 'MOST EFFICIENT' CLIMATE CHANGE</u> <u>OPTION</u>: Tax would limit economic costs and provide industry certainty while achieving environmental benefits
- <u>TEN STATES SEEK FRAUD PROTECTION FOR CARBON OFFSET</u> <u>MARKET FROM THE FTC</u>: Protection would set clear definition of what qualifies as a carbon offset
- <u>EPA PRESENTATION ON REGULATION OF GREENHOUSE GASES</u>: Presentation focused on EPA's authority to regulate greenhouse gases
- <u>WYOMING ENACTS TWO BILLS ON CARBON CAPTURE</u>, <u>SEQUESTRATION</u>: Wyoming is first state to enact comprehensive system for regulating long-term carbon capture and storage
- EPA HOLDS SECOND PUBLIC WORKSHOP ON REGULATING UNDERGROUND STORAGE OF CO2: Workshop addressed financial assurance for long-term care and monitoring of CO2 injection wells
- <u>EPA RAISES GREENHOUSE GASES IN IMPACT STATEMENT FOR</u> <u>NEVADA COAL-FIRED PLANT</u>: Comment questions whether greenhouse gases from plant have been adequately addressed
- <u>GROUPS PETITION TO INCLUDE CLIMATE CHANGE IN NEPA REVIEWS</u>: Petition proposes amendments to regulations to include climate change and its effects
- <u>FUND LEADERS, MANAGERS APPROVE PLAN FOR CONSIDERING</u> <u>CLIMATE IN INVESTMENTS</u>: Plan is aimed at boosting investments in energy efficiency and new technologies
- <u>INVESTORS FILE RECORD NUMBER OF CLIMATE CHANGE</u> <u>RESOLUTIONS WITH U.S. COMPANIES</u>: Resolutions are double the number filed in two years, and are getting results from companies
- **CLIMATE NOTES**: February 15, 2008 and March 3, 2008 editions available

CLEAN WATER ACT

• <u>UWAG UPDATE LETTER</u>: Letter addresses EPA's study on wastewater discharge, among other important issues

WASTE ISSUES

• NRECA SUBMITS COMMENTS ON EPA's COAL ASH NODA: NRECA's comments aim to protect G&Ts' ability to continue to generate coal-based electricity

ENERGY

• RURAL UTILITIES SERVICE AFFIRMS ADMINISTRATION STANCE ON BASELOAD LOANS: RUS denying loans to co-ops because of uncertainties in funding

- <u>LATEST CREB ALLOCATIONS INCLUDE 26 ELECTRIC COOPERATIVE</u> <u>PROJECTS – BACKLOG REMAINS</u>: Significant backlog in projects seeking funds from cooperatives due to overwhelming response
- <u>TAX CREDIT EXTENSION FOR CLEAN ENERGY TECHNOLOGY</u> <u>INVESTMENTS REINTRODUCED</u>: Bill provides five year extension for "clean technologies"

OTHER

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- <u>GROUPS SUE TO HALT EAST KENTUCKY PLANT CONSTRUCTION</u>: Complaint alleges RUS failed to properly conduct its environmental assessment
- <u>EPA APPOINTS MEMBERS OF NEW AGRICULTURAL ADVISORY</u> <u>COMMITTEE</u>: Committee set up to advise EPA on issues that affect farms, ranches and rural communities

March 18, 2008

Clean Air Act

EPA SETS STRICTER AMBIENT AIR STANDARDS FOR OZONE

On March 12, 2008, EPA announced it is tightening the National Ambient Air Quality Standards (NAAQS) for ground-level ozone. The agency is setting the primary and secondary standards equal in form and level at 0.075 parts per million, replacing the existing standards of 0.08 ppm that were set in 1997. Because of rounding, the existing standards encompass ozone levels as high as 0.084 ppm.

In announcing the new ozone standards, Administrator Johnson also stated that he will be sending Congress four principles to guide legislative changes to the Clean Air Act (CAA) including that the CAA be revised to allow decision-makers to consider benefits, costs, risk tradeoffs, and feasibility in making decisions about how to clean the air, something the agency is currently not allowed to do when revising NAAQS. While various environmental organizations and some states were quick to criticize EPA for not making the standards even more stringent, industry has pointed out that the large uncertainty in the scientific evidence does not justify the new standards and the cost of attaining them will be huge – making the new rule among the most expensive federal rules ever issued. In addition to the high costs of likely new requirements for utilities to add more emission reduction equipment, counties designated as "nonattainment" face serious repercussions such as immediate impacts on new transportation projects, restrictions on industry expansion within those counties, and new permitting requirements and delays.

Along with revising the NAAQS for ozone, EPA also is changing the Air Quality Index (AQI) to reflect the new primary standard. The AQI is EPA's color-coded tool designed for use by state and local authorities to inform the public about daily air pollution levels in their communities. While the agency notes that significant progress has been made in reducing ground-level ozone across the country with ozone levels having dropped 21 percent since 1980 and improvements expected to continue, revising the AQI to reflect the new standard likely will lead to a greater number of bad ozone-day alerts being generated. Information, including EPA's press release, Fact Sheet, maps of new and existing nonattainment areas, and a pre-publication version of the new ozone rule are available on the EPA website by <u>clicking here</u>. For additional information, contact Bill Wemhoff at (703) 907-5824 or at <u>bill.wemhoff@nreca.coop</u>.

PEABODY COAL-FIRED PLANT TO PROCEED

On March 3, 2008, Peabody Energy Corp. announced that it has achieved a "final and unappealable" air permit for the construction of a 1,600-megawatt, coal-fired electric power plant in Southern Illinois. The plant had been vigorously opposed by a coalition of Illinois environmental groups including the Sierra Club. Peabody officials said the environmental groups had exhausted all available legal channels for opposing the permit. The environmental groups had initially challenged the permit with EPA's Environmental Appeals Board (EAB). When the EAB denied a petition to overturn the permit, the groups filed a lawsuit. The appellate court declined to second-guess the EAB and upheld the permit. For more information, contact Rich Robinson at (703) 907-5856 or at <u>richard.robinson@nreca.coop</u>. 5

NEW JERSEY APPEALS NSR RECORDKEEPING RULE

On February 19, 2008, New Jersey filed a petition in a federal appeals court challenging EPA's recently revised NSR recordkeeping requirements for power plants and other industrial facilities, arguing that the regulations are too lax and would inhibit state regulators from determining whether plants should have to upgrade their pollution controls (*New Jersey v. EPA*, D.C. Cir., docket number unavailable, 2/19/08). The state argues that without more rigorous recordkeeping requirements, state regulators cannot know whether emissions are increasing at factories and coal-fired power plants covered by the rules. The EPA final rule, published December 21, 2007, gives covered facilities flexibility in determining whether they need to keep detailed records of increased air emissions under the NSR program. For more information, contact Rae Cronmiller at (703) 907-5791 or at rae.cronmiller@nreca.coop.

Climate Change

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DESERET CASE COULD DETERMINE IF CO2 EMISSIONS ARE PART OF PERMITTING DECISION

A case before EPA's Environmental Appeals Board (EAB) involving Deseret Power Electric Cooperative could result in the agency's having to consider greenhouse gas (GHG) emissions when granting permits to new power plants. The EAB agreed in 2007 to review a permit granted by EPA Region 8 for a new coal-fired generating unit at Deseret's plant near Bonanza, Utah. The permit did not require any controls on CO₂. After EPA granted the permit, the Sierra Club petitioned the EAB to review the permit, stating that EPA was required by the Clean Air Act to consider the new generator's CO₂ emissions before granting a permit under the Clean Air Act's prevention of significant deterioration (PSD) program. Under PSD, new and modified major sources are required to install best available control technology (BACT) pollution controls if they cause an emissions increase. A favorable decision by the EAB would mean that EPA would have to require all new and reconstructed coal-fired power plants to minimize their CO₂ emissions. In a brief filed January 31, 2008, the Sierra Club said EPA is required to set BACT requirements because the Supreme Court ruled in 2007 that CO₂ is a pollutant under the Clean Air Act. NRECA will be filing an amicus brief with the EAB supporting EPA and Deseret. For more information, contact Rae Cronmiller at (703) 907-5791 or at rae.cronmiller@nreca.coop.

EPA DENIES CALIFORNIA WAIVER REQUEST

On March 6, 2008, EPA published its final *Notice of Decision* in the *Federal Register* denying California's request for a waiver under Section 209 of the CAA to implement greenhouse gas controls on new motor vehicles (73 *Fed. Reg.* 12156). For a copy of the notice, <u>click here</u>. In its notice, EPA said California "does not need its greenhouse gas standards for new motor vehicles to meet compelling and extraordinary conditions," a criterion for a waiver for state motor vehicle emission standards under Section 209. When announcing EPA's decision in December 2007, Administrator Johnson noted that federal energy legislation recently signed by President Bush includes a new federal fuel economy

standard of 35 miles per gallon. He said this legislation would result in nearly equivalent GHG emission reductions as the California standards and would also avoid a confusing patchwork of regulations. In response to EPA's December 2007 announcement, California and several other states filed suit in January seeking to overturn the agency's decision.

The denial of the California waiver petition is significant because two federal courts (the U.S. District Court for the District of Vermont and the U.S. District Court for the Eastern District of California) conditionally upheld the California standards (noting that EPA needed to grant the pending waiver request), and indicated in those decisions that the California standards would become federal standards under the Clean Air Act if the waiver was granted. Prevention of Significant Deterioration (PSD) requirements apply to any regulated pollutant under the Clean Air Act and had the waiver request been granted, states and environmental groups would have argued that the grant of the waiver triggered PSD for all major sources of CO₂ and the other greenhouse gases, including power plants. The denial is also important because granting the waiver could have been considered an implicit finding of "endangerment" by EPA. A finding that greenhouse gases and CO₂ endanger public health or welfare has consequences for stationary sources under numerous provisions of the Clean Air Act. For additional information, contact Bill Wemhoff at (703) 907-5824 or at bill.wemhoff@nreca.coop.

GROUPS ALLEGE UNREASONABLE DELAY BY EPA

On January 23, 2008, several environmental groups sent a letter to EPA alleging that the agency has unreasonably delayed acting on the Supreme Court's remand in *Massachusetts v. EPA*. In particular, the letter criticized EPA for not having moved forward on a rulemaking finding an endangerment to public health and welfare from greenhouse gas (GHG) emissions. The letter asked EPA to respond with regard to its plans on the remand by February 27, 2008, and set forth the organizations' intent "to take action to enforce the Supreme Court's remand and the D.C. Circuit's mandate." The letter also stated that it "serves as formal notice pursuant to Section 304(a) & (b) of the Clean Air Act of the groups' intent to bring an action to challenge EPA's unreasonable delay in acting on the pending rulemaking petition" at issue in *Massachusetts v. EPA*. Several states and the cities of Baltimore and New York sent a similar letter, but without the specific notice of intent to sue. For a copy of the environmental groups' letter on Cooperative.com, click here.

On February 27, 2008, EPA answered the above letters stating that it does not have a time frame for complying with the Supreme Court decision requiring it to establish GHG emissions limits for vehicles or to explain why it is not doing so. EPA further maintained that it has expended considerable effort to develop draft regulations in response to the Supreme Court decision. However, the agency is delaying action on a rulemaking to consider the effect of energy legislation enacted late in 2007 that increased automobile fuel economy. Massachusetts Attorney General Martha Coakley and the Sierra Club issued statements the next day saying they will take EPA to court to enforce the Supreme Court decision, but they did not say when they would do so. For a copy of EPA's response on Cooperative.com, <u>click here</u>. For further information, contact Rich Robinson at (703) 907-5856 or at <u>richard.robinson@nreca.coop</u>.

ENERGY AND COMMERCE COMMITTEE RELEASES NEW WHITE PAPER ON CLIMATE CHANGE

The House Energy and Commerce Committee released a third climate change white paper as part of its process to develop a comprehensive record prior to drafting legislation. According to the white paper, where an economy-wide federal cap and trade program exists, states should not be allowed to establish more stringent cap and trade programs. Such programs could result in higher costs and would probably not decrease national greenhouse gas emissions. State, local, and tribal greenhouse gas (GHG) reduction programs, however, could be beneficial if they were to impact sectors outside the scope of a federal cap and trade program. For instance, changes in building codes could lower GHGs and augment a federal program. Also, a federal cap and trade program could be maximized where state, local, and tribal governments implement uniform recordkeeping and monitoring activities. For a copy of the white paper, <u>click here</u>. For more information, contact Carol Whitman at (703) 907-5790 or carol.whitman@nreca.coop.

EPA REPORTS LIEBERMAN-WARNER COSTS HIGH

Lieberman-Warner climate legislation (S. 2191) will cost more than twice that of climate bills by Bingaman-Specter or McCain-Lieberman, reducing economic growth from 1 to 3.8 percent by 2030, equivalent to \$238 billion to \$938 billion annually, according to EPA. The report, EPA Analysis of the Lieberman-Warner Climate Security Act of 2008, projects that CO₂ will cost between \$46 and \$83 per ton in 2030, with the electricity sector making the greatest emission reductions and electricity prices increasing 44 percent. The analysis includes aggressive technology assumptions, with the result that almost all fossil electricity generation is capturing and storing CO_2 emissions by 2035. If CCS remains expensive, costs increase. EPA found that the use of domestic and international offsets substantially reduce the cost of the bill. In terms of emission reductions, Lieberman-Warner reduces emissions 56 percent lower than current levels in 2050. EPA will release a revised analysis by June that will include the effects of the Energy Independence and Security Act, enacted in December 2007, such as new automobile fuel-economy standards and larger mandates for renewable fuel and energy efficient household appliances. The Energy Information Administration is due to release its analysis of S. 2191 shortly. For a copy of the EPA analysis, click here. For more information, contact Carol Whitman at (703) 907-5790 or carol.whitman@nreca.coop.

RGGI ANNOUNCES RULES FOR CO2 ALLOWANCE AUCTION

The Regional Greenhouse Gas Initiative (RGGI) for a cap-and-trade program on the power sector has released the design elements for its auctions, the nation's first for a mandatory CO_2 emissions reduction program. Ten RGGI states from Maryland to Maine will auction nearly the entire annual regional emissions budget, approximately 188 million tons of CO_2 . The states have agreed to participate in uniform regional auctions for the allowances that each state will be offering for sale. Key design elements include:

• All market participants will be eligible to participate in the initial auction, provided they meet qualification requirements, which will include a provision of financial security. Flexibility will be retained to limit participant eligibility in subsequent auctions. There will be a total limit for the number of allowances that entities may

7

purchase in a single auction, equivalent to 25 percent of the allowances offered for sale in any single auction.

- A reserve price of \$1.86 per allowance will apply to the first auction. After the first auction, a reserve price will be in effect that is the higher of \$1.86 per allowance, as adjusted annually from 2009 onward based on the Consumer Price Index, or 80 percent of the current market price of the particular RGGI allowance vintage being auctioned.
- Any unsold allowances will be made available for sale in future auctions in which a reserve price based on the current market price is being used. In 2012, the states will decide whether to retire any unsold allowances from the first compliance period, or to offer these allowances for sale in subsequent auctions during the second compliance period.

The first compliance period for RGGI program will begin January 1, 2009. Because several states have not yet approved the auction rules through legislation or regulation, the design elements are not final. For a copy of the rules, <u>click here</u>. For more information, contact Carol Whitman at (703) 907-5790 or <u>carol.whitman@nreca.coop</u>.

EPA GREENHOUSE GAS REPORTING RULEMAKING

EPA is developing a national mandatory greenhouse gas (GHG) reporting rule, as directed in the Consolidated Appropriations Act, 2008 (H.R. 2764; Public Law 110-161) enacted in December 2007. EPA is on a very aggressive timetable to meet the congressional deadlines of publishing a proposed rule by September 2008 and a final rule by June 2009. The objective for the reporting program is to provide data that will inform and support development of national climate policy. The program will cover six GHGs: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). EPA will include emissions from both upstream production (fuel and chemical producers and importers) and downstream emissions (e.g., power plants, iron, steel, and cement manufacturers). Areas of flexibility include emission thresholds and the frequency of reporting. In addition, EPA has the discretion to use existing reporting requirements for electric generating units under Section 821 of the CAA. Importantly, this rulemaking is classified as data collection; it is not a regulatory action that would make GHGs regulated pollutants. While reporting on CO₂ emissions from electric generation units could remain unchanged from current requirements, cooperatives may have to consider reporting CO₂ emissions from other sources such as vehicle fleets and other gases such as SF₆. For more information, contact Carol Whitman at (703) 907-5790 or carol.whitman@nreca.coop.

CITIZENS GROUP SUES MICHIGAN OVER FAILURE TO REGULATE COAL-FIRED PLANT FOR CO2

On January 29, 2008, Citizens for Environmental Inquiry filed a lawsuit against the Michigan Department of Environmental Quality (DEQ), seeking to force the department to regulate CO₂ emissions from coal-fired power plants (*Citizens for Environmental Inquiry v. Department of Environmental Quality*, Mich. Cir. Ct., No. 08-114 AW, *complaint filed* 1/29/08). The group had asked the DEQ to put in place, or explain why it could not put in place, rules governing emissions after the U.S. Supreme Court ruling in Massachusetts v.

8

EPA. The DEQ said the agency is waiting for EPA to develop its guidelines before starting the state rulemaking process. For further information, contact Rich Robinson at (703) 907-5856 or at <u>richard.robinson@nreca.coop</u>.

GROUP TAKES MULTIPLE ACTIONS TO PROTECT ENDANGERED SPECIES

On February 7, 2007, the Center for Biological Diversity (CBD) field a petition with the U.S. Department of Interior, Fish and Wildlife Service (FWS), claiming the Pacific walrus, a species dependent on arctic sea ice for support in foraging, resting, and raising calves, should be listed as threatened or endangered under the Endangered Species Act (ESA) because global warming is disrupting their habitat. For a copy of the petition and other information about CBD, <u>click here</u>.

On February 27, 2008, the CBD filed a lawsuit in the U.S. District Court for the District of Columbia, seeking to speed up ESA evaluations on 10 species of penguin whose habitat is allegedly shrinking as the planet warms. The FWS said last summer that an endangered species listing "may be warranted" for the 10 penguin species in South America, Southern Africa and Antarctica. The agency missed a November 2007 deadline for deciding whether the species qualify and proposing a listing.

On March 10, 2008, CBD joined with two other groups to file a lawsuit against the Department of the Interior for missing a legal deadline to issue a final decision on whether to list the polar bear under the ESA (*Center for Biological Diversity v. Kempthorne*, N.D. Cal., No. 08-1339, 3/10/08). The lawsuit seeks a court order compelling the Bush administration to issue the final decision on the polar bear immediately. In an interesting twist on the issue, several days before the filing of the lawsuit, the Congress of Racial Equality, one of the nation's major civil rights organizations, promised to sue the Bush Administration if it lists the polar bear as threatened under the ESA because such a listing will drive up energy prices and hurt America's working poor more than any other element of society. For further information about these actions, contact Rich Robinson at (703) 907-5856 or at richard.robinson@nreca.coop, or Rae Cronmiller at (703) 907-5791 or at rae.cronmiller@nreca.coop.

ALASKAN VILLAGE SUES ENERGY COMPANIES OVER EROSION LINKED TO CLIMATE CHANGE

On February 26, 2008, an Inuit Eskimo coastal village in northwestern Alaska sued 24 major oil and energy companies for allegedly causing the global warming that has resulted in severe erosion in the village (*Native Village of Kivalina v. ExxonMobil Corp.*, N.D. Cal., No. cv-08-1138, 2/26/08). The lawsuit charges the companies with emitting large amounts of carbon gases and, in some cases, conspiring to cast public doubt on the seriousness of emissions-caused global warming. The defendants were selected according to the amounts of carbon emissions they produce. Kivalina, home to about 400 people, is one of the Alaska coastal villages most imperiled by rapid erosion that is accelerated by a lack of sea ice and thawing permafrost on shore. The complaint relies on federal and state laws regarding public and private nuisances. It seeks to have the defendants pay the cost of relocating Kivalina, which the U.S. Army Corps of Engineers has estimated would cost \$100 million to \$400 million. Other eroding Alaska villages could likely join in the

lawsuit, with the aim of securing the money to relocate. ExxonMobil in particular was singled out in the lawsuit as a company that used "disinformation tactics," promoting friendly advocates to work as scientific representatives even though their work has not been peer-reviewed. For further information, contact Rich Robinson at (703) 907-5856 or at richard.robinson@nreca.coop.

BANK OF AMERICA FOLLOWS TREND TO ASSESS CARBON EMISSIONS IN UTILITY FINANCING

Following an emerging financial industry trend, Bank of America will start assessing CO_2 emissions impact costs in risk formulas for underwriting electric utilities. Bank officials said they will consider carbon emissions a liability in utility financing because greenhouse gas regulation is inevitable. The bank said it favors a market-based trading system regulated by the federal government. Since there are no federal carbon emission regulations, the bank will estimate liability costs at \$20 to \$40 per ton of CO_2 . As previously reported, Citigroup, JPMorgan Chase and Morgan Stanley announced an agreement to adopt carbon principles and set standard guidelines for funding construction and modification of coal-based power plants in an effort to reduce financial risk. The banks said the new guidelines are intended to encourage utilities to lower CO_2 emissions and invest in renewable energy and low-emission technologies. For more information, contact Carol Whitman at (703) 907-5790 or carol.whitman@nreca.coop.

CBO SAYS CARBON TAX 'MOST EFFICIENT' CLIMATE CHANGE OPTION

The Congressional Budget Office (CBO) has issued a report favoring a carbon tax as the most efficient method to address global warming. CBO's report states that a carbon tax would limit economic costs and provide industry certainty while achieving environmental benefits. The report requested by Senate Energy Committee Chairman Jeff Bingaman (D-NM) found a carbon tax would provide climate benefits five times greater than three proposed cap-and-trade regulatory policies with no provisions to limit economic costs. A carbon tax would provide an incentive to reduce emissions while the costs were low and continue to lower emissions as costs rise, the report stated. Cap-and-trade plans reviewed include Chairman Bingaman's bill (S. 1766) with a "safety valve" to limit how much industry must spend to comply. CBO found S. 1766 would be the best cap-and-trade alternative to imposing a carbon tax because it would prevent price spikes and keep emission reduction costs from surpassing expected benefits. The study did not include the costly Lieberman-Warner cap-and-trade bill (S. 2191), which lacks a safety valve, that the full Senate will consider. Sen. James Inhofe (R-OK), Senate Environment Committee ranking member and climate legislation critic, said CBO's study supports his position in favor of a carbon tax. For a copy of the report, click here. For more information, contact Carol Whitman at (703) 907-5790 or carol.whitman@nreca.coop.

TEN STATES SEEK FRAUD PROTECTION FOR CARBON OFFSET MARKET FROM THE FTC

On January 25, 2008, California Attorney General Edmund Brown Jr., along with nine other state attorneys general, sent a letter to the Federal Trade Commission (FTC) recommending tighter guidelines for businesses that sell carbon emission offset credits. These credits represent environmental projects that reduce greenhouse gas (GHG)

emissions elsewhere in the environment, allowing businesses to purchase these credits to offset their own emissions. Brown and other attorneys general are requesting that the FTC develop a clearer definition of what qualifies as a carbon offset, and conduct more thorough research into consumers' understanding of the offset market. As previously reported, with the market for carbon offsets expected to reach \$100 million annually in the United States within the next four years, the FTC recently requested public comments by January 25, 2008, on regulation of this market. For further information, contact Rich Robinson at (703) 907-5856 or at <u>richard.robinson@nreca.coop</u>.

11

EPA PRESENTATION ON REGULATION OF GREENHOUSE GASES

On January 31, 2008, Peter Tsirigotas of EPA's Office of Air Quality Planning and Standards gave a presentation at the agency's Clean Air Act Advisory Committee meeting., which addresses EPA's authority to regulate greenhouse gases under the Clean Air Act. For a copy of the presentation on Cooperative.com, <u>click here</u>. For additional information, contact Bill Wemhoff at (703) 907-5824 or at <u>bill.wemhoff@nreca.coop</u>, or Rich Robinson at (703) 907-5856 or at <u>richard.robinson@nreca.coop</u>.

WYOMING ENACTS TWO BILLS ON CARBON CAPTURE, SEQUESTRATION

On March 4, 2008, Wyoming Gov. Dave Freudenthal (D) signed two bills establishing what he called a "groundbreaking" regulatory framework for carbon capture and sequestration (H.B. 89, H.B. 90). The bills position Wyoming as the first state to set up a comprehensive system for regulating long-term carbon capture and storage (CCS). The bills give the state Department of Environmental Quality the authority to regulate the long-term storage of CO₂, and sets up permitting requirements as defined by department rules. The bills also recognize that surface owners control the underground pore spaces where CO₂ could be stored long term. For a copy of H.B. 89, <u>click here</u>. For a copy of H.B. 90, <u>click here</u>. At this time, 31 other states are contemplating some sort of legislation, but none of them would be as comprehensive as the Wyoming laws. For further information, contact Rich Robinson at (703) 907-5856 or at <u>richard.robinson@nreca.coop</u>.

EPA HOLDS SECOND PUBLIC WORKSHOP ON REGULATING UNDERGROUND STORAGE OF CO2

On February 26-27, 2008, EPA held the second Public Workshop on CO₂ Geologic Sequestration. NRECA prepared a summary of the break-out workshop that addressed financial assurance for long-term care and monitoring of CO₂ injection wells. For a copy of the summary on Cooperative.com, <u>click here</u>. Summaries prepared by staff from other utilities should be available soon. For workshop presentations on EPA's website, <u>click here</u>. In July 2008, EPA is planning to propose a rule regulating geologic sequestration of CO₂ that will be part of the agency's Underground Injection Control program. For additional information please contact Jim Stine at james.stine@nreca.coop or 703-907-5739.

EPA RAISES GREENHOUSE GASES IN IMPACT STATEMENT FOR NEVADA COAL-FIRED PLANT

EPA is raising questions about a draft environmental impact statement for a proposed \$1.2 billion coal-fired power plant on U.S. Bureau of Land Management (BLM) land in southern Nevada, including whether greenhouse gas (GHG) emissions from the plant have

been adequately addressed. The comments by EPA, dated December 14, 2007, on a BLM draft impact statement recommend further analysis of other options for generating power such as advanced coal-generating technology or renewable sources such as wind and solar. EPA's comments mark an emerging agency trend to more carefully watch GHG emissions from power plants. BLM will now consider those comments, along with others, as it develops final impact statement. Completion of the document is expected sometime this summer. For a copy of EPA's comments, <u>click here</u>. For further information, contact Rich Robinson at (703) 907-5856 or at <u>richard.robinson@nreca.coop</u>.

GROUPS PETITION TO INCLUDE CLIMATE CHANGE IN NEPA REVIEWS

On February 28, 2008, three environmental groups petitioned the White House Council on Environmental Quality (CEQ) to amend National Environmental Policy Act (NEPA) regulations to require that climate change be addressed in environmental studies for federal projects. The petition proposes several amendments to the regulations in which climate change and its effects are included among the factors to be considered when preparing environmental assessments or environmental impact statements. The groups also want CEQ to issue new guidance to all federal agencies "explaining that NEPA and existing CEQ regulations require that agencies address climate change." The petition also requests that CEQ address climate change specifically by preparing a comprehensive handbook for officials to use when preparing NEPA documents. For a copy of the petition, <u>click here</u>. For more information, contact Rich Robinson at (703) 907-5856 or at <u>richard.robinson@nreca.coop</u>.

FUND LEADERS, MANAGERS APPROVE PLAN FOR CONSIDERING CLIMATE IN INVESTMENTS

On February 14, 2008, a group of pension fund leaders, foundation heads, and financial asset managers adopted a nine-point action plan to consider climate change as a factor in investment decisions. The plan with 49 signatories representing some \$1.75 trillion in assets is aimed at boosting investments in energy efficiency and new technologies, while also raising the level of scrutiny of the possible long-term risks of carbon-intensive investments. The nine points of the plan include:

- Requiring the consideration of climate risks and opportunities in investment decisions;
- Investing in companies developing and deploying clean technologies;
- Improving energy performance of real estate portfolios and investments;
- Urging comprehensive corporate responses to climate risks;
- Assisting investors with information and guidance to evaluate corporate climate risks;
- Expanding company scrutiny and collaboration by investors, analysts, and other financial professionals;
- Pushing the Securities and Exchange Commission (SEC) to require disclosure of material risk from climate factors in corporate securities filings;
- Encouraging companies and investors to back government action on climate policy; and
- Supporting policies to maximize energy efficiency.

More information, including the action plan text, is available by <u>clicking here</u>. For further information, contact Rich Robinson at (703) 907-5856 or at <u>richard.robinson@nreca.coop</u>.

INVESTORS FILE RECORD NUMBER OF CLIMATE CHANGE RESOLUTIONS WITH U.S. COMPANIES

13

Leading U.S. investors announced on March 6, 2008, that they have filed a record 54 global warming shareholder resolutions with U.S. firms, including electric power companies, which face far-reaching business impacts from climate change. The resolutions are nearly double the number filed just two years ago. Resolutions are already getting action from companies. Fourteen of the 54 resolutions were withdrawn by investors after the companies agreed to disclose potential impacts from emerging climate regulations and strategies for reducing greenhouse gas emissions including Allegheny Energy, Alliant Energy, Dominion Resources and Southern Co. For further information, contact Rich Robinson at (703) 907-5856 or at <u>richard.robinson@nreca.coop</u>.

CLIMATE NOTES

The February 15, 2008 edition of *Climate Notes* is available on Cooperative.com by <u>clicking here</u>. The March 3, 2008 edition of *Climate Notes* is available on Cooperative.com by <u>clicking here</u>.

Clean Water Act

UWAG UPDATE LETTER

Hunton & Williams, counsel to UWAG, periodically prepares a non-confidential version of the Update Memo that is sent to all UWAG members to keep them abreast of the various water issues they are working on at the federal level. It address important issues including the Section 316(b) lawsuits and appeals to the Supreme Court, EPA's on-going study of wastewater discharges from power plants as part of the agency's plans to update the industry's effluent guidelines, and wetland developments. If you wish to discuss any of the issues in the UWAG memo, please contact Jim Stine at james.stine@nreca.coop or 703-907-5739.

Waste Issues

NRECA SUBMITS COMMENTS ON EPA's COAL ASH NODA

EPA published a notice of data availability (NODA) on August 29, 2007 (72 *Fed. Reg.* 49714), that addressed disposal of coal combustion products (CCP) in landfills and surface impoundments. EPA's publication contained several reports and a great deal of technical information pertaining to the safety and protection provided by existing CCP management activities at coal-fired power plants. EPA is considering whether current regulations are protective enough, or if it needs to write new federal regulations. Environmental groups are pressing hard for much stricter regulation of ash management practices or even an out-right ban. Protecting the ability of G&Ts to continue economical generation of electricity from coal is a top NRECA priority. With support from USWAG, on February 11, 2008, NRECA prepared comments and a template that helped several individual cooperatives to submit their own comments. For a copy of NRECA's comments on Cooperative.com, <u>click here</u>. For a copy of USWAG's February 11, 2008 comments on Cooperative.com, <u>click here</u>. For a copy

of the appendix to USWAG's comments on Cooperative.com, <u>click here</u>. For additional information, please contact Jim Stine at <u>james.stine@nreca.coop</u> or 703-907-5739.

Energy

RURAL UTILITIES SERVICE AFFIRMS ADMINISTRATION STANCE ON BASELOAD LOANS

Jim Newby, Assistant Administrator of the Rural Utilities Service (RUS), recently stated that the agency will not issue any loans for new plant construction in 2008 and is unlikely to do so in 2009. The announcement comes after several cooperatives have either been denied RUS loans or have withdrawn RUS loan applications in recent months. Newby cited a 30 percent price increase for new generation as one reason for the denials, and the anti-loan stance as another. Newby also acknowledged that the agency hopes to resolve its concerns about increased risk and resume loans at some point after 2009. NRECA CEO Glenn English told the media that RUS and the Administration were exhibiting some of the same nervousness seen in private financial markets over the potential effects of climate change legislation. Mr. English also noted that many lawmakers are solely focused on reducing the amount of CO₂ emissions and do not yet have a plan for getting "from here to there." At the time of the loan suspension, at least four cooperatives were lined up for loans totaling \$1.3 billion for projects in Kentucky, Illinois, Arkansas and Missouri. A project in Montana was denied funding last month, and two more were recently withdrawn in Wyoming and Missouri. For more information, contact John Holt at (703) 907-5805 or at john.holt@nreca.coop.

LATEST CREB ALLOCATIONS INCLUDE 26 ELECTRIC COOPERATIVE PROJECTS – BACKLOG REMAINS

The latest Clean Renewable Energy Bond (CREB) allocations include 26 electric cooperative projects in 13 states totaling \$143.47 million, about a third of all project requests. Cooperative projects receiving allocations spanned most of the eligible technologies: wind, solar, hydropower, open-loop biomass and landfill gas. Allocations were between \$30,000 and \$30 million. This round is the second of CREB allocations under a funding extension Congress approved in 2006 after overwhelming response to the initial allocations left a significant project backlog. Again, cooperative response to the program leaves a significant backlog in projects seeking funding. During initial CREB allocations in 2007, electric cooperatives received \$300 million, 55 percent of project requests. NRECA is working with key members of Congress for another CREB program and Production Tax Credit extension in 2008. For a list of the allocations on Cooperative.com, <u>click here</u>. For more information, contact Susan Pettit at (703) 907-5822 or susan.pettit@nreca.coop.

TAX CREDIT EXTENSION FOR CLEAN ENERGY TECHNOLOGY INVESTMENTS REINTRODUCED

On February 14, 2008, despite failed efforts in the Senate in 2007, Sens. Amy Klobuchar (D-Minn.), Olympia Snowe (R-Maine), and Maria Cantwell (D-Wash.) reintroduced legislation (S. 2642) that would extend expiring tax credits for the production of energy-

efficient technologies and would be funded by repealing tax credits for major oil and gas producers. The bill also would provide longer-term extensions of tax incentives of five years for the development of new wind power technologies, solar energy producers, and other "clean technology" energy businesses. For a copy of the Senate bill, <u>click here</u>. The tax incentives are set to expire at the end of this year. Like last year, Republicans and the White House do not support the repeal of the manufacturing deduction for major oil and gas producers, a provision that would raise nearly \$10 billion to offset the costs of the tax credits. Another package of energy-related tax incentives is slated for consideration in the House. H.R. 3221 would use tax credits to encourage the production and use of cleaner forms of energy while offsetting those incentives with a denial of the Section 199 manufacturing deduction to certain oil and gas producers. For a copy of the House bill, <u>click here</u>. For more information, contact Susan Pettit at (703) 907-5822 or <u>susan.pettit@nreca.coop</u>.

15

Other

GROUPS SUE TO HALT EAST KENTUCKY PLANT CONSTRUCTION

On March 3, 2008, three environmental groups sued the Rural Utilities Service (RUS) to halt construction of an East Kentucky Power Cooperative plant that the groups say is unnecessary and harmful to the environment. The groups claim the RUS failed to properly conduct an environmental assessment of East Kentucky Power's plans to build a new coal-fired plant and transmission lines at its J.K. Smith power station in Clark County. The groups maintain that environmental studies on the two projects should be done together instead of separately. The transmission line study already has been completed. Their separation, the groups say, violates the National Environmental Policy Act's requirement that related proposals be analyzed as a group. The co-op successfully fought off similar challenges of its plans during Public Service Commission hearings over the past year. Last month, the environmental groups issued a report saying East Kentucky could meet its growing power needs by using a combination of energy efficiency and renewable energy programs. For a copy of the complaint in the lawsuit on Cooperative.com, <u>click here</u>. For further information, contact Rich Robinson at (703) 907-5856 or at <u>richard.robinson@nreca.coop</u>.

EPA APPOINTS MEMBERS OF NEW AGRICULTURAL ADVISORY COMMITTEE

On February 21, 2008, the EPA Administrator appointed 30 people to serve on the agency's newly formed Farm, Ranch, and Rural Communities Advisory Committee. The committee will advise the Administrator on agricultural issues that affect farms, ranches, and rural communities. The committee also will address the challenges of meeting growing demand for renewable fuels and curbing waste from concentrated animal feeding operations. The committee is holding its first meeting March 13-14, 2008, D.C., where it is looking at how EPA's policies and regulations on climate change and renewable energy will affect the agriculture community, and how the agriculture industry can play a significant role in the nation's ability to reduce its greenhouse gas emissions and its dependence on oil imports. The committee is also being asked to develop an environmental strategy to manage waste

from livestock operations that considers both regulatory and voluntary approaches, and that provides tools for producers to improve environmental performance. For more information, contact Rich Robinson at (703) 907-5856 or at <u>richard.robinson@nreca.coop</u>.

Produced by the NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION Environmental Affairs Unit, Editor Richard Robinson

The Environmental Bulletin is provided free of charge to all NRECA members upon request. Prior editions and referenced documents are posted to the Cooperative.com web site at: https://www.cooperative.com/environmental/resources/EnvironmentalBulletin/EnvironmentalBulletin.htm

For additional information regarding listed issues, contact:

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National Rural Electric Cooperative Association

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NBECA

ENVIRONMENTAL BULLETIN

April 16, 2008

What's Inside This Issue

CLEAN AIR ACT

- <u>COURT ISSUES MANDATE ON CAMR DECISION/EPA AND UARG FILE</u> <u>FOR REVIEW</u>: Mandate comes as surprise because mandates are not usually issued until deadline for appeal has passed
- <u>STATES FAIL TO SUBMIT APPROVABLE OZONE EMISSION PLANS</u>: EPA may impose sanctions if states do not submit approvable SIPs in a timely fashion
- EPA DESIGNATES 13 COMMUNITIES IN ATTAINMENT OF 8-HOUR OZONE STANDARD: Communities agreed to reduce ozone emissions earlier than the Clean Air Act requires
- EPA AMENDS HAZARDOUS WASTE COMBUSTORS EMISSIONS <u>STANDARDS</u>: New standards clarifies compliance and monitoring provisions from the October 2005 rulemaking

CLIMATE CHANGE

- <u>DESERET G&T IS AT CENTER OF DEBATE TO REGULATE</u> <u>GREENHOUSE GAS EMISSIONS UNDER AIR ACT</u>: Many groups with national interests have also filed briefs in support of or in opposition to EPA permit
- <u>KANSAS GOVERNOR VETOES LEGISLATION ALLOWING EXPANSION</u> <u>OF SUNFLOWER PLANT</u>: Governor vetoes bill due to concerns about greenhouse gas emissions
- EPA ADMINISTRATOR OUTLINES RESPONSE TO MASSACHUSETTS V. EPA DECISION: Letter explains how CO2 and other GHGs would be regulated under CAA
- <u>THE CLIMATE REGISTRY FINALIZES REPORTING PROTOCOL</u>: Protocol outlines requirements for voluntary reporting
- <u>GORE LAUNCHES \$300 MILLION CLIMATE AD CAMPAIGN</u>: Campaign to get Americans thinking about potential fixes for climate change
- WAXMAN, MARKEY INTRODUCE BILL TO CONTROL NEW COAL-<u>POWERED PLANT EMISSIONS</u>: Bill would prohibit states and EPA from issuing permits unless plants sequester and store 85 percent of their emissions
- <u>HOUSE COMMITTEE REVIEWS CAA AUTHORITIES OVER GHGS</u>: Chairman uncertain that EPA capable of overseeing climate regulations

- <u>DOE TO ISSUE TWO LOAN GUARANTEE SOLICITATIONS</u>: Focus will be on avoidance of greenhouse gas emissions
- <u>GREENING THE VATICAN</u>: Pope Benedict XVI added polluting the earth to the Catholic list of sins
- <u>SEALS TO BE REVIEWED FOR LISTING AFTER LAWSUIT THREATENED</u>: Petition requests seals be listed as threatened or endangered because of effects of climate change on Alaska's coast
- <u>CLIMATE NOTES</u>: March 3 and 17, 2008 editions available

CLEAN WATER ACT

- <u>COURT OVERTURNS DEFINITION OF "NAVIGABLE WATER"</u>: Court rules EPA did not offer a clear explanation for broad definition of term
- EPA PUBLISHES DRAFT WATER PROGRAM STRATEGY FOR <u>RESPONDING TO CLIMATE CHANGE</u>: Draft describes effects of climate change on water resources
- <u>TMDL KNOWLEDGEBASE CLEARINGHOUSE</u>: Virginia Tech Center has developed an online database to house TMDL-related information
- EPA, ARMY CORPS ISSUE FINAL RULE TO MITIGATE LOSS OF WETLANDS, STREAMS: Rule sets standards to mitigate loss of wetlands and associated aquatic resources
- <u>UWAG UPDATE LETTER</u>: UWAG letter addresses important issues including Section 316(b) lawsuit and EPA's study on wastewater discharge for power plants

ENERGY

• <u>**RENEWABLE ENERGY CREDITS BILL INTRODUCED**</u>: Bill introduced includes a one-year extension of Clean Renewable Energy Bonds authority

OTHER

• <u>EPA REQUESTS HELP FROM AG COMMITTEE ON POLICIES AFFECTING</u> <u>FARMS</u>: Committee will address role of agriculture in reducing greenhouse gases and an environmental strategy for livestock operations

<u>Clean Air Act</u>

COURT ISSUES MANDATE ON CAMR DECISION/EPA AND UARG FILE FOR REVIEW

In a surprise move, on March 14, 2008, the U.S. Court of Appeals for the D.C. Circuit granted a request by environmental petitioners for an expedited issuance of the mandate vacating the Clean Air Mercury Rule (CAMR). Although the court issued its opinion earlier to vacate the rule, CAMR remained in effect until the mandate was issued. The court's action was unexpected because the court normally does not issue a mandate to vacate a rule until the deadline for filing appeals has passed. In this case, environmental organizations were anxious to have the mandate issued early so they could challenge units undergoing permit applications. They will seek to have states set mercury limits on these facilities through case-by-case Maximum Achievable Control Technology (MACT) reviews. As a result of issuing the mandate, CAMR, including the mercury monitoring provisions, is now void in its entirety.

On March 24, 2008, EPA and UARG filed separate petitions for review by the full court of the three-judge panel's decision to vacate CAMR. The full court should decide within the next few weeks whether to accept the appeal. If the court decides not to hear the case, and if the Supreme Court is either not asked to review the decision, or if asked, declines to review it, EPA will need to begin a rulemaking under the MACT provisions. One cannot predict what standards will emerge from a MACT rulemaking because many important policy questions would need to be resolved by EPA, and because of the likelihood that the vast bulk of any EGU MACT rulemaking will be left to the next administration.

While it waits to learn of the full court's decision, EPA is preparing guidance for states to use regarding how to assess mercury controls at new power plants. The absence of an EPA rule has created problems for states reviewing permit applications. The guidance will address whether EPA agrees that case-by-case MACT requirements under Section 112(g) are now in effect and, if so, how the requirements should be applied. The fate of state mercury programs that set more stringent requirements than CAMR is more complex and will be addressed later. Many of them have yet to receive final EPA approval and nearly all of them rely on mercury monitoring provisions vacated in CAMR. For additional information, contact Bill Wemhoff at (703) 907-5824 or at <u>bill.wemhoff@nreca.coop</u>.

STATES FAIL TO SUBMIT APPROVABLE OZONE EMISSION PLANS

Several states are facing possible EPA sanctions because of their failure to submit plans to attain the agency's 1997 national ozone air quality standards. According to a March 24, 2008 *Federal Register* notice (73 *Fed. Reg.* 15416), California, New York, Illinois, Ohio, Indiana, Virginia, Wisconsin, New Hampshire, Rhode Island, Vermont and Maine have not completed acceptable state implementation plans (SIPs) to show how they will attain the 1997 standards. For a copy of the notice, <u>click here</u>. On March 27, 2008, EPA also issued a *Federal Register* notice (73 *Fed. Reg.* 16205), finding that many additional states had submitted incomplete versions of their plans. For a copy of the notice, <u>click here</u>.

The CAA establishes specific consequences if EPA finds that a state failed to submit a SIP, or, regarding a submitted SIP, EPA determines it is incomplete or disapproves it. If a state fails to submit a satisfactory SIP within 18 months, EPA may impose sanctions requiring new or modified sources to offset double the amount of their emissions exceedance. If the state fails to submit a satisfactory SIP within two years, the state may lose federal highway funds and EPA will also impose federal implementation plans for ozone attainment. The failure of the states to submit approvable SIPs to meet the 1997 standards underscores the difficulty states may face when developing plans to meet EPA's new standards announced on March 12, 2008. The agency significantly tightened the 1997 standards from 0.08 ppm to 0.075 ppm throwing many new areas into nonattainment. For additional information, contact Bill Wemhoff at (703) 907-5824 or at bill.wemhoff@nreca.coop.

EPA DESIGNATES 13 COMMUNITIES IN ATTAINMENT OF 8-HOUR OZONE STANDARD

On April 2, 2008, EPA published a notice in the Federal Register, designating 13 areas participating in early action compacts (EACs) to be in attainment of the eight-hour ozone standard (73 Fed. Reg. 17,897). The EAC areas agreed to reduce ground-level ozone emissions earlier than the Clean Air Act required and to demonstrate attainment with the 8hour ozone NAAQS by December 31, 2007. The communities being given the designation are Washington County/Hagerstown in Maryland; Fayetteville, the Greensboro area, and the Hickory-Morganton-Lenoir area in North Carolina; Greenville-Spartanburg-Anderson in South Carolina; the Chattanooga area, the Johnson City-Kingsport-Bristol area, and the Nashville area in Tennessee; the San Antonio area in Texas; Frederick County/Winchester and Roanoke in Virginia; and Berkeley and Jefferson Counties in West Virginia. In exchange for early compliance, EPA gives EAC participants greater flexibility to choose locally tailored emissions control measures rather than more conventional ones required of most nonattainment areas. EPA also agreed to revoke the one-hour standard for each of the 13 early compact areas one year after final attainment designations take effect April 15, 2008. For a copy of the Federal Register notice, click here. For more information, contact Rich Robinson at (703) 907-5856 or at richard.robinson@nreca.coop.

EPA AMENDS HAZARDOUS WASTE COMBUSTORS EMISSIONS STANDARDS

On April 8, 2008, EPA published a Clean Air Act final rule in the *Federal Register* (73 *Fed. Reg.* 18,970) that clarifies several compliance and monitoring provisions from the October 2005 rulemaking designed to reduce emissions of hazardous air pollutants (NESHAPS). The emissions standards affect about 267 hazardous waste-burning sources including industrial, commercial, or institutional boilers and process heaters (which may affect some co-ops). The revised rule corrects typographical errors, and amends timelines to reflect the accurate dates and time frames associated with compliance activities, and makes the rule easier to understand and use. Some other amendments are more substantive. The revisions are effective immediately, and the final rule does not change the October 14, 2008 compliance date established by the October 2005 final rule. For a copy of the rule, <u>click here</u>. For more information, contact Rich Robinson at (703) 907-5856 or at richard.robinson@nreca.coop.

April 16, 2008

Climate Change

DESERET G&T IS AT CENTER OF DEBATE TO REGULATE GREENHOUSE GAS EMISSIONS UNDER AIR ACT

Deseret Power Electric Cooperative's attempt to build a small commercial waste coal combustion generator (110 MW) is receiving national attention as its Clean Air Act construction permit (PSD) reaches the EPA appeals board (EAB). The Sierra Club challenged EPA Region 8-issued federal PSD permit issued last year for failing to consider CO₂ emissions in its required best available control technology (BACT) analysis. Over a dozen groups with national interests have filed briefs in support of or in opposition to the EPA-issued permit. Oral arguments in Washington have been scheduled for May 29, 2008. Essentially, the arguments to include CO₂ BACT are two-fold. Either a CO₂ monitoring provision added during the 1990 Clean Air Act legislative debates requires CO₂ BACT because it became a "regulated pollutant" in 1990, or the Supreme Court decision in Massachusetts v EPA issued late April resulted in CO₂ becoming a "regulated pollutant" for BACT purposes at that time. The EAB decision is likely to be appealed to the courts. For a copy of Deseret's brief on Cooperative.com, click here. For a copy of NRECA's brief supporting EPA and Deseret on Cooperative.com, click here. For a copy of UARG's brief supporting EPA and Deseret on Cooperative.com, click here. For more information, contact Rae Cronmiller at (703) 907-5791 or at rae.cronmiller@nreca.coop.

KANSAS GOVERNOR VETOES LEGISLATION ALLOWING EXPANSION OF SUNFLOWER PLANT

On March 21, 2008, Kansas Gov. Kathleen Sebelius (D) vetoed a bill that would have allowed the addition of two coal-fired generating units at the Sunflower Electric Power Corp. plant in western Kansas. Instead of allowing the expansion of Sunflower's project with two new 700-megawatt units, Sebelius said she supported pursuing other, more promising, energy and economic development alternatives. The bill, in effect, sought to overturn an October 2007 decision by the state's health and environment secretary to deny an air quality permit to Sunflower over concerns about greenhouse gas emissions from the new units. The governor said the bill went beyond this specific project by stripping emergency powers from the state in the air quality permitting process and prohibiting the consideration of any standards beyond the federal Clean Air Act. Both houses of the Kansas legislature are now attempting to override the governor's veto. For a copy of the bill, <u>click here</u>. For a copy of the governor's veto message, <u>click here</u>. For more information, contact Rich Robinson at (703) 907-5856 or at <u>richard.robinson@nreca.coop</u>.

EPA ADMINISTRATOR OUTLINES RESPONSE TO *MASSACHUSETTS V. EPA* DECISION

On March 27, 2008, EPA Administrator Johnson sent letters to several key members of Congress outlining his intended approach to respond to the Supreme Court's decision, *Massachusetts v. EPA*. On April 2, 2007, the Court held that EPA has authority under the CAA to regulate CO_2 and other greenhouse gases (GHGs) from new motor vehicles. In the letters, the Administrator said he would issue an Advance Notice of Propose Rulemaking (ANPR) on all aspects of how CO_2 and other GHGs should and/or could be regulated under

the CAA. The letter explains that regulation of motor vehicles under the CAA would entail much more than automobiles (e.g., the triggering of PSD requirements affecting many stationary sources including numerous small businesses currently not subject to controls). The Administrator said that it is better to examine the entirety of the situation rather than act on automobiles without considering the ramifications. He does not give a timeline for when the ANPR will be released but it is expected later this spring. For a copy of Administrator Johnson's letter to John Dingell (D-MI) and Joe Barton (R-TX) on Cooperative.com, <u>click here</u>.

Because it had been a year since the Supreme Court's decision, on April 2, 2008, twelve states and several environmental groups fled suit in the U.S. Court of Appeals, D.C. Circuit, seeking to force EPA to issue a decision within 60 days on whether GHG emissions from motor vehicles endanger the public health or welfare. The petitioners claim that EPA has "unreasonably" delayed issuing a formal endangerment determination. For a copy of the petition filed by states and environmental groups on April 2, 2008, <u>click here</u>. On the same day, Sens. Dianne Feinstein (D-Calif.) and Olympia Snowe (R-Maine) introduced a bill that would require EPA to issue such a finding. The bill (S. 2806) also would require that EPA reconsider its decision denying California a CAA waiver to enforce stricter emissions standards for vehicles. For a copy of the bill, <u>click here</u>. For additional information, contact Bill Wemhoff at (703) 907-5824 or at bill.wemhoff@nreca.coop.

THE CLIMATE REGISTRY FINALIZES REPORTING PROTOCOL

The Climate Registry, a state-based initiative to report greenhouse gas (GHG) emissions in facilitation of regional climate programs, released the final version of its General Reporting Protocol. The protocol, which outlines requirements for the voluntary reporting scheme, includes policy guidelines, technical guidelines, and methodologies for quantifying emissions. Reporters that sign on with the registry must track their direct and indirect emissions of six GHGs—carbon dioxide, methane, nitrous oxide, perfluorocarbons, hydrofluorocarbons, and sulfur hexafluoride—from each facility in North America. All reporters must obtain third party verification annually to ensure the accuracy of the data. Currently, 39 states, the District of Columbia, three Canadian provinces, three tribes, and one Mexican state are members of the Climate Registry. Founding reporters, those that join the registry by May 1, 2008, include Great River Energy and Wolverine Power Cooperative. For a copy of the Climate Registry's General Reporting Protocol, <u>click here</u>. For more information, contact Carol Whitman at (703) 907-5790 or carol.whitman@nreca.coop.

GORE LAUNCHES \$300 MILLION CLIMATE AD CAMPAIGN

Former Vice President Al Gore has rolled out an advocacy campaign that is aimed to mobilize Americans to rally for aggressive reductions in greenhouse gas emissions, and tilt public opinion on climate change in an optimistic direction. While avoiding specific recommendations on solutions, the "We" campaign employs online organizing and action alerts. The ad's tone is designed to make people feel positive about the potential to fix climate change, and to increase public consciousness. This campaign is one of the most ambitious and costly in U.S. history. Private contributors have already donated \$150 million of the \$300 million that is needed to fund the campaign for the next three years. . .

This ad is airing on major broadcast shows such as *American Idol*, the *Today Show* and *Good Morning America*, as well as online. To view the campaign, <u>click here</u>. For more information, contact Carol Whitman at (703) 907-5790 or <u>carol.whitman@nreca.coop</u>.

WAXMAN, MARKEY INTRODUCE BILL TO CONTROL NEW COAL-POWERED PLANT EMISSIONS

On March 11, 2008, Reps. Ed Markey (D-MA) and Henry Waxman (D-CA) teamed up to release the "Moratorium on Uncontrolled Power Plants Act" (HR 5575). This bill would prohibit both states and EPA from issuing permits for the construction of new coal-fired power plants unless the plants sequester and store 85 percent of their annual CO₂ emissions. Also, the bill would prohibit plants that receive permits before the bill's passage, but which are built afterward and without the mandated technology, from receiving free or discounted emissions allowances once a greenhouse gas cap-and-trade bill is implemented. Technology that captures and permanently stores 85 percent CO₂ emissions has yet to be implemented on a scale large enough to be used for a power plant, so the bill requires beyond what can currently be done. Additionally, the bill signals to House Speaker Nancy Pelosi (D-CA) that these two senior members of the House Energy and Commerce Committee will oppose Chairman John Dingell (D-MI) if he advances more moderate climate change legislation. For a copy of the bill, <u>click here</u>. For more information, contact Carol Whitman at (703) 907-5790 or <u>carol.whitman@nreca.coop</u>.

HOUSE COMMITTEE REVIEWS CAA AUTHORITIES OVER GHGS

At an April 10, 2008 House Energy and Air Quality Subcommittee hearing, Energy and Commerce Committee Chairman John Dingell (D-MI) took issue with the Supreme Court decision in Massachusetts v. EPA that gives the EPA authority under the Clean Air Act (CAA) to issue climate-related regulations. EPA testified to a list of potential areas for CAA regulation including limits on tailpipe emissions and fuels, new source review permits and a broad new National Ambient Air Quality Standard that measures greenhouse gas concentrations in all 50 states. Chairman Dingell has predicted there would be a "glorious mess" if EPA is allowed to implement emissions rules under existing provisions of the CAA without comprehensive legislation on the issue. His tone at the hearing took on a new sense of urgency as he appealed to lawmakers skeptical of mandatory emission curbs to support legislation that would amend the CAA and improve implementation of a carbon control scheme. House committee staff is drafting a comprehensive cap-and-trade bill that seeks to reduce U.S. emissions 60 percent to 80 percent by 2050. Chairman Dingell has said he would try to produce the bill for comment by mid-April, but he has not gone any further in stating his legislative plans. Industry lobbyists believe the House will wait to address climate legislation until the Senate considers the Lieberman-Warner climate bill, S. 2191, currently scheduled for floor debate June 2, 2008. For more information, contact Carol Whitman at (703) 907-5790 or carol.whitman@nreca.coop.

DOE TO ISSUE TWO LOAN GUARANTEE SOLICITATIONS

The Department of Energy has announced that it plans to issue loan guarantee solicitations this summer for up to \$38.5 billion. The first solicitation will come no later than June 2008 for efficiency, renewable energy and electric transmission projects (up to \$10 billion); nuclear power facilities (up to \$18.5 billion); and uranium enrichment projects (up to \$2
billion). The second solicitation, which will be issued later in the summer, will be for advanced fossil energy projects (up to \$8 billion). Prior to the issuance of the \$10 billion solicitation for projects in the efficiency, renewable energy and electric transmission areas, DOE intends to issue a Request for Information to solicit input concerning areas of particular technology focus and interest in these areas. Selection criteria under these solicitations will focus on the avoidance of emissions of greenhouse gas emissions and other air pollutants; the speed at which technologies can be commercialized; cost-saving potential for consumers; the prospect of repayment; and the potential for long-lasting success of these technologies in the marketplace. The upcoming solicitations will be the second and third under the program, which some lawmakers say the agency has been slow to get off the ground. The agency is planning to receive full applications from 16 projects as a result of the first solicitation, issued in 2006. The projects include integrated gasification combined cycle power plants, solar energy projects, cellulosic ethanol plants and others. For more information on DOE's loan guarantee program, <u>click here</u>. For more information, contact Carol Whitman at (703) 907-5790 or carol.whitman@nreca.coop.

GREENING THE VATICAN

The Catholic Church and environmentalists have found common ground on the issue of climate change. Pope Benedict XVI last month added polluting the earth to the Catholic list of sins. Presenting climate change as a moral issue, he warned that environmental neglect hurts the poor and vulnerable. The pope's efforts are resonating throughout the Catholic community as schools, universities and churches adopt green practices and participate in environmental activism. For more information, contact Carol Whitman at (703) 907-5790 or carol.whitman@nreca.coop.

SEALS TO BE REVIEWED FOR LISTING AFTER LAWSUIT THREATENED

On March 21, 2008, the Center for Biological Diversity (CBD) served notice of its intent to sue the National Marine Fisheries Service (NMFS) over its failure within 90 days to review the ribbon seal, a marine mammal whose sea-ice habitat is becoming scarce as its climate warms, for possible listing under the Endangered Species Act (ESA). The CBD had submitted a petition December 20, 2007, to have the ribbon seal listed as threatened or endangered. Subsequently, on March 26, 2008, the NMFS announced that it had launched a status review to determine whether the ribbon seals should be protected under the ESA because of the effects of climate change. In addition, the agency said it will conduct similar status reviews of the three other species of ice-dependent seals living in northern Alaska waters--spotted, bearded, and ringed seals. The CBD is one of the groups that petitioned for listing of the polar bear and subsequently sued over the U.S. Fish and Wildlife Service's failure to announce such a listing. The organization has also petitioned for ESA listing of another ice-dependent sea mammal, the Pacific walrus. For further information, contact Rich Robinson at (703) 907-5856 or at richard.robinson@nreca.coop.

CLIMATE NOTES

The March 17, 2008 edition of *Climate Notes* is available on Cooperative.com by <u>clicking</u> <u>here</u>. The March 26, 2008 edition of *Climate Notes* is available on Cooperative.com by <u>clicking here</u>.

Clean Water Act

COURT OVERTURNS DEFINITION OF "NAVIGABLE WATER"

On March 31, 2008, the U.S. District Court for the District of Columbia ruled on a case brought by the American Petroleum Institute ("API") and others challenging the definition of "navigable waters" in EPA's 2002 Spill Prevention, Control, and Countermeasure ("SPCC") Rule (American Petroleum Institute v. Johnson, No. 02-2247 and Marathon Oil Company v. Johnson, No. 02-2254). For a copy of the opinion, click here. The court held that the definition of "navigable waters" in the 2002 SPCC Rule violated the federal Administrative Procedure Act because the agency did not offer a "clear, cogent and reasoned explanation" for the new "broad definition," and because the explanation the agency did provide "failed to come to grips with" the reasoning of the United States Supreme Court in Solid Waste Agency of N. Cook County v. U.S. Army Corps of Engr's, 531 U.S. 159 (2001) ("SWANCC"). The court vacated and remanded the new regulatory definition in the 2002 SPCC Rule back to the agency, which means that the definition of "navigable waters" in the 1973 SPCC Rule still provides the operative definition for all SPCC programs. EPA is determining whether to appeal the decision. For the purposes of their SPCC programs, many co-ops tend to use a broad interpretation of "navigable waters" and, to be on the safe side, tend to assume even the smallest water course could be a navigable water. For additional information please contact Jim Stine at james.stine@nreca.coop or 703-907-5739.

EPA PUBLISHES DRAFT WATER PROGRAM STRATEGY FOR RESPONDING TO CLIMATE CHANGE

EPA recently published a draft strategy that describes the potential effects of climate change on clean water, drinking water, and ocean protection programs, and outlines EPA actions to respond. The strategy is based on the findings of the Intergovernmental Panel on Climate Change (IPCC). It accepts as given what it calls the "scientific consensus" that we can expect rising sea levels, changes in ocean chemistry, warmer water, new patterns of rainfall, and more intense storms. It then proposes 46 specific "key actions" that the National Water Program will take to respond to these changes. The key actions, listed in summary fashion in Appendix 2 of the Strategy, are a remarkably broad list of goals. including improving energy efficiency at water and wastewater facilities, promoting water conservation, promoting "green" buildings, developing regulations for and studies of sequestering CO₂, assessing the risks of waterborne disease, expanding emergency response planning, sponsoring climate research, educating the public on climate change, and making EPA organizational adjustments. EPA has invited comment but, since the document is so broad and at the "30,000 foot" strategic level, neither UWAG nor NRECA are likely to comment. The strategy can be found by clicking here. For additional information, please contact Jim Stine at james.stine@nreca.coop or 703-907-5739.

TMDL KNOWLEDGEBASE CLEARINGHOUSE

Virginia Tech's Center for Total Maximum Daily Load (TMDL) and Watershed Studies has developed an online database to house selected TMDL-related information and documents in one location. The searchable clearinghouse contains three types of resources:

(1) TMDL guidance documents, (2) reviews and summaries of TMDL-related technical and trade literature, and (3) state-by-state summaries of TMDL programs. State summaries are updated regularly for all 50 states and include the approach and methodology used to develop TMDLs in that state. In total, about 500 documents are available within this database, which was funded, in part, by an EPA grant. The TMDL Knowledgebase Clearinghouse can be accessed via the Center's website by <u>clicking here</u>. For additional information, please contact Jim Stine at james.stine@nreca.coop or 703-907-5739.

EPA, ARMY CORPS ISSUE FINAL RULE TO MITIGATE LOSS OF WETLANDS, STREAMS

EPA and the U.S. Army Corps of Engineers released a final rule March 31, 2008, that sets standards to mitigate the loss of wetlands and associated aquatic resources. EPA said the rule under Section 404 of the Clean Water Act improves the planning, implementation, and management of compensatory mitigation projects designed to restore aquatic resources that are affected when activities like construction, mining, and farming disturb a half-acre or more of wetlands. EPA has said that this rule is the "most important advancement of the wetlands program" since the U.S. adopted a "no-net-loss" policy toward wetlands in 1989. According to EPA, the final rule also provides one set of regulations for compensatory mitigation instead of the numerous, separate guidance documents currently in use. Under the rule, all compensation projects must have mitigation plans that include the same 12 fundamental components. Among other things, these components include objectives, site selection criteria, site protection instruments like conservation easements, a mitigation work plan, and a maintenance plan. The final compensatory mitigation rule has not yet been published in the Federal Register. The text of the final rule and other information is available by clicking here. For additional information, please contact Jim Stine at james.stine@nreca.coop or 703-907-5739.

UWAG UPDATE LETTER

The March 17, 2008 *Environmental Bulletin* contained an article on the periodic update memo prepared by Hunton & Williams, counsel to UWAG, to keep UWAG members abreast of various water issues they are working on at the federal level. The memo, dated February 8, 2008, addresses important issues including the Section 316(b) lawsuits and appeals to the Supreme Court, EPA's on-going study of wastewater discharges from power plants as part of the agency's plans to update the industry's effluent guidelines, and wetland developments. The memo was inadvertently left off the March 17, 2008 *Environmental Bulletin*. For a copy of the update memo on Cooperative.com, <u>click here</u>. For more information, please contact Jim Stine at james.stine@nreca.coop or 703-907-5739.

Energy

RENEWABLE ENERGY CREDITS BILL INTRODUCED

On April 3, 2008, Sens. Maria Cantwell (D-Wash.) and John Ensign (R-Nev.) introduced a \$6 billion tax bill (number not available) that includes a one-year extension of a renewable energy production tax credit. The Clean Energy Tax Stimulus Act of 2008, cosponsored originally by six Democrats and 14 Republicans, represents another attempt by Senate

Democrats to secure quick passage of renewable energy tax credits that expire at the end of 2008. The bill would extend for one year through 2009 and expand by \$400 million the \$1.2 billion provision that rural cooperatives and public power utilities can issue Clean Renewable Energy Bonds to reduce the cost of renewable energy investments. For further information, contact Rich Robinson at (703) 907-5856 or at <u>richard.robinson@nreca.coop</u>.

11

<u>Other</u>

EPA REQUESTS HELP FROM AG COMMITTEE ON POLICIES AFFECTING FARMS

On March 13, 2008, EPA Deputy Administrator Marcus Peacock told the agency's new Farm, Ranch, and Rural Communities Advisory Committee (FRRCC), at its first meeting, that it will help EPA make policy decisions that affect farms, ranches, and the rural way of life. The FRRCC will address three initial topics:

- 1. The role of agriculture in reducing greenhouse gas (GHG) emissions. The agricultural industry as both a source of and a sink for GHG emissions has a significant role in cutting oil imports through the development of renewable energy sources.
- 2. An environmental strategy for livestock operations.
- 3. Communication issues.

For further information, contact Rich Robinson at (703) 907-5856 or at richard.robinson@nreca.coop.

Produced by the NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION Environmental Affairs Unit, Editor Richard Robinson

The Environmental Bulletin is provided free of charge to all NRECA members upon request. Prior editions and referenced documents are posted to the Cooperative.com web site at: https://www.cooperative.com/environmental/resources/EnvironmentalBulletin/EnvironmentalBulletin.htm

For additional information regarding listed issues, contact: Rae Cronmiller, Environmental Counsel, 703-907-5791 or <u>rae.cronmiller@nreca.coop</u>, or Bill Wemhoff, Sr. Environmental Mgr. (Air Issues), 703-907-5824 or <u>bill.wemhoff@nreca.coop</u> or Jim Stine, Sr. Environmental Mgr. (Water & Solid Waste Issues), 703-907-5739 or <u>james.stine@nreca.coop</u> or Carol Whitman, Principal, Legislative Affairs, 703-907-5790 or <u>carol.whitman@nreca.coop</u> Richard Robinson, Environmental Policy Representative, 703-907-5856 or <u>richard.robinson@nreca.coop</u> For information on corporate level policy regarding listed issues, contact: Kirk Johnson, Vice President, Environmental Affairs, 703-907-5775 or <u>kirk.johnson@nreca.coop</u>.



National Rural Electric Cooperative Association

A Touchstone Energy' Cooperative

NRECA

ENVIRONMENTAL BULLETIN

May 22, 2008

What's Inside This Issue

CLEAN AIR ACT

- <u>EPA SETS GUIDELINES FOR IMPLEMENTING NSR STANDARDS FOR</u> <u>FINE PARTICLES</u>: Rule defines a major emissions source for NSR purposes for PM-2.5, SO2 and NOx
- <u>UARG COMMENTS ON EPA'S ISA FOR OXIDES OF NITROGEN</u>: Second draft an improvement but there remain significant flaws
- EPA SETTLES LAWSUIT WITH COKE MANUFACTURERS OVER RULES FOR POWER PLANTS: EPA will promulgate rule relieving coke oven gas-powered boilers and plants from burden of monitoring PM and NOx emissions, but not SO2
- <u>UARG FILES COMMENTS ON MANE-VU VISIBILITY PROJECTIONS</u>
 <u>DRAFT REPORT</u>: UARG states that SIPs do not need to contain any "beyond CAIR" controls
- <u>EPA PROPOSES NSPS FOR COAL PROCESSING PLANTS</u>: Rule to affect coal processing and conveying equipment

CLIMATE CHANGE

- <u>NRECA PROVIDES CONSTRUCTIVE SUGGESTIONS TO LIEBERMAN AND</u> <u>WARNER ON CLIMATE BILL</u>: Several key Senators agree to work with NRECA to effect changes
- **PRESIDENT BUSH OUTLINES NEW US CLIMATE GOALS:** One goals is to have power plant emissions peak over the next 10 years to 15 years and then decline
- <u>EIA PROJECTS SENATE CLIMATE BILL WILL RAISE ENERGY COSTS</u>: Electricity prices would rise between 11 percent and 64 percent
- <u>KANSAS LEGISLATURE AGAIN FAILS TO OVERRIDE GOVERNOR'S</u> <u>VETO OF BILL ON SUNFLOWER UNITS</u>: Leaders of legislature now considering other ways to provide support for the project
- **ENDANGERMENT CASE:** Holding may harm chances for ruling by federal appeals court to compel EPA to quickly issue climate endangerment finding
- DEPARTMENT OF INTERIOR LISTS POLAR BEAR AS "THREATENED SPECIES": Listing to state that specific sources like power plants do not contribute to imperiling polar bears' habitat

- <u>GOVERNORS PROTEST FEDERAL VEHICLE GREENHOUSE GAS</u>
 <u>EMISSIONS PLAN:</u> Governors send letter to president protesting proposal to limit
 California's right to regulate greenhouse gas emissions from vehicles
- EPA WILL NOT REGULATE REFINERY EMISSIONS UNDER NEW SOURCE PERFORMANCE STANDARDS: Decision is good precedent for cooperative owned and operated plants
- <u>CCS ALLIANCE SUBMITS COMMENTS ON STATE OF WASHINGTON</u> <u>PROPOSAL</u>: Alliance finds many problems with first proposal to regulate carbon sequestration
- **DOE TO PROVIDE FUNDING FOR CCS PROJECTS**: \$126.6 million to be used to conduct large-scale carbon capture and sequestration tests in Ohio and California
- <u>CALIFORNIA CONSUMER ADVOCATES OPPOSE UTILITY-FUNDED</u> <u>CLIMATE STUDIES</u>: Group claims California Public Utilities Commission contends CPUC not authorized to raise electricity rates on its own to fund in-house programs
- CLIMATE NOTES: April 21 and May 2, 2008 editions available

CLEAN WATER ACT

- <u>SUPREME COURT AGREES TO HEAR INDUSTRY LAWSUIT ON SECTION</u> <u>316(b) COOLING WATER INTAKE RULE</u>: Court will decide issue of cost-benefit analysis
- <u>OBERSTAR HOLDS HEARINGS ON BILL TO AMEND CLEAN WATER</u> <u>ACT</u>: Bill would eliminate the term "navigable" from the Clean Water Act, extending federal jurisdiction over all "waters of the United States"

WASTE ISSUES

 <u>USWAG SCHEDULES NEXT PCB WORKSHOP</u>: Workshop will be held on November 19 - 20, 2008

ENERGY

• <u>IOWA ENACTS LAW REQUIRING CO-OPS TO SET ENERGY EFFICIENCY</u> <u>GOALS</u>: Co-ops were able to change bill that originally required co-ops to achieve energy efficiency goals equal to annual usage reductions of 1.5 percent

TRANSPORTATION

- <u>**REQUALIFICATION TIMEFRAMES FOR SF6 CYLINDERS REMINDER:**</u> Requalification normally required every five years
- <u>INCREASE IN HAZARDOUS MATERIALS REGISTRATION FEES</u> <u>PROPOSED</u>: Department of transportation proposes increase for both offerors and transporters of certain hazardous materials

May 22, 2008

Clean Air Act

EPA SETS GUIDELINES FOR IMPLEMENTING NSR STANDARDS FOR FINE PARTICLES

On May 8, 2008, EPA issued a final rule clarifying requirements for enforcement of the NSR program for fine particulate matter ($PM_{2.5}$) emissions. The rule defines a major emissions source as one that emits 250 tons per year with the exception of 28 source categories that will constitute a major emitter at 100 tons per year. The rule also sets NSR significant emissions rates at 10 tons of $PM_{2.5}$ per year, 40 tons of SO₂ per year, 40 tons of NOx per year, and 40 tons of organic volatile compounds per year, if regulated. The rule also allows emitters to trade emissions between states and regions but not within in a given nonattainment area. The rule does not initially require states to account for gases that could condense to form particles. For the text of the rule and a fact sheet, <u>click here</u>. For more information, contact Rae Cronmiller at (703) 907-5791 or at <u>rae.cronmiller@nreca.coop</u>.

UARG COMMENTS ON EPA'S ISA FOR OXIDES OF NITROGEN

On May 5, 2008, UARG submitted comments on EPA's Second External Review Draft of its Integrated Science Assessment (ISA) for Oxides of Nitrogen -- Health Criteria, March 2008. In its comments, UARG said the second draft of the ISA is an improvement but there remain significant flaws that the agency must address before it will satisfy the CAA legal standard applicable to "air quality criteria." UARG said in many areas the draft fails to present EPA's evaluation of the relevant science, opting instead to simply describe various studies, and then pronounce conclusions. In other areas where the agency does include analyses, an undefined and vague framework for reaching causality determinations is used and serious mistakes are made. For a copy of UARG's comments on Cooperative.com, <u>click here</u>. For more information, contact Bill Wemhoff at (703) 907-5824 or at <u>bill.wemhoff@nreca.coop</u>.

EPA SETTLES LAWSUIT WITH COKE MANUFACTURERS OVER RULES FOR POWER PLANTS

On April 11, 2008, EPA announced settlement of a lawsuit in the *Federal Register* filed by coke manufacturers challenging new emissions standards for fossil fuel-fired electric power plants (Coke Oven Environmental Task Force v. EPA, D.C. Cir., No. 06-1131). The industry filed the lawsuit after the agency finalized new monitoring and emissions requirements for PM, SO₂, and NOx for new fossil fuel-fired electric power plants in June 2007. The industry claimed that coke oven gas does not produce as much PM or NOx emissions as coal, which is how it is currently classified. As part of the settlement, EPA will issue a direct final rule or a proposed rule by May 31, 2008, clarifying the emissions monitoring standards and relieving coke oven gas-powered boilers and plants from the burden of monitoring PM and NOx emissions, but that the plants would continue to monitor for SO_2 under proposed amendments offered by the coke oven gas industry. Under the rule, new plants or older facilities that are significantly upgraded would have to meet the new emissions and monitoring standards. EPA has until November 30, 2008, to take final action on the rulemaking. Currently, there are only 18 coke plants in the U.S. that could potentially use coke oven gas, but there are some new facilities under construction that could have to meet the new emissions standards. For a copy of the *Federal Register*

notice (73 *Fed. Reg.* 19838), <u>click here</u>. For more information, contact Rich Robinson at (703) 907-5856 or at <u>richard.robinson@nreca.coop</u>.

UARG FILES COMMENTS ON MANE-VU VISIBILITY PROJECTIONS DRAFT REPORT

On April 25, 2008, UARG filed comments in response to the Mid-Atlantic/Northeast Visibility Union's (MANE-VU) April 4, 2008 email invitation, asking stakeholders to comment on its 2018 Visibility Projections Draft Report. The draft report describes the process that MANE-VU used to assess the impact by 2018 if:

- 1. The electric generating units (EGUs) in the MANE-VU, Midwest Regional Planning Organization (MPRO), and the Visibility Improvement State and Tribal Association of the Southeast (VISTAS) regions implemented the emissions reductions required by CAIR;
- 2. The states in those regions also implemented additional reductions from non-EGU sources including best available retrofit technology (BART); and
- 3. Certain emissions reductions occur from EGUs in Canada.

Most importantly, the draft report concludes that, using MANE-VU's analysis, all MANE-VU sites are projected to meet or exceed the uniform rate of progress goal for 2018. UARG comments that this conclusion agrees with that of the other regional planning organizations (RPOs) in the eastern half of the U.S. Therefore, UARG contends that states in this area should develop SIPs that reflect compliance with CAIR levels for EGUs, and do not require any additional reductions by EGUs. If the three eastern RPOs (MANE-VU, VISTAS and MPRO) agree with this conclusion, then no co-op plants in those states would have to go "beyond CAIR" in meeting their states' regional haze SIPs. For a copy of UARG's comments on Cooperative.com, <u>click here</u>. For more information, contact Rich Robinson at (703) 907-5856 or at <u>richard.robinson@nreca.coop</u>.

EPA PROPOSES NSPS FOR COAL PROCESSING PLANTS

On April 28, 2008, EPA proposed revisions to NSPS Subpart Y, which affects coal processing and conveying equipment (breakers, crushers, screens, conveyor belts), coal storage systems, and coal transfer or loading systems at new, modified and reconstructed units (73 *Fed. Reg.* 22901). This rule may be significant for those co-ops that own or operate such equipment or systems. Under a consent decree with the Sierra Club, the EPA Administrator must sign the final rule by April 16, 2009. Environmentalists who are targeting emissions from all aspects of coal power production are likely to oppose the proposal. The proposed rule addresses:

- Subcategorization;
- Thermal dryers;
- Coal processing and conveying equipment (including breakers and crushers), coal storage systems, and transfer and loading systems;
- Compliance and emissions monitoring;
- Modified and reconstructed conveyors;
- The definition of "coal storage system;" and
- Regulation of nonmetallic minerals.

UARG will prepare comments on these proposed revisions, which are due June 12, 2008. For a copy of the proposal, <u>click here</u>. For more information, contact Rich Robinson at (703) 907-5856 or at <u>richard.robinson@nreca.coop</u>.

Climate Change

NRECA PROVIDES CONSTRUCTIVE SUGGESTIONS TO LIEBERMAN AND WARNER ON CLIMATE BILL

On May 9, 2008, NRECA sent a letter to Sens. Joseph Lieberman (I-CT) and John Warner (R-VA) urging them to improve their climate change cap-and-trade legislation before bringing it to the floor in June. The letter included making the caps and timelines more realistic, including an economic safety valve, and minimizing the use of an auction for cooperative emission allowances, in addition to outlining some more detailed concerns NRECA has identified with the bill. Several key senators have pledged to work with NRECA on the Lieberman-Warner climate bill, including some who have cosponsored the legislation and now have increasingly become concerned with its complexity and cost. This will not be the only opportunity to provide suggestions to improve the bill. For a copy of the letter, <u>click here</u>. For more information, contact Carol Whitman at (703) 907-5790 or carol.whitman@nreca.coop.

PRESIDENT BUSH OUTLINES NEW US CLIMATE GOALS

On April 16, 2008, prior to the latest U.S.-led meeting to establish a post-Kyoto, international climate change regime, President Bush announced a new national goal of stopping the growth of greenhouse gas emissions by 2025. Saying, "We've got to do more in the power generation sector," he laid out a goal of having power plant emissions peak over the next 10 years to 15 years, and then decline. Bush emphasized his opposition to higher taxes and harm to the economy and said solutions should focus on technology. He also noted, with disapproval, that some environmental activists want to use the Clean Air Act to regulate CO₂. Calling the current package of technology tax incentives "a complicated mix," he called for a single incentive program that is technology-neutral and long-lasting. For a fact sheet on the policy, <u>click here</u>. For more information, contact Carol Whitman at (703) 907-5790 or <u>carol.whitman@nreca.coop</u>.

EIA PROJECTS SENATE CLIMATE BILL WILL RAISE ENERGY COSTS

According to the Energy Information Administration (EIA) in April 2008, the Lieberman-Warner climate bill (S. 2191) will raise energy prices and decrease average annual household consumption—a measure of economic welfare—between \$160 and \$310 in 2015, and \$300 and \$790 by 2030 (2007 dollars). Electricity prices under S. 2191 would rise between 11 percent and 64 percent under the various technology scenarios modeled. Under a core case where nuclear and coal with carbon capture and storage (CCS) are available in the timeframes of the bill's emission reduction requirements, 533 gigawatts (GW) of new capacity would be added by 2030 in contrast to 264 GW of projected capacity additions without S. 2191. New generation would be dominated by nuclear power, 268 GW, while coal generation would lag, 64 GW of new coal with CCS capacity offset by retirements and reduced utilization. The bulk of emission reductions are projected to come from electricity generation under all scenarios. Proponents of S. 2191 claimed the EIA analysis showed that it would not cause significant harm to the economy, while opponents focused on projected increases to gasoline prices of anywhere from 41 cents to over a dollar by 2030. For a copy of the EIA analysis, <u>click here</u>. For more information, contact Carol Whitman at (703) 907-5790 or <u>carol.whitman@nreca.coop</u>.

KANSAS LEGISLATURE AGAIN FAILS TO OVERRIDE GOVERNOR'S VETO OF BILL ON SUNFLOWER UNITS

On May 1, 2008, the Kansas House failed for a second time to override Gov. Kathleen Sebelius's (D) veto of legislation that would have allowed Sunflower Electric Power Corporation to build two coal-fired generating units in western Kansas. The vote in favor of overriding Sebelius's veto of the bill was 80-45, four votes shy of the necessary two-thirds majority. The bill also would have prevented the state agency from using its emergency powers to impose restrictions on future sources of emissions. Leaders of the Republican-controlled legislature are considering a variety of other ways to provide support for the project. For the full text of the bill and a summary on the web site of the Kansas legislature, <u>click here</u>. For more information, contact Rae Cronmiller at (703) 907-5791 or at <u>rae.cronmiller@nreca.coop</u>.

ENDANGERMENT CASE

A federal district court in California on March 28, 2008, on a motion to dismiss, threw out a labor rights organization's request to force EPA to immediately decide whether greenhouse gases endanger public health (*San Francisco Chapter of A. Philip Randolph Institute, et al. v. EPA, et al.*). The court said the group's request "is so far afield from notions of comity and propriety that it need not be seriously considered." This decision is potentially damaging for environmentalists who are asking a federal appeals court to compel EPA to quickly issue a climate endangerment finding pursuant to the Supreme Court case of *Massachusetts v. EPA*. The labor rights organization sued EPA and the Bay Area Air Quality Management District last September attempting to stop the permitting process for a proposed power plant. For more information, contact Rich Robinson at (703) 907-5856 or at richard.robinson@nreca.coop.

DEPARTMENT OF INTERIOR LISTS POLAR BEAR AS "THREATENED SPECIES"

On May 14, 2008, Secretary of Interior Dirk Kempthorne announced that he is listing the polar bear as a "threatened species" under the Endangered Species Act (ESA). According to the Secretary, the loss of habitat because of the decline in sea ice puts polar bears at risk of becoming endangered in the foreseeable future, the standard established by the ESA for designating a threatened species. In his comments, Secretary Kempthorne reiterated President Bush's statement last month that the ESA was never intended to regulate global climate change. Kempthorne promised the following actions:

• Importantly, the Director of the U.S. Fish & Wildlife Service will issue guidance to staff that the best scientific data available today cannot make a causal connection between harm to listed species or their habitats and greenhouse gas emissions from a specific facility, resource development project or government action. The Department will issue an official legal opinion further clarifying these points. The guidance and

legal opinion will hopefully provide an acceptable argument for cooperatives seeking to permit power plants that they do not have to consult with the U.S. Fish & Wildlife Service pursuant to the ESA regarding any harm to polar bears.

- The Department will propose common sense modifications to the existing ESA regulatory language to prevent abuse of this listing to erect a back-door climate policy outside the normal system of political accountability.
- The U.S. Fish and Wildlife Service is proposing a 4(d) rule that states that if an activity is permissible under the stricter standards of the Marine Mammal Protection Act (MMPA), it is also permissible under the ESA with respect to the polar bear. This rule, effective immediately, will, the Secretary stated, ensure the protection of the bear while allowing the U.S. to continue to develop its natural resources in the arctic region in an environmentally sound way.

For copies of Secretary Kempthorne's remarks, the MMPA Section 4(d) rule, the guidance from the Director of the U.S. Fish & Wildlife Service and other materials on the Department of Interior web site, <u>click here</u>. For more information, contact Rich Robinson at (703) 907-5856 or at <u>richard.robinson@nreca.coop</u>.

GOVERNORS PROTEST FEDERAL VEHICLE GREENHOUSE GAS EMISSIONS PLAN

On April 24, 2008, California Governor Arnold Schwarzenegger and 11 other governors sent a letter to President Bush protesting a federal proposal to limit California's right to regulate greenhouse gas (GHG) emissions from vehicles. The letter came after the National Highway Traffic Safety Administration (NHTSA) issued a 417-page Notice of Proposed Rulemaking (NOPR) on April 22, 2008, proposing a set of fuel-efficiency standards, including a provision that would override California laws that set limits on carbon emissions from cars. NHTSA is taking comment on its NOPR until May 28, 2008. In 2007, two federal district courts ruled in Vermont and California that the GHG motor vehicle emission standards adopted by those states are not preempted under the Energy Policy and Conservation Act. The governors also sent letters to the Senate and House leadership complaining about the NHTSA action. For a copy of the letter to President Bush by Gov. Schwarzenegger and its accompanying press release, <u>click here</u>. For more information, contact Rich Robinson at (703) 907-5856 or at <u>richard.robinson@nreca.coop</u>.

EPA WILL NOT REGULATE REFINERY EMISSIONS UNDER NEW SOURCE PERFORMANCE STANDARDS

On April 30, 2008, EPA, in response to comments that urged the agency to include greenhouse gas (GHG) emission standards in the NSPS for petroleum refineries, declined to adopt any such standards at this time. EPA explained its position, stating that (1) it has no legal obligation to promulgate GHG emission standards under Section 111 of the CAA at this time; and (2) it is reasonable not to adopt any such standards in this rulemaking, but instead to consider more broadly the issue of possible Section 111 regulation in the agency's upcoming advance notice of proposed rulemaking (ANPR) on potential Clean Air Act regulation of GHG emissions. EPA was under court order to complete the review for petroleum refineries and to issue revised standards by April 30, 2008. EPA also said regulating GHGs under the refinery standards would automatically trigger NSR

*** ENVIRONMENTAL BULLETIN

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requirements for thousands of stationary sources including power plants. For a copy of the refinery standards, <u>click here</u>. For more information, contact Rich Robinson at (703) 907-5856 or at <u>richard.robinson@nreca.coop</u>.

CCS ALLIANCE SUBMITS COMMENTS ON STATE OF WASHINGTON PROPOSAL

On April 18, 2008, the CCS Alliance, established to encourage deployment of carbon, capture and sequestration (CCS) technologies, and of which NRECA is member, submitted comments to the State of Washington on its proposed rules on CCS. This proposal is the first attempt by any state to regulate these activities, and the Alliance filed comments because of the potential of these rules to become a model for other states. The Alliance found a number of problems with the proposed rules including that the proposal:

- If finalized, will make it more difficult to build or upgrade fossil-fired power plants in the state,
- Treats sequestered CO₂ as a waste rather than a commodity,
- Requires permanent sequestration for 1,000 years,
- Will lead to plant shutdown in all cases of extended sequestration site noncompliance,
- Does not exclude liability under other environmental laws, and
- Provides no defined post-closure period of financial responsibility.

For a copy of the comments on Cooperative.com, <u>click here</u>. For more information, contact Rich Robinson at (703) 907-5856 or at <u>richard.robinson@nreca.coop</u>.

DOE TO PROVIDE FUNDING FOR CCS PROJECTS

On May 6, 2008, the Department of Energy (DOE) announced that it will give grants to the West Coast and Midwest Regional Carbon Sequestration Projects that will total \$126.6 million. Industry partners will provide \$56.6 million in cost-shared funds. The money will be used to conduct large-scale carbon capture and sequestration (CCS) tests in Ohio and California to demonstrate that capturing CO_2 emissions, compressing them, and storing them in the ground is a safe, permanent, and viable way to reduce CO_2 emissions into the atmosphere. For additional information on DOE's web site, <u>click here</u>. For more information, contact Rich Robinson at (703) 907-5856 or at <u>richard.robinson@nreca.coop</u>.

CALIFORNIA CONSUMER ADVOCATES OPPOSE UTILITY-FUNDED CLIMATE STUDIES

A California consumer advocacy group is planning to challenge the legality of a plan by state energy regulators to increase electricity rates to fund climate change research and technology development. The California dispute may provide other state and federal officials lessons about how certain climate change programs can be paid for in the coming years. A key issue, expected eventually to be addressed by other state regulators as well as federal officials, is to what degree utilities can raise rates to implement GHG-reduction programs. At issue is a plan approved April 10, 2008, by the California Public Utilities Commission to create the California Institute for Climate Solutions, which will fund research, development and commercialization of technologies to reduce GHG emissions in the electricity and natural gas sectors. The plan includes a slight increase in electricity rates for customers of the state's investor owned utilities, which serve about two-thirds of the

California population. A ratepayer advocacy organization, The Utility Reform Network (TURN), contends CPUC is not authorized to raise electricity rates on its own to fund inhouse programs, and plans to appeal the CPUC decision. For more information, contact Rich Robinson at (703) 907-5856 or at <u>richard.robinson@nreca.coop</u>.

CLIMATE NOTES

The April 21, 2008 edition of *Climate Notes* is available on Cooperative.com by <u>clicking</u> <u>here</u>. The May 2, 2008 edition of *Climate Notes* is available on Cooperative.com by <u>clicking here</u>.

Clean Water Act

SUPREME COURT AGREES TO HEAR INDUSTRY LAWSUIT ON SECTION 316(b) COOLING WATER INTAKE RULE

When the Second Circuit rejected EPA's final Phase II, 316(b) rules, one of the most important agency decisions the judge objected to was the use of a cost-benefit analysis to determine Best Technology Available (BTA) for minimizing environmental harm. EPA has long considered cooling towers to be a leading candidate for BTA, and if costs are not an issue, towers will almost certainly be declared BTA in many circumstances. Cost-benefit analysis is such an important issue that the utility industry asked the Supreme Court to review the circuit court decision. One IOU estimated it would cost one billion dollars to retrofit cooling towers on an existing 2-unit nuclear power plant. Twelve co-op G&T's have plants that could be affected because they use once-through cooling water or cooling lakes.

Three petitions asking for Supreme Court review were filed by Entergy Corp., PSEG and by UWAG on behalf of it members, including NRECA. The three separate petitions were filed in November 2007, challenging the U.S. Court of Appeals for the Second Circuit decision. The Supreme Court agreed to hear the case, consolidated the three petitions and limited them to one issue: "Whether Section 316(b) of the Clean Water Act, authorizes EPA to compare the costs with benefits in determining the best technology available for minimizing adverse environmental impact at cooling water intake structures." The Supreme Court is expected to hear the case in November or December. In the meantime, state permit-issuing authorities should be aware of these activities and conduct their 316(b) programs accordingly. For additional information, please contact Jim Stine at james.stine@nreca.coop or 703-907-5739.

OBERSTAR HOLDS HEARINGS ON BILL TO AMEND CLEAN WATER ACT

On April 16, 2008, Rep. James Oberstar, Chairman of the House Transportation and Infrastructure Committee held hearings on H.R. 2421, The Clean Water Restoration Act of 2007. Among other items, the bill would eliminate the term "navigable" from the Clean Water Act. By doing so, the bill would extend federal jurisdiction over all "waters of the United States," an essentially unlimited term that would include essentially all water regardless of where it is found. There has been a continuing disagreement over how state and federal water regulatory programs for wetlands and other programs should be coordinated. Oberstar's bill would essentially eliminate any state controls and moot this controversy. NRECA does not expect the bill to move out of committee this year. For additional information please contact Jim Stine at james.stine@nreca.coop or 703-907-5739.

Waste Issues

USWAG SCHEDULES NEXT PCB WORKSHOP

USWAG will hold its Advanced PCB Workshop on November 19 - 20, 2008, at the Marriott Memphis Downtown hotel and Cook Convention Center in Memphis, TN. Save the date. For further information, <u>click here</u>. This meeting will not be a repeat of previous USWAG PCB workshops, but promises to be a practical, problem solving course for personnel with a working knowledge of the PCB regulations. Please save the date for this educational advanced training course. Information on the Workshop agenda, registration and hotel accommodations will be available in the next several weeks. If you have any questions, please contact Gayle Novak, USWAG Representative at <u>gayle.novak@uswag.org</u>, or at 202-508-5654.

Energy

IOWA ENACTS LAW REQUIRING CO-OPS TO SET ENERGY EFFICIENCY GOALS

On May 6, 2008, Iowa Gov. Chet Culver (D) signed legislation that will require electric cooperative utilities in the state to establish energy efficiency goals and the programs that will enable them to meet those goals. S.F. 2386, which took effect upon its signing, also mandates the creation of an energy efficiency commission, directed to devise efficiency standards for all new and existing buildings. The bill originally required co-ops to achieve energy efficiency goals that translated into usage reductions of 1.5 percent annually. When the co-ops objected both to the set goals and the increased authority of the Iowa Department of Public Safety to enforce them, the bill was amended to require co-ops to instead set goals for energy efficiency. The law also requires co-ops to report back to the state on their progress in achieving energy efficiency goals. For a copy of the bill, <u>click here</u>. For further information, contact Rich Robinson at (703) 907-5856 or at richard.robinson@nreca.coop.

Transportation

REQUALIFICATION TIMEFRAMES FOR SF6 CYLINDERS REMINDER

No DOT 3AA cylinder, commonly used to transport SF6, may be filled with a hazardous material and offered for transportation unless that cylinder has been successfully requalified pursuant to the standards in 49 C.F.R. Part 180, Subpart C, and marked accordingly. To requalify, DOT 3AA cylinders must meet the general requirements for specification cylinders in 49 C.F.R. §178.35 as well as those specific to 3AA cylinders established in §178.37. A cylinder may be requalified at any time during or before the month and year that the

requalification is due. However, a cylinder filled before the requalification becomes due may remain in service until it is emptied. A cylinder with a specified service life may not be refilled and offered for transportation after its authorized service life has expired. Generally, a DOT 3AA cylinder with a water capacity of 56.7 kg (125 lb) or less that is removed from any cluster, bank, group, rack or vehicle each time it is filled must be requalified every five years. Under certain circumstances, the requalification period can be extended to 10 years. For further information, contact Rich Robinson at (703) 907-5856 or at richard.robinson@nreca.coop.

INCREASE IN HAZARDOUS MATERIALS REGISTRATION FEES PROPOSED

On May 5, 2008, the Pipeline and Hazardous Materials Safety Administration proposed an increase to the hazardous materials registration fees for offerors and transporters of certain quantities of hazardous materials (identified in 49 C.F.R. §107.601) from \$975 (plus a \$25 administrative fee) to \$2475 (plus a \$25 administrative fee). The proposed increase would fully fund the Hazardous Materials Emergency Preparedness grants program to the level authorized in Department of Transportation's approved Fiscal Year 2008 budget, but would not be effective until the registration year 2009-2010. The increase would apply to all registrants except for small businesses and not-for-profit organizations. The proposed increase would also require those registrants that have pre-registered for 2009-2010 and later years to supplement their previously paid fees with the increased amount. For a copy of the proposal (73 *Fed. Reg.* 24,519), <u>click here</u>. For further information, contact Rich Robinson at (703) 907-5856 or at <u>richard.robinson@nreca.coop</u>.

Produced by the NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION Environmental Affairs Unit, Editor Richard Robinson

The Environmental Bulletin is provided free of charge to all NRECA members upon request. Prior editions and referenced documents are posted to the Cooperative.com web site at: https://www.cooperative.com/environmental/resources/EnvironmentalBulletin/EnvironmentalBulletin.htm

For additional information regarding listed issues, contact: Rae Cronmiller, Environmental Counsel, 703-907-5791 or <u>rae.cronmiller@nreca.coop</u>, or Bill Wemhoff, Sr. Environmental Mgr. (Air Issues), 703-907-5824 or <u>bill.wemhoff@nreca.coop</u> or Jim Stine, Sr. Environmental Mgr. (Water & Solid Waste Issues), 703-907-5739 or <u>james.stine@nreca.coop</u> or Carol Whitman, Principal, Legislative Affairs, 703-907-5790 or <u>carol.whitman@nreca.coop</u> Richard Robinson, Environmental Policy Representative, 703-907-5856 or <u>richard.robinson@nreca.coop</u> For information on corporate level policy regarding listed issues, contact: Kirk Johnson, Vice President, Environmental Affairs, 703-907-5775 or <u>kirk.johnson@nreca.coop</u>.



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ENVIRONMENTAL BULLETIN

June 5, 2008

What's Inside This Issue

In Appreciation of Richard Robinson

This edition of the Environmental Bulletin will be Richard Robinson's final edition, as he is leaving NRECA to return to the public sector. We will miss Richard around NRECA; he has contributed significantly to the work of the association on behalf of our membership.

The Environmental Bulletin will be taking a summer break in Richard's absence. However, the Environmental Policy Department at NRECA will continue to send information out over the listserves from time to time as necessary to keep cooperatives informed of important environmental issues.

Thank you, Richard, for all your contributions. ~ Kirk Johnson, VP Environmental Policy

CLEAN AIR ACT

- <u>APPEALS COURT DENIES PETITION TO REHEAR CAMR DECISION</u>: EPA must now promulgate MACT mercury rule
- <u>CINERGY WINS NSR CASE</u>: Jury finds in Cinergy's favor on 10 or 14 alleged violations
- <u>CHALLENGES FILED TO OZONE RULE</u>: States, industry and environmental groups all file lawsuits
- <u>COURT DISMISSES CHALLENGE TO PROPOSED WASTE-COAL POWER</u> <u>PLANT</u>: Court says that it will not substitute its judgment for that of the state environmental agency
- <u>MINNESOTA BOARD ASKED TO DENY CERTIFICATE OF NEED FOR</u> <u>COAL-FIRED PLANT IN SOUTH DAKOTA</u>: Two administrative law judges say that load can be handled by conservation and renewable energy
- <u>UARG FILES COMMENTS ON NO2 DRAFT ASSESSMENT</u>: UARG generally agrees with EPA's approach

CLIMATE CHANGE

- ORAL ARGUMENTS MADE BEFORE EPA ENVIRONMENTAL APPEALS BOARD ON DESERET CASE: Board focused on whether CO2 is subject to regulation
- <u>BOXER-LIEBERMAN-WARNER RELEASE REVISED BILL FOR SENATE</u> <u>DEBATE</u>: NRECA opposes revised bill because it greatly disadvantages cooperatives in allocating allowances

- <u>SENATE REJECTS LIEBERMAN-WARNER CLIMATE BILL</u>: Procedural vote effectively ends climate debate for 2008
- HOUSE CLIMATE PAPER FOCUSES ON COST CONTAINMENT, PREVIEWS LEGISLATION: Fourth white paper from Energy And Commerce Committee
- <u>MARKEY CLIMATE CHANGE BILL</u>: Bill goes much further in requiring CO2 reductions than Senate bill
- ENVIRONMENTAL GROUPS TO CHALLENGE DECISION ON POLAR BEAR LISTING: Groups have multiple objections to decision to list polar bear as "threatened: rather than "endangered"
- <u>KANSAS GOVERNOR VETOES ANOTHER ATTEMPT TO BUILD</u>
 <u>SUNFLOWER PLANT</u>: Governor vetoes third attempt to overturn her previous
 decision
- **<u>CLIMATE NOTES</u>**: May 29, 2008 edition available

CLEAN WATER ACT

 DRAFT GENERAL PERMIT FOR STORM WATER DISCHARGES FROM CONSTRUCTION PROJECTS: Co-ops can expect states to adopt the federal permit once it is finalized

WASTE ISSUES

• NRECA WEB CONFERENCE ON NEW ENVIRONMENTAL COMPLIANCE GUIDE FOR DISTRIBUTION COOPERATIVES: Guide a tool to help distribution cooperative staff understand and manage water and waste environmental issues

ENERGY

HOUSE PASSES BILL TO EXTEND EXPIRING TAX BREAKS, PROVIDE
 <u>INCENTIVES FOR RENEWABLES</u>: President threatens to veto yet another attempt
 to pass these extensions

TRANSPORTATION

• NRECA COMMENTS ON STANDARDS FOR TESTING COMMERCIAL DRIVER SKILLS: NRECA recommends that utilities be allowed to train their own drivers without requiring utilities to become accredited training institutions

<u>Clean Air Act</u>

APPEALS COURT DENIES PETITION TO REHEAR CAMR DECISION

On May 20, 2008, the full U.S. Court of Appeals for the DC Circuit denied requests to reconsider a decision by the three-judge panel that vacated the Clean Air Mercury Rule (CAMR) in February of this year. The panel ruled that EPA violated provisions of the CAA when it removed control of electric generating units from under Section 112 of the Act and promulgated CAMR under Section 111. The full court's refusal to rehear the case means that EPA will now begin working on developing a Section 112 rulemaking that requires the use of maximum achievable control technology (MACT) on every source. Meanwhile, newly constructed and reconstructed major sources are subject to case-by-case MACT review under Section 112(g). Because all federal mercury reduction regulations have now been eliminated, plants no longer need to comply with CAMR's emission limits or its mercury monitoring requirements. Sources in states that declined to adopt the CAMR cap-and-trade program, however, will need to examine whether they may continue to be subject to their state mercury emission limitations. For more information, contact Bill Wemhoff at (703) 907-5824 or at bill.wemhoff@nreca.coop.

CINERGY WINS NSR CASE

On May 22, 2008, a federal jury in Indiana unanimously cleared Cinergy Corp. of 10 of 14 alleged violations of NSR provisions, but found four violations at an Indiana coal-fired power plant (*United States v. Cinergy Corp.*, S.D. Ind., No. 99-1693, 5/22/08). In 1999, the federal government charged Cinergy with violating NSR after the company made major modifications at several power plants. The remedy portion of the case will begin on December 8, 2008, and the government will be seeking civil penalties from Cinergy on the four violations. As previously reported, in November 2007, Judge Larry McKinney refused Cinergy's request to reconsider judgments against the company, rejecting Cinergy's contention that EPA had not given it "fair notice" of its interpretation of the projects that trigger NSR requirements. McKinney also upheld EPA's narrow definition of routine maintenance projects exempted from NSR, rejecting Cinergy's claim that a project that is routine in the industry is routine even if it occurs at an individual plant only once. McKinney agreed with EPA that a project has to be routine at an individual plant to qualify as routine maintenance at that plant. For more information, contact Rae Cronmiller at (703) 907-5791 or at rae.cronmiller@nreca.coop.

CHALLENGES FILED TO OZONE RULE

On May 27, 2008, 14 states sued EPA seeking stricter air quality standards for ozone (*New York v. EPA*, D.C. Cir., No. 08-1202, 5/27/08). Meanwhile, Mississippi and a coalition of industry trade groups also filed separate petitions for review May 23 and May 27, 2008, respectively, arguing the new standards are too strict (*Mississippi v. EPA*, D.C. Cir., No. 08-1200, 5/23/08; *Ozone NAAQS Litigation Group v. EPA*, D.C. Cir., No. 08-1204, 5/27/08). A coalition of environmental groups filed a lawsuit against EPA on May 27, 2008, also seeking to strengthen the ozone standard. The groups allege EPA Administrator Stephen Johnson was unduly pressured by the White House to consider factors such as the economic impact of the ozone rule that are expressly forbidden under the Clean Air Act

(American Lung Ass'n v. EPA, D.C. Cir., No. 08-1203, 5/27/08). For more information, contact Bill Wemhoff at (703) 907-5824 or at <u>bill.wemhoff@nreca.coop</u>.

COURT DISMISSES CHALLENGE TO PROPOSED WASTE-COAL POWER PLANT

On May 13, 2008, a federal court in Pittsburgh threw out a Clean Air Act citizen suit challenging the proposed construction of a power plant fueled by waste coal in southwestern Pennsylvania, concluding that it has no jurisdiction to hear the case (Sierra Club v. Wellington Development-WVDT LLC, W.D. Pa., No. 08-cv-293, 5/13/08). If the court's reason for dismissing the case is adopted by federal courts elsewhere, it could be significant for coal-fired power plant construction projects throughout the country targeted for litigation by environmental groups. The citizen suit claimed that federal and state rules invalidated a permit to build a new major stationary source of air pollutant emissions if construction does not begin with 18 months after the permit is approved, if construction is delayed for 18 months or more, or if construction does not begin within a reasonable time. In its opinion, the court said the Pennsylvania Department of Environmental Protection inspected the building site in December 2006 to evaluate and document construction activities, and concluded in writing that the company had met the requirement to begin construction within 18 months after receiving its plan approval. The court said a ruling in favor of the plaintiffs "would require us to question the agency's own conclusion, made after a site inspection, that work on the power plant had timely commenced." The court said it has no subject matter jurisdiction over a challenge to a state permitting decision. For more information, contact Rae Cronmiller at (703) 907-5791 or at rae.cronmiller@nreca.coop.

MINNESOTA BOARD ASKED TO DENY CERTIFICATE OF NEED FOR COAL-FIRED PLANT IN SOUTH DAKOTA

On May 9, 2008, two state administrative law judges (ALJs) recommended that the Minnesota Public Utilities Commission deny a certificate of need for the Big Stone II coalfired power plant proposed for eastern South Dakota (*In re: Otter Tail Power Co. and Others for Certification of Transmission Facilities in Western Minnesota*, Minn. OAH, No. 12-2500-17037-2, 5/9/08). The ALJs wrote that the consortium of power companies behind the proposed plant failed to show that the area's demand for electricity could not be met more cost effectively than energy conservation and load management measures, and that they failed to show that Big Stone II would be less expensive than renewable energy sources when considering its environmental costs. The ALJs also found that the companies failed to consider the full environmental costs of using coal as the energy source. While the South Dakota Public Utilities Commission has approved the project, the Minnesota Public Utilities Commission must also approve it because of the transmission lines that would have to be built in Minnesota. For more information, contact Rae Cronmiller at (703) 907-5791 or at rae.cronmiller@nreca.coop.

UARG FILES COMMENTS ON NO2 DRAFT ASSESSMENT

On May 30, 2008, UARG submitted formal comments on EPA's draft health risk and exposure assessment for NO2. The assessment, when finalized, will support the review of the NO2 Primary National Ambient Air Quality Standard. In its comments, UARG said

that while it agrees with EPA's decision to base its health risk assessment on human clinical studies, the agency's choices in conducting the assessment have yielded an inflated, biased and alarmist portrait of risks from exposure to NO2 in ambient air. UARG said EPA must revise the assessment to be more even-handed and to reflect more accurately NO2 exposure and the slight health risk that such exposures poses. For a copy of UARG's comments on Cooperative.com, <u>click here</u>. For more information, contact Bill Wemhoff at (703) 907-5824 or at <u>bill.wemhoff@nreca.coop</u>.

Climate Change

ORAL ARGUMENTS MADE BEFORE EPA ENVIRONMENTAL APPEALS BOARD ON DESERET CASE

On May 29, 2008, EPA's three-member panel Environmental Appeals Board (EAB) heard oral arguments on whether the term "subject to regulation" in the Clean Air Act (CAA) NSR provision requires regulation of CO₂ emissions for coal-fired units under Best Available Control Technology (BACT) mandates. Deseret's planned 110 MW Fluidized Bed Unit designed to burn waste coal was the subject of the hearing. Located at the existing Bonanza plant site, the unit received a federal NSR permit because of its location on Indian Lands. The panel focused on whether 1990 CAA amendments require EPA to mandate CO₂ monitoring for coal-fired units, and if so, whether such monitoring fits the definition of CO₂ "subject to regulation" under the CAA's NSR language. NRECA filed an amicus brief supporting EPA and Deseret in the case. The panel decision is expected by end of summer. The loser can appeal the decision to a federal court of appeals. For more information, contact Rae Cronmiller at (703) 907-5791 or at <u>rae.cronmiller@nreca.coop</u>.

BOXER-LIEBERMAN-WARNER RELEASE REVISED BILL FOR SENATE DEBATE

Sen. Barbara Boxer (D-CA), Chairman of the Environment and Public Works Committee, along with Sens. Joseph Lieberman (I-CT) and John Warner (R-VA), has released a "manager's amendment" to the Lieberman-Warner climate change bill (S. 2191). The 492page revision includes funds for carbon capture and storage research and funds intended to help ease consumer and business transitions to a low-carbon economy. The bill is worse for electric co-ops than S. 2191, the previous version of the bill. The carbon allocations for cooperatives are substantially less than other utility sectors would receive. Co-op allocations are capped at eight percent of the utility allocation while co-op's produce eight percent of utility emissions. Overall, the bill now reduces carbon allocations for co-op consumers and makes co-ops even more vulnerable to the auction of allocations. The bill also fails to address other important issues such as the need for an effective safety valve and emission reduction timelines that match the availability of carbon control technologies. Affecting all utility sectors, the bill eliminates allocations to future fossil fuel power plants. NRECA opposes the current Boxer-Lieberman-Warner climate bill. For a copy of the manager's amendment, click here. For a copy of NRECA's position statement on Cooperative.com, click here. For more information, contact Carol Whitman at (703) 907-5790 or carol.whitman@nreca.coop.

SENATE REJECTS LIEBERMAN-WARNER CLIMATE BILL

The Senate has ended debate on the Boxer-Lieberman-Warner climate bill on June 6, 2008, for this year, effectively rejecting the bill. After a 74 to 14 vote to start debate, Republican Senators used up a day on a motion to proceed to the bill, then forced a full reading of the 492-page substitute amendment that lasted nearly nine hours. Opponents repeatedly pointed out that the bill would raise the price of gasoline an additional \$1 per gallon while moderate and conservative Democrats worried in private about debating a climate bill when voters back home are upset about current high gas prices. In the absence of any substantive debate on the bill's timelines, international competitiveness, or economic impacts to families and workers, Majority Leader Harry Reid (D-NV) filed a motion to end the debate. The 48 to 36 vote fell short of the 60 votes needed to proceed to a vote on the bill. As described in the above article, electric cooperatives opposed the bill. While this debate is finished, its contentiousness foreshadows the difficulties that lie ahead in crafting climate legislation. For a copy of the roll call vote, <u>click here</u>. For more information, contact Carol Whitman at (703) 907-5790 or carol.whitman@nreca.coop

HOUSE CLIMATE PAPER FOCUSES ON COST CONTAINMENT, PREVIEWS LEGISLATION

On May 27, 2008, the House Energy and Commerce Committee released its fourth climate change white paper. The new paper, "Getting the Most Greenhouse Gas Reductions for our Money," discusses how to contain costs while simultaneously achieving environmental goals. The paper offers a preview of some elements of legislation likely to be introduced later in this Congress by Committee Chairman John Dingell (D-MI) and Subcommittee Chairman Rick Boucher (D-VA). Their bill would allow emitters to use offsets and to bank emissions allowances for the future. While the paper supports unlimited banking, it says the amount of offsets that could be used will be the subject of a future paper. This fourth paper also recommends that lawmakers consider a number of cost-saving features including a safety valve. NRECA will file comments to respond to numerous important questions raised in the white paper in June. For a copy of the white paper, <u>click here</u>. For more information, contact Carol Whitman at (703) 907-5790 or carol.whitman@nreca.coop.

MARKEY CLIMATE CHANGE BILL

On June 4, 2008, Rep. Ed Markey (D-MA), Chair of the House Select Committee on Energy Independence and Global Warming and a senior member of the Energy and Commerce Committee, released his own climate bill, the "Investing in Climate Action and Protection Act," with reduction percentages even more stringent than the Lieberman-Warner proposal. The Markey bill would amend the Clean Air Act to establish an economy-wide cap and-trade system, and would auction virtually all of the allowances in lieu of free distribution. The bill's cap-and-trade program would set a cap on greenhouse gas GHG emissions at 2005 levels by 2012, 20 percent below 2005 levels by 2020, and to 85 percent below 2005 levels by 2050. In addition to the broad-based cap, the bill would require new coal-fired power plants that begin construction after January 1, 2009 to capture and sequester 85% of their total CO₂ emissions. Beginning on January 1, 2012, and at fiveyear intervals thereafter, EPA would be required to increase the minimum rate of capture and geological sequestration of CO_2 emissions if a greater rate of capture and geological sequestration is achievable through the application of the best available control technology. For a copy of the bill, <u>click here</u>. For more information, contact Carol Whitman at (703) 907-5790 or <u>carol.whitman@nreca.coop</u>.

ENVIRONMENTAL GROUPS TO CHALLENGE DECISION ON POLAR BEAR LISTING

On May 20, 2008, environmental groups announced that they will be suing the Bush administration on its recent decision to list the polar bear as a threatened species under the Endangered Species Act (*Center for Biological Diversity v. Kempthorne*, N.D. Cal., No. 08-1339, 5/16/2008). The groups filed claims on May 16, 2008, targeting the interim rule the Department of the Interior (DOI) published a day earlier, claiming that the rule is illegal and denies polar bears the full protections provided under the act. The groups said Interior Secretary Dirk Kempthorne failed to provide public notice of the rule, and did not conduct the environmental review required under the National Environmental Policy Act. The groups also sent Kempthorne a 60-day notice announcing a planned lawsuit alleging violations of the Endangered Species Act (ESA) itself. Specifically, the groups claim DOI, in deciding polar bears are "threatened" rather than "endangered," ignored best available science and failed to designate critical habitat in the final listing rule. For more information, contact Rae Cronmiller at (703) 907-5791 or at rae.cronmiller@nreca.coop.

KANSAS GOVERNOR VETOES ANOTHER ATTEMPT TO BUILD SUNFLOWER PLANT

On May 16, 2008, Kansas Gov. Kathleen Sebelius (D) vetoed an economic development and tax incentives bill because of provisions that would have allowed Sunflower Electric to build two new coal-fired generators at a power plant in western Kansas, even though a state agency had denied an air quality permit for the project. The Kansas House Speaker signaled that no effort would be made to revive the bill. In her veto statement, Sebelius criticized legislative leaders for tying together the tax incentives in the bill with the provisions related to the coal plant, which she had previously made clear were not acceptable to her. For more information, contact Rae Cronmiller at (703) 907-5791 or at rae.cronmiller@nreca.coop.

CLIMATE NOTES

The May 29, 2008 edition of *Climate Notes* is available on Cooperative com by <u>clicking</u> <u>here</u>.

Clean Water Act

DRAFT GENERAL PERMIT FOR STORM WATER DISCHARGES FROM CONSTRUCTION PROJECTS

On May 16, 2008, EPA proposed a new general permit that will apply to storm water runoff from a construction site (73 *Fed. Reg.* 28454). The action was necessary because the 2003 general permit is about to expire. The new permit does not appear to make any significant changes in the general permit requirements. It includes language on how EPA may coordinate with local erosion and sediment control programs. The permit continues to

apply to construction sites that disturb one or more acres of land. While the EPA general permit only applies to states where EPA is the NPDES permit-issuing authority, it is important to co-ops because states with their own NPDES programs tend to incorporate the federal requirements into their regulations. For a copy of the proposal, <u>click here</u>. For additional information please contact Jim Stine at <u>james.stine@nreca.coop</u> or 703-907-5739.

8

Waste Issues

NRECA WEB CONFERENCE ON NEW ENVIRONMENTAL COMPLIANCE GUIDE FOR DISTRIBUTION COOPERATIVES

NRECA has scheduled a brief web conference to introduce and review CRN's recently developed "Environmental Management Guide for Distribution Cooperatives." The Guide is a practical tool to help electric distribution cooperative staff understand and manage the many water and waste environmental issues they face. It provides a "first stop" resource to help identify key environmental issues and develop appropriate programs and measures to meet those obligations. The *Environmental Management for Distribution Co-ops Web Conference* has been scheduled for July 9, 2008, from 2-3 PM Eastern Time. Conference participants will:

- Learn the basics of how to use the Environmental Management Guide.
- Get an overview of what is contained in the guide.
- Gain a general understanding of the environmental management roles and responsibilities of most co-op staff.

For complete information on the conference, <u>click here</u>, or contact Brian Sloboda at <u>brian.sloboda@nreca.coop</u>, 703-907-5689.

Energy

HOUSE PASSES BILL TO EXTEND EXPIRING TAX BREAKS, PROVIDE INCENTIVES FOR RENEWABLES

Defying another White House veto threat, the House of Representatives on May 21, 2008, passed a tax package (H.R. 6049) that would extend dozens of expired and expiring tax provisions and that includes nearly \$17 billion in incentives and credits for renewable energy. In general, the bill would extend for one year a series of temporary tax provisions that expired at the end of 2007, such as the research and development tax credit, or that are set to expire at the end of 2008. The legislation also includes a series of longer-term extensions of energy policy incentives, such as an extension and modification of the Section 45 renewable energy production tax credit, and an extension through 2014 of the tax credit for solar energy and fuel cell investment. Most importantly to cooperatives, the bill would establish \$2 billion of new Clean Renewable Energy Bonds to finance "clean" energy production facilities, and it would establish a new tax credit for the purchase of plug-in hybrid or electric vehicle sales. The bill also includes nearly \$1.5 billion in tax credits for carbon capture and sequestration demonstration projects.

The measure would increase some other taxes to offset the extended tax breaks, a move that drew a veto threat from the administration. In a Statement of Administration Policy, the White House expressed "strong" opposition to the offsets, saying it does not believe that efforts to avoid tax increases on Americans need to be coupled with provisions to increase revenue. The measure now heads to the Senate, where its fate is uncertain. NRECA has joined a coalition supporting passage of the House bill. For a copy of the legislation, <u>click here</u>. For more information, contact Susan Pettit at (703) 907-5822 or at <u>susan.pettit@nreca.coop</u>.

Transportation

NRECA COMMENTS ON STANDARDS FOR TESTING COMMERCIAL DRIVER SKILLS

On May 22, 2008, NRECA filed comments responding to the Federal Motor Carrier Safety Administration's proposed new requirement for obtaining a Commercial Driver's License (CDL). Current rules require training for prospective CDL holders on driver qualifications, hours of service rules and whistle blower protection. The proposed rules would require CDL applicants to produce a certificate stating they have received a specified amount of behind-the-wheel training -- through an accredited training institution -- on a Commercial Motor Vehicle. NRECA's comments emphasized that paper certificates do not guarantee an increase in actual skills and recommended the agency specify the target level of relevant skills and test for it. For instance, utility drivers should be tested on the skills they need to operate bucket trucks in often-challenging conditions. Such skills are different than those needed to pilot an eighteen-wheeler. NRECA also recommended that utilities be allowed to train their own drivers without requiring utilities to become accredited training institutions. For a copy of NRECA's comments on Cooperative.com, <u>click here</u>. To learn more, contact Jonathan Glazier at (703) 907-5798 or jonathan.glazier@nreca.coop.

Produced by the NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION Environmental Affairs Unit, Editor Richard Robinson

The Environmental Bulletin is provided free of charge to all NRECA members upon request. Prior editions and referenced documents are posted to the Cooperative.com web site at: https://www.cooperative.com/environmental/resources/EnvironmentalBulletin/EnvironmentalBulletin.htm

For additional information regarding listed issues, contact: Rae Cronmiller, Environmental Counsel, 703-907-5791 or <u>rae.cronmiller@nreca.coop</u>, or Bill Wemhoff, Sr. Environmental Mgr. (Air Issues), 703-907-5824 or <u>bill.wemhoff@nreca.coop</u> or Jim Stine, Sr. Environmental Mgr. (Water & Solid Waste Issues), 703-907-5739 or <u>james.stine@nreca.coop</u> or Carol Whitman, Principal, Legislative Affairs, 703-907-5790 or <u>carol.whitman@nreca.coop</u> For information on corporate level policy regarding listed issues, contact: Kirk Johnson, Vice President, Environmental Affairs, 703-907-5775 or <u>kirk.johnson@nreca.coop</u>.



National Rural Electric Cooperative Association

NBECA

ENVIRONMENTAL BULLETIN

June 27, 2008

What's Inside This Issue

CLEAN AIR ACT

- SEMINOLE WINS COURT DECISION OVERTURNING STATE DENIAL OF PLANNED UNIT CERTIFICATION
- EPA's EAB REQUESTS MORE BRIEFING IN DESERET CASE
- UARG FILES COMMENTS GENERALLY SUPPORTING EPA'S PROPOSED NSPS REGULATIONS FOR NONMETALLIC MINERAL PROCESSING
- EPA PROPOSES TO AMEND NSPS FOR EGUS

CLIMATE CHANGE

- EPA TO ISSUE ANPR ON REGULATING GHGs UNDER THE CAA
- USWAG COMMENTS ON UIC REGULATIONS FOR GEOLOGIC SEQUESTRATION OF CARBON DIOXIDE
- CLIMATE NOTES June 23 edition available
- EIA PROJECTS WORLD ENERGY AND CO2 EMISSIONS WILL GROW BY 50 PERCENT BETWEEN 2005–2030

CLEAN WATER ACT and WASTE ISSUES

- EPA PUBLISHES DRAFT CONSTRUCTION GENERAL PERMIT
- EPA PUBLISHES DRAFT RISK ASSESSMENT FOR WOOD TREATMENT CHEMICALS

Clean Air Act

(For more information regarding the following articles, contact Rae Cronmiller at (703) 907-5791 or <u>rae.cronmiller@nreca.coop</u>, or Bill Wemhoff at (703) 907-5824 or <u>bill.wemhoff@nreca.coop</u>. Referenced documents are posted on Cooperative.com and can be viewed by <u>clicking here</u>.

SEMINOLE WINS COURT DECISION OVERTURNING STATE DENIAL OF PLANNED UNIT CERTIFICATION

On June 13, a Florida district court overturned the Secretary of Florida's Department of Environmental Protection's denial of state certification for Seminole's planned 750 MW coal-fired electric generating unit to be located at its existing Seminole plant site. In a short opinion, the judge found that the state failed to provide any legal ground to deny the certification based on Florida law and the established record developed to support the certification.

EPA's EAB REQUESTS MORE BRIEFING IN DESERET CASE

On June 16, the Environmental Appeals Board (EAB) requested EPA Region 8, the defendant in a case involving a permit for a new unit being constructed by Deseret Power Cooperative, to supply more information explaining the connection between the Public Law 101-549 Section 821 requiring CO2 monitoring and the enforcement of that requirement in separate Clean Air Act (CAA) provisions. Section 821 is not within the CAA. At stake is whether CO2 is "subject to regulation" under the CAA's new source review provisions and thus must be regulated. Deseret's planned 220 MW waste coal facility is a test case because Region 8 recently issued a new permit for the unit.

UARG FILES COMMENTS GENERALLY SUPPORTING EPA'S PROPOSED NSPS REGULATIONS FOR NONMETALLIC MINERAL PROCESSING

On June 23, the Utility air regulatory Group (UARG) filed comments on EPA's proposed NSPS rule for nonmetallic mineral processing that affects any generating unit that crushes or grinds limestone at the plant site for use in a wet scrubber. The proposal requires opacity and/or particulate limits depending on the physical configuration at the site and best demonstrated technology.

EPA PROPOSES TO AMEND NSPS FOR EGUs

On June 12, EPA issued a proposed rule that would revise the new source performance standards (NSPS) for electric utility steam generating units (EGUs), (73 FR 33642). Included in the proposal are technical and editorial corrections and opacity monitoring requirements for owners and operators of affected facilities that are subject to opacity limits, but are not required to use a continuous opacity monitor system. Deadline for comments is July 28.

Climate Change

Referenced documents are posted on Cooperative.com and can be viewed by clicking here.

CLIMATE NOTES

The June 23, 2008 edition of *Climate Notes* is available on Cooperative.com.

EPA TO ISSUE ANPR ON REGULATING GHGs UNDER THE CAA

EPA is expected, any day, to release an Advance Notice of Proposed Rulemaking (ANPR) that discusses potential responses by the agency to the Supreme Court's decision in *Massachusetts v. EPA*. It will explore alternative strategies for regulating major source greenhouse gas emissions under the Clean Air Act. EPA will seek comment on a wide variety of regulatory options, ranging from establishing a new national ambient air quality standard (NAAQS) for GHGs to the creation of emissions trading programs. The agency is not suggesting any particular path for regulation but raises a number of critical questions, including the amount of discretion it has and how it should regulate the six different GHGs. A notice will be sent out over the Environmental Listserv when the ANPR becomes available. For more information, contact Rae Cronmiller at (703) 907-5791 or rae.cronmiller@nreca.coop.

COURT RULES EPA HAS NOT UNREASONABLY DELAYED IN ITS RESPONSE TO *MASSACHUSETTS v. EPA* SUPREME COURT RULING

On June 26, the U.S. Court of Appeals for the D.C. Circuit issued an order denying petitioners claims that EPA has unreasonably delayed responding to the Supreme Court's ruling in *Massachusetts v. EPA*. In April, petitioners had asked the court to order EPA to make a determination on endangerment within 60 days regarding new motor vehicles' emission of CO2 and other greenhouse gases. A finding of endangerment regarding new motor vehicles emissions likely would have led to regulation of stationary sources as well. For more information, contact Rae Cronmiller at (703) 907-5791or rae.cronmiller@nreca.coop, or Bill Wemhoff at (703) 907-5824 or bill.wemhoff@nreca.coop.

USWAG COMMENTS ON REGULATIONS FOR GEOLOGIC SEQUESTRATION OF CO2

On June 16, USWAG provided general comments to EPA as the agency begins developing regulations for underground storage of CO2. The comments urge EPA to consider four broad issues in the rulemaking: 1) ensure flexibility to accommodate site-specific technological, geological and other factors, 2) rather than developing technical specifications to cover a wide range of sites, the agency should rely more on a performance-based regulatory approach and let local authorities focus on site-specific requirements, 3) consider both short-term and long-term financial assurance issues, and 4) consider how underground injection control (UIC) regulations will coordinate with other green house gas regulatory programs. For more information on these developments, please contact Jim Stine at james.stine@nreca.coop or 703-907-5739.

EIA PROJECTS WORLD ENERGY AND CO2 EMISSIONS WILL GROW BY 50 PERCENT BETWEEN 2005–2030

Worldwide energy consumption and CO2 emissions will grow by more than 50 percent between 2005 and 2030 according to the most likely long-term scenario outlined in a report released June 25 by the U.S. Energy Information Administration. The forecast is in line with estimates in the U.N. Intergovernmental Panel on Climate Change Fourth Assessment Report, released in November 2007. Most of the projected emissions growth will occur in developing nations and coal use is expected to expand by 2 percent per year reaching 29 percent of total world energy consumption by 2030. More information on the *International Energy Outlook 2008* report is available at: <u>http://www.eia.doe.gov/oiaf/ieo/index.html</u>.

Clean Water Act and Waste Issues

(For additional more information regarding the following articles, contact Jim Stine at james.stine@nreca.coop or (703) 907-5739. Referenced documents are posted on Cooperative.com and can be viewed by <u>clicking here</u> (for water documents) and <u>here</u> (for waste documents).

EPA PUBLISHES DRAFT CONSTRUCTION GENERAL PERMIT

EPA recently published a proposed General Permit for Storm Water Runoff from Construction Activities, 73 Fed. Reg. 28,454 (May 16, 2008). The proposed permit will replace the existing general permit that is about to expire. The general permit covers runoff from construction activities in states where EPA is the permit issuing authority. The permit is important to co-ops because many states simply adopt the conditions in the federal permit. The conditions in the draft permit are very similar to the existing permit. EPA is considering more substantive changes for the future and they decided to issue the new permit for two years, essentially unchanged, to fill the gap until new requirements can be developed. NRECA submitted comments supporting the general permit.

EPA PUBLISHES DRAFT RISK ASSESSMENT FOR WOOD TREATMENT CHEMICALS

EPA recently announced the availability of a number of documents and risk assessment studies addressing the three heavy duty wood preservatives, CCA, penta and creosote, 73 Fed. Reg. 20627 (April 16, 2008). The documents can be obtained from the rulemaking docket at Docket ID No. EPA-HQ-OPP-2004-0402, on line at: <u>www.regulations.gov</u>. These risk assessment studies are another step toward renewing the FIFRA registrations for these chemicals. EPA plans to publish "risk management" recommendations by the end of 2008. For the first time during the multi-year review process, EPA raised concerns about lineman exposure and secondary re-use of treated wood poles. NRECA helped USWAG develop comments on the studies. Electric Utilities continue to emphasize the significant benefits of using these chemicals to treat wood poles used in distribution systems and that these benefits clearly outweigh any risks that may be involved.

Produced by the NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION Environmental Affairs Unit

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NBECA

ENVIRONMENTAL BULLETIN

July 17, 2008

What's Inside This Issue

CLEAN AIR ACT

- FEDERAL COURT VACATES CAIR RULE
- COMMENTS FILED ON PROPOSED NSPS FOR COAL PREPARATION PLANTS
- NOTICE OF AVAILABILITY OF DRAFT FLAG REPORT
- EPA RELEASES FINAL INTEGRATED SCIENCE ASSESSMENT ON NOX
- ENVIRONMENTAL GROUPS SUE EPA ON NSR RULE

CLIMATE CHANGE

- EPA ISSUES ANPR FOR REGULATING GHGs UNDER THE CAA
- STATE COURT DEVELOPMENTS REGARDING CO2 CONTROLS
- COMMENTS FILED ON POLAR BEAR LISTING 4(d) RULE
- EPA RELEASES GLOBAL CHANGE RESEARCH PROGRAM INTERIM REPORT
- CLIMATE NEWS NOTES
- EPA PROPOSES RULE ON CO2 GEOLOGIC SEQUESTRATION
- HOUSE PANEL REVIEWS BILL TO ACCELERATE CCS TECHNOLOGY
- EPA RELEASES REPORT ON CLIMATE CHANGE AND HEALTH
- SENATOR BINGAMAN OUTLINES CLIMATE LEGISLATION PRINCIPLE

CLEAN WATER ACT and WASTE ISSUES

• EPA ISSUES FINAL GENERAL PERMIT FOR STORM WATER RUNOFF

Clean Air Act

For more information regarding the following articles, contact Rae Cronmiller at (703) 907-5791 or <u>rae.cronmiller@nreca.coop</u>, or Bill Wemhoff at (703) 907-5824 or <u>bill.wemhoff@nreca.coop</u>.

FEDERAL COURT VACATES CAIR RULE

On July 11th, the D.C. Federal Court of Appeals vacated the Clean Air Interstate Rule (CAIR) finding serious flaws in the complex regulation as related to the requirements in the Air Act to eliminate interstate air pollution that substantially contributes to downwind state ambient air quality standards nonattainment. Under the ruling, the court found flaws in regional reductions of SO2 emissions because the scheme did not address individual upwind state substantial contributions to downwind state nonattainment and found the CAIR trading program illegal because it required reductions in the acid rain SO2 allowances greater than one allowance per one ton of emissions. The court also found that the NOx trading program impermissibly allocated more NOx allowances to coal generation than gas. The opinion is available by clicking <u>here</u>.

COMMENTS FILED ON PROPOSED NSPS FOR COAL PREPARATION PLANTS

On July 14, 2008, UARG filed comments on EPA's Proposed New Source Performance Standards for Coal Preparation Plants (Subpart Y) as published at 73 FR 22901. The comments support the agency's proposed subcategorization, address EPA's conclusions regarding Best Demonstrated Technology and argue that the proposed particulate matter and opacity limits are too stringent. The comments are available by clicking <u>here</u>.

NOTICE OF AVAILABILITY OF DRAFT FLAG REPORT

On July 8, the National Park Service announced the availability of a draft revision of the 2000 Federal Land Managers' Air Quality Related Values Workgroup (FLAG) report (73 FR 39039). The report addresses various issues concerning air pollution effects on air quality related values in Class I areas under the control of the Federal Land Manager (FLM) agencies (the U.S. Forest Service, the National Park Service, and the U.S. Fish & Wildlife Service). Comments on the draft are due by September 8, 2008.

EPA RELEASES FINAL INTEGRATED SCIENCE ASSESSMENT ON NOx

On July 11th, EPA released its Integrated Science Assessment on Health Effects of Nitrogen Oxides ("NOx ISA"). The assessment will provide the scientific basis for EPA's review of the current primary NAAQS for NO2. It concludes that a likely causal relationship exists between short-term NO2 exposure and effects on the respiratory system, including changes in pulmonary function, increased respiratory symptoms and emergency department visits and hospital admissions. Although the ISA does not make any recommendations concerning possible revisions of the NAAQS, it implies that consideration of a short-term NO2 standard may be appropriate. The document is available by clicking <u>here</u>.

ENVIRONMENTAL GROUPS SUE EPA ON NSR RULE

On July 15th, environmental groups filed a lawsuit against EPA alleging an NSR rule issued May 8th exempts power plants and factories from meeting clean air standards for fine particulate matter. The groups also petitioned EPA Administrator Johnson asking him to reconsider the rule. The final rule, clarifying requirements for enforcement of the NSR program, sets significant emissions rates and allows emitters to trade emissions between states and regions but not within a given nonattainment area. A copy of the complaint is available by clicking <u>here</u>.

Climate Change

EPA ISSUES ANPR FOR REGULATING GHGs UNDER THE CAA

On July 11th, EPA issued an Advance Notice of Proposed Rulemaking (ANPR) that requests comment on the possibility of regulating greenhouse gas emissions (including carbon dioxide) under the Clean Air Act. The ANPR is EPA's response to the Supreme Court's decision in Massachusetts v. EPA. Although that case involved the possible regulation of greenhouse gas emissions from motor vehicles under section 202 of the Clean Air Act, the ANPR discusses the possible ramifications of a decision to regulate under section 202 and explores broadly regulation of greenhouse gas emissions under numerous other provisions of the Act. The ANPR and related Fact Sheet are available by clicking here. A White House policy memorandum and a press statement accompanying the ANPR are available by clicking here. For more information, contact Rae Cronmiller at (703) 907-5791 or rae.cronmiller@nreca.coop.

STATE COURT DEVELOPMENTS REGARDING CO2 CONTROLS

Environmental Groups Challenge Southern Montana's air permit The Montana Environmental Information Center has filed a petition in Montana state court against the state challenging Southern Montana's Highwood Station air permit for failing to consider "best available control technology" (BACT) for carbon dioxide emissions associated with the planned 220 MW coal-fired fluidized bed unit. The complaint follows those filed in other jurisdictions that allege the U.S. Supreme Court's decision in Massachusetts requires CO2 BACT as part of the process for obtaining a new source construction permit. The petition is available by clicking <u>here</u>.

<u>Georgia Court Overturns state air permit on failure to regulate CO2</u>. Meanwhile a Fulton County Georgia court struck down a Georgia state air permit for a planned 1200 MW coal-fired generating unit for failing to regulate CO2 and conduct a BACT analysis as part of the new source permitting process. The opinion is available by clicking <u>here</u>.

Sierra Club alleges South Dakota's Co-owned Big Stone coal-fired generating unit violated NSR for CO2 emissions

In a lawsuit filed on June 10th petitioners allege Big Stone violated Clean Air Act New Source Review provisions by making several modifications including coal-switching in 1975 and making physical modifications to supply steam to an ethanol plant in the 2001. Compliant alleges hourly increases in emissions rates and a failure to obtain an NSR permit for among other emissions, CO2. For a copy of the compliant, click <u>here</u>.
For more information regarding, contact Rae Cronmiller at (703) 907-5791 or rae.cronmiller@nreca.coop,

COMMENTS FILED ON POLAR BEAR LISTING 4(d) RULE

On July 14, UARG filed comments supporting the 4(d) Rule issued by the U.S. Fish and Wildlife Service simultaneous with the listing of the polar bear as a threatened species under the Endangered Species Act. The 4(d) Rule limits the scope of the polar bear listing by stating that lawful activities of a single source outside of Alaska cannot constitute a "take" under section 9 of the Endangered Species Act. Effectively, this eliminates many of the problems that could arise for electric generating units in permitting and other contexts from the polar bear listing. The comments are available by clicking <u>here</u>. For more information, contact Rae Cronmiller at (703) 907-5791 or <u>rae.cronmiller@nreca.coop</u>, or Bill Wemhoff at (703) 907-5824 or <u>bill.wemhoff@nreca.coop</u>.

EPA RELEASES GLOBAL CHANGE RESEARCH PROGRAM INTERIM REPORT

On July 10, EPA released for public comment a draft interim report of the U.S. Global Change Research Program, "Assessment of the Impacts of Global Change on Regional U.S. Air Quality: A Preliminary Synthesis of Climate Change Impacts on Ground-Level Ozone" ("Assessment") (73 FR 39695). The overall purpose of the Assessment is to provide sufficient information on the range of possible air quality responses to future climate change to enable air quality managers to consider global change in their planning and management decisions. Among the conclusions included in the draft report is that climate change could produce significant increases in near-surface ozone concentrations in many areas of the U.S. in the range of 2 to 8 ppb, perhaps as early as 2020. Comments on the Assessment are due by August 25, 2008. For more information, contact Bill Wemhoff at (703) 907-5824 or bill.wemhoff@nreca.coop.

CLIMATE NEWS NOTES

The July 14, 2008 edition of *Climate News Notes* is available on Cooperative.com by clicking here.

EPA PROPOSES RULE ON CO2 GEOLOGIC SEQUESTRATION

On July 15th, EPA released an unofficial proposed rule on regulating CO2 geologic sequestration under the Safe Drinking Water Act Underground Injection Program (UIC). It proposes a new class of injection wells – Class VI – under the existing UIC framework. The proposal describes the minimum level of safeguards that states would have to adopt, would impose financial responsibility on the owner or operator of the well for corrective action, injection well plugging, emergency and remedial response, and post-injection care and site closure. The official version will appear in the federal register likely in several weeks with a 120 day comment period. For a copy of the unofficial version, click here. For more information, contact Rae Cronmiller at (703) 907-5739 or james.stine@nreca.coop.

HOUSE PANEL REVIEWS BILL TO ACCELERATE CCS TECHNOLOGY

The House Energy and Air Quality Subcommittee recently heard testimony on the Carbon Capture and Storage Early Deployment Act, a bill to aggressively fund large-scale carbon capture-storage (CCS) projects. Subcommittee Chairman Rick Boucher (D-VA) says HR 6258 is necessary because it would take too long for revenues from auctions under a CO2 cap-and-trade program to become available for CCS research. The bill sets up a Carbon Storage Research Corporation for creating a \$10 billion fund over 10 years through annual fee assessments to utilities. Distribution utilities representing two-thirds of the total quantity of fossil fuel-based electricity must agree to establish the corporation. Because of the way the bill is drafted, however, NRECA and American Public Power Association members currently are excluded from participating in the decision to set up the corporation. The estimated impact on residential customer rates is \$10 to \$12 per year. State regulators oppose provisions that allow power companies to pass the fees to customers with only the Corporation providing oversight and no state regulatory review. The appropriate level of federal and state oversight is a dominant issue that will need to be resolved. NRECA is developing suggestions for improving the bill. For more information, contact Carol Whitman at (703) 907-5790 or carol.whitman@nreca.coop.

EPA RELEASES REPORT ON CLIMATE CHANGE AND HEALTH

On July 17th, EPA released a report that discusses the potential impacts of climate change on human health, human welfare, and communities in the U.S. The report, entitled "Analyses of the Effects of Global Change on Human Health and Welfare and Human Systems," also identifies adaptation strategies to help respond to the challenges of a changing climate and identifies near- and long-term research goals for addressing data and knowledge gaps. The report can be downloaded from the EPA website by clicking <u>here</u>. For more information, contact Bill Wemhoff at (703) 907-5824 or bill.wemhoff@nreca.coop.

SENATOR BINGAMAN OUTLINES CLIMATE LEGISLATION PRINCIPLES

Senate Energy and Natural Resources Committee Chairman Jeff Bingaman (D-NM) has outlined 10 principles for climate legislation, signaling his committee's intention to participate in next year's climate change debate. Sen. Bingaman and Sen. Arlen Specter (R-PA) were the lead sponsors of the Low Carbon Economy Act, comprehensive climate legislation that ultimately took a backseat to the Lieberman-Warner cap-and-trade legislation passed by the Environment and Pubic Works Committee and rejected by the Senate in early June. In a recent speech, Sen. Bingaman laid out 10 principles that call for focusing legislation on efforts that reduce greenhouse gas emissions, realistic targets and timetables, containing costs, and resolving potential conflicts between a new national climate change program and existing state and federal environmental laws, such as the Clean Air Act. For a copy of the principles, click <u>here</u>. For more information, contact Carol Whitman at (703) 907-5790 or <u>carol.whitman@nreca.coop</u>.

Clean Water Act and Waste Issues

EPA ISSUES FINAL GENERAL PERMIT FOR STORM WATER RUNOFF

On July 14th, EPA published a final General Permit for Storm Water Runoff from Construction Activities (CGP), (73 FR 40338). It contains substantially the same terms and conditions as the 2003 CGP and has been issued for a two-year period. EPA is also in the process of developing Effluent Limitations Guidelines for the construction and development industry. Upon completion, the agency will revise the CGP to incorporate the Effluent Guideline provisions, not later than July 2010. Additional information is available by clicking <u>here</u>. For more information, contact Jim Stine at <u>james.stine@nreca.coop</u> or (703) 907-5739.

Produced by the NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION Environmental Affairs Unit The Environmental Bulletin is provided free of charge to all NRECA members upon request. For additional information regarding listed issues, contact: Rae Cronmiller, Environmental Counsel, 703-907-5791 or <u>rae.cronmiller@nreca.coop</u>, or Bill Wemhoff, Sr. Environmental Mgr. (Air Issues), 703-907-5824 or <u>bill.wemhoff@nreca.coop</u> or Jim Stine, Sr. Environmental Mgr. (Water & Solid Waste Issues), 703-907-5739 or <u>james.stine@nreca.coop</u> or Carol Whitman, Principal, Legislative Affairs, 703-907-5790 or <u>carol.whitman@nreca.coop</u> For information on corporate level policy regarding listed issues, contact: Kirk Johnson, Vice President, Environmental Affairs, 703-907-5775 or <u>kirk.johnson@nreca.coop</u>.



ENVIRONMENTAL BULLETIN

August 14, 2008

What's Inside This Issue

CLEAN AIR ACT

- UARG COMMENTS ON THREE PROPOSED RULES
- EPA PROPOSES EIGHT-HOUR OZONE NAAQS PHASE 2 RULE
- NOx AND SOx / INTEGRATED SCIENCE ASSESSMENT RELEASED
- NRECA CO-SPONSORS SITING CONFERENCE

CLIMATE CHANGE

- EPA FILES SUPPLEMENTAL RESPONSE IN DESERET CASE BEFORE EAB
- REPORT SAYS COMPUTER MODELS ACCURATE AND EFFECTIVE FOR UNDERSTANDING CLIMATE CHANGE
- DOE PROJECT BEGINS CO2 SEQUESTRATION
- ALASKA SUES DOI OVER POLAR BEAR LISTING
- CLIMATE NEWS NOTES AVAILABLE
- RGGI BEGINS BIDDING PROCESS
- CLEAN COAL TECHNOLOGY ACT INTRODUCED

NBECA

<u>Clean Air Act</u>

For more information regarding the following articles, contact Rae Cronmiller at (703) 907-5791 or <u>rae.cronmiller@nreca.coop</u>, or Bill Wemhoff at (703) 907-5824 or <u>bill.wemhoff@nreca.coop</u>. Referenced documents are posted on Cooperative.com and can be viewed by <u>clicking here</u>.

UARG COMMENTS ON THREE PROPOSED RULES

The Utility Air Regulatory Group recently submitted formal comments on the following proposed rules:

Proposed Revisions to Boiler NSPS (Subparts D, Da, Db and Dc (73 FR 33642)) UARG urged the agency to (1) abandon its proposal to require annual visible emissions testing for all Subpart Da units, (2) exempt sources opting to use PM CEMS from the opacity standard without imposing any additional testing requirements, (3) abandon its proposal for electronic reporting of all PM CEMS test data, (4) allow repeat Method 22 testing in lieu of a Method 9 performance test, and abandon the proposed digital camera alternative, (5) clarify the Boiler NSPS applicability provisions for combined cycle combustion turbines subject to Subpart KKKK, (6) adopt a more flexible performance testing grace period under Subpart Da, and (7) abandon or significantly revise its proposal regarding the use of scrubber liquid-to-gas ration as a monitoring parameter for units not using PM CEMS.

Integrated Science Assessment for Sulfur Oxides – Health Criteria The comments address the evidence concerning responses of some asthmatics to 5to 10-minute exposures to SO2. UARG said the ISA falls short of the legal requirements of the CAA and does not accurately reflect the latest scientific information. The group recommended several revisions to the draft.

Proposed NAAQS for Lead (73 FR 29184)

The comments respond to EPA's request for information regarding the authority of the agency to establish zero-level NAAQS. UARG said it agrees with EPA's interpretation that setting any NAAQS at zero would run afoul of several well-established legal principles governing CAA implementation. A zero-level NAAQS would be inconsistent with CAA legislative history, the design of the statute, and several court decisions indicating that the law does not authorize the EPA Administrator to establish standards at zero.

EPA PROPOSES EIGHT-HOUR NAAQS PHASE 2 RULE

On July 21, EPA proposed to amend regulations under 40 CFR Parts 50 and 51 regarding implementation of the eight-hour ozone NAAQS – Phase 2 (73 FR 42294). The proposal clarifies when states may claim "reasonable further progress" on emissions reductions from pollution sources outside of nonattainment areas in state implementation plans. The proposal is in response to the US Circuit Court of Appeals November 2007 vacatur and remand and builds on a practice the agency already uses for fine particulate matter. Comments are due August 20, 2008.

NOX AND SOX / INTEGRATED SCIENCE ASSESSMENT RELEASED

On August 12, EPA noticed the availability of a draft "Integrated Science Assessment for Oxides of Nitrogen and Sulfur – Environmental Criteria; Second External Review Draft" (73 FR 46908). The document was prepared by the agency as part of the review of the secondary NAAQS for NO2 and SO2. Comments are due October 1, 2008.

3

NRECA CO-SPONSORS SITING CONFERENCE

NRECA and the Edison Electric Institute (EEI) are co-sponsoring this year's transmission and generation siting conference October 6-8 in Minneapolis, with Great River Energy and Xcel Energy serving as co-hosts. The conference will cover environmental and public relations aspects related to siting issues with presentations from entities and consultants currently involved in transmission line, renewable, fossil fuel and nuclear power projects. The conference fee from the attendees is solely to fund conference costs. A copy of the conference brochure is available by <u>clicking here</u>.

Climate Change

Unless indicated otherwise, referenced documents are posted on Cooperative.com and can be viewed by <u>clicking here</u>.

EPA FILES SUPPLEMENTAL RESPONSE IN DESERET CASE BEFORE EAB

On August 8, EPA filed a Supplemental Brief before the Environmental Appeals Board in the case involving Deseret G&T (PSD) construction permit for its planned coal-fired unit at the Bonanza site. The response addresses "enforceability" of Public Law 101-549 Section 821 and whether its required CO2 monitoring provisions constitute "regulation" under the CAA. If so, PSD permits must consider CO2 emissions as a regulated air pollutant. EPA argues that the CO2 monitoring requirements are not part of the Act, and if so monitoring is not regulation. For more information, contact Rae Cronmiller at (703) 907-5791 or rae.cronmiller@nreca.coop.

REPORT SAYS COMPUTER MODELS ACCURATE AND EFFECTIVE FOR UNDERSTANDING CLIMATE CHANGE

According to a federal study by the U.S. Climate Change Science Program, *Climate Models; An assessment of Strengths and Limitations,* the computer models used to analyze climate trends and the relationship between climate change and greenhouse gas emissions from human activity are effective and accurate. The study, released July 31, compared computer model forecasts with actual weather trends in the 20th century. It determined not only that the models are accurate, but also that temperature changes could not be explained if warming effects of anthropogenic greenhouse gas emissions were ignored, essentially confirming the human impact on climate change. The report is one of 21 synthesis and assessment products commissioned by the Climate Change Science Program, co-sponsored by 13 federal agencies. The report is available at:

(<u>http://www.climatescience.gov/Library/sap/sap3-1/final-report/default.htm</u>.) For more information, contact Bill Wemhoff at (703) 907-5824 or <u>bill.wemhoff@nreca.coop</u>.

DOE PROJECT BEGINS CO2 SEQUESTRATION

The U.S. Department of Energy recently initiated its project for injecting CO2 in a large coal bed while simultaneously recovering valuable natural gas. The plan is to inject up to 35,000 tons in a 6-month demonstration near Navajo City, N.M in order to help develop ways to maximize permanent storage of the injected CO2. Additional information about the project can be obtained from the DOE website at:

http://www.fossil.energy.gov/news/techlines/2008/08031-

<u>San Juan Basin CO2 Injection.html</u>. For more information, contact Bill Wemhoff at (703) 907-5824 or <u>bill.wemhoff@nreca.coop</u>.

ALASKA SUES DOI OVER POLAR BEAR LISTING

On August 4, the state of Alaska sued the U.S. Interior Department in US District Court over the Fish and Wildlife Service's decision to list Polar Bears as threatened under the Endangered Species Act. The lawsuit, also on behalf of the municipal governments within Alaska, alleges that the listing amounted to eight violations of the ESA and Administrative Procedures Act. It challenges the scientific basis of the listing decision, cites the increase in the worldwide polar bear population over the past 40 years, existing conservation measures already in place and contends that polar bears have survived prior warming periods.

Meanwhile, on August 11, Interior Secretary Kempthome proposed revisions to the ESA that would provide for federal agencies to decide for themselves if construction projects threaten protected species without consulting with the Fish and Wildlife Service or National Oceanic and Atmospheric Administration. Consultation is currently required for every project that is reviewed, paid for, or approved by the federal government and that potentially could have an impact on an endangered or threatened species or habitat. The proposed regulations, to be published soon in the *Federal Register*, also would prevent federal agencies from tying global warming emissions directly to the deterioration of any species' habitat. Additional information regarding the proposal is available at: http://www.doi.gov/news/08_News_Releases/080811a.html. For more information, contact Rae Cronmiller at (703) 907-5791 or rae.cronmiller@nreca.coop, or Bill Wemhoff@nreca.coop.

CLIMATE NEWS NOTES AVAILABLE

The July 28 and August 11 editions of Climate News Notes are available.

RGGI BEGINS BIDDING PROCESS

The Regional Greenhouse Gas Initiative (RGGI), a cooperative effort of Northeastern and Mid-Atlantic states to reduce greenhouse gas emissions, is planning the nation's first auction for CO2 allowances under a cap-and-trade program. Under RGGI, power plants must hold sufficient allowances "permits that allow an entity to emit 1 ton of CO2" to cover their emissions by January 1, 2009. Allowances will be sold in blocks of 1,000. A single entity cannot bid on more than 25 percent of the allowances. If the demand for the 12,565,387 allowances is less than or equal to the total number available, they will be sold at the reserve price of \$1.86. Bidders must submit bonds, cash or letters of credit to be eligible to participate and open an account with RGGI's Allowance Tracking System. Six states will offer allowances in the September 25 online auction, including Connecticut,

Maine, Maryland, Massachusetts, Rhode Island and Vermont. Those allowances can be used by utilities in any of the 10 states regulated by the RGGI cap-and-trade system. A second auction will be held in December. For more information, contact Carol Whitman at (703) 907-5790 or carol.whitman@nreca.coop.

CLEAN COAL TECHNOLOGY ACT INTRODUCED

Senators Kent Conrad (D-ND) and Orrin Hatch (R-UT) in the Senate and Reps. Pomerov (D-ND) and Lewis (R-KY) in the House have introduced The Carbon Reduction Technology Bridge Act of 2008 to spur the development of clean coal technology. S. 3208 (HR 6756), establishes tax incentives and a new bond program to promote increased power plant efficiency as well as carbon capture and sequestration technology. Clean coal bonds, modeled on the Clean Renewable Energy Bonds program, are provided for electric cooperatives and public power systems with \$5 billion in bonding authority available until expended. Co-ops may utilize the bonds to finance any qualified projects described in the bill, including; efficiency improvements to existing plants; closed-loop biomass facilities that co-fire with coal; new efficient coal plants with carbon capture and storage; and carbon capture and storage equipment on existing or new facilities. Investor-owned utilities are eligible for tax incentives for these programs and a "carbon reduction tax credit" to reward sequestration of CO2. The credit is \$30 per metric ton of CO2 stored in a geological formation; \$20 per metric ton if transferred to the U.S. Government and \$15 per metric ton if injected in an oil and gas pipeline for enhanced oil recovery. For a copy of the bill, see http://www.nreca.org/Documents/PublicPolicy/CarbonReductionTechnologyBridgeAct.pdf For more information, contact Carol Whitman at (703) 907-5790 or carol.whitman@nreca.coop.

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Volume 7, Issue 10 October 10, 2008

Environmental Bulletin

IN THIS ISSUE

Clean Air Issues

- EPA seeks rehearing on CAIR
- UARG asks Supreme Court to hear CAMR case
- Benefits of major rules exceeded costs
- UARG files comments on interagency cooperation under Endangered Species Act
- UARG files comments on available portion of draft on NO2 health effects

Climate Change

- House Energy Committee leaders issue cap-and-trade discussion draft for 2009 action
- Interior Department agrees to designate habitat for polar bears
- GAO reports power plants lack incentives for CCS
- EPA misses deadline for GHG reporting rule

Clean Water and Waste Issues

- EPA issues final permit for storm water runoff
- EPA releases final strategy to reduce climate change effects on water resources
- Proposed UIC rule for geologic storage of CO2
- Canadian PCB Phase-Out Regulations
- EPA posts 'raw' toxics release data

Kirk's Column

Welcome to the new and updated *Environmental Bulletin*. First, please join me in welcoming Jennifer Taylor to NRECA's Environmental Policy unit. Jennifer joins us as the new editor of the Environmental Bulletin, and worked in NRECA's Communications Department before joining the Environmental Policy team. Prior to her work at NRECA, she worked for the North Carolina Association of Electric Cooperatives (statewide) and for Cape Hatteras Electric Cooperative in Buxton, North Carolina. She brings a great, fresh perspective to the group, and we are all excited to have her on board.

Less exciting are some of the challenges we continue to face related to climate change, clean air, clean water, and other environmental issues. We jokingly call it "job security," but the challenges facing co-ops are immense and complex.

This week Reps. Rich Boucher (D-VA) and John Dingell (D-MI) unveiled their discussion draft of climate change cap-and-trade legislation. We are vigilantly wading through the 461-page draft bill, trying to understand how it works. I'll tell you now it is not simple – but we are working to develop a straightforward summary of the bill for the membership.

Finally, let me say we know the Sierra Club continues to make every effort to prevent co-ops from building or even financing new generation. Unfortunately there is no easy way to overcome the Club's tactics – they will continue to use every option they can think of to fight new power plants. We have to be engaged in this hand-to-hand combat with the best information possible to show we are looking out for the energy, economic, and environmental interests of our member-consumers. The good news is that is exactly what co-ops across the country are doing. At NRECA, we'll keep doing our part to ensure our member-consumers' needs are met.

-Kírk

Clean Air Issues

EPA Seeks Rehearing on CAIR

On September 24, EPA requested a new hearing before a full federal appeals court to reconsider a decision vacating the Clean Air Interstate Rule (CAIR). According to EPA's brief, the decision to vacate CAIR and its emissions trading program contradicts a prior decision by the court upholding a similar trading system under the NOx SIP Call, involving state implementation plans under the CAA to control nitrogen oxides. The White House has pushed to have all of CAIR reinstated legislatively, but that has been opposed by environmental organizations that say the original reductions do not go far enough to protect public health. CAIR is still in effect until the court issues a mandate, at which time, co-ops will have to reinstate their NOx Budget Trading Program rules. UARG also petitioned the D.C. Circuit Court for a rehearing. NRECA and UARG are closely monitoring this case and its possible effects on co-ops.

UARG Asks Supreme Court to Hear CAMR Case

On September 17, UARG petitioned the U.S. Supreme Court to reinstate the Clean Air Mercury Rule (CAMR), which had been vacated by a federal appeals court in February (New Jersey v. EPA, D.C. Cir., No. 05-1097, <u>Petition for Certiorari</u>). The petition raises two questions with the D.C. Circuit's ruling, challenging whether that court overstepped precedent when judging EPA's interpretation of the CAA and whether the Bush administration is bound to regulate mercury emissions based on a finding from the outgoing Clinton administration. CAMR, issued in 2005, set up an emissions trading system to reduce mercury emissions. EPA has until October 17, 2008, to file an appeal to the Supreme Court. NRECA is working with UARG to monitor this case.

Benefits of Major Rules Exceeded Costs

The benefits of major environmental, safety, and other federal regulations implemented over the last decade, including a total of 40 major EPA rules, have greatly outweighed their costs over that period, the White House Office of Management and Budget (OMB) said in an annual report, <u>Draft 2008 Report to Congress on the Benefits and Costs of Federal Regulation</u>, released on September 24. Those 40 EPA rules imposed total annual costs between \$32.2 billion and \$35 billion more than offset by projected annual benefits between \$83.3 billion and \$592.6 billion. The OMB report said benefits of the EPA rules greatly outweighed the costs largely due to a single CAA regulation the agency promulgated to address fine particulate matter.

<u>UARG Files Comments on Interagency Cooperation under Endangered Species Act</u> Final UARG comments were filed on the proposed rule on <u>Interagency Cooperation</u> <u>under the Endangered Species Act of the Fish and Wildlife Service (FWS) and National</u> <u>Marine Fisheries Service (NMFS)</u>. The proposed rule clarifies that consultation under Section 7 of the Endangered Species Act is not required in connection with species listed for climate change purposes (such as the polar bear) in federal actions involving a single greenhouse gas emissions source. Comments on the proposed rule are not due until October 14, 2008 (a 30-day extension was granted). Because it is highly important that FWS and NMFS complete this rule before the end of this administration, UARG filed its comments early to allow the agencies time to review the additional support that UARG is providing for this rule and to aid the agencies in completing the rule quickly.

UARG Files Comments on Available Portion of Draft on NO2 Health Effects

On September 26, UARG filed comments on available portions of the <u>Second External</u> <u>Review Draft of the Risk and Exposure Assessment (REA) on Health Effects of NO2</u>. EPA announced the release of the draft on September 2, and requested comments. Portions of the REA and associated appendices were released in August; however, not all sections have been made available to the public. In its comments, UARG complained that it is unreasonable to require the public to comment on an incomplete draft and said that the portions of the assessment made available contains information that is inaccurate and misleading and includes policy judgments that should be made by the Administrator.

Under the CAA, EPA sets primary National Ambient Air Quality Standards (NAAQS) for certain pollutants, including NO2, at a level that is requisite to protect the public health with an adequate margin of safety. Standards that are at the requisite level are "not lower or higher than is necessary" to provide that degree of protection. EPA must review NAAQS at least every five years, revising them "as appropriate." The REA is being prepared as a part of EPA's review of the primary NO2 NAAQS.

Climate Change

House Energy Committee Leaders Issue Cap-and-Trade Discussion Draft for 2009 Action Key House Democrats on energy issues released a draft climate change bill they plan to bring up for legislative debate next year. House Energy and Commerce Committee Chairman John Dingell (D-MI) and Energy and Air Quality Subcommittee Chairman Rick Boucher (D-VA) outlined climate change cap-and-trade legislation that would cover 88 percent of greenhouse gas emissions. The 461-page plan is intended to be a guide for efforts to pass a bill in the next Congress, when Democrats are expected to hold a larger number of seats in the House and Senate. "Reaching a consensus on a national approach to addressing climate change will be difficult under the best of circumstances," the committee leaders said.

The program would begin in 2012, and require overall emissions reductions of 6 percent below 2005 levels by 2020, a 44 percent cut by 2030, and an 80 percent cut by 2050. The discussion draft offers four options for distributing emission allowances to affected industries, and the sponsors are asking interested stakeholders to comment on the different options. NRECA is reviewing this complex proposal for potential impacts on electric cooperatives and will send you a detailed summary shortly. NRECA was asked to submit detailed comments on this discussion draft, and we will take that opportunity. A summary of the draft climate change bill and other materials are available at http://energycommerce.house.gov/Climate_Change/index.shtml.

Interior Department Agrees to Designate Habitat for Polar Bears

The U.S. Fish and Wildlife Service has agreed to designate by June 30, 2010, critical habitat for the polar bear, under an agreement announced October 6, that partially settles a lawsuit by environmental advocates. The agreement addresses a lawsuit challenging the

Bush administration's recent decision to list the polar bear as a threatened species and a related ruling exempting the bear from many of the protections the Endangered Species Act provides. Interior Secretary Dirk Kempthorne listed the polar bear as threatened due to receding sea ice, but said the listing should not open the door to use the Endangered Species Act to regulate greenhouse gases.

GAO Reports Power Plants Lack Incentives for CCS

In a report released on September 30, *Federal Actions Will Greatly Affect the Viability of Carbon Capture and Storage as a Key Mitigation Option*, the GAO states that without a comprehensive set of climate change policies, coal-fired power plants are unlikely to have the incentive to build commercial-scale CCS systems. The GAO report said the "absence of a national strategy to control CO2 emissions" has deterred DOE, EPA, and other agencies from resolving a series of practical issues, including how sequestered carbon dioxide might be transported from power plants to underground storage areas. Regulatory agencies also have to resolve numerous challenges posed by injecting large volumes of emissions into the ground, the report said, including how the Comprehensive Environmental Response, Compensation, and Liability Act (CERLA) and the Resource Conservation and Recovery Act (RCRA) apply to injected carbon dioxide. NRECA, through UWAG, is monitoring those regulatory issues.

On a related note, proponents of cap-and-trade legislation are citing a new GAO report that says the establishment of a federal policy to limit CO2 emissions would help lower the cost CCS and resolve issues surrounding liability for CO2 stored underground. The GAO findings could be used to counter claims by the coal industry and its congressional allies that providing billions of dollars in federal funding for development of CCS technology should precede any effort to limit CO2 emissions, as a way to ease compliance burdens and transition the economy to low-carbon energy sources.

EPA Misses Deadline for GHG Reporting Rule

EPA missed a congressional deadline for proposing a rule that would require mandatory reporting of greenhouse gases from the largest emission sources in the country. EPA was required by the omnibus appropriations bill (Pub. L. No. 110-161) approved by Congress in December 2007 to propose the rule by September 26. EPA is required to finalize the rule by June 2009. The electric power industry already reports CO2 emissions from generation units to EPA under the CAA Amendments of 1990. However, other industries do not have similar requirements to report emissions.

The proposed rule would likely cover emissions of carbon dioxide, methane, nitrogen dioxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. The rule would represent the first broad-based mandatory greenhouse gas reporting requirements by the federal government. More information on the <u>EPA greenhouse gas reporting rulemaking</u> is available.

Climate News Notes Available

The latest editions of Climate News Notes have been posted to Cooperative.com <u>Climate News Notes – September 15</u> <u>Climate News Notes – September 29</u>

Clean Water Issues

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EPA Issues Final Permit for Storm Water Runoff

EPA recently issued the final general NPDES permit covering discharges of storm water from "Industrial Activities." In most cases, co-ops do not use the EPA general permit. Instead, they usually have storm water runoff from power plants covered under their site-wide NPDES permits issued by the state. However, the states usually adopt the federal requirements into their own programs, so new requirements from the federal general permit could start showing up soon in state permits as well.

The EPA industrial storm water permit is also known as the <u>Multi-Sector General</u> <u>Permit</u> (MSGP), and it was published at (73 Fed. Reg. 56,572) September 29, 2008. It is effective immediately. Possibly the most significant development is the prohibition on using the general permit for discharges to waterways that are covered by a TMDL. The general permit is not allowed in these cases, and it is not clear that even an individual permit will be issued, unless different pollutants are in the discharge and in the receiving body or the discharger shows (and EPA agrees) that the storm water discharge will not cause or contribute to an excursion of water quality standards. NRECA will provide a summary of the new federal permit shortly.

EPA Releases Final Strategy to Reduce Climate Change Effects on Water Resources

On October 2, EPA's water office released a final strategy, <u>National Water Program</u> <u>Strategy: Response to Climate Change</u> that outlines actions to manage programs and invest resources aimed at reducing adverse effects on water from climate change. The strategy divides water program responses into five areas: reducing greenhouse gas emissions; adapting to climate change; conducting climate change-related research; managing water programs; and educating water program professionals. To address these challenges, the report said the National Water Program will expand existing programs that result in greenhouse gas reduction and expand efforts related to carbon dioxide sequestration. The agency also will support carbon sequestration related to energy production and industrial processes. NRECA through UWAG commented on the draft version of the strategy several months ago.

Proposed UIC Rule for Geologic Storage of CO2

On September 25, NRECA held a conference call regarding the proposed regulations for geologic storage of CO2 under the Underground Injection Control (UIC) program and the Safe Drinking Water Act (73 FR 43492). NRECA will be distributing draft comments soon. Next, we will finalize them and prepare a template our members can use to comment before the deadline on November 24. NRECA helped USWAG develop testimony that was presented at an EPA public hearing in Denver, Colo., on October 2. NRECA will continue working with our members and other industry groups on this rule. A copy of the NRECA summary of the proposal, USWAG's Denver testimony and the appendix of technical requirements is available on <u>Cooperative.com</u>.

Waste Issues

Canadian PCB Phase-Out Regulations

On September 18, Canada adopted <u>final regulations requiring the phase-out of electrical equipment containing PCBs</u>. EPA has been considering a similar phase-out of PCBs and NRECA and USWAG have been trying to discourage this effort. Canada links their action to the international agreement on persistent organic pollutants (the POPs treaty), which includes a deadline for phasing-out virtually all PCBs. One of the most troubling aspects of the Canadian program is that it requires all PCB equipment that is being stored for re-use to be "removed" by the end of 2009. We have told EPA and Congress that we believe the United States is already meeting its POPs obligations under existing TSCA regulations. Nonetheless, the Canadian phase-out will put additional pressure on EPA to adopt its own phase-out program, which could place a significant cost burden on co-ops by forcing them to remove a great deal of existing electrical equipment like transformers and capacitors long before the equipment reaches the end of its useful life.

EPA Posts 'Raw' Toxics Release Data

On September 10, EPA announced it has posted its facility-level data for 2007 on releases of hazardous chemicals submitted to the agency through the Toxics Release Inventory program. The facility-level information made available via the <u>Electronic-Facility Data Release</u>, or e-FDR, is considered "raw" data that are not grouped in any way or subjected to analysis by the agency. Industries covered by the TRI program were required to submit data on 2007 releases by July 1, 2008. Industries that are required to report their TRI release include electric utilities. Cooperative data is not reported in a separate category, but is included with all the data for electric utilities. Co-ops should be aware of the data release in the event it is covered by local media.

Produced by the National Rural Electric Cooperative Association

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Volume 7, Issue 11 October 24, 2008

Environmental Bulletin

IN THIS ISSUE

Clean Air Issues

- EPA Adopts More Stringent Lead NAAQS
- Final UARG Comments on the Integrated Science Assessment for NOx and Sox
- EPA Proposed Performance Specification for CPMS
- Emissions Data from 2005 Available

Climate Change

- Summary on Early Review of Dingell-Boucher Cap-and-Trade Draft
- NRECA Files Amicus Brief in Support of Southern Montana G&T
- Obama Campaign in Talks with Key House Lawmaker on Cap and Trade
- IEA Report Says CCS Lags Due to Cost Barriers
- Climate News Notes Available

Clean Water and Waste Issues

- National Research Council Releases Report on EPA's Stormwater Program
- New Mercury TMDL Guidance
- Final Chemical Reporting Rules Revise Standards
- EPA Issues Report on FGD Materials

Kirk's Column

Well, we're only 12 days from the election, and we'll soon be rid of the incessant political commercials on television and the radio. More importantly, we'll know who the political leadership of the country will be for the next Administration and Congress. Environmental issues will have a higher profile than they have in recent memory, while energy and financial issues will also dominate the federal policy stage. Under any plausible scenario at this point, we'll have our hands full across the board – regardless of who sits in the White House. Both Senator McCain and Senator Obama will be more aggressive on climate change policy than President Bush has been, and the new Congress will place new priorities on clean air, clean water, and climate change issues.

This week brought some interesting news that may play into how aggressively the new Congress addresses clean air issues. The DC Circuit Court of Appeals indicated it may be willing to reconsider its decision to completely vacate the Clean Air Interstate Rule (CAIR), saying there may be room for compromise with the parties to the case. If the Court arrives at some compromise and remands CAIR to the EPA, it may impact how aggressive the next Congress may be on SO2 and NOx emission reduction requirements.

We're also digging more and more into the Boucher-Dingell climate change bill, and it is living up to what one would expect from a seasoned legislator like Chairman Dingell – it is more carefully thought out than the Lieberman-Warner-Boxer bill from the Senate this year and includes some good and some bad. It is too early to have any kind of realistic economic analysis of the bill, and we all know how much the economy has become the dominant issue in politics lately.

Finally, this week NRECA filed an amicus brief in support of Southern Montana G&T's effort to build a coal-based power plant to meet its distribution systems' base load power needs. While it seems like a cut-and-dried case to me, the court will make its decision in the coming months. Many thanks to Rae Cronmiller and Aleeta Harrington here in Environmental Policy for their work to get the amicus brief filed in Montana.

Clean Air Issues

EPA Adopts More Stringent Lead NAAQS

On October 15, EPA dramatically strengthened the <u>National Ambient Air Quality</u> <u>Standards (NAAQS) for lead</u>. The new standards tighten the allowable lead level 10 times to 0.15 micrograms of lead per cubic meter of air (ug/m3). This decision marks the first time the lead standards have changed in 30 years. The previous standards, set in 1978, were 1.5 ug/m3. EPA's action sets two standards: a primary standard at 0.15 ug/m3 to protect health, and a secondary standard at the same level to protect the public welfare, including the environment. EPA is also requiring additional monitoring for lead and relocation of some of the existing monitors. Notice of the revised NAAQS will be published in the *Federal Register* within the next several weeks.

Final UARG Comments on the Integrated Science Assessment for NOx and SOx

Final UARG <u>comments on the Integrated Science Assessment (ISA) for oxides of</u> <u>nitrogen and sulfur</u> were filed with EPA on October 10, 2008. They address concerns regarding the scientific analysis of the welfare effects of NOx and SOx. Briefly, UARG challenged EPA's treatment of ammonia and ammonium, mercury methylation, and its characterization of the state of the science regarding numerous other environmental effects. As explained in the comments, UARG continues to disagree with EPA's conclusions and characterizations of the science, and therefore urges the agency to revise the ISA significantly before proceeding with the review of the secondary national ambient air quality standards ("NAAQS") for SOx and NOx. NRECA, through UARG, will closely follow EPA's finalization of the ISA.

EPA Proposed Performance Specification for CPMS

EPA has proposed Performance Specification (PS) 17 and Procedure 4 (QA/QC) for continuous parameter monitoring systems (CPMS) for use under the New Source Performance Standards (NSPS) and NESHAPS published at (73 Fed. Reg. 59,956) October 9, 2008. These specifications address monitoring of parameters like temperature, pressure, liquid flow rate, and pH. Miscellaneous conforming amendments to the general provisions, and Appendix F, Procedure 1, are also proposed. Comments on the proposal are due to EPA by December 8, 2008.

Emissions Data from 2005 Available Online

On October 16, EPA announced the online availability of 2005 air emissions data from power plants. EPA has issued a new edition of its <u>Emissions & Generation Resource</u> <u>Integrated Database</u> (eGRID) and updated <u>Power Profiler</u>. eGRID is an air emissions database of electric power plants in the United States, including emissions data on nitrogen oxides, sulfur dioxide, carbon dioxide and mercury. The new edition of eGRID now also provides emissions data on methane and nitrous oxide. Power Profiler is a tool for consumers to see how their individual energy use is impacting air emissions. Please be familiar with these EPA online tools in the event you are contacted by local press or concerned citizens.

Climate Change

Summary on Early Review of Dingell-Boucher Cap-and-Trade Discussion Draft

In following up on the release of the climate change cap-and-trade discussion draft legislation by House Energy and Commerce Committee Chairman John Dingell (D-Mich.) and Energy and Air Quality Subcommittee Chairman Rick Boucher (D-Va.), NRECA prepared a high-level, two-page <u>summary of this legislation</u>. This is a very complex, well-drafted bill and more complicated than the Lieberman-Warner-Box bill debated earlier this year. NRECA will provide more updates as we continue to review this bill for electricity sector and electric cooperative impacts.

NRECA Files Amicus Brief in Support of Southern Montana G&T

On October 21, NRECA filed an <u>amicus brief supporting Montana's issuance of Southern</u> <u>Montana G&T's air (PSD) permit</u> for construction of a 250 MW coal-fired unit at Highwood Station. Since Montana air law departs little from the federal version, the arguments mostly followed the theories espoused in the <u>NRECA Deseret brief</u> filed on March 21, with additional material added to address issues that have arisen since the Deseret brief. The brief was limited to 20 pages, so the brief is content heavy.

Obama Campaign in Talks with Key House Lawmaker on Cap and Trade

Advisers to Democratic presidential nominee Barack Obama and Energy and Air Quality Subcommittee Chairman Rick Boucher (D-Va.) have begun preliminary talks about how to write global warming legislation early next year should the Illinois senator win the White House. Boucher, an early endorser of Obama, predicted he could bridge differences between Obama's campaign platform on climate change and a proposal he released earlier this month with House Energy and Commerce Chairman John Dingell (D-Mich.). Boucher and Obama both back the launch of a cap-and-trade program, but they differ on how to distribute what would be billions of dollars in emission allowances for about three-quarters of the U.S. economy. Boucher says the House is likely to lead congressional debate on comprehensive climate legislation in 2009.

IEA Report Says CCS Lags Due to Cost Barriers

Carbon capture and sequestration (CCS) technology is being hindered by a lack of funding and regulatory certainty, says a new report from the International Energy Agency (IEA), an arm of the Organization for Economic Cooperation and Development (OECD). An <u>executive summary of the IEA report</u> released October 20, argues, "CCS will need to contribute nearly one-fifth of the necessary emissions reductions to reduce global GHG emissions by 50% by 2050 at a reasonable cost." The report also states, "Current spending and activity levels are nowhere near enough to achieve these deployment goals...If these demonstration projects do not materialize in the near future, it will be impossible for CCS to make a meaningful contribution to GHG mitigation efforts." Cost continues to be the main barrier as investors remain skittish about investing billions of dollars in CCS projects.

Climate News Notes Available

The latest edition of Climate News Notes have been posted to Cooperative.com Climate News Notes – October 14, 2008

Clean Water Issues

National Research Council Releases Harsh Report on EPA's Stormwater Program

On October 15, the National Research Council released its long-anticipated report, "<u>Urban Stormwater Management in the United States</u>." The report reflects the results of a 26-month study of EPA's stormwater program, with a focus on the effectiveness of existing regulatory approaches and controls. The stormwater study found that EPA's existing program was deficient in important areas, and identified specific areas needing improvement. While the report was directed primarily at EPA's program for municipal stormwater management, the failures identified and the changes called for are so broad that they are likely to affect the entire stormwater regulatory program both at federal and state levels. This could lead to stricter requirements in co-op stormwater permits, including numeric water quality-based limits for runoff from industrial sites and construction activities. NRECA, through UWAG, will monitor the different agency and public reactions to the report very carefully and alert you to new developments.

New Mercury TMDL Guidance

EPA has released new guidance styled, "<u>Elements of Mercury TMDLs Where Mercury</u> <u>Loadings are Predominantly from Air Deposition</u>." The guidance is comprised of a cover memorandum, as well as a "checklist" that is predicated on approaches and lessons learned by EPA in approving previous mercury TMDLs. UWAG, through the Federal Water Quality Coalition, <u>commented on an earlier draft of the checklist</u>. EPA accepted some of these comments but rejected others. The final checklist is an improvement over the draft, but it remains problematic in certain areas identified in the industry comments. If your state indicates an interest in using this guidance, you may wish to consult the comments for advice on how to promote more meaningful, step-wise and implementable TMDLs in your state.

Final Chemical Reporting Rules Revise Standards

EPA announced on October 17, <u>changes to emergency planning</u>, <u>emergency release</u> <u>notification</u>, <u>and hazardous chemical reporting regulations</u> under the Emergency Planning and Community Right-to-Know Act that were proposed more than a decade ago. The final rule includes clarifications on how to report hazardous chemicals in mixtures, and changes to Tier I and Tier II forms, which include, respectively, general and chemicalspecific information.

In addition, the Tier I and Tier II reporting forms and their instructions have been removed from the Code of Federal Regulations and are now available at the agency's Emergency Management Web site. Tier I forms contain aggregate information for applicable hazard categories and must be submitted annually. Tier II forms contain more detailed information, including the specific names of each chemical, and are submitted on the request of agencies that receive the Tier I version. Facilities are also now required to report their North American Industry Classification System code on the forms. Another new requirement is that the chemical or common name of the chemical as provided on its Material Safety Data Sheet must be provided on the Tier II form. Cooperative G&Ts are often affected by the Tier I and II reporting requirements and should be aware of these new regulations.

Waste Issues

EPA Issues Report on FGD Materials

EPA's Office of Research and Development (ORD) has published "<u>Characterization of</u> <u>Coal Combustion Residues from Electric Utilities Using Wet Scrubbers for Multi-</u> <u>Pollutant Control</u>," an evaluation of the leaching characteristics of FGD materials. Data presented in this report will be used by EPA to develop in the future a report addressing the fate of mercury as part of an ongoing effort by EPA to use a holistic approach to account for the fate of mercury and other metals in coal throughout the life-cycle stages of CCP management including disposal and beneficial use. It is important to note that this is a data report. EPA will be preparing a report evaluating these data in the future. Because of the potential impact of this report on EPA's Bevill rulemaking, this is an issue that NRECA, through USWAG, will continue to monitor.

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1	SUPPLEMENTAL RESPON SUPPLEMENTAL REQUEST FC PSC CASE (Original Resp	ECTRIC CORPORATION'S ISE TO THE ATTORNEY GENERAL'S OR INFORMATION TO JOINT APPLICANTS NO. 2007-00455 onse March 6, 2008) 1ber 7, 2008
2		
3	Item 82) Please reference the Respon	nse to OAG 1-71. Please provide the
4	information requested.	<u>`</u>
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6		
7		
1	B ernando The following table undete	a the transaction related armonditures in orrespond
8		s the transaction related expenditures in excess
9	1 1 1	to current. These amounts have been or will
10		ribed in the Reimbursement Agreements filed
11	in this proceeding.	
12		
13		
14		
15	Total Unwind-Vendors Exceedi	ng \$250,000
16		
17	Black & Veatch	\$ 2,556,222.98
18	CRA International, Inc	3,898,884.11
19	Hogan Hartson JDG Consulting	1,870,007.20 483,976.17
20	Orrick, Herrington & Sutcliffe	16,588,081.65
	Arnold & Porter-RUS Counsel Escrow	395,326.80
21	Stanley Consultants	1,332,634.31
22	Sullivan, Mountjoy, Stainback & Miller	2,230,562.03 409,148.54
23	Utility and Economic Consulting	409,140.04
24	Total	\$ 29,764,843.79
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28	Witness) C. William Blackburn	
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BIG RIVERS ELECTRIC CORPORATION'S SUPPLEMENTAL RESPONSE TO THE ATTORNEY GENERAL'S SUPPLEMENTAL REQUEST FOR INFORMATION TO JOINT APPLICANTS PSC CASE NO. 2007-00455 (Original Response March 6, 2008) November 7, 2008

without requiring the Attorney General to extrapolate the number from the attachments.

Please reference the Response to HMP&L 1-3. Please answer the question

1 2 3

33

Item 87)

4 5 Response) In responding to HMP&L 1-3, Big Rivers presented the O&M and Capital expenditures necessary to meet the generation levels in the Big Rivers production model. 6 Big Rivers' Production Work Plan now has been updated to reflect different levels of 7 8 O&M non-labor costs and Capital expenditures attributable to the Reid/Station Two 9 units. Attached, Big Rivers submits tables listing the 2009-2011 O&M Non-Labor and Capital budgets for the Reid/Station Two units. The tables present the O&M Non-Labor 10 Budget (Gross) attributable to the Reid/Station Two units on a monthly basis beginning 11 January 2009 and ending December 2011. The tables also present the capital 12 expenditures attributable to the Reid/Station Two units in the 2009, 2010, and 2011 13 Capital Budgets. 14 15 16 Witness) Mark A. Bailey 17 18 19 2021

> Item AG-87 Page 1 of 1

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Number	Description	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	TOTAL
RD109USO Total	R1 - Unscheduled Outages	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	210,000
RD109xxx Total	R1 - Major Initiatives	0 -	0	0	Ð	0	0	80,000	0	0	Û	0	0	80,000
RD109ASIL Total	R1 - Rebuild "A" Silo Sump Pump	0	0	0	18,000	0	0	0	0	0	0	0	0	18,000
RD109xxx Total	R1 - Major Initiatives	0 E 000	0	371,315	0	0	19,500 4,290	15,000	10,000	19,500	0	0	0	435,315
RDMAIR Total RDMASH Total	RDM Air System RDM Ash Handling	5,000 6,250	3,420 5,300	5,000 3,954	40,150 6,750	4,270 755	4,250	1,830 5,880	5,800 3,435	4,350 8,166	3,520 3,450	3,920 10,200	950 4,400	82,500 71,500
RDMBFW Total	RDM Feedwater System	1.400	2,200	1.200	1,550	200	400	400	3,430	850	3,430 900	1,200	1,400	12,000
RDMCDS Total	RDM Condensate System	1.000	1.250	1.000	1,600	600	700	800	500	850	1.500	1.500	1,100	12,200
RDMCHS Total	RDM Fuel Feed: Fuel Conveying System	11,400	30,320	22,800	42,820	25,420	41,020	27,420	35,520	27,320	28,680	17,400	23,420	333,540
RDMCHSBUS Total	RDM Fuel Handling:Coal Unloading Barge	4,000	3,500	14,750	4,500	7,000	14,250	12,500	10,100	4,000	7,800	15,400	5,000	102,800
RDMCW Total	RDM Cooling Water System	400	350	125	400	200	150	330	400	350	150	170	0	3,025
RDMCWS Total	RDM Circulating Water/Cooling Towers	1,000	1,000	1,000	1,000	1,900	1,350	1,400	1,450 4,300	600	1,700 1,500	0	1,700	14,100
RDMCWSINT Total	RDM Screenwell Maintenance RDM Demineralized Water System	2,500 900	7,050 1,300	13,500 1,500	12,000 1,000	2,800 1,800	1,800 800	5,400 900	4,300	3,550 400	1,800	2,500 1,300	4,000 1,300	81,000 14,000
RDMDWS Total RDMEDGT Total	RDM Combustion Turbine-Electrical Distribution	400	400	800	300	500	800	500	500	400	,,000	600	300	5.600
RDMEDT Total	RDM Switchgean/Bus	250	1,300	450	150	1,400	6,000	300	7,700	6.000	200	500	100	24,350
RDMEL Total	RDM Bldgs & Grounds: Elevators	3,875	3,875	3,875	3,875	3,875	3,875	3,875	3,875	3,875	3,876	3,875	3,925	46,550
RDMENV Total	RDM Emission Controls: CEM	3,500	1,570	2,100	2,550	820	1,050	600	900	1,700	4,200	3,100	1,910	24,000
RDMFOS Total	RDM Fuel Oll System	900	600	400	800	660	665	575	500	210	700	500	900	7,400
RDMFPS Total	RDM Fire Protection	400	1,200	1,200	2,700	650	1,800	200	700	1,100	2,800	800	500 200	14,350
RDMFSPGT Total	RDM Combustion Turbine-Fire Protection RDM General Use Equipment	1,000 3,200	450 1,700	600 2.700	500 1,700	500 3,200	200 2,700	600 2,200	400 1,200	200 3,200	400 1.700	3,000 1,200	2,700	8,050 27,400
RDMGEU Total RDMGT Total	RDM Combustion Turbine	3,200	1,000	7.000	3.200	2.000	2,700	1.000	0	3,200	17,700	51,100	1,000	97,000
RDMHVC Total	RDM Bidgs & Grounds: HVAC	580	3.980	1,980	3,680	2,680	3,460	5,075	3,600	5,050	340	3,250	2,040	35,725
RDMMBBLU Total	RDM Plant Lubrication	3,000	3,000	3,000	3,000	3,000	3,500	3,500	3,000	3,000	3,000	3,000	3,000	37,000
RDMMBBMT Total	RDM Maintenance Training	1,250	3,250	1,250	1,250	1,250	24,250	6,250	3,250	1,250	1,250	3,250	1,250	49,000
RDMMEQ Total	RDM Non-Fuels Equipment	600	600	600	600	600	600	600	600	600	800	600	600	7,200
RDMMEQCLE Total	RDM Mobile Fuele Equipment	6,900	6,900	6,900	6,900	59,900	6,900	6,900	6,900	6,900	48,900	6,900	6,900	175,800
RDMOHC Total	RDM Overhead Cranes & Holsts RDM Plant Communications	3,000 1,350	600 1.800	3,000 1,000	1,900 1,850	0 1,500	5,500 1,600	2,000 1,700	400 1.950	3,700 1,600	800 2,200	1,000 1.500	0	21,900
RDMPCM Total RDMPCS Total	RDM Plant Communications RDM Controls/Computer Systems	1,000	1,000	18.000	1,630	1,000	1,000	1,000	1,950	1,600	1,100	1,000	1,250 500	19,300 25,700
RDMPFP Total	RDM Bidgs & Grounds:Winterization	1.510	1.000	600	500	500	0	1,000	410	1.050	15.410	410	610	22,000
RDMPLS Total	RDM Plant Lighting System	2,800	4,850	1.350	9,850	5,650	5,000	2,550	10,000	5,750	6,400	2,000	1,550	57,750
RDMPST Total	RDM Bidgs & Grounds Site Mtce/Improvements	4,850	5,750	3,950	4,450	3,700	3,100	8,700	1,400	2,200	1,950	3,350	2,600	44,000
RDMPVE Total	RDM Vehicles	4,650	4,500	4,400	5,500	4,650	6,300	4,450	4,050	5,450	5,600	5,100	3,350	58,000
RDMPWS Total	RDM Potable Water System	800	350	370	500	1,100	620	900	450	500	850	450	600	7,490
RDMRID Total	RDM Recording/Indicating Devices	1,000 10,300	1,500 12.500	750 11,300	600 6,500	225 2,580	450 3,350	740 4,790	450 3,900	180	900 12,800	1,000	500 9,200	8,295
RDMSGU Total RDMSGUFDE Total	RDM Bollers & Burners RDM Fans/Draft System	1,500	3,400	1.600	3,600	750	1,000	2,550	1,100	2,850 1,900	600	12,500 2,500	5,500	92,570 28.000
RDMSGUFPE Total	RDM Fuel Feed: Mills and Feeders	2,500	5,400	2,500	6,400	600	2,700	1,000	1,400	500	5,100	1,400	2,150	32,000
RDMSGUPCP Total	RDM Emission Controls:Precipitators	500	500	5,800	500	700	1,100	1,600	500	1.100	200	200	700	13,300
RDMTGN Total	RDM Turbine/Generator	2,500	2,500	2,600	1,750	700	850	1,100	800	1,100	1,750	2,100	2,250	20,000
RDMWTS Total	RDM Bidge & Grounds: Sumpe	3,250	1,650	8,050	4,250	1,050	5,150	15,150	9,450	3,850	4,050	1,250	3,150	60,100
RDMWWS Total	RDM Effluent Control(Waste Water Treatment)	750	13,000	760	1,000	750	1,000	750	1,000	750	1,000	750	1,000	22,500
RDOSGUFPE Total	RDO Mills and Feeders GT - Stack Liner Replacement	5,000	5,000	5,000 0	5,000	0	0	0	0	0 0	5,000 0	5,000 0	5,000	35,000
GT09STKLR Total ST09DGB Total	H0 - Turbine Crane Drive Gear Box	0	0	0	ů l	ő	0	0	0	0	30,000	0	0	0 30.000
RH09BUBP Total	RH - Barne Unloader Bumper Pad	õ	ŏ	ů	ŏ	ŏ	ő	ŏ	ő	Ő	00,000	ů 0	å	30,000
ST109AMIL Total	H1 - OH "B" Mill Gear Box	0	60,000	0	Ō	0	0	Ő	Ó	Ō	0	Ō	Ō	80,000
ST109ASHB Total	H1 - Overhaul "B" Ash Sluice Pump	0	0	0	0	0	0	0	0	30,000	0	0	0	30,000
ST109MFSR Total	H1 - Rebuild "B" Mass Flow/Screw Feeder	Q	0	150,000	0	0	Q	0	0	0	0	0	0	150,000
ST109SPG Total	H1 - Planned Outage (General)	0	0	2.038,890	0	0	0	0	0	0	0	0	0	2,142,980
ST109SPN Total ST109SPO Total	H1 - Planned Outage (Nox) H1 - Planned Outage (Opa)	บ ถ	0	73,000 232.000	0	0	0	0	0	0	0	0	0	73,000 232,000
ST109SPS Total	H1 - Planned Outage (Opa) H1 - Planned Outage (Scrubber)	0	0	202,200	0	0	ů ů	0	0	0	0	U 0	0	202.260
ST109SPT Total	H1 - Planned Outage (Turbine)	ŏ	ō	192,830	ŏ	ő	ŏ	ŏ	ů	20,000	ő	5,000	ŏ	217,830
ST109USO Total	H1 - Unscheduled Outages	7,000	7,000	0	Ō	7,000	7,000	7,000	7,000	7,000	7,000	7,000	7,000	70,000
ST209ASHC Total	H2 - Rebuild "C" Ash Sluice Pump	0	0	0	0	0	0	30,000	0	0	0	0	0	30,000
ST209USO Total	H2 - Unscheduled Outages	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	360,000
STCHCSM Total	FH Consumables FH Outside Industrial Svc	1,000 5,500	1,000	1.000 5,500	1,000 8,500	1,000 5,500	1,000 6,785	1,000 6.785	1,000 6,786	1,000	1,000 6,786	1,000	1,000	12,000
STCHOIS Total	Lis Aaraina liinnanisi 342	0,000	9,909	0,000	0,000	9,900	0,100	a ⁴ 103	0,100	6,788	0,100	6,786	6,786	75,000

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Number	Description	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	TOTAL
STCHPST Total	FH Buildings & Grounds	6,750	6,750	3,750	6,900	6,150	10,485	5,465	5,465	5,465	2,485	2,485	5,460	67,55D
STCHTR Total	FH Tool Room	700	700	700	700	700	700	700	700	700	700	700	700	8,400
STDREDGE Total	ST Dredging Ash Ponds	0	0	0	0	0	15,000	0	0	10,000	0	0	0	25,000
STMASH Total	STM Ash Handling	16,100	43,800	15,450	18,050	3,450	19,300	16,700	37,150	13,600	16,350	18,400	10,800	229,150 75,500
STMBFW Total	STM Feedwater System	5,000	5,900 1,200	9,600 1.600	6,700 1.650	4,500 1,700	6,000 1,500	5,200 1.625	5,200 2,175	7,000 10.600	7,000 2.050	7,900 2,250	5,500 1,250	29,500
STMCDS Total	STM Condensate System STM Fuel Feed: Fuel Conveying System	1,900 3,975	6.200	6,175	6,275	9,075	6,175	8,900	7,475	7,875	5,525	3,550	7.025	78,225
STMCHS Total STMCSM Total	STM Consumables	18,670	16,920	16.420	18,820	16,920	19.620	17,820	21,570	23,320	19,320	22,320	17,320	228.840
STMCW Total	STM Cooling Water System	1,000	700	950	1,000	1,500	1,700	1,500	1,150	750	700	1,150	1,500	13,600
STMCWS Total	STM Circulating Water/Cooling Towers	5,400	4,550	6,650	6,350	6,700	8,050	5,550	5,550	6,000	15,900	5,200	5,200	81,100
STMEDT Total	STM Switchgear/Bus	1,400	7,900	7,500	2,400	6,500	6,700	7,850	450	8,250	1,200	12,400	1,200	63,750
STMEL Total	STM Bidgs & Grounds: Elevators	3,875	3,875	3,875	3,875	3,875	3,875	3,875	3,875	3,875	3,875	3,875	3,925	46,650
STMEVS Total	STM Emission Controls:CEM	8,150	7,900	9,900	6,550	16,050	6,250	9,550	7,300	7,250	13,900	6,250 13,100	7,450 2,200	105,500 114,950
STMFGD Total	STM Emission Controls: Scrubbers	7,250	7,800 14,588	22,700 21,386	10,450 18,188	6,650 12,988	14,225 11,988	2,900 10,668	5,700 8.688	12,300 7,189	9,875 13,189	10,189	6,189	140.160
STMFGX Total STMFGXMEW Total	STM Limestone Grinding/Processing STM Emission Controls; SDRS Mist Eliminator	4,888 0	1,500	4,300	500	12,000	3,100	70,000 800	2,000	2,000	500	2,000	900	17.600
STMFGXPWS Total	STM Emission Controls: SDRS Poteble Water	400	200	100	200	500	200	100	200	100	200	100	500	2,800
STMFGXSAB Total	STM Emission Controls:SDRS Absorber Bldg	1,600	5,000	1,000	1,500	2,500	1,000	3,100	1,300	1,500	1,500	2,400	1,200	23,500
STMFGXSBB Total	STM Emission Controls:SDRS Scrubber Bidg	100	150	100	150	100	150	700	150	160	150	150	250	2,300
STMFGXSTK Total	STM Emission Controls:SDRS Scrubber Stack	500	0	1,000	400	0	1,400	0	500	1,700	500	700	700	7,400
STMFGXTRW Total	STM Emission Controls:SDRS Thickener Return	750	750	750	4,760	900	7,750	800	750	1,050 800	750 400	1,150 800	750 1,300	20,900 11,600
STMFOS Total	STM Fuel Oli System	1,100 1,000	900 1,000	1,200 3,500	850 1,500	650 3,000	1,300 1,000	1,100 1,500	1,200 1,500	2,500	1.000	3,500	1,000	22,000
STMFPS Total	STM Fire Protection STM Bidgs & Grounds:HVAC	1,000	3.630	3,550	3.750	5,750	5,760	6,275	4.250	4,100	2.050	5,000	2,285	47,800
STMHVC Total STMOHC Total	STM Overhead Cranes & Hoists	1,200	2.500	3,600	4,000	0,120	1.000	0	0	4,000	1,600	1,500	1,000	19,200
STMPAS Total	STM Air System	13.660	3,590	3,050	2,100	18,500	3,100	2,750	3,050	3,300	3,650	1,950	2,800	61,500
STMPCM Total	STM Plant Communications	1,600	1,600	1,800	1,500	1,950	2,150	2,300	1,800	1,800	1,000	2,100	1,300	20,900
STMPCS Total	STM Plant Controls	1,800	2,000	1,900	1,700	1,800	1,600	1,000	1,200	1,900	2,000	1,300	1,300	19,700
STMPLC Total	STM Controls/Computer Systems	3,100	3,800	161,085	4,900	3,600	17,850	2,800	4,250	2,800	3,000	3,500	2,750	213,335
STMPLS Total	STM Plant Lighting System	11,800	8,200	12,850	12,250	15,350	7,250	8,000	8,700	11,450	14,750	10,500	9,000	130,100
STMPWS Total	STM Service Water System	100	100	100	100	100	100	100	100 1.000	100 1.500	100 1,500	100 1.500	100 0	1,200 13,700
STMRID Total	STM Recording/Indicating Devices STM Nox Reduction-SCR Maintenance	90D 7.000	1,150 3,000	3,350 30,200	1,800 41,500	500 3.000	5,000	500 3.000	22,200	10.680	8,100	2,000	2.000	137.680
STMSCR Total STMSGU Total	STM Nox Reduction-SCR Maintenance	38,650	39.800	31,050	31.050	41,050	27.500	28,600	31.075	26.725	30,800	33,200	29,100	388.600
STMSGUFDE Total	STM Fans/Draft System	1,000	4,750	6,250	5,500	4,000	8,500	3,200	3,500	7,350	2.600	3,700	1,600	51,950
STMSGUFPE Total	STM Fuel Feed: Mills and Feeders	6,100	8,250	12,500	9,500	5,500	7,400	6,000	4,500	9,000	7,000	8,500	3,900	88,150
STMSGUPRP Total	STM Emission Controls: Precipitators	4,000	8,600	7,000	4,000	8,000	6,000	5,500	5,000	6,600	5,000	3,600	500	61,500
STMTGN Total	STM Turbine/Generator	4,000	5,000	3,100	4,750	3,500	3,500	5,400	4,600	4,150	5,500	4,000	3,000	50,500
STMTGNDGS Total	STM Diesel/Generator	100	70	0	600	200	0	200	500	0	1,500	0	800	3,970
STMTR Total	STM Tool Room	3,500	3,400	4,050	3,250	3,600 500	4,000 400	4,700 500	6,000 400	5,500 500	4,500 400	6,500 350	4,600 400	52,500 5,100
STMWWS Total	STM Effluent Control(Waste Water Treatment)	500 17,112	400 17,112	350 22,262	400 22,162	17.112	24,432	18,282	22.362	20.012	20,262	17,112	17,137	235,359
STOADM Total STOCHSBUS Total	STO Administrative FH Coal Unioading Barge	17,112	17,112	12.000	22,102	12.000	24,432	37.000	50,000	25.000	12,000	0	0	148.000
STOCSM Total	STO Consumables	1.000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	12,000
STOFGD Total	STO HMPL FGD Shared Equipment	38,638	38,638	38,638	38,638	38,638	38,638	38,638	38,638	35,638	38,638	38,638	38,638	463,658
STOIS Totai	STO Outside Industrial Svc	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	156,000
STOLAB Total	STO Laboratory	13,050	15,350	30,400	18,750	22,300	33,700	13,200	15,450	36,880	16,250	15,900	23,700	254,930
STOMEQ Total	FH Mobile Fuels Equipment	8,600	8,600	8,600 3,300	8,600	8,600 3,300	24,715 5,015	24,715 6,015	24,716 5,015	24,715 5.015	24,715 5,015	24,715 5.015	24,715 5.015	216,005 51,605
STOMEQCVH Total	STO Vehicles (Mtc. Gas, Oli) STO Buildings & Grounds	3,300 11,640	3,300 14,640	11,640	3,300 19,595	3,300	12,195	12,195	35,695	10,695	10.695	19,695	12.025	161.305
STOPST Total STOSCR Total	STO SCR Operation	8.250	6,250	30,250	6,250	8,250	126,250	6,250	6,250	6,250	82,250	84,250	6,250	373.000
STOSGU Total	STO Bollera and Burnera	27,090	33,000	25,500	0	19,200	42,000	18,000	0	27,800	33,000	18,000	0	243,500
STOSGUFPE Total	STO Mills and Feeders	13,500	13,500	13,500	7,000	13,500	13,500	13,500	13,500	13,500	13,500	13,500	13,500	155,500
STOTGN Total	STO Turbine/Generator	5,330	5,330	5,340	5,330	5,330	5,340	5,330	5,330	5,340	5,330	5,330	5,340	64,000
STOTR Total	STO Tool Room	0	0	2,550	0	1,000	0	1,500	0	360	1,000	0	1,000	7,400
Grand Total		515,803	697,958	4,227,662	663,458	605,458	842,768	717,673	659,604	715,011	781,615	718,975	481,065	11.628,950
Total 2009 Budget		515,803	697,958	4,192,299	663,458	605,458	842,768	717,673	659,604	715,011	781,515	718,975	481,065	11,626,950 2,910,274
HMPL Allocation		122,850 392,953	170,218 527,740	1,129,166 3,063,133	162,991 500,487	152,845 452,613	211,799 630,989	156,156 561,517	161,469 498,135	175,743 539,268	188,794 592,721	164,403 55 4,572	113,838 367,227	2,910,274 8,718,676
BREC Share		0021303	AP1 11 44	44444149	0001401	-1001010		001,011	444194		****j1 & 1	~~'jVI M	**** (36461	411 10(01V

Reid/Station Two 2010 O&M Non-Labor Budget (Gross)

Number	Description	Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	TOTAL
RD110SPO Total	R1 - Planned Outage (Ops)	0	0	0	0	0	0	0	0	0	0	0	0	0
RD110USO Total	R1 - Unscheduled Outages	0	0	0	0	0	0	0	0	0	0	0	0	0
RD110xxx Total	RD - Major Initiatives	130,550	30,550	165,050	396,650	30,550	60,000	230,000	0	497,550	30,650	30,550	30,514	1,621,414
RDMAIR Total	RDM Alr System	4,450	3,520	2,870	28,000	4,720	2,370	15,250	5,000	2,950	2,870	3,100	1,300	74,400
RDMASH Total	RDM Ash Handling	5,450	6,150	4,050	7,350	1,500	10,650	5,350	3,350	7,900	3,350 0	8,100	3,800	67,000
RDMBFW Total	RDM Feedwater System	0	0	0	0	0	3,000 3,000	3,000 3,000	3,000 3,000	0	0	0	0	9,000
RDMCDS Total	RDM Condensate System	11,400	33,300	25,600	45,400	25.920	39,720	27,920	28,020	28.020	23,820	17.900	23,420	9,000 330,440
RDMCHS Total	RDM Fuel Feed: Fuel Conveying System RDM Fuel Handling:Coal Unloading Barge	3,500	3,500	16,450	4,500	10,500	15,250	10.000	7,100	4.000	5,800	13.900	5,300	99,800
RDMCHSBUS Total RDMCW Total	RDM Fuel Handing:Coal United by Barge RDM Cooling Water System	0,000	360	925	400	10,000	320	330	0	530	350	470	0	3.675
RDMCWS Total	RDM Circulating Water/Cooling Towers	1.000	1.000	400	500	1.900	1.350	2,700	1,450	600	1,700	500	1,700	14.800
RDMCWSINT Total	RDM Screenwell Maintenance	200	3,700	21,300	14,200	13,200	200	7.200	4,500	8,450	200	200	200	73,550
RDMDWS Total	RDM Demineralized Water System	1,400	2,100	1,000	1,000	1,300	11,000	1,000	1,600	300	1,200	1,300	800	24,000
RDMEDGT Total	RDM Combustion Turbine-Electrical Distribution	0	400	800	300	500	900	4,600	500	500	0	600	300	9,300
RDMEDT Total	RDM Switchgear/Bus	250	800	450	850	400	6,350	800	6,400	6,000	700	500	100	23,400
RDMEL Total	RDM Bidgs & Grounds: Elevators	3,600	3,600	4,100	4,100	4,100	4,100	4,600	4,100	3,600	4 <u>,</u> 600 0	3,600	4,600 0	48,700
RDMENV Total	RDM Emission Controls: CEM	0	0	0	0	0	3,000 3,000	3,000	3,000 3,000	0	U O	0	0	9,000 9,000
RDMFOS Total	RDM Fuel Oll System	700	0 850	3,400	700	850	500	3,000 500	700	2,100	2,800	750	700	9,000 14,350
RDMFPS Total	RDM Fire Protection	100	350	400	2.900	300	700	600	400	2,100 0	1,700	3,000	200	10.550
RDMFSPGT Total RDMGEU Totai	RDM Combustion Turbine-Fire Protection RDM General Use Equipment	3.200	1,200	2,700	2,700	2,700	2,700	2,200	1,200	3,200	1,700	1,700	2,700	27,900
RDMGT Total	RDM Combustion Turbine	100	100	8,100	5,100	6,100	100	100	100	4,100	20,100	66.900	100	111,000
RDMHVC Total	RDM Bidgs & Grounds: HVAC	730	3,630	1,030	4,130	3,130	3,600	4,200	4,075	3,800	500	4,950	2,300	36,075
RDMMBBLU Total	RDM Plant Lubrication	3,000	3,500	3,500	4,000	2,500	4,000	3,600	4,000	3,000	4,000	3,000	4,000	42,000
RDMMBBMT Total	RDM Maintenance Training	1,250	3,250	1,250	1,260	1,250	24,250	6,250	3,250	1,250	1,250	3,260	1,250	49,000
RDMMEQ Total	RDM Non-Fuels Equipment	900	900	1,100	1,300	900	1,100	900	1,100	900	1,100	900	900	12,000
RDMMEQCLE Total	RDM Mobile Fuels Equipment	6,400	6,400	8,400	6,900	8,900	66,900	8,900	8,900	6,900	6,900	8,900	6,900	141,300
RDMOHC Total	RDM Overhead Cranes & Holsts	3,000	1,300	5,300	2,400	0	3,000	2,500	1,000	3,500	1,900	2,000	0	26,900
RDMPCM Total	RDM Plant Communications	1,450	2,200	1,000	1,650	1,500	1,700	1,800	1,450	1,600	2,200	1,000	1,850	19,400
RDMPCS Total	RDM Controls/Computer Systems	0	0	15,000	0	0	0	Ő	0	0	0	0	0	15,000
RDMPFP Total	RDM Bidgs & Grounds:Winterization	1,500	900	900	800	0	0	0	400	100	12,900	1,220	1,000	19,720
RDMPLS Total	RDM Plant Lighting System	4,400	7,700 2.600	2,300 2,100	11,350 7,700	6,650 2,100	4,100 3,300	4,100 14,200	10,950 2,200	6,850 3,200	5,800 4,150	4,100 2,350	2,650 3,600	70,860 50,500
RDMPST Total	RDM Bidgs & Grounds Site Mice/Improvements RDM Vehicles	3,000 4,600	4,700	4,350	5,500	5,100	5,800	4,450	3,750	5,200	4,400	4,500	3,650	55,900
RDMPVE Total RDMPWS Total	RDM Potable Water System	4,000	350	370	500	2,350	300	900	450	500	800	450	600	8,370
RDMRID Total	RDM Recording/Indicating Devices	1.000	1,500	750	600	225	0	540	450	380	900	1.000	Ö	7,345
RDMSGU Total	RDM Bollers & Burners	0	0	Ō	Ō	0	3,385	3,385	3,390	0	0	Q	Ó	10,160
RDMSGUFDE Total	RDM Fans/Draft System	0	Ō	Ó	Ō	Ó	3,000	3,000	3,000	Ō	0	Ó	0	9,000
RDMSGUFPE Total	RDM Fuel Feed: Mills and Feeders	0	0	0	0	0	3,000	3,000	3,000	0	0	0	0	9,000
RDMSGUPCP Total	RDM Emission Controls:Precipitators	0	0	0	0	0	3,000	3,000	3,000	0	0	0	0	9,000
RDMTGN Total	RDM Turbine/Generator	0	0	0	0	0	3,000	3,000	3,000	0	0	0	0	9,000
RDMWTS Total	RDM Bidgs & Grounds: Sumps	560	653	11,760	4,850	550	8,650	15,250	9,850	4,050	2,850	1,750	550	61,200
RDMWWS Total	RDM Effluent Control(Waste Water Treatment)	950	950	1,000	9,950	950	950	950	900	850	850 0	850	850	20,000
RDOSGUFPE Total	RDO Mills and Feeders	0	0 Ó	0	0	0	0	0	0	0 40,000	0 15,000	0	0	0
RH10xxx Total	RH - Major initiatives H1 - Unscheduled Outages	30.000	30,000	30.000	30.000	30,000	30,000	30.000	30,000	40,000	30.000	30.000	30,000	55,000 360.000
ST110USO Total ST110xxx Total	H1 - Major Initiatives	30,000	15.000	30,000	25,000	30,000	30,000	30,000 N	00,000	30,000	00,000	22,000	00,000	92.000
ST210SPG Total	H2 - Planned Outage (General)	0	0	829,462	1,161,635	ő	õ	õ	õ	å	ŏ	0	ō	1,991,097
ST210SPN Total	H2 - Planned Outage (Nox)	ŏ	ō	0	73,000	ō	ō	ŏ	ō	õ	õ	ō	ō	73,000
ST210SPO Total	H2 - Planned Outage (Ops)	0	0	Ō	162,000	0	0	0	0	Ō	0	Ó	0	162,000
ST210SPS Total	H2 - Planned Outage (Scrubber)	0	0	13,950	141,810	0	0	0	0	0	0	0	0	165,760
ST210SPT Total	H2 - Planned Outage (Turbine)	0	0	51,080	161,750	0	0	٥	0	0	0	0	0	212,830
ST210USO Total	H2 - Unscheduled Outages	7,000	7,000	3,600	0	3,500	7.000	7,000	7,000	7,000	7.000	7,000	7,000	70,000
ST210xxx Total	H2 - Major Initiatives	0	0 4 000	90,000	110,000	0 4 000	0 1.000	30,000	0 1.000	0	0 1.000	22,000 1.000	0 1.000	252,000
STCHCSM Total	FH Consumables	1,000 6.250	1,000 6,250	1,000 6,250	1,000 6 .250	1,000 6,250	1,000 6.250	1,000 6,250	1,000 6,250	1,000 8,250	1,000 8,250	1,000 8,250	6,250	12,000 75,000
STCHOIS Total STCHPST Total	FH Outside Industrial Svc FH Buildings & Grounds	6,250	6,250	3,250	7,000	8,250	12,375	8,250	6,250	7,375	3,775	3,250	6,250	74,525
STCHTR Total	FH Tool Room	700	700	700	700	700	700	700	700	700	700	700	700	8,400
STDREDGE Total	ST Dredging Ash Ponds	0	0	0	ŏ	0	5,000	Ö	10,000	Ő	Ö	0	Ō	15,000
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Number	Description	Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	TOTAL
STMASH Total	STM Ash Hendling	14,450	41,200	18,000	21,600	7.050	28,250	14,900	40,500	7,300	17,000	13,950	10,550	234,650
STMBFW Total	STM Feedwater System	8,000	5,500	10,700	9,200	5,000	6,800	3,000	8,900	8,300	6,000	11,800	5,500	86,700
STMCDS Total	STM Condensate System	2,760	1,650	3,700	1,650	2,250	2,760	2,575	2,575	11,500	2,150	3,400	1,250	38,200
STMCHS Total	STM Fuel Feed: Fuel Conveying System	3,650 21,320	6,375 20.070	6,900 19,670	7,300 22.070	9,300 20,070	7,200 21,070	10,400 19,070	9,100 22,320	8,300 23,070	8,100 19,070	2,850 22,070	6,760 17,070	85,225
STMCSM Total	STM Consumables STM Cooling Water System	1,600	20,070	1,800	1.600	1.000	1.700	2,000	1.150	23,070	700	1,150	17,070	246,840 14,050
STMCW Total STMCWS Total	STM Cooling Water System	5,000	4,700	6,000	8,150	5,700	16,550	4.750	4,800	5,700	40,500	4,900	4,200	108,950
STMEDT Total	STM Switchgear/Bus	1,900	8,400	7,500	1,400	7,000	8,700	6,850	1.200	7,250	1,200	14,400	1,300	67,100
STMEL Total	STM Bidgs & Grounds: Elevators	4,800	4,800	3,300	4,300	3,800	3,800	3,500	3,200	3,800	3,400	3,600	3,400	45,700
STMEVS Total	STM Emission Controls:CEM	8,250	7,750	10,700	6,550	15,150	6,460	10,650	7,550	7,450	14,300	5,250	7,450	107,500
STMFGD Total	STM Emission Controls: Scrubbers	3,360	7,900	26,800	11,560	3,960	14,325	3,500	5,800	13,460	10,775	10,300	2,300	114,000
STMFGX Total	STM Limestone Grinding/Processing	5,535	15,235	21,534	16,834	13,934	12,134	7,034	3,834	7,334	12,464 200	5,334 1.800	6,334	127,540
STMFGXMEW Total	STM Emission Controls: SDRS Mist Eliminator	0 200	3,100 200	3,200 300	600 1,600	0 300	4,100 200	200 300	2,200 200	2,500 100	200	100	900 100	18,800 3,800
STMFGXPWS Total STMFGXSAB Total	STM Emission Controls:SDRS Potable Water STM Emission Controls:SDRS Absorber Bidg	1,500	5.000	2,000	1.000	2,500	1,000	3.600	1,300	2,000	1,500	1,400	1,200	24,000
STMFGXSEB Total	STM Emission Controls:SDRS Scrubber Bidg	150	150	150	1.000	100	200	150	150	150	100	150	100	2,550
STMFGXSTK Total	STM Emission Controls:SDRS Scrubber Stack	600	0	1,000	1,200	0	1,400	0	600	1,700	Ó	700	700	7,800
STMFGXTRW Total	STM Emission Controls:SDRS Thickener Return	800	9,250	750	750	350	300	750	1,160	750	1,160	650	760	17,300
STMFOS Total	STM Fuel Oll System	900	1,700	1,500	1,150	460	1,100	1,100	1,800	1,300	500	700	900	13,100
STMFPS Total	STM Fire Protection	1,650	2,050	2,750	2,550	1,650	2,050	1,250	2,550	1,650	1,050	4,050	1,050	24,000
STMHVC Total	STM Bldgs & Grounds:HVAC	1,900	3,700	4,415	3,600	5,800	4,500	4,900	3,850	3,700	2,200	3,700	1,900	44,185
STMOHC Total	STM Overhead Cranes & Hoists	1,000	2,500	2,500	3,000	0	1,000	2,000	0	3,600	1,500	2,600	1,000	20,800
STMPAS Total	STM Air System	1,000	4,050	3,000	8,300	30,000	3,000	3,000	2,150	9,900	3,700 1,900	2,100 1,300	3,000 1,200	73,200
STMPCM Total	STM Plant Communications	1,300 2,100	1,700 1,900	3,100 2,100	1,900 1.000	1,300 3,260	1,900 1,000	1,600 0	1,300 1,000	3,200 2,100	2,000	1,400	1,400	21,700 19,260
STMPCS Total	STM Plant Controls STM Controls/Computer Systems	3,100	4,100	119,435	8,100	2.900	16.200	5.600	5,500	4.200	2,900	4,300	4,200	180,535
STMPLC Total STMPLS Total	STM Plant Lighting System	9,100	6,450	8,960	6,200	7.850	4,900	9,000	4,100	5,000	10,700	9,300	6,100	87.850
STMPWS Total	STM Service Water System	100	100	100	100	100	100	100	100	100	100	100	100	1.200
STMRID Total	STM Recording/Indicating Devices	900	1.150	3,360	2,000	500	200	500	1,000	1,500	1,500	1,500	Ö	14,100
STMSCR Total	STM Nox Reduction-SCR Maintenance	4,000	4,000	51,200	26,500	4,000	5,000	4,000	22,200	24,000	17,500	4,000	4.000	170,400
STMSGU Total	STM Bollers & Burners	26,750	37,050	33,750	36,450	37,250	61,300	33,700	28,875	34,225	33,200	27,000	30,500	419,050
STMSGUFDE Total	STM Fans/Draft System	1,800	5,250	4,450	5,100	3,200	9,000	2,900	4,300	6,250	4,400	2,900	3,100	52,650
STMSGUFPE Total	STM Fuel Feed: Mills and Feeders	6,800	9,700	12,000	11,100	3,800	7,400	5,000	4,900	9,900	8,000	11,100	3,900	92,600
STMSGUPRP Total	STM Emission Controls: Precipitators	4,000	6,500	7,000	4,000	8,000	6,000	5,750	5.000	6,750	5,000	3,500	500	62,000
STMTGN Total	STM Turbine/Generator	4,000	5,000	3,100	6,250	3,500 300	4,000	5,400	7,600	3,160	4,500 1,250	4,000	3,000	52,500 4,100
STMTGNDGS Total	STM Diesel/Generator STM Tool Room	100 3,500	70 3,400	300 4,050	600 3,250	3,600	200 4,000	250 4,700	5,000	200 5,500	4,500	5,600	500 4,500	52,500
STMTR Total STMWWS Total	STM 1001 Room STM Effluent Control(Waste Water Treatment)	3,800	3,400	4,050	1,500	3,000	400	300	400	300	400	5,500	350	5,600
STOADM Total	STO Administrative	17,261	17,261	22,411	17,261	17,788	24,581	18,956	22,511	23.961	17.661	17,281	17,291	234,202
STOCHSBUS Total	FH Coal Unloading Barge	0	0	12,000	0	12,000	0	37,000	52,000	25,000	12,000	0	0	150,000
STOCSM Total	STO Consumables	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	12,000
STOFGD Total	STO HMPL FGD Shared Equipment	35,254	35,254	35,254	35,254	35,254	35,254	35,254	35,254	35,254	35,254	35,254	35,254	423,048
STOIS Total	STO Outside Industrial Svc	13,400	13,400	13,400	13,400	13,400	13,400	13,400	13,400	13,400	13,400	13,400	13,400	160,800
STOLAB Total	STO Laboratory	14,050	16,350	25,400	20,050	23,300	43,700	14,200	16,460	37,180	17,250	16,900	23,700	268,530
STOMEQ Total	FH Mobile Fuels Equipment	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	216,000
STOMEQCVH Total	STO Vehicles (Mtc, Gas, Oli)	4,350	4,350 15,245	4,350 12,245	4,350 19,695	4,350 10,695	4,350 12,195	4,350 12,195	4,350 35.695	4,350 10,695	4,350 10,695	4,350 19.695	4,350	52,200 183,540
STOPST Total STOSCR Total	STO Buildings & Grounds STO SCR Operation	12,245 9.000	9.000	9.000	21,000	9.000	129,000	9,000	9,000	9,000	85.000	87.000	12,245 9,000	394.000
STOSGU Total	STO Bollens and Burnens	27,000	30,000	18,000	21,000	19,200	39,000	18,000	9,000 0	27,800	30,000	18,000	9,000	236,000
STOSGUFPE Total	STO Mills and Feeders	16,000	16.000	16,000	16.000	16,000	16,000	16.000	16,000	16,000	16,000	16,000	16,000	192.000
STOTGN Total	STO Turbine/Generator	5,330	5,330	5,340	5,330	5.330	5,340	5,330	5,330	5,340	5,330	5,330	5,340	64,000
STOTR Total	STO Tool Room	. 0	0	2,550	0	1,000	0	1,500	0	350	1,000	0	1,000	7,400
Grand Total		580,425	822,090	1,871,241	2,872,319	587,624	984,389	876,539	652,309	1.169,464	727,214	728,984	462,558	12,235,146
Total 2010 Budget		580,425	622,090	1,971,241	2,872,319	587,824	984,369	876,539	852,309	1,169,464	727,214	728,984	462,568	12,235,148
HMPL Allocation		118,178	157,704	521,633	725,291	146,073	240,584	162,048	162,952	175,897	179,969	171,263	113,899	2,875,493
BREC Share		462,247	484,386	1,449,608	2,147,028	441,551	743,785	714,491	489,357	993,587	647,245	557,721	348,689	8,359,663

Number	Description	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	TOTAL
RD111USO Total	R1 - Unscheduled Outages	0	0	0	0	0	0	0	0	0	0	0	0	0
RD111xxx Total	RD - Major Initiatives	32,500	32,500	32,500	62,500	32,500	66,000	0	0	132,600	32,500	32,500	32,500	487,500
RDMAIR Total	RDM Air System	4,450	3,620	2,870	26,000	4,720	2,370	1,250	6,000	2,950	2,870	3,100	1,300	80,400
RDMASH Total	RDM Ash Handling	4,100	3,950	4,050	7,350	1,500	9,300	5,350	3,100	5,700 0	3,350 0	5,700 0	3,800 0	67,250
RDMBFW Total	RDM Feedwater System	0	0	0	Q Q	0	3,250 3,260	3,250 3,250	3,250 3,250	U C	U 0	0	0	9,750 9,750
RDMCDS Total	RDM Condensate System	0	33.300	0 25,600	46,400	26,920	3,260	27,920	28.020	28,020	23,820	17.900	23.420	330,440
RDMCHS Total	RDM Fuel Feed: Fuel Conveying System	11,400	,		-	10,500	15,250	10,000	7,100	4,000	5,800	13,900	5,300	99.800
RDMCHSBUS Total	RDM Fuel Handling:Coal Unioading Barge RDM Cooling Water System	3,500	3,500 350	16,450 925	4,500 400	10,000	320	330	7,100	530	360	470	0,000	3,875
RDMCW Total RDMCWS Total	RDM Cliculating Water/Cooling Towers	1,000	1,000	400	600	1,900	1,350	2,700	1,450	600	1,700	600	1,700	14,800
RDMCWSINT Total	RDM Screenwell Maintenance	200	3,700	21,300	14,200	13,200	200	7,200	4,500	8,450	200	200	200	73,650
RDMDWS Total	RDM Demineralized Water System	1,400	2,100	1,000	1.000	1,300	1,000	1,000	1,600	300	1,200	1,300	800	14,000
RDMEDGT Total	RDM Combustion Turbine-Electrical Distribution	0	400	800	300	600	900	4,500	500	600	0	600	300	9,300
RDMEDT Total	RDM Switchgean/Bus	250	800	460	660	400	6,350	800	6,400	6,000	700	500	100	23,400
RDMEL Total	RDM Bidgs & Grounds: Elevators	3,600	3,600	4,100	4,100	4,100	4,100	4,600	4,100	3,600	4,600	3,600	4,600	48,700
RDMENV Total	RDM Emission Controls: CEM	0	0	0	0	0	3,250	3,250	3,250	0	0	0	0	9,760
RDMFOS Total	RDM Fuel Oll System	0	0	0	0	0	3,260	3,250	3,250	0	0	0	0	9,760
RDMFPS Total	RDM Fire Protection	700	850	3,400	700	650	500	500	700	2,100	2,800	750	700	14,350
RDMFSPGT Total	RDM Combustion Turbine-Fire Protection	0	360	400	2,900	300	700	600	400	0	1,700	3,000	200	10,650
RDMGEU Total	RDM General Use Equipment	3,200	1,200	2,700	2,700	2,700	2,700	2,200	1,200 100	3,200 4,100	1,700	1,700 66,900	2,700 100	27,900 111,000
RDMGT Total	RDM Combustion Turbine	100	100	8,100	5,100	6,100	100	100 4,200	4.075	4,100	20,100 600	4,960	2.300	38,075
RDMHVC Total	RDM Bidgs & Grounds; HVAC	730	3,630	1,030	4,130	3,130 2,600	3,600 4,000	4,200	4,076	3,000	4.000	3,000	4,000	42,000
RDMMBBLU Total	RDM Plant Lubrication	3,000	3,500 3,260	3,500 1,250	4,000 1,250	1,250	24,250	6,250	3,250	1,250	1,260	3,260	1,250	49,000
RDMMBBMT Total	RDM Maintenance Training	1,250 900	900	1,200	1.300	900	1,100	900	1,100	900	1,100	900	800	12,000
RDMMEQ Total RDMMEQCLE Total	RDM Non-Fuels Equipment RDM Mobile Fuels Equipment	8,950	8,950	8,950	8,950	8,950	8,950	9,200	8,900	8,950	38,950	8,950	8,950	137,600
RDMOHC Total	RDM Overhead Cranes & Holsts	3,000	1,300	5,300	2.400	0	3,000	2,500	1,000	3,600	1,900	2.000	0	25,900
RDMPCM Total	RDM Plant Communications	1,460	2,200	1,000	1.650	1,500	1,700	1,800	1.450	1,600	2,200	1.000	1.850	19,400
RDMPCS Total	RDM Controls/Computer Systems	0	0	16.000	0	0	0	Ū	0	¢	0	0	0	15,000
RDMPFP Total	RDM Bidgs & Grounds:Winterization	1.600	800	800	600	0	0	0	400	100	12,900	1,220	1,000	19,720
RDMPLS Total	RDM Plant Lighting System	2,975	8,375	1,476	10,525	5,825	2,176	2,775	10,128	6,025	4,975	3,175	1,725	68,160
RDMPST Total	RDM Bidgs & Grounds Site Mtce/Improvements	3,000	2,600	2,100	7,700	2,100	3,300	14,200	2,200	3,200	4,150	2,350	3,600	50,500
RDMPVE Total	RDM Vehicles	4,650	4,400	4,300	5,400	4,650	5,800	4,350	3,950	6,050	4,800	4,500	3,250	54,900
RDMPWS Total	RDM Potable Water System	800	350	370	500	2,350	300	900	450	600	800	450	600	8,370
RDMRID Total	RDM Recording/Indicating Devices	1,000	1,600	760	600	225	0	540	450	380	900	1,000	0	7,345
RDMSGU Total	RDM Bollers & Burners	0	0	0	0	0	3,250	3,250	3,250	0	0	0	0	9,750
RDMSGUFDE Total	RDM Fans/Draft System	0	0	0	0	0	3,250	3,250 3,250	3,250	0	0 0	U 0	0	9,760 9,760
RDMSGUFPE Total	RDM Fuel Feed: Mills and Feeders	0	0	0	0	0	3,250 3,250	3,260	3,250 3,250	0	0	0	0	9,750
RDMSGUPCP Total RDMTGN Total	RDM Emission Controls:Precipitators RDM Turbine/Generator	0	0	0	ő	ő	3,250	3,250	3,260	a a	0	Ő	0	9,760
RDMWTS Total	RDM Bidgs & Grounds: Sumps	550	860	11,760	4.650	550	8,650	15,260	9,950	4,050	2,850	1.750	550	61,200
RDMWWS Total	RDM Effluent Control(Waste Water Treatment)	950	960	1,000	9,950	950	950	950	900	860	850	850	850	20,000
RDOSGUFPE Total	RDO Mills and Feeders	0		.,	-1								0	0
RH11xxx Total	RH - Major Initiatives	0	0	0	0	0	0	0	24,000	0	0	0	0	24,000
ST111SPG Total	H1 - Planned Outage (General)	0	0	0	615,850	1,041,065	0	0	0	0	0	0	0	1,656,915
ST111SPN Total	H1 - Planned Outage (Nox)	0	0	0	73,000	0	Û	0	0	0	O	0	0	73,000
ST111SPO Total	H1 - Planned Outage (Ops)	0	0	0	177,000	0	0	0	0	0	0	0	0	177,000
ST111SPS Total	H1 - Planned Outage (Scrubber)	0	0	0	66,860	99,910	0	0	0	0	0	0	0	155,760
ST111SPT Total	H1 - Planned Outage (Turbine)	0	0	0	2,431,330	901,600	0	0	0	0	0	0	0	3,332,830
ST111USO Total	H1 - Unscheduled Outages	7,000	7,000	7,000	0	0	7,000	7,000	7,000	7,000	7,000	7,000	7,000	70,000
ST111xxx Total	H1 - Major initiatives	0	80,000	255,000	35,000	0	15,000	30,000	12,000	0	•	-	0	427,000
ST211USO Total ST211xxx Total	H2 - Unscheduled Outages H2 - Major Initiatives	30,000 0	30,000 16.000	30,000 0	30,000 20,000	30,000 0	30,000 0	30,000 45,000	30,000 0	30,000 12,000	30,000 0	30,000 0	30,000 0	360,000 92,000
STCHCSM Total	FH Consummables	1,000	1,000	1.000	1,000	1.000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	12,000
STCHOIS Total	FH Outside Industrial Svc	5,500	6,500	6,500	5,500	6,500	6,600	6,500	6,500	6,500	8,600	6,600	8,500	78.000
STCHPST Total	FH Buildings & Grounds	6,260	6,250	3,250	7,000	6,250	12,375	6,260	6,250	7,375	3,775	3,250	6,250	74,525
STCHTR Total	FH Tool Room	700	700	700	700	700	700	700	700	700	700	700	700	8,400
STDREDGE Total	ST Dredging Ash Ponds	0	0	0	0	0	5,000	0	0	20,000	0	0	0	26,000
STMASH Total	STM Ash Handling	14,450	42,200	18,000	21,600	7,050	28,250	30,900	40,600	7,300	18,250	13,950	10,850	262,900
STMBFW Total	STM Feedwater System	8,000	5,500	10,700	9,200	5,000	5,800	3,000	8,900	8,300	6,000	11,800	5,500	89,700

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										Dag 44	()-+ 44	Nov-11	Dec-11	TOTAL
Number	Description	Jan-11	Feb-11 650	Mar-11 3.700	Apr-11 1,660	May-11 2,250	Jun-11 1,750	Jul-11 2,575	Aug-11 2,075	Sep-11 11,600	Oct-11 2,160	3,400	1,250	36,700
STMCDS Total	STM Condensate System	2,750 3.650	6.375	6,900	7,300	9,300	7,200	10,400	9,100	8,300	8,100	2,860	6,760	86,225
STMCHS Total	STM Fuel Feed; Fuel Conveying System	21.650	20,400	19,900	22,400	20,400	21,400	19,400	22,650	23,400	19,400	22,400	17,400	250,800
STMCSM Total	STM Consummables	1,600	700	1.800	1,500	1,000	1,700	2,000	1,160	760	700	1,160	0	14,050
STMCW Total	STM Cooling Water System STM Circulating Water/Cooling Towers	5,050	4.800	5,950	6,900	5,900	6,400	4,660	5,360	6,750	40,400	5,200	4,800	102,150
STMCWS Total	STM Circulating Watericooning Towers	1,900	8,400	7,500	1,400	7,000	8,700	6,860	1,200	7,260	1,200	14,400	1,300	67,100
STMEDT Total STMEL Total	STM Strictgean Dos STM Bidgs & Grounds: Elevators	4,800	4,800	3,300	4,300	3,800	3,800	3,600	3,200	3,800	3,400	3,600	3,400	45,700
STMEL Total	STM Emission Controls:CEM	8,260	7,760	10,700	6,650	15,150	6,450	10,650	7,550	7,450	14,300	5,250 9,650	7,450 2,300	107,600 112,700
STMFGD Total	STM Emission Controls: Scrubbara	3,350	7,900	26,800	11,650	3,950	14,325	3,000	5,800	13,400	10,775 10.484	5.334	8,334	131.040
STMFGX Total	STM Limestone Grinding/Processing	5,535	15,235	19,534	16,834	13,834	10,134	16,534 200	3,834 2,200	7,334 2,500	200	1,800	900	18,800
STMFGXMEW Total	STM Emission Controls: SDRS Mist Eliminator	0	3,100	3,200	600	0 300	4,100 200	300	200	100	200	100	100	3.800
STMFGXPWS Total	STM Emission Controls:SDRS Potable Water	200	200	300 2,000	1,600 1,000	2,500	1,000	3,600	1.300	2.000	1,500	1,400	1,200	24,000
STMFGXSAB Total	STM Emission Controls:SDRS Absorber Bidg	1,500 150	5,000 150	2,000	1,000	100	200	160	150	150	100	150	100	2,550
STMFGXSBB Total	STM Emission Controls:SDRS Scrubber Bidg	600	00,	1,000	1,200	0	1.400	0	600	1,700	0	700	700	7,800
STMFGXSTK Total	STM Emission Controls:SDRS Scrubber Stack STM Emission Controls:SDRS Thickener Return	800	8,260	750	760	360	300	750	1,160	760	1,150	550	780	17,300
STMFGXTRW Total	STM Emission Controls:SDRS Thickeler Return	900	1,700	1.600	1,150	460	1,100	1,100	1,800	1,300	600	800	900	13,200
STMFOS Total	STM Fire Protection	1,550	2,050	2,750	2,550	1,550	2,050	1,260	2,650	1,660	1,060	4,050	1,060	24,000
STMFPS Total STMHVC Total	STM Bldgs & Grounds:HVAC	1,900	3,700	4,415	3,600	5,600	4,500	4,900	3,860	3,700	2,200	3,700	1,900	44,165 20,800
STMOHC Total	STM Overhead Cranes & Hoists	1,000	2,500	2,600	3,000	0	1,000	2,000	0	3,600	1,600	2,600 2,100	1,000 3,000	73,200
STMPAS Total	STM Air System	10,000	4,050	3,000	8,300	21,000	3,000	3,000	2,150	9,900	3,700	1,300	1,200	21,700
STMPCM Total	STM Plant Communications	1,300	1,700	3,100	1,900	1,300	1,900	1,600	1,300	3,200	1,900 2,000	1,300	1,400	19,260
STMPCS Total	STM Plant Controls	2,100	1,900	2,100	1,000	3,260	1,000	0	1,000	2,100 4,200	2,000	4.300	4,200	243,635
STMPLC Total	STM Controls/Computer Systems	3,100	4,100	122,535	8,100	62,900	16,200	5,600 7,500	5,500 8,800	4,200	14,360	10,100	8,500	127,800
STMPLS Total	STM Plant Lighting System	11,300	8,200	12,900	12,350	14,950 100	7,100 100	1,000	100	100	100	100	100	1,200
STMPWS Total	STM Service Water System	100	100	100	100	600		500	1.000	1,500	1,500	1,500	0	13,600
STMRID Total	STM Recording/Indicating Devices	900		3,350	1,600		200	4.000	22.200	24,000	21,500	3.000	3.000	178,400
STMSCR Total	STM Nox Reduction-SCR Maintenance	8,000		51,200	26,500	4,000	5,000		28.875	34,225	33,200	27,000	30,500	421.050
STMSGU Total	STM Bollens & Burners	26,750	•	33,760	35,450	37,250	61,300	33,700	4,300	6,250	4,400	2,900	3,100	52,550
STMSGUFDE Total	STM Fans/Draft System	1,800		4,460	5,100	3,200	9,000	2,900 5,000	4,300 4,900	9,900	8,000	11,100	3,900	92,600
STMSGUFPE Total	STM Fuel Feed: Mills and Feeders	5,800	•	12,000	11,100	3,600	7,400	5,750	4,000	6,750	5,000	3,500	600	62,000
STMSGUPRP Total	STM Emission Controls: Precipitators	4,000	•	7,000	4,000	6,000	6,000	5,700	7,600	3,150	4,500	4,000	3.000	52,500
STMTGN Total	STM Turbine/Generator	4,000		3,100	5,250 600	3,600 300	4,000 200	260	330	200	1,250	-,	600	4,100
STMTGNDGS Total	STM Diesel/Generator	100		300		3.600	4,000	4,700	6,000	5,500	4,500	6.500	4,500	52,500
STMTR Total	STM Tool Room	3,500		4,050 350	3,250 1,500	3,500	400	300	400	300	400	550	360	5,600
STMWWS Total	STM Effluent Control(Waste Water Treatment)	350				18.011	25,831	19,181	23,281	24,761	18,411	18,011	18,040	248,951
STOADM Total	STO Administrative	18,636 0		23,161 12,000	23,736 0	12,000	20,031	37,000	64.000	25.000	12,000	0	0	152,000
STOCHSBUS Total	FH Coal Unloading Barge	1.000		1,000	1,000	1,000	1.000	1,000	1.000	1.000	1.000	1,000	1,000	12,000
STOCSM Total	STO Consummables	31,869		31,869	31,869	31,869	31,869	31,869	31,869	31,889	31,869	31,869	31,869	382,426
STOFGD Total	STO HMPL FGD Shared Equipment	13,800		13,800	13,800	13.800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	165,600
STOIS Total	STO Outside Industrial Svc	14.080	•	69,600	25,350	19,400	33,900	14,300	18,850	22,380	17,450	17,000	23,900	280,430
STOLAB Total	STO Laboratory	18,000	-	18,000	18.000	18.000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	218,000
STOMEQ Total	FH Mobile Fuels Equipment	4,450		4,450	4,460	4.450	4.450	4,450	4,460	4,450	4,450	4,450	4,460	63,400
STOMEQCVH Total	STO Vehicles (Mtc, Gas, Oli)	13,095	•	22,095	11,326	11,325	12,900	12,900	36,400	11,400	11,400	20,400	13,170	192,505
STOPST Total	STO Buildings & Grounds	9.000		9,000	24,000	9,000	139,000	9,000	9,000	9,000	86,000	87,000	9,000	407,000
STOSCR Total	STO SCR Operation STO Bollers and Burners	27,000		18,000	0	19,200	39,000	18,000	0	27,800	30,000	18,000	9,000	236,000
STOSGU Total	STO Bollers and Burners STO Mills and Feeders	16,000		18,000	16,000	16,000	16,000	16,000	16,000	18,000	16,000	18,000	16,000	192,000
STOSGUPPE Total	STO mills and requers STO Turbine/Generator	5,330		5,340	5,330	6,330	6,340	5,330	5,330	5,340	5,330	5,330	5,340	64,000
STOTGN Total	STO Tool Room	0	•	2,660	0	1,000	0	1,500	0	360	1,000	0	1,000	7,400
STOTR Total Grand Total		497,170	708,010	1,141,769	4,123,729	2,682,174	924,109	702,404	687,394	787,339	751,939	684,359	466,948	14,165,344
			• • -											
Total 2011 Budget		497,170	708,010	1,141,769	4,123,729	2,662,174	924,109	702,404	687,394	767,339	751,939	884,359	466,948	14,165,344
HMPL Allocation		122,119	182,612	303,864	1,207,299	783,588	224,292	178,485	171,957	172,277	185,808	167,146	114,482	3,803,928
						4 000 600	000 04*	523,919	515,437	615,082	566,131	527,213	352,466	10,351,416
BREC Share		375,051	623,398	837,905	2,918,430	1,898,686	699,817	9291918	0105491	919199E	909 <u>7</u> 391	**** \$** 14	,	

Big Rivers Electric Cooperative 2009 Capital Budget

Hadd JMM21 Station II 15.000 17.15 13.285 ROH - LERA Air Machines (2) 5.000 57.2 4.428 ROH - Planams Mine Bidg ROM 107.000 112.232 44.768 ROH - Planams Mine Bidg ROM 107.000 12.232 44.768 ROH - Flanams Mine Bidg ROM 53.000 6.069 44.841 ROH - Jeans Mine Ending Kork 50.000 34.285 2255.704 ROH - Mass Ending Kork 10.000 2.25.199 74.801 RH - Mac Capital Projects 10.000 2.25.199 74.801 RH - Mac Capital Projects 20.000 5.040 14.680 RH - Stassport Multi Gas 7.000 1.512 4.488 RH - Capital Advantors 20.000 5.644 116.926 RH - Mass Convery Rolts 90.000 22.679 67.321 RH - Mass Convery Rolt	Project Description	Gross Capital Budget	City of Henderson Share	Net Capital Budget
RCH - Confined Space Training Trailer 15,000 1.715 13,286 RCH - HEPA / Meachines (2) 5,000 6,722 4,428 RCH - Parama Mire Bidg Roof 107,000 12,232 4,478 RCH - Parama Mire Bidg Roof 50,000 6,059 44,291 RCH - Jean Sequemes System 30,000 24,285 704 RCH - East Sequemes System 100,000 25,190 7,480 RH - Masc Tools & Equipment Max 100,000 26,100 1,480 RH - Eastport Mult Gas 7,000 1,752 4,480 RH - Hass Contant A Monitors 20,000 5,644 16,649 RH - Assport Mult Gas 7,000 1,644 16,649 RH - Assont Mult Gas 7,000 1,644 16,649 RH - Assont Mult Gas 90,000 22,679 67,321 RH - Masc Convey Tells 90,000 22,679 67,321 RH - Boot System Control Box 22,000 5,644 16,689 RH - Hant Prove & Asson Asson 0 0 0 0 RH - Hant P				
Rick - Hoave Equipment Bidg Food 107 000 12.222 P4.768 Rick - Hoave Equipment Bidg Roof 53,000 6,059 46,841 Rick - Hoast Sequeg System 300,000 25,193 74,4851 Rick - Hoast Sequeg System 100,000 25,193 74,4851 Rick - Bids Equipment Bidg Nord 5,000 1,220 3,740 Rit - Basto Forman 5,000 1,512 4,485 Rit - Passport Multi Gas 7,000 1,512 4,485 Rit - All Carl By Manthonia 5,000 2,279 67,321 Rit - Miss Captal Valves 80,000 2,279 67,321 Rit - Miss Carl Valves 80,000 2,279 67,321 Rit - Boatt System Control Box 2,2000 5,544 16,6456 Rit - Loop Califorators (2) 4,000 1,003 2,987 Rit - Boatt System Control Box 2,5000 6,300 18,700 No - DCS Engineering (Compatel In Drovements 2,5000 6,300 18,700 No - DCS Engineering (Compatel Davements 2,5000 6,300 18,700		15,000	1,715	13,285
Rich - Hissey Equipment Bidg Roof 53,000 6,069 46,841 Rich - Lissed Freight 50 Loader) 0 0 0 0 Rich - Lissed Freight 50 Loader) 300,000 24,269 275,169 74,861 Rit - Bics Tools & Equipment 100,000 2,550 7,480 37,468 Rit - Electito Wanch 5,000 1,250 3,746 37,468 Rit - Electito Wanch 6,000 1,512 4,488 Rit - Cleint & Monthors 20,000 5,040 14,862 Rit - Misc Carlyster Rothor 108) 2,5730 6,489 19,261 Rit - Misc Carlyster Control Box 22,000 5,544 19,465 Rit - Boch System Control Box 22,000 5,544 19,465 Rit - Load Sistem Control Box 22,000 6,300 18,700 Rit - Misc Carlystem Control Box 22,000 6,304 115,455 Rit - Load Sistem Control Box 25,000 6,300 18,700 Rit - Sears/Rither & StanAPI 0 0 0 0 0 Rit - Sears	RGH - HEPA Alr Machines (2)	5.000	572	4,428
CRH - Ligner Front Endinader (Rpl 560 Loader) 0 0 0 RGH - Plant Sawage System 300 000 34 296 225 719 74.801 H - Misc Capital Projects 100,000 25,199 74.801 RH - Basport Multi Gas 7,000 1,784 5,238 RH - Passport Ammonia 6,000 1,312 4,485 RH - Clent & Monthors 20,000 5,040 14,960 RH - Misc Capital Valves 90,000 22,679 67,321 RH - Misc Capital Valves 90,000 22,679 67,321 RH - Mass Conveyre Belts 90,000 22,679 67,321 RH - South System Control Box 22,000 5,544 16,646 RH - Loop Califorators (2) 4,000 1,008 2,987 RH - Control Rom Pressurging Frans 35,000 6,000 50,545 115,455 RH - Control Rom Pressurging Frans 30,000 9,345 6,856 RH - Passion Rom Pressurging Frans 30,000 9,345 20,865 RH - Control Rom Pressurging Frans 30,000 6,347	RGH - Panama Mine Bldg Roof	107.000	12,232	94.768
IGH - Flant Savage System 300.000 24.266 285.704 RH - Misc Tools & Equipment 100.000 2.5199 74.801 RH - Electic Vitench 5.000 1.220 3.7400 RH - Electic Vitench 6.000 1.774 5.238 RH - Passport Annnonia 6.000 1.512 4.488 RH - Signa Monitors 20.000 5.040 14,860 RH - Misc Calle Nonitors 20.000 5.2479 67.321 RH - Misc Calle Nonitors 22.000 5.644 16,645 RH - Siter Sitem Control Box 22.000 5.644 16,645 RH - Locid Sitem Control Box 22.000 5.644 16,645 RH - Locid Sitem Control Box 22.000 6,845 116,455 RH - Locid Sitem Control Box 22.000 0 0 0 RH - Site Call Sitem Control Box 22.000 6,845 116,455 RH - Locid Sitem Control Box 20.000 6,845 116,455 RH - Locid Sitem Control Box 20.000 6,845 116,446 RH - Si	RGH - Heavy Equipment Bidg Roof	53,000	6,059	48,941
H+. Miss Capital Projects 100,000 25,199 74,801 H+. Miss Capital Projects 10,000 2,520 7,480 H+. Electric Wranch 5,000 1,550 3,740 RH - Passport Multi Gas 7,000 1,754 5,238 RH - Client & Monitors 20,000 5,040 14,468 RH - Miss Capital Valves 90,000 22,676 67,321 RH - Miss Capital Valves 90,000 22,677 67,321 RH - Loop Califorators (2) 4,000 1,008 2,982 RH - Loop Califorators (2) 4,000 1,008 2,982 RH - Post PA New System 0 0 0 0 RH - Control Room Pressouring Fans 35,000 8,000 8,045 (15,455 RH - Control Room Pressouring Fans 30,000 8,155 20,865 115,455 RH - Control Room Pressouring Fans 30,000 8,165 20,865 10,900 3,045 6,955 RH - Control Room Pressouring Fans 30,000 8,136 20,866	RGH - Used Front Endloader (Rpl 560 Loader)	0	0	0
H+. Hiso Tools & Engliment 10.000 2.820 7.480 H+. Electric Wrench 5.000 1.764 5.238 RH - Passport Multi Gas 7.000 1.764 5.238 RH - Passport Multi Gas 7.000 1.764 5.238 RH - Alexand Monitors 20.000 5.040 14,480 RH - Misc Capital Valves 90.000 2.677 67.321 RH - Misc Capital Valves 90.000 2.676 67.321 RH - Misc Capital Valves 22.000 5.544 16.458 RH - Loinet A Bone (Moved from '08) 2.570 6.489 19.264 RH - Loinet System Control Box 22.000 5.544 16.458 RH - Loinet System Control Box 2.000 6.820 2.6100 RH - Mais Charles Fight Mest Improvements 25.000 6.300 18.700 RH - Water Pient Bitig Heat Improvements 25.000 6.300 18.700 O - Dig Bited Charles fight Heat Improvements 25.000 6.877 138,103 O - Rop Eleved To Doro/Framos 100.000 30.446 69.651 </td <td>RGH - Plant Sewage System</td> <td>300.000</td> <td>34,296</td> <td>265.704</td>	RGH - Plant Sewage System	300.000	34,296	265.704
RH- Electric Wench 5,000 1,280 3,740 RH - Pasaport Ammonia 6,000 1,512 4,480 RH - Sasport Ammonia 6,000 1,542 4,480 RH - Sasport Ammonia 6,000 25,750 6,488 10,281 RH - Misc Capital Valves 90,000 22,676 67,321 RH - Misc Conveyor Belts 90,000 22,676 67,321 RH - Booth System Control Box 22,000 5,644 16,648 RH - Booth System Control Box 22,000 5,644 16,648 RH - Control Room Pressuring Frans 35,000 6,000 16,852 28,610 RH - Control Room Pressuring Frans 25,000 60,300 16,754 11,645 HO - DCS Engineering (Computes in 2010) 166,000 50,445 115,455 HO - Rol Plaver & SamAPI 10,000 3,045 8,855 HO - Rol Plaver & SamAPI 30,000 61,35 226,856 HO - Rol Plaver Return Line 16" 200,000 60,897 139,103 HO - Rol Plaver Return Return Line 16" 200,000 <td>RH - Misc Capital Projects</td> <td>100,000</td> <td>25,199</td> <td>74,B01</td>	RH - Misc Capital Projects	100,000	25,199	74,B01
RH - Passport Multi Gas 7,000 1,754 5,238 RH - Client & Monitors 20,000 5,040 14,860 RH - Client & Monitors 20,000 5,040 14,860 RH - Miles Conveyor Betts 80,000 22,676 67,321 RH - Miles Conveyor Betts 80,000 22,676 67,321 RH - Booth System Control Box 22,000 5,544 16,468 RH - Loop Calibrators (2) 4,000 1.008 2,992 RH - Naice Conveyor Betts 35,000 8,820 26,810 RH - Loop Calibrators (2) 4,000 1.008 2,992 RH - Naice The Bidg Hest Imporements 25,000 6,820 26,810 Ho - DSC Engineering (Complete in 2010) 166,000 50,945 115,855 Ho - Rpi Eleved The Bidg Hest Imporements 20,000 6,827 139,103 Ho - Rpi Eleved The Dors/Frames 100,000 30,444 69,651 Ho - Rpi Eleved Tobors/Frames 30,000 91,345 20,864 H - Cole Chifw 30,000 91,345 20,864	RH - Misc Tools & Equipment	10,000	2,520	7,480
RH - Respont Ammonia 6,000 1,512 4,488 RH - Client & Monitors 20,000 5,040 14,980 RH - Misc Capital Valves 90,000 22,679 67,321 RH - Misc Capital Valves 90,000 22,679 67,321 RH - Bodth System Control Box 22,000 5,544 16,662 RH - Bodth System Control Box 22,000 5,544 16,662 RH - Loop Calibratora (2) 4,000 1,008 2,992 RH - Plant Phone & PA New System 0 0 0 0 RH - Outor Messuriting Frans 35,000 8,020 28,180 RH - Outor Messuriting Frans 25,000 6,300 18,700 No - Rpi Elevator Doord/Frames 100,000 3,045 6,055 No - Rpi Elevator Doord/Frames 100,000 80,449 68,651 No - Rpi Elevator Doord/Frames 100,000 30,449 68,651 No - Rpi Elevator Doord/Frames 100,000 30,449 68,651 No - Rpi Elevator Resurviration 300,000 91,346 208,654	RH - Electric Wrench	5,000	1,260	3,740
FH - Giant & Monitors 20.000 5.040 14,860 RH - 4" Sump Pump & Hose (Moved from '08) 25,750 6.489 19,281 RH - Misc Capital Valves 90,000 22,677 67,321 RH - Misc Capital Valves 90,000 22,679 67,321 RH - Misc Capital Valves 90,000 5,644 16,458 RH - Loop Calibrators (2) 4,000 1,008 2,962 RH - Mater Dense & PA New System 0 0 0 0 RH - Control Room Pressurizing Fans 35,000 6,820 26,160 O - DCS Engineering (Complete in 2010) 166,000 50,645 115,455 Ho - Dg1 Pi Server & SemAPI 10,000 3,045 6,055 Ho - Rej Pi Server & SemAPI 300,000 81,35 20,865 Ho - Rej Pi Server & SemAPI 300,000 80,456 146,001 324,49 Ho - Rej Pi Server & SemAPI 10,000 30,449 69,651 Ho - Rej Finder Monter Donsr/Frames 100,000 30,449 69,651 Ho - Cost Field Wring & Devices 116,000	RH - Passport Multi Gas	7,000	1,764	
FH - 4" Sump Pump & Hose (Moved from '08) 25,750 6.489 19,261 RH - Mise Capital Valves 90,000 22,679 67,321 RH - Bacc Conveyor Beits 90,000 22,679 67,321 RH - Bacch System Control Box 22,000 5,544 16,669 RH - Loop Calibrators (2) 4,000 1,008 2,992 RH - Plant Phone & PA New System 0 0 0 0 RH - Control Room Pressuriting Frans 35,000 6,820 28,000 RH - Control Room Pressuriting Frans 25,000 6,300 18,760 NO - DQS Engineering (Complete In 2010) 166,000 50,445 115,455 NO - Reparticitating Frans 100,000 3,045 6,855 NO - Reparticitating Frans 100,000 60,687 139,103 NO - Reparticitating Return Inte 16" 200,000 60,687 139,103 NO - Reparticitating Return Inte 16" 200,000 60,897 139,103 NO - Reparticitation Drains 300,000 91,346 268,651 NI - Colo Trobs 441,435	RH - Passport Ammonia	6,000	1,512	
Hi - Huise Capital Values 90,000 22,679 67,321 RH - Muise Conveyor Belts 90,000 22,679 57,321 RH - Booth System Control Box 20,000 5,544 19,462 RH - Loop Calibrators (2) 4,000 1,008 2,992 RH - Nearch Pressurizing Fans 35,000 8,620 28,160 RH - Water Pum Bidg Heat Improvements 25,000 6,000 14,755 HO - DCS Engineering (Complets in 2010) 166,000 50,545 115,455 HO - Rpi Pi Sever & SemAPI 10,000 3,045 0,855 HO - Rpi Pi Sever & SemAPI 200,000 60,867 139,103 HO - Rpi Tinckener Returm Line 16" 200,000 60,867 139,103 HO - Rpi Tinckener Returm Line 16" 200,000 91,346 208,654 H - Rpi WDPF FGD & SCR Controls 140,000 42,628 97,372 H - CCS Field Wining & Devices 110,000 48,716 111,222 H - Control Room 100,000 48,716 111,222 H - Control Room 100,000 48,716 111	RH - Client & Monitors	20.000		-
H- Misc Conveyor Belts 90.000 22.679 67.321 RH - booth System Control Box 22.000 5,544 16,458 RH - booth System Control Box 2000 5,544 16,458 RH - Booth System Control Box 2,000 5,544 16,458 RH - Plant Phone & PA New System 0 0 0 0 RH - Control Foor Pressuring Fans 35,000 8,220 23,160 115,455 No - Rpl Fl Server & SemAPI 10,000 3,045 8,055 115,455 No - Rpl Fl Server & SemAPI 200,000 60,887 139,103 20,865 No - Rpl Elevator Doors/Frames 100,000 30,449 69,651 No - Rpl Elevator Doors/Frames 100,000 60,887 139,103 H1 - COS Controls 14,0000 42,628 97,372 H1 - COS Controls 14,0000 40,41,451 20,034 H1 - COS Controls 140,000 48,718 111,282 H1 - AH Initel Expansion Joints (2) 160,000 48,718 111,282 H1 - Houter Booth Moring & Dononets	RH - 4" Sump Pump & Hose (Moved from '08)	25,750	6,489	19,261
RH - Booth System Control Box 22,000 5,544 16,469 RH - Loop Calibrators (2) 4,000 1,008 2,992 RH - Plant Phone & PA New System 0 0 0 0 RH - Control Room Pressurzing Fans 35,000 6,300 18,700 Ho - DCS Engineering (Complete in 2010) 166,000 50,545 115,455 Ho - Dcy Engineering (Complete in 2010) 166,000 50,545 115,455 Ho - Dcy Engineering (Complete in 2010) 166,000 50,545 115,455 Ho - Dcy Engineering (Complete in 2010) 200,000 60,867 139,103 Ho - Repi Eleved Tobors/Frames 100,000 30,449 68,651 Ho - Repi Eleved Tobors/Frames 100,000 42,628 97,372 H - CCS Field Wring & Devices 118,665 36,102 82,463 H - CCS Field Wring & Devices 118,665 140,601 320,934 H - Cost Controls 401,435 140,651 320,934 H - Cost Controls 100,000 30,449 68,551 H - Reid Wring & Devices 100,000 <td>RH - Misc Capital Valves</td> <td></td> <td></td> <td></td>	RH - Misc Capital Valves			
HH - Loop Calibrators (2) 4.000 1.008 2.992 RH - Plant Phone & PA New System 0 0 0 RH - Control Koom Pressurizing Fans 35,000 6,820 28,180 RH - Control Koom Pressurizing Fans 35,000 6,820 28,180 RH - Watter Plant Bildy Heat Improvements 25,000 6,300 113,740 No - Ropi Bisenera (Complete in 2010) 166,000 50,545 115,455 No - Ropi Bised Lines 6" (2) 200,000 60,897 139,103 No - Ropi Bised Lines 6" (2) 200,000 60,897 139,103 No - Ropi Bised Lines 6" (2) 20,000 60,897 139,103 No - Ropi Tiskkame Return Line 16" 200,000 60,897 139,103 No - Not Tiskkame Return Line 16" 200,000 60,897 139,103 No - Ropi Tiskkame Return Line 16" 200,000 60,897 139,103 No - Ropi Tiskkame Return Line 16" 200,000 60,897 139,103 No - Soci Trais 140,000 30,449 69,551 N1 - Coclint Room 100,000 30	RH - Misc Conveyor Beits			
RH - Plant Phone & PA New System 0 0 0 0 0 RH - Control Room Pressultzing Fans 35,000 6,820 28,180 RH - Water Pinnen Bidty Heat Improvements 25,000 6,300 18,700 HO - DCS Engineering (Complete in 2010) 166,000 50,545 115,455 HO - Lyparade CEMs 30,000 9,135 20,865 HO - Rpi Piscottor Doors/Frames 100,000 30,446 68,551 HO - Rpi Thickener Return Line 16" 200,000 60,897 139,103 HO - Webtottom Drains 300,000 91,346 208,664 H1 - Rpi ImcKener Return Line 16" 200,000 60,897 139,103 HO - Webtottom Drains 300,000 91,346 208,654 H1 - Rpi ImcKener Return Line 16" 200,000 60,897 139,103 H1 - CSC Field Winng & Devices 118,665 36,102 82,463 H1 - Control Room 100,000 30,449 68,551 H1 - A Hinlet Expansion Joints (2) 160,000 48,718 111,282 H1 - A Hinlet Expansion Joints (2)	RH - Booth System Control Box			
HI - Control Room Pressurizing Fans 35,000 6,820 26,160 RH - Water Plant Bildy Heat Improvements 25,000 6,300 13,700 HO - DCS Engineering (Complete in 2010) 166,000 50,545 115,455 HO - Rpi Pi Server & SemAPI 10,000 3,045 6,955 HO - Rpi Pi Server & SemAPI 30,000 9,135 20,865 HO - Rpi Elevator Doors/Frames 100,000 30,449 69,551 HO - Rpi Elevator Doors/Frames 300,000 91,346 208,654 HO - Rpi Elevator Doors/Frames 300,000 91,346 208,654 H1 - RCD Held Wring & Davices 118,565 36,102 82,463 H1 - CCS Controls 140,000 42,628 97,372 H1 - CCArtor Room 100,000 30,449 69,551 H1 - CCS Controls 160,000 46,718 111,282 H1 - Control Room 100,000 80,471 111,282 H1 - Born Outet Damper A&B Rexa Drives 20,000 60,897 139,103 H1 - For Far Outlet Damper A&B Rexa Drives 20,000 60,897 <td>RH - Loop Calibrators (2)</td> <td></td> <td></td> <td></td>	RH - Loop Calibrators (2)			
RH - Weiter Plant Bitg Heat Improvements 25,000 6,300 18,700 H0 - DCS Engineering (Complete in 2010) 166,000 50,545 115,455 H0 - RpI Piserver & SamAPI 10,000 3,045 6,055 H0 - RpI Elevator Doors/Frames 200,000 60,867 139,103 H0 - RpI Thickemer Return Line 16" 200,000 60,867 139,103 H0 - RpI Thickemer Return Line 16" 200,000 60,867 139,103 H0 - RpI Thickemer Return Line 16" 200,000 60,867 139,103 H0 - Weibtottom Drains 300,000 91,346 206,854 41,32 H1 - CSC Field Wring & Devices 118,565 36,102 82,463 H1 - CSC Controls 140,000 30,449 69,551 H1 - CATI Room 100,000 30,449 69,551 H1 - AH Inite Expansion Joints (2) 160,000 46,718 111,282 H1 - AH Inite Expansion Joints (2) 100,000 46,718 111,282 H1 - AKI Inite Expansion Joints (2) 20,000 6,0897 139,103 H1 - Fold Most Expansion Joints (2	RH - Plant Phone & PA New System			0
H0 - DCS Engineering (Complete in 2010) 166,000 50,545 115,455 H0 - Lpgrade CEMs 30,000 6,135 20,855 H0 - Rp I Bleed Lines 6" (2) 200,000 60,887 139,103 H0 - Rp I Elevator Doors/Frames 100,000 30,449 69,651 H0 - Rp I Elevator Doors/Frames 100,000 60,887 139,103 H0 - Netbottom Drains 300,000 91,346 208,654 H1 - CCS Field Wining & Devices 140,000 42,628 97,372 H1 - CCS Controls 461,435 140,0501 320,934 H1 - CCS Controls 461,435 140,0501 320,934 H1 - CCS Controls 461,435 140,0501 320,934 H1 - CCS Controls 461,435 140,0501 320,935 H1 - Control Room 100,000 48,718 111,282 H1 - Control Tomer Distribution Deck 200,000 60,897 139,103 H1 - Control Tomer Distribution Deck 200,000 60,899 15,301 H1 - Rol Fare Davide Damper A&B Rexa Drives 20,000 6,699 15,3	· · · · · ·			
H0 - Rpi PI Server & SemAPI 10,000 3,045 6,955 H0 - Lipgrade CEMs 30,000 9,135 20,855 H0 - Rpi Elevator Doors/Frames 100,000 30,449 69,651 H0 - Rpi Thickener Return Line 16" 200,000 60,897 139,103 H0 - Rpi Thickener Return Line 16" 200,000 60,897 139,103 H0 - Webtotiom Drains 300,000 91,346 208,654 H1 - RDI WDPF FGD & SCR Controls 140,000 42,828 97,372 H1 - CCS Field Wring & Devices 118,665 36,102 82,463 H1 - CSC controls 140,000 30,449 69,551 H1 - CSC controls 100,000 30,449 69,551 H1 - CAL Inner Deck Vant Fans 30,000 46,718 111,282 H1 - Cooling Tower Distribution Deck 20,000 6,090 13,9103 H1 - FD Fan Outlet Damper A&B Rexa Drives 20,000 6,090 13,9103 H1 - Hydrogen Purity Meters 22,000 6,699 15,301 H1 - Rpi Precip Hoppers (0-12) 4 total 20,000 76,122	RH - Water Plant Bldg Heat Improvements			
H0 - Upgrade CEMs 30,000 9,135 20.865 H0 - Rpi Bleed Lines 8" (2) 200,000 60,697 136,103 H0 - Rpi Dickaner Return Line 16" 200,000 60,697 139,103 H0 - Rpi Thickaner Return Line 16" 200,000 60,697 139,103 H0 - Wetbottom Drains 300,000 91.346 208,654 H1 - RDI WDPF FGD & SCR Controls 140,000 42,628 97,372 H1 - CCS Field Wring & Devices 118,655 36,102 82,463 H1 - CCS Controls 140,000 30,449 69,551 H1 - Cortrol Room 100,000 30,449 69,551 H1 - Control Room 100,000 48,718 111,282 H1 - Hult Expansion Joints (2) 160,000 48,718 111,282 H1 - Burne Deck Vant Faras 20,000 60,997 139,103 H1 - Foed Water Heater Emargency drain Vaive 160,000 48,718 111,282 H1 - Hydrogen Purity Metars 22,000 6,699 15,301 H1 - Repi Msitz Eliminator 175,000 32,285 121,715				
H0 - Rpi Bleed Lines 6" (2) 200,000 60,897 139,103 H0 - Rpi Elevator Doors/Frames 100,000 30,449 69,551 H0 - Rpi Elevator Doors/Frames 200,000 60,897 139,103 H0 - Wetbottom Drains 300,000 91,346 208,654 H1 - Rpi WDPF FGD & SCR Controls 140,000 42,628 97,372 H1 - CCS Controls 461,435 140,501 320,934 H1 - CCS Controls Acons 100,000 30,449 69,551 H1 - AH Inite Expansion Joints (2) 160,000 48,718 111,282 H1 - Burner Deck Vent Fans 30,000 9,135 20,865 H1 - Cooling Tower Distribution Deck 20,000 60,990 13,810 H1 - Feedwater Heater Emergency drain Vaive 160,000 48,718 111,282 H1 - Hydrogen Purity Meters 22,000 6,699 15,301 H1 - Readwater Heater Emergency drain Vaive 160,000 48,718 111,282 H1 - Rpi Mist Eliminator 175,000 53,285 121,715 H1 - Rpi Mist Eliminator 175,000 <td< td=""><td>•</td><td></td><td></td><td></td></td<>	•			
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R1 - Rpl Reclaim Vent Fan 30.000 0 30,000 R1 - Stack Lighting 200,000 0 200,000 R1 - Upgrade CEMs 20,000 0 20,000 HMPL Stack Lighting 287,558 87,558 200,000 R-CT reliability study & upgrades 1,125,509 0 1,125,509 HMPL SCR Catalyst Replacement-additional \$ (net) 878.102 267,371 610,731 H Replace layer of catalyst 305,800 93,112 212,688				
R1 - Stack Lighting 200,000 0 200,000 R1 - Upgrade CEMs 20,000 0 20,000 HMPL Stack Lighting 287,558 87,558 200,000 R-CT reliability study & upgrades 1,125,509 0 1,125,509 HMPL SCR Catalyst Replacement-additional \$ (net) 878,102 267,371 610,731 H Replace layer of catalyst 305,800 93,112 212,688		•	•	
R1 - Upgrade CEMs 20,000 0 20,000 HMPL Stack Lighting 287,558 87,558 200,000 R-CT reliability study & upgrades 1,125,509 0 1,125,509 HMPL SCR Catalyst Replacement-additional \$ (net) 878.102 267,371 610,731 H Replace layer of catalyst 305,800 93,112 212,688	·			
HMPL Stack Lighting 287,558 87,558 200,000 R-CT reliability study & upgrades 1,125,509 0 1,125,509 HMPL SCR Catalyst Replacement-additional \$ (net) 878,102 267,371 610,731 H Replace layer of catalyst 305,800 93,112 212,688				
R-CT reliability study & upgrades 1,125,509 0 1,125,509 HMPL SCR Catalyst Replacement-additional \$ (net) 878.102 267,371 610,731 H Replace layer of catalyst 305,800 93,112 212,688				
HMPL SCR Catalyst Replacement-additional \$ (net) 878.102 267,371 610,731 H Replace layer of catalyst 305,800 93,112 212,688			-	
<u>H Replace layer of catalyst</u> 305,800 93,112 212,688				
	• •			
			-	

Big Rivers Electric Cooperative 2010 Capital Budget

Project Description	Gross Capital Budget	City of Henderson Portion	Net Capital Budget
Reid / HMPL Station			
RGH - Stack Climbing Devices (2)	20,000	2,286	17,714
RGH - Rpl Panama Bldg External Sheeting	40,000	4,573	35,427
RH - Misc Capital Projects	100,000	25,199	74,801
RH - Misc Tools & Equipment	10,000	2,520	7,480
RH - Electric Welding Machine	5,000	1,260	3,740
RH - Client & Monitors	20,000	5,040	14,960
RH - 1 Ton Mtc Truck (Rpl S9 - 1990 Ford)	20,000	5,040	14,960
RH - Misc Capital Valves	90,000	22,679	67,321
RH - Misc Conveyor Belts	90,000	22,679	67,321
RH - "5A" Raw River Reclaim vent fans	25,000	6,300	18,700
RH - 480 Volt Welder	3,000	756	2,244
RH - Barge Unloader Bucket	70,000	17,639	52,361
RH - Rpl 480 Volt MCC	200,000	50,398	149,602
RH - Rpl River Intake 480 Volt MCC	100,000	25,199	74,801
RH - Temperature Bath Calibrator	8,000	2,016	5,984
H0 - Rpl F1-F4 Building Heating Fans	200,000	60,897	139,103
H0 - DCS Engineering (Complete in 2010)	99,600	30,327	69,273
H2 - Rol WDPF FGD & SCR Controls	90,000	27,404	62,596
H1 - Performance OPT Software	150,000	45,673	104,327
	20,000	6,090	13,91
H0 - Rpl PLC Controls for Water Plant	12,000	3,654	8,346
H1 - Cooling Tower Controls	7,000	2,131	4,869
H1 - Feedwater Heater Level Controls	3,000	913	2,087
H1 - Precipitator Controls	150,000	45,673	104,327
H2 - Performance OPT Software			-
H2 - AH Outlet Expansion Joint	85,000	25,881	59,119
H2 - Burner Igniter Conversion	150,000	45,673	104,323
H2 - High Energy Pipe Hangers	35,000	10,657	24,343
H2 - Rpl Mist Eliminator	175,000	53,285	121,71
H2 - Rpl Precip Hoppers on #9-#12	200,000	60,897	139,10
H2 - Rpl Precip Outlet Duct to Bypass Stack Breeching	300,000	91,346	208,654
H2 - Rpl Slag Grinders (2)	75,000	22,837	52,163
H2 - Rpl Sootblowers (14-17 of 23) 4 total	115,000	35,016	79,984
H2 - Rpi Wallblowers (4-6 of 24) 3 total	48,000	14,615	33,38
H2 - Feedwater Heater Emergency Drain Valve	160,000	48,718	111,28
H2 - Voltage Regulator	175,000	53,285	121,71
H2 - Waterwall Overlay	1,000,000	363,375	636,62
H2 - #5 Heater Retube	300,000	91,346	208,654
H2 - Boiler to AH Breeching Expansion Joints (2)	160,000	48,718	111,282
H2 - Rpl AH Steam Coils (2)	20,000	6,090	13,910
R1 - Rpl AH Steam Coils (2) - Moved from 2009	20,000	0	20,000
HMPL SCR Catalyst Replacement	958,746	291,926	666,820
Total Reid / HMPL Station II	\$ 5,509,346	\$ 1,680,013	\$ <u>3,829,333</u>

Big Rivers Electric Cooperative 2011 Capital Budget

Zum Caph	al Budget		
Project Description	Gross Capital Budget	City of Henderson Portion	Net Capital Budget
Reid / HMPL Station	20.000	0.000	477744
RGH - Stack Climbing Devices (2)	20,000	2,286	17,714
RH - Misc Capital Projects	100,000	25,199	74,801
RH - Misc Tools & Equipment	10,000	2,520	7,480
RH - Client & Monitors	20,000	5,040	14,960
RH - Replace D8N with a D8T	600,000	151,194	448,806
RH - Rpl Band Saw	12,000	3,024	8,976
RH - Misc Capital Valves	90,000	22,679	67,321
RH - Misc Conveyor Belts	90,000	22,679	67,321
RH - Plant Phone & PA New System	650,000	163,793	486,207
RH - Rpl Silo Sump Pump Discharge Line	120,000	30,239	89,761
RH - Truck Hopper Vent Fan	25,000	6,300	18,700
RH - Rpl DI Water Plant Components	275,000	69,297	205,703
RH - Ground Resistance Tester	6,000	1,512	4,488
RH - Water Plant Heating System	25,000	6,300	18,700
RH - Rpl Barge Unloader Switching Center	100,000	25,199	74,801
H0 - CT Sump Pump (make-up pit)	12,000	3,654	8,346
H0 - Rpl PLC Controls for Water Plant	180,000	54,808	125,192
H1 - Cooling Tower Controls	113,000	34,407	78,593
H1 - Feedwater Heater Level Controls	68,000	20,705	47,295
H1 - Precipitator Controls	27,000	8,221	18,779
H1 - Burner Igniter Conversion	150,000	45,673	104,327
H1 - AH Outlet Expansion Joint	85,000	25,881	59,119
H1 - Economizer Outlet Expansion Joint	85,000	25,881	59,119
H1 - Rpl Slag Grinders (2)	75,000	22,837	52,163
H1 - Wet Bottom Vent Fans	25,000	7,612	17,388
H1 - Feedwater Heater Extraction MOV	160,000	48,718	111,282
H1 - Rpl Wallblowers (11-13 of 24) 3 total	50,000	15,224	34,776
H1 - Blading Replacement	125,000	38,061	86,939
H1 - Burner Replacement (added \$200K)	3,200,000	974,359	2,225,641
H1 - Nozzle Coating	100,000	30,449	69,551
H1 - Turbine packing HP-IP rows	125,000	38,061	86,939
H1 - High Energy Pipe Hangers	45,000	13,702	31,298
H1 - Addition of 480 Volt MCC's (1 ea)	200,000	60,897	139,103
H1 - Rpl 480V MCC at Cooling Tower	300,000	91,346	208,654
H1 - Transformer Deluge System	35,000	10,657	24,343
H1 - Rpl AH Steam Coils (2)	22,000	6,699	15,301
H1 - Install Servo Valve Isolation & Filter Block	50,000	15,224	34,776
H1 - Server Replacement	20,000	6,090	13,910
H1 - Catalyst Regeneration	737,000	224,407	512,593
H2 - Turbine Trip Block Upgrade	20,000	6,090	13,910
H2 - Cooling Tower Controls	12,000	3,654	8,346
H2 - Feedwater Heater Level Controls	7,000	2,131	4,869
H2 - Precipitator Controls	3,000	913	2,087
H2 - Wet Bottom Vent Fans	25,000	7,612	17,388
H2 - Loop Seat Vapor Extractor Frequency Drive	2,000	609	1,391
R1 - Rpl Boiler Roof	55,000	0	55,000
Total Reid / HMPL Station II	\$ 8,256,000	\$ 2,381,843	\$ 5,874,157
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BIG RIVERS ELECTRIC CORPORATION'S			
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SUPPLEMENTAL RESPONSE TO THE ATTORNEY GENERAL'S			
SUPPLEMENTAL REQUEST FOR INFORMATION TO JOINT APPLICANTS			
PSC CASE NO. 2007-00455			
(Original Response March 6, 2008)			
November 7, 2008			

1	
2	Item 94) Please refer to page 2 of the (claimed confidential) Stone and Webster
.3	report, attached to the Smelters' Response to OAG #3, where it states: "The Big Rivers
4	capital budget amount is larger than the WKE capital budget for each unit." Explain why
5	the Big Rivers capital budget is larger than the WKE capital budget for each unit.
6	
7	Response) Attached, Big Rivers presents a chart detailing by unit the capital budget
8	items included in the most recent Big Rivers capital budget that are not included in the
9	WKEC capital budget referenced in this question. Individual unit budget line items and
10	their increased costs are presented in this chart. The chart also summarizes the
11	differences in each year 2009 through 2017 as well as summarizing the total differences
12	for the period 2009 through 2017.
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14	Witness) Mark A. Bailey
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32	Item AG-94
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BIG RIVERS ELECTRIC CORPORATION'S SUPPLEMENTAL RESPONSE TO THE ATTORNEY GENERAL'S SUPPLEMENTAL REQUEST FOR INFORMATION TO JOINT APPLICANTS PSC CASE NO. 2007-00455 (Original Response March 6, 2008) November 7, 2008

BREC Capital Budget Items Not in the WKE Capital Budget

Item Description		2009	2010		2011		2012		2013	2014		2015	2016	2017		TOTAL 2009-2017
Coleman			1	1		1		1		1				1		
(none)						+		+								
Green						1		1			+					
Green 2 Precip Repair	s	1,050,900		s	1,125,509	1		<u>+</u>								2,186,409
Green 1 Precip Repair	-		\$ 1,092,7		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		1,159,274								- 2	2,188,409
Green 1&2 FGD Rehab	\$	4,243,600			2,251,018		1,100,27 1								s	9,515,526
Green 1&2 Paint Boiler, Precip & FGD	S	1,442,824					1,576,613	15	1.623.911		+				Ś	7,660,149
HMP&L								Ť			+				+-	-1,000,140
HMPL Stack Lighting	\$	200,000	1			+		1					<u></u>			200,000
Reid 1 and CT			1			1		1			+				1	200,000
R-CT reliability study & upgrades	s	1,125,509	<u> </u>			+		+							- <u> </u>	1,125,509
Reid CT Cooling Tower Repair						-		1			-ts	1,827,604			- İs	1,827,604
Wilson						1					+-				1	
Make flue gas SO3 treat. System permanent.			\$ 1,138,5	<u>0 s</u>	2.225.641			<u> </u>							5	3,364,141
WL FGD Additional Amount for Inlet Guillotine (net diff)	S	300,000				1		1							-tě-	300,000
WL FGD Additional Amount for Outlet Guillotine (net diff)	S	300,000				-					+				s	300,000
WL FGD Recycle Pump Suction Valve Replacement (8)	S	280,000				1		1							- <u> </u> -	280,000
WL FGD Repl 3 absorber mist eliminator panels & mounting frames	S	900,000						1							ŝ	900,000
WL FGD Rept mist eliminator piping & nozzles	\$	470.000						1			1.				Ś	470,000
WL FGD Structural Improvements			S 2,425,0	10				1							S	2,425,000
WL FGD Repl 75 stack tension bands with 316L SS material			\$ 850,0	00				1							İs	850,000
WL FGD Repl 4 dewalering filter drums incl vacuum skids & pumps			\$ 1,700,0	00		1		1							Ś	1,700,000
WL FGD Repair ductwork hol and wet sides				S	3,114,272			1			1				15	3,114,272
WL FGD PLC FGD/Flyash Control System Replacement				\$	20,000										Ś	20,000
WL FGD Structural Improvements (net diff)				S	1,675,000	1		[1			1	Š	1,675,000
WL FGD inlet and outlet damper replacement 2 absorbers				\$	1,200,000										ŤŠ	1,200,000
															s	
Total Added Capital	\$	10,322,833	\$ 11,713,24	4 \$	13,142,132	\$	2,735,887	\$	1,623,911	\$ -	S	1,827,604	\$.	S -	\$	41,365,611

Note: Total Added for WL FGD 2009-2013 - \$13,234,272

BIG RIVERS ELECTRIC CORPORATION'S SUPPLEMENTAL RESPONSE TO THE ATTORNEY GENERAL'S SUPPLEMENTAL REQUEST FOR INFORMATION TO JOINT APPLICANTS PSC CASE NO. 2007-00455 (Original Response March 6, 2008) November 7, 2008

1 2 Item 95) Please refer to page 4 of the (claimed confidential) Stone & Webster 3 report, attached to the Smelter's Response to OAG #3, where it states: "The one concern 4 that Stone & Webster Consultants has is that Big Rivers has included in their Business 5 Plan a very comprehensive capital expenditure and major modification plan over the next 6 five years. Stone & Webster Consultants' opinion is that the WKE capital expenditure 7 budget should be the baseline and that additional capital expenditures may be required." 8 Please provide: 9 A sensitivity run of the Unwind Financial Model (Exhibit 8), with a. 10 the sole change being to utilize the WKE capital expenditure budget in place of the capital expenditures contained in the model. 11 12 b. Indicate whether any other inputs should be changed in concert with this change in capital expenditures in order to maintain internal consistency of 13 14 results, and specify any such other inputs that should be changed, and why. An electronic spreadsheet copy (.xls file) of the sensitivity run in a, 15 C. 16 above. 17 18 a. b. and c. As Big Rivers noted in its original response to this question, Response) the Stone & Webster report refers to an outdated version of Big Rivers Production Work 19 20 Plan that has evolved over time. Big Rivers in its March 6, 2008 response accordingly 21 provided a response demonstrating the incremental impact on rates of removing the referenced differences in capital budget items based on the then-current Big Rivers 22 Production Work Plan. The Big Rivers Production Work Plan has since been revised as 23 24 described in the October 9, 2008 filings. 25 26 Using Big Rivers' Unwind Financial Model, Big Rivers has performed a new 27 sensitivity run using the updated Big Rivers Production Work Plan to demonstrate the 28 incremental impact on rates of removing the referenced differences in capital budget 29 items as provided in the updated response to AG Supplemental Item 94. The results of this sensitivity run are shown in Tables 1 and 2 attached. A CD with an electronic 30 31

	SUPF	BIG RIVERS ELECTRIC CORPORATION'S SUPPLEMENTAL RESPONSE TO THE ATTORNEY GENERAL'S PLEMENTAL REQUEST FOR INFORMATION TO JOINT APPLICANTS PSC CASE NO. 2007-00455 (Original Response March 6, 2008) November 7, 2008								
1	spreadsheet c	copy of the tables and the sensitivity run of the Financial Model is attached.								
2	As before, it	would be difficult if not impossible to note each and every input difference								
3		WKEC plan and the current Big Rivers plan. The request would take a line								
4	item by line item review of each plan to determine differences and to explain.									
5										
6	Witness)	Mark A. Bailey								
7		Robert S. Mudge								
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32		Item AG-95								
33		Page 2 of 4								

BIG RIVERS ELECTRIC CORPORATION'S

SUPPLEMENTAL RESPONSE TO THE ATTORNEY GENERAL'S SUPPLEMENTAL REQUEST FOR INFORMATION TO JOINT APPLICANTS

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PSC CASE NO. 2007-00455

(Original Response March 6, 2008)

November 7, 2008

TABLE 1

		Wtd Avg	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
	Member Non-Smelters																
	Base Case																
1 2 3 4 5 6 7 8	Base Regulatory Account FAC Env. Surcharge Surcredit Rebate Realized MRSM Effective Rate - Cash		35.45 11.22 2.19 (3.28) (10.13) 35.45	35.42 12.95 2.42 (3.20) (0.09) (10.08) 37.42	35.39 (0.10) 14.04 3.15 (3.12) (1.69) (8.38) 39.29	35.36 (0.10) 16.58 3.24 (3.64) - (10.19) 41.26	35.33 (0.10) 18.46 3.27 (3.55) - (9.28) 44.14	35.31 0.42 11.27 3.48 (3.47) - - 47.01	35.28 0.41 9.82 5.36 (3.39) - 47.49	35.26 0.40 9.93 5.37 (3.32) 	38.67 0.41 10.00 5.36 (4.49) - - 49.94	38.64 0.40 10.32 5.58 (4.40) 	38.62 0.39 10.60 5.52 (4.30) - - 50.84	38.61 1.52 10.96 5.80 (4.22) - - 52.67	38.58 1.48 10.98 5.95 (4.12) - - 52.88	38.56 1.45 11.56 6.03 (4.04) - 53.57	38.67 1.59 11.47 6.21 (3.96) - - 53.98
1 2 3 4 5 6 7 8	Base Regulatory Account FAC Env. Surcharge Surcredit Rebate Realized MRSM Effective Rate - Cash	36.90 0.60 11.91 4.72 (3.80) (0.11) (2.85) 47.37	35.45 11.22 2.19 (3.28) 	35.42 12.95 2.42 (3.20) (0.10) (10.07) 37.42	35.39 (0.10) 14.04 3.15 (3.12) (1.75) (8.32) 39.29	35.36 (0.10) 16.58 3.24 (3.64) 0.00 (10.19) 41.26	35,33 (0.10) 18,46 3.27 (3.55) - (9.35) 44,07	35.31 0.42 11.27 3.48 (3.47) (0.00) 	35.28 0.41 9.82 5.36 (3.39) - - 47.49	35.26 0.40 9.93 5.37 (3.32) 	38.43 0.41 10.00 5.36 (4.49) - -	38.41 0.40 10.32 5.58 (4.40) - 50.31	38.39 0.39 10.60 5.52 (4.30) - 50.61	38.37 1.52 10.96 5.80 (4.22) - 52.44	38.35 1.48 10.98 5.95 (4.12) - 52.65	38.33 1.45 11.56 6.03 (4.04) - 53.34	38.47 1.59 11.47 6.21 (3.96) - - 53.78

Attachment to AG's Supplemental Request Item 95

BIG RIVERS ELECTRIC CORPORATION'S

SUPPLEMENTAL RESPONSE TO THE ATTORNEY GENERAL'S SUPPLEMENTAL REQUEST FOR INFORMATION TO JOINT APPLICANTS

PSC CASE NO. 2007-00455

(Original Response March 6, 2008)

November 7, 2008

TABLE 2

		Wtd Avg	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
	Smelters	1	[
	Base Case																
1 2 3 4 5 6 7 8 9 10	Lg. Indus. Rate @ 98% LF Addl. Smelt. Charge Base TIER Adjustment FAC Env. Surcharge PPA Surcharge Rebate Realized Effective Rate - Cash		27.90 0.25 28.15 11.22 2.19 0.08 1.57 43.20	27.90 0.25 28.15 12.95 2.42 (0.39) 1.57 (0.10) 44.61	27.90 0.25 28.15 1.79 14.04 3.15 0.48 1.57 (1.73) 47.46	27.86 0.25 28.11 2.25 16.58 3.24 0.27 1.67 52.33	27.90 0.25 28.15 1.59 18.46 3.27 0.57 1.87 	27.90 0.25 28.15 1.64 11.27 3.48 0.26 1.87 - -	27.90 0.25 28.15 2.78 9.82 5.36 0.44 1.87 - -	27.86 0.25 28,11 2.59 9.93 5.37 0.58 1.87 48.44	30.62 0.25 30.87 3.55 10.00 5.36 2.09 2.60 2.60 54.47	30.62 0.25 30.87 0.54 10.32 5.58 0.88 2.60 	30.62 0.25 30.87 3.67 10.60 5.52 1.78 2.60 - 55.05	30.58 0.25 30.83 2.97 10.96 5.80 1.15 2.59 54.30	30.62 0.25 30.87 4.30 10.98 5.95 2.07 2.60 56.77	30.62 0.25 30.87 3.53 11.56 6.03 1.74 2.60 - 56.32	30.71 0.25 30.96 4.75 11.47 6.21 2.54 2.60
1 2 3 4 5 6 7 8 9 10	Lg. Indus. Rate @ 98% LF Addl. Smelt. Charge Base TIER Adjustment FAC Env. Surcharge PPA Surcharge Rebate Realized Effective Rate - Cash	29.08 0.25 29.33 2.29 12.01 4.60 0.97 2.15 (0.13) 51.22	27.90 0.25 28.15 11.22 2.19 0.08 1.57 43.20	27.90 0.25 28.15 12.95 2.42 (0.39) 1.57 (0.10) 44.61	27.90 0.25 28.15 1.59 14.04 3.15 0.48 1.57 (1.79) 47.19	27.86 0.25 28,11 1.95 16.58 3.24 0.27 1.87 - 52.04	27.90 0.25 28.15 1.28 18.46 3.27 0.57 1.87 	27.90 0.25 28.15 1.32 11.27 3.48 0.26 1.87 	27.90 0.25 28.15 2.46 9.82 5.36 0.44 1.87 48.10	27.86 0.25 28.11 2.26 9.93 5.37 0.58 1.87 	30.44 0.25 30.69 3.55 10.00 5.36 2.09 2.60 	30.44 0.25 30.69 0.54 10.32 5.58 0.88 2.60 	30.44 0.25 30.69 10.60 5.52 1.78 2.60 	30.39 0.25 30.64 2.99 10.96 5.80 1.15 2.59 54.14	30,44 0.25 30,69 4.34 10,98 5,95 2,07 2,60 - 56,62	30.44 0.25 30.69 3.57 11.56 6.03 1.74 2.60 - 56.18	30.56 0.25 30.81 4.75 11.47 6.21 2.54 2.60

Attachment to AG Supplemental Request Item 95

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BIG RIVERS ELECTRIC CORPORATION'S SUPPLEMENTAL RESPONSE TO THE ATTORNEY GENERAL'S SUPPLEMENTAL REQUEST FOR INFORMATION TO JOINT APPLICANTS PSC CASE NO. 2007-00455 (Original Response March 6, 2008) November 7, 2008

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Item 99) Please refer to Sections 8 of the (claimed confidential) Stone and Webster report, attached to the Smelters' Response to OAG #3, which provides a technical 4 assessment of operations and maintenance. Provide documents which compare annual operations and maintenance expenditure amounts incorporated in the Unwind Financial 5 6 Model for purposes similar or identical to Stone & Webster's recommended annual operations and maintenance expenditure levels. To the extent the Unwind Financial 7 8 Model contains lower projected annual expenditure amounts than Stone & Webster's recommended level explain how Big Rivers will address the negative consequences of 9 10 such lack of expenditure as outlined in this report.

The updated Big Rivers Production Work Plan which is included in the 12 Response) updated Unwind Financial Model (Exhibit 79) contains detailed O&M expenses for 2009 13 14 through 2011. Please see the attachment, which reconciles the WKEC current O&M 15 plan to the now updated Big Rivers Plan. Individual Non-Labor Fixed O&M Budget 16 items are presented for each unit over the period 2009 through 2023. As before, there is no O&M table in the Stone & Webster report to compare against, and Big Rivers has 17 18 made no attempt to extrapolate the numbers.

20 Witness) Mark A. Bailey

BIG RIVERS ELECTRONIC CORPORATION'S SUPPLEMENTAL RESPONSE TO THE ATT CY GENERAL'S SUPPLEMENTAL REQUEST FOR INFORMATION TO JOINT APPLICANTS PSC CASE NO. 2007-00455 (Original Response Marach 6, 2008) November 7, 2008

BREC non-Labor Fixed O&M Budget Items Not in the WKE Budget (response to AG request # 11 dated 10/24/2008 updated AG request # 99)

Item Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Coleman																
structural & life-assess. Inspections		\$265,225	\$273,182	\$281,377												
clean coal dust & ash from boilers, etc		\$106,090														
Coleman Ash Pond dredging		\$265,225														
Green																
structural & life-assess. Inspections		\$265,225	\$273,182													
clean coal dust & ash from boilers, etc		\$106,090														
Green ash pond dredging										\$3,566,057						
HMP&L																
structural & life-assess. Inspections		\$265,225	\$273,182	-												
clean coal dust & ash from boilers, etc		\$106,090														
SCR Catalyst Regeneration																
R/HMPL Ash pond dredging								\$5,508,362								
Reid																
structural & life-assess. Inspections		\$265,225]							1						
clean coal dust from boilers, etc		\$106,090														
R-1 Lay-Up										\$1,200,000						
Wilson																
structural & life-assess. Inspections		\$265,225														
clean coal dust from boilers, etc		\$106,090														
SCR Catalyst Regeneration																
sub-Total	\$0	\$2,121,800	\$819,546	\$281,377	\$0	\$0	\$0	\$5,508,362	\$0	\$4,766,057	\$0	\$0	\$0	50	\$0 (50
Total	\$13,497,142															

Summary of Changes Since the Filed Response to AG Request # 99 SCR Catalyst Regeneration moved from O&M expense to capital, consistent with WKE capitalization guidelines (\$41,093,615 Total)

Added \$1,200,000 in 2017 for the possible lay-up of R-1 Added \$3,566,057 in 2017 to dredge the Green ash pond

	SUPI	BIG RIVERS ELECTRIC CORPORATION'S SUPPLEMENTAL RESPONSE TO THE ATTORNEY GENERAL'S PLEMENTAL REQUEST FOR INFORMATION TO JOINT APPLICANTS PSC CASE NO. 2007-00455 (Original Response March 6, 2008) November 7, 2008
2	Item 100)	Please refer to Sections 8 of the (claimed confidential) Stone and Webster
3		ned to the Smelters' Response to OAG #3, provide documents which show
4		ns, SO ₂ allowances, and net excess/shortfall of allowances by year.
5	2	
6	Response)	Attached is an updated table depicting forecasted SO2 emissions,
7	allowances a	llotted and consumed, and net allowance excess/shortfalls by year.
8		
9	Witness)	David A. Spainhoward
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33		Item AG-100 Page 1 of 2

BIG RIVERS ELECTRIC CORPORATION'S SUPPLEMENTAL RESPONSE TO THE ATTORNEY GENERAL'S SUPPLEMENTAL REQUEST FOR INFORMATION TO JOINT APPLICANTS PSC CASE NO. 2007-00455 (Original Response March 6, 2008) November 7, 2008

Emissions Costs (Nominal dollars)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
forecasted SO2 allowance Price	S 140	S 115	S 434	5 439	5 436	\$ 425	\$ 294	S 286	\$ 265	\$ 247	\$ 196	S 144	5 122	5 106 5	\$ 98
Total SO2(ktons) - emitted	20.430	21,740	20 538	21 040	20 628	21 140	20 836	21 282	19 910	21 199	20.456	21 001	20.812	21 263	20716
Total SO2(ktons) - REQUIRED for compliance	20.430		41 076	42,080	41 255	42 281	59 591	60 865	56 944	60.630	58 504	60 063	59.521	60 812	59.247
Total SO2 Allowances (ktons)	52.48		52 487	52 487	52,487	52 487	52,487	52 487	52 487	52.487	52 487	52 487	52,487	52 487	52 487
sub-total SO2 Allowances (Kons)	32.05	* * • • • •	11.411	10.407	11.231	10,206	(7.104)	(8,378)	(4,457)	(8 143)	(6 017)	(7.576)	(7.034)	(8.325)	(6 760)
	4 28		4 122	4 092	4 289	4,285	4.297	4,317	4,259	4.273	4,143	3.928	4,314	4 328	4,217
Station II SO2(ktons) - emilted	4 28		8 244	8 18-	8.578	8.569	12,289	12.345	12 180	12 220	11849	11 233	12 339	12.379	12.061
Station II SO2(ktons) - REQUIRED for compliance	11 694		11.694	11 694	11 694	11.694	11.694	11.694	11,694	11694	11,694	11 694	11 694	11 694	11 694
Station II Allowances (klons)	2.22		1.035	1.053	0.935	0.937	0.000	0.000	0.000	0.000	0.000	0,138	0.000	0.000	0.000
Excess H-182 Allowances Back to City (30% of net)			10.377	9.354	10.295	9,269	(7.104)	(8.378)	(4.457)	(8,143)	(6.017)	(7.715)	(7.034)	(8.325)	(6 760)
SO2 allowances (ktons) left	29.834			\$4,106,353	\$4,504,500	\$3.939.334	(\$2,091,361)		X · · · · <i>Y</i>	· · · ·	· · · ·	(\$1,114,066)	(\$860,861)	(\$879,123)	(\$659,417)
SO2 allowances Sales	\$4,176,76	\$\$3,280,485	\$4,503,410	34,100,333	34,304,300	<i>\$3,33</i> 9,334	102.001.001	(vc, + 10, 107)	101.110,0003	(ez.e.e, coo)	(47.100,200)	(()	,,	

(Assumes CAIR resumes in 2011) (model run: annual output - 09-08-08) .

	BIG RIVERS ELECTRIC CORPORATION'S SUPPLEMENTAL RESPONSE TO THE ATTORNEY GENERAL'S SUPPLEMENTAL REQUEST FOR INFORMATION TO JOINT APPLICANTS PSC CASE NO. 2007-00455 (Original Response March 6, 2008) November 7, 2008
1	
2	
3	Item 107) Follow up to response to Staff #3, and the attached letter regarding
4	"funding of consent fees". Please provide a document which shows a) a list of consent
5	fees by party and amount which has been agreed to, and, b) a list of parties to which
6 7	consent fees will likely be due and an estimated contingency amount for each one.
8	Response) Big Rivers is not aware of any consent fees that will be required of it to
8 9	close the Unwind Transaction.
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13	Witness) C. William Blackburn
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32	Item AG-107
3.3	Page 1 of 1

Please state whether or not any further agreements or understandings exist

Big Rivers has disclosed to the Commission all agreements with any

between BREC and any other party or entity regarding the proposed transaction which

construed or understood as a "side deal" as that term is commonly understood. If any

person respecting the Unwind Transaction. The agreement for Big Rivers to make the

additional payment to the Smelters described in the Supplemental Testimony of C.

William Blackburn at pages 53 and 54 of Exhibit 78 must be memorialized, but the

have not been explicitly identified or presented to the Commission which could be

such "side deal" does exist, identify each one and describe it in detail.

Item 12)

Response)

18

Witness) Mark A. Bailey

material agreement is as described.

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Item 13) Please provide a demonstration that Rural sales (e.g, 2.44 TWh for 2009) are in fact synchronized with Rural operating receipts (e.g., \$90.8 million for 2009), such that the operating receipts would in fact be received within the calendar year as shown.

a. Please identify and estimate any factors which might or would cause
BREC's operating receipts as modeled for Rural consumers to be different than actual
receipts (assuming identical volumes).

11**Response)**The correspondence of Rural sales (2.44 TWh for 2009) to Rural operating12receipts (\$90.8 million for 2009) in the Financial Model (Exhibit 79) can be shown by:

i) calculating the Effective (cash) rate for rural customers (line 4 divided by line 5,
on page 2 of 2), and

16

13

ii) showing how the cash rate differs from the accrued rate, which difference isbased on the timing of Rebate payments (lines 10 and 11, on page 2 of 2).

19

Big Rivers' operating receipts for Rural consumers in 2009 will be based on existing
tariff rates, plus the Fuel Adjustment Charge (FAC), the Regulatory Account Charge, the
Environmental Surcharge (ES), Smelter Surcredit, and draws on the Economic Reserve.
No Rebate is paid in 2009. Tariff rates for 2009 are not expected to depart from those
modeled. The FAC and ES will be subject to adjustment periodically through 2009, but
are reflected in the Financial Model on an average basis for the year (as are underlying
costs). The Smelter Surcredit is a negotiated payment under the Smelter Agreements.

Note that, to the degree assumptions beyond sales volumes such as fuel costs were to
change within a reasonably expected range, effective rates to Rural consumers would be
held constant by adjustments to draws on the Economic Reserve.

31

33

1				
2	1	Rural Rates	Location in Financial Model	2009
3	2 3	i) Effective (Cash) Rate Derivation (\$/ MWh)		
4 5	4	Operating Receipts (M\$)	Proforma, line 107	90.8
6	5	Divided by: Sales (TWH)	Proforma, line 3	<u>2.44</u>
7	6 7	Effective Rate (\$/MWh)	line 4/ line 5	37.22
8	8	il) Reconciliation of Effective (Cash) Rate to Accrued Rate		
9	9	Cash Rate (\$/MWh)	Line 6	37.22
10	10	Add Back Rebate Realized Based on Prior Year (\$/MWh)		
11	11	Recognize Rebate Accrued in Current Year (\$/MWh)	Proforma, line 45	(0.10)
12	12	Accrual Rate (\$/MWh)	Proforma, line 46	37.12
13 14				
15				
16				
17				
18	Witne	ess) Robert S. Mudge		
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		Item 13 Page 2 of 2		

	BIG RIVERS ELECTRIC CORPORATION'S
	RESPONSE TO THE ATTORNEY GENERAL'S OCTOBER 24, 2008 SUPPLEMENTAL REQUEST FOR INFORMATION TO JOINT APPLICANTS PSC CASE NO. 2007-00455
	November 7, 2008
1	
2	
3	Item 14) Please provide a demonstration that Smelter sales (e.g, 7.30 TWh for
4	2009) are in fact synchronized with Smelter operating receipts (e.g., \$314.6 million for
5	2009), such that the operating receipts would in fact be received within the calendar year
6	as shown.
7	a. Please identify and estimate any factors which might or would
8	cause BREC's operating receipts as modeled for Smelter consumers to be different than
9	actual receipts (assuming identical volumes).
10	
11	
12	Response) The correspondence of Smelter sales (7.30 TWh for 2009) to Smelter
13	operating receipts (\$315.3 million for 2009 ¹) in the Financial Model can be shown by:
14	
15	i) calculating the Effective (cash) rate for Smelter consumers (line 4 divided by line
16	5, page 2 of 2), and
17	
18	ii) showing how the cash rate differs from the accrued rate, which difference is
19	based on the timing of Rebate payments (lines 10 and 11, page 2 of 2).
20	
21	Big Rivers' operating receipts for Smelter consumers in 2009 will be based on existing
22	tariff rates (via the large industrial rate, load-factor adjusted), plus a negotiated \$0.25/
23	MWh surcharge, the TIER Adjustment, the Fuel Adjustment Charge (FAC), Power
24	Purchase Adjustment (PPA), Environmental Surcharge (ES), and Smelter Surcharges.
25	No Rebate is paid in 2009. Tariff rates underlying the Large Industrial rate for 2009 are
26	not expected to depart from those modeled. The TIER Adjustment, FAC, ES, and PPA
27	will be subject to adjustment periodically through 2009 but are reflected in the Financial
28	
29	¹ The amount of \$314.6 million cited in question 14 above corresponds to accounting
30	income from Smelter sales in 2009, not operating receipts.
31	

	BIG RIVERS ELECTRIC CORPORATION'S RESPONSE TO THE ATTORNEY GENERAL'S OCTOBER 24, 2008 SUPPLEMENTAL REQUEST FOR INFORMATION TO JOINT APPLICANTS PSC CASE NO. 2007-00455 November 7, 2008										
1	Model on	an average basis for the year (as are underlying costs).	The Smelter Surcharges								
2	are negotiated payments under the Smelter Agreements.										
3											
4	Note that, to the degree assumptions beyond sales volumessuch as fuel costswere to										
5	change, they would be reflected in changes to Smelter rates.										
6											
7	1	Smelter Rates	Location in Financial Model	2009							
8	3	i) Effective (Cash) Rate Derivation (\$/ MWh)									
9	4	Operating Receipts (M\$)	Proforma, line 109	315.27							
10 11	5	Divided by: Sales (TWH)	Proforma, lines 7 + 9	<u>7.30</u>							
12	6	Effective Rate (\$/MWh)	line 4/ line 5	43.20							
13	7 8	ii) Reconciliation of Effective (Cash) Rate to Accrued Rate									
14	9	Cash Rate (\$/MWh)	Line 6	43.20							
15		Add Back Rebate Realized Based on Prior Year		- 43.20							
16	10	(\$/MWh)									
17	11	Recognize Rebate Accrued in Current Year (\$/MWh)	Proforma, line 97	(0.10)							
18	12	Accrual Rate (\$/MWh)	Proforma, line 98	43.11							
19											
20	Witness)	Robert S. Mudge									
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	BIG RIVERS ELECTRIC CORPORATION'S RESPONSE TO THE ATTORNEY GENERAL'S OCTOBER 24, 2008 SUPPLEMENTAL REQUEST FOR INFORMATION TO JOINT APPLICANTS PSC CASE NO. 2007-00455 November 7, 2008
1	
2	
3	Item 15) The Unwind Financial Model includes projections of cash balances, which
4	appear to be determined on a net basis from modeled receipts, costs, investing, and
5	modeling assumptions and processes.
6	a. Does BREC agree with this statement and characterization? If not,
7	please state why not.
8	b. Please compare and contrast the model's projected cash balances
9	to the minimum cash cushion that BREC will need for purposes of operating the business
10	going forward.
11	c. Please estimate and quantify the minimum cash cushion that
12	BREC will need to operate the business over the next five years, as compared to the
13	model's projected cash balances for the same period.
14	
15	
16	Response) a. Big Rivers agrees with the statement and characterization in part a
17	of question 15, when the additional factor of capital markets borrowings starting at the
18	end of 2011 is additionally taken into account.
19	
20	b. Average cash balances, projected line of credit, and Days Cash on
21	Hand are reproduced from the Financial Model of 10/08, page 3 of 3. Overall through
22	2023, cash balances average \$115 million inclusive of the Transition Reserve. Including
23	Big Rivers' anticipated line of credit, average liquidity is modeled at \$215 million.
24	Average Days Cash on Hand stands at 73 daysor approximately 2 and 1/2 months
25	without the line of credit and 135 daysor 4 and 1/2 monthsincluding the line of credit.
26	
27	Big Rivers has had several conversations with Mark Glotfelty of Goldman
28	Sachs and Company, concerning the level of cash Big Rivers needs to maintain in order
29	to obtain an investment grade rating. Based on these discussions, Big Rivers has learned
30	that there is not a hard and fast rule that the rating agencies use to determine the exact
31	amount of cash a company should carry as a minimum cushion.
32	
33	Item 15 Page 1 of 3
1	1

1	
2	Generally, Rating agencies like to see a company carry a minimum cash
3	cushion of 90 days of operating expenses (enough for approximately one financial
4	quarter). In order to operate the business and maintain eligibility for an investment grade
5	rating, Big Rivers determined that it would target at least 90 days of cash on hand at all
6	times in the Unwind Financial Model. Line 351 of the attached table shows the cash on
7	hand including the lines of credit that Big Rivers intends to carry in the future. The
8	lowest projected level of cash on hand occurs in 2017, where Big Rivers is projected to
9	have 109 days of cash on hand.
10	
11	If we look at cash only and exclude any lines of credit, Line 352 of the
12	attached table shows a strong cash position for years 2009, 2010 and 2011. Big Rivers in
13	the future will evaluate its operating cash levels in light of current circumstances and if
14	the cash levels as modeled today materialize, Big Rivers will determine if the cash levels
15	are sufficient to maintain its investment grade rating, and if not, will pursue changes as
16	necessary.
17	
18	c. Over the next five years, cash balances average \$134 million
19	inclusive of the Transition Reserve. Including Big Rivers' anticipated line of credit,
20	average liquidity is modeled at \$234 million. Average Days Cash on Hand stands at 85
21	daysor nearly 3 monthswithout the line of credit and 148 daysor nearly 5 months
22	including the line of credit.
23	
24	
25	Witness) C. William Blackburn
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22	Item 15 Page 2 of 3

November 7, 2008

Cash Analysis * - \$Millions (unless otherwise indicated)

	Ave		ages 1st 5	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
			Years															
333	Days Cash on Hand																	
334	Average Cash Balance	115.3	133.7	148.7	139,9	152.3	132.9	94,9	87.7	185.5	179.4	75.1	84.4	90.3	83.9	86,4	92.8	96.1
335	Line of Credit	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
336	Total	215.3	233.7	248.7	239.9	252.3	232.9	194.9	187.7	285.5	279.4	175.1	184.4	190.3	183.9	186.4	192.8	196.1
337	Divided by							10 114			210.1	110.1	104,4	100.0	100.0	100.4	102.0	140.1
338	Total Operating Expense	1																
339	PPA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
340	Fuel Costs	286.7	316.7	270.8	301.0	305,8	339.5	366.4	276.1	259.3	261.7	260.2	267.6	268.0	275.4	277.0	285.9	285,5
341	SEPA & Other Purchases	33.1	23.9	22.8	19,3	25.9	24.3	27.1	26.5	28.1	29.4	41.7	31.9	38.8	39.1	46.6	44.0	51.3
342	Non-Fuel Vanable Production O&M	49.1	36.7	30.8	33.7	38.3	39,9	40.9	41.8	51.4	53.0	52.9	55.3	55.3	58.1	60.4	61.4	63.3
343	Fixed Production O&M	115.2	102.1	101.3	93,3	105.0	104.9	106.0	102.3	111.8	108.5	129.6	113.5	129.3	123.8	133.5	128,7	137.0
344	Transmission O&M	9.9	8.5	8.0	8.3	8.5	8.8	9.0	9,3	9.6	9.9	10.2	10.5	10.8	11.1	11.4	11.8	12.1
345	APM, L/C, Cogen, CW & TVA Trans	6.6	6.0	6,3	6,5	5.8	5.7	5.9	6.0	6.2	6.4	6.6	6.8	7.0	7.2	7.4	7,6	7.8
346	A&G	33.6	29.3	29.5	27.8	29.2	29.5	30.3	31.7	32.1	33.0	34.3	35.1	36.0	37.5	38.2	39.5	40.9
347	Property Taxes & Insurance	9.5	7.8	6.9	7.1	7.8	8.5	8,8	9.1	9,3	9.6	9.9	10.2	10.5	10,8	11.1	11.5	11.8
348	Interest Expense (Incl. Financing Fees)	43.4	49.9	53.1	48.9	48.4	51.0	47.9	<u> 46.4</u>	44.8	43.5	42.0	40.4	40.1	38.4	36.9	35.2	33.7
349	Total	587.2	580.9	529.7	545.7	574.8	612.2	642.3	549.2	552.5	554.9	587.5	571.3	595.8	601.2	622.5	625.5	643.5
350																		
351	Days Cash on Hand (including Line of Credit)	135.1	148.3	171.3	160.4	160.2	138.8	110.8	124.8	188.6	183,8	108.8	117.8	116.6	111.6	109.3	112.5	111.2
352	Days Cash on Hand (excluding Line of Credil)	72.7	85.2	102.4	93.6	96.7	79.2	53,9	58,3	122.5	118.0	46.6	53.9	55.3	50,9	50.6	54.1	54.5
	Including Transition Resource	1																

* Including Transition Reserve

Item 16) Has BREC modeled projected future rates for Rural consumers, assuming current BREC circumstances and position, and that the Unwind Transaction does not occur? If so, please provide this financial modeling including the projected future rates for Rural consumers (unblended).

Response) Big Rivers provided PSC staff with data corresponding to the "Existing Transaction" which assumes the Unwind Transaction does not occur and further assumes Big Rivers' current circumstances and position (including lease buyouts), as Exhibit 100 to Big Rivers' filing dated October 9, 2008. Projected future wholesale rates to Big Rivers' members for rural delivery points (unblended) corresponding to Exhibit 100 are provided on the following page:

 Witness)

Robert S. Mudge

	Wtd. Avg.	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Future rate	s for rura	l deliver	y points	(unblend	led) corr	respondir	ng to Exi	nibit 100	("Existing	g Transa	iction E	conomi	cs, 10/08	B/08")		
Arbitrage Case	41.80	44.36	38.87	38.80	40.85	40.83	40.80	40.77	40.74	40.72	40.70	40.68	44.37	44.35	44.33	44.31
Smelter Case	47.78	44.36	38.87	47.51	49.14	45.65	45.62	45.59	48.26	48.23	48.21	48.18	50.99	50.97	50.95	50.92

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	BIG RIVERS ELECTRIC CORPORATION'S RESPONSE TO THE ATTORNEY GENERAL'S OCTOBER 24, 2008 SUPPLEMENTAL REQUEST FOR INFORMATION TO JOINT APPLICANTS PSC CASE NO. 2007-00455 November 7, 2008
1	
2	
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4	Item 17) Please provide the effective rate as paid by the smelters in 2008, similar to
5	that presented for Rural and Large industrial customers on page 3 of the Unwind
6	Financial Model.
7	
8	
9	Response) Big Rivers requested and the Smelter granted approval to Kenergy to
10	provide Big Rivers with the effective rate paid by the Smelters to Kenergy during 2008.
11	
12	For nine months ending September 30, 2008, Kenergy has booked revenue from
1.3	Alcan and Century at \$36.364/MWh and \$34.216/MWh, respectively.
14	
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17	Witness) C. William Blackburn
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	Item 17 Page 1 of 1

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Item 18) Please refer to the October 2008 presentation "Summary of Changes in the Unwind Financial Model, June 2008 vs. October 2008, pages 10 and 12. Please provide graphs augmented to also include and depict rates from the "errata version" of the Unwind Financial Model as filed in this matter in February 2008.

9 Below are the rate comparisons comparable to those on pages 10 and 12 of Response) the Unwind Financial Model presentation of 10/20/08 for each of the Non-Smelter 10 Members and the Smelters, with the addition of rates from the February filing reflecting 11 the Base Case. The principal difference between rates shown in February and those 12 shown in June are related to updated fuel price projections, as previously summarized for 13 Commission staff. Note that compensation to be paid to the Smelters by E.ON in respect 14 of the higher fuel costs modeled between the February and June model runs is handled 15 outside of the Unwind Financial Model, and hence not reflected in Smelter rates. 16


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Item 19)Identify each item identified by BREC in its due diligence activities sinceApril 2008 for which action and expenditure of resources will be required by BREC,following assumed closing of the proposed Unwind Transaction.

a. For each item, identify the action necessary and expenditure of resources anticipated to be required, and the source of funds for those expenditures.

10 Response) One such due diligence activity performed by Big Rivers involves the
11 Production Work Plan attached to the October 9 filing as Exhibit 105. Big Rivers began
12 with the Western Kentucky Energy plan and developed its own plan resulting from its
13 due diligence activities. The major changes which Big Rivers made are attached. All of
14 these changes are reflected in the Financial Model.

15

A second action and expenditure of resources is contained in the Third Amendment to the
Termination Agreement, Application Exhibit 80. The concept in the Third Amendment
is that Big Rivers will not have to expend any money or other resources beyond those
captured in the Financial Model. The E.ON Parties are paying for costs and/or
indemnifying Big Rivers against the contingencies contained in the Third Amendment
not already reflected in the Financial Model.

22

The last items identified in due diligence activities that may require action are captured,
as nearly as possible, in Exhibit DAS - 2 ("Status of Disposition of Certain Closing
Conditions") to the Supplemental Testimony of David Spainhoward (Application Exhibit
99). Big Rivers and E ON Parties are working diligently to resolve issues as they occur.
The objective is to make sure that issues are resolved so that Big Rivers does not have to
expend resources after the close that have not been reflected in the Financial Model.

29

30

31 32 33 Witness) David A. Spainhoward Mark A. Bailey

> Item 19 Page 1 of 3

BREC Capital Budget Items Not in the WKE Capital Budget

Item Description		2009		2010		2011		2012		2013	2014		2015	2016		2017		TOTAL 009-2017
Coleman	T				[ľ									
(none)			1				1										<u> </u>	
Green	T																	
Green 2 Precip Repair	\$	1,060,900	1		5	1,125,509											<u> \$</u>	2,186,409
Green 1 Precip Repair	-		\$	1,092,727			5	1.159.274									\$	2,252,001
Green 1&2 FGD Rehab	\$	4,243,600		3,020,908		2,251,018											<u> </u> \$	9,515,526
Green 1&2 Paint Boiler, Precip & FGD	\$	1,442,824	\$	1,486,109	\$	1,530,692	\$	1,576,613	5	1,623,911							<u> \$</u>	7,660,149
HMP&L									<u> </u>								<u> </u>	
HMPL Stack Lighting	S	200,000	1		l		1										<u> \$</u>	200,000
Reid 1 and CT					ł				1									
R-CT reliability study & upgrades	s	1,125,509	1														\$	1,125,509
Reid CT Cooling Tower Repair					1							<u> </u> \$	1,827,604				5	1,827,604
Wilson			[1							<u></u>			<u> </u>	
Make flue gas SO3 treat, System permanent.			\$	1,138,500	s	2,225,641			1								<u> \$</u>	3,364,141
WL FGD Additional Amount for Inlet Guillotine (net diff)	\$	300,000			T				L								<u> </u>	300,000
WL FGD Additional Amount for Outlet Guillotine (net diff)	\$	300,000					1		1								15	300,000
WL FGD Recycle Pump Suction Valve Replacement (8)	5	280,000															<u></u>	280,000
WL FGD Repl 3 absorber mist eliminator panels & mounting frames	5	900,000			1		<u> </u>		1									900,000 470,000
WL FGD Rept mist eliminator piping & nozzles	\$	470,000	<u> </u>		<u>i</u>		<u> </u>		_									2,425,000
WL FGD Structural Improvements			\$	2,425,000			ļ		ļ								13-	2,423,000
WL FGD Rept 75 stack tension bands with 316L SS material			S	850,000	1		ļ		1						<u>_</u>		ŝ	1,700,000
WL FGD Repl 4 dewatering filter drums incl vacuum skids & pumps			\$	1,700,000	L		<u> </u>		ļ		L						13	3,114,272
WL FGD Repair ductwork hot and wet sides					S	3,114,272	<u> </u>		<u> </u>			<u></u>					1.	20,000
WL FGD PLC FGD/Flyash Control System Replacement					\$	20,000			ļ									
WL FGD Structural Improvements (net diff)					<u>s</u>	1,675,000	1		_								<u> \$</u> \$	1,675,000
WL FGD Inlet and oullet damper replacement 2 absorbers			<u> </u>		\$	1,200,000			1						_		+	1,200,000
Total Added Capital	5	10,322,833	\$ 1	1,713,244	\$	13,142,132	s	2,735,887	\$	1,623,911	\$. \$	1,827,604	\$. s		\$	41,365,611

Note: Total Added for WL FGD 2009-2013 - \$13,234,272

Attachment to AG's Supplemental Request Item 94

BREC non-Labor Fixed O&M Budget Items Not in the WKE Budget (response to AG request # 11 dated 10/24/2008 updated AG request # 99)

Item Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Coleman		1														
structural & life-assess. Inspections		\$265,225	\$273,182	\$281,377												
clean coal dust & ash from boilers, etc		\$106,090														
Coleman Ash Pond dredging		\$265,225											<u> </u>			
Green													<u> </u>			
structural & life-assess. Inspections		\$265,225	\$273,182													
clean coal dust & ash from boilers, etc		\$106,090											<u> </u>			
Green ash pond dredging										\$3,566,057						
HMP&L																
structural & life-assess. Inspections		\$265,225	\$273,182										1			
clean coal dust & ash from boilers, etc		\$106,090						<u> </u>					ļ			
SCR Catalyst Regeneration															İ	
R/HMPL Ash pond dredging								\$5,508,362					<u> </u>			
Reid																
structural & life-assess. Inspections		\$265,225						L								
clean coal dust from boilers, etc		\$106,090														
R-I Lay-Up								L		\$1,200,000						
Wilson							l									
structural & life-assess. Inspections		\$265,225						ļ								
clean coal dust from boilers, etc.		\$106,090						<u> </u>					1			
SCR Catalyst Regeneration		[S 0	50
sub-Totai	\$0	\$2,121,800	\$819,546	\$281,377	\$0	\$0	\$0	\$5,508,362	\$0	\$4,766,057	\$0	\$0	\$0	\$0	30	
Total	\$13,497,142]														

Summary of Changes Since the Filed Response to AG Request # 99 SCR Catalyst Regeneration moved from O&M expense to capital, consistent with WKE capitalization guidelines (\$41,093,615 Total)

Added \$1,200,000 in 2017 for the possible lay-up of R-1

Added \$3,566,057 in 2017 to dredge the Green ash pond

1	BIG RIVERS ELECTRIC CORPORATION'S RESPONSE TO THE ATTORNEY GENERAL'S OCTOBER 24, 2008 SUPPLEMENTAL REQUEST FOR INFORMATION TO JOINT APPLICANTS PSC CASE NO. 2007-00455 November 7, 2008
2	
3	
4	Item 20) Identify each item which remains open and subject to further due diligence
5	evaluation and review by BREC.
6	
7	
8 9	Response)Please see Exhibit DAS – 2 ("Status of Disposition of Certain ClosingConditions") to the testimony of David Spainhoward (Exhibit 99) in the October 2008
10	filing. Big Rivers will continue its due diligence on the generating assets up to and
11	including the day of the unwind transaction close. Big Rivers will be as certain as it can
12	be that each closing condition contained in Exhibit $DAS - 2$ is met as of the closing date
13	and time. Until then, due diligence will continue and Big Rivers and WKEC will
14	continue to resolve issues as and when they arise.
15	
16	
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18	Witness) David A. Spainhoward
19	
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	Item 20
	Page 1 of 1

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Item 21) State the extent to which the "resolution" of the fuel issue by an increased termination payment of \$82 million from E.ON is intended to wholly insulate rural consumers from increased rates due to increased fuel costs over an applicable time period.

a. Please describe and quantify why the \$82 million amount is the appropriate amount to resolve the "fuel issue", as opposed to some other amount (e.g., \$100 million; \$150 million; etc.).

Response) The additional \$82 million from E.ON is intended to mitigate the increased fuel cost via the FAC impact on the Non-Smelter Members.

5 WKEC solicited for coal supply during March 2008. Big Rivers 6 collaborated with WKEC in regards to fuel bidding, evaluation, selection, and planned 7 coal supply contractual agreement assignment upon completion of the lease termination.

19 Big Rivers noted in the coal supply bids that: the solid fuel pricing had changed substantially from the modeling performed earlier in regards to present and 20 future coal supplies; and, normal bid offers had reverted to shorter periods of time (one to 21 three year term offers versus bids of one to four or one to five years in length of contract 22 pricing disclosure. While consultants considered the run-up in market fuel pricing to be a 23 near-term affect (a "bubble" of up to two years), Big Rivers took a more conservative 24 approach in its projected price estimations through the five-year window, as shown on 25 page 3 of 3, for years 2009-2013. 26

Based upon the market pricing signals provided WKEC and Big Rivers in
the bid solicitation, Big Rivers then extrapolated pricing forward using forecasts obtained
from consulting firms Global Insight and Hill and Associates. Three scenarios were
established: an optimistic, most-likely, and pessimistic forecast for future coal supply. In

each scenario, the pricing was estimated to be above prior consultant coal forecasts 2 utilized by Big Rivers for generation planning. The optimistic scenario estimated a \$75 million increase; the most-likely scenario estimated \$85 million; and the pessimistic 3 scenario estimated a \$95 million dollar future cost of fuel increase. 4

It became apparent that the Economic Reserve under the optimistic 6 scenario would not last for the desired period of five years; however, the most-likely 7 8 estimated scenario provided reasonable probability that the customers would be protected from increased rates due to fuel costs. The pessimistic scenario provided additional years 9 10 of assurance for the customers at the expense of increased contributions from E.ON. The calculations for the estimated \$85 million scenario are shown on page 3 of 3. 11

Big Rivers has attempted to use its best efforts, along with reputable 13 industry consultants, to assign probable fuel cost scenarios and to attempt to mitigate 14 15 such potential fuel cost increases for its non-smelter customers. Based upon the 16 marketplace bid evaluation, consultant analysis of coal markets, and consultant modeling of impact of forward fuel cost increases (which protects its customers for an estimated 17 five-years), Big Rivers and E.ON settled upon the \$82 million amount. 18

19 20

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Witness) C. William Blackburn

Estimated Coal Supply Expense (\$/MMBTU) for BREC 2009 - 2013

	2009	2010	2011	2012	2013
Coleman	\$ 1.797	\$ 1.830	\$ 1.837	\$ 1.843	\$ 1.860
Green	\$ 1.337	\$ 1.742	\$ 1.750	\$ 1.750	\$ 1.760
HMPL	\$ 1.580	\$ 1.735	\$ 1.738	\$ 1.742	\$ 1.760
Reid	\$ -	\$ _	\$ -	\$ -	\$ -
Wilson	\$ 1.256	\$ 1.286	\$ 1.288	\$ 1.517	\$ 1.770
System	\$ 1.507	\$ 1.648	\$ 1.701	\$ 1.175	\$ 1.806

December 2007 estimated fuel prices for BREC modeling (\$/MMBTU).

Revised estimated fuel prices for BREC modeling May 2008 (\$/MMBTU). Basis: March 2008 WKE coal supply bid, plus 15% escalation per year.

	2009	2010	2011	2012	 2013
Coleman	\$ 2.400	\$ 2.480	\$ 2.550	\$ 2.780	\$ 2.910
Green	\$ 1.680	\$ 2.040	\$ 2.190	\$ 2.150	\$ 2.500
HMPL	\$ 1.900	\$ 2.520	\$ 2.550	\$ 2.650	\$ 2.780
Reid	\$ 2.500	\$ 2.800	\$ 2.850	\$ 2.900	\$ 3.050
Wilson	\$ 1.770	\$ 1.700	\$ 1.750	\$ 2.450	\$ 2.570
System	\$ 1.950	\$ 2.145	\$ 2.230	\$ 2.450	\$ 2.680
Differential	\$ 0.443	\$ 0.497	\$ 0.529	\$ 1.275	\$ 0.874
Open Tonnage:	1,637,000	1,800,000	2,300,000	3,000,000	3,000,000
Dollar Value:	\$ 7,614,505.50	\$ 9,393,300.00	\$ 12,775,350.00	\$ 40,162,500.00	\$ 27,531,000.00

Total:	\$ 97,476,656
Sensitivity -10%.	\$ 87,728,990
Sensitivity -15%.	\$ 77,981,324

1		BIG RIVERS ELECTRIC CORPORATION'S RESPONSE TO THE ATTORNEY GENERAL'S OCTOBER 24, 2008 LEMENTAL REQUEST FOR INFORMATION TO JOINT APPLICANTS PSC CASE NO. 2007-00455 November 7, 2008
2		
3	X4 27)	Discourse for to the Superlamontal Discot Testimony of Debort Mudge, at
5	Item 22)	Please refer to the Supplemental Direct Testimony of Robert Mudge, at e it references "changes to non-labor fixed costs and capital expenditures."
6		le a document or schedule which shows the revisions to these items on an
7	-	sis within the enumerated "four major categories."
8	individual da	sis within the entimerated rour major categories.
9		
10	Response)	Please see the attached schedule comparing principal components of the
11	•	est categories cited above in the October Financial Model as compared to the
12	June Financia	
13		
14		
15	Witness)	Robert S. Mudge
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		Item 22 Page 1 of 4

		Location in Financial Model	Total	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Analy	sis of Change in Fixed Production	O&M. A&G Costs. Ma	 arketing F	ees, and	Capital C	Costs (SN	<u>1; 2009 - :</u>	2023)										
Analy	313 Of Offange III 1 Acd 1 rougoing.																	
1	1. Fixed Production O&M	Production-																
-	10/00	Fixed																
2	<u>10/08</u> Labor	line 31	827.9	48.4	45.6	47.0	48.4	49.9	51.3	52.9	54.5	56.1	57.8	59.5	61.3	63.2	65.0	67.0
4	Non-Labor												60.0	54.3	54.6	60.4	53.1	67.8
5	Baseline	line 33	760.9	40.3	45.4	45.9	42.5	54.5	42.3	53.4 3.8	45.5	47.1 4.8	53.9	54.5	54.0			
6	Plant Maintenance	line 43	11.6 101.0	2.0 9.2	0.7	0.3 10.2	12.4	-	- 7.0	3.0	6.7	<u>19.8</u>	-	13.5	5.9	7.8	8.4	
7	T/G Overhauls Subtotal	line 46	873.5	<u>9.2</u> 51.5	46.1	56.4	54.9	54.5	49.3	57.2	52.2	71.7	53.9	67.8	60.5	68.2	61.5	67.8
8 9	Emissions Fees	line 48	27.0	1.5	1.5	1.5	1.6	1.6	1.7	1.7	<u> </u>	1.8	1.9	2.0	2.0	2.1	2.1	2.2
10	Total	1	1,728.4	101.3	93.3	105.0	104.9	106.0	102.3	111.8	108.5	129.6	113.5	129.3	123.8	133.5	128.7	137.0
11	Delta									0.0	1.2	1.8	2.1	2.2	2.2	2.3	2.4	2.4
12	Labor	·适应的时候"包括进行	22.3	5.0	0.5	0.0	(0.2)	(0.2)	0.0	0.6	1.2	1.0 	2.1	८.८				
13	Non-Labor	ender ander services	19.2	3.3	4.3	4.0	2.8	4.2	0.4			16.94 N 184			a sosterensi			
14 15	Baseline Plant Maintenance	n de lan de lettra de la company. Anna de la company	(28.0)	(1.7)	(1.4)	(2.3)	(2.0)	(1.5)	(1.1)	(1.5)	(1.3)	(1.8)	(1.4)	(2.4)	(2.0)	(2.6)	(2.2)	(2.8)
15	T/G Overhauls		2.9		<u>, 1997 - 199</u> 7	1.0	2.0	2 <u>1123</u> (31			alendi calind							
17	Subtotal	n ar an an an an an an an an an an an an an	(5.9)	1.6	2.9	2.7	2.8	2.7	(0.7)	(1.5)	(1.3)	(1.8)	(1.4)	(2.4)	(2.0)	(2.6) 2.1	(2.2) 2.1	(2.8) <u>2.2</u>
18	Emissions Fees	render för statte bleveradet.	27.0	<u> </u>	<u>1.5</u> 4.9	<u>1.5</u> 4.3	<u>1.6</u> 4.2	<u>1.6</u> 4.1	<u> </u>	<u> </u>	<u> </u>	<u>1.8</u> 1.8	<u>1.9</u> 2.6	<u>2.0</u> 1.7	<u>2.0</u> 2.2	1.8	2.3	1.8
19	Total		43.5	8.1	4.9	4.5	4.2	2879 (525 ** 7 105		<u> </u>			elen en en en eren	99900291197.5.5.44o	1999.00000 .000 .00	(22))2012 2 2207 - 12	1222112011111111111111111111111	nii yi coliiyi cha Comesin S
20 21	<u>6/08</u> Labor	line 31	805.5	43.4	45.1	46.9	48.6	50.1	51.3	52.3	53.3	54.3	55.7	57.4	59.1	60.8	62.7	64.6
22	Non-Labor													C4 D	54.6	60.4	53.1	67.8
23	Baseline	line 33	741.7	37.0	41.1	41.9	39.7	50.3 1.5	41.9 1.1	53.4 5.4	45.5 1.3	47.1 6.5	53.9 1.4	54.3 2.4	54.6 2.0	2.6	2.2	2.8
24	Plant Maintenance	line 43	39.7 98.0	3.7 9.2	2.1	2.6 9.3	2.0 10.5	1.5	7.0	J.4 -	6.7	19.8	-	13.5	5.9	7.8	8.4	
25 26	T/G Overhauls Subtotal	line 46	879.4	49.8	43.2	53.8	52.1	51.8	50.0	58.7	53.5	73.5	55.2	70.2	62.5	70.9	63.7	70.6
26 27	Emissions Fees						<u></u>					<u> </u>			<u> </u>			496.4
28	Total		1,685.0	93.2	88.3	100.7	100.7	101.8	101.3	111.0	106.8	127.8	110.9	127.6	121.6	131.7	126.4	135.1
29			l															

		Location in Financial Model	Total	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Analy	sis of Change in Fixed Production O&	M, A&G Costs, M	arketing F	ees, and	Capital (Costs (\$N	<u>1; 2009 -</u>	2023)										
	2. Administrative and General Costs	Production- Fixed																
31 32 33 34 35 36	<u>10/08</u> Labor Non-Labor Intellectual Property Total	line 2 line 3 line 4	195.4 225.3 <u>84.0</u> 504.6	11.0 12.1 <u>6.4</u> 29.5	10.8 12.5 <u>4.5</u> 27.8	11.1 12.9 <u>5.3</u> 29.2	11.4 13.2 <u>4.8</u> 29.5	11.8 13.6 <u>4.9</u> 30.3	12.1 14.0 <u>5.5</u> 31.7	12.5 14.5 <u>5.1</u> 32.1	12.9 14.9 <u>5.2</u> 33.0	13.3 15.3 <u>5.7</u> 34.3	13.7 15.8 <u>5.7</u> 35.1	14.1 16.3 <u>5.6</u> 36.0	14.5 16.8 <u>6.2</u> 37.5	14.9 17.3 <u>6.0</u> 38.2	15.4 17.8 <u>6.3</u> 39.5	15.8 18.3 <u>6.7</u> 40.9
37 38 39 40 41	Delta Labor Non-Labor Intellectual Property Total		(8.6) 39.8 <u>37.8</u> 69.0	0.0 2.2 <u>2.4</u> 4.6	(0.5) 2.2 <u>1.9</u> 3.6	(0.5) 2.3 <u>2.5</u> 4.3	(0.5) 2.3 <u>2.3</u> 4.1	(0.5) 2.4 <u>2.3</u> 4.2	(0.6) 2.5 <u>2.5</u> 4.4	(0.6) 2.6 <u>2.4</u> 4.3	(0.6) 2.6 <u>2.4</u> 4.4	(0.6) 2.7 <u>2.5</u> 4.5	(0.6) 2.8 <u>2.7</u> 4.8	(0.7) 2.9 <u>2.6</u> 4.8	(0.7) 3.0 <u>2.7</u> 4.9	(0.7) 3.0 <u>2.7</u> 5.1	(0.7) 3.1 <u>3.0</u> 5.4	(0.7) 3.2 <u>2.9</u> 5.4
42 43 44 45 46	<u>6/08</u> Labor Non-Labor Intellectual Property Total	line 2 line 3 líne 4	203.9 185.5 46.2 435.6	11.0 10.0 <u>4.0</u> 25.0	11.3 10.3 <u>2.6</u> 24.2	11.6 10.6 <u>2.8</u> 25.0	12.0 10.9 <u>2.5</u> 25.4	12.3 11.2 <u>2.6</u> 26.1	12.7 11.6 <u>3.0</u> 27.3	13.1 11.9 <u>2.7</u> 27.7	13.5 12.3 <u>2.8</u> 28.6	13.9 12.6 <u>3.2</u> 29.8	14.3 13.0 <u>3.0</u> 30.3	14.7 13.4 <u>3.1</u> 31.2	15.2 13.8 <u>3.5</u> 32.5	15.6 14.2 <u>3.2</u> 33.1	16.1 14.6 <u>3.3</u> 34.1	16.6 15.1 <u>3.8</u> 35.5
47 48 49 50	3. Marketing Fees	Pro forma												7.0	7.0	7.4	7.6	7.8
51 52 53	APM, L/C, Cogen, CW & TVA Tran Della APM, L/C, Cogen, CW & TVA Tran	en ander die der der der die der die der die der die der die der die die die die die die die die die die	99.1 18.7	6.3 1.0	6.5 1.0	5.8 1.1	5.7 1.1	5.9 1.1	6.0 1.2	6.2 1.2	6.4 1.2	6.6 1.3	6.8 1.3	7.0 1.3	7.2 1.4	7.4 1.4	7.6 1.5	1.5
54 55 56	<u>10/08</u> APM, L/C, Cogen, CW & TVA Tran		80.5	5.3	5.4	4.7	4.6	4.7	4.9	5.0	5.2	5.3	5.5	5.6	5.8	6.0	6.2	6.3

		Location in Financial Model	Total	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Analysi	is of Change in Fixed Production	O&M, A&G Costs, M	arketing F	ees, and	Capital C	Costs (\$N	l <u>; 2009 - 2</u>	2023)										
	Capital Expenditures	Pro forma																
58 59 60 61 62 63 64 65 65	10/08 Generation Transmission Transmission Upgrades A&G Extraordinary Generation Other (HQ Building, IP) Total	line 143 line 144 line 145 line 146 line 147 line 148	526.6 53.3 11.2 24.7 127.7 24.5 768.0	36.2 10.3 5.6 1.3 28.7 <u>11.4</u> 93.5	20.6 5.3 5.6 1.4 17.4 <u>1.0</u> 51.3	31.5 4.4 - 1.4 25.4 0.9 63.7	23.4 5.9 - 1.5 10.7 <u>0.8</u> 42.2	38.5 0.5 1.5 8.8 0.8 50.1	32.8 0.4 - 1.5 5.2 1.0 40.9	33.8 0.5 - 1.6 4.4 - 0.8 41.2	34.8 1.6 1.6 2.3 0.8 41.1	35.9 2.8 - 1.7 2.8 1.0 44.1	36.9 3.4 - 1.7 2.4 0.9 45.3	38.1 3.5 - 1.8 7.0 <u>0.9</u> 51.2	39.2 3.6 - 1.8 3.4 - 1.1 49.1	40.4 3.7 1.9 3.1 0.9 49.9	41.6 3.8 - 2.0 2.7 0.9 50.9	42.8 3.9 - 2.0 3.3 <u>1.2</u> 53.3
67 68 69	Delta Generation Transmission		22.7 (3.2) 3.5	3.6 0.7 (0.4)	(3.2) (3.9) 3.9	2.7	(6.7)	8.2	1.6	1.6	1.7	1.7	1.8 - -	1.8 - -	- 1.9 - -	1.9 - -	2.0 - -	2.0
70 71 72 73	Transmission Upgrades A&G Extraordinary Generation Other (HQ Building, IP)		40.1 (8.9) 54.2	- 7.5 <u>- 6.0</u> 17.5	(3.4) (0.7) (7.3)	4.9 (0.3) 7.4	(2.9) (2.1) (11.6)	7.2 (0.8) 14.6	2.2 (0.3) 3.4	4.4 <u>(2.2)</u> 3.9	2.3 (0.6) 3.4	- 2.8 <u>(0.4)</u> 4.1	- 0,6 <u>(2.7)</u> (0.3)	2.9 <u>(0.6)</u> 4.1	2.5 (0.4) 4.0	3.1 (2:5) 2.6	- 2.7 (0.7) 4.0	3.3 (0.8) 4.5
74 75 76 77 78 79 80 81 81	Total 6/08 Generation Transmission Transmission Upgrades A&G Extraordinary Generation Other (HQ Building, IP) Total	line 143 line 144 line 145 line 146 line 146 line 147 line 148	503.9 56.5 7.7 24.7 87.6 33.4 713.8	32.5 9.6 6.0 1.3 21.3 5.4 76.0	23.7 9.2 1.7 1.4 20.9 <u>1.7</u> 58.6	28.8 4.4 - 1.4 20.4 <u>1.2</u> 56.3	30.1 5.9 - 1.5 13.6 2.9 53.9	30.4 0.5 - 1.5 1.6 <u>1.6</u> 35.5	31.3 0.4 - 1.5 3.0 <u>1.3</u> 37.5	32.2 0.5 - 1.6 - 3.0 37.3	33.2 1.6 - 1.6 - 1.4 37.8	34.2 2.8 1.7 <u>1.4</u> 40.0	35.2 3.4 - 1.7 1.8 <u>3.6</u> 45.7	36.2 3.5 - 1.8 4.1 <u>1.5</u> 47.1	37.3 3.6 - 1.8 0.9 <u>1.5</u> 45.1	38.5 3.7 - 1.9 - 3.4 47.4	39.6 3.8 - 2.0 - - - 46.9	40.8 3.9 - 2.0 - 2.1 48.8

Item 23) Please refer to the Supplemental Direct Testimony of Robert Mudge, at page 11, where an "Overall Revenue Requirements" table is provided for the period 2009 – 2023. Please provide a table displaying the same information, but on an annual basis with each year 2009 – 2023 depicted.

10 Response) Please see the attached table displaying the Overall Revenue
11 Requirements information on an annual basis with each year 2009 – 2023 depicted.

14 Witness) Robert S. Mudge

November 7, 2008

		Total	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Analyz	is of Change in Total Revenue Requireme	nt (SM; 200	9 - 2023)														
Analys	13 Of Change of Change							523.2	540.Z	542.4	593.9	573.9	608.4	616.5	634.4	637.8	657.0
1	Filed Model (6/08)	8,325.2	417.7	435.6	465.7	512.4	566.2	523.2	340.2	J72.1							70
2	Increases from Operations			60 7	8,3	20.3	55.5	6.4	9.0	10.0	6.3	5.3	5.3	3.6	6.6	7.5 10.3	7.6 10.2
3	Fuel Costs	184.5	8.9	23.7 3.6	5.0	4.3	5.9	3.8	9.6	9.5	9.2	9.3	9.5	9.8	10.1	5.4	5.4
4	Non-Fuel Variable Production O&M	112.2	2.1	3.0 3.6	4,3	4.1	4.2	4.4	4.3	4.4	4,5	4.8	4.8	4.9	5.1 1.8	2.3	1.8
5	A&G	69.0	4,6	4.9	4.3	4.2	4.1	1.1	0.8	1.7	1,8	2.6	1.7	2.2	0.4	2.3	0.2
6	Fixed Production O&M	43.5	8,1	(2.8)	1.2	1.9	3.7	1.1	2.0	1.4	0.9	0.7	0.7	0.5	0.4	1.5	1.5
7	Gain on Sale of Emissions Allowances	24.0	11.8 1.0	1.0	1.1	1.1	1.1	1.2	1.2	1.2	1.3	1.3	1.3	1.4	1.4	1.0	
8	Marketing Fees	18.7	3.3	3.4	1.1		-	-	-	-	•	•	-	0.2	0.2	0.3	0.3
9	Smelter Economic Reserve	7.7	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	1.4	1.6	1.2	0.8
10	Transmission O&M	3.2 10.2	1.2	0.8	(0.8)	(2.0)	(1.0)	(0.1)	0.8	<u> 1.5</u>	1.8	2.0	1.1		27.2	28.9	27.8
11	Interest Earnings		41.2	38.4	24.4	34.2	73.8	18.1	28.0	29.9	26.1	26.3	24.7	24.0	21.2	20.0	21.0
12	Subtotal - Increases	473.1	41.2	30.4	* • 7 • 7	0,											
13														(12.2)	(13.1)	(11.7)	(7.9)
14	Reductions from Operations	(243.5)	3.7	(26.7)	0.8	(24.2)	(42.8)	(17.3)	(22.8)	(21.7)	(17.7)	(16.8)	(13.0)	(12.2)	5.4	3.5	4.1
15	Offsystem Sales	(243.5)	(5.0)	(10.4)	(7.8)	(6.9)	(9.9)	(2.0)	(3.3)	(1.4)	4.2	3.4	2.5	0.1	0.2	0.3	0.4
16	SEPA & Other Purchases	(20.0)		(3.2)	(0.4)	(0.4)	(0.4)	(0.2)	(0.1)	(0.0)	(0.1)	(0,1)	(0.0)	0.1	0.2	-	
17	Depreciation & Amortization	(16.2)	ş • ·	(3.0)	10.5	14.8	(28.6)	-	-	•		-		(0.1)	(0.1)	(0,1)	(0.1)
18	Member Economic Reserve	(10:2)	(5.5)	(0.0)	,	•	(0,1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0,1)	(0.1)	(0.0)	(0.17	
19	Income Tax	81. S. C. S. C. S. S. S. S. S. S. S. S. S. S. S. S. S.	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)			(8.1)	(3.6)
20	RUS Note & PCB Restructuring Charge	· · · · · · · · · · · · · · · · · · ·	(14.4)	(43.4)	3.2	(16.7)	(81.7)	(19.7)	(26.3)	(23.2)	(13.7)	(13.6)	(10.7)	(9.3)	(7.7)	(0.1)	(0.07
21	Subtotal - Reductions	(288.9)	(14.4)	(40.4)	1 2.40	(. . ,	(-)	• •									
22		New College												1.7	1.7	1.7	1.7
23	Lease Buyout	25.9	1.7	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.7	0.9	0.9	0.9	0.9
24	Discontinuation of Net Lease Income	23.9 13.0		0.9	0.9	0,9	0.9	0,9	0.9	0.9	0.9	0.9	0.9 0.7	0.9	0.3	0.7	0.7
25	Discontinuation of CoBank Patronage	10.6	0.3	0.7	0.7	0.7	0.7	0.7	0.7	0,7	0.7	0.7			3.3	3.3	3,3
26	BofA Lease Gain not Amortized		i	3.3	3.4	3.4	3,3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	0.0
27	Subtotal - Lease Buyout	49.5	3.0	0.0	0.4									~ ~	3,5	3.8	4.6
28		45.9	2,5	2.7	2,9	6.1	3.8	3.1	2.3	1.4	1.6	1.6	3.0	3.0	9,9	3.0	-1.0
29	Interest Expense (Incl. Financing Fees)	45.9 Milestration	2.7	.									(n 4)	(3.3)	(3.4)	(3.5)	(3.6)
30		(37,8)] (1.9	0.6	(2.0)	(1.3)	(2.0)	(2.3)	(2.6)) (3.0)	(3.1)	(3.3)	(3.1)	(3.3)	10.41	(0.01	,
31	Net Margin	(or.o	₩ \•••	0.0	, ,	•									-	-	-
32		6,9	(8.7	22.5	(6,9)	(0.0)	(0.0)	0.0	<u> </u>		<u> </u>				22.9	24.5	28.5
33	Rebate Realized	÷		24.1	25.0	25.7	(2.8)	2.6	4.6		14.1	14.3	17.2	17.8	657.3	662.3	685.5
34	Total	248.7		459.7	490.7	53B.1	563.5	525.7	544.8	550.8	608.1	588.2	625.6	634.2	031.3	002.9	000.0
35	December Close/ \$60.9m Buyout	0,010,5	408.4														
36																	
37	Percent Change	39	0]														

4 Item 24) Please refer to the Supplemental Direct Testimony of Michael Core at
5 page 7, where it is stated "the anticipated benefits of the Unwind Transaction
6 significantly outweigh the potential costs." Please identify and describe each item that is
7 viewed as a "potential cost" in this statement.

10 Response) The "potential costs" of the Unwind Transaction are the costs of owning
11 and operating Big Rivers' generating units. Big Rivers' best estimate of those potential
12 costs is shown in the Unwind Financial Model, the latest iteration of which is Exhibit 79
13 to the Application.

Witness) Michael H. Core

	BIG RIVERS ELECTRIC CORPORATION'S RESPONSE TO THE ATTORNEY GENERAL'S OCTOBER 24, 2008 SUPPLEMENTAL REQUEST FOR INFORMATION TO JOINT APPLICANTS PSC CASE NO. 2007-00455 November 7, 2008
1	
2	
3	
4	Item 25) Does BREC understand the proposed electric supply agreements with the
5	smelters to permit the rate charged to the smelters to vary to the extent the Commission
6	later varies the Large Industrial rate? If not, please explain why not?
7	
8	
9	Response) Yes. Big Rivers understands the relationship of the "Large Industrial
10	Rate" (demand and energy rates), as may be adjusted from time to time by the
11	Commission, and how a change to an individual element of this rate would impact the
12	"Base Rate" charged to the Smelters. "Large Industrial Rate" and "Base Rate" are
13	defined in terms in the Smelter Agreements.
14	
15	
16	Witness) C. William Blackburn
17	
18	
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	11

1 2 3 4 Please produce a "what if" run of the model provided as Exhibit 79, Item 26) 5 varying inputs only as necessary to include an additional \$400 million in generation plant capital expenditure added over four years beginning in 2012, which capital expenditure 6 7 is entirely funded with increased debt. 8 9 The "what if" model reflecting an additional \$400 million in generation 10 Response) plant capital expenditure added over four years beginning in 2012 is attached. Key 11 assumptions include the following: 12 13 - The \$400 million in generation plant capital expenditure is assumed allocated entirely to 14 the maintenance of existing plant, and hence has no incremental revenues or costs 15 associated with it. 16 17 - The capital expenditures are funded with \$100 million in capital markets borrowings at 18 19 the beginning of each of 2012, 2013, 2014, and 2015. 20 - All-in interest costs are modeled at 7.25% (inclusive of costs of issuance). 21 22 - Principal repayments are modeled at \$10 million per year starting in 2016. 23 24 25 - Incremental costs associated with the additional borrowings are covered by Smelter TIER adjustments and general rate adjustments affecting both Smelters and Non-Smelter 26 Members (see lines 18 - 30, below). 27 28 29 30 Witness) Robert S. Mudge C. William Blackburn 31 32 33 Item 26

"What-If" Scenario Assuming \$400m Additional Capital Expenditures in 2012 - 2015

		Location in Financial Model	2009 - 2023	2009 - 2016	2017 - 2023
1	Analysis of Change in Total Revenue Requirement (\$M; 2009 - 2023)				
2		Proforma Lines 107 + 108 + 109	8,573.9	4,112.6	4,461.2
3	Financial Model, 10/08	Proforma Line 203	102.4	25.5	76.9
4	Increased Depreciation	Proforma Line 188	(18.8)	(2.3)	(16.5)
5	Interest Earnings Interest Expense	Proforma Line 205	284.2	101.5	182.7
6 7	Net Margin (.24 x Interest Expense)	Proforma Line 217	68.2	24.4	43.8
	Total		436.0	149.1	287.0
8 9	+ \$400m of Capital Expenditures	Proforma Lines 107 + 108 + 109	9,009.9	4,261.7	4,748.2
10					
11	Energy Sales (TWh)				
12		Proforma Lines 9 + 11	61.96	30.5	31.5
13	Members	Proforma Lines 13 + 15	109.52	58.4	51.1
14	Smelters	1 Joloma Lines 10 1 10			
15					
16	Rate Impact Analysis (\$/ MWh)				
17 18	1. Non-Smelter Members				
19			47.40	42.70	52.12
20	Financial Model, 10/08	Proforma Lines (107 + 108)/ (9 + 11)	47.49	42.70	4.43
21	GRA	Proforma Line 75	50.49	44.22	56.56
22	+ \$400m of Capital Expenditures	Proforma Lines (107 + 108)/ (9 + 11)	30.45	44.2.2	00.00
23					
24	2. Smelters				
25		Ductore Line (400)/ (42 + 45)	51,42	48.14	55.17
26	Financial Model, 10/08	Proforma Lines (109)/ (13 + 15) Proforma Line 75	2.25	1.14	3.52
27	GRA (embedded in Base Rate)	Proforma Line 75 Proforma Line 89	0.03	0.62	(0.63)
28	TIER Adjustment		2.28	1.76	2.88
29	Total	Proforma Lines (109)/ (13 + 15)	53.70	49.89	58.06
30	+ \$400m of Capital Expenditures	r tolonna Entes (rosh (ros i toj			

- Pro Forma Smelter Rate Structure Member Rates Cash Method

- Regulatory Accounts FAC, PPA, and Environmental Surcharge Unwind Transaction Production Fixed Capital Expenditures and Depreciation
- I. Pro Forma II. Smelter Rate Structure III. Member Rates Cash Methi Nequilatory Accounts V. Production Fixed VII. Production Fixed VIII. Capital Expenditures and I VIII. Debt X. Sale Leaseback IX. Sale Leaseback X. Income Taxes XII. Alternative Minimum Tax (/ XVI. Emissions Inventory XVI. Lease Buyout Summary
- Income Taxes Regular Net Operating Losses (NOLs)
 - Alternative Minimum Tax (AMT) NOLs

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	< <return contents<="" of="" table="" th="" to=""><th></th><th></th><th>Transact</th><th>Lease</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></return>			Transact	Lease															
		2006	2007	2008 ion	ion	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
	Calendar Year Unwind Allocation	0.000	0.000	0.000 0.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000 0.000	1.000 0.000
	Pre-Transaction Allocation	1.000	1.000	1.000 0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 0.000	0.000 0.000	0.000	0.000
	Transaction index	0.000	0.000	0.000 1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 Transaction			12/31/	
1 2	I. Sales (TWH)										0.70	0.75	2.82	2.88	2.94	3.00	3.06	3.12	3.18	3.24
3 4	Rural	2.23	2.41	2.40 -		2.44	2.49	2.54	2.59	2.65	2.70	2.76	1.30	2.00	1.37	1.41	1.44	1.48	1,51	1.54
5	Large Industrial	0.96	0.92	0.95 -		1.06	1.10	1.13	1.17	1.20	1.23	1.27	4.15	4.14	4.14	4.14	4.15	4,14	4.14	4.14
7	Century			•		4.14	4.14	4.14	4.15	4.14	4.14	4.14				3.16	3.17	3.16	3.16	3.16
9 10	Alcan		•			3.16	3.16	3.16	3.17	3.16	3.16	3.16	3.17	3.16	3.16				0.85	0.78
11	Market	2.06	2.84	1.66 -		1.55	1.83	1.38	1.36	1.41	1.32	1.29	1.24	1.05	1,12	0.87	0.89	0.87		
12 13 14	Total Sales	5.25	6.16	5.01 -		12.35	t2.71	12.35	12.44	12.56	12.56	12.62	12.68	12.56	12.72	12.57	12.70	12.77	12.83	12.87

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	Pro Po.				and the second second second second second second second second second second second second second second second	1															
					Transact 1	Lease Ferminat						0014	3100	2016	2017	2018	2019	2020	2021	2022	202
Ca	liendar Year	2006	2007	2008	lon	ion	2009	2010	2011 1.000	2012	2013	2014	2015	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.(
	wind Allocation	0.000	0.000	0,000	0.000	0.000	1.000 0.000	1.000 0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0
	e-Transaction Allocation	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0
Tr	ansaction Index	0.000	0.000	0.000	1.000	0.000	0.000	0.000								1	ransaction	Closing D	ate:	12/31/	2008
ii.	Rates, Accrual Based (S/ MWH Sold, uni	ess other	wise noter	d)															a 2004	0.000/	0.0
ţ	General Rate Adjustment (%)	0.00%	0.00%	0.00%			0.00%	0.00%	0.00%	1.46%	1.80%	3.12%	3.94%	0.00%	10.55%	0.00%	0.00%	0.00%	0.00%	0.00%	
Ī	FAC (S/ MWH)						11.22	12.95	14.04	16.58	18.46	11.27	9.82	9.93	10.00	10.32	10.60	10.96	10.98	11.56	11.
į	FAC Roll-In (S/MWh) PPA_(S/ MWH)						0.08	(0.39)	0.48	0.27	0.57	0.26	0.44	0.58	2.09	0.88	1.78	1.15	2.07	1.74	2
1	Environmental Surcharge Adjustment (S/ MV	<u>VH)</u>										.	5.36	5.37	5,36	5.58	5.52	5.80	5.95	6.03	6
•	Rural						2.19	2.42	3.15	3.24	3.27	3.48		5.37	5.36	5.58	5.52	5.80	5.95	6.03	6
	Large Industrial						2.19	2.42	3.15	3.24	3.27	3.48	5.36		5.36	5.58	5.52	5.80	5.95	6.03	6
	Smelters						2.19	2.42	3.15	3.24	3.27	3.48	5.36	5.37	5.30	5.50	3.52	0.00	0.00		
	Rural										ee 400	CO 5%	60.6%	60.5%	60.7%	60.8%	60.9%	60.8%	61.0%	61.1%	61
	Load Factor (%)	61.6%	63.3%	62.5%			60.0%	60.1%	60.2%	60.2%	60.4% 7.61	60.5% 7.85	8.16	8.16	9.02	9.02	9.02	9.02	9.02	9.02	9
	Demand (S/ KW-mo.)	7.37	7.37	7,37			7.37	7.37 20.40	7.37 20.40	7.48 20.70	21.07	21.73	22.59	22.59	24.97	24.97	24.97	24.97	24.97	24.97	2
	Energy (S/ MWH)	20.40	20.40	20.40			20.40							37.04	37.02	37.00	36,98	36.95	36.94	36.92	3
	Base	36.79	36.36	36.55			37.22	37.19	37.17	37.14	37.12	37.09	37.07	37.04	37.02						
	MRDA	(1.20)	(1.14)	(1.14)			•	•				0.42	0.41	0.40	0,41	0.40	0.39	1.52	1.48	1.45	
	Regulatory Account Charge								(0.10)	(0.10) 0.54	(0.10) 1.22	2,42	3.97	3.97	8.29	8.29	8.28	8.27	8.27	8.27	
	GRA		•				•		•	0.04	1.66	£.,**#w	0.07	¢							
							11.22	12.95	14.04	16.58	18.46	11.27	9.82	9.93	10.00	10.32	10.60	10.96	10.98	11.56	
	FAC	•	•	•			2.19	2.42	3.15	3.24	3.27	3,48	5.36	5.37	5.36	5.58	5.52	5.80	5.95	6.03	I
	Environmental Surcharge	•					(3.28)	(3.20)	(3.12)	(3.64)	(3.55)	(3.47)	(3.39)	(3.32)	(4.49)	(4.40)	(4.30)	(4.22)	(4.12)	(4.04)	
	Surcredit Non-Smelter Member Economic Reserve						(10.13)	(10.08)	(8.38)	(10.19)	(9.28)	<u></u>		<u> </u>		. <u></u>	· · · · · ·			13.55	_
	Net		<u> </u>	-				2.09	5.69	6.00	8.91	11.28	11.80	11.97	10.87	11.50	11.83	12.54	12.82	13.55	
									10 70	40 50	47.15	51.21	53.25	53.39	56.59	57.19	57.48	59.29	59.51	60.20	
	Pre TIER Rebate Total TIER Related Rebate	35.58	35.22	35.41			37.22 (0.10)	39.29 (1.79)	42.75	43.5B	·····			<u> </u>	<u> </u>	57.19	57.48	59.29	59.51	60.20	
	Effective Rate (S/ MWH)	35.58	35.22	35.41			37.12	37.49	42.75	43.58	47.15	51.21	53.25	53.39	56.59	57.19	37.40	39.25	33.51	00.20	
	•																				5
	Large industrial	78.1%	76,5%	77.7%) 	78.6%	78.6%	78.6%	78.4%	78.6%	78.6%	78.6%	78.4%	78.6%	78.6%	78.6%	78.3%	78.6%	78.6%	
	Load Factor (%) Demand (S/ KW-mo.)	10.15	10.15	10.15		ļ	10.15	10.15	10.15	10.30	10.48	10.81	11.24	11.24	12.42	12.42	12.42	12.42	12.42 16.79	12.42 16.79	
	Energy (S/ MWH)	13.72	13.72	13.72			13,72	13.72	13.72	13.92	14.17	14.61	15.18	15.18	16.79	16.79	16.79	16.79	10.13	10.75	
	Linergy (or mitting					2			64 00	04.40	31.39	31.39	31.39	31.41	31.39	31.39	31.39	31.42	31.39	31.39	
	Base	31.51	31.90	31.61			31.39	31.39	31.39	31.40	31.35				, ,		•			•	
	Power Factor Penalty/ Demand Cr. (Lrg.	0.19	0.08				•													-	
	MRDA	(1.04)	(1.02)	(0.98)		1			(0.10)	(0.10)	(0.10)	0.42	0.41	0.40	0.41	0.40	0.39	1.52	1.48	1.45	
	Regulatory Account Charge GRA									0.46	1.03	2.05	3.36	3.37	7.03	7.03	7.03	7.03	7.03	7.03	
							11.22	12.95	14.04	16.58	18.46	11.27	9.82	9.93	10.00	10.32	10.60	10.96	10.98	11,56	
	FAC	•	-	*			2.19	2.42	3.15	3.24	3.27	3.48	5.36	5.37	5.36	5.58	5.52	5.80	5.95	6.03	
	Environmental Surcharge	•					(3.28)		(3.12)	(3.64)	(3.55)	(3.47)) (3.39)	(3.32)	(4.49)	(4.40)	(4.30)	(4.22)	(4.12)	(4.04)	}
	Surcredit						(10.13)		(8.38)	(10.19)	(9.28)			·		· · · · · · · · · · · · · · · · · · ·	<u> </u>	· · · · ·			
	Non-Smelter Member Economic Reserve		······	······	• 1430/480410 1469/08/08		-	2.09	5.69	6.00	8.91	11.28	11.80	11.97	10.87	11.50	11.83	12.54	12.82	13.55	
	Net	•	-															.		FO 10	
		30.67	30.96	30.62			31.39	33.49	36.98	37.76	41.24	45.15	46.97	47.15	49,70	50.32	50.64	52.51	52.72	53.43	
	Pre TIER Rebate Total TIER Related Rebate	30.07					(0.09)	(1.59)	<u>.</u>	<u> </u>	<u></u>	<u> </u>	-	<u> </u>	<u> </u>			· · ·		53.43	· —
		30.67	30.96	30.62			31.31	31.90	36.98	37.76	41.24	45.15	46.97	47.15	49.70	50.32	50.64	52.51	52.72	53.43	ļ
7	Effective Rate (S/ MWH)	00.07	50.50	30.00		<u>i</u>															

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						Lease															
					Fransact T				0014	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
	Calendar Year	2006	2007	2008	lon	lon	2009	2010	2011	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	Unwind Allocation	0.000	0.000	0.000	0.000	0.000 0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Pre-Transaction Allocation	1.000	1.000 0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Transaction Index	0.000	0.000	0.000		0.000	0.000	0.000								•	Transaction	n Closing D	ate:	12/31/2	2008
69	Non-Smelter Member Blend	35.26	35.15	35.14			35.45	35.42	35.39	35.36	35.33	35.31	35.28	35.26	35.24	35.21	35.20	35.18	35.16	35.14	35.13
72	Base MBDA	(1,15)	(1.11)	(1.10)						•		-	•	·	·			1.52	1.48	i.45	1.59
73 74	Regulatory Account Charge	1	1						(0.10)	(0.10)	(0.10)	0.42	0.41	0.40	0.41	0.40 7.00	0.39 7.88	7.88	7.87	7.87	7,87
75	GRA	,								0.52	1.16	2.30	3.78	3.78	7.89	7.89	1.00	1.00	1.01	(
76	FAC						11.22	12.95	14.04	16.58	18.46	11.27	9.82	9.93	10.00	10.32	10.60 5.52	10.96 5.80	10.98 5.95	11.56 6.03	11.47 6.21
77 78	Environmental Surcharge						2.19	2.42	3.15	3.24	3.27	3.48	5.36	5.37	5.36	5.58			(4.12)	(4.04)	(3.96)
	Surcredit	,					(3.28)	(3.20)	(3.12)	(3.64)	(3.55)	(3.47)	(3.39)	(3.32)	(4.49)	(4.40)	(4.30)	(4.22)	(4.12)	(4.04)	(3.30)
79 80	Non-Smeller Member Economic Reserve			•			(10.13)	(10.08)	(8.38)	(10.19)	(9.28)	<u> </u>			<u></u>	· · · · ·		12.54	12.82	13.55	13.72
81	Net						•	2.09	5.69	6.00	8.91	11.28	11.80	11.97	10.87	11.50	11.83	12.54	12.02	10.00	10.72
82		34.11	34.04	34.04			35.45	37.51	40.98	41.78	45.30	49.31	51.27	51.42	54.40	55.00	55.29	57.12	57.33	58.02	58.30
83	Pre TIER Rebate Total TIER Related Rebate						(0.10)	(1,73)	•	<u> </u>	<u></u>			·	<u> </u>	•••••	•••••	<u>.</u>			
84		34.11	34.04	34,04			35.36	35.78	40.98	41.78	45.30	49.31	51.27	51.42	54.40	55.00	55.29	57.12	57.33	58.02	58.30
85 86	Effective Rate	34.11	04.04	01,01																	
87	Smelters						28.15	28.15	28.15	28.52	29.07	29,97	31,14	31.10	34.40	34.40	34.40	34.35	34.40	34.40	34.40
88	Base Rate	,		•			20.10		1.79	2.95	2.95	2.95	3.55	3.39	3.55	0.32	3.23	2.31	3.42	2.43	3.61
89	TIER Adjustment		<u>`</u>				28,15	28.15	29,95	31.47	32.02	32,92	34.69	34.49	37.95	34.72	37.63	36.66	37.83	36.83	38.01
90	Smelter Rate Subject to Price Cap	•	•				11.22	12.95	14.04	16.58	18.46	11.27	9.82	9.93	10.00	10.32	10.60	10.96	10.98	11.56	11.47
91	FAC						0.08	(0.39)	0.48	0.27	0.57	0.26	0.44	0.58	2.09	0.88	1.78	1.15	2.07	1.74	2.54
92	PPA	•		•			2.19	2.42	3.15	3.24	3.27	3.48	5.36	5.37	5.36	5.58	5.52	5.80	5.95	6.03	6.21
93	Environmental Surcharge						0.70	0.70	0.70	1.00	1.00	1.00	1.00	1.00	1.40	1.40	1.40	1.39	1.40	1.40	1.40
94	Surcharge 1	•					0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	1.20	1.20	1.20	1.20	1.20	1.20	1.20
95	Surcharge 2										•		•	•	•	•	•		•	-	,
96	Smelter FAC Reserve TIER Related Rebate						(0,10)	(1.73)	•	•	•	-		·	<u> </u>	<u> </u>	<u> </u>		·	· · · · · · · · · · · · · · · · · · ·	
97			······				43.11	42.98	49.19	53.44	56.19	49.80	52.18	52.24	58.00	54.09	58.14	57.16	59.42	58.76	60.83
98	Effective Rate	•	•																	00.04	CO 70
99	h de malant	40.45	52.68	48.74			60.94	59.20	63.59	66.81	70.55	62.13	63.43	63.52	64.53	66.02	68.95	67.21	67.69	69.01	69.79
100	Market	40,40	02.00	-1M1-1													- -	c7 07	50.04	59.16	60.43
101 102 103	Overali Blend	36.60	42.62	38.92			43.15	43.29	48.35	51.38	54.47	50.95	53.05	53.07	57.34	55.44	57.89	57.85	59.24	29.10	09.40

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					Transact	Lease Terminat															
	Calendar Year	2006	2007	2008	lon	lon	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
-	Unwind Allocation	0.000	0.000	0.000	0.000	0.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	Pre-Transaction Allocation	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Transaction Index	0.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-				1	a state and											1	ransactio	n Closing D	188; 1	12/31/	2000
	III. Cash Flows (MS)																				
105																					
106	Operating Receipts											138.5	147.1	150.5	162.9	167.9	172.3	181.3	185.7	191.4	196.0
107	Rurai	79.4	84.8	84.8		0.0	90.8	97.5	104.2	113.1	125.0	55.7	59.6	61.4	66.5	69.1	71.3	75.6	77.8	80.7	83.0
108	Large Industrial	29.3	28.5	29.2		0.0	33.4	36.6	40.1	44.0	49.5		380.8	382.2	423.2	394.7	424,2	418.3	433.6	428.7	443.9
109	Smelters		•	•		•	315.3	325.6	346.3	391.0	410.1	363.4		362.2 78.8	423.2	73.6	424.2 59.7	59.5	433.0 59.1	58.4	54.7
110	Offsystem	83.4	149.4	81.1			94.3	108.5	87,7	90.9	99.4	82.2	82.1	78.8	67.6	73.0	59.7		ə9.1	30.4	04.7
111	WKEC Lease	47.9	50.8	47.7		•		•	-	•	•			•	•	-		•	,		•
112	Transmission	6.0	6.3	5.1		•	•	,	•	•		•	,	•	•	•					•
113	Smelter - Tier 3 Transmission	1.7	1.7	1.7			•	•	•	•		•	•	-						40.05	40.5
114	Gain on Sale of Allowances	-		•			3.8	3.0	(0.6)	(0.4)	(0.2)	(1.9)	(16.3)	(15.1)	(14.5)	(15.6)	(14.2)	(15.5)	(15.6)	(16.0)	(16.5)
115	Cobank Patronage Capital & Other	0.6	0.6	0.6		•	•	•	•	0.7	1.6	1.5	•	•	•	•	•	•	•	•	
116	Lease Buyout					(59.6)	•		•	-	•	•	•	· · ·	•	•				- -	
117	Interest Earnings	3.7	6.8	5.0		0.0	6.4	5.5	<u>5.7</u>	5.7	4.2	3.8	4.3	4.5	4.5	4.7	5.9	5.8	6.0	6.5	7.0
118	Total Receipts	252.0	328.9	255.3		(59.6)	543.9	576.7	583.4	645.0	689.5	643.2	657.6	662.3	710.3	694.3	719.2	724.9	746.6	749.8	768.1
119																					
120	Operating Disbursements																				
121	PPA	98.0	96.3	95.4				•	-	•	•		•	,		•	•		•		
122	Fuel Costs					0.0	270.6	304.9	307.9	344.6	370.3	259.1	259.3	262.0	261.0	267.6	268.7	275.7	277.5	286.7	285.8
123	SEPA & Other Purchases	11.4	68.0	11.6		0.0	23.1	17.9	28.1	25.7	29.7	25.8	28.2	30.1	48.9	34.0	45.0	37.4	49.3	45.3	55.8
124	Carbon Tax			Ĩ				,				•		•	•	•		•	•	-	,
125	Carbon Allowance Cost								,	,	•		•	•	÷	•	-	•	•	•	
126	Environmental	0.4	0.5	0.6		(0.0)	30.8	33.7	38.3	39.9	40.9	41.8	51.4	53.0	52.9	55.3	55.3	58.1	60.4	61.4	63.3
127	Fixed O&M					0.0	101.3	93.3	105.0	104.9	106.0	102.3	111.8	108.5	129.6	113.5	129.3	123.8	133.5	128.7	137.0
128	Transmission O&M	6.6	7.1	7.4		0.0	8.0	8.3	8.5	8.8	9.0	9.3	9.6	9.9	10.2	10.5	10.8	11.1	11.4	11.8	12.1
129	APM, L/C, Cogen, CW & TVA Trans	4,7	8.8	5.9		0.0	6.3	6.5	5.8	5.7	5.9	6.0	6.2	5.4	6.6	6.8	7.0	7.2	7.4	7.6	7.8
130	A&G	13.8	15.6	17.2		0.0	29.5	27.8	29.2	29.5	30.3	31.7	32.1	33.0	34.3	35.1	36.0	37.5	38.2	39.5	40.9
131	Property Taxes & Insurance	2,4	2.3	2.2	1000	0.0	6.9	7.1	7.8	8.5	8.8	9.1	9.3	9.6	9.9	10.2	10.5	10.8	11.1	11.5	11.8
132	Working Capital	6.8	4.6	(4.9)		0.0	(31.5)	(1.1)	(0.2)	(1.1)	(0.6)	10.0	1.1	0.4	(0.4)	1.3	(1.0)	0.0	(0.9)	0.2	(0.7)
133	PCB Restructuring				1100 (S. +) (S		7.2	•	• •								•	•		•	
134	Other	2.3	1.9	2.0		(0.0)	(0.7)			-		•	2	•			· .				
		146.3	205.1	137.5		0.0	451.6	498.3	530.3	566.6	600.2	495.1	509.0	512.7	552.9	534.4	561.5	561.6	587.8	592.6	613.9
135	Total Disbursements	140.3	203.1	191.0		0.0	40110	400.0	000.0	200.0	000-6		0	÷							
136	One when Descriptions Distance	105.7	123.8	117.8		(59.6)	92.4	78.4	53.1	78.4	89.3	148.0	148.6	149.6	157.4	159.9	157,8	163.3	158.8	157.2	154.2
137	Operating Receipts less Disbursements	105.7	123.0	117.8		(03.0)	J6.4	70.4	JJ. 1	70.7	0.00	1 7410	, 10.0	1 1010				· · · · •			
138					an an an an an an an an an an an an an a																

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	Lease Transact Terminat 0000 1000 2010 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023																				
				ा	ransact T	erminat							0040	0010	2017	2010	2010	2020	2021	2022	2023
	Calendar Year	2006	2007	2008	lon	lon	2009	2010	2011	2012	2013	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000
	Unwind Allocation	0.000	0.000	0.000	0.000	0.000	1.000	1.000	1.000	1.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Pre-Transaction Allocation	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Transaction Index	0.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			Closing D		12/31/2	2008
				17 17																	
139							~~ .		53.1	78.4	89.3	148.0	148.6	149.6	157.4	159.9	157.8	163.3	158.8	157.2	154.2
140	Operating Receipts less Disbursements	105.7	123.8	117.8		(59.6)	92.4	78.4	33.1	/0.4	05.3	140.0	140.0	14010		/==					
141																					
142	Capital Expenditures					(0.0)	00.0	00.6	31.5	123.4	138.5	132.8	133.8	34.8	35.9	36.9	38.1	39.2	40.4	41.6	42.8
143	Generation	6.4	6.6	6.7		(0.0)	36.2 10.3	20.6 5.3	4.4	5.9	0.5	0.4	0.5	1.6	2.8	3.4	3.5	3.6	3.7	3.8	3.9
144	Transmission	5.9	9.6	18.4		•		5.6	4.4	3.5	0.0	0 .7									
145	Transmission Upgrades		4.1				5.6	5.6 1.4	1.4	1.5	1.5	1.5	1.6	1.6	1.7	1.7	1.8	1.8	1.9	2.0	2.0
146		0.9	1.3	1.3		0.0	1.3 28.7	17.4	25.4	10.7	8.8	5.2	4.4	2.3	2.8	2.4	7.0	3.4	3.1	2.7	3.3
147	Extraordinary Generation	,	•	• •				1.0	25.4	0.8	0.8	1.0	0.8	0.8	1.0	0.9	0.9	1.1	0.9	0.9	1.2
148	Other (HQ Building, IP)		<u> </u>	<u> </u>	•	0.0	<u> </u>		63.7	142.2	150.1	140.9	141.2	41.1	44.1	45.3	51.2	49.1	49.9	50.9	53.3
149	Total Capital Expenditures	13.2	21.6	26.4		0.0	93.5	51.3	63.7	192.2	100.4	140.3	(** 1. <u>C</u>				• ···-				
150				24 22				~ ~	• •	0.0	0.0	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0,4	0.5	0.5
151	Income Taxes from Operations	0.4	0.2	0.4		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	v .+	Q. 1		••••				
152								074	(10.6)	(63.8)	(60.8)	6.9	7.1	108.1	112.9	114.2	106.1	113.8	108.4	105.8	100.4
153	Net Pre-Finance Cash Flow	92.1	102.0	91.0		(59.6)	(1.1)	27.1	(10.6)	(03.0)	(00.0)	0.3	(.)	100.1	1,2.0						
154				8																	
155	Financing								(40 F)	(20.6)	(68.4)	(66.5)	(271.5)	243.5	48.2	25.8	52.8	55.3	44.0	45.9	48.2
156	Principal (Net)	26.4	13.3	41.8			13.3	15.1 42.5	(42.5) 41.6	(20.0)	(68.4)	60.0	65.2	63.2	60.5	57.6	56.0	52.8	49.5	46.8	43.8
157	interest	36.9	36.9	51.5		0.0	43.2		41.0	30.9	U++.7		7.0								
158	Financing Fees			1				0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
159	Line of Credit		·	į		0.0	0.5			30.8	(13.2)	(6.0)	(198.7)	307.2	109.2	83.9	109.3	108.6	94,0	93.2	92.5
160	Aggregate Debt Service (incl. Line of C	63.4	50.2	93.3		0.0	57.0	58.0	0.6	30.0	(13.2)	(0.0)	(130.17	007.4		0010					
161							(00.4)	(04.0)	(4.4.63)	(94.6)	(47.6)	12.8	205.8	(199.1)	3.7	30.2	(3.2)	5.2	14.4	12.5	7.9
162	Post-Finance Cash Flow	28.7	51.9	(2.3)		(59.6)	(58.1)	(31.0)	(11.2)	(94.0)	(41.0)	(2.0	200.0	(10011)			• •				
163																					
164	Unwind Transaction																				
165	Cash Proceeds				387.7																
166	i Debt Reduction	•			(147.0)																
167	Misc. Transaction			2	(3.1)																
168				1007	237.6		~~ ~	PC 4	30.8	38.3	35.7						~				•
169	Non-Smelter Member Economic Reserve	-			(157.0)	•	35.5	36.1	30.6	30.3	33.7						-			,	-
170	Smelter Fuel Payment				(7.0)	•			•		-										
171											05 7								-		
172	Net Before Transition Reserve				73.6	•	35.5	36.1	30.8	38.3	35.7	•									
173	3								400.07	405 710	00.0	106 6	312.4	113.3	117.0	147.2	144.1	149.24	163.6	176.2	184.1
174	Ending Cash Balances (Incl. Transition	96.5	148.3	146.0	219.6	160.0	137.3	142.5	162.05	105.713	93.8	106.6	J 12,4	110.0							
	Reserve																				

175 <u>Reserve)</u>

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					Transact 1	Lease 'erminat															
	Calendar Year	2006	2007	2008	lon	lon	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	1.000
-	Unwind Allocation	0.000	0.000	0.000	0.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		0.000
	Pre-Transaction Allocation	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Transaction Index	0.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
•					noon fille												ransaction	Glosing U	ale:	12/3//2	000
176	IV. Income Statement (MS)																				
177																					
178	Revenues						00 C	60 A	100 7	147.4	125.0	138.5	147.1	150.5	162.9	167.9	172.3	181.3	185.7	191.4	196.0
179	Aural	79.4	84.76	84.8		0.0	90.5	93.2	108.7 41.8	113.1 44.0	49.5	55.7	59.6	61.4	66.5	69.1	71.3	75.6	77.8	80.7	83.0
180	Large Industrial	29.3	28.53	29.2		•	33.3	35.0	359.0	391.0	43.5	363.4	380.8	382.2	423.2	394.7	424.2	418.3	433.6	428.7	443.9
181	Smelters					-	314.6	313.6	359.0 87.7	391.0	99.4	82.2	82.1	78.8	67.6	73.6	59.7	59.5	59.1	58.4	54.7
182	Off-System	83.4	149.38	81.1		•	94.3	108.5	-	90.9	99.4	06.6	02.1	10.0	07.0						•
183	Transmission	6.0	6.29	5.1			•	•	•		,	-		-							
184	Smeller - Tier 3 Transmission	1.8	1.80	1.8		•					(0.0)	(1.0)	(16.3)	(15.1)	(14.5)	(15.6)	(14.2)	(15.5)	(15.6)	(16.0)	(16.5)
185	Gain on Sale of Allowances				an an an an an an an an an an an an an a	•	3.8	3.0	(0.6)	(0.4)	(0.2)	(1.9)	(10.5)	(13.1)	(14.0)	(12/0)	(14.61	1.0.01	(10.0)	(10.0)	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
186	WKEC Lease (Net)	52.3	52.33	52.3			•	•	`		·	•	•	•		,	•				
187	Lease Buyout					(16.1)			#** **			, 		4.5	4.5	4.7	5.9	5.8	6.0	6.5	7.0
188	Interest Earnings	3.7	6.83	5.0		0.0	6.4	5.5	5.7	5.7	4.2	3.8	4.3					724.9	746.6	749.8	768.1
189	Total Revenues	255.9	329,92	259.4	2001000000	(16.1)	542.9	558.9	602.2	644.3	688.0	641.7	657.6	662.3	710.3	694.3	719.2	124.9	/40.0	749.0	100.1
190																					
191	Expenses																				
192	PPA	98.0	96.29	95.4		•		•	•	•	<i>,</i>			, , ,				275.4	277.0	285.9	285.5
193	Fuel Costs	-		•		(0.0)	270.8	301.0	305.8	339.5	366.4	276.1	259.3	261.7	260.2	267.6	268.0			265.9 44.0	200.5 51.3
194	SEPA & Other Purchases	11.4	68.01	11.61	0.000	0.0	22.8	19.3	25.9	24.3	27.1	26.5	28.1	29.4	41.7	31.9	36.8	39.1	46.6	44.0	31.3
195	Carbon Tax					-	•	•	•	•	•	•	•	•	•		•				
196	Carbon Allowance Cost					•	^	•				•	•								
197	Non-Fuel Variable Production O&M	0.4	0.48	0.6		(0.0)	30.8	33.7	38.3	39.9	40.9	41.8	51.4	53.0	52.9	55.3	55.3	58.1	60.4	61.4	63.3
198	Fixed Production O&M	-				0.0	101.3	93.3	105.0	104.9	106.0	102.3	111.8	108.5	129.6	113.5	129.3	123.8	133.5	128.7	137.0
199	Transmission O&M	6,6	7.07	7.4		0.0	8.0	8.3	8.5	8.8	9.0	9.3	9.6	9.9	10.2	10.5	10.8	11.1	11.4	11.8	12.1
200	APM, L/C, Cogen, CW & TVA Trans	4.7	8.78	5.9		0.0	6.3	6.5	5.8	5.7	5.9	6.0	6.2	6.4	6.6	6.8	7.0	7.2	7.4	7.6	7.8
201	A&G	13.8	15.62	17.2		0.0	29.5	27.8	29.2	29.5	30.3	31.7	32.1	33.0	34.3	35.1	36.0	37.5	38.2	39.5	40.9
202	Property Taxes & Insurance	2.4	2.32	2.2		0.0	6.9	7.1	7.8	8.5	8.8	9,1	9.3	9.6	9.9	10.2	10.5	10.8	11.1	11.5	11.8
203	Depreciation & Amortization	32.8	32,15	32.5		0.0	34.4	35.6	44.6	47.1	49.3	51.6	55.4	58.1	74.6	75.9	77.3	78.7	80.2	81.6	83.2
204	Income Tax		•	•			·			-	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.8	0.8
205	Interest Expense (Incl. Financing Fees)	60.7	60.90	59.9		0.0	53.1	48.9	48.4	58.2	62.4	68.2	73.8	72.5	70.3	68.0	67.0	64.5	62.3	59.8	57.6
206	RUS Note & PCB Restructuring Charge		•			0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
207	Net Sale-Leaseback	(2.6)	(2.56)	(3.4)		•	,	•				•	•	•	•	•		•	•		-
208	Other - Net	(6.0)	(6.32)	(6.6)	<u>yanana(=00)</u>	(0.0)	(0.3)		-		<u> </u>		·	-	·	· · ·	<u> </u>	· · ·			
209	Total Expenses	222.3	282.74	222.9	Margal Mense	(0.0)	564.1	581.7	619.8	667.0	707.0	623.5	638.0	643.0	691.4	675.9	701.0	707.2	729.3	733.0	751.8
210					WINN MARK																
211	Unwind Transaction				690.8	•			•			•					•	•	*		`
212	The second second second second second second second second second second second second second second second se																				
213	Non-Smelter Member Economic Reserve				(157.0)		35.5	36.1	30.8	36.3	35.7	•	•		•	•		•	•	•	
214	**************************************																				
215	Smelter FAC Payment				(7.0)						•		•	•		,	•			•	
216																					
217	Net Margin	33.7	47.18	36.5	526.8	(16.1)	14.3	13.3	13.2	15.6	16.7	18.2	19.6	19.3	18.9	18.4	18.2	17.7	17.3	16.8	16.3

					ransact *	Lease															
	- · · ·	2006	2007	2008	ion	ion	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
	Calendar Year	2008	0.000	0.000	0.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	Unwind Allocation	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Pre-Transaction Allocation	0.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-	Transaction Index	0.000	0.000	0.000												-	Transaction	h Closing C	Date:	12/31/	2008
218 219 220	V. Belance Sheet (MS)																				
	Assets																				
222	Property			4 700 0	1.882.3	1.882.3	1,986.7	2.038.8	2,103.3	2.246.4	2.397.3	2.539.1	2.681.1	2,723.1	2,768.1	2,814.3	2,866.3	2,916.3	2,967.1	3,018.8	3,073.0
223	Total Utility Plant in Service	1,731.2	1,749.9	1,783.8		15.1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
224	Construction in Progress	13.1	15.1	15.1 886.6	15.1 886.6	886.6	921.0	956.5	1.001.2	1,048.3	1.097.6	1.149.2	1,204.6	1,262.7	1,337.3	1,413.2	1,490.5	1,569.2	1,649.4	1,731.0	1,814.2
225	Depreciation & Amortization	827.5	854.1	200.9	200.9	4.1	4,4	4.4	4,4	3.7	2.2	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
226	Other Property	190.7	197.8	200.9 (200.9	4.1	•4,•4	4.4	-1,-1												
227	Current		~ ~		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
228	Cash General Funds & Special Deposits	0.0	0.0	0.0	184.6	125.0	100.9	104.6	122.7	64.8	51.2	62.3	266.4	65.4	67.2	95.4	90.2	93.2	105.4	115.6	121.1
229	General Cash Balance	96.5	148.3	146.0	35.0	35.0	36.4	37.9	39.4	40.9	42.6	44.3	46.1	47.9	49.8	51.8	53.9	56.0	58.3	60.6	63.0
230	Transition Reserve		•			157.0	127.8	96.8	69.9	34.4	,							•		•	
231	Non-Smeller Member Economic Reserve	•			157.0	107.0	127.0						,	•		,	•	-	•	•	•
232	Smelter FAC Reserve		~ ~ ~		19.9	19.87	44,71	46.1	49.7	53.2	57.0	53.2	54.4	54.8	58.8	57.5	59.4	59.9	61.7	61.9	63.4
233	Accounts Receivable	17.5	26.3	19.9	19.9	19.07	0.3		1.0	2,4	5.0	4,4	4.4	5.2	12.3	14.3	20.5	18.8	21.5	22.8	27.4
234	Regulatory Asset		•	•	· · · ·	31.4	31.3	35.2	37.3	42.4	46.3	29.2	29.3	29.5	30.3	30.4	31.2	31.5	31.9	32.7	33.0
235	Fuel Stock & Related		•	•	31.4	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
236	Emissions Inventory				2.0	2.0	2.0	21.6	22.3	22.9	23.6	24.3	25.1	25.8	26.6	27.4	28.2	29.1	29.9	30.8	31.8
237	Materials and Supplies Other	0.8	0.8	0.8	20.4				1.1	1,1	1.1	1.1	1.1	1.1	1,1	1.1	1.1	1.1	1,1	1.1	1.1
238	Other Current Assets	4.1	1.1	1.1	1.1	1.1	1,1	1.1	4.1	1,4	1.1										
239	Credits														-			-			
240	AMBAC/Credit Suisse July '98	4.7	4.3	3.8	3.8	3.8			, , ,	6.8	6.3	6.0	5.7	5,4	5.1	4.8	4.5	4.2	3.8	3.5	3.1
241	Deferred Tax	4.7	5.0	5.4	6.8	6.8	6.8	6.8	6.8	6.8 6.9	6.5	5.0 6.0	12.6	11,9	11.2	10.5	9.8	9.0	8.3	7.5	6.8
242	Deferred Debt Debits/PCB Refunding 10/0	0.6	0.8	0.7	11	1.1	7.1	6.7	7.3		2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
243	Other Deferred Assets	•	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.3	2				-			
244	LEM Settlement Note/Marketing Payment	<u> </u>	16.1	<u> </u>		<u> </u>		<u> </u>					4.004.4	1.717.3	1,703.0	1.704.1	1,684.4	1,659.7	1,649.4	1.634.2	1,619.2
245	Total Assets	1,253.4	1,313.3	1,308.1	1,676.8	1,420.3	1,456.5	1,452.6	1,473.1	1,486.8	1,550.6	1,630.5	1,931.4	1,/17.3	1,703.0	1,704.3	1,004.4	1,000.1	10.001	1,00=	
246																					
247	Liabilities & Equities												100 4	502.4	521.3	539.7	557.9	575.6	592.9	609.7	626.1
248	Margins & Equilies	(218.2)	(175.0)	(138.5)	388.3	372.2	386.4	399.7	413.0	428.6	445.3	463.5	483.1	502.4	021.J	035.7	501.5	010.0	001.0		
249	Long-Term Debt													4 4 9 9 9	1.093.6	1,078.2	1,036.4	992.7	961.5	928.6	894.2
250	Existing Debt	1,053.1	1,061.7	1,027.1	871.7	871.7	864.8	856.5	906.2	934.5	1,010.9	1,085.8	1,366.2	1,132.0		1,078.2	1,036.4	0.0	0.0	0.0	0.0
251	Sale-Leaseback Obligation	177.3	183.9	189.7	189.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				961.5	928.6	894.2
252	Total Long-Term Debt	1.230.4	1.245.6	1.216.9	1,061.4	871.7	864.8	856.5	906.2	934.5	1,010.9	1,085.8	1,366.2	1,132.0	1,093.6	1,078.2	1,036.4	992.7	901.5	320.0	034,2
253	· · · · · · · · · · · · · · · · · · ·		•															00.4	85.4	86.1	88.9
254	Accounts Payable	12.6	18.0	12.7	12.7	12.7	69.5	72.5	76.8	81.9	86.7	73.3	74.0	74.6	79.5	77.4	81.0	82.1	03.4		
255	Regulatory Liability	/		:		0.0		1.1	•		•	•		•					1.2	1.2	1.2
255	Taxes Accrued	0.2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1,1	1.1	1.1	1,1	1.1	1.2	1.2	1.2	1.2	یکدا ب	1.2
256	Non-Smelter Member Economic Reserve	·	,		157.0	157.0	127.8	96.8	69.9	34.4	•	•	•		•	•	•	•	•		
257	Smelter FAC Reserve Deferred Income	· .								•	•	•	•	•	•					0.4	0,4
	Interest Accrued	7.6	7.8	7.3	0,4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4 8.2	0.4 8.4
259		6.0	5.2		5.4	5.4	5.6	5.7	5.9	6.1	6.2	6.4	6.6	6.8	7.0	7.2	7.5	7.7	7.9		
260	Other Accrued Liabilities Deferred TIER Rebate Payable	0.0	~ <i>rrm</i> .	÷.,	NG KANANG	0.0	1.0	18.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
261		158.1	156.9	152.6								•			•		•	•	•		•
262	• • • • •	56.4	53.5		50.6							•	•	•		•		·	•	-	•
263			0.3							-		-		,,		<u> </u>					
264	Other Deferred Credits & Century Reactive	1.253.4	1,313.3		1,676.8	1,420.3	1,456.5	1,452.6	1,473.1	1,486.8	1,550.6	1,630.5	1,931.4	1,717.3	1,703.0	1,704.1	1,684.4	1,659.7	1,649.4	1,634.2	1,619.2
265	Total Liabilities & Equity	1,233,4	1,010,0	1,000.1	1,010,0	1,		.,													
266					gan a bhaile an Anna an Anna an Anna an Anna an Anna an Anna an Anna an Anna an Anna an Anna an Anna an Anna an	8															

266

				2		Lease															
					Transact																
	Calendar Year	2006	2007	2008	lon	lon	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	1.000
	Unwind Allocation	0.000	0.000	0.000	0.000	0.000	1.000	1.000	1.000	1.000	1.000 0.000	1,000	1.000 0.000	1.000 0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Pre-Transaction Allocation	1.000	1.000 0.000	1.000	0.000	0.000 0.000	0.000 0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-	Transaction Index	0.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0,000						Closing D	ate:	12/31/2	800
267	Change in Working Capital																				
268	Other Property	6.7	7.1	3.1		(196.8)	0.3		•	(0.7)	(1.6)	(1.5)					-	0.5	1.8	0.2	1.5
269	Accounts Receivable	1.2	8.9	(6.4)			24.8	1.4	3.6	3.5	3.8	(3.8)	1.3 0.7	0.4 0.8	4.0 0.8	(1.3) 0.8	2.0 0.8	0.5	0.9	0.2	1.5 0.9
270	Materials, Supplies & Other	0.1	(0.0)	0.0		0.0	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.0	0.0	u.o	0.0				-
271	Other Current Assets	3.8 0.5	(3.0) (5.4)	5.3	000000 0 00000000000000000000000000000		(56.8)	(3.0)	(4.3)	(5.1)	(4.8)	13.4	(0.7)	(0.5)	(5.0)	2.1	(3.6)	(1.1)	(3.3)	(0.7)	(2.8)
272 273	Accounts Payable Taxes Accrued	0.5	(0.8)	(0.0)		(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
273	Other Accruais	(0,1)	0.8	(0.2)		(0.0)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)
275	Investment - Special Deposit (B/S)	(6.0)	(6.2)	(6.4)		196.8	•	•		•	•		•	•		•	•		•	•	
276	Net SLB	(0.3)	(0.3)	0.5																	
277	CoBank Patronage Capital	(0.4)	(0.4)	(0.4)	0.00/06+00	(0.0)	(0.3)		•	0.7	1.6	1.5					,				
278	Adjustment	<u> </u>	4.1	(0.5)	<u></u>	0.0	· · · ·	(1.1)	(0.2)	(1.1)	(0.6)	10.0	1.1	0.4	(0.4)	1.3	(1.0)	0.0	(0.9)	0.2	(0.7)
279	Total	6.8	4.6	(4.9)		0,0	(31.5)	(1.1)	(0.2)	(1.1)	(0.0)	10.0	1.1	0.4	(0.4)	1.5	(,,	•,-	(0.07	•	(a)
280																					
281 282	Cash Balance Beginning	67.8	96.5	148.3	146.0	219,6	160.0	137.3	142.5	162.0	105.7	93.8	105.6	312.4	113.3	117.0	147.2	144.1	149.2	163.6	176.2
283	Ending	96.5	148.3	146.0	219.6	160.0	137.3	142.5	162.0	105.7	93.8	106.6	312.4	113.3	117.0	147.2	144,1	149.2	163.6	176.2	184.1
284																					
285	VI. Credit Measures																				
286																					
287	Contract TIER						14.25	13.29	13.24	15.64	16.71	18.16	19.59	19.33	18.89	18.40	18.24	17.72	17.28	16.78	16,34
288	Earnings	and Coolugi	harina				53.6	49.3	48.8	58.6	62.8	68.6	74.3	72.9	70.7	68.4	67.4	64.9	62.7	60.2	58.0
289 290	Plus: Interest Expense, Financing Fees, Plus: Imputed Rate Increase in 2010	, and Hesiuci	លានាមួ	2				-5.6		,			,	,					-		
290	Less: Offset to Imputed Rate Increase in	n 2010						-				,							•	•	•
292	Less: Interest on Sequestered Funds						(1.40)	(1.46)	(1.51)	(1.57)	(1.64)	(1.70)	(1.77)	(1.84)	(1.92)	(1,99)	(2.07)	(2,16)	(2.24)	(2.33)	(2.42)
293	Total						66.4	61.1	60.6	72.7	77,9	85.0	92.1	90.3	87.7	84.8	83.5	80.4	77.7	74.7	71.9
294	Plus Sale-Leaseback Interest						2			<u> </u>	·			<u> </u>	·	<u> </u>	· · · ·	· · · ·	· · · ·	· · ·	· ·
295	Total						66.4	61.1	60.6	72.7	77.9	85.0	92.1	90.3	87.7	84.8	83.5	80.4	77.7	74.7	71.9
296	Divided by										~ ~			70.0	70.7	68.4	67.4	64.9	62.7	60.2	58.0
297	Interest Expense, Financing Fees, and I	Restructuring	3				53.6	49.3	48.8	58.6	62.8	68.6	74.3	72.9	70.7	98.4	07.4	04.5	02.7		
298	Plus Sale-Leaseback Interest						·	······			62.8	68.6	74.3	72.9	70.7	68.4	67.4	64.9	62.7	60.2	58.0
299	Total						53.6	49.3	48.8	58.6	02.8	08.0	/4.J	12.5	10.7	00.4	07.7	04.0	02.7	00.2	40.0
300							1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24
301	Contract TIER						1.4.4	1.6.7	144.7	1.4. 1	· · · · · ·			••= /							
302 303	Conventional TIER																				
303	Eaminos						14.3	13.3	13.2	15.6	16.7	18.2	19.6	19.3	18.9	18.4	18.2	17.7	17.3	16.8	16.3
305	Plus: Interest Expense, Financing Fees,	, and Restuc	turing				53.6	49.3	48.8	58.6	62.8	68.6	74.3	72.9	70.7	68.4	67.4	64.9	62.7	60.2	58.0
306	Plus Income Tax		-				<u>.</u>	<u> </u>	·		0.6	0.6	0.6	0.6	0,7	0.7	0.7	0.8	<u>8.0</u>	0.8	0.8
307	Total						67.8	62.6	62.1	74.3	80.1	87.3	94.5	92.8	90.3	87.5	86.3	83.3	80.7	77.8	75.2
308	Plus Sale-Leaseback Interest							<u> </u>	·	<u> </u>	<u> </u>		· · ·	· · ·			<u>·</u>				75.2
309	Total						67.8	62.6	62.1	74.3	80.1	87.3	94.5	92.8	90.3	87.5	86.3	83.3	80.7	77.8	79.2
310	Divided by							10.0	100	50 A	<u> </u>	60 C	74 7	72.9	70.7	68,4	67.4	64.9	62.7	60.2	58.0
311	Interest Expense, Financing Fees, and I	Restructuring	3		aliteration i		53.6	49.3	48.8	58.6	62.8	68.6	74.3	12.9	70.7	vo.4	U7.4	04.J	UE.1		
312	Plus Sale-Leaseback interest						53.6	49.3	48.8	58.6	62.8	68.6	74.3	72.9	70,7	68.4	67.4	64.9	62.7	60.2	58.0
313	Total						53.5	49.3	48.0	0.06	02.0	00.0	14.0	16.0	10.1		91.04	0-110			
314	Conventional TIEP						1,27	1.27	1.27	1,27	1.28	1.27	1.27	1.27	1.28	1.28	1.28	1.28	1.29	1.29	1.30
315 316	Conventional TIER						, i L 1														
010					الانتخاذ ففلتهم ويتدويهم و																

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						Lease															
					Transact 7	ferminat											0010	0000	2021	2022	2023
	Calendar Year	2006	2007	2008	lon	ion	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	1.000	1.000	1.000
•	Unwind Allocation	0.000	0.000	0.000	0.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		0.000	0.000	0.000	0.000	0.000
	Pre-Transaction Allocation	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 0.000	0.000	0.000	0.000	0.000	0.000
	Transaction Index	0.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			n Closing D		12/31/2	
-					in an an an an an an an an an an an an an											I	Inditsdutio	i Giosing c	ale.	12,0110	2000
317	DSCR - Cash Basis, Pre Capex, incl Sale-Le	aseback																			
318	Cash Available for Debt Service									70.4	00.0	148.0	148.6	149.6	157.4	159.9	157.8	163.3	158.8	157.2	154.2
319	Receipts less Disbursements						92,4	78.4	53.1	78.4	89.3	140.0	140.0	143.0	107.4	133.5	101.0	100.0			
320	Economic Reserve						35.5	36.1	30.8	38.3	35.7				(n. 1)	(0.4)	(0.4)	(0.4)	(0.4)	(0.5)	(0.5)
321	Taxes						(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.3)	(0.3)	(0.4)	(0.4)						153.7
322	Net						127.8	114.5	83.8	116.7	125.0	147.8	148.3	149.2	157.0	159.5	157.3	162.9	158.3	156.7	155.7
323	Plus Sale-Leaseback Interest									<u> </u>	-	· · · ·		· · · · ·	<u> </u>	<u>,</u> ,			·		
324	Total						127.8	114,5	83.8	116.7	125.0	147.8	148.3	149.2	157.0	159.5	157.3	162.9	158.3	156.7	153.7
325	Divided by																				
326	Interest Expenditures						43.7	43.0	42.1	51.4	55.2	60.5	65.7	63.7	61.0	58.1	56.5	53.3	50.0	47.3	44.3
320	Scheduled Principal						13.3	15.1	15.8	16.7	31.6	33.5	35.6	7,1	38.2	40.4	42.8	45.3	34.0	35.9	38.2
328	Plus Sale-Leasback Interest							•			<u> </u>		<u> </u>		`		<u> </u>			•	
329	Total Debt Service						57.0	58.0	57.9	68.1	86.8	94.0	101.3	70.8	99.2	98.5	99.3	98.6	84.0	83.2	82.5
329	Total Deor Service																				
330	DSCR						2.24	1.97	1.45	1.71	1,44	1.57	1.46	2.11	1.58	1.62	1.58	1.65	1.89	1.88	1.86
332	Daun																				
333	Davs Cash on Hand																				
333	Average Cash Balance	96.5	122.4	147.2	182.8	189.8	148.7	139.9	152.3	133.9	99.8	100.2	209.5	212.9	115.2	132.1	145.7	146.7	156.4	169.9	180.1
335	Line of Credit	100.0				100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
336	Total	196.5	122.4	147.2	182.8	289.8	248.7	239.9	252.3	233.9	199.8	200.2	309.5	312.9	215.2	232.1	245.7	246.7	256.4	269.9	280.1
330	Divided by	120.0	122,4																		
338	Total Operating Expense																				
	PPA	98.0	96.3	95.4																	•
339		30.0	30.0	33,4			270.8	301.0	305.8	339.5	366.4	276.1	259.3	261.7	260.2	267.6	268.0	275.4	277.0	285.9	285.5
340	Fuel Costs SEPA & Other Purchases	11.4	68.0	11.6			22.8	19.3	25.9	24.3	27.1	26.5	28.1	29.4	41.7	31.9	38.8	39.1	46.6	44.0	51.3
341	Non-Fuel Variable Production O&M	0.4	0.5	0.6			30.8	33.7	38.3	39.9	40.9	41.8	51.4	53.0	52.9	55.3	55.3	58.1	60.4	61.4	63.3
342 343	Fixed Production O&M	0.4	0.0				101.3	93.3	105.0	104.9	105.0	102.3	111.8	108.5	129.6	113.5	129.3	123.8	133.5	128.7	137.0
	Transmission O&M	6.6	7.1	7.4			8.0	8.3	8.5	8.8	9.0	9.3	9.6	9.9	10.2	10.5	10.8	11.1	11.4	11.8	12.1
344 345	APM, L/C, Cogen, CW & TVA Trans	4.7	8.8	5.9			6.3	6.5	5.8	5.7	5.9	6.0	6.2	6.4	6.6	6.8	7.0	7.2	7.4	7.6	7.8
345 346	AEG	13.8	15.6	17.2			29.5	27.8	29.2	29.5	30.3	31.7	32.1	33.0	34.3	35.1	36.0	37.5	38.2	39.5	40.9
340	Property Taxes & Insurance	2.4	2.3	2.2			6.9	7.1	7.8	8.5	8.8	9.1	9.3	9.6	9.9	10.2	10.5	10.8	11.1	11.5	11.8
347	Interest Expense (Incl. Financing Fee	60.7	60.9	59.9			53.1	48.9	48.4	58.2	62.4	68.2	73.8	72.5	70.3	68.0	67.0	<u> </u>	62.3	59.8	57.6
	Total	198.0	259.5	200.4			529.7	545.7	574.8	619.5	656.8	570.9	581.5	583.9	615.7	598.9	622.6	627.3	647.9	650.2	667.4
349	10(8)	190.0	205.0	200,4			020.7	Q 10.1	0												
350	Days Cash on Hand (including Line of C	362.2	172.2	268.1			171.3	160.4	160.2	137.8	111.0	128.0	194.3	195.6	127.5	141.5	144.0	143.5	144.5	151.5	153.2
351 352	Days Cash on Hand (including Line of C Days Cash on Hand (excluding Line of C	177.8	172.2	268.1			102.4	93.6	96.7	78.9	55.4	64.1	131.5	133.1	68.3	80.5	85,4	85.3	88.1	95.4	98.5
352	Days basit on manu (exclosing Line of c	117.0	316.16	2001						-											
333				1	uniter and a second																

				1		Lease															
					Transact																0000
	Calendar Year	2006	2007	2008	lon	lon	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 1.000	2020	1.000	2022	2023
	Inwind Allocation	0.000	0.000	0.000	0.000	0.000	1.000	1.000 0.000	1.000 0.000	1.000 0.000	1.000 0.000	1.000 0.000	1.000	1.000 0.000	1.000 0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Pre-Transaction Allocation	1.000	1.000	1.000	0.000	0.000 0.000	0.000 0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-	Transaction Index	0.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	01000				n Closing D	ate:	12/31/2	2008
354	/II. Debt Service Detail, as of Transacti	on Date (MS)																			
355																					
356	Capital Markets Issue (Tranche 1)											40.4	20.0	00.0	29.0	00 C	53.2	53.2	53.2	52.7	24.9
357	Beginning Principal			•			•	•	(50.2)	58.3	58.3 9.3	49.1 9.9	39.2 10.6	28.6	28.6	28.6 (24.6)	JJ.2		0.5	27.9	15.7
358	Principal								(58.3)	4.1	4.1	3.4	2.7	2.0	2.0	2.0	3.5	3.5	3.5	3.4	1.6
359 360	interest Debt Service				Georgiana e d				(58.3)	4.1	13.3	13.3	13.3	2.0	2.0	(22.6)	3.5	3.5	3.9	31.3	17.3
360	Blended Interest Cost			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	6.50%	6.50%	6.50%	6.50%	6.50%
362																					
363	Capital Markets Issue (Tranche 2)													007 0	207.0	207.0	207.0	207.0	207.0	207.0	199.0
364	Beginning Principal			-	10970-503				•	-	•	•	(207.0)	207.0	207.0	207.0	207.0	201.0	207.0	8.0	22.5
365	Principal													11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.2
366	Interest Debt Service							 _	·		······	· · · ·	(207.0)	11.6	11.6	11.6	11.6	11.6	11.6	19.7	33.7
367 368	Blended Interest Cost			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	5.62%	5.62%	5.62%	5.62%	5.62%	5.62%	5.62%	5.63%
369																					
370	Variable Rate Bonds																				
371	Beginning Principal			•		•	•		-		•	•	•	•	•						
372	Principal			-																-	•
373	Interest				•••••••		<u> </u>	······································		······									·	· · ·	-
374 375	Debt Service Blended interest Cost			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
376	Dielided allesest Oost			0.007	CILC / C																
377	Ongoing RUS Note (Stated)																				
378	Beginning Principal				768.4	628.2	628.2	614.9	599.8	584.0	504.7	482.3	458.7	433.7	200.2	162.0	121.6	78.8	33.5 33.5	0.0	0.0
379	Principal			•	140.2		13.3	15.1	15.8	79.4 32.5	22.3 29.0	23.6 27.7	25.0 26.4	233.5 13.4	38.2 11.5	40.4 9.3	42.8 7.0	45.3 4.5	1,9	0.0	0.0
380	Interest			<u> </u>		0.0	<u>36.1</u> 49.4	<u>35.4</u> 50.4	<u>34.5</u> 50.3	111.9	51.4	51.4	<u></u> 51.4	246.9	49.7	49.7	49,8	49.8	35.4	0.0	0.0
381	Debt Service Risadari Istarrat Cast			•	140.2 0.00%	0.0	49.4 5.75%	5.75%	5.75%	5.75%	5,75%	5.75%	5.75%	5.75%	5.75%	5.75%	5.75%	5.75%	5.75%	0.0	
382 383	Blended Interest Cost				0.0070	0.0070	0.7070	0	00.0												
384	ARVP																				
385	Beginning Principal			•	104,1	104.1	104.1	110.2	116.8	123.7	131.0	138.7	146.9	155.6	164.8	174.6	184.9	195.8	207.4	219.7	232.7
386	Principal/ Reserve					•	•	•	•		•	•	•	•			•			•	
387	Interest/ Reserve										·	·····	<u> </u>						······································		
388	Debt Service			0.00%	- 5.91%	5,91%	5.91%	5.91%	5.91%	5.91%	5.91%	5.91%	5.91%	5.91%	5.91%	5.91%	5.91%	5.91%	5,91%	5.91%	5.91%
389 390	Accretion Rate			0.0070	3.3175	0.0170	3,31,5	0.0170	0.01.10												
391	PCB																				
392	Beginning Principal				142.1	142.1	142.1	142.1	142.1	142.1	142.1	142.1	142.1	142.1	142.1	142.1	142.1	142.1	142.1	142.1	142.1
393	Principal			•				7.1		7.1	7,1	7.1	7,1	7.1	. 7.1	7.1	7.1	71	7.1	7.1	7.1
394	Interest			······	<u>-</u>	<u>0.0</u> 0.0	<u>7.1</u> 7.1	7.1	<u>7.1</u> 7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1
395 396	Debt Service Blended Interest Cost				0.00%	0.0%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
390	Diendeu mileiest Cost				0.0070	9.0010	0.00 %														
	Additional Debt	9197 (SQL) (SQL) (SQL)			in designation of						91.000 Carling						en de la deserve			<u>Garantan</u> i	
	Beginning Principal				Nobel States					- 10 C	100.0	200.0	300.0	400.0	390.0	380.0	370.0	360.0 10.0	350.0 10.0	340.0 10.0	330.0 10.0
	Principal	og staller dis bly s								(100.0)	(100.0)	(100.0) 21.8	(100.0) 29.0	10.0 29.0	10.0 28.3	10.0 27.6	10.0 26.8	26.1	25.4	24.7	23.9
	Interest Control Contr	and the second								7.3 (92.8)	14.5 (85.5)	(78.3)	(71.0)	39.0	38.3	37.6	36,8	36.1	35.4	34.7	33.9
	Debt Service Blended Interest Cost			100 270 2440 24 1-110	International States				ng ng North	((Solo)						100 ANA 100				A CONTRACTOR
1			00004010721142386382	annos as Anna Anna 				an mark an angan di kagan di ja		anna a seanna langanaga ini											
398	Total (Incorporates RUS on Stated Basis	5)													1 400 -	1 00 1 0	1 070 0	1.025.0	002 5	061 5	020 5
399	Beginning Principal			•	1,014.6	874.4	874.4	867.2	858.7	908.1	936.0	1,012.2	1,086.9	1,367.0 243.5	1,132.7 48.2	1,094.3 25.8	1,078.8 52.8	1,036.9 55.3	993.2 44.0	961.5 45.9	928.6 48.2
400	Principal			•	140.2	0.0	13.3 43.2	15.1 42.5	(42.5) 41.6	(20.6) 50.9	(68.4) 54.7	(66.5) 60.0	(271.5) 65.2	243.5 63.2	48.2 60.5	23.8 57.6	56.0	52.8	49.5	46.8	43.8
401 402	Interest Line of Credit Fee			•	•	0.0	43.2	42.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
402	LING OF UTGUR I EG																				

Calendar Year 2006 2	Leasi Transact Termin 007 2008 Inn								Octoper 2008
Pre-Transaction Allocation 0.000 Transaction Index 1.000	0.000 0.000 0.000 0.00 0.000 0.000 0.000 0.00 0.000 0.000 1.000 0.00 1.000 0.000 1.000 0.00 140.2 0.0	0.000 0. 0.000 0.	10 2011 .000 1.000 .000 0.000 .000 0.000 .000 0.000 .000 0.000 .08.0 (0.4)	1.000 0.000 (0.000 (013 2014 1.000 1.000 0.000 0.000 0.000 0.000 13.2) (6.0)	2015 2016 1.000 1.000 0.000 0.000 0.000 0.000 (205.7) 307.2	2017 2018 1.000 1.00 0.000 0.00 0.000 0.00 109.2 83.5	00 1.000 1.000 00 0.000 0.000 00 0.000 0.000 00 0.000 0.000 Transaction Closing D	2021 2022 2023 1.000 1.000 1.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 9.000 0.000 93.2 92.5

Smelter Rates

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Unwind Allocation	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Pre-Transaction Allocation	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Days in Year	365	365	365	366	365	365	365	366	365	365	365	366	365	365	365
General Rate Adjustment (%)	0.00%	0.00%	0.00%	1.46%	1.80%	3.12%	3.94%	0.00%	10.55%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1 Smeller Sales															
2 Century	4.14	4.14	4.14	4.15	4.14	4.14	4.14	4.15	4.14	4.14	4.14	4.15	4.14	4.14	4.14
3 Alcan	3.16	3.16	3.16	3.17	3.16	3.16	3.16	3.17	3.16	3.16	3.16	3.17	3.16	3.16	3.16
4 Total Energy (TWh)	7,297	7.297	7.297	7.317	7.297	7.297	7.297	7.317	7.297	7.297	7.297	7.317	7.297	7.297	7.297
5 Total Demand (GW)	10.200	10.200	10.200	10.200	10.200	10,200	10.200	10.200	10.200	10.200	10.200	10.200	10.200	10.200	10.200
6 Smelter Load Factor (%) 7	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%
8 Smeller Rate (\$/ MWh)															
9 Large Industrial Rate															
10 Sales (TWH)	1.06	1.10	1.13	1.17	1.20	1.23	1.27	1.30	1.34	1.37	1.41	1.44	1.48	1.51	1,54
11 Load Factor (%)	78.65%	78.65%	78.65%	78.39%	78.65%	78,65%	78.65%	78.36%	78.65%	78.65%	78,65%	78.33%	78.65%	78.65%	78.65%
12 Demand (\$/ KW-mo.)	10.15	10.15	10.15	10.30	10.48	10.81	11.24	11.24	12.42	12.42	12.42	12.42	12.42	12.42	12.42
13 Energy (\$/ MWH)	13.72	13.72	13.72	13.92	14.17	14.61	15.18	15.18	16.79	16.79	16.79	16.79	16.79	16.79	16.79
14 Power Factor Penalty/ Demand Cr. (\$/ MWH)	,		`	,	,				,		,			,	•
15 MRDA (\$/ MWH)						,			,	,				,	
16 Regulatory Account Charge	-		(0.10)	(0.10)	(0.10)	0.42	0.41	0.40	0.41	0.40	0.39	1.52	1.48	1.45	1.59
17 Less: Regulatory Account Charge		+	0,10	0.10	0.10	(0.42)	(0.41)	(0.40)	(0.41)	(0.40)	(0.39)	(1.52)	(1.48)	(1.45)	(1.59)
18 Net Rate (\$/ MWH) 19	31.39	31.39	31.39	31.86	32.43	33.44	34.76	34.78	38.42	38.42	38.42	38.45	38.42	38.42	38.42
20 Large Industrial Rate @ 98% LF	27.90	27.90	27.90	28,27	28.82	29.72	30.89	30.85	34.15	34.15	34,15	34.10	34.15	34.15	34.15
21 Plus Margin	0.25	0.25	0,25	0,25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
22 Smelter Base Rate	28.15	28.15	28,15	28.52	29.07	29.97	31.14	31,10	34.40	34.40	34,40	34.35	34.40	34.40	34.40
23 Plus TIER Adjustment			1.79	2.95	2.95	2.95	3.55	3.39	3.55	0.32	3.23	2.31	3.42	2.43	3.61
24 Less TIER Related Rebate	(0.10)	(1.73)							,	,		,			
25 Smeller Rate Subject to TIER Adjustment	28.06	26.42	29,95	31.47	32.02	32.92	34.69	34,49	37,95	34.72	37.63	36.66	37.83	36.83	38.01
26							•	••				00.00	01,00	00.00	00.01
27 Plus FAC + PPA + Environmental Surcharge	13.48	14.99	17.67	20.10	22.30	15.01	15.62	15.87	17.45	16.77	17.91	17.91	19.00	19.33	20.22
28 Plus Surcharge 1	0.70	0.70	0.70	1.00	1.00	1.00	1.00	1.00	1.40	1.40	1.40	1.39	1.40	1.40	1.40
29 Plus Surcharge 2	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	1.20	1.20	1.20	1.20	1,20	1.20	1.20
30 Effective Smeller Rate (Incl. PPA, Surcharge, & Rebate) 31	43.11	42.98	49.19	53.44	56.19	49.80	52.18	52.24	58.00	54.09	58.14	57.16	59.42	58.76	60.83
32 TIER Adjustment Cap (\$/ MWh)															
33 Bandwidth Floor	28.15	28.15	28,15	28.52	29.07	29.97	31.14	31.10	34.40	34.40	34.40	34.35	34,40	34,40	34.40
34 Bandwidth Range	1.95	1.95	1.95	2.95	2.95	2.95	3.55	3.55	3.55	4.15	4.15	4.15	4.75	4.75	4.75
35 Bandwidth Ceiling	30.10	30.10	30,10	31.47	32.02	32.92	34.69	34.65	37.95	38.55	38.55	38.50	39,15	39.15	39.15
36 Smelter Rate Subject to TIER Adjustment/ Rebate	28.06	26.42	29.95	31.47	32.02	32.92	34.69	34.49	37.95	34.72	37.63	36.66	37.83	36.83	38.01

Smelt. ... (ate Structure

Smelter Rates

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Unwind Allocation	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Pre-Transaction Allocation	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Days in Year	365	365	365	366	365	365	365	366	365	365	365	366	365	365	365
General Rate Adjustment (%)	0.00%	0.00%	0.00%	1.46%	1.80%	3.12%	3.94%	0.00%	10.55%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%



Smelt ... late Structure

Smelter Rates

	Smelter Rates															
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
	11. 1. 1. 4.1	1,000	1.000	1,000	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	Unwind Allocation	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Pre-Transaction Allocation	365	365	365	366	365	365	365	366	365	365	365	366	365	365	365
	Days in Year	0.00%	0.00%	0.00%	1.46%	1.80%	3.12%	3.94%	0.00%	10.55%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	General Rate Adjustment (%)	0.0078	0.0070	0.0070		.,										
37	TIER Adjustment Rebate/Charge						404.0	206.7	211.9	229.4	236.9	243.5	257.0	263.5	272.1	279,1
38	Pre-TIER Rebate Member Revenues	124.1	134.4	150.5	157.1	174.5	194.2	200.7	357.4	397.3	392.4	400.7	401.4	408.6	411.0	417.5
39	Pre-TIER Adj/Rebate Smelter Revenues	315.3	326.2	345.9	369.5	388.5	341.9	354.9 70.0	68.2	57.7	62.7	51.5	49.7	49.5	48.9	45.2
40	Other Revenues	140.0	<u> 153,1</u>	123.5	134.5	139.2	84.1	631.7	637.5	<u> </u>	692.0	695.7	708.1	721.6	732.1	741.8
41	Pre TIER Adi/Rebate Revenues	579.4	613.8	620.0	661.1	702.2	620.2	638.0	643.0	691.4	675.9	701.0	707,2	729.3	733.0	751.8
42	Total Expenses	564.1	581.7	619.8	667.0	707.0	623.5		643.0 (5.5)	(7.0)	16.1	(5.3)	0.8	(7.7)	(0.9)	(10.0)
43	Net Margin Before TIER Adjustment	15.3	32.1	0.1	(5.9)	(4.8)	(3.4)	(6.3)	(5.5)	(7.0)	10.1	(0.0)	0.0	(1.1.1	(0.0)	(,
44	•						~~ ~	67 6	67.4	63.7	84.4	62.0	65.7	55.0	59.3	48.0
45	Interest + Margin	68.8	81.4	49.0	52.7	58.0	65.2	67.9	67.4 72.9	70,7	68.4	67.4	64.9	62.7	60.2	58.0
46		53.6	49.3	48.8	58.6	62.8	68.6	74.3		0.90	1.24	0.92	1.01	0.88	0.98	0.83
47	Pre-TIER Adjustment TIER	1.29	1.65	1.00	0.90	0.92	0.95	0.91	0.92	0.90	1.44	0.92	1.0 (0.00	0.00	
48	· · · · ·									24.0	0.3	21.5	14.7	22.7	15.4	23.9
49	increment needed for 1.24x TIER	(2.4)	(20.3)	11.6	20.0	19.9	19.8	24.1	23.0	24.0	0.5	£1.J	14.7			
50	Contract TIER Adjustments												_	-		
51	Plus: Imputed Rate Increase in 2010	•		•	•		•	•	-	•	•	•			,	-
52	· · · · · · · · · · · · · · · · · · ·	-	-	-	-	-	*	-	-		(2.0)	(2.1)	(2.2)	(2.2)	(2.3)	(2.4)
53	· · · · · ·	<u>(1.4</u>)	(1.5)	(1.5)	(1.6)	(1.6)	(1.7)	<u>(1.8</u>)	(1.8)	(1.9)				(2.2)	(2.3)	(2.4)
54		(1.4)	(1.5)	(1.5)	(1.6)	(1.6)	(1.7)	(1.8)	(1.8)	(1.9)	(2.0)	(2.1)	(2.2) 16.9	(2.2) 25.0	17.7	26.3
55		(1.0)	(18.8)	13.1	21.6	21.5	21.5	25.9	24.8	25.9	2.3	23.6	10.9	25.0	11.7	20.0
56																
57		(1.0)	(18.8)		•		•	-	•					25.0	17.7	26.3
58		,	•	13.1	21.6	21.5	21.5	25.9	24.8	25.9	2.3	23.6	16.9	25.0		20.0
59	· • ·															
60																
61	Rurals	(0.10)	(1.79)			•			٠	-	•	•	•	-		-
62		(0.09)	(1.59)			•	•	•	•			-	-	-	-	-
63		(0.10)	(1.73)	-	-	-	-	•	-	-	-	•	•			-
64 64		·	•											o (0	0.40	3.61
04 EE	TIER Adjustment Charge to Smelters (\$/MWh)			1.79	2.95	2.95	2.95	3.55	3.39	3.55	0.32	3.23	2.31	3.42	2.43	3.01
60	HER Autoantient onlarge to onteneso terminit															

Memh Rates Cash Method

Member hutes (Cash Method) Calculation

	Member hutes (Cash Method) Calculation															~~~~
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
			4 000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	Unwind Allocation	1.000	1.000 0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Pre-Transaction Allocation	0.000	0.000	0.000	0.000	0.000	0.000	0.000								
1	Member Sales (TWh)	~	0.40	2.54	2.59	2.65	2.70	2,76	2.82	2.88	2.94	3.00	3.06	3.12	3.18	3.24
2	Rural	2.44	2.49 1.10	2.54	2.55	1.20	1.23	1.27	1.30	1.34	1.37	1.41	1,44	1.48	1.51	1.54
3	Large Industrial	1.06		3.67	3.76	3.85	3.94	4.03	4.12	4.22	4.31	4,40	4.50	4.60	4.69	4.79
4	Total	3.50	3.58	3.67	3.70	3.03	0,34	4.00		(1==						
5 6	Rates (Cash Method)															
7	Rural						00 50/	CO C7/	60.5%	60.7%	60.8%	60.9%	60.8%	61.0%	61.1%	61.2%
8	Load Factor (%)	60.0%	60.1%	60.2%	60.2%	60.4%	60.5%	60.6%	8.16	9.02	9.02	9.02	9.02	9.02	9.02	9.02
9	Demand (\$/ KW-mo.)	7.37	7.37	7.37	7.48	7.61	7.85	8.16	22.59	9.02 24.97	24,97	24.97	24.97	24.97	24.97	24.97
10	Energy (\$/ MWH)	20.40	20.40	20.40	20.70	21.07	21.73	22.59	37.04	37.02	37.00	36.98	36.95	36.94	36.92	36.90
11	Base	37.22	37.19	37.17	37.14	37.12	37.09	37.07	37.04	37.02	37.00	-	-	-	_	
12	MRDA	-	•	-	•	-	-	-	0.40	0.41	0.40	0.39	1,52	1.48	1,45	1.59
13		•	•	(0.10)	(0.10)	(0.10)	0.42	0.41	0.40 3.97	8.29	8.29	8.28	8.27	8.27	8.27	8.26
14	-	-	*	-	0.54	1.22	2.42	<u>3.97</u> 9.82	9.93	10.00	10.32	10.60	10.96	10.98	11.56	11.47
15	FAC	11.22	12.95	14.04	16.58	18.46	11.27	9.82 5.36	9.93 5.37	5.36	5.58	5.52	5.80	5.95	6.03	6.21
16		2.19	2.42	3.15	3.24	3.27	3.48		(3.32)	(4.49)	(4.40)	(4.30)	(4.22)	(4.12)	(4.04)	(3.96)
17	Surcharge Rebate	(3.28)	(3.20)	(3.12)	(3.64)	(3.55)	(3.47)	(3.39)	(3.32)	(4.43)	(4.40)	(4.00) -	(,		` <u>-</u> '	-
18	TIER Related Rebate	-	(0.10)	(1.76)	-	-	-	-	-		-	-	-	-	-	•
19	Non-Smelter Member Economic Reserve	<u>(10.13)</u>	(10,08)	(8,38)	(10.19)	(9.28)		11.80	11.97	10.87	11.50	11.83	12.54	12.82	13.55	13.72
20	Net		2.00	3.93	6.00	8.91	<u>11.28</u> 51.21	53.25	53.39	56.59	57.19	57.48	59.29	59.51	60.20	60.48
21	Effective Rate	37.22	39.19	41.00	43.58	47.15	51.21	53.25	33.39	30.35	07.10	01110	001			
22																
23	Large Industrial					78.6%	78.6%	78.6%	78.4%	78.6%	78.6%	78.6%	78.3%	78.6%	78.6%	78.6%
24	Load Factor (%)	78.6%	78.6%	78.6%	78.4%		10.81	11.24	11.24	12.42	12.42	12.42	12.42	12,42	12.42	12.42
25	Demand (\$/ KW-mo.)	10.15	10.15	10.15	10.30	10.48	14.61	15.18	15.18	16.79	16.79	16.79	16.79	16.79	16.79	16.79
26	Energy (\$/ MWH)	13.72	13.72	13.72	13.92	<u>14.17</u> 31.39	31.39	31.39	31.41	31.39	31.39	31.39	31.42	31.39	31.39	31.39
27	Base	31.39	31.39	31.39	31.40	31.39	91.00	01.00	, ,	-	-	-	-	-	-	-
28		-	-	-	-		0.42	0,41	0.40	0.41	0.40	0.39	1.52	1.48	1.45	1.59
29	Regulatory Account Charge	•	-	(0.10)	(0.10)	(0.10)	2.05	3.36	3.37	7.03	7.03	7.03	7.03	7.03	7.03	7.03
30	GRA				0.46	1.03	11.27	9.82	9.93	10.00	10.32	10.60	10.96	10.98	11.56	11.47
31	FAC	11.22	12.95	14.04	16.58		3.48	5.36	5.37	5.36	5.58	5.52	5.80	5.95	6.03	6.21
32	Env. Surcharge	2.19	2.42	3.15	3.24	3.27	3.48 (3.47)	(3.39)	(3.32)	(4.49)	(4.40)	(4.30)	(4.22)	(4.12)	(4.04)	(3.96)
33	Surcharge Rebate	(3.28)	(3.20)	(3.12)	(3.64)	(3.55)	(3.47)	(0.09)	10.061	1-1-1-1	(-	· · ·			
34	TIER Related Rebate	•	(0.08)	(1.54)			•	•	_	_	-	-	-	-		-
35	Non-Smelter Member Economic Reserve	(10.13)	(10.08)	(8.38)	(10.19)	(9.28)		11.80	11.97	10.87	11.50	11.83	12.54	12.82	13.55	13.72
36		-	2.01	4.15	6.00	<u>8.91</u> 41.24	11.28	46.97	47.15	49.70	50.32	50.64	52.51	52.72	53.43	53.74
37	Effective Rate	31.39	33.40	35.44	37.76	41,24	40,10	40.97	77,10							

Memh Rates Cash Method

Member hates (Cash Method) Calculation

		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
		1,000	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	Jnwind Allocation	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
I	Pre-Transaction Allocation	0.000	0.000	0,000	0.000											
39	Non-Smelter Member Blend											05.00	05 10	35.16	35.14	35.13
40	Base	35.45	35.42	35.39	35.36	35.33	35.31	35.28	35.26	35.24	35.21	35.20	35.18	35.10	33.14	
41	MRDA	-	-	-	-	•	-	-	-	-		0.39	- 1.52	1.48	1.45	1.59
42	Regulatory Account Charge	•	,	(0.10)	(0.10)	(0.10)	0.42	0.41	0.40	0.41	0.40 7.89	7.88	7.88	7.87	7.87	7.87
43	GRĂ	-	-	-	0.52	1.16	2.30	3.78	3.78	7.89	10.32	10.60	10.96	10.98	11.56	11.47
44	FAC	11.22	12.95	14.04	16.58	18.46	11.27	9.82	9.93 5.37	5.36	5.58	5.52	5.80	5.95	6.03	6.21
45	Env. Surcharge	2.19	2.42	3.15	3.24	3.27	3.48	5.36	(3.32)	(4.49)	(4.40)	(4,30)	(4.22)	(4.12)	(4.04)	(3.96)
46	Surcharge Rebate	(3.28)	(3.20)	(3.12)	(3.64)	(3.55)	(3.47)	(3.39)	(3.32)	(4.43)	(4.40)	(-1,00)			-	-
47	TIER Related Rebate	-	(0.09)	(1.69)	-	-	•	-	-	-	-	-	-	-	-	-
48	Non-Smelter Member Economic Reserve	(10.13)	(10.08)	(8.38)	(10.19)	<u>(9.28)</u> 8.91	11.28	11.80	11.97	10.87	11.50	11.83	12.54	12.82	13.55	13.72
49	Net	,	2.00	4.00	6.00	45.30	49.31	51.27	51.42	54.40	55.00	55.29	57.12	57.33	58.02	58.30
50	Effective Rate	35.45	37.42	39.29	41.78	40.00	49.01	J1.41	91.7E	04.10	00.00					
51																
52	Revenues Delta(SM)	0.24	4.22	(4.46)			-	-	•			,	,			•
53	Rural	0.24	4.22	(4.40)	_				-	-	-	-	-	-	-	-
54	L-I						_				-	-	-	-	-	-
55	Total	0.33	5.87	(6.20)	•	-										
56																
57	Smelter Rebate Lag	7.30	7.30	7.30	7.32	7.30	7.30	7.30	7.32	7.30	7.30	7.30	7.32	7.30	7.30	7.30
58	TWh		(1.73)	7.50	-	-	-	-	•	-	•	-	-	-	•	-
59	Accrued (\$/ MWh)	(0.10)	(0.10)	(1.73)	-		-	-	-	-			•	•	-	-
60	Realized (\$/ MWh)	- 0.70	11.94	(12.63)	-										•	•
61	Adjust (SM)	0.70	11.94	(12.00)												

														Oc	tober	2008
F	Regulatory Accounts	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
	Purchased Power Cost not ncluded in Member Rates (\$M)	0.26	(1.39)	1.77	1.03	2.20	1.02	1.76	2.39	8.83	3.78	7.86	5.17	9.50	8.16	12.18
2	EXPENSE DEFERRAL METHOD	atory Ac	count)													
4 5 7 8	<u>1. Deferral</u> Power Purchase Expense Debit Credit Total	<u>(0.26</u>) (0.26)	1.39 1.39	<u>(1.77</u>) (1.77)	<u>(1.03)</u> (1.03)	(2.20) (2.20)	(<u>1.02</u>) (1.02)	(<u>1.76</u>) (1.76)	_(<u>2.39</u>) (2.39)	(<u>8.83</u>) (8.83)	<u>(3.78)</u> (3.78)	(7.86) (7.86)	(5.17) (5.17)	- (9.50) (9.50)	<u>(8.16)</u> (8.16)	<u>(12.18)</u> (12.18)
9 10 11 12	2. Recognition of Prior Year Balance Credit Member Revenue (Charg Debit Power Purchase Expense	e to Mem	<u>Start in 2</u> bers)	<u>013)</u> (0.37) (0.37)		(0.37) (0.37)	1.67 1.67	1.67 1.67	1.67 1.67	1.72 1.72	1.72 1.72	1.72 1.72	6.82 6.82	6.82 6.82	6.82 6.82	7.61 7.61
13 14 15	Net Income	0.26	(1.39)	1.77	1.03	2.20	1.02	1.76	2.39	8.83	3.78	7.86	5.17	9.50	8.16	12.18
	Balance Sheet Assets Cash Regulatory Asset Total	<u>0.3</u> 0.3		(0.4) <u>1.0</u> 0.6	(0.7) <u>2.4</u> 1.7	(1.1) <u>5.0</u> 3.9	0.5 <u>4.4</u> 4.9	2.2 <u>4.4</u> 6.7	3.9 9.1	5.6 	7.3 14.3 17	9.1 20.5 29.5	15.9 <u>18.8</u> 34.7	22.7 21.5 44.2	29.5 	37.1
22 23 24 25	Liabilities & Equity Equity Regulatory Liability Total	0.3 0.3	(1.1 <u>1.1</u> -) 0.6 0.6		3.9 3.9	4.9 4.9	6.7 6.7	9.1 9.1	17.9 17.9	21.7 21.7	29.5 29.5	34.7 	44.2 44.2	52.4 52.4	64.5 64.5

	FAC 1. A Env Sur													00	ctober	2008
	FACT: A Elly Sul	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
	Production (TWh) Sales (TWh)	11.9 12.3	12.4 12.7	11.8 12.3	12.0 12.4	12.1 12.6	12.1 12.6	12.2 12.6	12.2 12.7	11.8 12.6	12.2 12.7	11.9 12.6	12.1 12.7	12.1 12.8	12.2 12.8	12.1 12.9
4 5 6 7	<u>A. FAC</u> Fuel Costs (\$M)	270.8	301.0	305.8	339.5	366.4	276.1	259.3	261.7	260.2	267.6	268.0	275.4	277.0	285.9	285.5
8 9	Total Costs for Passthrough (\$/ MWh Sold) Fuel Cost Base (\$/MWh)	21.94 (10.72)	23.67 (10.72)	24.76 (10.72)	27.30 (10.72)	29.18 (10.72)	21.99 (10.72)	20.54 (10.72)	20.64 (10.72)	20.72 (10.72) 10.00	21.04 (10.72) 10.32	21.32 (10.72) 10.60	21.68 (10.72) 10.96	21.70 (10.72) 10.98	22.28 (10.72) 11.56	22.19 (10.72) 11.47
	B. PPA	11.22 22.55	12.95 17.35	14.04 27.57	16.58 25.20	18.46 29.18	11.27 25.26	9.82 27.61	9.93 29.57	48.30	33.44	44.44	36.86	48.75	44.80	55.28
12 13 14	Total Costs for Passthrough (\$/ MWh Sold)	1.83	1.36	2.23	2.03	2.32	2.01 (1.75)	2.19 (1.75)	2.33 (1.75)	3.85 (1.75)	2.63 (1.75)	3.54 (1.75)	2.90 (1.75)	3.82 (1.75)	3.49 (1.75)	4.30 (1.75)
15 16 17	Purchase Power Passthrough (\$/MWh)	<u>(1.75</u>) 0.08	(1.75) (0.39)	<u>(1.75</u>) 0.48	<u>(1.75</u>) 0.27	<u>(1.75</u>) 0.57	0.26	0.44	0.58	2.09	0.88	1.78	1.15	2.07	1.74	2.54
18 19	<u>C. Environmental Surcharge</u> Eligible Cost (\$M)	27.00	30.76	38.88	40.35	41.08	43.74	67.70	68.06	67.34	70.95	69.42	73.61	76.01	77.42	79.85
20 21 22	Total Costs for Passthrough (\$/ MWh Sold)	2.19	2.42	3.15	3.24	3.27	3.48	5.36	5.37	5.36 	5.58 	5.52	5.80	5.95	6.03	6.21
23 24	Environmental Surcharge Passthrough (\$/N	2.19	2.42	3.15	3.24	3.27	3.48	5.36	5.37	5.36	5.58	5.52	5.80	5.95	6.03	6.21
25 26 27	1 - FAC + Environmental Surcharge to Mem	ibers														
28 29	FAC	11.22 	12.95 2.42	14.04 <u>3.15</u>	16.58 <u>3.24</u>	18.46 <u>3.27</u>	11.27 <u>3.48</u>	9.82 <u>5.36</u>	9.93 <u>5.37</u>	10.00 <u>5.36</u> 15.36	10.32 <u>5.58</u> 15.90	10.60 <u>5.52</u> 16.13	10.96 <u>5.80</u> 16.76	10.98 <u>5.95</u> 16.94	11.56 <u>6.03</u> 17.59	11.47 <u>6.21</u> 17.68
30 31	Large Industrials	13.41 11.22	15.37 12.95	17.19 14.04	19.83 16.58	21.73 18.46	14.75 11.27	15.18 9.82	15.29 9.93	10.00	10.32	10.13	10.96	10.98	11.56	11.47
32 33 34	Environmental Surcharge Total	<u>2.19</u> 13.41	<u>2.42</u> 15.37	<u>3.15</u> 17.19	<u>3.24</u> 19.83	<u>3.27</u> 21.73	<u>3.48</u> 14.75	<u>5.36</u> 15.18	<u> </u>	<u>5.36</u> 15.36	<u>5.58</u> 15.90	<u>5.52</u> 16.13	<u> </u>	<u>5.95</u> 16.94	<u> 6.03</u> 17.59	<u> </u>
35 36	2 - FAC + PPA + Environmental Surcharge FAC	to Smelt 11.22 0.08	<u>ers</u> 12.95 (0.39)	14.04 0.48	16.58 0.27	18.46 0.57	11.27 0.26	9.82 0.44	9.93 0.58	10.00 2.09	10.32 0.88	10.60 1.78	10.96 1.15	10.98 2.07	11 <i>.</i> 56 1.74	11.47 2.54
37 38 39	Environmental Surcharge	<u>2.19</u> 13.48	<u>2.42</u> 14.99	<u>3.15</u> 17.67	<u>3.24</u> 20.10	<u>3.27</u> 22.30	<u>3.48</u> 15.01	<u>5.36</u> 15.62	<u>5.37</u> 15.87	<u>5.36</u> 17.45	<u>5.58</u> 16.77	<u>5.52</u> 17.91	<u>5.80</u> 17.91	<u>5.95</u> 19.00	<u> </u>	<u>6.21</u> 20.22

UW Tr saction

_

		2008	Transaction	Lease Termination
(:	SM)	_	*	0.000
	Inwind Allocation	1.000	-	-
	re-Transaction Allocation	*	1.000	
T	ransaction Index			
E	A. Transaction Components		387.7	
1	1. Cash Payment/ Credit Escrow Draws			
2	2. WKE Residual Value Obligation			
з	WKE Gen. Capex - Cum.			
4	Non-Incremental (RV Obligation Balance)	50.2	55.0	
5	Beginning Balance	7.0		-
6	WKE Share of Non-Incremental Capex	2.1	-	-
7	Amortization of WKE Share	55.0	55.0	
8	Net	55.0	0014	
9	Incremental	90.9	86.3	-
10	Beginning Balance	90.5		
11	WKE Share of Non-Incremental Capex	4.6		-
12	Amortization of WKE Share		86.3	
13	Net	86.3	141.4	
14	Total	141.4	141.4	
15	3. LG&E Rental Income Advance			_
16	Cash Flow	47.7	,	-
17	income Statement	52.3	-	
18	Balance	(11.2)	(11.2)	
19	4. Fuel & Other inventories	-	51.0	-
20	5. Cancellation of Settlement Prom. Note	•	15.7	-
21	6. Coleman Scrubber Completion	•	98.5 2.0	
22	7. LG&E Emissions Allowance	-	-	
	8. Expense Unamortized Mktg Payment/ Settlement Note		(15.1)	
23	9. Assurances Agreement		1.5	-
24	9. Assurances Agreement			
25	Total Residual Value Obligation	152.6	152.6	-
26	Cancellation of RV Obligation			
27	Reclassification as Equily	•	152.6	-
28	neulassinudituri as Equity			
29	Net WKE Obligation	152.6		
30				

UW Transaction		2008	Transaction	Lease Termination
(SM)			-	0.000
• •		1.000	-	-
Unwind Allocation Pre-Transaction Allocation		-	1.000	
Transaction Index				
(ransaction management)				
2			146.0	
- Tonestion Cash Flows			387.7	
Cash Balances Ple-I laisaction			-	
35 Transaction Proceeds			(1.5)	
36 Lease Buyout 37 Smelter Payment (Assurances Agreement) 37 Smelter Payment of Smulty Parties			-	
Concept Fee to Lease-Equity + Critical				
ao Lump-Sum Member Rebaie			(0.2)	
40 Net DSL Termination			(1.3)	
41 Century/Century Reactive Power Handatter			384.6	
ap Income Tax				
43 Net Transaction Cash			(147.0)	
44 Debt Restructuring: 45 Debt Reduction (Net)	1.75%			
the demonstrate Costs	0.80%		-	
- Road Insurance			(147.0	,)
47 Bond Institute 48 ARVP Defeasance Premium			(147.0	1
to Total			(35.0)
50 Restricted Cash Balances:			(157.0)
West Constant			-	
51 Transition Reserve 52 Non-Smelter Member Economic Reserve			191.0	3
Smelter Economic Reserve Smelter Economic Reserve Unrestricted Cash Balances Post-Transaction				
			1,027.	1
55 56 <u>C. Debt Restructuring:</u>			(15.	
			6.	
58 Cancellation of Settlement From RUS New Note 59 Capitalize Accrued Interest on RUS New Note				_
59 Capitalize Accrued Information Stated Basis: 60 Step-Up RUS New Note to Stated Basis: 61 GAAP RUS New Note			765	.3 .9
The Independent			772	
62 Ending Balance 63 Accrued Interest			112	
of Total			768	3.4
Stated RUS New Note				5.8
e6 Ending Balance			77	5.2
67 Accrued Interest				3.0
68 Total			1,02	1.4
69 Step-Up				7.0)
70 Beginning Balance - Stated			(14	7.0)
71 Cash Flow: 72 Prepay RUS New Note				-
			(14	17.0)
73 Delease Anton 74 Issue Capital Markets Debt				74.4
75 Net				(2.7)
76 Ending Balance - Stated 76 Ending Balance - Stated 77 Step-Down Remaining RUS New Note to GAAP Basis: 77 CAAP			8	71.7
/U Changer and C Now Mote to GAAF Dasis.				

UW Tic .saction		2008	Transaction	Lease Termination
(SM)		_	-	0.000
the sector		1,000	*	-
Unwind Allocation Pre-Transaction Allocation		-	1.000	-
Pre-Transaction Allocation				
Transaction Index				
D. Reflection on Income Statement			387.675	-
			141.356	,
1 1. Cash 2 2. Residual Value Payment		-	11.222	*
			51.040	
		-	15.659	•
		-	98.520	-
			1,960	
-		-	(15.068)	
- All and Mito Payment Sellement Note			(1.525)	
			690,839	-
0 Total				
91 92 <u>E. Non-Patronage Allocations and Taxable Income</u>				
	15%		58.15	-
33	10%			
04 Cash Flows				
95 96 Income Statement	15%		58.15	-
	15%	-	22.89	
97 Cash	15%	-	7.95	
98 RVP 99 Fuel Inventory & Other (plus emissions allowances)	15%		2.35	-
	15%	-	14.78	
	15%	-	(5.83)	
the stand Meta Dayment Sellettent Note				
	15%		100.29	-
03		•	100.22	
04 Total				
05			100.29	-
106 Taxable Income		•	(22.89	
107 Gain on Transaction (above)		-	(14.78	·
108 Less RVP		-	4.20	
109 Less M1 - Coleman Scrubber			66.82	
110 Plus Previously Expensed Mktg. Pmt.		-	60.02	•

111 112 Total

Produc .n-Fixed

Production - Fixed

Production - Fixed											004-	0000	0004	2022	2001
(SM)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Unwind Alfocation	1.000	1.000	1.000 0.000	1.000	1.000	1.000	1.000	1.000	1.000 0.000	1.000 0.000	1.000 0.000	1.000 0.000	1.000 0.000	1.000 0.000	1.0 0.0
Pre-Transaction Allocation	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000							
A&G	10.99	10.79	11.12	11.45	11.79	12.15	12.51	12.89	13.27	13.67	14.08	14.50	14.94	15.39	15.
Labor Non-Labor	12.12	12.48	12.85	13.24	13.63	14.04	14.46	14.90	15.34	15.80	16.28	16.77	17.27	17.79 6.33	18. 6.
Intellectual Property	6.42	4.51	5.26	4.82	4.91	5.51	5.09	5.18	5.69	5.66	5.65	6.19	5.98	0.23	Ų.
Intellectual Property Contingency	·	•	·	·	•		•					37.46	38.19	39.51	40
Total	29.54	27.78	29.22	29.51	30.33	31.70	32.06	32.96	34.31	35.14	36.01				
APM, L/C, Cogen, CW & TVA Trans	6.31	6.46	5.80	5.69	5.86	6.03	6.21	6.39	6.58	6.78	6.98	7.19	7,40	7.62	7
Property Insurance	4.05	4.17	4.30	4.43	4.56	4.70	4.84	4.98	5.13	5.28	5.44	5.61	5.78	5.95	6
Property Tax												0.70	3.81	3.93	2
Baseline	1.81	1.87	2.39	2.92	3.01	3.10	3.19	3.29	3.39	3.49 1.21	3.59 1.24	3.70 1.28	1.32	1.36	
Transmission Operations	0.88	0.91	0.98	1.01	1.04	1.07 0.19	1.10 0.19	1.14 0.20	1.17 0.21	0.21	0.22	0.23	0.23	0.24	
General Plant Operations	0.16	0.17	0.17	0.18	0.18	4.36	4.49	4.63	4.76	4.91	5.05	5.21	5.36	5.52	
Total	2.86	2.94	3.54	4.11	4.23	4.00	4.49	4.00	4.70	4.01	0.00				
Transmission O&M	6.07	6.25	6.43	6.63	6.83	7.03	7.24	7.46	7.68	7.91	8.15	8.40	8.65	8.91	
Baseline Labor Baseline Non-Labor	1.63	1.68	1.73	1.78	1.84	1.89	1.95	2.01	2.07	2.13	2.19	2.26	2.33	2.40	
Upgrades, Phase I									0.05	0.25	0.25	0.25	0.25	0.25	
O&M	0.25	0.25	0.25	0.25	0.25	0.25	0.25 0.04	0.25 0.04	0.25 0.04	0.25	0.23	0.04	0.04	0.04	
Property Tax	0.04	0.04	0.04 0.01	0.04 0.01	0.04 0.01	0.04 0.01	0.04	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
Property Ins.	0.01	0.01	0.01	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	
Total (Real)	0.29 0.32	0.29	0.29	0.35	0.36	0.37	0.38	0.39	0.40	0.42	0.43	0.44	0.45	0.47	
Total (Nominal) Total Transmission O&M	8.02	8.26	8.51	8.76	9.02	9.29	9.57	9.86	10.16	10.46	10.77	11.10	11.43	11.77	1
Fixed_O&M															
<u></u>								- , , , , ,	55.44	57.79	59.53	61.31	63,15	65.05	6
Labor	48.36	45.62	46.99	48.40	49.85	51.35	52.89	54.47	56.11						
Non-Labor	40.30	45.41	45.93	42.50	54.48	42.33	53.38	45.49	47.13	53.86	54.34	54,56	60.42	53.05	€
Plant Maintenance															
Coleman	0.58	0.24	0.24			•					•	•	•		
Green	0.34	0.24	,	•	*	,	, 	•	2.58		•				
HMP&L	0.24	0.17	•	•	•		2.94		0.87						
Reid	0.34	•	•				-					,			
Wilson	0.34	•		-	-			-		-	-			<u> </u>	
Adjust for Station 2	1.84	0.65	0.24	•			2.94	•	3.44	•		,	•	•	
Total (Real) Total (Nominal)	2.01	0.74	0.28	-		-	3.83		4.77		•	•		•	
i oral fritominaly									10.00		10.40	# 04	7 00	8.44	
T/G Overhauls (Cash Flows)	9.17		10.22	12.45		6.95		6.74	19.80	•	13.46 13.46	5.91 5.91	7.82 7.82	8.44 8.44	
T/G Overhauls (Income Statement)	9,17	•	10.22	12.45		6.95	•	6.74	19.80		13.40	5.91	1.02	0.44	
Environmental Monitoring and Other	1.46	1.50	1.54	1.59	1.64	1.69	1.74	1.79	1.84	1.90	1.95	2.01	2.07	2.14	
08/2007 Adjustment						•			•	•					
				40.00	40- 0-	100.01	111 00	109 40	129.65	113.55	129.28	123.79	133.46	128.67	13
Total Fixed O&M (to Cash Flows)	101.30	93.26	104.96	104.93	105.97	102.31 102.31	111.83 111.83	108.49 108.49	129.65	113.55	129.28	123.79	133.46	128.67	13
Total Fixed O&M (to Income Statement)	101.30	93.26	104.96	104.93	105.97	102.01	111.03	100,95	,						

(SM)	2005	2005	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
I Transmission-Basic		5.91	9.62	18.39	10.28	5.26	4.43	5.91	0.46	0.36	0.49	1.58	2.81	3.36	3.46	3.56	3.67	3.78	3.89
3 <u>Transmission Upgrades</u> 4 Phase I		-	4.00		5.40	5.30	•						, -	•	•	•	•	•	
5 Phase II 6 Total Real		<u>.</u>	4.00		5.40	5.30	•	•	•	· ·	· ·	· ·	· ·						
7 Total Nominal	3.00%		4.12		5.56	5.62											•		
8 9 <u>A&G</u> 10		0.86	1.25	1.29	1.33	1.37	1.41	1.45	1.49	1.54	1.59	1.63	1.68	1.73	1.78	1.84	1.89	1.95	2.01
11 Shared HQ Building																			
12 Phase I 13 Phase II					1.66							<u> </u>		<u> </u>					
14 Total		-	-		1.66			,		-	•	•	÷						
15 16 <u>Intellectual Property</u> 17 Total 18				-	9.74	1.02	0.92	0.79	0.80	0.98	0.83	0.85	1.00	0.92	0.94	1.06	0.89	0.91	1.23
19 WKE Share of Generation Capex							0.2	01/	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
20 (%) 21 (MS)		51% 6.69	51% 6.84	51% 6.99	0%	0%	0%	0%	076	076									
22 (105)		0.00																	
23 Generation					33.10	18.29	27.20	103.33	112.65	104.86	102.56	25.92	25.92	25.92	25.92	25.92	25.92	25.92	25.92
24 Baseline 25 Adjustment for Station 2				<u>.</u>	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
26 Total Real			-		33.10	18.29	27.20	103.33	112.65	104.86	102.56 133.81	25.92 34.83	25.92 35.87	25.92 36.95	25.92 38.06	25.92 39.20	25.92 40.38	25.92 41.59	25.92 42.83
27 Total Nominal 28	3.00%	13.12	13.41	13.71	36.16	20.59	31.54	123.38	138.55	132.83	133.01	34.63	33.07	30.55	33.00	03.20	40.00		-,2.00
29 Plant Maintenance									4 82									_	
30 Coleman		•	•		1.14 8.55	1.11 6.75	2.37 4.23	1.05 2.29	1.02 1.32										
31 Green 32 HMP&L					0.94	1.16	2.36	3.72	3.25	2.86	0.43	0.43	0.43	0.43	1.03	1.03	0.43	0.43	0.43
33 Reid					1.03				1 =	1.24	1.40 1.57	1,24	1.57	1.24	3.74	1.24	1.57	1.24	1.57
34 Wilson 35 Adjustment for Station 2				•	14,63	6.47	11.19	1.91	1.57	1.29	1.57	1.24						·	
35 Adjustment for Stanton 2 36 Total Real				-	26.29	15.49	20.16	8.97	7.15	4.10	3.40	1.68	2.00	1.68	4.77	2.28	2.00	1.68	2.00
37 Total Nominal	3.00%				28.73	17.44	23.37	10.71	8.80	5.19	4,44	2.25	2.77	2.39	7.01	3.44	3.12	2.69	3.31
38 39 Environmental																			
40 NOx Removal Equipment Capital										-			•	-	-	-	-		
41 Mecury Monitoring		•	•				1.73		•	•	•	•	•	•					
42 Clmn FGD Equipment Capital 43 FGD ongoing upkeep capital (0.10%)																			
44 Additional FGD thickener & filter drum													•	-	-	•	-	-	-
 45 R-CT reliability study & upgrades 46 Wilson super heater tubes replacment 			•	•	•	-	-		-		•		•						
47 Adjustment for Station 2			· · · ·		. <u></u>									<u> </u>			<u> </u>	<u></u>	
48 Total Real							1.73 2.00						-			•			
49 Total Nominal 50	3.00%		•				2.00	·											
51 BigBivers Capex											400.04		ac 97	00.05	38.06	39.20	40.38	41.59	42.83
52 Gross Generation 53 Less WKE Generation Share		13.12 6.69	13.41 6.84	13.71 6.99	36.16	20.59	31.54	123.38	138.55	132.83	133.81	34.83	35.87	36.95	35.00	39.20	40.00	41.39	46.00
53 Less WKE Generation Share 54 BigRivers Generation		6.43	6.57	6.72	36.16	20.59	31.54	123.38	138.55	132.83	133.81	34.83	35.87	36.95	38.06	39.20	40.38	41.59	42.83
55 Transmission		5.91	9.62	18.39	10.28	5.26	4.43	5.91	0.46	0.36	0.49	1.58	2.81	3.36	3.46	3.56	3.67	3.78	3.89
56 Transmission Upgrades		0.86	4.12 1.25	1.29	5.56 1.33	5.62 1.37	1.41	1.45	1.49	1.54	1.59	1.63	1.68	1.73	1,78	1.84	1.89	1.95	2.01
57 A&G 58 Shared HQ Building		Ų.60	1.25	1.63	1.66	·						-							
59 Intellectual Property					9.74	1.02	0.92	0.79	0.80	0.98	0.83	0.85 2.25	1.00 2.77	0.92 2.39	0.94 7.01	1.06 3.44	0.89 3.12	0.91 2.69	1.23 3.31
60 Plant Maintenance 61 Environmental					28.73	17.44	23.37 2.00	10.71	8.80	5.19	4,44	2.20	2.11	2.39			0.12		
61 Environmental 62 08/2007 Adjustment		-	-							-	-		-			-	-		
63 Cash Adder		<u> </u>	-	<u> </u>	<u> </u>								44,13	45.35	51,24	49,11	49,94	50,92	53.27
64 Total		13.19	21.56	26.40	93.47	51,30	63.67	142.23	150.11	140.90	141.16	41.14	44,13	45.35	51,24	49.11	43.34	30,92	33.21

	(SM)	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
65																				
66																				
67	Depreciation																			
68																				
69	Additional Book Depreciation		40.00	13,12	13.41	112.234	66,56	38.03	56.91	134.08	147.35	138.02	138.25	37.08	38.64	39.34	45.06	42.64	43.49	44.28
70	Prior year non-incremental + in service		12.83	13.42	112.23	66.559	38.030	56.909	134.083	147.346	138.022	138.253	37.080	38.644	39.338	45.063	42.641	43,494	44.276	46.143
71	Current year non-incremental + in service		13.12 12.97	13.41	62.82	00.339	30.030	30.903	104.000	141.010	\$00.0££	100.000	01.000	00.071						
72	Average of Production		32.97	33.20	02.02	17.333	17.17	12.25	5.83	7.36	1.96	1.90	2.08	3.22	4.49	5.09	5.24	5.40	5.56	5.73
73	Prior year Transmission and A&G					17.174	12.25	5.83	7.36	1,96	1.90	2.08	3.22	4,49	5.09	5.24	5.40	5.56	5.73	5.90
74	Current year Transmission and A&G		6.38	10.88	17.33	(7.174	1 6	0.00	7.00											
75	Average of Transmission and A&G			24.14	80.16															
76	Total		19.35																	
77	Rate to Apply to 2007 Capital in 08		1.53%	1.53%	1.54%	1.53%	1.53%	2.63%	2.63%	2.63%	2.63%	2.63%	2.63%	2.63%	2.63%	2.63%	2.63%	2.63%	2.63%	2.63%
78	Capital Depreciation Rate (excl. Environmental)		0.30	0.37	1.23	1.53%	1.53%	1.49	2.69	3.83	3.81	3.69	2.38	1.10	1.15	1.25	1.29	1.28	1.30	1.34
79	Additional Depreciation		0.30	9.37	1.6.9	1.002	1.04	60°14	2.00	0.00	0.01	0.00	2.00							
80	101001 04-00- 7-00																			
81	HMP&L Station Two		12.83	13,12	13.41	13.71	36.16	20.59	31.54	123.38	138.55	132.83	133.81	34.83	35.87	36.95	38.06	39.20	40.38	41.59
82	Prior year non-incremental		0.05%	0.05%	0.05%	0.11%	0.10%	0.10%	0.10%	0.10%	0,10%	0,11%	0.11%	0,12%	0.12%	0.12%	0.12%	0.12%	0.13%	0.13%
83 84	Depreciation as a Percentage of Gross PPE Additional Depreciation		0.01	0.01	0.01	0.01	0.04	0.02	0.03	0.12	0.14	0.14	0.15	0.04	0.04	0.04	0.05	0.05	0.05	0.05
85			0.01	0.01	0.01															
86	Environmental																			
87	Prior year environmental								2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
88	Current vear environmental							2.00										•	-	-
89	Environmental Depreciation Rate					1.53%	1.53%	2.63%	2.63%	2.63%	2.63%	2.63%	2,63%	2.63%	2.63%	2.63%	2.63%	2.63%	2.63%	2.63%
90	Additional Depreciation							0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
91	Approxime population																			
92	Other																			
93	Prior year		6.00	6.77	14.99	19.68	17.17	12.25	5.83	7.36	1,96	1,90	2.08	3.22	4.49	5.09	5.24	5.40	5.56	5.73
94	Current year		6.77	10.87	19.68	17.17	12.25	5.83	7.36	1.96	1.90	2.08	3.22	4.49	5.09	5.24	5.40	5.56	5.73	5.90
95	Average		6.38	8.82	17.33															
96	Rate to Apply to 2007 Capital in 08		0.00	0.00	0.00															
97	Capital Depreciation Rate (excl. Environmental)					0.58%	0.58%	0.58%	0.58%	0.58%	0.58%	0.58%	0.58%	0.58%	0.58%	0.58%	0.58%	0.58%	0.58%	0.58%
98			0.02	0.03	0.05	0.11	0.09	0.05	0.04	0.03	0.01	0.01	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03
99																				
100	Book Depreciation & Amortization																			
101	Generation																70.00	70.04		74.05
102	Big Rivers' Plants		26.89	26.17	26.414	28.077	29.100	49.24	51.98	55.85	59,71	63.45	65.88	67.03	68.24	69.54	70.88	72.21	73.57	74.96
103	-																		0 ×**	0.00
104	Intellectual Property					0.149	0.164	0.31	0.33	0.35	0.38	0.40	0.42	0.45	0.47	0.49	0.52	0.55 1.82	0.57 1.88	0.60 1.93
105	HMP&L Station Two		0.92	0.93	0.934	0.949	0.986	1.01	1.04	1.16	1.30	1.45	1.60	1.64	1.68	1.73	1.78			
106	Total Generation Depr & Amort		27.81	27.10	27,349	29.175	30.251	50.55	53.34	57.36	61.39	65.30	67.90	69.12	70.39	71,76	73.18	74.58	76.01	77.49
107	Other		5.03	5.06	5.106	5.214	5.300	5.35	5.39	5.42	5,43	5,44	5.46	5.48	5.51	5.54	5.57	5.60	5.63	5.67
108	Blended Depreciation Adj.		-	-	-	<u> </u>		(11.27)	(11.61)	(13.51)	(15.23)	(15.34)	(15.26)	· · · · · · · · · · · · · · · · · · ·	······································					
109	Total		32.84	32.15	32.45	34.389	35.551	44.64	47.13	49.27	51.59	55.40	58.10	74.60	75.90	77.30	78.75	80.18	81.65	83.16
110													-		~	~~	~~	~~~		37
111	Years Depreciation					56	57	46	46	47	48	47	47	37	37	37	37	37	37	31

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	(SM)	Transaction	2008H2	2009	2010	2011	2012	2013	2014	2015 1.000	2016 1.000	2017 1.000	2018 1.000	2019 1.000	2020 1.000	2021 1.000	2022 1.000	2023 1.000
	Unwind Allocation Pre-Transaction Allocation	0.000 0.000 0.000	0.000 0.000 0.000	1.000 0.000 1.000	1,000 0.000 2,000	1.000 0.000 3.000	1.000 0.000 4.000	1.000 0.000 5.000	1.000 0.000 6.000	0.000	0.000 8.000	0.000 9.000	0.000	0.000	0.000 12.000	0.000	0.000 14.000	0.000 15.000
1 2 3	Capital Markets (Tranche 1) Beginning Balance Coupon	0.00%	7.00%	7.00%	7.00% 0.00%	7.00%	58.3 7.00% 0.00%	58.3 7.00% 15.88%	49.1 7.00% 16.98%	39.2 7.00% 18.11%	28.6 7.00% 0.00%	28.6 7.00% 0.00%	28.6 7.00% -42.21%	53.2 6.50% 0.00%	53.2 6.50% 0.00%	53.2 6.50% 0.80%	52.7 6.50% 47.82%	24.9 6.50% 26.89%
4 5 6	Principal (%) Interest Principal	0.00%	0.00%	0.00%	0,00%	(58.3)	4.1	4.1	3.4 9.9	2.7 10.6	2.0	2.0	2.0 (24.6)	3.5	3.5	3.5 <u>0.5</u>	3.4 27.9	1.6 <u>15.7</u>
78	Principal Debt Service					(58.3)	4.1	13.3	13.3	13.3	2.0	2.0	(22.6)	3.5	3.5	3.9	31.3	17.3
9 10	Capital Markets (Tranche 2) Beginning Balance	0.00%	5.50%	5.42%	5.34%	5.26%	5.18%	5.21%	5.24%	5.26%	207.0 5.29%	207.0 5.32%	207.0 5.35%	207.0 5.39%	207.0 5.42%	207.0 5.45%	207.0 5.48%	199.0 5.52%
11 12 13	Coupon Principal (%) Interest	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-100.00%	0.00% 11.6	0.00% 11.6	0.00% 11.6	0.00% 11.6	0.00%	0.00% 11.5	3.88% 11.6 <u>8.0</u>	10.86% 11.2 22.5
14 15	Principal Debl Service			<u> </u>	<u>.</u>		<u> </u>			(207.0) (207.0)	11.6	11.6	11.6	11.6	11.6	11.6	19.7	33.7
16 17 18	RUS GAAP Beginning Balance	765.3	625.5	625.5	612.5	597.7	582.2	503.1	481.0	457.6	432.9	199.5	161.3	121.0 5.82%	78.3 5.82%	33.0 5.82%	5.82%	5.82%
19 20	Coupon Principal (%)	0.00% 0.00%	5.82% 0.00% 0.0	5.82% 2.12% 36.4	5.82% 2.40% 35.5	5.82% 2.51% 34.8	5.82% 12.63% 33.9	5.82% 3.56% 29.3	5.82% 3.76% 28.0	5.82% 3.98% 26.6	5.82% 37.17% 25.2	5.82% 6.08% 11.6	5.82% 6.44% 9.4	6.81% 7.0	7,21% 4.6	5.33% 1.9	0.00%	0.00%
21 22 23	Interest Mid Year Prepay Adjustment to interes Principal + Accrued Interest	139.8	0.0	13.0	14.8	15.5	(1.1) 79.1	22.1	23.4	24.8	(11.6) 233.4	38.1	40.4	42.7	<u>45.3</u> 49.8	0.5 <u>33.0</u> 35.4	0.0	0.0
24 25	Debt Service	139.8	0.0	49.4	50.4	50.3	111.9	51.4	51.4	51.4	246.9	49.7	49.7	49.8	49.0	33.4	0.0	0.0
26 27 28	Variable Beginning Balance Coupon	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00% 0.00%	0.00%	0.00% 0.00%	0.00%	0.00% 0.00%	0.00%
29 30	Principal (%) Interest+Remarketing	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00 %					
31 32 33	Principal Debt Service				<u> </u>	-			<u> </u>		-				•			
34 35	Beginning Balance	142.1	142.1 5.00%	142.1 5.00%	142.1 5.00%	142.1 5.00%	142.1 5.00%	142.1 5.00%	142.1 5.00%	142.1 5.00%	142.1 5.00%	142.1 5.00%	142.1 5.00%	142.1 5.00%	142.1 5.00%	142.1 5.00%	142.1 5.00%	142.1 5.00%
36 37 38	Principal (%)	0.00%	0.00%	0.00% 7.1	0.00% 7,1	0.00% 7.1	0.00% 7.1	0.00% 7.1	0.00% 7.1	0.00% 7.1	0.00% 7.1	0.00%	0.00%	0.00% 7.1	0.00%	0.00%	0.00% 7.1	0.00% 7.1
39 40	•	<u>.</u>	0.0	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7,1	7.1	7.1	7,1	7.1	7.1	7.1	7.1
41 42 43	Beginning Balance	104.1	104.1	104.1	110.2	116.8	123.7	131.0	138.7 5.91%	146.9 5.91%	155.6 5.91%	164.8 5.91%	174,6 5,91%	184.9 5.91%	195.8 5.91%	207.4 5.91%	219.7 5.91%	232.7 5.91%
44 45		5.91% 0.00% 0.00%	5.91% 0.00% 0.00%	5.91% 0.00% 0.00%	5.91% 0.00% 0.00%	5.91% 0.00% 0.00%	5.91% 0.00% 0.00%	5.91% 0.00% 0.00%	0.00%	0.00%	0.00%	0.00%	0.00% 0.00%	0.00% 0.00%	0.00% 0.00%	0.00% 0.00%	0.00% 0.000%	0.00%
46 47 48	Accretion	0.0010	0.0	6.2	6.5	6.9	7.3	7.7	8.2	8.7	9.2	9.7	10.3	10.9	11.6	12.3	13.0	13.8
49 50	Debt Service		· · ·	<u> </u>	<u> </u>			<u>,</u>				·		-		· ·	-	
51	Additional Deb) Beginning Belance Interest Principal						- 7.3 (100.0)	100.0 14,5 (100.0)	200.0 21.8 (100.0)	300.0 29.0 (100.0)	400.0 29.0 10.0	390.0 28.3 10.0	380.0 27.6 10.0	370.0 26.8 10.0	360.0 26.1 10.0	350.0 25.4 10.0	340.0 24.7 10.0	330.0 23.9 10.0
53		1,011.5	871.7 0.0	871.7 6.2	864.8 5.5	856.5 6.9	906.2 7.3	934.5 7.7	1,010.9 8.2	1,085.8 8.7	1,366.2 9.2	1,132.0 9.7	1,093.6 10.3	1,078.2 10.9	1,036.4 11.6	992.7 12.3	961.5 13.0	928.6 13.8
54 55 56	Principal	139.8	0.0 <u>0.0</u>	13.0 43.5	14.8 42.7	(42.8) 41.9	(20.9) 51.2	(68.7) 55.0	(66.7) 60.3	(271.7) <u>65.5</u> (206.2)	243.4 <u>63.3</u> 306.7	48.1 60.6 108.7	25.7 <u>57.7</u> 83.4	52.7 <u>56.1</u> 108.8	55.3 <u>52.9</u> 108.1	43.5 	45.9 <u>46.8</u> 92.7	48.2 <u>43.8</u> 92.0
57 58	Ending Balance	139.8 871.7	0.0 871.7	56.5 864.8	57.5 856.5	(0.9) 906.2	30.3 934.5	(13.7) 1,010.9	(6.5) 1,085.8	(206.2) 1,366.2	1,132.0	1,093.6	1,078.2	1,036.4	992.7	961.5	928.6	694.2

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October 2008

	M) hwind Allocation re-Transaction Allocation	Ťı	ransaction 0.000 0.000 0.000	2008H2 0.000 0.000 0.000	2009 1.000 0.000 1.000	2010 1.000 0.000 2.000	2011 1.000 0.000 3.000	2012 1.000 0.000 4.000	2013 1.000 0.000 5.000	2014 1.000 0.000 5.000	2015 1.000 0.000 7.000	2016 1.000 0.000 8.000	2017 1.000 0.000 9.000	2018 1.000 0.000 10.000	2019 1.000 0.000 11.000	2020 1.000 0.000 12.000	2021 1.000 0.000 13.000	2022 1.000 0.000 14.000	2023 1.000 0.000 15.000
61 <u>An</u> 62 (upporting Schedules nortizalion of Financing Costs Capital Markets (Tranche 1)							-											10.000
63 64	Straightline BB							1.0	1.0	1.0	0.9	0.9	0.9	0.8	0.8	0.7	0.7	0.7	0.6
65	Accretion					······································	(1.0)	0.0	0.0	0.0	0.0	0.0	<u>0.9</u> 0.0	0.0	0.0	0.0	0.0	0.0	0.0
66 67	EB		<u> </u>				1.0	1.0	1.0	0.9	0.9	0.9	0.8	0.8	0.7	0.0	0.7	0.6	0.6
69	Capital Markets (Tranche 2) Net Borrowing and YTM	5.94%		-							(200)	12	12	12	12	12	12	20	34
70	88		·····					-				200	200	201	201	201	201	202	194
71 72 73	YTM Principal Amort. Accretion			•			•		•		(200)	12	12	12	12	12	12	12 8	12 22
74	EB		· · · · ·				· · · · · · · · · · · · · · · · · · ·			-	200	200	201	201	201	201	202	0	0 172
75	20										200	200	201	201	201	201	202	194	172
76 \ 77	Variable Net Borrowing and YTM	0.00%			÷										,				
78	BB		· · · · · ·	· · · · · · · · · · · · · · · · · · ·	· · · ·	·····									<u> </u>				-
79 80 81	YTM Principal Amort. Accretion			•	•		· ·	-	-					•	•				
82 83	EB				· · · · · ·		· · · · ·		······································						<u>.</u>	· · · · ·	- -		
84	nortization of Financing Costs																		
87 F	Delerred debit - BOY Financing Costs						1.0	1.0	1.0	1.0	0.9 7.0	7.9	7.6	7.3	7.0	6.7	6.3	6.0	5.6
88 A	Amortization				<u> </u>	<u> </u>		0.0	0.0	0.0	0.0	0.3	0.3	0.3	0,3	0.4	0.4	0.4	0.4
1 98 90	Deferred debit • EOY						1.0	1.0	1.0	0.9	7.9	7.6	7.3	7.0	6.7	6.3	6.0	5.6	5.2
	<u>erest Expense</u> Folai interest			0.0	43.5	42.7	41.9	51.2	55.0	60.3	65.5	63.3	60.0		FG 4	69 9			
	ARVP Accretion			0.0	43.5	42.7 6.5	41.9 5.9	7.3	55.U 7.7	8.2	65.5 8.7	63.3 9.2	60.6 9.7	57.7 10.3	56,1 10,9	52.9 11.6	50.0 12.3	45.8 13.0	43.8
	Capitalized Interest			0.0	(0.8)	(0.8)	(0.8)	(0.8)	(0.8)	(0.8)	(0.8)	(0.8)	9.7 (0.8)	(0.8)	(0.8)	(0.8)	(0.8)	(0.8)	13.8 (0.6)
	AMBAC Amortization (PCB) A/C 165			0.0	3.8	(0.0)	10:01	(0.0)	10.01	(0.0)	(v.o)	(0.0)	10.01	10.0)	(0.0)	{u.u}	(0.0)	(u.o)	(0.8)
	ine of Credit Fee			0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
97	Totai		·	0.0	53.1	48.9	48.4	58.2	62.4	68.1	73.8	72.1	70.0	67.7	66.7	64.1	61.9	59.5	57.3

Octuber 2008

	Sale L. Jback																		00	studer :	2008
	(\$M) Unwind Allocation Pre-Transaction Allocation Lease Termination	2005 0.000 1.000	2006 0.000 1.000	2007 0.000 1.000 0	2008 5 0.000 1.000 0	se Termina 0.000 0.000 0	2009 1.000 0.000 0	2010 1.000 0.000 0	2011 1,000 0.000 0	2012 1.000 0.000 0	2013 1.000 0.000 0	2014 1.000 0.000 0	2015 1.000 0.000 0	2016 1.000 0.000 0	2017 1.000 0.000 0	2018 1.000 0.000 0	2019 1.000 0.000 0	2020 1.000 0.000 0	2021 1.000 0.000 0	2022 1.000 0.000 0	2023 1.000 0.000 0
i 2 3 4	BOY Deferred Gain Amortization (I/S) EOY Deferred Gain (B/S)	62.1 <u>2.9</u> 59.3	59.3 <u>2.9</u> 56.4	56.4 <u>2.9</u> 53.5	53.5 50.6						- - 	- 	- , ,	, , ,		•					-
7 8		180.6 181.2	186.7 187.4	192.9 <u>0.7</u> 193.7	199.3 (2.5) 196.8							- 	<u>.</u>					•		, 	, ,
9 10 11	Liability - Long-Term Debt (B/S)	171.0 5.7	177.3 6.0	183.9 6.2	189.7 6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 ,	0.0
13	True Unrecognized Gain	(49.6)	(47.0)	(44.4)	(41.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
1 6 17	Sale-Leaseback Interest Income	11.7 12.0	12.1 12.4	12.5 12.8	12.6 12.2	•								-	-		-			•	
	Sale-Leaseback Gain Amortization Net Sale-Leaseback Expense	<u>2.9</u> 9.1	<u>2.9</u> 9.5	<u>2.9</u> 9.9	<u>2.9</u> 9.2							<u>.</u>		-	-	-	·····			•	•
	Net Sale-Leaseback Income	2.6	2.6	2.6	3.4	-	·				•	,	•		·	·	·				
25 26	5 Defeasance Income 6 Rent Expense	63.5 <u>(48.9</u>) 14.7	64.1 <u>(48.9</u>) 15.2	64.5 <u>(48.9</u>) 15.6	64.5 (48.9) 15.6						· 	• •	•								<u> </u>
27 28 29 30 31	Gain on Lease Buyout BOY Deferred Gain Amortization (I/S)	14./	10.2	10.0		(16.1) (16.1)			• • •	• • •	•	•	•	, , ,	•		•	•		•	• •
32 33 34 35	2 3 Supporting Schedules			2.9 2.9	2.9 2.9		•	• •	- ,	•	• • •	• •	- - -	•	- - -		•	•	• • •	•	• •
	· · · · · · · · · · · · · · · · · · ·																				

	moonic 1xes																	
	(SM)	Transacti T on	on	2009	2010 1.000	2011 1.000	2012 1.000	2013 1.000	2014 1.000	2015 1.000	2016 1.000	2017 1.000	2018 1.000	2019 1.000	2020 1.000	2021 1.000	2022 1.000	2023 1.000
	Unwind Allocation	0.000	0.000	1.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Pre-Transaction Allocation	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Transaction Index	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000							
	_																	
	Summary						,	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.8	0.8
	Income Tax Expense	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5
	3 Income Taxes Paid	(1.3)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4
	Current Provision for Deterred Income Tax	(1.0)	(0.0)	(0.07	(+)	(,	• •											
	5																	
	6 Calculation								•				•	•				
	7 Offsystem Sales		0.0	1.4	1.5	1.5	1.6	1.6	1.7	<u> </u>	1.8	<u> </u>	2.0	2.1	2.2	2.2	2.3	2.4
	3 Interest Earnings		0.0	1,4	1.5	1.5	1.6	1.6	1.7	1.8	1.8	1.9	2.0	2.1	2.2	2.2	2.3	2.4
	Nonpatronage Revenues		0.0	1.4	1.0													
10	0 Nonpatronage Expenses	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1		0.0%	0.076	0.075	0.0 /0		•/•							•	•	,	•	
1:	· · · · · · · · · · · · · · · · · · ·	•								-	,			<u> </u>	<u> </u>	-	·	
1:		*******	0.0	1,4	1.5	1.5	1.6	1.6	1.7	1.8	1.8	1.9	2.0	2.1	2.2	2.2	2.3	2.4
1	4 Nonpatronage Net Margin (pre-tax)		0.0	1,4		1.0												
1. 1 1	6 Transaction Impact	66.8		•														
1																		
1	9 Temporary Differences (Timing)																	
2																		
2			•		•	•	•	•	•		•	•						
	2 Effect of Additional Capex (Incl. Coleman Scrubber)			•	•	•	•		•	•	•		,	,				
	3 Other Ms	,	,	•	•		•		•		•	·	•	•				
2																		
2					•	•		•	•		•	•	•	-				
	6 Rent Expense		•			•		•	,	,		•	•	•				
	7 Other Interest Allocation																	
	8 Net						<u> </u>			<u> </u>	·····	·		<u> </u>	. <u> </u>			
			-			•				·`			<u> </u>	<u> </u>	<u> </u>			2.4
		66.8	0.0	1.4	1.5	1.5	1.6	1.6	1.7	1.8	1.8	1.9	2.0	2.1	2.2	2.2	2.3	2.4
	0 Taxable Income before NOLs	00.0	4.4															
	2 Regular Tax	66.8	0.0	1.4	1.5	1.5	1.6	•	÷	•	•	•					2.3	2.4
	33 Regular NOLs Used 34 Taxable Income after NOLs			,				1.6	1.7	1.8	1.8	1.9	2.0	2.1	2.2	2.2 0.8	0.8	0.8
								0.6	0.6	0.6	0.6	0.7	0.7	0.7	8.0		0.8	0.8
				-	•			0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3		0.5
	•			·			•	0.0	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5
	37 Tax																	
	38 39 AMT															(0.0)	(0.0)	(n n)
	39 AMT		(0.0)	(0.9)	(0.9)	(0.6)	(0.4)	(0.4)	(0.3)									(0.0) 2.4
	10 ACE Adjustment	66.8	0.0	0.5	0.6	0.9	1.1	1.3	1.4	1.7	1.8	1.9	2.0	2.1	2.1	2.2	2.3	2.4
	11 Taxable Income 12 AMT NOLs Used	60.1	0.0	0.5	0.5	0.8	1.0	<u> </u>			<u> </u>	· ·	······		<u> </u>	<u> </u>	<u> </u>	2.4
		6.7	0.0	0.1	0.1	0.1	0.1	0.1	1.4	1.7	1.8	1.9	2.0	2,1	2.1	2.2	2.3	
	43 Net Taxable Income	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3		0.4	0.4	0.4	0.4	0.4	0.5	0.5
	14 TMT	1.0					• .	0.0	0.3	0.3	0.4	0,4	0.4	0.4	0.4	0.4	0.5	0.5
	45 Less Regular Tax Paid (up to AMT)	1.3	0.0	0.0	0.0	0.0	0.0	•	,	•		•			•	•	•	
	46 Net AMT	1.5	0.0	0.0	5.6	5.0											.	~ <i>.</i>
	47 AMT Balance	5.3	6.7	6.7	6.7	6.7	6.7	6.7	6.2	5.9	5.6	5.3	5.0	4.7	4.4	4.1	3.7	3.4
	48 BB	1.3	0.0				0.0			-	-		-					
	49 Additions	1.0		0.0 •	, , , , , ,		•	0.5	0.3	0.3	0.3	0.3						
	50 Reductions	6.7	6.7	6.7	6.7	6.7	6.7	6.2	5.9	5.6	5.3	5.0	4.7	4.4	4.1	3.7	3.4	3.0
	51 EB	0.7	Q.1	0.7	0.7	211	217									_		
	52	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5
	53 Total Tax	0.1	0.0	0.0	0,0	÷.•												
	54					-		0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.8	0.8
:	55 Est. Book Tax	·																

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(SM) Unwind Allocation Pre-Transaction Allocation Transaction Index	Transacti To on 0.000 0.000 1.000	Lease erminati 0.000 0.000 0.000	2009 1.000 0.000 0.000	2010 1.000 0.000 0.000	2011 1.000 0.000 0.000	2012 1.000 0.000 0.000	2013 1.000 0.000 0.000	2014 1.000 0.000 0.000	2015 1.000 0.000 0.000	2016 1.000 0.000 0.000	2017 1.000 0.000 0.000	2018 1.000 0.000 0.000	2019 1.000 0.000 0.000	2020 1.000 0.000 0.000	2021 1.000 0.000 0.000	2022 1.000 0.000 0.000	2023 1.000 0.000 0.000
 56 57 Capex Not Reflected in Pre-Transaction Tax Calculation. 58 59 WKE Share 60 Non-Incremental 61 Incremental 62 Capex Amounts 63 Non-Incremental 64 Incremental Generation 65 WKE Total 66 Plant Maintenance 67 Environmental 68 Transmission Upgrades 69 Shared HQ Building 70 Intellectual Property 71 8/07 Adjustment 72 Total 73 74 Cumulative Balance 75 76 Book Depreciation 			0.5 0.8 18.4 18.4 28.7 5.6 1.7 9.7 64.1 64.1	0.5 0.8 10.5 17.4 5.6	0.6 0.6 18.8 23.4 2.0	0.7 0.7 81.6 81.6 10.7	0.7 0.7 91.6 91.6 8.8	0.7 0.7 87.8 87.8 5.2	0.7 0.7 88.5 88.5 4.4	0.7 0.7 23.0 23.0 2.3	0.7 0.7 23.7 23.7 2.8	0.7 0.7 24.4 24.4 2.4	0.7 0.7 25.2 25.2 7.0	0.7 0.7 25.9 3.4 1.1 30.4 670.6 18.3	0.7 0.7 26.7 3.1	0.7 0.7 27.5 27.5 2.7	0.7 0.7 28.3 28.3 3.3
76 Book Depreciation 77 78 Tax Depreciation @ 20 Years 79 80 Timing Difference (Tax Deduction)			3.2 (2.1)	4.9 (3.2)	7.2 (4.1)	11.8 (6.7)	16.9 (9.7)	21.6 (12.6)	26.3 (15.1)	27.6 (15.7)	29.0 (13.2)	30.4 (13.8)	32.0 (14.6)	33.5 (15.3)	35.1 (15. 9)	36.6 (16.6)	38.3 (17.4)

Reg N.

STATEMENT 60

FEDERAL CUMULATIVE NONPATRON NET OPERATING LOSSES TAX YEARS 1983-2023

			TAX YEAHS 1983-	023		
				NONPATRON	NONPATRON	
		NOL	NONPATRON		REMAINING NOL'S	TOTAL NET NOLS
TAX	NONPATRON		SECTION 172 USAGE	EXPIRED NOL'S		
YEAR	TAXABLE LOSS (INCOME)	UTILIZED	SECTION THE COLLEGE		0	0
TEAN			(7.004 777)	(1,488,056)		0
(000	7,182,833	0	(5,694,777)	(10,496,978)	0	0
1983	22,448,681	0	(11,951,703)	0	0	õ
1984	67,286,392	0	(67,286,392)	0	0	0
1985		ō	(56,198,468)	0	0	U
1986	56,198,468	ő	(75,567,924)	0	0	0
1987	75,567,924	0	(44,315,156)	U	0	0
1988	44,315,156	-	(22,819,745)	0	0	0
1989	22,819,745	0		(2,324,777)	0	0
1999	36,952,270	0	(34,627,493)	(8,878,313)	0	0
	29,446,433	0	(20,568,120)	0	0	0
1991	14,648,800	0	(14,648,800)	0	0	õ
1992	30,220,578	0	(30,220,578)	Ő	0	0
1993		0	(36,390,275)	0	0	U
1994	36,390,275	ů O	(43,631,999)	3	0	0
1995	43,631,999	-	(6,225,540)	(6,487,847)	0	0
1996	12,713,387	0	(1,574,810)	(28,371,562)	õ	0
1997	29,946,372	0	(1,374,010)	0	0	0
	(5,694,777)	5,694,777	·	0	0	0
1998	(11,951,703)	11,951,703	0	0	0	0
1999	(211,273,153)	211,273,153	0	0	0	ő
2000	(20,133,776)	20,133,776	0	ů.	0	0
2001		18,036,546	0	ő	0	0
2002	(18,036,546)	17,437,192	0	0	0	0
2003	(17,437,192)		0	U	n n	0
2004	(14,433,689)	14,433,689	0	0	ő	0
2005	(19,500,822)	19,500,822	ň	0	0	0
	(20,568,120)	20,568,120	v	0	0	0
2006	(42,500,882)	42,500,882	U	0	0	0
2007	(17,426,731)	17,426,731	0	0	0	0
2008	(66,819,339)	66,819,339	0	0	0	0
Transaction		00,010,000	0	0	0	U
	(0)	1,400,000	0	0	0	0
2009	(1,400,000)		0	U	0	0
2010	(1,456,000)	1,456,000	0	d	0	0
2011	(1,514,240)	1,514,240	ő	0	0	0
2012	(1,574,810)	1,574,810	0	0	0	0
2012	(1,637,802)	0	0	0	0	0
	(1,703,314)	0	-	0	0	ů.
2014	(1,771,447)	0	0	0	0	0
2015	(1,842,304)	0	0	0	0	0
2016		0	0	0	0	•
2017	(1,915,997)	õ	0	0	0	0
2018	(1,992,637)	0	0	0	0	0
2019	(2,072,342)	-	0	0	0	0
2020	(2,155,236)	0	0	0	0	0
2020	(2,241,445)	0	-	0		0
	(2,331,103)	0	0	0	0	-
2022	(2,424,347)	0	0			0
2023	(<u>_1-4</u> , <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u> 1, <u>-</u>			(58.047,534)	0	<u> </u>
	35,959,561	471,721,779	(471,721,779)			
Total Carryforward to 2024	35,959,501			222,668,370		

FEDERAL CUMULATIVE NONPATRON NET OPERATING LOSSES TAX YEARS 1983-2023

STATEMENT 60

TAX	NONPATRON	NOL	NONPATRON	NONPATHON	NONPATRON	TOTAL NET NOLS
YEAR	TAXABLE LOSS (INCOME)	UTILIZED	SECTION 172 USAGE	EXPIRED NOL'S	REMAINING NOL'S	
Total Carrylorward to 2002 Total Carrylorward to 2003 Total Carrylorward to 2004 Total Carrylorward to 2005 Total Carrylorward to 2006 Total Carrylorward to 2007 Total Carrylorward to H1 2008 Total Carrylorward to H1 2008 Total Carrylorward to 2010 Total Carrylorward to 2010 Total Carrylorward to 2010 Total Carrylorward to 2010 Total Carrylorward to 2011 Total Carrylorward to 2012 Total Carrylorward to 2012 Total Carrylorward to 2013 Total Carrylorward to 2013 Total Carrylorward to 2014 Total Carrylorward to 2015 Total Carrylorward to 2016 Total Carrylorward to 2016 Total Carrylorward to 2017 Total Carrylorward to 2018 Total Carrylorward to 2019 Total Carrylorward to 2019 Total Carrylorward to 2020 Total Carrylorward to 2021 Total Carrylorward to 2021 Total Carrylorward to 2021 Total Carrylorward to 2021	$\begin{array}{c} 280,715,904\\ 262,679,358\\ 245,242,166\\ 230,808,477\\ 211,307,655\\ 190,739,535\\ 148,238,653\\ 130,811,923\\ 63,992,583\\ 62,592,583\\ 62,592,583\\ 62,592,583\\ 62,592,583\\ 61,136,583\\ 59,622,343\\ 56,409,732\\ 54,706,418\\ 52,934,971\\ 51,092,667\\ 49,176,670\\ 47,184,033\\ 45,111,691\\ 42,956,456\\ 40,715,011\\ 38,383,908 \end{array}$	249,053,409 267,089,955 284,527,147 288,960,836 338,461,658 339,029,778 381,530,660 398,957,390 465,776,730 465,776,730 465,776,730 468,632,730 471,721,779 471,721,779 471,721,779 471,721,779 471,721,779 471,721,779 471,721,779 471,721,779 471,721,779 471,721,779 471,721,779	(249,053,409) (267,089,955) (284,527,147) (298,960,836) (318,461,658) (339,029,778) (381,530,660) (396,957,390) (465,776,730) (465,776,730) (466,632,730) (470,146,970) (471,721,779) (471,721,779) (471,721,779) (471,721,779) (471,721,779) (471,721,779) (471,721,779) (471,721,779) (471,721,779) (471,721,779) (471,721,779)	$(11,985,034) \\ (11,985,034) \\ (11,985,034) \\ (11,985,034) \\ (11,985,034) \\ (14,309,811) \\ (23,188,124) \\ (23,184,124) \\ (23,184,124) \\ (23,184,124) \\ (23,184,124) \\ (23,$	268,730,870 250,694,324 233,257,132 218,823,443 196,997,844 167,551,411 125,050,529 107,623,799 40,804,459 33,404,459 37,948,459 29,946,372 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	$\begin{array}{c} 268,730,870\\ 250,694,324\\ 233,257,132\\ 218,823,443\\ 196,997,844\\ 167,551,411\\ 125,050,529\\ 107,623,799\\ 40,804,459\\ 39,404,459\\ 39,404,459\\ 39,404,459\\ 37,948,459\\ 29,946,372\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\$

Carryback/Carrytorward Rules: For years beginning before 8/6/97 carryback 5 years, carrytorward 15.
 For years beginning after 8/6/97 carryback 2 years, carrytorward 20.

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BIG RIVERS ELECTRIC CORPORATION & SUBSIDIARY EIN: 61-0597287 STATEMENT 61

ALTERNATIVE MINIMUM TAX NONPATRON NET OPERATING LOSSES

			NONPATRON	REMAINING AMT NONPATRON	NONPATRON	NONPATRON EXPIRED NOL'S	NONPATRON REMAINING NOL'S	TOTAL NET NOLS
TAV	4	AMT NONPATRON	NOL UTILIZED	(INCOME)	SECTION 172 USAGE		-	0
TAX YEAR		LOSS (INCOME)	(90% LIMIT **)	((7,182,833)	0	0
YEAR			0	0	0	(22,448,681)	0	0
	1983	7,182,833	0	0	-	0	0	0
	1984	22,448,681	0	0	(67,286,392)	0	0	0
	1985	67,286,392		0	(56,198,468)	(11,862,696)	0	0
	1986	56,198,468	0	C	(62,522,466)	(29,538,819)	0	0
	1987	74,385,162	0	((14,775,845)	(8,020,667)	0	0
	1988	44,314,663	0	((12,087,111)	(12,695,326)	0	0
	1989	20,107,778	0	((16,651,074)	(5,043,002)	0	0
	1989	29,346,400	0	1	(17,624,779)	(3,5-101)	0	0
	1990	22,667,781	0		(9,553,735)	0	0	0
	1992	9,553,735	0		0 (21,693,629)	0	0	<u>n</u>
	1992	21,693,629	0		0 (27,573,481)	0	0	n
	1995	27,573,481	0		0 (34,018,244)	0	0	۲ O
	1995	34,018,244	C		0 (9,443,662)	(19,689,813)	0	
	1996	9,443,662	C		0 (12,967,339)	(10,000,0	C	- 0
	1997	32,657,152	(0 (44,897)	(6,993,634)	(- 0
	1998	44,897	(0 (1,088,527)	(0,000)	,	0 0
	1999	8,082,161			66) 0	0		0 0
	2000	(165,931,656)	149,338,49	•	0 0	0		0 0
	2001	(19,634,252)	19,634,25 17,034,58	с Л	0 0	0		0 0
	2002	(17,034,584)			61) 0	0		0 0
	2003	(16,417,605)	14,775,84 12,087,11	1,343,0)12) 0	0		0 0
	2004	(13,430,123)			119) 0	6		0 0
	2005	(18,501,193)		(1,958,3	309)	C)	0 0
	2006	(19,583,088)		(4,158,	342)	· · · · · · · · · · · · · · · · · · ·)	0 0
	2007	(41,583,419		(1,650,	927)	· í)	0 0
	2008	(16,509,268			934)	,))	0 0
	Transaction	, (66,819,339	· ·	0	(0)	, D	0	0 0
	Tanodene	(0			612)	0 ¹	0	0 0
	200	9 (506,119	"	(57	000)	0	0	0 0
	201	n (579,898	·	ee (91	,430)	0	0	0 0
	201	1 (914,290		NG (114	,332)	0	0	0 0
	201	2 (1,143,318		124 (123	,936)	0	0	0 0
	201	3 (1,259,36)	•7	0 (1,441		0	0	0
	201	A (1,441,53	4)	0 (1,673	3,867)	0	0	0 0
	201	1,673,86		0 (1,818	3,705)	0	0	0 0
	201	1,818,70		o (1,910		0	0	0
	201	17 (1,910,47	(3)	0 (1,98)		õ	0	0 0
	201	18 (1,987,25	58)	0 (2,06)	7,109)	0	0	0 0
	20	19 (2,067,10)9))19)	0 (2,14	9,688)	0	0	0 0
	20	20 (2,149,68	88)	0 (2,23	6,063)	0	0	o o
	20	21 (2,236,00	63)	0 (2,32	5,886)	0	0	
	20	22 (2,325,8	86)	0 (2,41	9,295)	-		0 0
		23 (2,419,2	90)		(363,529,6	649) (123,475,4	470)	
			363,529),649 <u>(56,34</u>	(363,529,6			
Total Carry	forward to 20	67,127,7	2.4					

Total Carryforward to 2024

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Total Carryforward to 2023

BIG RIVERS ELECTRIC CORPORATION & SUBSIDIARY EIN: 61-0597287 STATEMENT 61

ALTERNATIVE MINIMUM TAX NONPATRON NET OPERATING LOSSES

TAY AMT	NONPATRON		REMAINING MT NONPATRON (INCOME) SI	NONPATRON ECTION 172 USAGE	NONPATRON EXPIRED NOL'S	NONPATRON REMAINING NOL'S	TOTAL NET NOLS
	301,439,211 284,404,627 267,987,022 254,556,899 236,055,706 216,472,618 174,889,199 158,379,931 91,560,592 91,054,474 90,474,576 89,560,280 88,416,962 87,157,602 85,716,067 84,042,200 82,223,496 80,313,022 78,325,764 76,258,656 74,108,967 71,872,905 69,547,019	363,529,649	(16,593,166) (16,593,166) (18,234,926) (19,577,938) (21,428,058) (23,866,367) (27,544,708) (29,195,635) (35,877,569) (35,928,181) (35,986,171) (36,077,600) (36,191,932) (36,317,868) (37,759,403) (39,433,270) (41,251,974) (43,162,448) (45,149,706) (47,216,814) (49,366,503) (51,602,565)	(363,529,649) (363,529,649) (363,529,649) (363,529,649) (363,529,649) (363,529,649) (363,529,649)	(123,475,470) (123,475,470) (123,475,470) (123,475,470) (123,475,470) (123,475,470) (123,475,470) (123,475,470)	FALSE FALSE FALSE FALSE FALSE	288,400,863 259,503,583 215,188,920 195,081,142 165,734,742 143,066,961 105,641,884 90,783,543 97,465,477 FALSE FALSE FALSE FALSE FALSE FALSE FALSE FALSE FALSE FALSE FALSE FALSE FALSE FALSE FALSE FALSE FALSE FALSE O 0 0 0 0 0 0 0 0

 Carryback/Carryforward Rules: For years beginning before 8/6/97 carryback 5 years, carryforward 15. For years beginning after 8/6/97 carryback 2 years, carryforward 20.

** For years ended December 31, 2001 and December 31, 2002, the Job Creation and Worker Assistance Act of 2002 allowed 100% of the AMTI to be offset with NOL carryforwards.

inputs

	Electricity Soles, Purchases, and Production	Sourca:	005/ Othe	2005	2007	2008 1	fransactione T ########	ferminı	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
2	<u>Sales</u> Rurai TWH	Existing Transacion -Budget-Arb-2008-Rev9-11-07.xts ar	va file: Anni	2.232	2,406	2,396		0.000	2.438	2.487	2.543	2.595	2.651	2.704	2.763	2.819	2.879	2.935	2.997	3.059	3.120	3.180	3.242
4 5	LF MW	Existing Transaction -Budget-Arb-2008-Rev9-11-07.xls		61.62% 413	63.26% 434	62.51% 437	6	50.17% 0	60.02% 464	60.12% 472	60.21% 482	60.15% 492	60.40% 501	60.49% 510	60.57% 521	60.51% 532	60.74% 541	60.82% 551	60.89% 562	60.83% 574	61.04% 584	61.11% 554	61.17% 605
6 9	UF	Existing Transacion -Budget-Arb-2008-Rev9-11-07.xls + Existing Transacion -Budget-Arb-2008-Rev9-11-07.xls	5MW/year	0.957 78.12% 140	0.921 76.45* 138	0.953 77,71% 140		0.000 78.09% 0	1.063 78.65% 154	1.097 78.65% 159	1.131 78.65% 164	1.165 78.39% 170	1.200 78.65% 174	1,235 78,65* 179	1.269 78.65% 184	1.303 78.36% 190	1.338 78.65% 194	1.373 78.65% 199	1.407 78.65% 204	1 440 78 33% 210	1.476 78.65% 214	1.510 78.65% 219	1.545 78.65% 224
15 11	ſF	Smelter Retail Agreement, Section 1.1.17 Smelter Retail Agreement, Section 1.1.17 Smelter Retail Agreement, Soction 1.1.15			0 98.00%	0 98.00%		0.000 98.00% 368	3.159 98.00% 368	3.159 <i>98.00%</i> 368	3.159 98.00% 368	3.168 98.00% 368	3,159 98,00% 368	3.159 98.00% 368	3.159 98.00% 368	3.168 98.00% 368	3.159 98.00% 368	3.159 98.00% 368	3.159 98.00% 368	3.168 98.00% 368	3.159 98.00% 368	3.159 98.00% 368	3.159 98.00% 368
	LF	Smetter Retail Agreement, Socian 1.1.16 Smetter Retail Agreement, Socian 1.1.16 Smetter Retail Agreement, Socian 1.1.14			96.00%	99.00%		0.000	4.135 98.00% 482	4.138 98.00% 482	4,138 98.00% 482	4,149 98.00% 482	4,138 96.00% 482	4.138 90.00% 482	4.138 98.00% 482	4,149 98.00% 482	4.138 98.0014 482	4.138 98.00% 482	4.138 98.00% 482	4.149 98.00% 482	4.138 98.00% 482	4.138 98.00% 482	4,138 98.00% 482
18 19	Offsystem (TWh)	file: Annual Output - 9-8-08 - BREC Update.xts		2.06	2.84	1.66			1.55	1.63	1.38	1.36	1,41	1.32	1.29	1.24	1.05	1.12	0.87	0.69	0.87	0.65	0.78
22 23 24 25	Purchases & Production Purchases (TWh) Market	file: Annual Output - 9-8-08 - BREC Update.xis Existing Transacion -Budger.4tb.2008-Rev2 +1-07.xis file: Annual Output - 9-8-08 - BREC Update.xis file: Annual Output - 9-8-08 - BREC Update.xis		0.07 0.24	0.62 0.20 0.81%	0.01 0.30 0.81%		0.00 0.00 (0.00) 0.81%	0.24 0.30 11.90 0.81%	0.16 0.31 12.35 0.81%	0.31 0.30 11.84 0.81%	0.22 0.30 12.02 0.81%	0.30 0.27 12.10 0.81%	0.26 0.27 12.14 0.81%	0.30 0.27 12.17 0.81%	0.32 0.27 12.20 0.81%	0,62 0.27 11,79 0.01%	0.40 0.27 12.17 0.81%	0.54 0.27 11.88 0.81%	0.42 0.27 12.13 0.81%	0.53 0.27 12.09 0.81%	0.49 0.27 12.20 0.81%	0.61 0.27 12.11 0.81%
	Fuel Consumption (Millions of MMBtu)	Ne: Annual Output - 9-8-08 - BREC Update xis						0.0	132.9	137.2	131.9	133,5	133.6	134.1	134.4	134.7	130.3	134.4	131.2	134.1	133.5	134,7	133.6
31 32	Startup Costs (MS) Kentucky Coal Tax Cred4 (SM) Emissions	tille: Annual Output - 9-8-08 - BREC Update.xts	4 						11.46 0	11.89 1.4	11.74 0.7	10.64 0	10.39 0	11.00 σ	10.23 Ø	10.81 Ø	13.05 Ø	11.43 0	13.62 Ø	12.55 0	12.50 D	14.15 Ø	13.39 0
34 35		file: Annust Output - 9-8-08 - BREC Update.xis file: Annust Output - 9-8-08 - BREC Update.xis							19,145 48,979	20,453 48,979	19,301 24,489	19.812 24,489	19,341 24,489	19,855 24,489	20,836 18,352	21,282 18.352	19,910 18,352	21,199 18,352	20,456 18,352	19,823 17,125	20,812 18,352	21,263 18,352	20,716 18,352
37 38 39	Emitted (Tons) Allocation (Tons) NOX Season (Mo./Yr.)	file: Annual Output - 9-8-08 - BREC Update.xis file: Annual Output - 9-8-08 - BREC Update.xis							5,141 4,652	5,105 4,652	13,489 11,068	13,371 11,057	13,531 11,057	\$3,340 11,057	13,579 8,944	13,378 8,944	13,303 8,491	13,413 8,297	13,214 8,153	13,553 7,948	13,445 7,713	13,365 7,491	13,558 7,419
42	Bales Fuel (S' MMBtu) Power Purchases (S' MWh)	lile: Annual Output - 9-8-08 - BREC Update.xis						1.96	1.95	2.15	2.25	2.50	2.69	1.85	1.85	3.87	\$.90	1.91	1,94	1.96	3.98	2.02	2.04
44 45 46 47	SEPA	Existing Transaction Budget-Abi-2008-RevG-11-07-xis Illie: Annual Output - 9-8-08 - BREC Update xis Illie: Annual Output - 9-8-08 - BREC Update xis		26.96 67.8347	26.98 77.90	22,44 200.00 2.59 140 700		22,44 65.53 2.59 140 700	22,44 65.53 2.59 140 700	22_44 66.17 2.73 115 650	22.44 67.28 3.23 868 2,120	28.33 74.14 3.32 878 1,951	29.04 71.54 3.38 875 1,909	29.75 65.38 3.44 850 2,570	29.75 65.42 4.22 842 3,071	29.75 66.75 4,34 825 2,663	29.75 64,85 4,48 757 2,764	30.50 63.37 4.54 706 2,665	31.24 67.39 4.65 551 2,564	31.24 67.48 4.79 413 2,574	31.24 76.46 4.99 350 2,578	31.24 74.47 5.03 302 2,581	32.00 76.94 5.23 279 2,554
49 60		file: Annual Output - 9-8-08 - BREC Update.xts	100%					Ø	6,041	6,219	5,967	6,046	6,058	6,063	6,097	6,100	5.910	6,095	5,938	6,078	6,058	6,083	6,065
51 52 53	Sales Rates & Related																						
\$5	<u>General Rate Advisiments (%)</u> Shadow 2010 Rate (0=start 2011) <u>Market (SCMR()</u> 11	Stipulated Inputs (subject to Commission Approval at lim Smelter Retail Agreements, Section 4.7.5(a) Itile: Annual Output - 9-8-08 - BREC Update.xIs	ne) 0	0 40.45	52.68	48.74		0.00% 60.94	0.00% 60.94	0.00% 59.20	0.00% 63.59	1.46% 66.81	1.80% 70.55	3.12% 62.13	0.94% 63.43	0.00% 63.52	10.55% 64.53	0.00% 66.02	0.00% 68.95	0.00% 67.21	0.00% 67.69	0.00% 69.01	0.00% 69.79
5B 59	<u>Rural</u> Demand (S/ KW-mo.) Energy (S/ MWh)	Current Member Tanti Current Member Tariti			Escalated Escalated			0															
63	Large Industrial Demand (S/ KW-mo.) Energy (S/ MWh)	Current Member Tauff Current Member Tariff			Escalated Escalated			0															
67 68 69 70 71 72	Smeters Margin (S/ MWh) Annual Revenue Guarantee (S/ MWh) Surcharge 1 (MS) Surcharge 2 (S/MWh) Base Fixed Energy Surcharge 2 (MS)	Smelter Retail Agreements, Section 1.1.20 (Alcan) and 1 Smelter Retail Agreements, Section 4.7 (see formula in 5 Smelter Retail Agreements, Section 4.11 (a) Smelter Retail Agreements, Sections 4.11 (b) and (c) line 11 + line 15 line 70 * line 71	(. 1.19 (Centu Smeller Rate	ny) i Structure	, lines 99 -	127)		0.25 (0.25) 5.11 0.60 0.00 0.00	0.25 5.11 0.87 7.30 6.36	0.25 5.11 0.87 7.30 6.36	0.25 1.79 5.11 0.67 7.30 6.36	0.25 2.95 7.30 0.87 7.32 6.38	0.25 2.95 7.30 0.87 7.30 6.35	0.25 2.95 7.30 0.87 7.30 6.36	0.25 3.55 7.30 0.87 7.30 6.36	0.25 3.39 7.30 0.87 7.32 6.38	0.25 3.55 10.18 1.20 7.30 8.76	0.25 0.32 10.18 1.20 7.30 8.76	0.25 3.23 10.18 1.20 7.30 8.76	0.25 2.31 10.16 1.20 7.32 8.78	0.25 3.42 10.18 1.20 7.30 8.76	0.25 2.43 10.18 1.20 7.30 8.76	0.25 3.67 10.18 1.20 7.30 8.76
75 76	Member Bevenue Discourti Aglustment (MS) MBDA Ratio (Rural to Industrial) Power Factor Renativ/ Demand Cr. (Lro., Ind.)	Amortization of Gain on Year 2000 Sale-Leaseback rans Allocated by Base Revenue + FAC post transaction Big Rivers Assumption	Ē	3.68 0.73 0.19	3.68000 0.75 0.07	3.68000 0.75		011/0!	#DIV/0!	ADIV/01	#DIV/0!	*DIV/0!	#DIV/0!	*DIV/0!	ADIV/01	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#0(V/0)	#DIV/0!	#DIV/0!
79 80	TIER Rebato Related to Rurals (SM) TIER Rebato Related to Large Industrials (SM) TIER Rebato Related to Smellors (SM)	Big Rivers Assumption (based on Rebate available to no Big Rivers Assumption (based on Rebate available to no Smelter Retail Agreements, Section 4.9 (energy basis all	n-Smelters I			lail Agreen	nents, belov		0.24 0.09 0.70	4.46 1.74 12.63													
82 83 64	FAC Base. 12/2004 (\$/ MWh Sold) W/o Purchased Power (Total Sales Denom.) W Purchased Power (Total Sales Denom.) Allocation of Revenues on '	Updated Model Results - 12-3-200418CY_ADJ_6mo-12- Updated Model Results - 12-3-200418CY_ADJ_6mo-12-																					
65 66 87 88 89	NOx + SO3 VOM Allowances	lite: Annual Output • 9-8-08 • BREC Update.xts lite: Annual Output • 9-8-08 • BREC Update.xts lite: Annual Output • 9-8-08 • BREC Update.xts lite: Annual Output • 9-8-08 • BREC Update.xts						0.00	3.30 0.34	3.74 0.29	3.55 5.13	3.80 4.51	3.62 4.72	4.10 5.87	4.09 14.23	4.38 12.70	4.01 13.30	4.63 13.63	4,49 12,96	4.72 14.43	4.86 14.78	5,17 15,16	5.05 15.86

Jutober 2008

90 91 92	VOM Net Allowances Total	Source: Ille: Annual Output - 9-8-08 - BREC Update.xis Ille: Annual Output - 9-8-08 - BREC Update.xis Ille: Annual Output - 9-8-08 - BREC Update.xis	005/ Othe	2005	2007	2008	Fransactione	Termina (0.00) 0.00	2009 27.54 (4.18) 27.00	2018 30.00 (3.28) 30.76	2011 34.69 (4.50) 38.68	2012 36.14 (4.11) 40.35	2013 37.24 (4.50) 41.08	2014 37.71 (3.94) 43.74	2015 47.28 2.09 67.70	2016 48.57 2.42 68.06	2017 48.65 1.18 67.34	2018 50.68 2.01 70.95	2019 50.77 1.18 69.42	2020 53.35 1,11 73.51	2021 55.51 0.86 76.01	2022 56.21 0.88 77.42	2023 58.27 0.66 79.85
90 94 95 96	Nox + 503 VQM Allowances	file: Annual Output - 9-8-08 - BREC Update.xis lile: Annual Output - 9-8-08 - BREC Update.xis file: Annual Output - 9-8-08 - BREC Update.xis file: Annual Output - 9-8-08 - BREC Update.xis						0.00	3.30 0.34	3.74 0.29	3.56 5.13	3.60 4.51	3.62 4,72	4.10 5.87	4.09 14.23	4.38 12.70	4.01 13.30	4.63 13.63	4,49 12,98	4.72 14.43	4.66 14.78	5.17 15.16	5.05 15.86
97 98 99 100	VOM in Excess of 2009 Net Allowance Costs in Excess of 2009 Total	Ilie: Annual Output - 9-8-08 - BREC Update.xts Ilie: Annual Output - 9-8-08 - BREC Update.xts Ilie: Annual Output - 9-8-08 - BREC Update.xts Ilie: Annual Output - 9-8-08 - BREC Update.xts						(0.00) 0.00	27.54 (4.18) 27.00	30.00 (3.25) 30.76	34.69 (4.50) 38.68	36.14 (4.11) 40.35	37.24 (4.50) 41.08	37.71 (3.94) 43.74	47.28 2.09 67.70	48.57 2.42 68.06	48.85 1,18 67.34	50.68 2.01 70.95	50.77 1.18 69.42	53.35 1.11 73.61	55.51 0.86 76.01	55.21 0.88 77.42	58.27 0.66 79.85
103 104	Smeller Rate Structure Jandwidth	Smelter Retail Agreements, Section 4.7.1						2.20	2.20	Z.20	2.20	3.20	3.20	3.20	3.60	3.80	3.60	4.40	4,40	4.40	5.00	5.00	5.00
105 106 107	Trancing																						
109 110 111 112	/ariable PCB (Swapped to Fixed)	Modeled to accommodate PMCC buyout, RUS max out: Modeled to accommodate PMCC buyout, RUS max out Modeled to accommodate PMCC buyout, RUS max out	standings and standings and standings and standings and	i cash bali I cash bali I cash bali I cash bali	ances ances ances ances ances			0.00% 0.00% 0.00% 0.00% 0.00%	0.00% 0.00% 2.12% 0.00% 0.00% 0.00%	0.00% 0.00% 2.40% 0.00% 0.00%	100.00% 0.00% 2.51% 0.00% 0.00% 0.00%	0.00% 0.00% 12.63% 0.00% 0.00% 0.00%	15.88% 0.00% 3.55% 0.00% 0.00% 0.00%		18,3359 100,0019 3,9859 8,0019 0,0019 0,0019	0.08% 0.00% 37.17% 0.00% 0.00% 0.00%	0.00% 0.00% 6.08% 0.00% 0.00% 0.00%	-42.23% 0.00% 6.44% 0.00% 0.00% 0.00%	0.08% 0.00% 6.81% 0.00% 0.00% 0.00%	0.00% 0.00% 7.21% 0.00% 0.00% 0.00%	0.60% 0.00% 5.33% 0.00% 0.00% 0.60%	47.82% 3.88% 0.00% 0.00% 0.00% 0.00%	
118 119 120 121	Zepilal Markets Tranche 1 Zepilal Markets Tranche 2 1US Stated Aratable PCB (Swapped to Fixed/ Refi)	Indicative Big Rivers borrowing rates, 4/23/2007, Golarr Indicative Big Rivers borrowing rates, 4/23/2007, Golarr Long Term Doot Schodule Actual 2006 - Budget 2007, xi NA Long Term Dobt Schodule Actual 2006 - Budget 2007, 2007	ian Sachs					7.00% 5.50% 5.75% 8.00% 5.00%	7.09% 5.42% 5.75% 6.00% 5.00%	7.00% 5.34% 5.75% 0.00% 5.00% 0.00%	7.00% 5.26% 5.75% 8.00% 5.00% 8.00%	7.09% 5.18% 5.75% 6.00% 5.00% 9.99%	7.00% 5.21% 5.75% 0.00% 5.00% 0.00%	7.00% 5.24% 5.75% 8.00% 5.00% 0.00%	7.00% 5.26% 5.75% 6.00% 5.00% 0.00%	7.00% 5.29% 5.75% 6.00% 5.00% 0.00%	7.00% 5.32% 5.75% 6.00% 5.00% 0.03%	7.00% 5.35% 5.75% 6.00% 5.00% 0.00%	6.50% 5.39% 5.75% 0.00% 5.00% 0.00%	6.50% 5.42% 5.75% 6.00% 5.00% 0.00%	6.50% 5.45% 5.75% 6.00% 5.00% 0.00%	6.50% 5.48% 5.75% 0.00% 5.00% 0.00%	6.50% 5.52% 5.75% 0.00% 5.00% 0.00%
	ARVP (Accretion/ Fieli) RUS ~ GAAP	Long Term Debt Schedule Actual 2006 - Budget 2007.x Long Term Debt Schedule Actual 2006 - Budget 2007.x						0.00% 5.82%	5.82%	5.82%	5.82%	5.62%	5.82%	5.82%	5.82%	5.82%	5.82%	5.82%	5.82%	5.82%	5.82%	5.82%	5.82*
126 127	Incinning Balances (MS) Capital Markets Tranche 1 Capital Markets Tranche 2 Ariable	Modeled to accommodate PMCC buyout, RUS max out Modeled to accommodate PMCC buyout, RUS max out NA									58.3				207.0								
129 130 131 132 133	≥CE LRVP 3US ~ GAAP 3cmarketing on Vasiable	Long Term Debt Schedule - Historical from July 1996 - Long Term Debt Schedule - Historical from July 1996 - Long Term Debt Schedule Actual 2006 - Budget 2007.x NA	Actual 2007 -	Budget Zi Budget Zi	008.xis + N 008.xis + k	lodeling fo 249.89	: 142 104 626																
134 135 136 137	Tees Underwriting & Other Bond Insurance	Goldman Sachs verbal guidance. Goldman Sachs verbal guidance.	1.75% 0.80%																				
138 139	Capitalized Interest Defetred Detat - PCB Refunding A/C, 181 Beginning Batance	Big Rivers' estimate Long Term Debt Schedule - Historical from July 1998 -	Actual 2007	(0.24) 0.90	(0.39) 0.84	(0.51) 0.79		0.74	(0.84) 0.74	(0.84)	(0.84)	(0.84)	(0.84)	(0.84)	(0.84)	(0.84)	(4.84)	(0.84)	(0.84)	(0.84)	(0.84)	(0.84)	(0.84)
141 142	Amonization Ending Balance IMBAC Amonization (PCB) A/C 165	Long Term Debt Schedule - Historical from July 1998 - Long Term Debt Schedule - Historical from July 1998 -	Actual 2007	0.05 0.84	0.05 0.790	0.05 0.737		8.00 0.74	0.74										÷				
144 145	Vinditization Balance Settlement Note/Markgting Payment	Long Term Debt Schedule - Historical from July 1998 - Long Term Debt Schedule - Historical from July 1998 -		0.42 4.69	0.42 4.27	0.42 3.65	3.65	0.00 3.85	3.65														
147 148	Amerization Ending Balance Srean River Coal Settlement Ending Balance	Long Term Debt Schedule - Historical from July 1998 - Long Term Debt Schedule - Historical from July 1998 -		1.00 17.08 0.09 (0.21)	1.00 16.07 0.05	1.00 15.07 0.00	15.07	0.00 15.07 0.00	1.00 14.06	1.00 13.05	1.00 12.06	1.00	1.00 10.05	1.00 9.04	1.00 8.04	1.00 7.04	1.00 6.03	1.00 5.03	1.00 4.02	1.00 3.02	1.00 2.02	1.00 1.01	1,01
151 152	line pl Credit Predayment on Transaction Date Pre-Transaction Debt Service	Big Rivers' estimate Modeled to achieve target cash balances	0.50%	100.00			147.00																
154 155 156 157	Principal Interest (Cash Flow) Interest (Income Statement) Amontization of RUSPCB Account VEW RUS RUST: (Stated)	Long Term Debt Schedule - Historical from July 1998 - Long Term Debt Schedule - Historical from July 1998 - Long Term Debt Schedule - Historical from July 1998 - Straightline amortuation et RUS and PC8 restructuring	Actual 2007 Actual 2007	26.43 36.93 60.72	13.30 36.866 60.90	41.79 51.493 59.91	0.34	0.34	7.13	6.73	6.32	5.92	5.51	5.11	4.70	4.30	3.89	3,49	3.08	2.68	2.27	1.89	1.51
159 160 161	Beginning Principal Base Payment	Long Term Debt Schedule - Historical from July 1998 - Long Term Debt Schedule - Historical from July 1998 -		812.23 54.49	603.60 42.69	807.56 84.83		628.18	628.18	614.89	599.60	584.02	504.66	482.33	458.70	433.69	200.18	161.96	121.56	78.78	33.50	0.00	0.00
162 163	nterest Expense nterest Payment	Long Term Debt Schedule - Historical from July 1998 - Long Term Debt Schedule - Historical from July 1998 - Long Term Debt Schedule - Historical from July 1998 -	Actual 2007 Actual 2007	45.88 31.57 7.15	46.80 31.14 7.32	45.14 45.67 6.79	6.79	0.00 0.00	36.12 36.12	35.36 35.36	34,49 34,49	32.50 32.50	29.02 29.02	27.73 27.73	26.38 26.38	13.44 13.44	11.51 11.51	9.31 9.31	6.99 6.99	4.53 4.53	1.93 1.93	0.00 0.00	0.00 0.00
165 166 167 168	Actrued Interest Principal Payment Briding Principal Drig Scheduled Principal Payment Driginal Maximum Allowed Principal Batance	Long Term Debt Schedule - Historical from July 1950 - Long Term Debt Schedule - Historical from July 1950 - Long Term Debt Schedule - Historical from July 1950 - Long Term Debt Schedule - Historical from July 1958 -	Actual 2007 Actual 2007 Actual 2007	22.91 803.60 24.00	11,54 607.56 26.00	39.17 768.39 34.00 878.61	768.39 34.00	628.18	13.29 614.89	15.09 599.80	15.78 584.02	79.36 504.66	22.33 482.33	23.62 458.70	25.01 433.69	233.51 200.18	.38.20 161.98	40,43 121.56	42.78 78.78	45.29 33.50	33.50 0.00	0.00	8.00
171 172 173 174 175 175 175 177 177	Yeve (RUS Promisson: Note (GAAP) Jeginning Principal - RUS New Note Interest Expanse Netrost Payment Actrud Interest Principal Balance Principal Balance mputed Interest Vecelpts (MS)	Long Term Debt Schedule - Historical fram July 1998 - Long Term Debt Schedule - Historical fram July 1998 - Long Term Debt Schedule - Historical fram July 1999 Long Term Debt Schedule - Historical fram July 1999 Long Term Debt Schedule - Historical fram July 1998 - Long Term Debt Schedule - Historical fram July 1998 -	Actual 2007 Actual 2007 Actual 2007 Actual 2007 Actual 2007	815.30 46.21 32.29 7.25 22.19 799.79 0.00	47.16 31.24 7.41 33.45	811.51 45.50 46.03 6.88 38.80 765.30	6.88	772.18 0.00 6.89 0.00 765.29 0.00															

Jucober 2008

				2005	2007		ransectione	Termini	2009	2010	2011	2012	2013	2014	2015	2016	2017	2016	2019	2020	2021	2022	2023
182	WKEC Loase Transmission Smeller - Tier 3 Transmission (Cash Flow)	Historic results and adapted from 2007 Budget-REVISED-MAI Historic results and adapted from 2007 Budget-REVISED-MAI Historic results and adapted from 2007 Budget-REVISED-MAI	IRCH 2	47.89 5.95 1.70	50.82 6.29 1,72	47.75 5.12 1.72		1.20	1.74	1.74	4.42	5.43	2.85	2.72	2.58	2.59	2.41	Z.24	2.04	1.94	1.70	1.42	1.14
184	Smetter - Tier 3 Transmission (Income Statement) Proceeds of Unwind Transaction (LG&E Payment)	Historic results and adapted from 2007 Budget-REVISED-MAI Termination Agreement		1.78	1.50	1.80	387.68	1.22	1.82	1.82	4,45	5.43	2.85	2.72	2.58	2.59	2.41	2.24	2.04	1.94	1.70	1.42	1.14
186	Cobank Patronage Capital & Other Interest Earnings	Historic results and adapted from 2007 Budget-REVISED-MAI Historic results and adapted from 2007 Budget-REVISED-MAI	ARCH 2	0.57 3.73	0.58 6.83	0.58 5.03	(0.20)					0.70	1.56	1.46									
188	Net Conforming Receipts Cobank Patronage Capital - Balance Sheet	Big Rivers' estimate	2.19	2.59	2.98	3.39	3.35	3.38	3.72	3.72	3.72	3.02	1.46										
190	Lease Related & Other Cobank Patronege Capital (Income Statement)	Historic results and adapted from 2007 Budget-REVISED-MAI Historic results and adapted from 2007 Budget-REVISED-MAI		5.04 0.96	5.34 0.98	5.58 0.96		0.00	0,34														
192 193																							
195	Fixed Production (MS)																						
197	Eired 03M Non-Labor (Roai)	tite: Fin Model inputs BREC Aug-08 net City rev 2.xis 200	08 Fact	0.0**				0.00	36.88	40.34	39.62	35.59	44.30	33.41	40.91	33.85	34.05	37.77	37.00	36.07	38.79	33.06	41.00 67.00
199	Labor (Nominai) Plant Maintenance (Real Basis)	Unwind Statting_Rev0707_Reflects 2008 Dellars_Rev 1.xts							48.36	45.62 0.24	46.99	48,40	49.65	51.35	52.89	54.47	56.11	57.79	59.53	61.31	63.15	65.05	07.00
200	Green	tile: Fin Model inputs BREC Aug-08 net City rev 2.xls tile: Fin Model inputs BREC Aug-08 net City rev 2.xls tile: Fin Model inputs BREC Aug-09 net City rev 2.xls		0					0.58 0.34 0.24	0.24 0.24 0.17	0.24				2.94		2.58				-		
202 203 204	Red	The Fin Model inputs BREC Aug-08 net City rev 2.xis []		0 0					0.34	0.17					2.54		0.67						
205		tite: Fin Model inputs BREC Aug-08 net City rav 2.xis		ő					4.54														
207		tile: Fin Model inputs BREC Aug-08 net City (ev 2.xls		0																			
209 210				0 D																÷			•
211	Transition			0																			
213 214				0 0.3																			
	T/G Overhauls (Cash Flows)	file: Fin Model inputs BREC Aug-08 net City rev 2.xis						0.00	9.17		10.22	12.45		6.95		6,74	19.80		136	5.91	7.82	8.44	
218		lile: Fin Model Inputs BREC Aug-08 net City rev 2.xls	o					0.00	9.17		10.22	12.45		6.96		6.74	19.60		13.45	5.91	7.82	8,44	
220	Environmental Monitoring and Other WKE "Incremental" items moved to OAM W-1 stack recain	tile: Fin Model inputs BREC Aug-08 net City rev 2.xls	U						1.46	1.50	1.54	1.59	1,64	1.69	1.74	1,79	1.84	1.90	1.95	2.01	2.07	2.14	2.20
222	boler waterwall metal overlays SCR catalyst replacement	life: Fin Model inputs BREC Aug-08 net City rev 2.xls																					
	Transmission O&M	Unwind Statling_Rev0707_Reflects 2008 Dollars_Rev 1.xts		6.59	7.07	7,43		0.00	6.07	6.25	6.43	6.63	6.83	7.03	7.24	7,46	7.68	7.91	8.15	8.40	8.65	8.91	9.17
226	Baseline Non-Labor	2005 actual escalated @ 3% plus 100K							1.63	1.68	1,73	1.78	1.84	1.89	1.95	2,01	2.07	2.13	2.19	2.26	2.33	2.40	2.47
228 229	Property Tax	Historic results and adapted from 2007 Budget-REVISED-MAI Historic results and adapted from 2007 Budget-REVISED-MAI	ACH 5					0.00 0.00	0.25 0.04	0.25 0.04	0.25	0.25 0.04	0.25 0.04	0.25	0.25	0.25 0.04	0.25 0.04	0.25	0.25 0.04	0.25 0.04	0.25 0.04	0.25 0.04	0.25 0.04
230 231		Historic results and adapted from 2007 Budget-REVISED-MA	RCH 5					0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
233	A&G Labor	Unwind Staffing_Rev0707_Reflects 2008 Dollars_Rev 1.xts						0.00	10.99	10.79 12.48	11.12 12.85	11.45 13.24	11.79 13.63	12.15	12.51 14.46	12,69 14,90	13.27 15.34	13.67 15.80	14.08 16.28	14.50 16.77	14.94 17.27	15.39 17.79	35.85 18.32
235	Non-Labor Intellectual Property (Nominal Basis) Intellectual Property Contingency	2004 actual escalated @ 3% Unwind spreadsheet + 8-29-07_Rev1.xts						0.00	12.12 6.42	4.51	5.26	4.82	4,91	5.51	5.09	5,18	5.69	5.66	5.65	6.19	5.99	6.33	6.74
237				13.81	15.62	17.16	-	0.00	29.54	27.78	29.22	29.51	30.33	31.70	32.06	32.96	34.31	35.14	36.01	37.45	38.19	39.51	40.91
239 240		Existing Transacion -Budget-Arb-2008-Rev9-11-07.xls		4.66	8.78	5.94		0.00	6.31	6.46	5.80	5.69	5.86	6.03	6.21	6.39	6.58	6.78	6.56	7.19	7.40	7.62	7.85
241 242		2004 actual escalated @ 3% 22	244,57	0.43	0.36	0.35		0.00	4.05	4,17	4.30	4,43	4.56	4.70	4.64	4.98	5.13	5.28	5,44	5.61	5.78	5.95	6.13
244	Property Tax Baseline	Historic results and adapted from 2007 Budget-REVISED-MAI		3.94 1,10	3.94 1.08	3.86 1.11		0.00	1.81	1.87	2.39	2.92	3.01	3.10	3.19	3.29	3.39	3.49	3.59	3.70	3.81	3.93	4.05
246	Transmission - Operations General Plant - Operations	Historic results and adapted from 2007 Budget-REVISED-MAI Historic results and adapted from 2007 Budget-REVISED MAI		0.74 0.14	0.77 0.11	0.75 0.04		0.00 0.00	0.88 0.16	0.91 0.17	0.96 0.17	1.01 0.18	1.04 0.18	1.07 0.19	1.10 0.19	1.14 0.20	t.17 0.21	1.21 0.21	1.24 0.22	t.28 0.23	1.32 0.23	1.36 0.24	1.40 0.25
247 248 248	Capital Expenditures																						
250	Generation			13.12	13.41	13.71																	
252	Baseline (Real Basis 2006) Adjustment for Station 2 (Real Basis 2006)	tile: Fin Model inputs BREC Aug-08 net City rev 2.xts 08 F file: Fin Model inputs BREC Aug-08 net City rev 2.xts	Factor	0.00				0.00	33.10 0.00	18.29 0.00	27,20 0.00	103.33 0.00	112.65 0.00	104.86 0.00	102.56 0.00	25.92 0.00	25.92 0.00	25.92 0.00	25.92 0.00	25.92 0.00	25.92 0.00	25.92 0.00	25.92 0.00
254	Gross Incremental																						
255	Transmission (Nominal)	Per Crockett Memo dated 11/12/07		5.91	9.62	18.39			10.28	5.26	4,43	5.91	0.46	0.36	0.49	1.58	2.81	3.36	3.46	3.56	3.67	3.78	J.89
	AAG (Nominal)	\$1.25M 2007 escalated @ 3%		0.66	1.25	1.29		0.00	1.33	1.37	1,41	1.45	1.49	1.54	1.59	1.63	1.68	1.73	1.78	1.84	1.89	1.95	2.01
	WKE Share of Generation Capex	Participation Agreement - Cost Sharing		51%	51%	51%		0%	0*•	0%	0%	0*4	0%	0%	0%	0%	0%	0%	Ø%	0%	0%	<i>0%</i>	0%
	Plant Maintenance (Real Basis 2007)											1.05	1.07										
265	Coleman Green	Ide: Fin Model inputs BREC Aug-08 net City rev 2.xts Ide: Fin Model inputs BREC Aug-08 net City rev 2.xts Ide: Fin Model inputs BREC Aug-08 net City rev 2.xts							1.14 8.55	1.11 6.75	2.37 4.23	1.05	1.02	7.60	0.43	n • • •	6.42	0.42	1.03	1.07	0.43	0.43	0.43
267	HMP&L Reid Wilson	file: Fin Model inputs BREC Aug-08 net City rev 2.xis file: Fin Model inputs BREC Aug-08 net City rev 2.xis file: Fin Model inputs BREC Aug-08 net City rev 2.xis							0.94 1.00 14.63	1.16 6.47	2.36 11.19	3.72 1.91	3.25 1.57	2.86 1.24	0.43 1.40 1.57	0.43 1.24	0.43 1.57	0.43 1.24	3.74	1.03 1.24	1.57	1.24	0.43 1.57
268 269 270	Adjustment for Station 2	file: Fin Model inputs BREC Aug-08 net Cuy tev 2.xis							14.00	w. * 1	11.10	r		67		1-6.7	,,	1.2.7	¥.) ''			•-67	· . 🖌 S
	Plant Maintenance Claim Amount	ļ l																					

	•	Source:	005/ Oth	2006	2007	2008	Fransaction	ne Termina	2009	2010	2011	2012	2013	2014	2015	2015	2017	2010	2019	2020	2021	2022	2023
27 27 27 27 27 27	3 Environmental (Bast Basis 2006) 4 NOX Removal Equipment Capital 5 Mercury Manfording 6 Omn FGD Equipment Capital 7 FGD engoing uptheop capital (0.10%) 6 Additional FGD Intickener & Inter drum	Ne: Fin Model inputs BREC Aug-08 net City rev 2.xis Na: Fin Model inputs BREC Aug-08 net City rev 2.xis No: Fin Model inputs BREC Aug-08 net City rev 2.xis Net Fin Model inputs BREC Aug-08 net City rev 2.xis Net Fin Model inputs BREC Aug-08 net City rev 2.xis									1.73									·	·		
28	9 R-CT reliability study & upgrades 0 Wilson super heater tubes replacment 1 Adjustment for Station 2	Ille: Fin Model inputs BREC Aug-08 net City tev 2.xls file: Fin Model inputs BREC Aug-08 net City tev 2.xls file: Fin Model inputs BREC Aug-08 net City tev 2.xls																					
28 28	3 <u>Transmission Upprades</u> 4 Phase I 5 Phase II	Per Crockett Memo dated 11/12/07 Per Crockett Memo dated 11/12/07			4.00				5.40	5.30									·			·	
28 28	9 9 Shared HO Building 9 Phase I 9 Phase II								1.66														
29 29 29 29	9 1 <u>Intelectual Property</u> 2 Capex Purposes 3 Depreciation Purposes 4 Trial Balance Adjust	Unwind spreadsheet - 6-29-07_Rev1.xts Depreciated at Average Capital Depreciation Rate	101.0%					0.00 0.00	9.74 0.15	1.02 0.16	<i>0.92</i> 0.31	9.79 0.33	0.80 0.35	8.98 0.38	0.83 0.40	0.85 0.42	1.00 0.45	0.92 0.47	0.94 0.49	1.06 0.52	0.89 0.55	0.91 0.57	1.23 0.60
29 29	5 Cash Adder																						
30	9 2 PPA Environmentat 2 PCB Restructuring	Historic results and adapted from 2007 Budget-REVISE Historic results and adapted from 2007 Budget-REVISE	D-MARCH 2	96.00 0.41	96.29 0.48	95.44 0.65																	
300 30-	ECA Restructions Education State Cher Backclons Transition Costs	Protorma transaction and bond insurance costs Long Term Debt Schedule - Historical from July 1998 - Historic results and adapted from 2007 Budget-REVISE	L Actual 2007 D-MARCH 2	1.62 0.14	1.62 0.13	1.82 0.15		0.00 (0.00)	7.20 1.62 (1.62)	1.82 (1.82)	1.82 (1.82)	1,82 (1,82)	1.82 (1.82)	1.82 (1.82)	1,82 (1,82)	1.82 {1.82}	1.82 {1.82}	1.82 {1.82}	1.82 {1.82}	1.82 {1.82}	1.82 {1.82}	1.82 {1.82}	1.06 (1.05)
30(30) 30(Deferred Debit - PCB Refunding A/C 181 Green River Coal Settlement MISO Credit Fee 	Long Term Debt Schedule - Historical from July 1998 - Long Term Debt Schedule - Historical from July 1998 -		(0.05) 0.35	(0.05) 0.05	(0.05) 0.04	I	(0.00) 0.00	{0.74}														
310 311 312 313	Deferred Tax Asset Write-Down Payment to City of Henderson Smätter Paymoni, (Assurances Anreomoni) Lasse-Exercise Consent Freed Smetter Exit Mon-Smetter Memoer Encess Cash Behate	Ne: Annual Output - 9-8-08 - BREC Update.xis Coordination Agreement					1.53		0.52	0.52	0.52	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
319 310 317 318	Economic Reserve Working Capital Adj. CoBank Patronage Capital Ameritation of RUS/PCB Charges Other Assumptions	Historic results and adapted from 2007 Budget-REVISE Historic results and adapted from 2007 Budget-REVISE Straightine amortization of RUS and PCB testructuring	2.25	1.09 2.64	4.06 3.04	(0.45) 3.43	157.00	3.43 6.00	(35.46) 3.77 0.41	(36.13) 3.77 0.41	(30.80) 3.77 0.41	(38.31) 3.07 0.41	{35.74} 1.51 0.41	0.05 0.41	0.05 0.41	0.05 0.41	0.05 0.41	0.05 0.43	0.05 0.41	0.05 0.41	0.05 0.41	0.05 0.38	0.05 0.38
319 320 321	Interest Earnings Rate on Cash Balances	Big Rivers estimate	4.00%																				
	Inflation	Big Rivers estimate	3.00%																				
324 325	Receivables (days)	Big Rivers estimate	30.00																				
	Payables (days)	Big Rivers estimate	52.50																				
328	Non-Patronage Tarable Allocation (Transaction)	Orrick Herrington/ Deloitte	15*																				
	Sequestered Cash Ending Balance	Smelter Retail Agreements, Section 1.1.119	35.00		Q																		
333 334	Balance Sheet (2005)																						
336	Property		1																				
337 338 339 340	Construction in Progress Depreciation & Amortization	Historic Balance Sheet Historic and Projected Balance Sheet Historic Balance Sheet Historic Balance Sheet	1,714.8 12.7 798.7 184.0	1,731-2 13.1 827.5 190.7	1,749.9 15.1	1.783.8 15.1	15.3	15.1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
342 343	Ending Cash Balanco	Historic Balance Sheet Historic Balance Sheet	0.0 67.8	0.0 96.5	0.0	0.0	0.0																
344 345 346	Fuel Stock & Related	Historic Balance Sheet Historic Balance Sheet Economic Reserve	16.3	17.5	26.3	19.9																	
347 348	Materials and Supplies Other	Historic Balance Sheet Historic Balance Sheet	0.7 0.3	0.8 4,1	0.8 1.3	0.8 1.1	157.0 1.1	157.0	127.8	96.8	69.9	34,4											
350 351	AMBAC/Credit Suisse July '98	Historic and Projected Balance Sheet Historic Balance Sheet	5.1 4.3	4.7	4.3	3.8	3.8	3.8															
352 353 354 355	Other Deferred Debits/PCB Refunding 10/01 LEM Settlement Note/Marketing Payment Total Assets	Historic Balance Sheet Historic Balance Sheet	18.1	17.1	16.1	15.1																	
356	Lizbilities Margins & Equities	Historic Balance Sheet	(251.9)	(218 3)	/17E (1)	1170 5																	
358	Long-Term Debt				(175.0)																		
360 361	Sale-Leaseback Obligation	Historic Balance Sheet Historic Balance Sheet	1,058.2	1,053.1 177.3	1,061.7 183.9																		

	Inputs																				2021	2022	2023
		Source:	005/ Othe		2007		ransactione T	fermini	2009	2010	2011	2012	2013	2014	2015	2015	2017	2018	2019	2020	2023	4011	2023
363	Accounts Payable	Estoric Balance Snest Estoric Balance Shest	13.1 0.4	12.6 0.2	18.0 1.0	12.7 1.0																	
364 365	Deferred Revenue (Credit Escrow)	Historic Balance Sheot	7.5	7.6	7.8	7.3	0.4 5.4	0.4 5.4															
366 367	Other Accrued Liabilities	Historic Balance Sheet Historic Balance Sheet	5.9	6.0 158.1	5.2 156.9	5.4 152.6	3.4	0.4															
368 369	Sale-Leaseback Gain	Historic Balance Sheet Historic Balance Sheet	1.0	0.4	0.3	0.2																	
370 371		Historic Balance Sheet																					
	Misc included in Other Property		ŝ																				
374 375																							
377	Sale-Leaseback	Sale-Lozseback	62.12					0.00	2,76	2,79	2.63	2.64	2.85	2.87	2.89	2.89	2.91	2.92	2.94	2.95	2,97	2.99	3.01
379		Sale-Leaseback	2.66	2.68	2.90	2.92		0.00	2.70	2.10													
	invesiment - Special Deposit (Ero)	Sale-Leaseback Sale-Leaseback	180.65 0.50	0.73	0.74																		
383	A000	Sale-Leaseback	170.95																				
385	Interest Incomé (VS)	Sale-Loaseback	11.67	12.07 12.39	12.48 12.82	12.61 12.16																	
387 388	Interest Expense (VS)	Sale-Leaseback	11.97		6.24	5.24																	
389 390	Cash Flow (Investment and Liability)	Sale-Leaseback	5.72	6.03	4.24																		
391	Sate-Leasedack - LeaseCo. Defeasance Income	Sale-Loaschack	63.53 (48.87)	64.06 (48.87)	64,47 (48,87)	64.47 (48.87)																	
	Rent Expense	Sale-Loaseback	(~0.07)	(-0.07)	(10.01)	,																	
395																							
397 398	WKE Residual Value Obligation																						
399	WKE Gen. Capex - Cum. Non-Incremental (RV Obligation Balance)	Historic results and adapted from 2007 Budger-REVISE	ID-MARCH 2	40.2	45.3	50.3	55.2																
401 402	Beginning Balance WKE Share of Non-Incremental Capex	Historic results and adapted from 2007 Budget REVISE Historic results and adapted from 2007 Budget REVISE Historic results and adapted from 2007 Budget REVISE			6.8																		
403 404	Amortization of WKE Share Unattributed Plugs	Historic results and adapted from 2007 Budget-REVISE Historic results and adapted from 2007 Budget-REVISE	D-MARCH 2	(145.1)																			
406	Incremental Beginning Balance	Historic results and adapted from 2007 Budget-REVISI Historic results and adapted from 2007 Budget-REVISI																					
407 408	Amonization of WKE Share	Historic results and adapted from 2007 Budget-REVISI	ED-MARCH 2	5.4	4.6	4.6	i																
	LG&E Rental Income Advance	Historic results and adapted from 2007 Budget-REVISI	ED-MARCH 2	47.9	50.8																		
413	Cash Flow Income Statement	Historic results and adapted from 2007 Budget-REVISI Historic results and adapted from 2007 Budget-REVISI Historic results and adapted from 2007 Budget-REVISI																					
414	Balance	(auto) w (war w auto)																					
41		Termination Agreement					51.0																
41	7 <u>Ford & Other Inventories</u> 3 9 <u>Celeman Scrubber Completion</u>	Termination Agreement/ file: Coleman Scrubber.xls					98.5																
42		Termination Agreement	1				15.7																
42							1.5																
42	4 Smeller Payment 5 Consent Fees	Smelter Coordination Agreement					1.5																
42																							
		ccount						157.0	0 157.	0 127.	8 96												
43	0 88	Assumed 4.28% interest earnings rate					157.0	0.0				.9 2		4									
43	2 Contribution	LG5E Unwind Deal Stipulated Releases to offset FAC + ES, net of surcharge rebate	<u>. </u>				157.0	157.0	(35. 0 127.					./)									
40	4 E8 5																						
4																							
43	8 11. LG&E Emissions Allowance 19 Volume (Ions)	Termination Agreement file: Annual Output - 9-8-08 - BREC Update.xls					14,000 140																
4		ine: Annual Casper • Service - Ence Openiana																					
4	IZ Lease Termination Payment I3 Assumed Make Whole to CoBank																						
	14 Total Expense 15 15 Total Expense																						
	 Lease Termination Payment from Unwind Counterparti Recognition of Deferred Gain on Original Lease Recognition for Deferred Gain on Original Lease 																						
4	 B Lease Termination Payment from Unwind Counterparti POL Termination 			0																			
4	60 DSL Termination 51 PMCC Share 52 Net SLB			0 i																			
	53 Depreciation		***																				

54	Source:	005/ Othe	2006	2007	2008	ransactions	e Termini	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Additional Book Depreciation File Vear non-incremental + in service 77 Average of Transmission and A&G Bepreciation as a Percentage of Gross PPE So Capitalization Peticy (Oxionger rate) Capital Depreciation Pate (encl. Environmental) Capital Depreciation Pate (Environmental) Capital Depreciation Pate (Environmental) Capital Depreciation Pate (Environmental) Capital Depreciation Pate (Environmental)	Historic Historic Historic deprecation rate Based on 1993 Depreciation Study Based on 1993 Depreciation Study	1 35 36	12.83 6.38 0.02 2011	13.12 10.69 0.62 2.4%	13.41 17.33 0.02		0.02															
33 14 <u>HMPAL Station Two</u> 15 Prior year non-incremental 16 Depreciation as a Percentage of Gross PPE 17	Historic Historic depreication mite		12.83 0.00	13.12 0.00	13.41 0.00		0.00															
88 <u>Other</u> 39 Prior year 70 Depreciation as a Percentage of Gross PPE	Historic Historic depreication rate		6.00 0.00	6.77 0.00	14.99 0.00		0.00															
71 72 <u>Book Depreciation & Amortization</u> 73 Generation																						
74 Big Rivers' Plants 75 HMPAL Station Two 76 Other 77	Historic Historic Historic		26.89 0.92 5.03	26.17 0.93 5.06	26.41 0.93 5.11		26.58 0.93 5.06	28.05 0.93 5.11														
78 Adjustment to Depreciation 19 9/24/07 Blendod Depreciation Amount 10 Income Tax Related	Coordination Agreement, Section 3.10	0					0.01976	0.0204	0.02103	0.02155	0.02167	0.02122	0.0209	0.02123	0.0215							
11 12. <u>Previously Expensed Marksting Payment</u> 13	Historic		0	0	0	4.196																
34 <u>Status Ouo Depreciation</u> 35	Protorma	23.69																				
6 WKE State of Capes 7 Non-Incremental 93 Incremental Dep 93 Terustante Obsp 9 Terustante Obsp	Participation Agreement - Cost Sharing Participation Agreement - Cost Sharing		5154 054 0.60	51 801 0.00	51% 80% 0.00		51% 80%	51% 80%	5154 80%	50% 60%	66% 66%	66% 66%	66% 66%	66% 66%	66% 66%	66 ×	66% 65%	66% 66%	56. 66.	66% 65%	66% 66%	
91 2005 Cumulative Balance of Capex not reflected in SQ 32 Other Temporary Differences 33	Historic Historic	149.87 19.65																				
94 <u>NOL Britatest</u> 55 Year 96			1983	1984	1984	1964	1984	1986	1987	1968	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	200
77 <u>Tax Bales</u> 38 Regular 39 AMT 30	Big Rivers' estimate Big Rivers' estimate	35% 20%																				
01 <u>ACE</u> 22 ACE Deduction 03 ACE % 34		75%	(1.23)	(1.22)	(1.22)		(0.00)	(1.19)	(1.17)	(0.80)	(0.58)	(0.50)	(0.35)	(0.13)	(0.03)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.0
35 <u>50 Addition</u> 36 <u>2006 AMT BB</u>	Historic	1	0.41 4.28	0.25 4.69	0.38 4.93	#REFt 5.32	0.26	0.44	0.43	0.71	1,61	0.47	0.90	1.35	1.77	2.26	4.72	5.56	6.36	6.71	6.76	7.6
77 9 <u>Noncationage NWH</u> 99 Offsystem Sales 10 Interest Income on Unrestricted Cash 11 Interest on Transilion Reserve 12 Interest on Economic Reserve	Historic Orrich Herrington/ Delaste Orrich Herrington/ Delaste Orrich Herrington/ Delaste Orrich Herrington/ Delaitte	1 PE PE NP PE	38%	0.46009	0	0	0	0	٥	0	0	0	0	0	O	0	0	0	0	0	0	I
13 14 Carbon Tax Cost (S/MWh) 15 Carbon Allowance Cost (S/MWh) 16 Carbon BY Allowance Cost (S/MWh)	57Aon charge starting in 2012, escalating 51/year 57Aon charge starting in 2012, escalating 51/year 5,073,775 tons in base year, 57Aon charge starting in 2	012, escalatin	g at St/yes	17																		
97 18 Smeller Excess Cash Rate Mitigation Account 19 BB		_																				
20 IE 21 Contribution 22 Release Amortization	Assumed 4.28% interest earnings rate Smelter Retail Agreement, Section ??? Releases to offset FAC increase from Feb. Filed Model	-																			<u> </u>	
23 EB 24 RUS Prepay Adjustments 25 Stated 26 GAAP 27 Interest earnings 28 Smetter Payment						-7					****** #**** {750.0}				0×0009 898480 898480					500.4		
29 Other Deferred Assers 30 Historic Purchases Through Close				2_1373 68	2.1373 12 4		2.1373	2.1373	2.1373	2.1373	2.1373	2.1373	2.1373	2.1373	2.1373	2.1373	2.1373	2.1373	Z 1373	2.1373	2.1373	2,137

	(SM) Unwind Allocation Pre-Transaction Allocation Lease Termination	ransacti on 0.000 0.000 0.000	Lease Terminati on 0.000 0.000 0	2009 1.000 0.000 0	2010 1.000 0.000 0	2011 1.000 0.000 0	2012 1.000 0.000 0	2013 1.000 0.000 0	2014 1.000 0.000 0	2015 1.000 0.000 0	2016 1.000 0.000 0	2017 1.000 0.000 0	2018 1.000 0.000 0	2019 1.000 0.000 0	2020 1.000 0.000 0	2021 1.000 0.000 0	2022 1,000 0.000 0	2023 1.000 0.000 0
2	Inventory Maintenance Fuel Purchases (S/mmbtu)	100% 1.56	1.96	1.95	2.15	2.25	2.50	2.69	1.85	1.85	1.87	1.90	1.91	1.94	1.96	1.98	2.02	2.04
4 5 6 7	Heat Value btu/ lb Heat Value mmbtu/ ton Coal Consumed (from PCM (000s tons)) Coal Consumed (Gbtus)		500 1.00 0 0	10,999 22.00 6,041 132,904	11,028 22.06 6,219 137,165	11,050 22.10 5,967 131,878	11,037 22.07 6,046 133,453	11,024 22.05 6,058 133,576	11,061 22.12 6,063 134,113	11,019 22.04 6,097 134,367	11,038 22.08 6,100 134,658	11,020 22.04 5,910 130,264	11,025 22.05 6,095 134,396	11,045 22.09 5,938 131,171	11,029 22.06 6,078 134,064	11,023 22,05 6,058 133,548	11,074 22.15 6,083 134,716	11,030 22.06 6,065 133,785
9 10 11	Volumes Fuel Inventory (Gbtus) BB		20,210	20,210	20,210	20,210	20,210	20,210	20,210	20,210	20,210 134,658	20,210	20,210 134,396	20,210 131,171	20,210 134,064	20,210	20,210 134,716	20,210 133,785
12 13 14 15	Fuel Purchased LG&E Additions to Fuel Inventory Fuel Consumed EB	20,210	(0) 20,210	(132,904 (132,904) 20,210	(137,165) 20,210	(131,878) 20,210	(<u>133,453)</u> 20,210	(133,576) 20,210	(<u>134,113)</u> 20,210	(134,367) 20,210	(<u>134,658)</u> 20,210	(130,264) 20,210	(134,396) 20,210	(131,171) 20,210	(134,064) 20,210	(133,548) 20,210	(134,716) 20,210	(133,785) 20,210
16 17 18	\$Millions		31.4	31.4	31.3	35.2	37.3	42.4	46.3	<u>29.2</u> 249.1	29.3 251.2	29.5 248.0	30.3 256.2	<u>30.4</u> 255.1	31.2 263.2	<u>31.5</u> 265.0	31.9 272.5	<u>32.7</u> 272.4
19 20 21 22	Fuel Purchased LG&E Additions to Fuel Inventory Fuel Expensed EB	31.4	0.0	(259.2 (259.4) 31,3	(290.5)	(294.8) 37.3	(328.9) 42.4	(356.0) 46.3	(265.1) 29.2	(249.0) 29.3	(250.9) 29.5	(247.2) 30.3	(256.2) 30.4	(254.3) 31.2	(262.8) 31.5	(264.5) 31.9	(271.7) 32.7	<u>(272.1)</u> 33.0

¢

< <u><return contents<="" of="" table="" to="" u=""> Unwind Allocation Pre-Transaction Allocation Transaction Index</return></u>	Transactior 0.000 0.000 1.000	2008 H2 0.000 0.000 0.000	2009 1.000 0.000 0.000	2010 1.000 0.000 0.000	2011 1.000 0.000 0.000	2012 1.000 0.000 0.000	2013 1.000 0.000 0.000	2014 1.000 0.000 0.000	2015 1.000 0.000 0.000	2016 1.000 0.000 0.000	2017 1.000 0.000 0.000	2018 1.000 0.000 0.000	2019 1.000 0.000 0.000	2020 1.000 0.000 0.000	2021 1.000 0.000 0.000	2022 1.000 0.000 0.000	2023 1.000 0.000 0.000
1 SO2 Emissions Inventory																	
2 3 Price (\$/ ton)* 4 LG&E Contribution 5 Excess Sold Annually (2008-2010)	14,000 100%	\$ 140	S 140	S 115 (S 868	S 878	5 875	\$ 850	\$ 842	\$ 825	\$ 757	S 706	\$ 561	\$ 413 :	\$ 350	\$ 302	\$ 279
6 Excess Sold Annually (post 2010) 7 CAIR Factor	100% 1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86
8 9 Allowances (in tons)	an an an an an an an an an an an an an a	an na san san		The second second		14,000	44.000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000
10 <u>BB</u>		14,000	14,000 48,979	14,000 48,979	14,000 24,489	14,000 24,489	24,489	24,489	18,352	18,352	18,352	18,352	18,352	17,125	18,352	18,352	18,352
11 Allocated	14,000	•	48,979 (19,145)	(20,453)	(19,301)	(19,812)	(19,341)	(19,855)	(20,836)	(21,282)	(19,910)	(21,199)	(20,456)	(19,823)	(20,812)	(21,263)	(20,716)
12 Consumed 13 Sold			(29,834)	(28,526)	(5,188)	(4,677)	(5,148)	(4,635)	2,484	2,929	1,558	2,847	2,104	2,697	2,460	2,911	2,364
the second second second second second second second second second second second second second second second se	14,000					· · · · · ·	· ·			,	•			•		•	
14 Net Contributed 15 Withdrawn/ Sold	14,000					~								·			-
15 Withdrawn/ Sold 16 EB	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000
17 Dollars (Balance Sheet)				an control to the					Ren ale del seño	in the second	laineis actories	and the second					
18 BB	0	P	4	•	•	-	-			<u> </u>	<i>,</i>	•	•	•	-	`	-
19 Net Contributed	1,960		•	•		•		-				•	`	-		•	
20 Withdrawn/ Sold				-				•				· · · ·	•	-	-	· · · · · · · · · · · · · · · · · · ·	
21 EB	1,960	•	-	•	•	~	•	·	•		-	,					
22 Average Inventory Value (S/ Allowance)	140			•	•	•	•	•			•						
23																	
24																	
25 Income Statement																	
26 Revenue			4,177	3,280	4,503	4,106	4,505	3,939	(2,091)	(2,417)	(1,180)	(2,010)	(1,180)	(1,114)	(861)	(879)	(659)
27 Sales 28 Allocation to inventory	1,960		-4,177	0,200	.,						•		•	•		•	•
29 Expense	1000																
30 Purchases			<u> </u>	<u>.</u>	<u>.</u>	<u> </u>	;	<u> </u>	<u></u>			<u> </u>				(070)	(659)
31 Net	1,960	•	4,177	3,280	4,503	4,106	4,505	3,939	(2,091)	(2,417)	(1,180)	(2,010)	(1,180)	(1,114)	(861)	(879)	(659)
32																	
33 Cash Flow							4.505	0.000	(2,091)	(2,417)	(1,180)	(2,010)	(1,180)	(1,114)	(861)	(879)	(659)
34 Sales	•		4,177	3,280	4,503	4,106	4,505	3,939	(2,091)	(2,417)	(1,100)	(2,010)	(1,100)	(,,,, , ,	(001)	(0.0)	
35 Purchases		<u>, , , , , , , , , , , , , , , , , , , </u>	<u> </u>	<u> </u>				3,939	(2,091)	(2,417)	(1,180)	(2,010)	(1,180)	(1,114)	(861)	(879)	(659)
36 Net		•	4,177	3,280	4,503	4,106	4,505	3,939	(2,091)	(4,417)	(1,100)	(2,0,0)	(11100)	1,11,141	(00.)	(2.0)	/
37																	
38 Balance Sheet (Incremental)		_	4,177	7,457	11,961	16,067	20,572	24,511	22,419	20,003	18,823	16,813	15,633	14,519	13,658	12,779	12,119
39 Cash	1,960	1.960	1,960	1.960	1,960	1,960	1,960	1,960	1,960	1,960	1,960	1,960	1,960	1,960	1,960	1,960	1,960
40 Emissions Inventory	1,960	1,960	6,137	9,417	13,921	18,027	22,532	26,471	24,379	21,963	20,783	18,773	17,593	16,479	15,618	14,739	14,079
41 Total	1,900	1,900	Q,13/	3,437	10,021	10,067	2002	6			,						

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Emiss, Inventory

<-Return to Table of Contents Unwind Allocation Pre-Transaction Allocation Transaction Index	Transactio 0.000 0.000 1.000	0.000 0.000	2009 1.000 0.000 0.000	2010 1.000 0.000 0.000	2011 1.000 0.000 0.000	2012 1.000 0.000 0.000	2013 1.000 0.000 0.000	2014 1.000 0.000 0.000	2015 1.000 0.000 0.000	2016 1.000 0.000 0.000	2017 1.000 0.000 0.000	2018 1.000 0.000 0.000	2019 1.000 0.000 0.000	2020 1.000 0.000 0.000	2021 1.000 0.000 0.000	2022 1.000 0.000 0.000	2023 1.000 0.000 0.000
43 NOX Emissions Inventory 44 45 Price (\$/ ton)* 46 LG&E Contribution 47 Excess Sold Annually	\$ 700 100%		\$ 700 s	\$ 650	\$ 2,120	\$ 1,951	\$ 1,909	\$ 2,570	\$ 3,071	\$ 2,863	\$ 2,764	\$ 2,665	S 2,564	\$ 2,574	\$ 2,578	\$ 2,581	\$ 2,584
48 49 Allowances 50 BB 51 Allocated 52 Consumed 53 Sold 54 Net Contributed			4,652 (5,141) <u>489</u>	4,652 (5,105) 453	11,068 (13,489) 2,421	11,057 (13,371) 2,314	11,057 (13,531) 2,474	11,057 (13,340) 2,284	8,944 (13,579) 4,635	8,944 (13,378) <u>4,435</u>	8,491 (13,303) 4,811	8,297 (13,413) 5,116	8,153 (13,214) 5,051	7,948 (13,553) <u>5,605</u>	7,713 (13,445) 5,732	7,491 (13,365) <u>5,874</u>	7,419 (13,558) <u>6,139</u>
55 Withdrawn/ Sold 56 EB 57 Dollara (Balance Sheet) 58 BB 59 Net Contributed 60 Withdrawn/ Sold)					Mill Fritzen		· · ·	· 			<u></u>			· · · · · · ·	
61 EB 62 Average Inventory Value (S/ Allowance) 63 64 65 Income Statement		-				-	-	-	- - ·	-		-		-	-	•	
66 Revenue 67 Sales 68 Allocation to Inventory 69 Expense 70 Purchases 71 Net			(342)	(295) (295)	(5,132)	(4.514)	(4,723)	(5,870)	(14,233)	(12,697)	(13,299)	(13,634)	(12,976)	(14,428)	(14,776)	(15,160)	(15,862)
72 73 Cash Flow 74 Sales 75 Purchases 76 Net 77			(342)	(295) (295)	(5,132)	(4,514)	(4,723)	(5,870)	(14,233)	(12,697)	(13,299) (13,299)	(13,634) (13,634)	(12,976) (12,976)	(14,428)	(14,776)	(15,160) 	(15,862)
77 78 Balance Sheet (Incremental) 79 Cash 80 Emissions Inventory 81 Total			(342) 	(637) 	(5,769) 	(10,283) (10,283)	(15,005)	(20,875) (20,875)	(35,109) (35,109)	(47,805)	(61,104) (61,104)	(74,738)	(87,713)				(147,940)

Leas Buyout Summary

Lease Buyout Impact	Total	Journal E	intries
	TOTEL		
		Debit	Credit
Accesta			
Assets Sale-Leaseback Investments	(196.8)	-	196.8
Cash & Investments	(59.6)	-	59.6
ousi a modulono			
Assets	(256.4)		
	a de ser en de décar La factorie de décar		
Liabilities & Equities	1946-03-0945-04 - 04		
Equities	(16.1)	16.1	-
Sale-Leaseback Obligation & Unamortiz		-	-
Obligation	(189.7)	189.7	-
Unamortized Gain	(50.6)	50.6	-
Total	in op einer seven den	-	-
Liabilities & Equities	(256.4)		
Check	-	256.4	256.4

BIG RIVERS ELECTRIC CORPORATION'S
RESPONSE TO THE ATTORNEY GENERAL'S OCTOBER 24, 2008
SUPPLEMENTAL REQUEST FOR INFORMATION TO JOINT APPLICANTS
PSC CASE NO. 2007-00455
November 7, 2008

Item 27) Exhibit PWT-9 attached to the Supplemental Testimony of Paul W. Thompson provides the "resolution" of four "Existing Contract Disputes." Provide the current estimated amount, separately, to resolve each of the four disputed items assuming the Unwind Transaction proceeds as proposed by the Joint Applicants. Please also indicate which party or entity would bear those estimated costs. This question is directed to information in the testimony of Paul W. Response) Thompson. Big Rivers defers to Mr. Thompson's response to Item 4 of this data request.

Mark A. Bailey Witness) David A. Spainhoward

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BIG RIVERS ELECTRIC CORPORATION'S RESPONSE TO THE ATTORNEY GENERAL'S OCTOBER 24, 2008 SUPPLEMENTAL REQUEST FOR INFORMATION TO JOINT APPLICANTS PSC CASE NO. 2007-00455 November 7, 2008

Item 28) Please provide "what if" Unwind Financial Model runs performed by or for BREC in the period September 1, 2008 to current, to reflect alternative resolutions contemplated to obtain Henderson's consent to the proposed transaction. For each "what if" model run, please specify the input assumptions for the model on the parameters which were assumed to obtain Henderson's consent.

Response) There are no "what if" Unwind Financial Model runs performed by or for2Big Rivers in the period September 1, 2008 to current to reflect alternative resolutions3contemplated to obtain Henderson's consent to the Unwind Transaction. Big Rivers has4not performed any such sensitivity analyses on the Unwind Financial Model because, as5Big Rivers has informed HMP&L and Commission Staff at the October 20, 20086Informal Conference, any alternative resolution to obtain Henderson's consent to the7proposed transaction cannot come at any increased cost to Big Rivers or its Members –8beyond the amounts already provided for in the Unwind Financial Model.

Witness) Mark A. Bailey
Please summarize the key points which define the contractual relationship, Item 29) rights and responsibilities of Henderson and BREC (separately) with regard to the operation of Station Two, from a business perspective.

The key documents which have defined the relationship of Big Rivers and 9 Response) the City of Henderson ("City") since 1970 are the Power Plant Construction and Operation Agreement (the "Operating Agreement"), a Power Sales Contract (the "Power Sales Contract") and a Joint Facilities Agreement, each dated August 1, 1970. Each has been amended a number of times since its execution, including in 1998 in connection with the assumption by WKE Station Two Inc. (predecessor to WKEC) of most of Big Rivers' obligations under these three contracts at the time of Big Rivers' emergence from bankruptcy. Big Rivers was not released from its obligations under the Operating 16 17 Agreement, the Power Sales Contract and the Joint Facilities Agreement when they were assumed by WKEC. Big Rivers remains secondarily liable for all those obligations. 18 Big Rivers operated Station Two, as an independent contractor, in accordance with the 19 provisions of the Operating Agreement from the commencement of operation of Station 20 Two until Big Rivers emerged from bankruptcy in 1998. In that capacity, Big Rivers 21 22 provided all operating personnel, materials, supplies (with the exception of coal and some reagents) and technical services required for the operation of Station Two. The 23 Operating Agreement includes a specific identification of those costs to be allocated to 24 the operation of Station Two. The Operating Agreement addresses budgeting, 25 accounting, auditing, billing and payments associated with the operation of Station Two. 26 The Operating Agreement also includes rights of first offer with respect to Station Two 27 and Big Rivers' Reid Station. Additionally, please refer to Big Rivers' response dated 28 29 November 7, 2008 to the Attorney General's October 24, 2008 Supplemental Data Request Items 31 and 32. 30

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Big Rivers purchased power from the City under the Power Sales Contract from the commencement of operation of Station Two until Big Rivers' emerged from bankruptcy in 1998. The Power Sales Contract provides a mechanism for determining the capacity of Station Two from time to time and for allocating capacity between the City and Big Rivers based upon five year assessments of the requirements of the City for its internal needs and annual adjustments of up to 5 MW.

Big Rivers is obligated to take and pay for capacity from Station Two in excess of that designated by the City as required for the "needs of the City and its inhabitants" as such phrase is defined in the Power Sales Contract. The Power Sales Contract also establishes limits on the City's ability to alienate its generating capacity from Station Two. The Power Sales Contract establishes pricing and payment provisions relating to the energy purchased by Big Rivers there under as well as for an annual audit of the financial accounts of Station Two.

Pursuant to the Joint Facilities Agreement, Big Rivers and the City have agreed to the use of certain facilities used in the operation of both Station Two and Big Rivers' Reid Station. The Joint Facilities Agreement addresses the ownership, maintenance and expenses associated with these facilities.

21 In addition to the Operating Agreement, Power Sales Contract and Joint Facilities 22 Agreement, Big Rivers and the City also executed a System Reserves Agreement dated 23 January 1, 1974. Furthermore, the City, Big Rivers and WKE Station Two Inc. executed the Station Two G & A Allocation Agreement dated July 15, 1998, which amended and 24 restated a prior Agreement dated February 15, 1991 between the City and Big Rivers, sets 25 forth an agreement among such three parties relating to the allocation to Station Two of 26 (i) the costs of maintaining an inventory of parts for Station Two and (ii) the parties' 27 general and administrative expenses incurred in the performance of their respective 28 obligations under the Operating Agreement, the Power Sales Contract and the Agreement 29 and Amendment to Agreements dated July 15, 1998 by and among the City, Big Rivers 30 and three subsidiaries of LG&E (the "Station Two Agreement"). 31

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In 2005, the City, Big Rivers, WKE Station Two Inc. and LG&E Energy Marketing executed a 2005 Amendments to Contracts dated as of April 1, 2005 (the "2005 Amendments") amending the Operating Agreement, the Power Sales Contract and the Joint Facilities Agreement in order to accommodate the design, acquisition, construction, testing, operation, maintenance and funding of the SCR System for Station Two and to provide for an allocation of the NOx allowances associated with Station Two in light of the parties' respective contributions toward the cost of the Station Two SCR System. The amendments to the Power Sales Contract affected by the 2005 Amendments also provide for the continued maintenance by Big Rivers and the City of separate Station Two Operations and Maintenance Funds in the amounts of \$400,000 and \$100,000, respectively. In accordance with the aforementioned Station Two Agreement, in 1998 Big Rivers assigned most of its rights under the Operating Agreement, the Power Sales Contract and the Joint Facilities Agreement to WKE Station Two Inc. (predecessor in interest to WKEC), and WKE Station Two Inc. assumed most of Big Rivers' obligations under such agreements. Big Rivers does retain certain obligations to the City in respect of incremental environmental operation and maintenance costs associated with Station Two and for certain capital improvements to Station Two. Should there be no Unwind, the rights assigned to WKEC by contract revert to Big Rivers on January 1, 2024 without action by the City.

From the inception of the Big Rivers – City relationship for Station Two commencing with the execution of the Operating Agreement, the Power Sales Contract and the Joint Facilities Agreement, the arrangement has provided Big Rivers (and during the period of WKEC operation, WKEC) with a reliable source of base load generation to serve the needs of Big Rivers' members at reasonable costs. This is so, notwithstanding the fact that, over the term of the arrangement, Big Rivers has paid a higher percentage of the total capital costs of Station Two in the form of capacity payments than the percentage of the total energy output from Station Two which Big Rivers has taken for its own use.

> Item 29 Page 3 of 4

From the City's perspective, the Station Two arrangements have provided it with 1 2 a source of base load generation to satisfy the needs of its consumers which, because of 3 the economies inherent in a larger generating facility than the City's own needs would support, was at an attractive cost. Big Rivers' take and pay obligation in the Power Sales 4 Contract with respect to capacity from Station Two in excess of the "needs of the City 5 and its inhabitants" has provided the City significant flexibility in satisfying its future 6 7 capacity requirements while paying none of the capacity costs until such time as it desires 8 to increase its designated capacity. Until 2005 (and only for the SCR capital), the 9 agreements provided for no reimbursement to Big Rivers or WKEC for previously incurred capital costs as the City's capacity reservation increases. Indeed, the form of 10 amendment to the Power Sales Contract which Big Rivers has submitted to the Kentucky 11 Public Service Commission in connection with its request for the KPSC's consent for 12 the Unwind, will enhance the existing arrangements from the City's perspective by 13 providing that Big Rivers will take and pay for excess energy resulting from the City's 14 failure to use the full amount of energy associated with its reserved capacity and 15 16 providing that Big Rivers will pay \$2.50 per MWH for this energy as opposed to \$1.50 per MWH in the existing arrangements (along with all other operating costs such as fuel, 17 reagent, allowances, etc.). 18

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Witness) David A. Spainhoward

1		BIG RIVERS ELECTRIC CORPORATION'S RESPONSE TO THE ATTORNEY GENERAL'S OCTOBER 24, 2008 LEMENTAL REQUEST FOR INFORMATION TO JOINT APPLICANTS PSC CASE NO. 2007-00455 November 7, 2008			
2					
3					
4	Item 30)	To what extent does Henderson believe the costs of rectifying its concerns			
5	regarding mail	intenance and condition of Station Two exceed the \$3 million offered by			
6	E.ON to meet	t such concerns.			
7					
8					
9	Response)	Big Rivers does not know what the City of Henderson and the City of			
10	Henderson, U	Itility Commission ("Henderson") actually "believe" about "the cost of			
11	rectifying its	concerns regarding maintenance and condition of Station Two." The			
12	positions take	en by Henderson on this subject are reflected in the correspondence			
13	furnished in response to Item 33 of this data request.				
14					
15	Witness)	Mark A. Bailey			
16		David A. Spainhoward			
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		Item 30 Page 1 of 1			

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Item 31)Please assume the Unwind Transaction closes as proposed. For eachcapital dollar that is necessary to rectify Henderson concerns regarding the operatingcondition of Station Two, how much of that is BREC obligated to pay?

Response) Big Rivers is not fully aware of the complete scope of Henderson's concerns regarding the operating condition of Station Two, what is necessary to rectify those concerns, or where capital expenditures would be made to rectify those concerns. However, we do know what the contractual relationship requires for cost splitting. Big Rivers is obligated to pay its contractual share of capital and expense items. The breakdown of cost splits for capital projects are as follows:

For capital projects, Big Rivers will be obligated to pay the following percentage of each capital dollar based first on the below-specified megawatt splits and based further on whether the capital project is Station Two-related only, or is an item shared between Station Two and Reid, or is one shared between Station Two, Reid and Green.

Following is the listing of megawatt splits and the obligation Big Rivers will be responsible for on expenditures through May 31, 2009 based on the current megawatt split between Big Rivers and the City of Henderson (95 megawatts of the 312 megawatt capacity of HMP&L Station Two). Were the City of Henderson's reservation higher or lower, the calculated split percentage would change in accordance with the agreements.

24		Split			
25		Percentage	Spending	Allocation	
26	Station Two Only - 217/312	0.6955	\$1 00	\$0.70	Big Rivers Obligation of each Capital Dollar
27	Station Two & Reid Common				Big Rivers Obligation of each
28	- 282/377	0 7480	\$1 00	\$0 75	Capital Dollar
29	Station Two, Reid & Green				Big Rivers Obligation of each
30	Common - 736/831	0.8857	\$1 00	\$0 89	Capital Dollar
31					
32					
1					

	SUP	BIG RIVERS ELECTRIC CORPORATION'S RESPONSE TO THE ATTORNEY GENERAL'S OCTOBER 24, 2008 PLEMENTAL REQUEST FOR INFORMATION TO JOINT APPLICANTS PSC CASE NO. 2007-00455 November 7, 2008
1	****	
1 2	Witness)	David A. Spainhoward
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3.3		Item 31
		Page 2 of 2

Item 32) Please assume the Unwind Transaction closes as proposed. For each expense dollar that is necessary to rectify Henderson concerns regarding the operating condition of Station Two, how much of that is BREC obligated to pay?

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Big Rivers is not fully aware of the complete scope of Henderson's Response) concerns regarding the operating condition of Station Two, what is necessary to rectify those concerns, or where expense expenditures would be made to rectify those concerns. However, we do know what the contractual relationship requires for cost splitting. Big Rivers is obligated to pay its contractual share of capital and expense items. The 14 breakdown of cost splits for expense projects are as follows:

16 For expense items such as O&M Labor, O&M Non-Labor, SCR Costs, etc., the split percentage of costs attributable to Station Two that Big Rivers will be obligated to 17 pay the following percentage of each expense dollar based on the following megawatt 18 splits based on whether the expenditures are Station Two related only or if the 19 expenditures are shared with Reid and Station Two or Reid/Station Two and Green on 20 common facilities. 21

23		Split Percentage	Spending	Allocation		
24		reicentage	opending	Alboaton		
25	Station Two Only - 217/312	0.6955	\$1 00	\$0.70	Big Rivers Obligation of each Expense Dollar	
26	Station Two & Reid				Big Rivers Obligation of each	
27	Common - 282/377	0.7480	\$1 00	\$0 75	Expense Dollar	
28	Station Two, Reid &					
29	Green Common - 736/831	0.8857	\$1.00	\$0 89	Big Rivers Obligation of each Expense Dollar	
30	7 30/03 1	0.0007	ψ1:00	φ0 00		
31						
32						
33	Item 32					
	Page 1 of 3					

For Scrubber costs that are directly related to the Station Two Scrubber, Big Rivers will 1 pay an allocated share of the cost using the 217/312 obligation split percentage. For 2 3 Scrubber costs that will be shared based on Green Station Assets in common use with the HMP&L Scrubber, the following methodology is used to determine the percentage 4 5 charged to Station Two each month. For O&M Labor and Non-labor related costs to the reagent prep area of the scrubber, a percentage attributable to Station Two is determined 6 7 based on the additive flow meters. These flow meters determine the amount of lime used by each of Green and Station Two. This calculated percentage of Station Two lime usage 8 is then applied to the costs incurred each month in the accounts for Reagent Prep Labor 9 and Non-labor, and the resulting calculated Station Two costs will then be allocated 10 between Big Rivers and HMP&L using the 217/312 split's split percentage of 0.6955 11 percent. For O&M labor and non-labor related costs in the waste treatment area, the 12 allocation percentage between the various units is based on bleed flow meters. These 13 bleed flow meters determine the amount of solid waste stacked out each month by each 14 unit. For each unit, this percentage is then applied to the total costs incurred each month 15 in the accounts for Waste Treatment Labor and Non-labor, and the allocated costs for 16 Station Two's waste costs will then be allocated between Big Rivers and HMP&L using 17 the 217/312 split's 0.6955 percentage. The percentages from the flow meters among the 18 various units will change each month. Big Rivers will also pay its obligation for the 19 hauling cost of the Station Two solid waste to the Landfill based on the 217/312 split 20 21 percentage.

31 32 33

	BIG RIVERS ELECTRIC CORPORATION'S RESPONSE TO THE ATTORNEY GENERAL'S OCTOBER 24, 2008 SUPPLEMENTAL REQUEST FOR INFORMATION TO JOINT APPLICANTS PSC CASE NO. 2007-00455 November 7, 2008						
1	Reagent Prep allocatio	on Example			Reagent Prep Labor	\$	1.00
2		Tons Percent	G/SII Allocation	Allocation	Reagent Prep Non-Labor	\$	1.00
.3	Reagent Lime Used	12615			Total	\$	2.00
4	Used by Green	7935 62.9%	\$ 1.26				
5	Used by Station II	4680 37 1%	\$ 0.74	\$ 0.52	Big Rivers Obligation 217/3 \$0.74	312 of	the
7	The Waste Treatment		ollow the sar	ne			
8	methodology as the Re	eagent Prep					
9	The City of Henderson	nurchases its own	n coal and re	anent lime	Big Rivers does not have an	oblia	ation
10	for these costs					02.19	at off
11							
12							
1.3							
14	Witness) David	A. Spainhoward					
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