

HEBER LIGHT & POWER
2014 RATE STUDY

PRELIMINARY
COST OF SERVICE
AND
RATE DESIGN

APRIL 15, 2014

SUMMARY

**Heber Light & Power
Electric Utility Cost of Service Study**

**SUMMARY
Revenue Excess/Deficiency Under Present and Proposed Rates
for the Projected Test Year FY 2014
(\$)**

Ln.	Description	Ref.	Residential			Commercial				Street Lights	Total System
			Tier 1	Tier 2	Total	Tier 1	Tier 2	Tier 3	Total		
			(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
Revenues from Existing Rates											
1	Base	Sch. G	\$	1,306,167	-	1,306,167	-	-	-	92,274	1,398,441
2	Energy	Sch. G	\$	4,925,343	1,519,598	6,444,940	771,796	374,776	4,665,688	5,812,259	12,257,200
3	Demand	Sch. G	\$	-	-	-	-	-	-	-	-
4	Total Revenue from Existing Rates	CALC	\$	6,231,510	1,519,598	7,751,108	771,796	374,776	4,665,688	5,812,259	13,655,641
5	Less: Donated Street Light Accounts	CALC	\$	-	-	-	-	-	-	(73,819)	(73,819)
6	Revised Revenue from Existing Rates	CALC	\$	6,231,510	1,519,598	7,751,108	771,796	374,776	4,665,688	5,812,259	13,581,821
Total Allocated Revenue Requirements											
7	Demand	Sch. A	\$	3,761,077	924,015	4,685,093	273,994	189,961	3,092,981	3,556,936	8,252,650
8	Energy	Sch. A	\$	2,616,327	642,775	3,259,102	206,774	143,356	2,334,162	2,684,292	5,964,210
9	Customer	Sch. A	\$	259,833		259,833	34,503		34,503	2,836	297,172
10	Total Allocated Revenue Requirements	CALC	\$	6,637,238	1,566,790	8,204,028	515,271	333,317	5,427,143	6,275,731	14,514,032
11	Reallocation of Donated S.L. Accounts	CALC	\$	12,568	2,967	15,535	976	631	10,277	11,884	(27,418)
12	Restated Allocation of Rev. Requirements	CALC	\$	6,649,806	1,569,757	8,219,563	516,247	333,948	5,437,420	6,287,615	14,514,032
13	Revenue Excess (Deficiency)	CALC	\$	(418,296)	(50,159)	(468,455)	255,549	40,828	(771,732)	(475,356)	11,600
14	Ratio of Revenue to Allocated Revenue Req.	CALC	#	0.94	0.97	0.94	1.50	1.12	0.86	0.93	2.69
15	Unadjusted Required Increase (Decrease)	CALC	%	6.71%	3.30%	6.04%	-33.11%	-10.89%	16.54%	8.18%	-62.86%
16	Across Board Required Rate Increase	CALC	%	6.86%	6.86%	6.86%	6.86%	6.86%	6.86%	6.86%	6.86%
17	Across the Board Revenue Increase	CALC	\$	427,710	104,300	532,010	52,973	25,723	320,237	398,934	932,211
Restated Revenue Requirements											
18	Total	CALC	\$	6,659,220	1,623,898	8,283,118	824,769	400,499	4,985,925	6,211,193	14,514,032
19	Demand	CALC	\$	3,773,534	957,695	4,731,228	438,569	228,248	2,841,527	3,508,344	8,245,684
20	Energy	CALC	\$	2,624,992	666,203	3,291,196	330,973	172,251	2,144,399	2,647,622	5,950,795
21	Customer	CALC	\$	260,694	-	260,694	55,227	-	-	55,227	317,553
22	Total	CALC	\$	6,659,220	1,623,898	8,283,118	824,769	400,499	4,985,925	6,211,193	14,514,032
23	Projected kWh Sales	Sch. C	kWh	65,453,057	16,080,401	81,533,458	5,172,892	3,586,370	58,394,091	67,153,354	149,207,557
24	Less: Donated SL Accounts	CALC	kWh	-	-	-	-	-	-	(416,596)	(416,596)
25	Adjusted kWh Sales	CALC	kWh	65,453,057	16,080,401	81,533,458	5,172,892	3,586,370	58,394,091	67,153,354	148,790,961
26	Average Cost Per kWh Under Current Rates	CALC	\$/kWh	0.09521	0.09450	0.09507	0.14920	0.10450	0.07990	0.08655	0.17720
27	Average Cost Per kWh Under ATB Increase	CALC	\$/kWh	0.10174	0.10099	0.10159	0.15944	0.11167	0.08538	0.09249	0.18936
Rate Increase (Decrease)											
28	Per Unit	CALC	\$/kWh	0.00653	0.00649	0.00653	0.01024	0.00717	0.00548	0.00594	0.01216
29	Percent	CALC	%	6.9%	6.9%	6.9%	6.9%	6.9%	6.9%	6.9%	6.9%

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Ln.	Description	Ref.	Residential			Commercial				Street Lights	Total System
			Tier 1	Tier 2	Total	Tier 1	Tier 2	Tier 3	Total		
			(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
	Rev. Requirement Breakdown (%)										
30	Demand	CALC %	25.9%	6.4%	32.3%	1.9%	1.3%	21.3%	24.5%	0.1%	56.9%
31	Energy	CALC %	18.0%	4.4%	22.5%	1.4%	1.0%	16.1%	18.5%	0.1%	41.1%
32	Customer	CALC %	1.8%	0.0%	1.8%	0.2%	0.0%	0.0%	0.2%	0.0%	2.0%
33	Total	CALC %	45.7%	10.8%	56.5%	3.6%	2.3%	37.4%	43.2%	0.2%	100.0%
34	Purchased Power as Percent of Total R.R.	CALC %	34.37%	35.77%	34.64%	34.99%	37.50%	37.50%	37.30%	52.96%	35.83%
	Per-unit Annual Revenue Requirements										
35	Demand	CALC \$/kW			203.33				196.79	102.82	200.35
36	Energy	CALC \$/kWh			0.0404				0.0394	0.0230	0.0399
37	Customer	CALC \$/Cust.&Lt.			28.74				45.85	1.38	27.71
38	Total	CALC \$/kWh			0.1016				0.0925	0.0379	0.0973
	Total Annual kWh Sales										
39	Winter (Nov. - May)	CALC kWh	38,781,795	9,952,525	48,734,320	3,022,660	2,095,849	31,869,216	36,987,724	303,768	86,025,812
40	Summer (June - Oct.)	CALC kWh	26,671,263	6,127,876	32,799,138	2,150,232	1,490,522	26,524,875	30,165,630	216,977	63,181,745
41	Total	CALC kWh	65,453,057	16,080,401	81,533,458	5,172,892	3,586,370	58,394,091	67,153,354	520,745	149,207,557
	Average Monthly kWh Sales										
42	Winter (Nov. - May)	CALC kWh	5,540,256	1,421,789	6,962,046	431,809	299,407	4,552,745	5,283,961	43,395	12,289,402
43	Summer (June - Oct.)	CALC kWh	5,334,253	1,225,575	6,559,828	430,046	298,104	5,304,975	6,033,126	43,395	12,636,349
44	Total	CALC kWh	5,454,421	1,340,033	6,794,455	431,074	298,864	4,866,174	5,596,113	43,395	12,433,963

Heber Light and Power
Electric Utility Cost of Service Study

COST OF SERVICE
Allocation of Revenue Requirements
for the Projected Test Year FY 2014
(\$)

Ln.	Description	Ref.	Projected Test Year Rev. Req. (a)	Allocation Basis (b)	Residential			Commercial			Street Lights (j)	Total System (k)	
					Tier 1 (c)	Tier 2 (d)	Total (e)	Tier 1 (f)	Tier 2 (g)	Tier 3 (h)			Total (i)
<u>Allocation Factors</u>													
1	No. of Customers	Sch. D			0.874353		0.874353	0.116104			0.116104	0.009543	1.000000
2	kWh Sales	Sch. C			0.438671	0.107772	0.546443	0.034669	0.024036	0.391361	0.450067	0.003490	1.000000
3	NCP Demand	Sch. E			0.453873	0.111507	0.565380	0.033368	0.023134	0.376674	0.433176	0.001444	1.000000
4	CP Demand	Sch. F			0.459997	0.113011	0.573008	0.032820	0.022754	0.370489	0.426063	0.000929	1.000000
<u>Allocation of Revenue Requirements</u>													
<u>Generation</u>													
5	Gas Generation	Sch. B	(0)	kWh Sales	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
6	Heber Plants	Sch. B	680,875	kWh Sales	298,680	73,379	372,060	23,605	16,366	266,468	306,439	2,376	680,875
7	O & M Generation Plants	Sch. B	0	CP Demand	-	-	-	-	-	-	-	-	-
8	Wages - Plants	Sch. B	925,151	CP Demand	425,567	104,553	530,119	30,364	21,051	342,758	394,172	859	925,151
9	Medical Insurance	Sch. B	212,148	CP Demand	97,587	23,975	121,563	6,963	4,827	78,598	90,388	197	212,148
10	Employee Benefits & Retirement	Sch. B	237,215	CP Demand	109,118	26,808	135,926	7,785	5,398	87,885	101,069	220	237,215
11	Sub-total Generation	CALC	2,055,389		930,953	228,715	1,159,668	68,717	47,642	775,710	892,068	3,653	2,055,389
<u>Purchased Power Costs</u>													
12	Total	Sch. B	5,200,757	kWh Sales	2,281,422	560,496	2,841,918	180,306	125,006	2,035,376	2,340,688	18,151	5,200,757
<u>Distribution</u>													
13	Wages - Distribution System	Sch. B	1,039,119	NCP Demand	471,629	115,869	587,497	34,673	24,039	391,409	450,121	1,501	1,039,119
14	Repairs and Maintenance	Sch. B	300,000	NCP Demand	136,162	33,452	169,614	10,010	6,940	113,002	129,953	433	300,000
15	Materials	Sch. B	475,000	NCP Demand	215,590	52,966	268,556	15,850	10,989	178,920	205,758	686	475,000
16	Vehicle Expense	Sch. B	252,000	NCP Demand	114,376	28,100	142,476	8,409	5,830	94,922	109,160	364	252,000
17	Communications	Sch. B	69,432	NCP Demand	31,513	7,742	39,255	2,317	1,606	26,153	30,076	100	69,432
18	Medical Insurance	Sch. B	270,012	NCP Demand	122,551	30,108	152,659	9,010	6,246	101,706	116,963	390	270,012
19	Employee Benefits & Retirement	Sch. B	265,147	NCP Demand	120,343	29,566	149,909	8,847	6,134	99,874	114,855	383	265,147
20	Sub-total Distribution	CALC	2,670,711		1,212,164	297,802	1,509,967	89,116	61,784	1,005,986	1,156,886	3,858	2,670,711
<u>Administrative & General</u>													
21	Generation-related	Sch. B	668,607	CP Demand	307,557	75,560	383,117	21,944	15,214	247,711	284,868	621	668,607
22	Distribution-related	Sch. B	1,014,877	NCP Demand	460,625	113,166	573,791	33,864	23,478	382,277	439,620	1,466	1,014,877
23	Customer-related	Sch. B	259,960	# of Cust	227,297		227,297	30,183			30,183	2,481	259,960
24	Sub-total Administrative & General	CALC	1,943,444		995,480	188,726	1,184,205	85,991	38,692	629,988	754,671	4,568	1,943,444
25	Total Operating Expenses	CALC	11,870,300		5,420,019	1,275,739	6,695,758	424,129	273,124	4,447,060	5,144,313	30,229	11,870,300
<u>Other Requirements</u>													
<u>Annual Debt Service</u>													
26	Generation-related	Sch. B	119,518	CP Demand	54,978	13,507	68,485	3,923	2,720	44,280	50,922	111	119,518
27	Distribution-related	Sch. B	570,827	NCP Demand	259,083	63,651	322,734	19,047	13,206	215,015	247,268	825	570,827
28	Customer-related	Sch. B	8,781	# of Cust	7,677		7,677	1,019			1,019	84	8,781
29	Total Debt Service	CALC	699,125		321,738	77,158	398,896	23,989	15,925	259,295	299,210	1,019	699,125

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Ln.	Description	Ref.	Projected Test Year Rev. Req. (a)	Allocation Basis (b)	Residential			Commercial				Street Lights (j)	Total System (k)
					Tier 1 (c)	Tier 2 (d)	Total (e)	Tier 1 (f)	Tier 2 (g)	Tier 3 (h)	Total (i)		
<u>Other Requirements (cont.)</u>													
	Capital Adds Paid from Cash												
30	Generation-related	Sch. B	303,374	CP Demand	139,551	34,285	173,836	9,957	6,903	112,396	129,256	282	303,374
31	Distribution-related	Sch. B	1,448,938	NCP Demand	657,634	161,567	819,201	48,348	33,520	545,777	627,644	2,093	1,448,938
32	Customer-related	Sch. B	22,288	# of Cust	19,488		19,488	2,588			2,588	213	22,288
33	Total Capital Additions	CALC	1,774,600		816,673	195,851	1,012,524	60,893	40,423	658,173	759,488	2,587	1,774,600
34	Total Other Requirements	CALC	2,473,725		1,138,411	273,009	1,411,420	84,882	56,348	917,468	1,058,698	3,607	2,473,725
35	Sub-total Revenue Requirements	CALC	14,344,025		6,558,430	1,548,748	8,107,178	509,011	329,471	5,364,528	6,203,011	33,836	14,344,025
<u>Revenue Credits</u>													
36	Connection Fees	Sch. B	(25,141)	NCP Demand	(11,411)	(2,803)	(14,214)	(839)	(582)	(9,470)	(10,890)	(36)	(25,141)
37	Interest Income	Sch. B	(22,800)	NCP Demand	(10,348)	(2,542)	(12,891)	(761)	(527)	(8,588)	(9,876)	(33)	(22,800)
38	Pole Attachment Revenue	Sch. B	(41,352)	NCP Demand	(18,769)	(4,611)	(23,380)	(1,380)	(957)	(15,576)	(17,913)	(60)	(41,352)
39	Receivables Penalty Income	Sch. B	(40,700)	kWh Sales	(17,854)	(4,386)	(22,240)	(1,411)	(978)	(15,928)	(18,318)	(142)	(40,700)
40	Total Revenue Credits	CALC	(129,993)		(58,382)	(14,343)	(72,725)	(4,391)	(3,044)	(49,563)	(56,997)	(271)	(129,993)
41	Sub-total Net Revenue Requirements	CALC	14,214,032		6,500,048	1,534,405	8,034,453	504,621	326,427	5,314,966	6,146,014	33,565	14,214,032
42	Annual Dividends (Return)	Sch. B	300,000	Sub-total R.R.	137,189	32,385	169,574	10,650	6,890	112,177	129,717	708	300,000
43	Total Net Revenue Requirements	CALC	14,514,032		6,637,238	1,566,790	8,204,028	515,271	333,317	5,427,143	6,275,731	34,273	14,514,032
<u>Demand Related Rev. Requirements</u>													
44	Operating Expenses	CALC	5,728,708		2,612,619	641,864	3,254,483	190,036	131,752	2,145,216	2,467,004	7,221	5,728,708
45	Other Requirements	CALC	2,442,656		1,111,246	273,009	1,384,255	81,275	56,348	917,468	1,055,091	3,310	2,442,656
46	Revenue Credits	CALC	(89,293)		(40,528)	(9,957)	(50,484)	(2,980)	(2,066)	(33,634)	(38,680)	(129)	(89,293)
47	Sub-Total Demand Related	CALC	8,082,071		3,683,337	904,916	4,588,253	268,331	186,034	3,029,050	3,483,415	10,402	8,082,071
48	Add: Annual Dividends	CALC	170,579		77,740	19,099	96,839	5,663	3,926	63,931	73,521	220	170,579
49	Total Demand Related	CALC	8,252,650		3,761,077	924,015	4,685,093	273,994	189,961	3,092,981	3,556,936	10,622	8,252,650
<u>Energy Related Rev. Requirements</u>													
50	Operating Expenses	CALC	5,881,632		2,580,103	633,875	3,213,978	203,911	141,372	2,301,844	2,647,127	20,527	5,881,632
51	Revenue Credits	CALC	(40,700)		(17,854)	(4,386)	(22,240)	(1,411)	(978)	(15,928)	(18,318)	(142)	(40,700)
52	Sub-Total Energy Related	CALC	5,840,932		2,562,249	629,489	3,191,738	202,500	140,393	2,285,916	2,628,809	20,385	5,840,932
53	Add: Annual Dividends	CALC	123,278		54,079	13,286	67,365	4,274	2,963	48,246	55,483	430	123,278
54	Total Energy Related	CALC	5,964,210		2,616,327	642,775	3,259,102	206,774	143,356	2,334,162	2,684,292	20,816	5,964,210
55	Sub-total Demand and Energy	CALC	14,216,860		6,377,404	1,566,790	7,944,195	480,768	333,317	5,427,143	6,241,228	31,437	14,216,860

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					Tier 1 (c)	Tier 2 (d)	Total (e)	Tier 1 (f)	Tier 2 (g)	Tier 3 (h)	Total (i)		
	Customer Related Rev. Requirements												
56	Operating Expenses	CALC	259,960		227,297		227,297	30,183			30,183	2,481	259,960
57	Other Requirements	CALC	31,069		27,165		27,165	3,607			3,607	296	31,069
58	Sub-Total Customer Related	CALC	291,030		254,462	-	254,462	33,790	-	-	33,790	2,777	291,030
59	Add: Annual Dividends	CALC	6,142		5,371	-	5,371	713	-	-	713	59	6,142
60	Total Customer Related	CALC	297,172		259,833	-	259,833	34,503	-	-	34,503	2,836	297,172
61	Total Revenue Requirements	CALC	14,514,032		6,637,238	1,566,790	8,204,028	515,271	333,317	5,427,143	6,275,731	34,273	14,514,032

Heber Light & Power
2014 Rate Study

Rate Comparison Worksheet
Proposed Rates Based on 4.5% Increase and New Rate Structure for Commercial
HLP vs. RMP and Other Utah Municipal Utilities

Line No.	Rate Description	HLP		Rocky Mountain Power		Bountiful City		City of Hurricane		Price City			
		Current	Proposed										
1	<u>Residential</u> Base/Customer Charge		12.00			5.00		7.14		11.00		3.74	
2	Energy Rate												
3	All						0.0925						
4	Tier 1	1st 1000 kWh	0.07525	1st 1000 kWh	0.07860	1st 400 kWh	0.08850		1st 800 kWh	0.07490	1st 400 kWh	0.09220	
5	Tier 2	All Additional	0.09450	All Additional	0.09880	Next 600 kWh	0.11543		801 - 2000 kWh	0.08560	Next 200 kWh	0.10721	
6	Tier 3					All Additional	0.14451		All Additional	0.09630	All Additional	0.12673	
7	Tier 4												
8	Tier 5												
8	Estimated Monthly Charge 750 kWh		68.44		71.49		80.80		76.52		67.18	81.07	
9	<u>Commercial - All</u> Base/Customer Charge		None										
10	Energy Rate												
11	Tier 1	1st 500 kWh	0.14920										
12	Tier 2	Next 500 kWh	0.10450										
13	Tier 3	All Additional	0.07990										
13	Estimated Monthly Charge 3,600 kWh		334.59										
14	<u>Small Commercial (Non-demand)</u> Base/Customer Charge			<= 250 kW	21.64			7.14	<= 50 kW	16.00			
15	Energy Rate												
16	Tier 1			1st 1000 kWh	0.11870				1st 800 kWh	0.07490			
17	Tier 2			All Additional	0.08050		All kWh	0.11120	801 - 1500 kWh	0.08560			
18	Tier 3								1501 - 25000 kWh	0.08270			
18	Estimated Monthly Charge 3,600 kWh				349.64			407.46	All Additional	0.07470			
19	<u>Small Commercial (Demand)</u> Base Charge / Customer Rate					=< 30 kW	10.00	=< 30 kW			=<35 kW	18.80	
20	Energy Rate												
21	Tier 1					1st 1500 kWh	0.11148	1st 1500 kWh	0.1112		1st 500 kWh	0.05688	
22	Tier 2					All Additional	0.06252	All Additional	0.0624		All Additional	0.05973	
23	Tier 3												
24	Demand Rate						8.58	> 15 kW	8.21		All kW	7.95	
25	Estimated Monthly Charge 3,600 kWh / 11.5 kW						407.12		304.98			323.82	
26	<u>Large Commercial / Industrial (Demand)</u> Base Charge / Customer Rate				None	=< 1000 kW	54.00	> 30 kW	26.25	300.00	> 35 kW	18.80	
27	Energy Rate												
28	Tier 1			1st 10,000 kWh	0.0580	All kWh	0.03664	All kWh	0.0473	All kWh	0.05030	1st 10,000 kWh	0.05688
29	Tier 2			All Additional	0.0370							Next 90,000 kWh	0.05973
30	Tier 3											All Additional	0.06271
30	Demand Rate			All kW	14.13		16.33	All kW	13.13	All kW	8.75	All kW	11.49
31	Estimated Monthly Charge 116,300 kWh / 370.0 kW				9,741.20		10,356.75		10,385.34		9,387.39		11,236.55

**Heber Light & Power
2014 Rate Study**

**Rate Comparison Worksheet
Proposed Rates Based on 4.5% Increase and New Rate Structure for Commercial
HLP vs. RMP and Other Utah Municipal Utilities**

Line No.	Rate Description	HLP		Payson City	Murray City	Springville City	All Other Avg. Charge
		Current	Proposed				
1	Residential Base/Customer Charge		12.00			11.00	
2	Energy Rate			12.71	3.35		
3	All						
4	Tier 1	1st 1000 kWh	0.07525	1st 400 kWh	0.08600	1st 400 kWh	0.07700
5	Tier 2	All Additional	0.09450	Next 400 kWh	0.09630	Next 600 kWh	0.09400
6	Tier 3			Next 400 kWh		All Additional	0.11600
7	Tier 4			Next 400 kWh			
8	Tier 5			All Additional			
	Estimated Monthly Charge						
8	750 kWh		68.44	82.85	69.40	74.70	76.07
9	Commercial - All Base/Customer Charge		None				
10	Energy Rate						
11	Tier 1	1st 500 kWh	0.14920				
12	Tier 2	Next 500 kWh	0.10450				
13	Tier 3	All Additional	0.07990				
	Estimated Monthly Charge						
13	3,600 kWh		334.59				
14	Small Commercial (Non-demand) Base/Customer Charge			<= 250 kW			
15	Energy Rate						
16	Tier 1			1st 1000 kWh			
17	Tier 2			All Additional			
18	Tier 3						
	Estimated Monthly Charge						
18	3,600 kWh						358.49
19	Small Commercial (Demand) Base Charge / Customer Rate				< 35 kW	=<35 kW	
20	Energy Rate						
21	Tier 1			1st 1000 kWh	0.09250	1st 500 kWh	0.11772
22	Tier 2			Next 14,000 kWh	0.04680	Next 9,500 kWh	0.09110
23	Tier 3			All Additional		All Additional	0.06080
24	Demand Rate			> 5 kVA	11.75	All kW	6.20
	Estimated Monthly Charge						
25	3,600 kWh / 11.5 kW			330.60	380.55	437.57	364.11
26	Large Commercial / Industrial (Demand) Base Charge / Customer Rate		None		> 35 kW	> 35 kW	
27	Energy Rate			100.00			
28	Tier 1			1st 10,000 kWh	0.04360	1st 10,000 kWh	0.11610
29	Tier 2			All Additional		Next 90,000 kWh	0.07830
30	Tier 3			All Additional		All Additional	0.07070
31	Demand Rate			All kW	12.37	All kW	6.90
	Estimated Monthly Charge						
31	116,300 kWh / 370.0 kW		9,741.20	9,781.36	9,668.57	11,948.41	10,394.91