AUSTIN ENERGY'S TARIFF PACKAGE:	§	
2015 COST OF SERVICE	§	**BEFORE THE CITY OF AUSTIN**
STUDY AND PROPOSAL TO CHANGE	§	**IMPARTIAL HEARING EXAMINER**
BASE ELECTRIC RATES	§	

AUSTIN ENERGY'S RESPONSE TO THE INDEPENDENT CONSUMER ADVOCATE'S FIRST REQUEST FOR INFORMATION

Austin Energy ("AE") files this Response to The Independent Consumer Advocate's ("ICA") First Request for Information submitted on March 2, 2016. Pursuant to the City of Austin Procedural Rules for the Initial Review of Austin Energy's Rates §7.3 (c)(1), this Response is timely filed.

Respectfully submitted,

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ATTORNEYS FOR AUSTIN ENERGY

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of this pleading has been served on all parties and the Impartial Hearing Examiner on this 14th day of March, 2016, in accordance with the City of Austin Procedural Rules for the Initial Review of Austin Energy's Rates.

HANNAH M. WILCHAR

749/11/7051414.1

ICA 1-1. Provide a capacity-demand-reserve margin (CDR) table for each year, 2014 – 2016 (projected). To the extent possible, please provide this data in functioning excel spreadsheet format.

ANSWER:

Pursuant to City of Austin Procedural Rules for the Initial Review of Austin Energy's Rates § 7.3(c)(2)(F), a party does not need to produce a document or tangible thing unless that party has constructive or actual possession, custody, or control of the requested item. Austin Energy does not possess a capacity-demand-reserve margin table for each year, 2014 – 2016 (projected).

Prepared by: BE
Sponsored by: Elaina Ball

ICA 1-2. Provide a forecasted CDR table for the next five years. To the extent possible, please provide this data in functioning excel spreadsheet format.

ANSWER:

Pursuant to City of Austin Procedural Rules for the Initial Review of Austin Energy's Rates § 7.3(c)(2)(F), a party does not need to produce a document or tangible thing unless that party has constructive or actual possession, custody, or control of the requested item. Austin Energy does not possess a forecasted CDR table for the next five years.

Prepared by: BE
Sponsored by: Elaina Ball

ICA 1-3. Identify power supply additions and retirements (MW) by year for the period 2014 – 2020.

ANSWER:

By agreement of the parties, Austin Energy will be responding to ICA 1-3 on March 21, 2016.

Prepared by: -
Sponsored by: -

ICA 1-4. Provide monthly reserve margins for each of the past five years. To the extent possible, please provide this data in functioning excel spreadsheet format.

ANSWER:

Pursuant to City of Austin Procedural Rules for the Initial Review of Austin Energy's Rates § 7.3(c)(2)(F), a party does not need to produce a document or tangible thing unless that party has constructive or actual possession, custody, or control of the requested item. Austin Energy does not possess a spreadsheet of the monthly reserve margins for each of the past five years.

Prepared by: BE
Sponsored by: Elaina Ball

ICA 1-5. For each power plant owned by the City of Austin, and each multi-year firm power supply contract, provide the following information:

A. Max. dependable output or capacity (MW);
B. Average annual capacity factor;
C. Energy output by month during the test period;
D. Capacity factor for each month during the test period;
E. Expected remaining life (years and retirement date);
F. Fixed O&M cost (cents/kWh);
G. Variable O&M cost (cents/kWh);
H. Expected fuel cost (cents/kWh);
I. Year of initial in-service;
J. Original cost of plant investment (installed $/kW);
K. Original cost of installed capital additions in excess of $1 million; and
L. Marginal cost. To the extent possible, please provide this data in functioning excel spreadsheet format.

ANSWER:

By agreement of the parties, Austin Energy will be responding to ICA 1-5 on March 21, 2016.

Prepared by: -
Sponsored by: -

ICA 1-6. With respect to the enactment of federal energy efficiency standards for utility transformers, please provide Austin Energy's estimate of the percentage increase in the procurement costs of transformers as a result of the requirement.

ANSWER:

Austin Energy estimates a 9% increase in procurement costs for Network Vault-Mount Transformers due to the 2016 Department of Energy energy efficiency standards for transformers. Austin Energy was already meeting the 2016 DOE standards for all other transformers, so no price increase due to these efficiency standards was recognized.

Prepared by: MP
Sponsored by: Elaina Ball

ICA 1-7. Provide evidence to support the statement that House of Worship ("HOW") discounts have been discontinued around the state because of concerns about the constitutionality of the tariffs.

ANSWER:

Austin Energy does not have independent evidence that HOW discounts have been discontinued because of constitutionality concerns. The referenced statement is simply an inference drawn from observation of rates policies across the state, including P.U.C. Docket No. 39647 and P.U.C. Docket No. 10476. It is not a statement about Austin Energy's or the City of Austin's conclusions about the constitutionality of any HOW discount.

Prepared by: MKD
Sponsored by: Mark Dreyfus

ICA 1-8. Provide the results of any load research studies comprised of customers receiving the HOW discount.

ANSWER:

Since FY 2013, no load research studies have been completed on customers who currently receive the House of Worship (HOW) discount. HOW customers are now included within their respective secondary voltage rate classes.

HOW customers, prior to FY 2013, were included in distinct customer class (E01C). Results of the load research studies from FY 2005 through FY 2011, with respect to the religious sanctuary class, are included as Attachment 1. E01C was not segmented by demand. Load research results from FY 2012 do not exist.

Attachment 1: E01C Load Research Results, FY 2005 – FY 2011.

Prepared by: JL
Sponsored by: Mark Dombroski

Austin Energy Load Research

E01C Res Service Relig Sanc

Month	Class Coincident Peak (KW)	Class Load at ERCOT Peak (KW)	Class Non-Coincident Peak (KW)	Peak Date	Calendar Mth Energy (kWh) at Generator	Calendar Mth Energy (kWh) at Meter	Calendar Month At Generator Off-Peak	Calendar Month At Generator MID-Peak	Calendar Month At Generator ON-Peak
Oct-04	9,750	10,232	21,146	10/24/2004	4,584,707	4,355,471	850,978	3,733,728	0
Nov-04	6,992	5,144	14,750	11/21/2004	3,090,028	2,935,526	719,299	2,370,729	0
Dec-04	6,197	4,373	10,075	12/19/2004	2,730,391	2,593,871	715,442	2,014,949	0
Jan-05	5,129	3,240	10,185	1/2/2005	2,651,916	2,519,321	1,581,673	1,070,243	0
Feb-05	8,804	8,804	15,590	2/9/2005	3,577,894	3,399,000	2,072,749	1,505,145	0
Mar-05	10,289	7,820	12,969	3/30/2005	3,211,337	3,050,770	1,766,278	1,445,059	0
Apr-05	6,644	8,783	15,413	4/10/2005	3,400,249	3,230,237	1,810,632	1,589,617	0
May-05	14,056	9,959	26,860	5/22/2005	4,609,809	4,379,319	2,455,101	2,154,708	0
Jun-05	13,788	13,973	25,386	6/19/2005	6,121,991	5,815,892	1,196,079	3,475,699	1,450,213
Jul-05	13,330	14,185	23,001	7/3/2005	5,977,423	5,678,552	1,292,660	3,400,799	1,283,964
Aug-05	10,487	10,487	23,684	8/14/2005	5,640,297	5,358,282	1,006,728	3,284,218	1,349,351
Sep-05	10,987	14,712	21,993	9/18/2005	5,583,097	5,303,942	1,042,318	3,158,285	1,382,494

Notes:

[1] Class Non-Coincident peak on a weekend day is highlighted.

[2] Time of use periods

Jun - Sep	On peak hours	2pm - 8pm	Mon-Fri
	Mid peak hours	6am - 2pm	Mon-Fri
		8pm - 10pm	Mon-Fri
		6am - 10pm	Sat & Sun
	Off peak hours	10pm - 6am	Everyday
Oct - May	Mid peak hours	6am - 10pm	Everyday
	Off peak hours	10pm - 6am	Everyday

Austin Energy Load Research

E01C Res Service Relig Sanc

Month	Class Coincident Peak (KW)	Class Load at ERCOT Peak (KW)	Class Non-Coincident Peak (KW)	Peak Date	Calendar Mth Energy (kWh) at Generator	Calendar Mth Energy (kWh) at Meter	Calendar Month At Generator Off-Peak	Calendar Month At Generator MID-Peak	Calendar Month At Generator ON-Peak
Oct-05	10,604	14,558	26,018	10/2/2005	4,819,025	4,819,025	867,969	3,951,056	0
Nov-05	10,247	10,806	24,158	11/6/2005	3,702,392	3,702,392	722,483	2,979,910	0
Dec-05	8,722	7,258	13,843	12/18/2005	3,488,632	3,488,632	894,471	2,594,160	0
Jan-06	4,411	4,411	13,345	1/1/2006	2,960,247	2,960,247	1,772,889	1,187,358	0
Feb-06	6,802	6,802	15,277	2/19/2006	3,086,768	3,086,768	1,847,170	1,239,598	0
Mar-06	5,107	4,589	21,950	3/12/2006	3,619,710	3,619,710	1,988,409	1,631,301	0
Apr-06	8,755	8,578	25,285	4/16/2006	4,496,272	4,496,272	2,304,411	2,191,861	0
May-06	10,982	9,009	25,524	5/28/2006	5,300,158	5,300,158	2,780,133	2,520,025	0
Jun-06	13,696	12,824	27,487	6/11/2006	6,200,753	6,200,753	1,018,297	3,769,959	1,412,497
Jul-06	11,492	10,640	26,295	7/16/2006	6,287,154	6,287,154	1,085,552	3,884,647	1,316,956
Aug-06	15,186	11,396	28,357	8/27/2006	6,800,644	6,800,644	1,195,846	4,045,680	1,559,117
Sep-06	12,075	12,075	31,843	9/17/2006	6,329,577	6,329,577	1,133,774	3,813,743	1,382,060

Notes:
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Jun - Sep	On peak hours	2pm - 8pm	Mon-Fri
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Austin Energy Load Research

E01C Res Service Relig Sanc

Month	Class Coincident Peak (KW)	Class Load at ERCOT Peak (KW)	Class Non-Coincident Peak (KW)	Peak Date	Calendar Mth Energy (kWh) at Generator	Calendar Mth Energy (kWh) at Meter	Calendar Month At Generator Off-Peak	Calendar Month At Generator MID-Peak	Calendar Month At Generator ON-Peak
Oct-06	10,579	10,579	27,585	10/1/2006	5,044,217	4,792,006	868,856	4,175,361	0
Nov-06	8,861	7,245	15,341	11/5/2006	3,750,787	3,563,248	793,857	2,956,930	0
Dec-06	8,725	8,600	18,727	12/3/2006	4,141,339	3,934,272	1,043,839	3,097,500	0
Jan-07	7,076	6,302	16,327	1/28/2007	4,227,731	4,016,345	2,575,847	1,651,885	0
Feb-07	7,138	7,138	20,023	2/4/2007	4,035,610	3,833,829	2,355,946	1,679,663	0
Mar-07	7,934	3,796	19,864	3/28/2007	3,710,261	3,524,748	1,995,106	1,715,155	0
Apr-07	8,527	9,294	23,236	4/29/2007	3,890,884	3,696,339	2,118,276	1,772,608	0
May-07	8,328	8,227	26,426	5/13/2007	5,037,948	4,786,051	2,606,146	2,431,802	0
Jun-07	10,213	10,213	30,224	6/10/2007	6,303,964	5,988,765	1,148,505	3,841,771	1,313,688
Jul-07	13,714	12,310	31,946	7/1/2007	6,749,163	6,411,705	1,160,438	4,208,817	1,379,908
Aug-07	13,474	14,498	35,327	8/12/2007	8,377,996	7,959,097	1,363,686	5,082,581	1,931,729
Sep-07	12,865	13,254	34,540	9/9/2007	7,026,720	6,675,384	1,128,190	4,431,443	1,467,088

Notes:
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E01C Res Service Relig Sanc

Month	Class Coincident Peak (KW)	Class Load at ERCOT Peak (KW)	Class Non-Coincident Peak (KW)	Peak Date	Calendar Mth Energy (kWh) at Generator	Calendar Mth Energy (kWh) at Meter	Calendar Month At Generator Off-Peak	At Generator MID-Peak	At Generator ON-Peak
Oct-07	14,420	11,459	29,375	10/7/2007	5,864,779	5,571,540	1,098,714	4,766,065	0
Nov-07	8,900	5,152	23,750	11/11/2007	3,879,806	3,685,815	808,432	3,071,374	0
Dec-07	4,973	4,973	22,741	12/9/2007	3,663,799	3,480,609	827,912	2,835,887	0
Jan-08	6,988	5,845	18,402	1/20/2008	4,113,542	3,907,865	2,451,486	1,662,056	0
Feb-08	5,493	5,493	15,634	2/3/2008	3,276,824	3,112,983	1,866,280	1,410,545	0
Mar-08	7,154	3,624	18,885	3/30/2008	3,233,217	3,071,557	1,785,078	1,448,139	0
Apr-08	8,803	8,803	16,898	4/27/2008	3,408,514	3,238,089	1,751,682	1,656,833	0
May-08	13,320	12,321	28,792	5/25/2008	5,456,969	5,184,120	2,868,433	2,588,536	0
Jun-08	12,920	12,328	30,372	6/15/2008	7,453,126	7,080,469	1,261,637	4,528,805	1,662,684
Jul-08	13,771	13,771	26,661	7/20/2008	6,229,412	5,917,942	1,199,836	3,514,466	1,515,109
Aug-08	8,387	8,387	26,456	8/3/2008	5,968,249	5,669,836	1,072,969	3,668,157	1,227,123
Sep-08	14,333	14,333	26,546	9/14/2008	5,591,644	5,312,061	996,083	3,291,007	1,304,554

Notes:
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[2] Time of use periods

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Oct - May	Mid peak hours	6am - 10pm	Everyday
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E01C Res Service Relig Sanc

Month	Class Coincident Peak (KW)	Class Load at ERCOT Peak (KW)	Class Non-Coincident Peak (KW)	Peak Date	Calendar Mth Energy (kWh) at Generator	Calendar Mth Energy (kWh) at Meter	Calendar Month At Generator Off-Peak	Calendar Month At Generator MID-Peak	Calendar Month At Generator ON-Peak
Oct-08	9,894	9,894	23,259	10/12/2008	4,558,514	4,330,588	834,033	3,724,481	0
Nov-08	7,516	12,330	19,403	11/2/2008	3,106,918	2,951,572	649,930	2,456,988	0
Dec-08	6,019	5,892	13,528	12/14/2008	3,174,759	3,016,021	786,979	2,387,780	0
Jan-09	5,881	5,856	14,212	1/25/2009	3,429,693	3,258,208	2,060,914	1,368,779	0
Feb-09	5,605	4,088	13,296	2/8/2009	2,641,425	2,509,354	1,511,576	1,129,849	0
Mar-09	4,763	3,413	15,479	3/8/2009	2,838,442	2,696,520	1,608,396	1,230,047	0
Apr-09	8,786	8,786	19,726	4/26/2009	3,365,291	3,197,026	1,746,980	1,618,310	0
May-09	5,618	5,618	23,260	5/31/2009	4,384,800	4,165,560	2,219,080	2,165,720	0
Jun-09	8,565	13,463	27,082	6/28/2009	5,370,417	5,101,896	968,658	3,170,092	1,231,667
Jul-09	17,888	14,110	29,916	7/12/2009	7,430,304	7,058,789	1,421,490	4,315,768	1,693,046
Aug-09	15,264	11,476	27,627	8/23/2009	6,350,042	6,032,540	1,166,810	3,868,291	1,314,941
Sep-09	9,088	10,293	24,385	9/20/2009	5,100,234	4,845,222	977,900	2,999,143	1,123,192

Notes:

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[2] Time of use periods

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Austin Energy Load Research

E01C Res Service Relig Sanc

Month	Class Coincident Peak (KW)	Class Load at ERCOT Peak (KW)	Class Non-Coincident Peak (KW)	Peak Date	Calendar Mth Energy (kWh) at Generator	Calendar Mth Energy (kWh) at Meter	Calendar Month At Generator Off-Peak	Calendar Month At Generator MID-Peak	Calendar Month At Generator ON-Peak
Oct-09	9,495	9,495	22,142	10/4/2009	4,198,037	3,988,135	913,485	3,284,552	0
Nov-09	3,990	3,990	16,247	11/15/2009	2,967,315	2,818,949	644,828	2,322,488	0
Dec-09	5,859	5,859	13,255	12/6/2009	3,632,514	3,450,888	907,765	2,724,749	0
Jan-10	8,234	8,234	16,040	1/10/2010	3,945,722	3,748,436	2,416,740	1,528,981	0
Feb-10	8,628	7,543	13,732	2/7/2010	3,748,446	3,561,024	2,269,146	1,479,300	0
Mar-10	5,334	5,334	13,660	3/21/2010	3,190,632	3,031,101	1,814,875	1,375,757	0
Apr-10	7,580	7,142	17,804	4/25/2010	3,290,431	3,125,909	1,711,384	1,579,046	0
May-10	11,262	16,947	32,830	5/30/2010	6,278,429	5,964,507	3,132,339	3,146,089	0
Jun-10	10,488	11,138	28,280	6/27/2010	5,683,910	5,399,714	1,004,412	3,372,178	1,307,320
Jul-10	14,884	10,437	27,082	7/18/2010	5,765,809	5,477,518	1,077,041	3,398,817	1,289,950
Aug-10	11,667	11,667	28,136	8/22/2010	6,662,602	6,329,472	1,153,787	3,963,314	1,545,501
Sep-10	12,844	9,544	28,100	9/12/2010	5,273,665	5,009,981	970,370	3,130,379	1,172,916

Notes:
[1] Class Non-Coincident peak on a weekend day is highlighted.
[2] Time of use periods

Jun - Sep	On peak hours	2pm - 8pm	Mon-Fri
	Mid peak hours	6am - 2pm	Mon-Fri
		8pm - 10pm	Mon-Fri
		6am - 10pm	Sat & Sun
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Austin Energy Load Research

E01C Res Service Relig Sanc

Month	Class Coincident Peak (KW)	Class Load at ERCOT Peak (KW)	Class Non-Coincident Peak (KW)	Peak Date	Calendar Mth Energy (kWh) at Generator	Calendar Mth Energy (kWh) at Meter	Calendar Month At Generator Off-Peak	Calendar Month At Generator MID-Peak	Calendar Month At Generator ON-Peak
Oct-10	5,867	5,867	18,381	10/24/2010	3,472,190	3,298,580	655,504	2,816,686	0
Nov-10	7,150	7,150	17,992	11/21/2010	3,568,316	3,389,900	789,229	2,779,087	0
Dec-10	4,276	4,276	14,216	12/26/2010	2,885,572	2,741,294	757,794	2,127,779	0
Jan-11	6,760	6,899	15,612	1/23/2011	3,828,881	3,637,437	2,367,221	1,461,660	0
Feb-11	12,736	10,094	15,464	2/9/2011	3,953,669	3,755,985	2,406,634	1,547,034	0
Mar-11	7,269	4,585	14,513	3/20/2011	2,889,537	2,745,060	1,572,638	1,316,899	0
Apr-11	6,356	5,861	20,716	4/24/2011	3,506,482	3,331,158	1,759,089	1,747,393	0
May-11	12,051	7,998	20,225	5/29/2011	3,736,884	3,550,040	1,929,280	1,807,604	0
Jun-11	10,269	12,740	22,538	6/19/2011	5,384,793	5,115,553	1,019,516	3,051,192	1,314,086
Jul-11	12,072	14,254	25,177	7/24/2011	6,652,473	6,319,850	1,267,689	3,924,402	1,460,382
Aug-11	13,017	14,380	28,666	8/28/2011	7,360,820	6,992,779	1,445,897	4,145,999	1,768,924
Sep-11	11,796	11,796	26,324	9/25/2011	5,860,627	5,567,595	1,077,286	3,377,946	1,405,395

Notes:

[1] Class Non-Coincident peak on a weekend day is highlighted.

[2] Time of use periods

Jun - Sep	On peak hours	2pm - 8pm	Mon-Fri
	Mid peak hours	6am - 2pm	Mon-Fri
		8pm - 10pm	Mon-Fri
		6am - 10pm	Sat & Sun
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Oct - May	Mid peak hours	6am - 10pm	Everyday
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ICA 1-9. Provide the total base revenue (with and without the discount) for HOW customers by rate class.

ANSWER:

Total base revenue for House of Worship (HOW) customers by rate class is as follows. The base revenue reported below does not include unbilled revenue. Due to the nature of the discount being applied when a customer's average bill exceeds a given maximum, customers may receive a discount in one month and not receive the discount in the following month. During Fiscal Year 2014, this maximum was $0.125 per kWh in October 2013 and $0.13087 per kWh from November 2013 through September 2014. In the table below, the base revenue on bills where a discount was applied is shown in the first column. The base revenue on bills where a discount was not applied is shown in the second column. During FY 2014, a total of $940,149 was discounted to HOW customers across all customer classes. The figures below are base revenue only.

Base Revenue			
Class	On bills receiving a discount	On Bills *not* receiving a discount	Total
Secondary Voltage Less than 10 kw	$26,262	$306,363	$332,625
Secondary Voltage 10 to 49 kw	$699,161	$99,099	$798,170
Secondary Voltage 50 kw and greater	$1,809,461	$1,130,538	$2,939,999
Total	$2,534,884	$1,543,950	$4,070,794

Prepared by: JL/SK
Sponsored by: Mark Dombroski

ICA 1-10. Provide a bill frequency table for customers which receive the HOW discount.

ANSWER:

The annual bill frequency for House of Worship customers during Fiscal Year 2014 is as follows.

Secondary Voltage (< 10 kW)			
Load Factor Boundary		Bills	% of Total
0%	10%	507	72%
11%	20%	156	22%
21%	30%	24	3%
31%	40%	10	1%
41%	50%	5	1%
51%	60%	4	1%
61%	70%	2	0%
71%	80%	1	0%
81%	90%	0	0%
91%	100%	0	0%
Total		709	100%

Secondary Voltage (≥ 10 < 300 kW)			
Load Factor Boundary		Bills	% of Total
0%	10%	1,207	33%
11%	20%	1,663	45%
21%	30%	745	20%
31%	40%	50	1%
41%	50%	3	0%
51%	60%	1	0%
61%	70%	0	0%
71%	80%	0	0%
81%	90%	1	0%
91%	100%	1	0%
Total		3,671	100%

Secondary Voltage (≥ 300 kW)			
Load Factor Boundary		Bills	% of Total
0%	10%	4	10%
11%	20%	22	56%
21%	30%	13	33%
31%	40%	0	0%
41%	50%	0	0%
51%	60%	0	0%
61%	70%	0	0%
71%	80%	0	0%
81%	90%	0	0%
91%	100%	0	0%
Total		39	100%

Prepared by: JL
Sponsored by: Mark Dombroski

ICA 1-11. Provide the number of Key Account customers, and associated revenues, by customer class.

ANSWER:

By agreement of the parties, Austin Energy will be responding to ICA 1-11 on March 21, 2016.

Prepared by: -
Sponsored by: -

ICA 1-12. Provide O&M expense associated with Key Account customer service personnel by FERC Account.

ANSWER:

Please see WP D-1.2.7, lines 28-33, for O&M expense by FERC for Key Accounts.

Prepared by: RM/MM
Sponsored by: Mark Dombroski

ICA 1-13. Please describe the method of allocating FERC Account 912 expenses among customer classes.

ANSWER:

FERC Account 912 expenses are allocated using direct allocation and remainder to customer service, which are reflected within the 'AE RFP' model under Schedule F-5, Schedule G-5, and Schedule G-6. The allocator used for direct is the 'Key Account' (Allocation Based on an Analysis of Time Spent by Key Accounts' Staff), while customer service used the 'No. Cust Mo. – Metered' (Customer-Months for Metered Customer Classes) allocator.

Prepared by: CTM
Sponsored by: Mark Dombroski

ICA 1-14. Are call center calls tabulated on the basis of the customer class which originated the call? If yes, provide the data regarding the number of calls originated by each customer class.

ANSWER:

Calls are not recorded by customer class. Calls are tabulated on the basis of Residential or Commercial.

For FY2014, Austin Energy received 742,664 calls from Residential Customers and 86,893 calls from Commercial Customers.

Prepared by: JF
Sponsored by: Kerry Overton

ICA 1-15. Provide a tabulation of the number of call center calls by subject matter (i.e., outage report, bill inquiry, bill payment, safety issue, non-electric utility matter, service starts / terminations, etc.).

ANSWER:

For the test year, Austin Energy received the following number of calls organized by subject matter:

Account Maintenance	329,514
Credit and Collections Contacts	108,055
Denials and Disputes	13,105
E-Business	17,249
Escalation	2,200
Field Actions	20,637
Inquiry	294,764
Outage	61
Premise Maintenance	17
Products & Services	43,955

Prepared by: JF
Sponsored by: Kerry Overton

ICA 1-16. Please explain how the cost of 311 call service is allocated / assigned among services, departments, and customer classes.

ANSWER:

For customer classes, the cost of 311 call service is allocated using the 'Cust O&MxAG' allocator that represents total customer O&M excluding A&G, Regulatory, Community Benefit and EGRSO, which is reflected within the 'AE RFP' model under Schedule F-5 (for allocator) and Schedule G-5 (for allocation).

For allocation to departments and services, please see AE's Response to NXP-Samsung RFI No. 3-6.

Prepared by: CTM/DK
Sponsored by: Mark Dombroski

ICA 1-17. Please provide on a test year monthly basis (similar to PUC Rate Filing Package Schedule O format): the"@ source" customer class energy, CP demands, NCP demands. Please provide this data in excel spreadsheet format.

ANSWER:

Austin Energy has not organized its load research data in the format called for in Schedule 'O' as shown in the Public Utility Commission instructions to Investor Owned Utilities. The requested data, customer class energy, coincident peak (CP) demands and non-coincident (NCP) demands are found on Work Paper F-6.1. Data is presented on a monthly basis for the test year by rate class. Energy at the source (Retail Energy @ Meter) is shown on lines 62 through 74 of the work paper.

Prepared by: JL
Sponsored by: Mark Dombroski

ICA 1-18. Please provide a spreadsheet which shows the development of each production demand allocation methodology tested in the class cost of service study.

ANSWER:

All production demand allocation methodologies tested are reflected within the 'AE RFP' model under Schedule F-6 and WP F-6.1.

Prepared by: CTM
Sponsored by: Mark Dombroski

ICA 1-19. Please identify, by FERC account, all software costs required to read and utilize IDR meters.

ANSWER:

During the test year, the following software was required to read and utilize IDR (interval data recorder) meters. The table below includes the purpose of the software.

Software	FERC	Purpose	FY 2014 Cost
Itron MV90	586	Collect and report billing reads	$37,739
Oracle Utilities Load Analysis	930	Develop customer class demands	$22,684
Schneider Electric Energy Profiler Online (EPO)	907	Report interval data to customers	$135,659
EPO Load Curtailment Module	907	Operate load curtailment program	$25,800

In addition to the software listed above, UtiliNet Solution Center (Landis+Gyr), was also required to utilize IDR meters for use in the load research program. UtiliNet Solution Center (USC) is included in the professional services provided by Landis+Gyr. The cost for USC is not accounted for separately from the meter reading services. Additionally, please note that Itron MV90 is also utilized for the collection and reporting of meter reads delivered to the billing system.

Prepared by: JL
Sponsored by: Mark Dombroski

ICA 1-20. With respect to smart meters installed for each customer class, what percentage are capable of interval data recording? What percentage by class are actually utilized to provide time interval measurement?

ANSWER:

Thirty percent of our residential smart meters are currently capable of interval data recording, with 10% currently sending interval data through our Advanced Metering Infrastructure head end system. This number is anticipated to grow to 100% capable and 100% provisioning of interval data to the utility within the next 5 years.

One hundred percent of our C&I meters are capable of collecting interval data, with 10% currently providing that data back to the utility. We anticipate that number to likewise rise to 100% within the next 5 years.

Prepared by: BK
Sponsored by: Elaina Ball

ICA 1-21. Do meter reading personnel require more time to record and capture data, and reset demand meters as opposed to meters serving energy only customers? Please provide the best estimate of the meter reading cost impact.

ANSWER:

For the majority of meters, there is no recordable difference between the time it takes to record and capture data and reset demand meters as compared with meters serving energy-only customers. This is due to the fact that the bulk of Austin Energy's electric meter reading services come through the Advanced Metering Infrastructure system in place today, which requires minimal manual meter reading.

There is an exception related to the deployment of certain types of commercial and industrial demand meters that collect and send interval data – Interval Data Recorder meters. Occasionally, IDR meters require field visits to acquire and record the interval data if the meter fails to fully transmit or is unable to transmit over dedicated lines. In this instance, a field visit is required to download the missing interval data from the meter. The field visits to capture IDR meter data are more time intensive than the field visits required to capture data from meters serving energy-only customers. Austin Energy estimates the cost involved with the acquisition and aggregation of IDR meter data to be approximately $120,000 per year.

Prepared by: BK
Sponsored by: Elaina Ball

ICA 1-22.

A. Has the residential inclining block rate structure produced any evidence that the rate design has reduced energy use per meter?

B. Please provide any such evidence.

C. Provide any price elasticity estimates which Austin Energy has derived from the rate structure.

D. Provide any residential price elasticity estimates which Austin Energy utilizes in designing the rate structure

ANSWER:

Please refer to Attachment 1: 2012 Conservation Pricing Signal Impacts.

Prepared by: BE
Sponsored by: Mark Dombroski

NewGen Strategies & Solutions

3420 Executive Center Drive
Suite 165
Austin, TX 78731
Phone: (512) 479-7900

Memorandum

To: Barksdale English

From: Tony Georgis, Grant Rabon, and Justin Rasor

Date: December 12, 2015

Re: 2012 Conservation Pricing Signal Impacts

In support of the broader Regulatory Consulting Services to Austin Energy (AE), NewGen Strategies and Solutions, LLC (NewGen) is evaluating the impacts of the 2012 conservation rate pricing signal on residential energy consumption. As a result of the 2011 Rate Study, AE updated customer rates and implemented new rate structures. One of the objectives of the 2011 Rate Study and subsequent rates was to develop rates aligned with AE's commitment to energy conservation. As a result, the residential customer class rates were redesigned to send pricing signals to further support energy conservation.

The 2012 rates were updated and structurally changed to include five tiers or "blocks" of monthly consumption starting with the first tier of 0 to 500 kilowatt-hours (kWh) up to the final tier of 2,501 kWh or more. The rates also included seasonal price signals, which increased prices in the summer periods (e.g. June through September) as customers typically use more electricity. This increase in costs as customers consume more electricity and increased costs during the summer months, sends a strong pricing signal to customers to conserve electricity as it could significantly reduce their monthly bills. The AE Residential customer class includes both single family detached and multifamily homes. Single family and multifamily each represent roughly 50% of the total customers or meters within the full Residential customer class. Table 1 summarizes the Residential-Austin Rate and the tiered rate structure.

Table 1
Residential – Austin (Inside City) Rate

Charge	Oct. – May	Jun. – Sept.
Customer Charge	$10.00 per month	$10.00 per month
Energy Charges		
0 – 500kWh	$0.018 per kWh	$0.033 per kWh
501 – 1,000kWh	$0.056	$0.080
1,001 – 1,500kWh	$0.072	$0.091
1,501 – 2,500kWh	$0.084	$0.110
2,501kWh and greater	$0.096	$0.114
Power Supply Adjustment	See Tariff	See Tariff
Community Benefit Charge	See Schedule	See Schedule
Regulatory Charge	See Schedule	See Schedule

Note: the Residential – Outside Austin rate includes three pricing tiers, not five as shown of the inside city rate above.

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This memo evaluates how the 2012 rates and pricing signals may have impacted residential customer consumption amounts and patterns. While it is difficult, if not impossible, to precisely state the exact amount of energy conserved directly due the 2012 rates, we are able to evaluate consumption patterns prior to and after the rates were implemented and identify outcomes and any consumption reductions. This memo report summarizes the initial results of our work, including the following:

- The change in residential customer consumption since the implementation of the conservation rates on October 1, 2012;
- The methodology used to "normalize" the consumption data to account for differences in weather or broader market trends (e.g. more efficient appliances, improved home construction, etc.);
- The suggested impact of the conservation rate signal; and
- Potential opportunities for AE to use and optimize the data and results in future program and operational decisions.

Executive Summary

To best understand and attempt to quantify the impact the 2012 conservation rate change had on residential consumption levels, one must "normalize" the annual consumption data for each customer and the electric system as a whole. Normalizing the electric consumption data attempts to remove the influence of specific variables (such as weather) on the level of electric consumption from year to year. By removing these key variables' influence on the electric consumption results, other variables (such as the rate change) may be evaluated for their impact on the actual consumption results. To normalize the consumption data, NewGen utilized average residential monthly consumption data from 1999 to September 2012, the month before the new rates took effect. Using this consumption data and monthly temperature data (e.g. heating and cooling degree days[1]) for the same period, we performed a regression analysis to quantify how consumption is correlated with and changes due to the temperature. This regression allowed us to identify and eliminate the impact that the weather had on consumption levels. In addition, the regression allowed us to generally account for the year over year impact of broader, market driven efficiencies such as the efficiency improvements in appliances, lighting, home construction, motors, air conditioning, etc.

The regression was then used to project what the "normalized" consumption for the period of fiscal year (FY) 2010[2] through 2015. This normalized projection of consumption was then compared to the actual consumption levels to better understand and identify the impacts of the conservation pricing signal rates. The weather and market normalized analysis suggests the implementation of the conservation pricing structure in October 2012 (FY 2013) contributed to a material and significant reduction in electricity consumption in the residential customer class. Figure 1 compares and calculates the

[1] A degree day is a numerical representation of the difference in the average ambient temperature for the day and a certain setpoint (i.e. 65 degrees). Cooling degree days reflect a need for air conditioning, while heating degree days reflect a need for heating.

[2] Austin Energy's Fiscal Year is October 1 through September 30.

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difference in the annual normalized (i.e. projected) and actual electric consumption for the residential customer class.

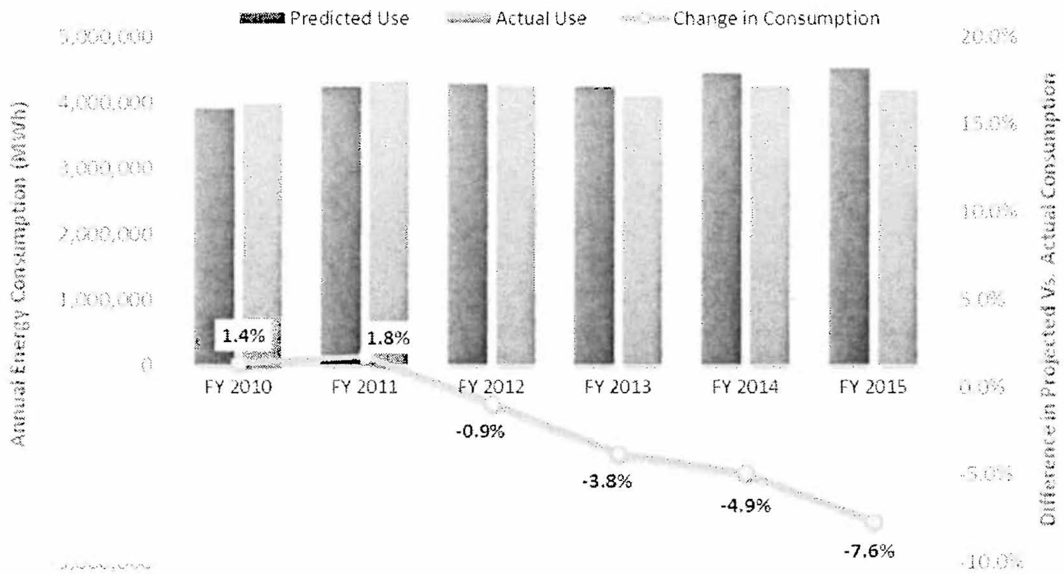

Figure 1: Projected vs. Actual Energy Consumption

Figure 1 shows the projected and actual consumption levels for FY 2010 through FY 2012 at similar levels in the years prior to the implementation of the conservation pricing rates beginning in FY 2013. In the first year of the conservation pricing signal, FY 2013, the analysis suggests a 3.8% reduction in the projected consumption levels with 4.9% and 7.6% in the subsequent years. FY 2012 projected consumption levels do exhibit a slight decline in comparison to the prior two years. However, this slight decline is not unexpected and within a reasonable projected or forecasted difference. FY 2012 also began on October 1, 2011, directly after the hottest summer on record for Austin. This may have led to a potential customer behavioral change as FY 2012 came directly after what were likely some of the highest customer bills in recent years from the record heat. The monthly projected and actual data also suggests customers reduced consumption in the fall of 2011 (beginning of FY 2012) after the record heat.

As intended by the implementation of the 2012 conservation rate pricing signal, as the rates and electric bills increased, customers began changing behaviors and conserving electricity. This relationship between price or rate increases and resulting reductions in electricity consumption is commonly known as elasticity of demand. Our research shows the long-term elasticity of demand (e.g. the measure of customers' reduction in consumption related to a price increase after a two to three year period) is approximately two to three times higher than the short-term elasticity of demand. This research suggests that as customers have more time to adjust to pricing signals, they conserve more electricity as

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they change behaviors and purchase energy efficient goods and products. This trend is also reflected in Figure 1.

While quantifying the exact reduction in consumption directly attributable to the 2012 rate change is likely impossible, we can identify trends in consumption patterns and estimate the impact of the rates by identifying and eliminating the most influential variables. The results of our analysis clearly suggest the implementation of the 2012 conservation rate structure resulted in a significant reduction in energy consumption. Finally, and aligned with our research regarding elasticity of demand, the longer term conservation results for FY 2014 and FY 2015 in Figure 1 are increasing and higher than the first year. Thus, if AE continues evaluating the impact of the conservation rates in subsequent years, they may observe the consumption reductions stabilizing at 10% to 12% per year as illustrated in the 2015 data, which is approximately two to three times as much the first year (FY 2013) reduction of 3.8%.

Scope of Work and Methodology Overview

Task 4 (Task) of NewGen's Regulatory Consulting Services includes evaluating and identifying the impacts of the 2012 conservation rate pricing signal on residential customer consumption and behaviors. As the conservation pricing signal was intended to promote energy efficiency and reduce consumption, NewGen primarily focused our analysis on the residential billing and consumption data to identify the potential reductions in consumption attributed to the conservation pricing signal. While the primary goal of the Task is identifying the potential reductions in residential energy consumption, the Task also includes the examination of the 2012 conservation rates' influence on customer interest, and use and adoption of AE's Customer Energy Solutions or demand side management (DSM) programs. At AE's request, this memo report and related results are focused on and summarize the residential billing analysis and related changes in residential consumption. Subsequent reports to AE will integrate the remaining Task elements including the DSM evaluation, conclusions, and findings.

To evaluate and attempt to quantify the change in consumption attributable to the 2012 conservation rates, NewGen applied an industry accepted methodology to "normalize" the annual consumption data for each customer and the electric system as a whole. Normalizing the electric consumption data attempts to remove the influence of specific variables (such as weather) on the level of electric consumption from year to year. By removing these key variables' influence on the electric consumption, the impact of the pricing signal may be analyzed for its contribution to changes in consumption patterns. A summary of the methodology and approach to determine the impact on consumption for the conservation rates is included below.

Billing Database and Data Gathering

To examine the potential impacts of the conservation rates, NewGen used the existing AE billing databases or **[the CIS and CCB systems]** as the foundation for normalizing and projecting the residential consumption levels. Once the regression was calculated, it was applied to each customer bill for FY 2010 through FY 2015 to project a weather normalized consumption profile. This normalized profile was then compared to the actual consumption levels to determine the differences.

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Weather and Broader Market Trend Normalization and Regression Analysis:

To normalize the consumption data, NewGen relied upon and leveraged portions of an existing AE weather normalization model. AE currently uses this weather normalization model to forecast load for budgeting and financial purposes. NewGen used portions of the existing AE model, as it has historical residential consumption data by month from 1999 through September 2012, the month before the conservation rates took effect. Using this historical consumption data and monthly temperature data (e.g. heating and cooling degree days) for the same period, we performed a regression analysis to quantify how consumption is correlated and varies with the temperatures. The regression analysis also identified an annual general reduction in consumption levels that represents the broader market trend and impacts of more efficient products, appliances, and homes. The regression only included data through September 2012 to ensure the regression formula and projections were not affected by the significant change in rates and rate structure after October 1, 2015. By applying the results of the regression, it allows us to identify and eliminate the impact that the weather had on consumption levels and generally account for the year over year impact of broader, market driven efficiencies. Please note, the regression NewGen developed is slightly different than the one currently calculated and included in the AE regression and forecast model. The regression used to support this Task and analysis was developed using data prior to the implementation of the 2012 conservation rates and also includes a variable to account for broader or market-wide conservation behaviors and improvements in energy efficiency.

The results of the regression analyses provided an R-squared value of 0.97. R-squared values for a regression are a statistical measure of how close the data points align with the fitted regression line. The higher the R-squared value the more closely the regression analysis fits and projects the data. For example, the 0.97 value means that 97% of the monthly consumption data points are explained by the regression.

Projected and Actual Monthly Consumption

Using the regression results, the FY 2010 through FY 2015 customer bills for the entire residential customer class were recalculated. By recalculating the consumption with the regression formula, it creates a projected consumption based on the temperatures for each month and takes into account an annual reduction in consumption based on broader energy efficiency market trends. The projected consumption levels were then compared to the actual consumption to estimate the change in consumption patterns associated with the 2012 conservation rates.

Outcomes and Results

Table 2 shows the results of the projected consumption for FY 2010 through FY 2015 compared to the actual consumption.

Table 2
Projected and Actual Residential Class Consumption

Year	Projected Consumption (MWh)	Actual Consumption	Difference (Actual vs. Projected)

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		(MWh)		
FY 2010	3,916,845	3,971,957	55,112	1.4%
FY 2011	4,236,819	4,313,108	76,289	1.8%
FY 2012	4,284,709	4,245,712	(38,996)	-0.9%
FY 2013	4,239,601	4,080,281	(159,320)	-3.8%
FY 2014	4,442,228	4,225,378	(216,850)	-4.9%
FY 2015	4,523,698	4,177,829	(345,869)	-7.6%

As Figure 1 and Table 2 show, there is a clear trend in the difference between the projected and actual consumption in the years after the conservation rates were implemented in FY 2013. The regression projected consumption levels for FY 2010 through FY 2012 that remained relatively stable, within +/- 1.8% of the actual consumption for each year. However, beginning in FY 2013 with the new conservation rates, the actual consumption levels are materially and significantly less than the projected or "normalized" consumption. In the first year of the conservation rates, the analysis suggests a 3.8% reduction in the projected consumption levels with 4.9% and 7.6% in the subsequent years. It is also important to note Table 2 also shows the reductions in electricity consumption growing in each year following the implementation of the conservation rates. This trend suggests as customers have more time to adjust behaviors and/or consider the new rates in their purchasing of products and equipment, the resulting consumption further declines. These results from FY 2014 and 2015 align with and support academic and research studies on the longer term effects of conservation pricing signals and increasing utility bills and rates. Additional discussion on the short- and long-term effects of the conservation rate structure are included in the Elasticity of Demand portion of the memo below.

As the Residential class includes both multifamily and single family homes, there was a concern that the recent economic recovery and perceived increase in multifamily construction such as apartment or condominium complexes may impact the results. The average multifamily customers consume approximately 650 to 800[3] kWh per month while average single family customers consume 1,000 to 1,600 kWh per month. If, or as, the number of multifamily customers begins to increase dramatically and shift the ratio of multifamily to single family customers within the class, there is a concern it may distort the results and artificially reduce the comparison of actual consumption levels to the projected. However, due to the regression analysis and application of the resulting formula, the results are not dramatically affected by a shifting mix of multifamily and single family customers within the class. The regression formula considers and includes each year's average monthly customer consumption and recalculates the projected consumption based on each individual customers' consumption profile. Thus, the evolving or changing mix in the Residential class housing stock is reflected in the projected results. Furthermore, it appears the growth rates in multifamily customers (approximately 1.5% per year) are not dramatically higher than single family (approximately 0.3% to 1.2% per year) for the past two to three years.

[3] The average monthly consumption is based on the billing database information for 2014 and 2015 with the range representing the inside versus outside City customers.

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Finally, while FY 2012 results show a slight decline in comparison to the previous two years; this slight decline is within a reasonable projected or forecasted difference. This slight decrease in FY 2012 is similar to the FY 2010 and FY 2011 results showing slight increases of actuals versus projected. FY 2012 also began on October 1, 2011, directly after the hottest summer on record for Austin. This may have led to a potential customer behavioral change as FY 2012 came directly after what were likely some of the highest customer bills in recent years from the record heat. A comparison of the monthly projected and actual data also suggests customers reduced consumption in the fall of 2011 (beginning of FY 2012) after the record 2011 summer heat. The actual consumption levels for the fall months at the beginning of FY 2012 were typically lower than the projected amounts. NewGen further examined the FY 2012 consumption data and regression analysis in an attempt to identify a variable that may further improve the precision of the regression projections, but there were no other statistically valid indicators to include.

Elasticity of Demand

As intended by the implementation of the conservation pricing signal in October 2012, as the rates and electric bills increased with greater consumption levels, customers began changing behaviors and conserving electricity. This relationship between price or rate increases and resulting reductions in electricity consumption is commonly known as elasticity of demand. Elasticity of demand is a common economics term used to measure the market responsiveness (elasticity) related to the change in consumption or demand of a particular product due to the change in its price. Understanding the elasticity of demand for electric rates is important in designing rates to achieve conservation goals.

Elasticity of demand is typically represented as a ratio of the percent change in demand divided by the percent change in price. These ratios are typically negative, which indicate as prices increase the demand or consumption decreases. The elasticity of demand also changes and typically increases as more customers become aware of the changes and are provided more time to adjust to the new pricing signals. For example, as the rates were implemented in October 2012 some customers began making adjustments to behaviors or implementing energy efficiency measures early in the FY, while most customers likely took the first six months to a year to fully realize the impacts to their total bills and begin making adjustments. As time went on, and more customers had time to adjust behaviors, the amount of conservation increased.

Our secondary market research identified short-term elasticity of demand in the range of -0.08 to -0.24. This data suggests each 10% increase in electricity bills would result in a reduction of 0.8% to 2.4% in customer consumption in the short-term (e.g. one to two years). Our research also showed long-term (e.g. two years or more) elasticity of demand was in the range -0.30 to -0.75 with some case studies as much as -1.0. As the data show, the long term elasticity of demand is approximately two to three times higher than the short term elasticity of demand. This general trend in the short- and long-term elasticity of demand is clearly seen in Table 2 and Figure 1 as the difference between the actual and projected consumption grows each year after the rates were implemented. The difference between the "normalized" or projected and actual consumption in FY 2013 is -3.8% and grows to -7.6% in FY 2015, or approximately double the short term amount.

Elasticity of demand is often used to project customer behavior with changing electric rates and support the design of rates such as AE's inclining block rate. Using or integrating elasticity of demand in rate

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analyses and revenue projections allows utilities to better understand and optimize the relationship between increasing the rates and impacts to system loads or consumption. For example, if AE were to implement a conservation pricing signal in other customer classes, it should use the short- and long-term elasticity of demand to facilitate the design of the rates and achieve a specified or targeted amount of conservation (e.g. 5% less than normalized). AE may also consider incorporating elasticity of demand to help project and forecast system consumption for the Residential customer class as it nears the long-term elasticity of demand impacts. Thus, if AE continues tracking the impact of the conservation rates in subsequent years, they may observe the consumption reductions stabilizing at approximately 10% to 12% per year, or approximately three times the amount of the first year reductions. This may also help to improve system load and revenue forecasts for the utility.

Future Analysis

Additional analyses of the conservation pricing signal may yield key information in supporting and optimizing the design and implementation of AE's Customer Energy Solutions or energy efficiency programs. Task 4 includes additional examination of the conservation rates that may provide insight into market segmentation and the calculation of the residential customer class' elasticity of demand. By leveraging the geographical information (e.g. zip codes or general premise locations) available for the Residential customer class and consumption patterns available through the analysis complete to date, we can develop maps across AE's service territory to identify, cross reference, and evaluate:

- Areas that include concentrations of larger residential electricity consumers;
- Areas that include more efficient customers;
- Areas or types of customers that responded the most to the conservation pricing signals;
- Areas that included the highest or lowest monthly bills as a percentage of median income and their adoption of AE's Customer Energy Solutions;
- Consumption profiles based on census related data such as income levels, home sizes, home values, etc.;
- The roles of income, house vintage/type, inside or outside city, and family size and their influence on conservation from rates and participation in Customer Energy Solutions;
- Others as directed by AE.

This additional analysis and resulting market segmentation should support AE's Customer Energy Solutions offerings by informing and further improving conservation related programs for customers. The information can help AE better target and capture potential Customer Energy Solutions participants, identify segments approaching saturation/diminishing returns, and identify market segments that are under/overserved. NewGen also plans to develop more discrete regression analyses to support the development of AE's specific elasticity of demand ratio for the conservation rates.

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Mr. Barksdale English
December 9, 2015
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Findings and Conclusions

- The regression analysis performed on the monthly average consumption and temperature data is highly correlated and a valid regression to project or "normalize" the actual annual consumption for comparison to actual levels.
- While quantifying the exact reduction in consumption directly attributable to the 2012 rate change is likely impossible, the results of the regression analysis strongly suggest the conservation pricing signal implemented in October 2012 (beginning of FY 2013) have resulted in material and significant reductions in residential electricity consumption. Prior to the rate change, the projected and actual annual consumption were closely aligned, while FY 2013 through FY 2015 each showed substantial and increasing levels of conservation.
- The analysis suggests significant reductions in energy consumption in FY 2013, FY 2014, and FY 2015 of 3.8%, 4.9%, and 7.6% respectively as compared to weather normalized projections.
- Our research shows long-term (e.g. two years or more) elasticity of demand generally two to three times higher than the short-term elasticity of demand. This suggests AE may see further conservation due to the conservation rates and reductions in actual compared to normalized consumption levels. These levels may reach 10% to 12% or more over the next few years.
- AE should consider integrating elasticity of demand in rate analyses and revenue projections to better understand and optimize the relationship between increasing the rates and impacts to system loads or consumption. For example, if AE continues tracking the impact of the conservation rates in subsequent years, they may observe the consumption reductions stabilizing at approximately 10% to 12% per year, or approximately three times the amount of the first year reductions. This may also help to improve system load and revenue forecasts for the utility.
- Additional analyses based on these initial results may yield key market segmentation information that is valuable to supporting and optimizing the design or implementation of AE's Customer Energy Solutions programs. These additional analyses may also lead to the calculation of the elasticity of demand for AE's residential customers and greater insight into which types of customers responded to the pricing signal.

If you have any questions or comments regarding these initial results of the impact of the conservation pricing signal, please feel free to contact Tony Georgis at tgeorgis@newgenstratgies.net or Grant Rabon at grabon@newgenstratgies.net.

ICA 1-23. Please provide analyses and workpapers which support the allocation of customer accounting, customer service, and customer billing among utility functions (e.g., electric service vs. water and wastewater, trash and recycling pick up, street cleaning, etc.).

ANSWER:

Please see AE's Response to NXP/Samsung RFI No. 1-94.

Prepared by: DK
Sponsored by: Mark Dombroski

ICA 1-24. Please identify each FERC account or sub-account which Austin Energy proposes to change from reconcilable to non-reconcilable, or vice versa, with a brief description of the reason for the change.

ANSWER:

Austin Energy does not propose to change any FERC accounts from reconcilable to non-reconcilable or vice versa.

Prepared by: RM/MM
Sponsored by: Mark Dombroski

ICA 1-25. Are any substations dedicated to a single customer? If yes, provide full details (including annual costs) of the method of cost recovery for that substation in particular, and for the allocation of substations, generally, to that customer.

ANSWER:

No substations in Austin Energy's distribution network are dedicated to a single customer.

Prepared by: DS/KD
Sponsored by: Elaina Ball

ICA 1-26. Please provide any cost-basis which exists for the inside/outside city customer rate differential.

ANSWER:

Austin Energy has no responsive information to this request.

Prepared by: BE
Sponsored by: Mark Dreyfus

ICA 1-27. With respect to reconcilable energy charges, is the reconciliation performed on a monthly class-by-class basis as set out in the PUC's fuel reconciliation rule? As an illustration, provide an example of a reconciliation to classes for a 12 month period.

ANSWER:

Austin Energy does not reconcile the Power Supply Adjustment (PSA) on a class-by-class basis.

Prepared by: RM/MM
Sponsored by: Mark Dombroski

ICA 1-28. Do the demand allocation factors in the class cost of service study include a weather normalization adjustment? If yes, provide a detailed explanation, with accompanying workpapers, of the method utilized to weather normalize CP and NCP data.

ANSWER:

The demand allocation factors do include a weather normalization adjustment. Please see the original and supplemental responses to NXP/Samsung 1-29 for a detailed explanation of the method and models utilized to weather normalize coincident peak and non-coincident peak data. Resulting from this process is an hourly net to system (total amount of energy to serve customers, along with associated line losses) load.

The customer class hourly demands, resulting from Austin Energy Load Research program, are calibrated to the aforementioned weather normalized hourly load data. The hourly load for each customer class each month is adjusted by a factor derived by a ratio of actual billed energy to the weather normalized energy for the specific class. These factors are shown in Attachment 1. The adjusted customer class demands are aggregated up to the match the hourly normalized net to system load. These adjustments are performed in the Oracle Utilities Load Analysis (OULA) program. The OULA input file for the October 2013 adjustments is included (Attachment 2) as an example of the process which is repeated for each month of the test year.

Attachment 1: Class Demand Calibration to Weather Normal Billed Energy (Proprietary customer information has been redacted.)
Attachment 2: Oracle Utilities Load Analysis Input File (Proprietary customer information has been redacted.)

Prepared by: ZD/JL
Sponsored by: Mark Dombroski

A	Actual Sales	GWh Oct	GWh Nov	GWh Dec	GWh Jan	GWh Feb	GWh Mar	GWh Apr	GWh May	GWh Jun	GWh Jul	GWh Aug	GWh Sep
1	ERES	362.89	256.32	320.08	369.45	324.68	269.90	244.87	284.99	383.11	469.96	505.68	522.83
2	ESEC1	21.23	19.07	22.46	25.60	23.13	20.37	18.82	18.88	21.30	22.66	23.79	24.79
3	ESEC2	226.43	196.75	193.79	210.60	192.56	180.63	186.89	201.34	234.34	256.16	266.22	261.44
4	ESEC3	226.39	206.68	202.60	222.03	198.46	194.03	198.26	213.15	225.96	235.83	241.40	267.68
5	EPRI1	30.64	35.67	36.11	39.30	34.43	34.31	35.79	36.92	39.98	42.10	43.51	47.46
6	EPRI2	69.35	63.07	55.47	56.97	56.37	54.88	62.52	62.65	63.92	70.94	69.82	70.61
7	EPRI3	104.73	105.10	102.17	107.01	97.89	92.13	102.94	98.01	108.67	112.68	107.78	120.34
8	ETRANS	[redacted]											
9	ETRAN2												
10	ENWM	1.03	1.01	0.99	0.98	0.97	0.98	0.97	0.97	0.97	0.96	0.95	0.95
11	ESPORT	0.51	0.51	0.45	0.38	0.50	0.57	0.49	0.49	0.39	0.40	0.39	0.47
12	ESAL	3.44	3.75	(0.13)	7.59	3.13	3.13	0.08	5.17	0.07	2.24	2.32	2.61
13	ESNG	[redacted]											
14													
15	Total	1,077.76	902.68	953.86	1,063.22	951.74	870.28	871.54	944.16	1,100.26	1,236.97	1,284.40	1,343.35
16													
17	NTS	1,038.99	943.63	1,066.83	1,047.39	933.74	941.74	940.37	1,060.12	1,233.14	1,333.88	1,409.18	1,206.67

C	Weather & CC Adj.	GWh Oct	GWh Nov	GWh Dec	GWh Jan	GWh Feb	GWh Mar	GWh Apr	GWh May	GWh Jun	GWh Jul	GWh Aug	GWh Sep
1	ERES	352.74	290.16	261.00	341.46	296.18	262.04	255.74	301.32	411.29	493.27	520.46	517.77
2	ESEC1	21.06	18.88	21.89	24.64	21.13	19.42	19.01	18.37	21.92	22.16	24.40	24.65
3	ESEC2	226.37	190.47	190.08	204.50	177.58	173.67	190.02	197.24	242.15	251.50	273.80	260.59
4	ESEC3	224.64	204.85	197.45	214.02	181.26	185.34	200.15	207.56	231.61	231.86	247.30	263.46
5	EPRI1	47.18	44.10	37.00	48.49	33.16	35.79	37.63	42.22	47.63	58.70	57.52	59.82
6	EPRI2	53.10	54.24	50.88	56.30	56.32	40.69	56.72	57.20	62.06	65.27	63.11	65.84
7	EPRI3	108.31	99.63	100.49	109.93	115.04	99.63	101.23	94.69	111.10	114.93	114.80	122.07
8	ETRANS	2.07	1.83	1.71	2.08	2.52	2.43	2.18	2.21	2.33	2.27	2.35	2.24
9	ETRAN2	18.88	18.07	18.00	18.96	15.61	16.33	18.13	18.61	19.85	21.71	21.53	22.52
10	ENWM	1.06	0.98	1.05	1.04	1.00	0.93	1.14	1.12	1.15	1.09	1.17	1.11
11	ESPORT	0.25	0.27	0.21	0.21	0.24	0.24	0.23	0.23	0.22	0.22	0.24	0.26
12	ESAL	2.95	3.10	3.54	3.74	3.58	2.77	3.00	2.61	2.43	2.14	2.27	2.52
13	ESNG	0.16	0.13	0.15	0.14	0.13	0.13	0.14	0.14	0.15	0.15	0.15	0.14
14													
15	Total	1,058.77	926.69	883.45	1,025.50	903.76	839.61	885.31	943.71	1,153.91	1,265.25	1,329.10	1,342.99
16													
17	NTS	1,072.54	902.04	953.64	1,003.30	905.55	946.57	957.24	1,108.59	1,281.10	1,367.64	1,417.06	1,203.09
	Adjust	10	11	12	1	2	3	4	5	6	7	8	9

C	Factor	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	ERES	0.97206	1.13203	0.81542	0.92422	0.91222	0.97085	1.04439	1.05730	1.07355	1.04959	1.02883	0.99032
2	ESEC1	0.99206	0.99041	0.97445	0.96239	0.91374	0.95367	1.01005	0.97305	1.02915	0.97795	1.02566	0.99409
3	ESEC2	0.99975	0.99854	0.98086	0.97105	0.92218	0.96146	1.01672	0.97964	1.03334	0.98178	1.02850	0.99676
4	ESEC3	0.99225	0.99118	0.97459	0.96395	0.91331	0.95518	1.00954	0.97376	1.02499	0.98316	1.02444	0.98427
5	EPRI1	1.18996	1.23622	1.02472	1.23374	0.96303	1.04331	1.05141	1.14361	1.19141	1.39426	1.32201	1.26039
6	EPRI2	0.76570	0.85998	0.91726	0.95468	0.99914	0.74513	0.90722	0.91290	0.97096	0.92014	0.90388	0.93248
7	EPRI3	1.03405	0.94789	0.98362	1.02722	1.17518	1.08139	0.98337	0.96616	1.02238	1.01998	1.06513	1.01440
8	ETRANS	[redacted]											
9	ETRAN2												
10	ENWM	1.02879	0.95169	1.06009	1.06290	1.02703	0.94958	1.17732	1.15970	1.18970	1.13380	1.22459	1.17124
11	ESPORT	0.29197	0.36518	0.32678	0.41456	0.31408	0.38970	0.33276	0.53845	0.70480	0.77799	0.61992	0.56233
12	ESAL	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
13	ESNG	[redacted]											
14													
15	**Note: Adjustment factor is the ratio of normalized sales to actual sales. This factor is applied to the unadjusted class means in LodeStar.**												

```
/* CREATE NEW KEYS THAT TOTAL PRIMARY AND SECONDARY
/* METERS. TOTALS ARE ADJUSTED FOR WEATHER AND YEAR END
/* CUSTOMER COUNTS.
/* October 01, 2013

/* BLOCK 1 CREATES ADJUSTMENT FACTOR TO BRING CLASS
/* TOTALS TO EQUAL THE NET TO SYSTEM NORMALIZED
/*
BLO

RESIMEAN = 0
RESIMEAN = RESIMEAN + E4RES-FINAL-MEAN-CL,0
RESIMEAN = RESIMEAN * 0.97206 /* ADJUST FOR WEATHER AND CC

TMPS1 = 0
TMPS1 = TMPS1 + E4SEC1-FINAL-MEAN-CL,0
TMPS1 = TMPS1 * 0.99206 /* ADJUST FOR WEATHER AND CC
TMPS2 = 0
TMPS2 = TMPS2 + E4SEC2-FINAL-MEAN-CL,0
TMPS2 = TMPS2 * 0.99975 /* ADJUST FOR WEATHER AND CC
TMPS3 = 0
TMPS3 = TMPS3 + E4SEC3-FINAL-MEAN-CL,0
TMPS3 = TMPS3 * 0.99225 /* ADJUST FOR WEATHER AND CC
TMPP1 = 0
TMPP1 = TMPP1 + E4PRI1-FINAL-MEAN-CL,0
TMPP1 = TMPP1 * 1.18996 /* ADJUST FOR WEATHER AND CC
TMPT1 = 0
TMPT1 = TMPT1 + E4TRNS-FINAL-MEAN-CL,0
TMPT1 = TMPT1 * [redacted] /* ADJUST FOR WEATHER AND CC
TMPL2 = 0
TMPL2 = TMPL2 + E4SPTL-FINAL-MEAN-CL,0
TMPL2 = TMPL2 * 0.29197 /* ADJUST FOR WEATHER AND CC
TMPL4 = 0
TMPL4 = TMPL4 + E4NWM-FINAL-MEAN-CL,0
TMPL4 = TMPL4 * 1.02879 /* ADJUST FOR WEATHER AND CC

COMMEAN = 0
COMMEAN = TMPS1 + TMPS2 + TMPS3 + TMPP1 + TMPT1 + TMPL2 + TMPL4

TMPP2 = 0
TMPP2 = TMPP2 + E4PRI2-FINAL-MEAN-CL,0
TMPP2 = TMPP2 * 0.7657 /* ADJUST FOR WEATHER AND CC
TMPP3 = 0
TMPP3 = TMPP3 + E4PRI3-FINAL-MEAN-CL,0
TMPP3 = TMPP3 * 1.03405 /* ADJUST FOR WEATHER AND CC
TMPT2 = 0
TMPT2 = TMPT2 + E4TRN2-FINAL-MEAN-CL,0
TMPT2 = TMPT2 * [redacted] /* ADJUST FOR WEATHER AND CC

INDMEAN = 0
INDMEAN = TMPP2 + TMPP3 + TMPT2

TMPL1 = 0
TMPL1 = TMPL1 + E4SNG-FINAL-MEAN-CL,0
```

```
TMPL1 = TMPL1 * [redacted] /* ADJUST FOR WEATHER AND CC
TMPL3 = 0
TMPL3 = TMPL3 + E4SAL-FINAL-MEAN-CL,0
TMPL3 = TMPL3 * 1.0 /* ADJUST FOR WEATHER AND CC

LIGHTGMEAN = 0
LIGHTGMEAN = TMPL1 + TMPL3

TMPADJUST1 = 0
TMPADJUST1 = TMPADJUST1 + RESIMEAN + COMMEAN + INDMEAN

TMPADJUST2 = 0
TMPADJUST2 = NTSNZ-ENTR-TOTL,0 * 1000
TMPADJUST2 = TMPADJUST2 - LIGHTGMEAN

TMPSECADJ = 0
TMPSECADJ = TMPADJUST2 / TMPADJUST1
TMPSECADJ = UOM(20)
NORMZADJ,0 = TMPSECADJ
NORMZADJ,0 = DES(SECONDARY METER ADJ FACTOR)

BLO

TEMP1 = 0
TEMP1 = E4RES-FINAL-MEAN-CL,0
TEMP1 = TEMP1 * 0.97206
TEMP1 = TEMP1 * NORMZADJ,0
TEMP1 = UOM(02)
E4RES-NORMZ-MEAN-CL,0 = TEMP1
E4RES-NORMZ-MEAN-CL,0 = DES(NORMIZALIZED RESIDENTIAL)

BLO

TEMP1 = 0
TEMP1 = E4SEC1-FINAL-MEAN-CL,0
TEMP1 = TEMP1 * 0.99206
TEMP1 = TEMP1 * NORMZADJ,0
TEMP1 = UOM(02)
E4SEC1-NORMZ-MEAN-CL,0 = TEMP1
E4SEC1-NORMZ-MEAN-CL,0 = DES(NORMIZALIZED RESIDENTIAL)

BLO

TEMP1 = 0
TEMP1 = E4SEC2-FINAL-MEAN-CL,0
TEMP1 = TEMP1 * 0.99975
TEMP1 = TEMP1 * NORMZADJ,0
TEMP1 = UOM(02)
E4SEC2-NORMZ-MEAN-CL,0 = TEMP1
E4SEC2-NORMZ-MEAN-CL,0 = DES(NORMIZALIZED RESIDENTIAL)

BLO

TEMP1 = 0
```

AE's Response to ICA RFI No. 1-28
Attachment 2
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```
TEMP1 = E4SEC3-FINAL-MEAN-CL,0
TEMP1 = TEMP1 * 0.99225
TEMP1 = TEMP1 * NORMZADJ,0
TEMP1 = UOM(02)
E4SEC3-NORMZ-MEAN-CL,0 = TEMP1
E4SEC3-NORMZ-MEAN-CL,0 = DES(NORMIZALIZED RESIDENTIAL)

BLO

TEMP1 = 0
TEMP1 = E4PRI1-FINAL-MEAN-CL,0
TEMP1 = TEMP1 * 1.18996
TEMP1 = TEMP1 * NORMZADJ,0
TEMP1 = UOM(02)
E4PRI1-NORMZ-MEAN-CL,0 = TEMP1
E4PRI1-NORMZ-MEAN-CL,0 = DES(NORMIZALIZED RESIDENTIAL)

BLO

TEMP1 = 0
TEMP1 = E4PRI2-FINAL-MEAN-CL,0
TEMP1 = TEMP1 * 0.7657
TEMP1 = TEMP1 * NORMZADJ,0
TEMP1 = UOM(02)
E4PRI2-NORMZ-MEAN-CL,0 = TEMP1
E4PRI2-NORMZ-MEAN-CL,0 = DES(NORMIZALIZED RESIDENTIAL)

BLO

TEMP1 = 0
TEMP1 = E4PRI3-FINAL-MEAN-CL,0
TEMP1 = TEMP1 * 1.03405
TEMP1 = TEMP1 * NORMZADJ,0
TEMP1 = UOM(02)
E4PRI3-NORMZ-MEAN-CL,0 = TEMP1
E4PRI3-NORMZ-MEAN-CL,0 = DES(NORMIZALIZED RESIDENTIAL)

BLO

TEMP1 = 0
TEMP1 = E4TRNS-FINAL-MEAN-CL,0
TEMP1 = TEMP1 * [redacted]
TEMP1 = TEMP1 * NORMZADJ,0
TEMP1 = UOM(02)
E4TRNS-NORMZ-MEAN-CL,0 = TEMP1
E4TRNS-NORMZ-MEAN-CL,0 = DES(NORMIZALIZED RESIDENTIAL)

BLO

TEMP1 = 0
TEMP1 = E4TRN2-FINAL-MEAN-CL,0
TEMP1 = TEMP1 * [redacted]
TEMP1 = TEMP1 * NORMZADJ,0
TEMP1 = UOM(02)
```

```
E4TRN2-NORMZ-MEAN-CL,0 = TEMP1
E4TRN2-NORMZ-MEAN-CL,0 = DES(NORMIZALIZED RESIDENTIAL)

BLO

TEMP1 = 0
TEMP1 = E4SNG-FINAL-MEAN-CL,0
TEMP1 = TEMP1 *[redacted]
/* TEMP1 = TEMP1 * NORMZADJ,0
TEMP1 = UOM(02)
E4SNG-NORMZ-MEAN-CL,0 = TEMP1
E4SNG-NORMZ-MEAN-CL,0 = DES(NORMIZALIZED RESIDENTIAL)

BLO

TEMP1 = 0
TEMP1 = E4SPTL-FINAL-MEAN-CL,0
TEMP1 = TEMP1 * 0.29197
TEMP1 = TEMP1 * NORMZADJ,0
TEMP1 = UOM(02)
E4SPTL-NORMZ-MEAN-CL,0 = TEMP1
E4SPTL-NORMZ-MEAN-CL,0 = DES(NORMIZALIZED RESIDENTIAL)

BLO

TEMP1 = 0
TEMP1 = E4SAL-FINAL-MEAN-CL,0
TEMP1 = TEMP1 * 1.0
/* TEMP1 = TEMP1 * NORMZADJ,0
TEMP1 = UOM(02)
E4SAL-NORMZ-MEAN-CL,0 = TEMP1
E4SAL-NORMZ-MEAN-CL,0 = DES(NORMIZALIZED RESIDENTIAL)

BLO

TEMP1 = 0
TEMP1 = E4NWM-FINAL-MEAN-CL,0
TEMP1 = TEMP1 * 1.02879
TEMP1 = TEMP1 * NORMZADJ,0
TEMP1 = UOM(02)
E4NWM-NORMZ-MEAN-CL,0 = TEMP1
E4NWM-NORMZ-MEAN-CL,0 = DES(NORMIZALIZED RESIDENTIAL)
```