Commonwealth of Kentucky
Before the
Public Service Commission

Case Number 2011-00303
Commission Staff's First Information Request

Clark Energy Cooperative, Inc

Winchester, Kentucky

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF CLARK ENERGY	)	
COOPERATIVE, INC. FOR A	)	
CERTIFICATE OF CONVENIENCE	)	**CASE NO.**
AND NECESSITY TO CONSTRUCT	)	**2011-00303**
ACCORDING TO IT'S 2010-2014	)	
FOUR YEAR CONSTRUCTION WORK PLAN	)	

RESPONSES OF CLARK ENERGY COOPERATIVE, INC.
TO COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION

Comes Clark Energy Cooperative, Inc., by counsel and pursuant to Commission Staff's First Request for Information dated March 5, 2012 files its Responses.

Holly S. Eades, Vice-President of Finance is the witness responsible for Clark Energy Cooperative, Inc.'s response to Request 1 and Todd Peyton, Manager of Engineering Services of Clark Energy Cooperative, Inc. is the witness responsible for Clark Energy Cooperative, Inc.'s responses to Requests 2 through 13.

GRANT, ROSE & PUMPHREY

By: _____

Robert L. Rose
51 South Main Street
Winchester, Kentucky 40391
ATTORNEYS FOR CLARK ENERGY

CERTIFICATE OF SERVICE

This is to certify these Responses of Clark Energy Cooperative, Inc. to the Commission Staff's First Request for Information dated March 5, 2012 has been served upon the Public Service Commission by filing electronically and by hand delivering one true and accurate copy to Faith Burns, Esquire, Post Office Box

615, Frankfort, Kentucky 40602-0615, Attorney for the Public Service Commission, on this 29th day of March, 2012.

Robert L. Rose
Of Counsel for Clark Energy
Cooperative, Inc.

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF CLARK ENERGY COOPERATIVE, INC FOR A CERTIFICATE OF CONVENIENCE AND NECESSITY TO CONSTRUCT ACCORDING TO IT'S 2010-2014 FOUR YEAR CONSTRUCTION WORK PLAN	)))))))	CASE NO. 2011-00303

RESPONSE OF CLARK ENERGY COOPERATIVE, INC.
TO COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION
DATED MARCH 5TH.

Paul G. Embs, being duly sworn, states that he has supervised the preparation of the responses of Clark Energy Cooperative, Inc. to the Public Service Commission Information Requests in the above-referenced case and that the matters and things set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.

Paul G. Embs
President &CEO

Subscribed and sworn before me on this 29 day of March, 2012.

Notary Public
MY COMMISSION EXPIRES SEPTEMBER 8, 2012

My commission expires:

Clark Energy Cooperative, Inc.

PSC Case No. 2011-00303
1st Information Request

Request #1
Responsible Party: Holly Eades

1. Refer to paragraph 10 of the Application. Clark states that "the anticipated annual cost of operations, excluding the cost of power, of the existing and proposed facilities is $14,081,508." Provide the amount of the $14,081,508 that is related to the facilities proposed in Clark Energy's 2010-2014 Construction Work Plan ("CWP") (i.e., the amount of additional operations and maintenance costs that will be incurred due to the proposed construction). Include a detailed analysis of the annual costs.

Response: The amount $14,081,508 is the annual budgeted cost (2011), less purchased power, to operate and maintain the entire electric distribution system. Clark Energy does not have accounting software that tracks maintenance and operation cost on a per project basis.

Clark Energy Cooperative, Inc.

PSC Case No. 2011-00303
1st Information Request

Request #2
Responsible Party: Todd Peyton

2. The Application states that this is Clark Energy's 2010-2014 CWP. Documentation provided with the CWP indicates that all approvals from the Rural Utilities Service ("RUS") were received in January and March 2010, and that Clark Energy's Board of Directors approved the CWP on January 26, 2010.

a. Explain why Clark Energy did not file its 2010-2014 CWP with the Commission until February 2012.

b. Has Clark Energy begun construction on any projects included in the 2010-2014 CWP? If yes, provide an analysis that includes the following: name of the project, date that construction began, completion date, if applicable; and total spending to date for each project.

Response:

a. Oversight by Clark Energy

b. Yes

Project Name	Construction Started	Completion	Total Cost
Snow Creek	10/06/2010	12/31/2010	$60,259.55
Hwy 36\Suiters Branch	02/28/2011	07/05/2011	$124,507.74
Lower Paint Creek	10/03/2011	02/29/2011	$68,705.76
Prewitt Pike	06/20/2011	08/09/2011	$43,898.83

Clark Energy Cooperative, Inc.

PSC Case No. 2011-00303
1st Information Request

Request #3
Responsible Party: Todd Peyton

3. Clark Energy refers to the CWP being for the period 2010-2014 throughout its application. However, the January 26, 2010 Board of Directors Resolution approving the CWP sets out the time period as January 1, 2010 to December 31, 2013. Provide the specific date range applicable to the CWP.

Response: Specific date range is January 1, 2010 to December 31, 2013. Naming of the CWP is based on the CWP covering the projected summer 2010 through the winter 2013-2014 peak loads.

Clark Energy Cooperative, Inc.

PSC Case No. 2011-00303
1st Information Request

Request #4
Responsible Party: Todd Peyton

4. Refer to page 2 of the Executive Summary. In the section entitled Results of Proposed Construction, Clark Energy states that the CWP will adequately serve the 2013 summer peak load and the 2014 winter peak load as projected in East Kentucky Power Cooperative's ("EKPC") 2008 load forecast.

a. Provide EKPC's most recent load forecast for Clark Energy.
b. Based on EKPC's most recent load forecast for Clark Energy, will the 2010-2014 CWP adequately serve the 2013 summer peak load and the 2014 winter peak load?

Response:

a. EKPC 2010 Load Forecast Included as part of response 4.
b. Yes, the summer and winter peak loads in the 2008 EKPC load forecast exceed the 2010 projections.

Clark Energy Cooperative

2010 Load Forecast

Prepared by:
East Kentucky Power Cooperative, Inc.
Resource Planning Department

August 2010

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Table of Contents

	Page Number
Introduction and Executive Summary	5
Narrative	16
Key Assumptions	20
Methodology and Results	32
– Residential Forecast	33
– Small Commercial	36
– Large Commercial	38
– Public Street & Highway Lighting	40
– Peak Day Weather Scenarios	43

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Introduction

Executive Summary

Clark Energy Cooperative, (Clark Energy) located in Winchester, Kentucky, is an electric distribution cooperative that serves members in 11 counties. This load forecast report contains Clark Energy long-range forecast of energy and peak demand.

Clark Energy and its power supplier, East Kentucky Power Cooperative (EKPC), worked jointly to prepare the load forecast. Factors considered in preparing the forecast include the national and local economy, population and housing trends, service area industrial development, electric price, household income, weather, and appliance efficiency changes.

EKPC prepared a preliminary load forecast, which was reviewed by Clark Energy for reasonability. Final projections reflect a rigorous analysis of historical data combined with the experience and judgment of the President/CEO and staff of Clark Energy. Key assumptions are reported beginning on page 20.

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Executive Summary *(continued)*

The load forecast is prepared biannually as part of the overall planning cycle at EKPC and Clark Energy. Cooperation helps to ensure that the forecast meets both parties' needs. Clark Energy uses the forecast in developing two-year work plans, long-range work plans, and financial forecasts. EKPC uses the forecast in areas of marketing analysis, transmission planning, generation planning, demand-side planning, and financial forecasting.

The complete load forecast for Clark Energy is reported in Table 1-1 on page 8. Residential and commercial sales, total purchases, winter and summer peak demands, and load factor are presented for the years 1990 through 2030.

Table 1-1

Clark Energy Cooperative
2010 Load Forecast
MWh Summary

Year	Residential Sales (MWh)	Seasonal Sales (MWh)	Small Comm. Sales (MWh)	Public Buildings (MWh)	Large Comm. Sales (MWh)	Public Street and Highway Lighting (MWh)	Total Sales (MWh)	Office Use (MWh)	% Loss	Purchased Power (MWh)
1990	161,301	0	54,943	0	716	446	217,406	506	7.6	235,946
1991	169,722	0	57,046	0	122	479	227,369	493	8.2	248,153
1992	172,313	0	58,436	0	1,919	527	233,196	422	7.7	252,997
1993	193,421	0	61,275	0	1,565	596	256,858	456	6.3	274,687
1994	190,886	0	62,591	0	3,728	653	257,858	509	7.0	277,933
1995	204,347	0	66,227	0	6,625	800	278,000	532	6.1	296,611
1996	220,157	0	69,687	0	8,222	1,003	299,069	565	7.3	323,310
1997	223,132	0	71,759	0	5,376	925	301,192	511	6.1	321,396
1998	234,698	0	78,457	0	1,717	605	315,476	498	6.3	337,162
1999	248,859	0	77,390	0	2,050	583	328,882	516	6.8	353,317
2000	264,282	0	78,100	0	9,212	541	352,135	532	5.7	374,001
2001	280,250	0	80,559	0	10,870	534	372,213	508	7.1	401,373
2002	297,277	0	82,632	0	10,726	540	391,175	522	4.8	411,248
2003	297,031	0	86,523	0	8,364	538	392,455	541	6.0	418,275
2004	304,332	0	88,922	0	8,173	560	401,986	588	5.9	427,871
2005	327,283	0	91,761	0	9,095	636	428,774	539	4.6	449,841
2006	317,021	0	86,096	0	16,391	649	420,158	659	5.7	446,178
2007	336,749	0	91,533	0	15,477	645	444,403	788	5.0	468,537
2008	338,063	0	88,758	0	13,732	645	441,198	775	4.7	463,945
2009	323,393	0	81,766	0	13,402	672	419,232	757	5.5	444,405
2010	338,106	0	85,236	0	13,520	707	437,568	774	5.5	463,854
2011	337,932	0	87,160	0	13,523	708	439,322	774	5.5	465,710
2012	337,976	0	88,728	0	13,649	709	441,062	774	5.5	467,551
2013	336,842	0	90,105	0	13,774	710	441,430	774	5.5	467,941
2014	340,890	0	91,391	0	13,891	710	446,883	774	5.5	473,711
2015	344,561	0	92,634	0	14,006	711	451,912	774	5.5	479,033
2016	349,093	0	93,858	0	14,118	711	457,780	774	5.5	485,242
2017	352,911	0	95,072	0	14,229	711	462,924	774	5.5	490,685
2018	359,201	0	96,282	0	14,340	712	470,535	774	5.5	498,740
2019	365,752	0	97,489	0	14,451	712	478,405	774	5.5	507,067
2020	371,380	0	98,696	0	14,562	713	485,351	774	5.5	514,418
2021	377,561	0	99,903	0	22,937	713	501,113	774	5.5	531,098
2022	383,557	0	101,109	0	23,048	713	508,427	774	5.5	538,837
2023	390,239	0	102,315	0	23,158	713	516,426	774	5.5	547,302
2024	396,857	0	103,521	0	23,269	714	524,361	774	5.5	555,698
2025	402,481	0	104,727	0	23,380	714	531,302	774	5.5	563,043
2026	408,270	0	105,933	0	23,490	714	538,408	774	5.5	570,563
2027	413,747	0	107,139	0	23,601	714	545,201	774	5.5	577,751
2028	418,901	0	108,345	0	23,712	714	551,672	774	5.5	584,599
2029	423,024	0	109,551	0	23,823	714	557,113	774	5.5	590,356
2030	429,133	0	110,758	0	23,933	715	564,538	774	5.5	598,214

Table 1-1 cont.
Clark Energy Cooperative
Load Forecast Study
Peaks Summary

Winter		*Summer*				
Season	Noncoincident Peak Demand (MW)	Year	Noncoincident Peak Demand (MW)	Year	Purchased Power (MWh)	Load Factor (%)
1989 - 90	64.0	1990	51.1	1990	235,946	42.1%
1990 - 91	57.9	1991	54.5	1991	248,153	48.9%
1991 - 92	59.9	1992	52.1	1992	252,997	48.1%
1992 - 93	63.5	1993	60.0	1993	274,687	49.4%
1993 - 94	77.0	1994	59.0	1994	277,933	41.2%
1994 - 95	68.0	1995	65.0	1995	296,611	49.8%
1995 - 96	79.8	1996	66.8	1996	323,310	46.1%
1996 - 97	80.1	1997	70.3	1997	321,396	45.8%
1997 - 98	72.8	1998	73.5	1998	337,162	52.4%
1998 - 99	87.3	1999	82.4	1999	353,317	46.2%
1999 - 00	94.5	2000	81.9	2000	374,001	45.1%
2000 - 01	103.5	2001	84.6	2001	401,373	44.3%
2001 - 02	93.7	2002	88.7	2002	411,248	50.1%
2002 - 03	110.3	2003	86.6	2003	418,275	43.3%
2003 - 04	111.2	2004	85.2	2004	427,871	43.8%
2004 - 05	114.5	2005	94.6	2005	449,841	44.9%
2005 - 06	107.4	2006	96.9	2006	446,178	47.4%
2006 - 07	128.3	2007	99.2	2007	468,537	41.7%
2007 - 08	129.8	2008	90.3	2008	463,945	40.7%
2008 - 09	134.8	2009	88.8	2009	444,405	37.6%
2009 - 10	120.6	2010	94.7	2010	463,854	43.9%
2010 - 11	135.6	2011	95.1	2011	465,710	39.2%
2011 - 12	135.8	2012	95.2	2012	467,551	39.2%
2012 - 13	136.7	2013	95.7	2013	467,941	39.1%
2013 - 14	138.6	2014	96.7	2014	473,711	39.0%
2014 - 15	140.4	2015	97.6	2015	479,033	39.0%
2015- 16	142.0	2016	98.3	2016	485,242	38.9%
2016 - 17	144.2	2017	99.6	2017	490,685	38.9%
2017 - 18	146.7	2018	101.0	2018	498,740	38.8%
2018 - 19	149.3	2019	102.3	2019	507,067	38.8%
2019 - 20	151.3	2020	103.3	2020	514,418	38.7%
2020 - 21	156.1	2021	107.3	2021	531,098	38.8%
2021 - 22	158.5	2022	108.6	2022	538,837	38.8%
2022 - 23	161.2	2023	110.0	2023	547,302	38.8%
2023 - 24	163.2	2024	111.1	2024	555,698	38.8%
2024 - 25	166.0	2025	112.7	2025	563,043	38.7%
2025 - 26	168.4	2026	113.9	2026	570,563	38.7%
2026 - 27	170.6	2027	115.2	2027	577,751	38.7%
2027 - 28	172.1	2028	116.0	2028	584,599	38.7%
2028 - 29	174.4	2029	117.3	2029	590,356	38.7%
2029 - 30	176.7	2030	118.7	2030	598,214	38.6%

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Executive Summary (*continued)*
Overall Results

- Total sales are projected to grow by 1.3 percent a year for the period 2010-2030, compared to a 1.9 percent growth projected in the 2008 load forecast for the period 2007-2027. Results shown in Table 1-2 and Figure 1-1.

- Winter and summer peak demands for the same period indicate annual growth of 1.4 and 1.1 percent, respectively. Annual peaks shown in Figure 1-2.

- Load factor remains steady at approximately 39% for the forecast period. See Figure 1-3.

Executive Summary *(continued)*

Overall Results

Table 1-2

Clark Energy 2010 Load Forecast

Summary of Sales Growth Rates

	Time Period	Residential	Small Commercial	Large Commercial	Public Street and Highway Lighting	Total Sales
5 Year Growth Rates	1999-2004	4.1%	2.8%	31.9%	-0.8%	4.1%
	2004-2009	1.2%	-1.7%	10.4%	3.7%	0.8%
	2010-2015	0.4%	1.7%	0.7%	0.1%	0.6%
	2015-2020	1.5%	1.3%	0.8%	0.1%	1.4%
	2020-2025	1.6%	1.2%	9.9%	0.0%	1.8%
	2025-2030	1.3%	1.1%	0.5%	0.0%	1.2%
10 Year Growth Rates	1999-2009	2.7%	0.6%	20.7%	1.4%	2.5%
	2010-2020	0.9%	1.5%	0.7%	0.1%	1.0%
	2020-2030	1.5%	1.2%	5.1%	0.0%	1.5%

Figure 1-1
Average Annual Growth in Sales
2010-2030

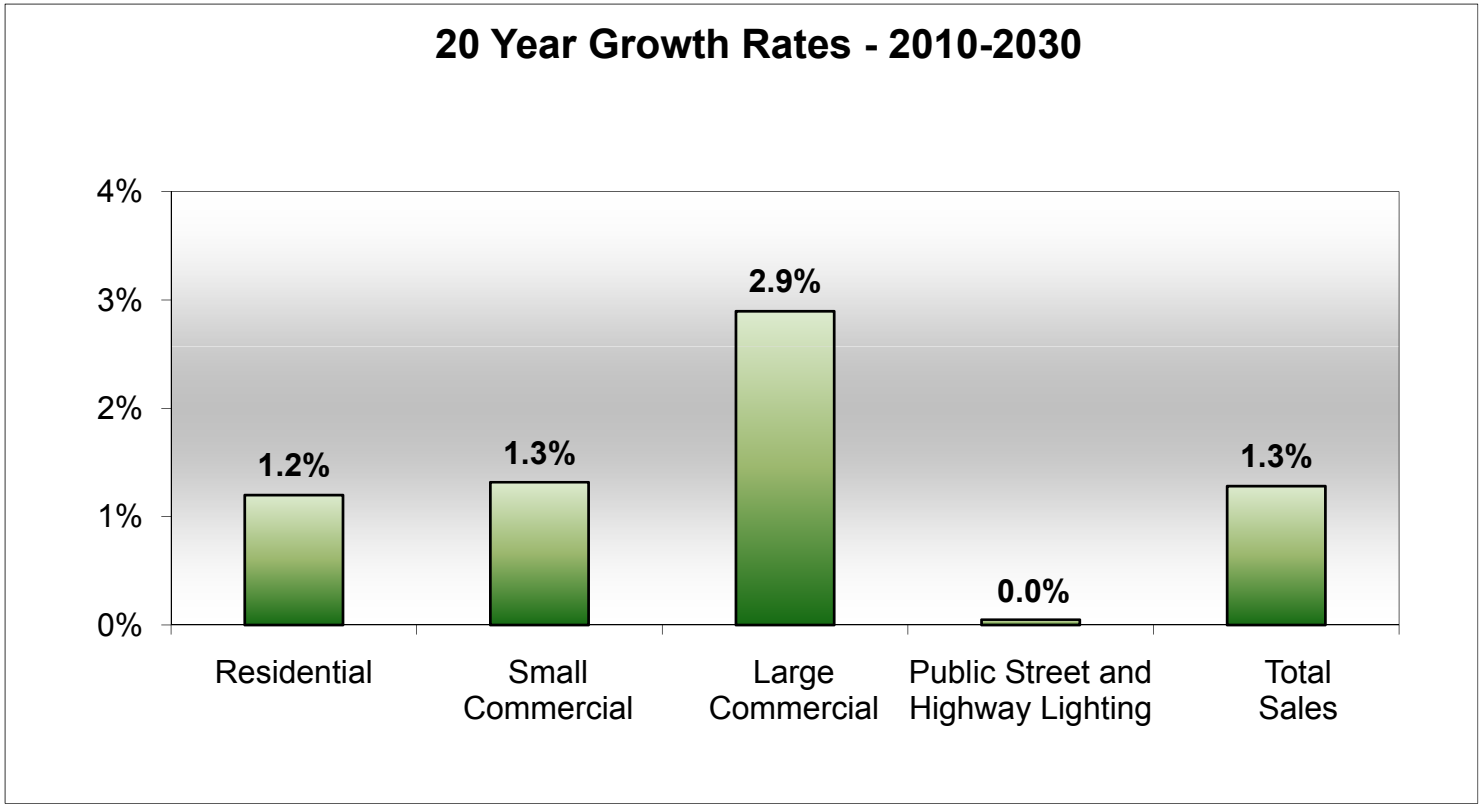


Figure 1-2
Peak Demand Forecast
Winter and Summer

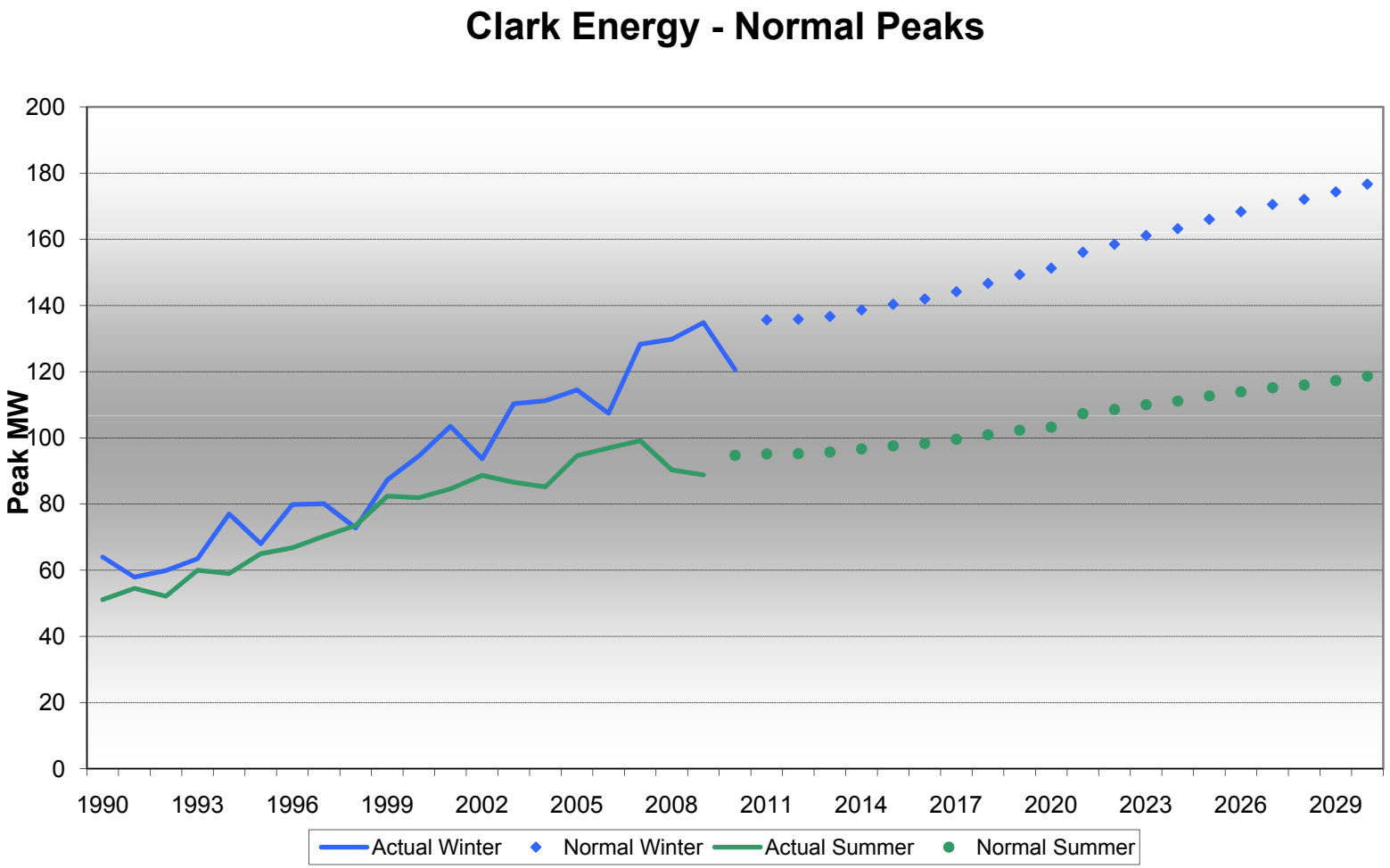
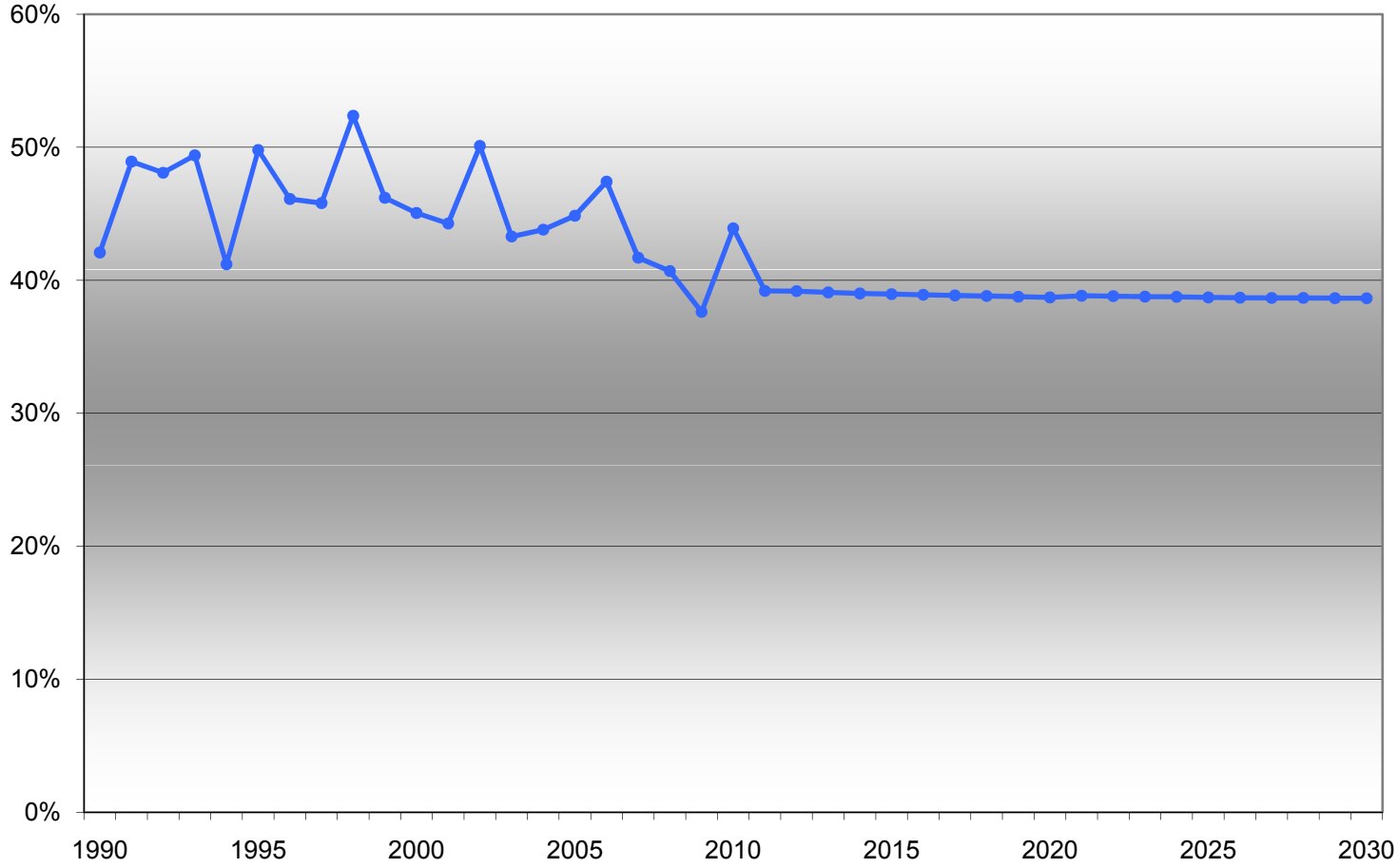


Figure 1-3
Annual System Load Factor



Narrative

Clark Energy provides electric service within areas of central and east central Kentucky. The service area extends east from the Lexington metropolitan and bluegrass regions, west of the corporate headquarters location in Winchester, to the foothill areas adjacent to the mountainous regions of Eastern Kentucky.

Clark Energy predominantly serves members within the counties of Clark, Montgomery, Bath, Menifee, Powell, Madison, and Bourbon. Portions of the counties of Fayette, Rowan, Morgan, Wolfe, and Estill are also served by Clark Energy.

No corporate annexations, mergers, or legislation pertaining to certification of territory possibly altering the complexion of the service area is anticipated.

Narrative *(continued)*

The potential for continued economic development within Clark Energy's service area exists due to a variety of factors. Access to major surface transportation systems contributes to development throughout the Lexington metropolitan region. Convenient transportation for goods and services is available throughout a majority of the service area. Major surface transportation within the area consists of two major interstate highways and a major state parkway.

Established industrial parks provide attractive facilities for additional commercial activity. The existence of two state parks along with other recreational resources affords some opportunities for possible future development. Economic development within the eastern counties of Bath, Menifee, and Rowan consists primarily of commercial timber and agricultural operations. The western and southwestern counties close to or part of the metropolitan Lexington area offers the greatest potential for economic growth. These counties, which possess the majority of residential, industrial, and commercial members served, include Clark, Montgomery, Powell, Madison, Bourbon, and Fayette.

Narrative *(continued)*
Clark Energy Members
Demographic Information

There is an average of 2.36 people per household.

57% of all homes are headed by someone age 55 or greater.

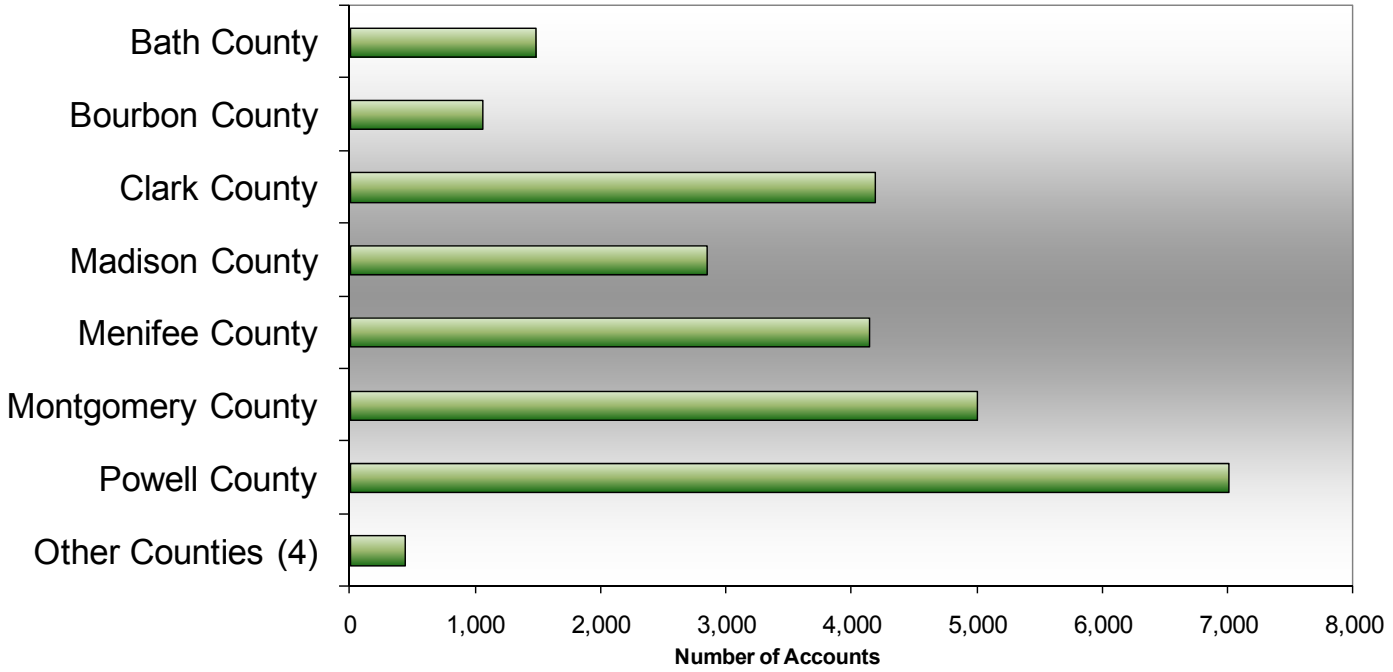
Approximately 20% of homes have farm operations, with beef cattle most prevalent.

Approximately 25% of all homes served are less than 10 years old.

Narrative *(continued)*
Counties Served

Clark Energy provides service to members in 11 counties.

Figure 1-4



Key Assumptions
Power Cost and Rates

- EKPC's wholesale power cost forecast used in this load forecast comes from the following report: "Twenty-Year Financial Forecast and Equity Development Plan, 2010-2029", revised May 11, 2010.

- Average residential retail rates will change from 9.582 cents/kWh in 2009 to 18.034 cents/kWh in 2030.

Key Assumptions *(continued)*
North Eastern Economic Region History and Forecast

	Population		Households		Total Employment		Unemployment Rate		Regional Total Income	
		(%) Change		(%) Change		(%) Change		(%) Change		(%) Change
1990	250,788		92,830		77,738		8.8%		$5,277	
1991	252,745	0.8%	94,569	1.9%	78,126	0.5%	10.1%	14.6%	$5,492	4.1%
1992	254,920	0.9%	96,003	1.5%	80,058	2.5%	10.9%	8.8%	$5,628	2.5%
1993	256,441	0.6%	96,719	0.7%	79,845	-0.3%	9.8%	-10.2%	$5,614	-0.2%
1994	257,720	0.5%	97,700	1.0%	82,255	3.0%	7.8%	-20.7%	$5,697	1.5%
1995	258,925	0.5%	99,283	1.6%	83,948	2.1%	7.6%	-2.2%	$5,676	-0.4%
1996	260,247	0.5%	100,666	1.4%	85,549	1.9%	7.4%	-3.1%	$5,872	3.4%
1997	261,862	0.6%	101,690	1.0%	87,562	2.4%	6.8%	-7.7%	$6,091	3.7%
1998	263,275	0.5%	102,613	0.9%	89,551	2.3%	6.1%	-11.0%	$6,272	3.0%
1999	264,619	0.5%	103,509	0.9%	90,361	0.9%	5.6%	-7.0%	$6,307	0.6%
2000	265,547	0.4%	104,079	0.6%	91,558	1.3%	5.6%	-0.3%	$6,527	3.5%
2001	266,241	0.3%	104,779	0.7%	91,513	0.0%	7.4%	31.1%	$6,522	-0.1%
2002	266,830	0.2%	105,281	0.5%	93,393	2.1%	6.4%	-12.8%	$6,641	1.8%
2003	267,339	0.2%	105,816	0.5%	93,711	0.3%	7.0%	9.6%	$6,706	1.0%
2004	268,032	0.3%	106,358	0.5%	94,350	0.7%	6.5%	-8.3%	$6,766	0.9%
2005	269,409	0.5%	106,532	0.2%	95,244	0.9%	6.7%	4.2%	$6,695	-1.1%
2006	270,792	0.5%	106,412	-0.1%	94,755	-0.5%	6.1%	-9.9%	$6,955	3.9%
2007	271,990	0.4%	106,409	0.0%	95,905	1.2%	5.9%	-3.3%	$6,913	-0.6%
2008	273,498	0.6%	106,319	-0.1%	93,556	-2.4%	7.8%	34.0%	$6,901	-0.2%
2009	275,118	0.6%	106,792	0.4%	89,461	-4.4%	11.8%	50.2%	$6,651	-3.6%
2010	276,922	0.7%	108,136	1.3%	90,046	0.7%	11.2%	-5.3%	$6,650	0.0%
2011	278,724	0.7%	109,066	0.9%	92,167	2.4%	10.0%	-10.2%	$6,751	1.5%
2012	280,423	0.6%	109,541	0.4%	94,674	2.7%	9.1%	-9.7%	$7,004	3.7%
2013	282,363	0.7%	110,574	0.9%	96,601	2.0%	8.6%	-5.1%	$7,215	3.0%
2014	284,092	0.6%	111,117	0.5%	98,085	1.5%	8.2%	-4.8%	$7,405	2.6%
2019	292,208	0.5%	116,913	0.7%	104,077	0.9%	5.6%	-5.2%	$8,363	1.8%
2029	303,507	0.4%	123,619	0.6%	111,477	0.7%	5.5%	-0.2%	$10,375	2.2%

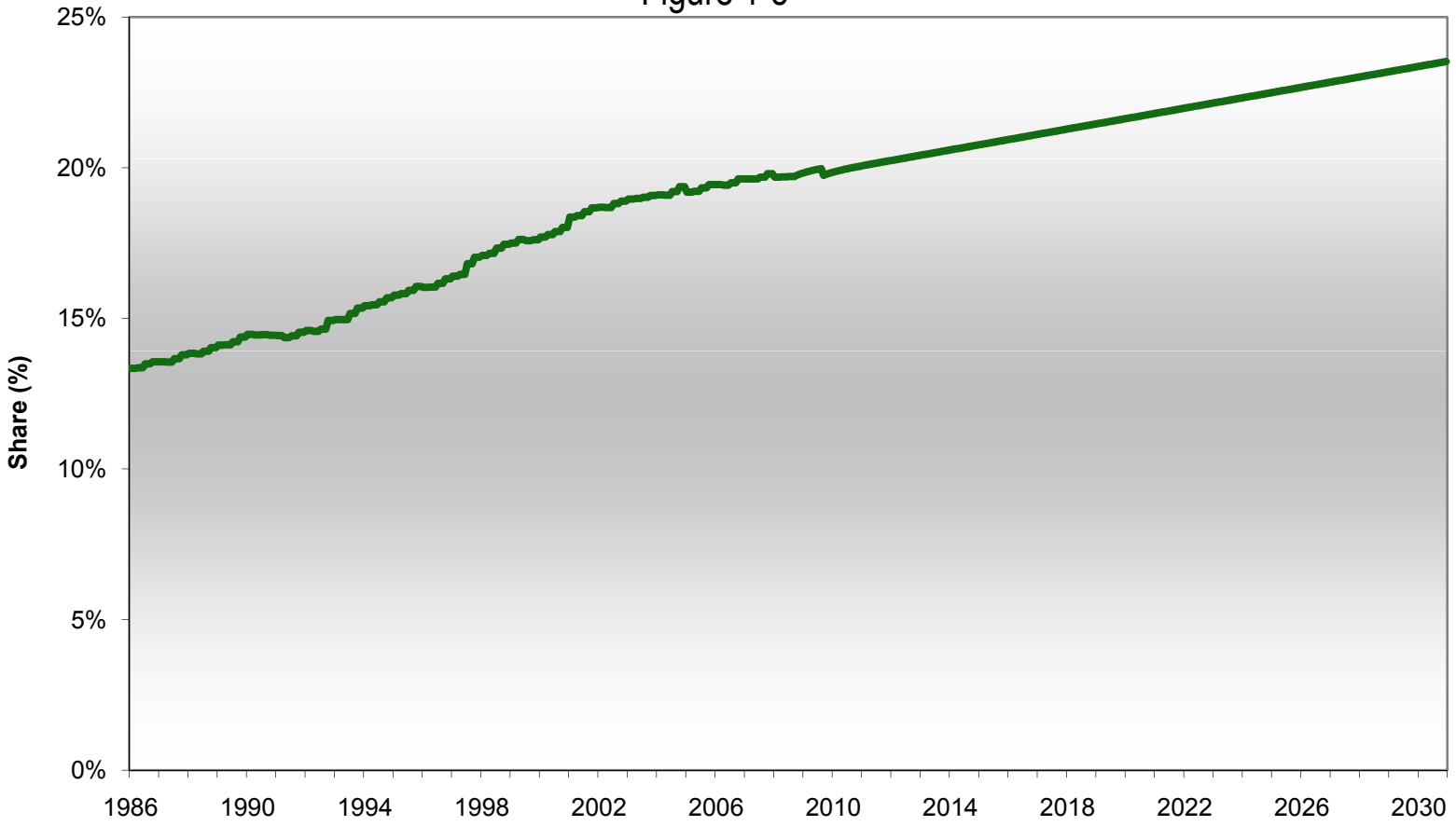
EKPC's source for economic forecasts is Global Insight. Regional Income is reported in millions of 2009 dollars. Growth rates are average annual changes.

Key Assumptions *(continued)*

Share of Regional Homes Served

Clark Energy's market share will increase for the forecast period.

Figure 1-5

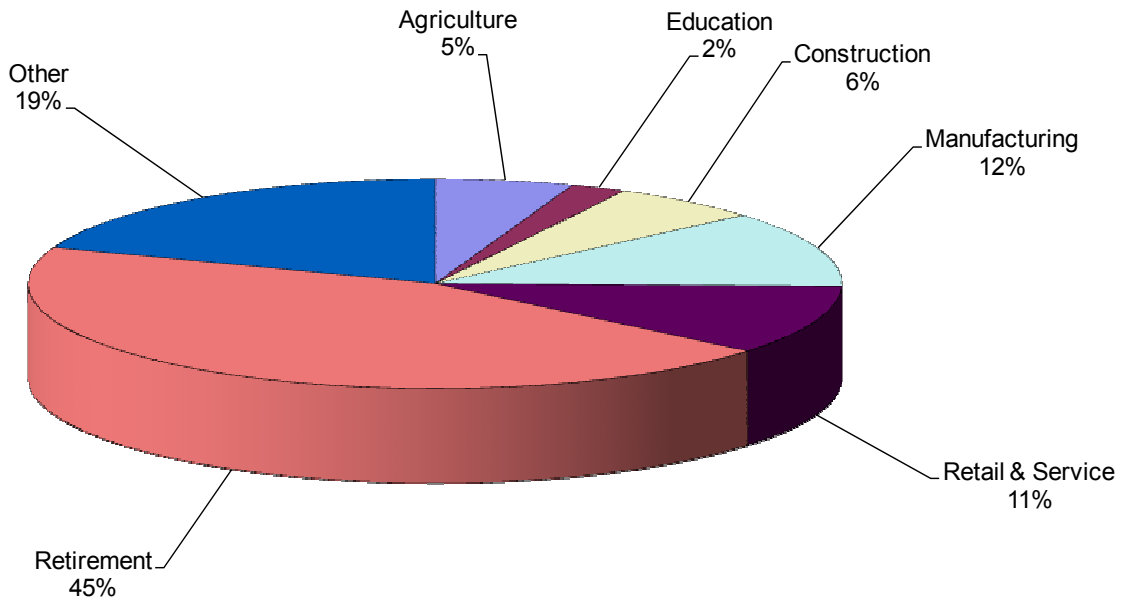


Key Assumptions *(continued)*

Household Income

Members' Greatest Sources

Figure 1-6



Key Assumptions *(continued)*
Appliance Saturations

- Electric heat saturation will increase from approximately 54 percent to approximately 68 percent.
- Central air conditioning will continue its penetration into the service area with approximately 76 percent of all residences having central air by 2030.
- Room air conditioner saturation is declining due to customers choosing central air conditioning systems.
- Electric water heater saturation will increase slightly to approximately 90 percent.
- Appliance efficiency trends are accounted for in the model. The data is collected from Energy Information Administration, (EIA). See Figure 1-7.
- 72 percent of homes report having at least 1 Compact Fluorescent Light.

Key Assumptions *(continued)*

Saturation Rates

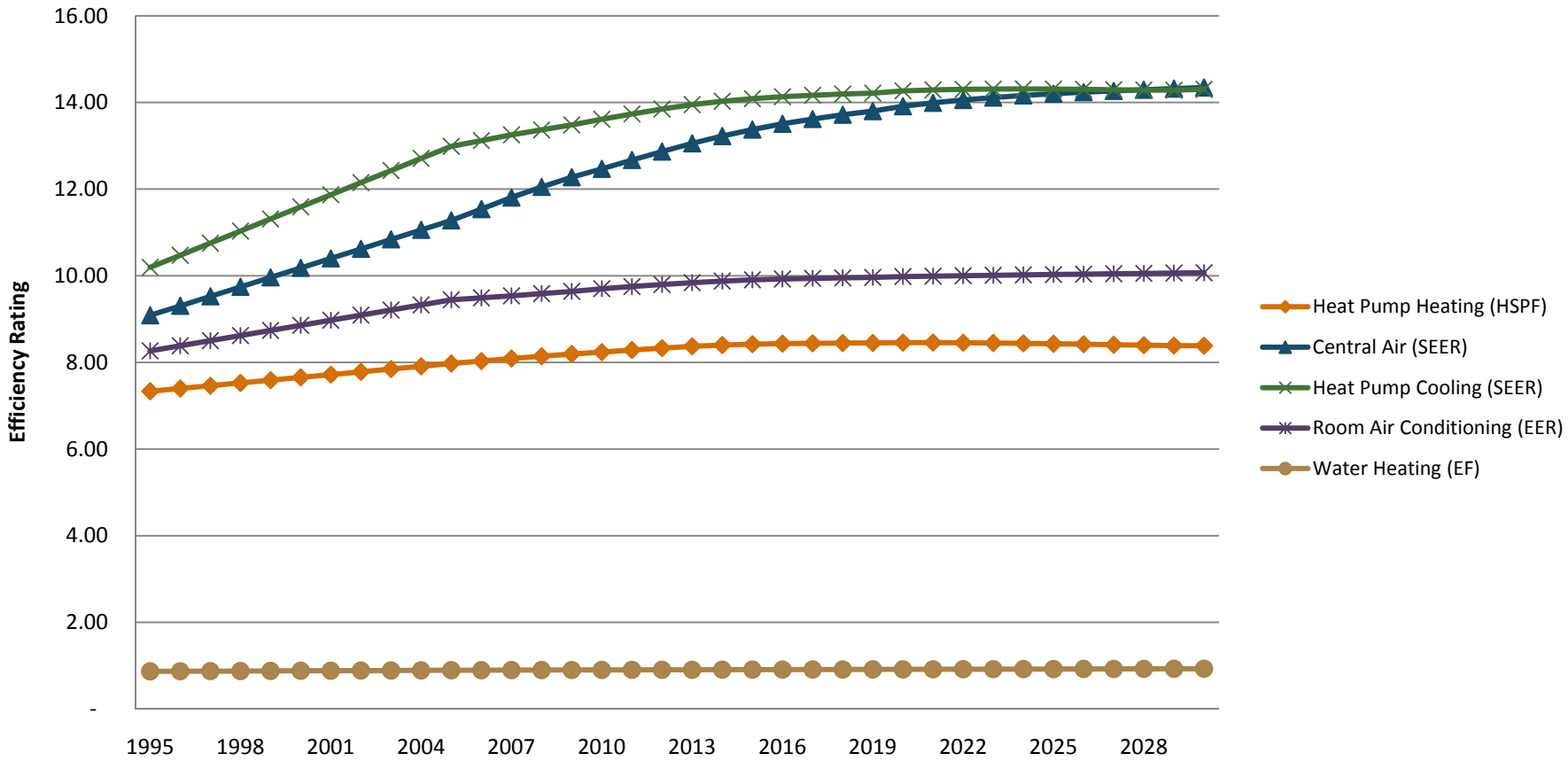
Non HVAC Appliances

▪ Electric Range	92%
▪ Dishwasher	51%
▪ Freezer	51%
▪ Clothes Dryer	96%
▪ Personal Computer	56%

Key Assumptions *(continued)*

Figure 1-7

Residential Appliance Efficiency Trends
East South Central Region



Source: Energy Information Administration (EIA) Efficiency Trend Update, 2009

Key Assumptions *(continued)*
Weather

- Weather data is from the Lexington station.

- Normal weather, a 30-year average of historical temperatures, is assumed for the forecast years.

Methodology and Results
Introduction

This section briefly describes the methodology used to develop the load forecast and presents results in tabular and graphical form for residential and commercial classifications. Table 1-3 through Table 1-5 shows historical data for Clark Energy as reported on RUS Form 736 and RUS Form 5.

A preliminary forecast is prepared during the first quarter depending on when Clark Energy experiences its winter peak. The first step is modeling the regional economy. Population, income, and employment are among the areas analyzed. The regional model results are used in combination with the historical billing information, appliance saturation data, appliance efficiency data, and weather data to develop the long range forecast.

Table 1-3

Clark Energy Comparative Annual Operating Data

Year	kWh Purchased And Generated	Change	kWh Sold	Change	kWh Loss	% Loss	Peak Billing Demand	Average Number Of Consumers	Miles Of Line	Consumers Per Mile	Cost Of Purchased Power	Cents / kWh
1995	296,610,666		278,000,056		18,078,761	6.1%	65.8	19,743	2,563	7.7	$10,648,936	3.6
1996	323,309,929	9.0%	299,068,767	7.6%	23,675,682	7.3%	76.4	20,364	2,597	7.8	$10,831,006	3.4
1997	321,395,538	-0.6%	301,191,966	0.7%	19,692,481	6.1%	78.1	21,138	2,638	8.0	$10,809,438	3.4
1998	337,161,610	4.9%	315,476,279	4.7%	21,187,571	6.3%	68.8	21,900	2,675	8.2	$11,372,602	3.4
1999	353,317,035	4.8%	328,782,300	4.2%	24,018,252	6.8%	84.6	22,464	2,716	8.3	$12,475,362	3.5
2000	374,000,670	5.9%	352,135,176	7.1%	21,332,863	5.7%	90.2	22,917	2,754	8.3	$13,688,455	3.7
2001	401,372,636	7.3%	372,212,600	5.7%	28,652,147	7.1%	96.7	23,427	2,805	8.4	$15,647,642	3.9
2002	411,248,443	2.5%	391,174,774	5.1%	19,550,946	4.8%	89.8	23,977	2,845	8.4	$15,962,943	3.9
2003	418,274,586	1.7%	392,455,064	0.3%	25,278,488	6.0%	107.1	24,376	2,865	8.5	$16,688,715	4.0
2004	427,871,274	2.3%	401,986,359	2.4%	25,296,918	5.9%	105.9	24,796	2,900	8.6	$18,688,571	4.4
2005	449,841,288	5.1%	428,774,102	6.7%	20,527,748	4.6%	111.1	25,151	2,935	8.6	$23,109,319	5.1
2006	446,178,468	-0.8%	420,157,719	-2.0%	25,361,286	5.7%	106.3	25,508	2,966	8.6	$25,030,997	5.6
2007	468,537,052	5.0%	444,403,153	5.8%	23,345,426	5.0%	120.9	25,801	2,982	8.7	$27,894,967	6.0
2008	463,945,173	-1.0%	441,197,904	-0.7%	21,972,588	4.7%	125.6	26,006	3,014	8.6	$29,565,810	6.4
2009	444,405,327	-4.2%	419,231,608	-5.0%	24,416,257	5.5%	131.4	26,123	3,035	8.6	$29,084,540	6.5
Average						5.8%						4.6

Table 1-4

Clark Energy Comparative Annual Operating Data

Year	Residential		Residential Seasonal		Commercial / Industrial (1 MW Or Less)		Commercial / Industrial (Over 1 MW)		Public Street / Highway Lighting		Public Authorities	
	kWh Sales	% Change	kWh Sales	% Change	kWh Sales	% Change	kWh Sales	% Change	kWh Sales	% Change	kWh Sales	% Change
1995	204,347,463		0		66,227,303		6,625,456		799,834		0	
1996	220,156,696	7.7%	0		69,687,175	5.2%	8,221,978	24.1%	1,002,918	25.4%	0	
1997	223,132,166	1.4%	0		71,758,852	3.0%	5,375,903	-34.6%	925,045	-7.8%	0	
1998	234,697,552	5.2%	0		78,456,911	9.3%	1,717,289	-68.1%	604,527	-34.6%	0	
1999	248,759,223	6.0%	0		77,390,324	-1.4%	2,049,522	19.3%	583,231	-3.5%	0	
2000	264,282,445	6.2%	0		78,100,031	0.9%	9,212,072	349.5%	540,628	-7.3%	0	
2001	280,249,670	6.0%	0		80,558,908	3.1%	10,870,142	18.0%	533,880	-1.2%	0	
2002	297,277,346	6.1%	0		82,631,722	2.6%	10,725,827	-1.3%	539,879	1.1%	0	
2003	297,030,797	-0.1%	0		86,522,802	4.7%	8,363,729	-22.0%	537,736	-0.4%	0	
2004	304,332,144	2.5%	0		88,921,610	2.8%	8,172,658	-2.3%	559,947	4.1%	0	
2005	327,283,225	7.5%	0		91,760,571	3.2%	9,094,782	11.3%	635,524	13.5%	0	
2006	317,021,099	-3.1%	0		86,096,015	-6.2%	16,391,240	80.2%	649,365	2.2%	0	
2007	336,749,057	6.2%	0		91,532,612	6.3%	15,476,617	-5.6%	644,867	-0.7%	0	
2008	338,063,420	0.4%	0		88,757,837	-3.0%	13,731,605	-11.3%	645,042	0.0%	0	
2009	323,392,718	-4.3%	0		81,765,702	-7.9%	13,401,600	-2.4%	671,588	4.1%	0	
Average Annual Change												
2 Year	-6,678,170	-5.3%			-4,883,455	-7.1%	-1,037,509	1.6%	13,361	2.4%		
5 Year	3,812,115	-1.4%			-1,431,182	-2.1%	1,045,788	0.0%	22,328	0.0%		
10 Year	7,463,350	-1.0%			437,538	-0.7%	1,135,208	-2.2%	8,836	0.8%		

Table 1-5

Clark Energy Comparative Annual Operating Data

	Residential		Residential Seasonal		Commercial / Industrial (1 MW Or Less)		Commercial / Industrial (Over 1 MW)		Public Street / Highway Lighting		Public Authorities	
Year	Consumers	kwh / Mo.	Consumers	kwh / Mo.	Consumers	kwh / Mo.	Consumers	kwh / Mo.	Consumers	kwh / Mo.	Consumers	kwh / Mo.
1995	18,474	922	0		1,164	4,741	1	552,121	104	641	0	
1996	18,988	966	0		1,210	4,799	2	342,582	164	510	0	
1997	19,768	941	0		1,235	4,842	1	447,992	134	575	0	
1998	20,622	948	0		1,260	5,189	0		18	2,799	0	
1999	21,153	980	0		1,291	4,996	1	170,794	19	2,558	0	
2000	21,567	1,021	0		1,328	4,901	1	767,673	21	2,145	0	
2001	22,041	1,060	0		1,363	4,925	1	905,845	22	2,022	0	
2002	22,555	1,098	0		1,400	4,919	1	893,819	21	2,142	0	
2003	22,939	1,079	0		1,414	5,099	2	348,489	21	2,134	0	
2004	23,306	1,088	0		1,466	5,055	1	681,055	23	2,029	0	
2005	23,561	1,158	0		1,562	4,895	1	757,899	27	1,961	0	
2006	23,868	1,107	0		1,608	4,462	3	455,312	29	1,866	0	
2007	24,152	1,162	0		1,615	4,723	3	429,906	31	1,734	0	
2008	24,344	1,157	0		1,628	4,543	3	381,433	31	1,734	0	
2009	24,441	1,103	0		1,648	4,135	3	372,267	31	1,805	0	
10 Year Avg	329	12			36	-86	0	20,147	1	-75		
5 Year Avg	227	3			36	-184	0	-61,758	2	-45		
2 Year Avg	145	-30			17	-294	0	-28,820	0	36		

Annual Changes In Clark Energy's Residential Class												
	1998	*1999*	*2000*	*2001*	*2002*	*2003*	*2004*	*2005*	*2006*	*2007*	*2008*	*2009*
Consumers	854	531	414	474	514	384	367	255	307	284	192	97
kWh/month	8	32	41	38	39	-19	9	69	-51	55	-5	-55

Methodology and Results *(continued)*

The preliminary forecast was presented to Clark Energy staff, and reviewed by the Rural Utilities Services (RUS) Field Representative. Changes were made to the forecast as needed based on new information, such as new large loads or subdivisions. In some instances, other assumptions were changed based on insights from Clark Energy staff.

Methodology and Results *(continued)*

Residential Forecast

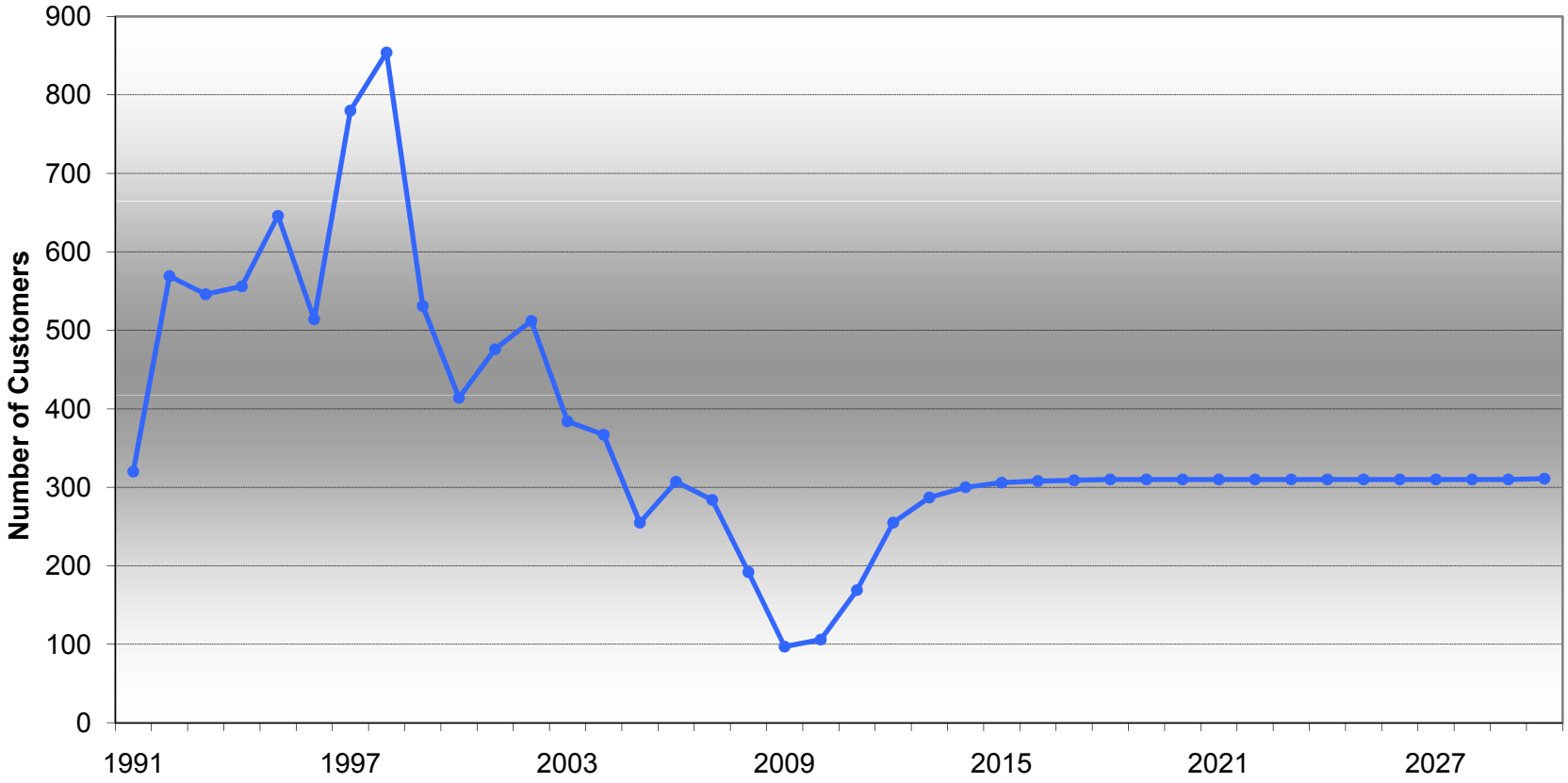
Residential customers are analyzed by means of regression analysis with resulting coefficients used to prepare customer projections. Regressions for residential customers are typically a function of regional economic and demographic variables. Two variables that are very significant are the numbers of households by county in each member system's economic region and the percent of total households served by the member system. Table 1-6 and Figure 1-8 report Clark Energy's customer forecast.

The residential energy sales were projected using a statistically adjusted end-use (SAE) approach. This method of modeling incorporates end-use forecasts and can be used to allocate the monthly and annual forecasts into end-use components. This method, like end-use modeling, requires detailed information about appliance saturation, appliance use, appliance efficiencies, household characteristics, weather characteristics, and demographic and economic information. The SAE approach segments the average household use into heating, cooling, and water heating end-use components. This model accounts for appliance efficiency improvements. Table 1-6 reports Clark Energy's energy forecast.

Table 1-6
Clark Energy Cooperative
2010 Load Forecast
Residential Summary

	Customers			*Use Per Customer*			*Class Sales*		
	Annual Average	Annual Change	% Change	Monthly Average (kWh)	Change (kWh)	% Change	Total (MWh)	Annual Change (MWh)	% Change
1990	15,837			849			161,301		
1991	16,157	320	2.0	875	27	3.1	169,722	8,421	5.2
1992	16,726	569	3.5	859	-17	-1.9	172,313	2,591	1.5
1993	17,272	546	3.3	933	75	8.7	193,421	21,108	12.2
1994	17,828	556	3.2	892	-41	-4.4	190,886	-2,535	-1.3
1995	18,474	646	3.6	922	30	3.3	204,347	13,461	7.1
1996	18,988	514	2.8	966	44	4.8	220,157	15,809	7.7
1997	19,768	780	4.1	941	-26	-2.6	223,132	2,975	1.4
1998	20,622	854	4.3	948	8	0.8	234,698	11,565	5.2
1999	21,153	531	2.6	980	32	3.4	248,859	14,162	6.0
2000	21,567	414	2.0	1,021	41	4.2	264,282	15,423	6.2
2001	22,043	476	2.2	1,059	38	3.8	280,250	15,967	6.0
2002	22,555	512	2.3	1,098	39	3.7	297,277	17,028	6.1
2003	22,939	384	1.7	1,079	-19	-1.8	297,031	-247	-0.1
2004	23,306	367	1.6	1,088	9	0.8	304,332	7,301	2.5
2005	23,561	255	1.1	1,158	69	6.4	327,283	22,951	7.5
2006	23,868	307	1.3	1,107	-51	-4.4	317,021	-10,262	-3.1
2007	24,152	284	1.2	1,162	55	5.0	336,749	19,728	6.2
2008	24,344	192	0.8	1,157	-5	-0.4	338,063	1,314	0.4
2009	24,441	97	0.4	1,103	-55	-4.7	323,393	-14,670	-4.3
2010	24,547	106	0.4	1,148	45	4.1	338,106	14,713	4.5
2011	24,716	169	0.7	1,139	-8	-0.7	337,932	-174	-0.1
2012	24,971	255	1.0	1,128	-11	-1.0	337,976	45	0.0
2013	25,258	287	1.1	1,111	-17	-1.5	336,842	-1,135	-0.3
2014	25,558	300	1.2	1,111	0	0.0	340,890	4,048	1.2
2015	25,864	306	1.2	1,110	-1	-0.1	344,561	3,671	1.1
2016	26,172	308	1.2	1,112	1	0.1	349,093	4,532	1.3
2017	26,481	309	1.2	1,111	-1	-0.1	352,911	3,818	1.1
2018	26,791	310	1.2	1,117	7	0.6	359,201	6,290	1.8
2019	27,101	310	1.2	1,125	7	0.7	365,752	6,551	1.8
2020	27,411	310	1.1	1,129	4	0.4	371,380	5,628	1.5
2021	27,721	310	1.1	1,135	6	0.5	377,561	6,181	1.7
2022	28,031	310	1.1	1,140	5	0.5	383,557	5,996	1.6
2023	28,341	310	1.1	1,147	7	0.6	390,239	6,682	1.7
2024	28,651	310	1.1	1,154	7	0.6	396,857	6,617	1.7
2025	28,961	310	1.1	1,158	4	0.3	402,481	5,624	1.4
2026	29,271	310	1.1	1,162	4	0.4	408,270	5,789	1.4
2027	29,581	310	1.1	1,166	3	0.3	413,747	5,476	1.3
2028	29,891	310	1.0	1,168	2	0.2	418,901	5,154	1.2
2029	30,201	310	1.0	1,167	-1	-0.1	423,024	4,124	1.0
2030	30,512	311	1.0	1,172	5	0.4	429,133	6,108	1.4

Figure 1-8
Annual Change in Residential Customers



Methodology and Results *(continued)*
Small Commercial Forecast

Small commercial sales are projected using two equations, a customer equation and a small commercial sales equation. Both are determined through regression analysis and utilize inputs relating to the economy, electric price, and the residential customer forecast. Small commercial projections are reported in Table 1-7.

Table 1-7

Clark Energy Cooperative
2010 Load Forecast
Small Commercial Summary

	Customers			*Use Per Customer*			*Class Sales*		
	Annual Average	Annual Change	% Change	Annual Average (MWh)	Change (MWh)	% Change	Total (MWh)	Annual Change (MWh)	% Change
1990	1,027			53			54,943		
1991	1,047	20	1.9	54	1	1.8	57,046	2,103	3.8
1992	1,064	17	1.6	55	0	0.8	58,436	1,390	2.4
1993	1,090	26	2.4	56	1	2.4	61,275	2,839	4.9
1994	1,126	36	3.3	56	-1	-1.1	62,591	1,316	2.1
1995	1,164	38	3.4	57	1	2.4	66,227	3,637	5.8
1996	1,210	46	4.0	58	1	1.2	69,687	3,460	5.2
1997	1,235	25	2.1	58	1	0.9	71,759	2,072	3.0
1998	1,260	25	2.0	62	4	7.2	78,457	6,698	9.3
1999	1,291	31	2.5	60	-2	-3.7	77,390	-1,067	-1.4
2000	1,327	36	2.8	59	-1	-1.8	78,100	710	0.9
2001	1,363	36	2.7	59	0	0.4	80,559	2,459	3.1
2002	1,400	37	2.7	59	0	-0.1	82,632	2,073	2.6
2003	1,414	14	1.0	61	2	3.7	86,523	3,891	4.7
2004	1,466	52	3.7	61	-1	-0.9	88,922	2,399	2.8
2005	1,562	96	6.5	59	-2	-3.1	91,761	2,839	3.2
2006	1,608	46	2.9	54	-5	-8.9	86,096	-5,665	-6.2
2007	1,615	7	0.4	57	3	6.5	91,533	5,437	6.3
2008	1,628	13	0.8	55	-2	-3.5	88,758	-2,775	-3.0
2009	1,648	20	1.2	50	-5	-9.1	81,766	-6,992	-7.9
2010	1,655	7	0.4	52	2	4.0	85,236	3,470	4.2
2011	1,666	11	0.7	52	0	0.0	87,160	1,924	2.3
2012	1,682	16	1.0	53	1	1.9	88,728	1,568	1.8
2013	1,701	19	1.1	53	0	0.0	90,105	1,377	1.6
2014	1,720	19	1.1	53	0	0.0	91,391	1,286	1.4
2015	1,740	20	1.2	53	0	0.0	92,634	1,243	1.4
2016	1,760	20	1.1	53	0	0.0	93,858	1,223	1.3
2017	1,780	20	1.1	53	0	0.0	95,072	1,214	1.3
2018	1,800	20	1.1	53	0	0.0	96,282	1,210	1.3
2019	1,820	20	1.1	54	1	1.9	97,489	1,208	1.3
2020	1,840	20	1.1	54	0	0.0	98,696	1,207	1.2
2021	1,860	20	1.1	54	0	0.0	99,903	1,206	1.2
2022	1,880	20	1.1	54	0	0.0	101,109	1,206	1.2
2023	1,900	20	1.1	54	0	0.0	102,315	1,206	1.2
2024	1,920	20	1.1	54	0	0.0	103,521	1,206	1.2
2025	1,940	20	1.0	54	0	0.0	104,727	1,206	1.2
2026	1,960	20	1.0	54	0	0.0	105,933	1,206	1.2
2027	1,980	20	1.0	54	0	0.0	107,139	1,206	1.1
2028	2,000	20	1.0	54	0	0.0	108,345	1,206	1.1
2029	2,020	20	1.0	54	0	0.0	109,551	1,206	1.1
2030	2,040	20	1.0	54	0	0.0	110,758	1,206	1.1

Methodology and Results *(continued)*

Large Commercial Forecast

Large commercial customers are those with loads 1 MW or greater. Clark Energy currently has 3 customers in this class and is projected to increase to 4 customers by 2030. Large commercial results are reported in Table 1-8.

Table 1-8
Clark Energy Cooperative
2010 Load Forecast
Large Commercial Summary

	Customers			*Use Per Customer*			*Class Sales*		
	Annual Average	Annual Change	% Change	Annual Average (MWh)	Change (MWh)	% Change	Total (MWh)	Annual Change (MWh)	% Change
1990	1			716			716		
1991	1	0	0.0	122	-594	-82.9	122	-594	-82.9
1992	1	0	0.0	1,919	1,796	1468.3	1,919	1,796	1468.3
1993	1	0	0.0	1,565	-353	-18.4	1,565	-353	-18.4
1994	1	0	0.0	3,728	2,163	138.2	3,728	2,163	138.2
1995	1	0	0.0	6,625	2,897	77.7	6,625	2,897	77.7
1996	2	1	100.0	4,111	-2,514	-38.0	8,222	1,597	24.1
1997	1	-1	-50.0	5,376	1,265	30.8	5,376	-2,846	-34.6
1998	0	-1	-100.0				1,717	-3,659	-68.1
1999	1	1		2,050			2,050	332	19.3
2000	1	0	0.0	9,212	7,163	349.5	9,212	7,163	349.5
2001	1	0	0.0	10,870	1,658	18.0	10,870	1,658	18.0
2002	1	0	0.0	10,726	-144	-1.3	10,726	-144	-1.3
2003	2	1	100.0	4,182	-6,544	-61.0	8,364	-2,362	-22.0
2004	1	-1	-50.0	8,173	3,991	95.4	8,173	-191	-2.3
2005	1	0	0.0	9,095	922	11.3	9,095	922	11.3
2006	3	2	200.0	5,464	-3,631	-39.9	16,391	7,296	80.2
2007	3	0	0.0	5,159	-305	-5.6	15,477	-915	-5.6
2008	3	0	0.0	4,577	-582	-11.3	13,732	-1,745	-11.3
2009	3	0	0.0	4,467	-110	-2.4	13,402	-330	-2.4
2010	3	0	0.0	4,507	39	0.9	13,520	118	0.9
2011	3	0	0.0	4,508	1	0.0	13,523	3	0.0
2012	3	0	0.0	4,550	42	0.9	13,649	126	0.9
2013	3	0	0.0	4,591	42	0.9	13,774	125	0.9
2014	3	0	0.0	4,630	39	0.9	13,891	118	0.9
2015	3	0	0.0	4,669	38	0.8	14,006	114	0.8
2016	3	0	0.0	4,706	37	0.8	14,118	112	0.8
2017	3	0	0.0	4,743	37	0.8	14,229	111	0.8
2018	3	0	0.0	4,780	37	0.8	14,340	111	0.8
2019	3	0	0.0	4,817	37	0.8	14,451	111	0.8
2020	3	0	0.0	4,854	37	0.8	14,562	111	0.8
2021	4	1	33.3	5,734	880	18.1	22,937	8,375	57.5
2022	4	0	0.0	5,762	28	0.5	23,048	111	0.5
2023	4	0	0.0	5,790	28	0.5	23,158	111	0.5
2024	4	0	0.0	5,817	28	0.5	23,269	111	0.5
2025	4	0	0.0	5,845	28	0.5	23,380	111	0.5
2026	4	0	0.0	5,873	28	0.5	23,490	111	0.5
2027	4	0	0.0	5,900	28	0.5	23,601	111	0.5
2028	4	0	0.0	5,928	28	0.5	23,712	111	0.5
2029	4	0	0.0	5,956	28	0.5	23,823	111	0.5
2030	4	0	0.0	5,983	28	0.5	23,933	111	0.5

Methodology and Results *(continued)*

Public Street & Highway Lighting Forecast

Clark Energy serves street light accounts which are classified in the 'Public Street & Highway Lighting Forecast' category. This class is modeled separately. Results are reported in Table 1-9.

Table 1-9
Clark Energy Cooperative
2010 Load Forecast
Public Street and Highway Lighting Summary

	Customers			*Use Per Customer*			*Class Sales*		
	Annual Average	Annual Change	% Change	Monthly Average (kWh)	Change (MWh)	% Change	Total (MWh)	Annual Change (MWh)	% Change
1990	12			3,097			446		
1991	15	3	25.0	2,659	-438	-14.1	479	33	7.3
1992	19	4	26.7	2,313	-346	-13.0	527	49	10.2
1993	42	23	121.1	1,183	-1,130	-48.8	596	69	13.1
1994	59	17	40.5	922	-262	-22.1	653	56	9.4
1995	104	45	76.3	641	-281	-30.5	800	147	22.6
1996	164	60	57.7	510	-131	-20.5	1,003	203	25.4
1997	134	-30	-18.3	575	66	12.9	925	-78	-7.8
1998	18	-116	-86.6	2,799	2,223	386.5	605	-321	-34.6
1999	19	1	5.6	2,558	-241	-8.6	583	-21	-3.5
2000	21	2	10.5	2,145	-413	-16.1	541	-43	-7.3
2001	22	1	4.8	2,022	-123	-5.7	534	-7	-1.2
2002	21	-1	-4.5	2,142	120	5.9	540	6	1.1
2003	21	0	0.0	2,134	-9	-0.4	538	-2	-0.4
2004	23	2	9.5	2,029	-105	-4.9	560	22	4.1
2005	27	4	17.4	1,961	-67	-3.3	636	76	13.5
2006	29	2	7.4	1,866	-96	-4.9	649	14	2.2
2007	31	2	6.9	1,734	-132	-7.1	645	-4	-0.7
2008	31	0	0.0	1,734	0	0.0	645	0	0.0
2009	31	0	0.0	1,806	72	4.2	672	27	4.2
2010	31	0	0.0	1,902	95	5.3	707	35	5.3
2011	31	0	0.0	1,904	2	0.1	708	1	0.1
2012	31	0	0.0	1,906	2	0.1	709	1	0.1
2013	31	0	0.0	1,907	2	0.1	710	1	0.1
2014	31	0	0.0	1,909	2	0.1	710	1	0.1
2015	31	0	0.0	1,910	1	0.1	711	1	0.1
2016	31	0	0.0	1,911	1	0.1	711	0	0.1
2017	31	0	0.0	1,913	1	0.1	711	0	0.1
2018	31	0	0.0	1,914	1	0.1	712	0	0.1
2019	31	0	0.0	1,915	1	0.0	712	0	0.0
2020	31	0	0.0	1,915	1	0.0	713	0	0.0
2021	31	0	0.0	1,916	1	0.0	713	0	0.0
2022	31	0	0.0	1,917	1	0.0	713	0	0.0
2023	31	0	0.0	1,918	1	0.0	713	0	0.0
2024	31	0	0.0	1,918	1	0.0	714	0	0.0
2025	31	0	0.0	1,919	1	0.0	714	0	0.0
2026	31	0	0.0	1,919	0	0.0	714	0	0.0
2027	31	0	0.0	1,920	0	0.0	714	0	0.0
2028	31	0	0.0	1,920	0	0.0	714	0	0.0
2029	31	0	0.0	1,920	0	0.0	714	0	0.0
2030	31	0	0.0	1,921	0	0.0	715	0	0.0

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Methodology and Results *(continued)*

Peak Day Weather Scenarios

Extreme temperatures can dramatically influence Clark Energy's peak demands. Table 1-10 and Figure 1-9 reports the impact of extreme weather on system demands.

Table 1-10

Clark Energy
Peak Day Weather Scenarios

Winter Peak Day Minimum Temperatures

	Mild	Normal		**Extreme**	
Degrees	10	-3	-12	-17	-25
Probability	*99%*	*50%*	*20%*	*10%*	*3%*
Occurs Once Every		**2 Years**	**5 Years**	**10 Years**	**30 Years**

Summer Peak Day Maximum Temperatures

	Normal		**Extreme**	
Degrees	96	98	100	104
Probability	*50%*	*20%*	*10%*	*3%*
	2 Years	**5 Years**	**10 Years**	**30 Years**

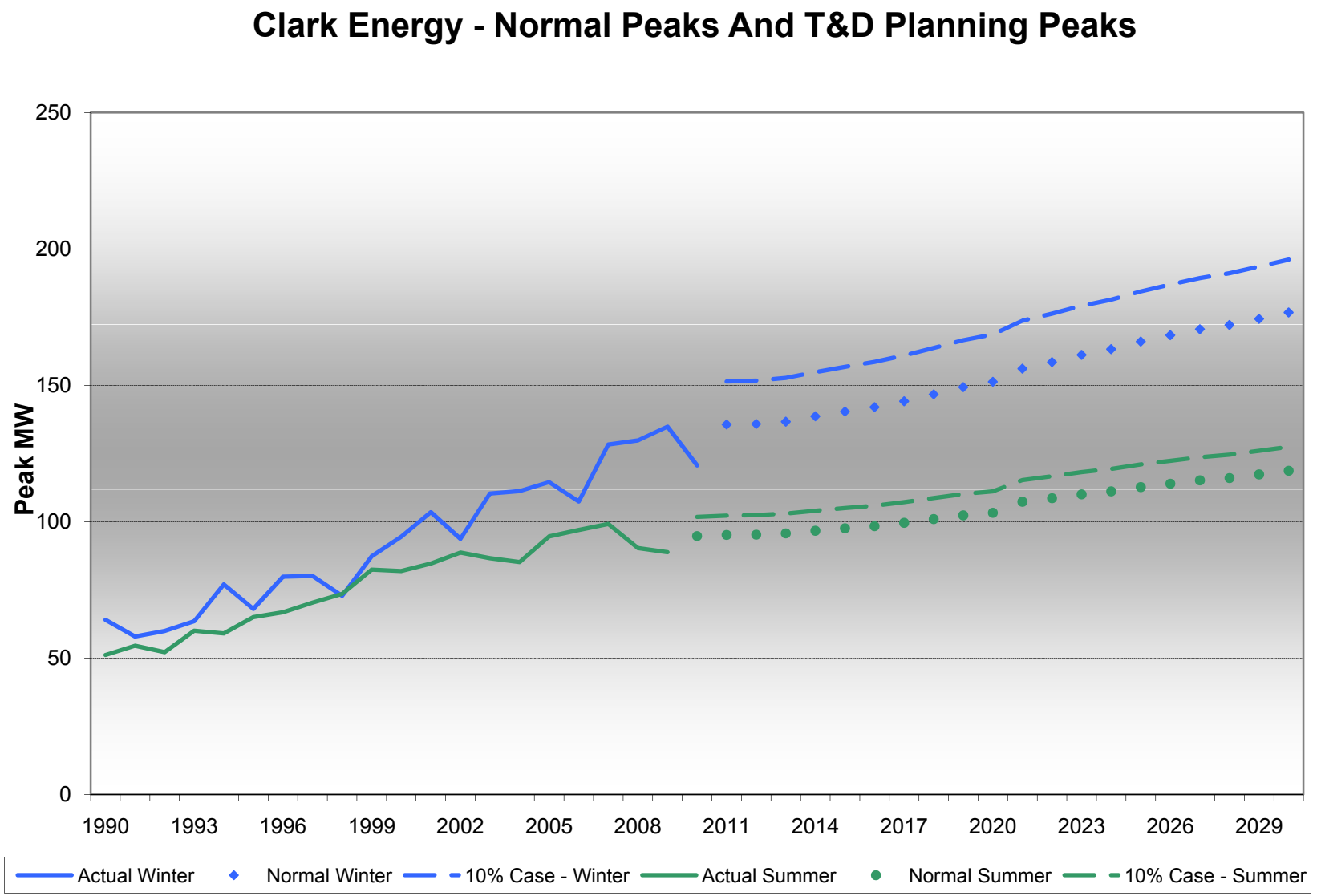
Noncoincident Winter Peak Demand - MW

Season	Mild	Normal		Extreme	
2010 - 11	121	136	146	151	160
2011 - 12	121	136	146	152	161
2012 - 13	122	137	147	153	162
2013 - 14	124	139	149	155	164
2014 - 15	125	140	151	157	166
2015- 16	127	142	153	159	168
2016 - 17	129	144	155	161	171
2017 - 18	131	147	158	164	173
2018 - 19	133	149	160	167	176
2019 - 20	135	151	162	169	179
2020 - 21	140	156	167	174	184
2021 - 22	142	159	170	176	186
2022 - 23	144	161	173	179	189
2023 - 24	146	163	175	181	192
2024 - 25	149	166	178	184	195
2025 - 26	151	168	180	187	198
2026 - 27	153	171	183	189	200
2027 - 28	154	172	184	191	202
2028 - 29	157	174	187	194	205
2029 - 30	159	177	189	196	207

Noncoincident Summer Peak Demand - MW

Year	Normal		Extreme	
2010	95	98	102	109
2011	95	99	102	109
2012	95	99	102	110
2013	96	99	103	110
2014	97	100	104	111
2015	98	101	105	112
2016	98	102	106	113
2017	100	103	107	115
2018	101	105	109	116
2019	102	106	110	118
2020	103	107	111	119
2021	107	111	115	123
2022	109	113	117	125
2023	110	114	118	126
2024	111	115	119	128
2025	113	117	121	129
2026	114	118	122	131
2027	115	119	124	132
2028	116	120	125	133
2029	117	122	126	135
2030	119	123	127	136

Figure 1-9


Clark Energy - Normal Peaks And T&D Planning Peaks
Peak MW
250
200
150
100
50
0
1990
1993
1996
1999
2002
2005
2008
2011
2014
2017
2020
2023
2026
2029
Actual Winter
Normal Winter
10% Case - Winter
Actual Summer
Normal Summer
10% Case - Summer

Clark Energy Cooperative, Inc.

PSC Case No. 2011-00303
1st Information Request

Request #5
Responsible Party: Todd Peyton

5. Refer to Section I, page 1-10, which states that, "Clark Energy purchases power from EKPC at twenty 69 KV delivery points, two 138 KV delivery points, and 2 meter points." Explain what is meant by 2 meter points.

Response: This section contains a typographical error. Section 1 page 1-10 should state "1" meter point. Delivery points are substations served by EKPC at 138kV or 69kV, while the metering point is also served by EKPC through a primary meter at distribution voltage.

PSC Request 6

Clark Energy Cooperative, Inc.

PSC Case No. 2011-00303
1st Information Request

Request #6
Responsible Party: Todd Peyton

6. In Section 2, page 2-7, RUS Code 705-1, Clark Energy states that it proposes to "upgrade all substations with two-way communications for the Hunt TS2 system. This will allow Clark Energy to continue to use the existing TSI meters and upgrade to TS2 meters as new meters are purchased."

a. State the total number of meters in Clark Energy's system identified by type, i.e, mechanical or digital. State the number of Clark Energy's digital meters that are TSI and the number that are TS2.

b. State the type of meters Clark Energy is proposing to purchase to serve the 2,134 projected new members (shown on page 2-2) and as the 4,000 replacement meters (shown on page 2-4).

Response:

a. **(**Mechanical – 18,292) (Digital – 7,830) (Digital TS1 – 7,020) (Digital TS2 – 810)

b. All meters proposed to be purchased are Digital TS2

Clark Energy Cooperative, Inc.

PSC Case No. 2011-00303
1st Information Request

Request #7
Responsible Party: Todd Peyton

7. What AMR/AMI systems other than the Turtle 2 system were considered? Provide the reason they were rejected and their estimated costs.

Response: No other systems were considered since Clark Energy has already fully deployed the TS1 system, and the upgrade will take advantage of the existing hardware\software and other infrastructure preventing costly replacements and duplication of facilities.

Clark Energy Cooperative, Inc.

PSC Case No. 2011-00303
1st Information Request

Request #8
Responsible Party: Todd Peyton

8. Provide Clark Energy's feasibility study related to the upgrade to a Turtle 2 System.

Response: No feasibility study was conducted since, as was stated in the response to question #7, Clark Energy has already fully deployed the TS1 system, and the upgrade will take advantage of the existing hardware\software and other infrastructure preventing costly replacements and duplication of facilities.

Clark Energy Cooperative, Inc.

PSC Case No. 2011-00303
1st Information Request

Request #9
Responsible Party: Todd Peyton

9. Provide the reason Clark Energy decided to install the Turtle 2 system. Include in your response functions provided by the Turtle 2 system that are not provide by the Turtle 1 system and why those additional functions are needed for Clark Energy's system.

Response: Upgrading to the TS2 system allows Clark to continue to utilize all existing TS1 meters while also positioning Clark to provide optional rate plans to our Consumers. Optional rate plans include demand side management, prepaid metering, time of use, and off peak rates. Additional functionalities include two-way communications, voltage data, remote service connect\disconnect, and communication to our Outage Management System.

Clark Energy Cooperative, Inc.

PSC Case No. 2011-00303
1st Information Request

Request #10
Responsible Party: Todd Peyton

10. Refer to Section 2, page 2-2. Explain the reason for the difference in the average installed cost/meter between underground and overhead.

Response: Simply a cell rounding issue in the spreadsheet formula used to produce the data resulting in the $1 difference.

Clark Energy Cooperative, Inc.

PSC Case No. 2011-00303
1st Information Request

Request #11
Responsible Party: Todd Peyton

Refer to "Clark Energy Hazard Mitigation Project Three Phase Overhead to Three Phase Underground Cave Run Lake\Daniel Boone National Forest" of Exhibit 3, which shows an estimated cost of $491,440.19.

a. Indicate who is responsible for that cost.

b. Refer to page 2-23, RUS Code-61 1 It shows the estimated cost of this project as $526,400. Explain the difference.

Response:

a. A FEMA hazard mitigation grant has been secured for this project.

b. $491,440.19 is the original estimated project cost developed in early 2009 to apply for the now awarded FEMA grant. $526,400 is the estimated project cost at time of completion in late 2012.

Clark Energy Cooperative, Inc.

PSC Case No. 2011-00303
1st Information Request

Request #12
Responsible Party: Todd Peyton

12. Refer to Appendix 9, "Stone Rd. Substation," which states, "the proposed improvements for the new substation were compared to the cost of the Base Case system improvements to serve the projected load." Provide the estimated cost of the substation alternative and the cost of the Base Case system improvements.

Response: Estimated substation cost $726,200. Base case system improvements $1,047,300.

Clark Energy Cooperative, Inc.

PSC Case No. 2011-00303
1st Information Request

Request #13
Responsible Party: Todd Peyton

13. Refer to Section 2, page 2-7, item 2.6 AMR/AMI, RUS Code 601. Clark Energy states this project will upgrade meters with a built-in remote disconnect device.

a. Explain whether this project is to purchase meters with a remote disconnect/reconnect device built in, or is the project to purchase the remote disconnect/reconnect device that will then be installed on each meter. Provide a full description of the equipment to be purchased, including manufacturer, model, functions and capabilities.

b. Why does Clark Energy propose to buy only 500 units?

c. Does Clark Energy plan to upgrade its entire system with meters with the remote connect/disconnect feature?

d. Is the equipment that Clark Energy is proposing to purchase compatible with the planned upgrade to the Hunt TS-2 system?

e. Are the devices/meters to be purchased by this project compatible with the other meters Clark Energy plans to purchase as part of this CWP (2,134 meters to serve projected new members and 4,000 replacement meters)?

Response:

a. The Landis+Gyr Focus AX SD meter has a disconnect/reconnect device built in as well as standard meter kWh and kW functions.

Response 13 continued:

b. This is a pilot project to test these units before developing a more extensive deployment plan.
c. No
d. Yes
e. Yes