OWEN Electric

A Touchstone Energy® Cooperative

January 20, 2012

Mr. Jeff Derouen, Executive Director
Kentucky Public Service Commission
211 Sower Blvd
PO Box 615
Frankfort, KY 40602

RE: Case No 2011-00313

Dear Mr. Derouen:

Attached please find the response of Owen Electric Cooperative ("OEC") to the Public Service Commission staff's First Information Request, per its Order dated January 9, 2012. At the direction of Commission staff, one paper copy original is being submitted under this cover and the response is also being submitted electronically.

Please direct questions to me at 502-563-3489.

Sincerely,

Jim Bridges

Jim Bridges, DSS
VP of Engineering
Owen Electric Cooperative

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:

APPLICATION OF OWEN ELECTRIC COOPERATIVE, INC	)
FOR A CERTIFICATE OF PUBLIC CONVENIENCE	)
AN NECESSITY FOR ITS 2012-2013	) CASE NO.2011-00313
CONSTRUCTION WORK PLAN	)

OWEN ELECTRIC COOPERATIVE, INC.'S RESPONSE TO PSC FIRST INFORMATION REQUEST OF JAN 9, 2012

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF OWEN ELECTRIC COOPERATIVE, INC. FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY FOR ITS 2012-2013 CONSTRUCTION WORK PLAN	))))	CASE NO. 2011-00313

FIRST INFORMATION REQUEST OF COMMISSION STAFF TO OWEN ELECTRIC COOPERATIVE, INC.

Pursuant to 807 KAR 5:001, Owen Electric Cooperative, Inc. ("Owen Electric") is to file with the Commission the original and 10 copies of the following information, with a copy to all parties of record. The information requested herein is due no later than fourteen days following the date of this request. Responses to requests for information shall be appropriately bound, tabbed and indexed. Each response shall include the name of the witness responsible for responding to the questions related to the information provided. Each response shall be answered under oath or, for representatives of a public or private corporation or a partnership or association or a governmental agency, be accompanied by a signed certification of the preparer or person supervising the preparation of the response on behalf of the entity that the response is true and accurate to the best of that person's knowledge, information, and belief formed after a reasonable inquiry.

Owen Electric shall make timely amendment to any prior response if it obtains information which indicates that the response was incorrect when made or, though

correct when made, is now incorrect in any material respect. For any request to which Owen Electric fails or refuses to furnish all or part of the requested information, Owen Electric shall provide a written explanation of the specific grounds for its failure to completely and precisely respond.

Careful attention should be given to copied material to ensure that it is legible. When the requested information has been previously provided in this proceeding in the requested format, reference may be made to the specific location of that information in responding to this request. When applicable, the requested information shall be separately provided for total company operations and jurisdictional operations.

1. Refer to page 1 of the Executive Summary in the Construction Work Plan ("CWP") regarding the general basis of the study.

a. Explain the basis of Owen Electric's projected sales for periods contained in the CWP.

b. Explain why Gallatin Steel is excluded from the projected system peaks.

c. Refer to the last paragraph on page 1 regarding the RUS Operating and Maintenance Survey (FORM 300) and Appendix A. Explain what Owen Electric has done to address the issues identified in the explanatory notes for item 3b.

2. Refer to Table I-C-1, Systems Additions and Improvements Summary, on page 1 of Section I-C of the CWP. For Category 700, provide an explanation for the use and cost for the AMR.

3. Refer to the footnote to Tables II-B, 1 and 2, on page 1 of Section II-B of the CWP. Explain how Owen Electric derived 60 percent for indirect labor and provide an example showing the calculation.

4. Refer to page 1 of Section II-C of the CWP regarding the status of previous CWP items. For the projects that were carried over or deferred, provide the date Owen Electric expects to complete the projects.

5. Refer to page 1 of the Executive Summary. From 2005-2009, the annual average increase in residential energy sales was 2.0 percent. This rate is projected to be 2.0 percent over the next two years. Small commercial sales are projected to increase 2.4 percent over the next two years. Large Commercial/Industrial energy sales are projected to increase 7.7 percent over the next two years. Provide the percentage change of sales for 2010 as compared to 2009 by residential, commercial and industrial.

6. Refer to page 2 of the Executive Summary. The last sentence states, "[t]he high side fuse of Grantslick II needs to be upgraded." Explain "needs to be upgraded."

7. Refer to page 3 of the Executive Summary. Explain the difference between the two-year planning period of 2012-2013 on page 1 and 2012-2015 CWP on page 3.

8. Refer to Owen Electric CWP: I-A, pages 4 to 6.

a. Explain whether the 2010 load forecast is an estimate or an actual.

b. If the answer to part a. is an estimate, provide the actual for 2010 for residential, commercial and industrial, if available.

9. Refer to Owen Electric CWP: II-D, page 1. It states, "[t]he Williamstown expansion will need to occur at the onset of the next CWP. A new 5MW amusement park, The Ark, will be served by the Williamstown substation and is scheduled to open in late 2014 or early 2015." Explain whether The Ark will provide any amount of contribution in aid of construction for the Williamstown expansion.

10. Refer to Owen Electric CWP: II-D, page 2. Explain how often the O&M Survey report is filed.

11. Refer to Owen Electric CWP: IV-A, page 1. Explain whether the total projected cost of $4,862,246 for new service construction is net of any underground cost differentials from customers.

12. Refer to Appendix C, Smart Grid Initiatives. It states:

> "Another smart grid initiative that OEC is presently involved with, in conjunction with the DOE, is self-healing. Self-healing pertains to automated distribution control whereby intelligent electronic devices are automatically operated based on a set of logic criteria being met. OEC currently has one location at the southern portion of its system where a self-healing scheme is in place. In the next year there will be two additional locations where critical loads will require continuous power, and in the event of an outage, must have power restored within minutes. The components that make up a self-heal system include mainline reclosers with communication capability, logic controls, plus a central master control located at OEC headquarters. This intelligent scheme allows for switching between feeders in fewer than 5 minutes. The system can either be reset manually or through remote control."

Explain how a circuit or partial distribution system self-heals in a storm severe enough to cause outages.

13. Refer to the Owen Electric CWP, Section IV-C, Miscellaneous Distribution Equipment – RUS Code 600's, page 5. Under the area labeled Miscellaneous Replacements – RUS Code 607, Owen states that part of the $1.3 million assigned to

Jeff Derouen
Executive Director
Public Service Commission
P.O. Box 615
Frankfort, KY 40602

DATED JAN 09 2012

cc: Parties of Record

Jim Bridges
Distribution Systems Solutions
c/o Owen Electric Cooperative
PO Box 400
Owenton, KENTUCKY 40359

Mark Stallons
President
Owen Electric Cooperative, Inc.
8205 Highway 127 North
P. O. Box 400
Owenton, KY 40359

Rebecca Witt
Senior VP Corporate Services
Owen Electric Cooperative, Inc.
8205 Highway 127 North
P. O. Box 400
Owenton, KY 40359

Affiant, Rebecca Witt, states that the answers given by her to the foregoing questions are true and correct to the best of her knowledge and belief.

Rebecca Witt, Senior Vice President of Corporate Services

Subscribed and sworn to before me by the affiant, Rebecca Witt, this 20th day of January, 2012.

Notary Melissa K. Moore

State-at-Large

My Commission expires April 14, 2015.

Affiant, Jim Bridges, states that the answers given by him to the foregoing questions are true and correct to the best of his knowledge and belief.

Jim Bridges, P.E.

Jim Bridges, P.E. DSS, Vice President of Engineering

Subscribed and sworn to before me by the affiant, Jim Bridges, this 20th day of January, 2012.

Notary Melissa K Moore

State-at-Large

My Commission expires April 14, 2015.

Question:

Refer to page 1 of the Executive Summary in the Construction Work Plan ("CWP") regarding the general basis of the study.

a. Explain the basis of Owen Electric's projected sales for periods contained in the CWP.

Response:

All projected sales and load in the Construction Work Plan (CWP) are based on the 2010 Load Forecast. See attached.

b. Explain why Gallatin Steel is excluded from the projected system peaks.

Response:

Gallatin Steel is served by its own dedicated substation and distribution system, and is served directly by East Kentucky Power. The scope of this CWP is for the load served by the OEC distribution system. Therefore the projected load for the CWP excludes Gallatin Steel.

c. Refer to the last paragraph on page 1 regarding the RUS Operating and Maintenance Survey (FORM 300) AND Appendix A. Explain what Owe Electric has done to address the issues identified in the explanatory notes for item 3b.

Response:

Contained in Owen's Shared Facility agreements with the telephone and CATV utilities are specific Articles that outline the expectations of both parties when a joint-use structure is replaced. When Owen is the owner of the structure, advanced notice (per agreement) is provided to the licensee that indicates the purpose and scope of replacing a wood-pole structure. The licensee is provided

a satisfactory amount of time to transfer their facilities to the new structure and either remove the original structure or request Owen to remove the structure after transfer. The telecommunications utilities have greatly reduced their staffs and efforts - in recent years - making the situation in Item No. 3b more difficult for Owen to manage. The large telephone utilities are generally more compliant and work fairly well in terms of the agreements. However, the small, local CATV companies do not always have the financial means to comply with the agreement regarding facility transfers. This lack of CATV's commitment to the agreements continues to shift a greater burden on Owen's resources.

Question 1
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Owen Electric Cooperative

2010 Load Forecast

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

July 2010

Table of Contents

Introduction

Executive Summary

Owen Electric Cooperative (Owen Electric) located in Owenton, Kentucky, is an electric distribution cooperative that serves members in nine counties. This load forecast report contains Owen Electric's long-range forecast of energy and peak demand.

Owen Electric 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 Owen Electric for reasonability. Final projections reflect a rigorous analysis of historical data combined with the experience and judgment of the manager and staff of Owen Electric. Key assumptions are reported beginning on page 16.

Introduction

Executive Summary

The load forecast is prepared biannually as part of the overall planning cycle at EKPC and Owen Electric. Cooperation helps to ensure that the forecast meets both parties' needs. Owen Electric uses the forecast in developing three-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 Owen Electric is reported in Table 1-1 on page 5. 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
Owen Electric
2010 Load Forecast
MWh Summary
Excluding Gallatin

Year	Residential Sales (MWh)	Small Comm. Sales (MWh)	Public Buildings (MWh)	Large Comm. Sales (MWh)	Other Sales (MWh)	Total Sales (MWh)	Office Use (MWh)	% Loss	Purchased Power (MWh)	Including Gallatin: Gallatin (MWh)	Including Gallatin: Purchased Power With Gallatin (MWh)	Including Gallatin: % Loss
1990	312,603	46,235	3,669	20,123	177	382,807	733	8.3	418,457	0	418,457	8.3
1991	343,499	61,339	4,116	24,809	172	433,934	647	5.3	458,941	0	458,941	5.3
1992	342,536	61,727	5,994	24,192	172	434,622	637	5.2	458,929	0	458,929	5.2
1993	378,860	66,082	7,480	24,535	158	477,115	572	6.0	508,188	0	508,188	6.0
1994	399,328	72,341	7,995	25,204	152	505,020	893	4.7	530,926	0	530,926	4.7
1995	421,304	93,085	8,656	29,310	152	552,508	1,056	4.5	579,477	294,835	874,312	3.0
1996	452,162	92,937	9,215	35,603	148	590,065	1,074	5.2	623,394	640,756	1,264,151	2.6
1997	459,953	102,512	8,985	33,835	150	605,436	1,001	4.2	633,151	755,279	1,388,430	1.9
1998	479,197	113,645	9,435	32,309	140	634,727	947	5.6	673,649	696,051	1,369,699	2.8
1999	512,392	125,681	9,472	43,239	153	690,938	999	4.6	725,484	901,685	1,627,169	2.1
2000	538,817	140,359	9,630	75,839	351	764,997	1,087	3.2	791,195	906,171	1,697,367	1.5
2001	563,943	141,591	9,875	97,497	413	813,318	1,017	6.4	869,871	992,438	1,862,308	3.0
2002	615,132	138,298	11,002	113,503	559	878,494	1,041	3.9	915,457	1,005,491	1,920,948	1.9
2003	621,331	150,927	11,883	119,256	665	904,061	1,202	4.8	950,612	1,007,676	1,958,288	2.3
2004	652,706	161,106	12,421	138,685	570	965,488	1,899	3.4	1,001,062	1,047,466	2,048,528	1.6
2005	696,107	178,068	11,928	173,061	522	1,059,686	1,889	4.2	1,107,846	992,824	2,100,670	2.2
2006	679,964	207,408	11,585	198,064	681	1,097,703	1,859	4.8	1,155,181	978,939	2,134,120	2.6
2007	746,858	226,685	15,009	192,139	589	1,181,281	2,044	4.2	1,235,503	986,518	2,222,021	2.3
2008	740,085	214,939	22,631	212,094	646	1,190,396	2,131	4.1	1,243,317	956,332	2,199,649	2.3
2009	718,201	200,851	24,368	196,810	644	1,140,875	2,095	3.9	1,189,079	864,506	2,053,585	2.2
2010	735,354	208,010	24,824	216,749	644	1,185,581	2,090	3.9	1,235,584	969,150	2,206,361	2.2
2011	736,129	213,146	25,497	231,587	644	1,207,003	2,090	3.9	1,257,870	968,960	2,228,081	2.2
2012	741,123	218,708	26,004	271,488	644	1,257,967	2,090	3.9	1,311,194	967,411	2,278,631	2.2
2013	746,663	224,898	26,511	284,344	644	1,283,060	2,090	3.8	1,335,914	967,031	2,303,911	2.2
2014	760,875	231,414	27,017	295,246	644	1,315,196	2,090	3.8	1,369,320	968,462	2,338,249	2.2
2015	775,178	238,219	27,524	306,150	644	1,347,715	2,090	3.8	1,403,124	968,404	2,371,456	2.2
2016	792,060	245,227	28,030	317,152	644	1,383,112	2,090	3.7	1,438,424	968,850	2,408,122	2.2
2017	808,370	252,322	28,537	329,940	644	1,419,813	2,090	3.7	1,476,534	966,792	2,443,561	2.2
2018	825,758	259,459	29,043	342,789	644	1,457,693	2,090	3.7	1,515,870	966,524	2,482,037	2.2
2019	845,043	266,695	29,549	355,689	644	1,497,620	2,090	3.6	1,555,716	966,412	2,522,767	2.2
2020	863,358	274,155	30,056	368,677	644	1,536,889	2,090	3.6	1,596,451	968,439	2,565,010	2.2
2021	882,748	281,873	30,562	381,797	644	1,577,623	2,090	3.6	1,638,706	968,256	2,606,493	2.2
2022	903,883	289,834	31,069	395,063	644	1,620,492	2,090	3.5	1,681,433	968,089	2,650,177	2.2
2023	926,445	298,034	31,575	408,486	644	1,665,183	2,090	3.5	1,727,744	966,278	2,694,041	2.2
2024	949,186	306,389	32,082	422,044	644	1,710,344	2,090	3.5	1,774,543	966,171	2,740,130	2.2
2025	970,462	314,899	32,588	435,715	644	1,754,308	2,090	3.4	1,818,217	965,789	2,784,712	2.2
2026	993,002	323,596	33,094	449,503	644	1,799,840	2,090	3.4	1,865,352	967,464	2,833,004	2.2
2027	1,014,825	332,370	33,601	463,387	644	1,844,826	2,090	3.4	1,911,922	967,782	2,879,349	2.2
2028	1,036,228	341,167	34,107	477,327	644	1,889,473	2,090	3.3	1,956,114	966,171	2,923,373	2.2
2029	1,056,133	349,971	34,614	491,295	644	1,932,657	2,090	3.3	2,000,772	965,789	2,967,158	2.2
2030	1,079,339	358,777	35,120	505,278	644	1,979,158	2,090	3.3	2,048,860	967,464	3,016,441	2.2

Table 1-1 (continued)
Owen Electric 2010 Load Forecast Peaks Summary
Excluding Gallatin

Winter		*Summer*			
Season	Noncoincident Peak Demand (MW)	Year	Noncoincident Peak Demand (MW)	Year	Purchased Power (MWh)	Load Factor (%)
1989 - 90	121.3	1990	87.9	1990	418,457	39.4%
1990 - 91	105.6	1991	95.3	1991	458,941	49.6%
1991 - 92	116.5	1992	93.6	1992	458,929	44.8%
1992 - 93	122.5	1993	109.8	1993	508,188	47.4%
1993 - 94	148.5	1994	110.1	1994	530,926	40.8%
1994 - 95	152.3	1995	121.6	1995	579,477	43.4%
1995 - 96	133.2	1996	118.1	1996	623,394	53.3%
1996 - 97	158.7	1997	144.0	1997	633,151	45.6%
1997 - 98	140.0	1998	147.7	1998	673,649	52.1%
1998 - 99	164.3	1999	175.6	1999	725,484	47.2%
1999 - 00	175.1	2000	169.6	2000	791,195	51.5%
2000 - 01	191.5	2001	193.4	2001	869,871	51.3%
2001 - 02	177.3	2002	203.6	2002	915,457	51.3%
2002 - 03	229.2	2003	224.7	2003	950,612	47.4%
2003 - 04	228.7	2004	231.2	2004	1,001,062	49.3%
2004 - 05	243.8	2005	273.5	2005	1,107,846	46.2%
2005 - 06	246.7	2006	277.7	2006	1,155,181	47.5%
2006 - 07	280.4	2007	265.2	2007	1,235,503	50.3%
2007 - 08	287.5	2008	270.5	2008	1,243,317	49.2%
2008 - 09	304.1	2009	269.2	2009	1,189,079	44.6%
2009 - 10	267.6	2010	273.5	2010	1,235,584	51.6%
2010 - 11	305.0	2011	278.0	2011	1,257,870	47.1%
2011 - 12	315.7	2012	288.0	2012	1,311,194	47.3%
2012 - 13	322.5	2013	294.2	2013	1,335,914	47.3%
2013 - 14	330.7	2014	301.1	2014	1,369,320	47.3%
2014 - 15	338.9	2015	308.2	2015	1,403,124	47.3%
2015- 16	346.6	2016	314.8	2016	1,438,424	47.3%
2016 - 17	356.8	2017	323.7	2017	1,476,534	47.2%
2017 - 18	366.3	2018	332.0	2018	1,515,870	47.2%
2018 - 19	376.1	2019	340.4	2019	1,555,716	47.2%
2019 - 20	384.9	2020	348.0	2020	1,596,451	47.2%
2020 - 21	396.3	2021	357.9	2021	1,638,706	47.2%
2021 - 22	406.7	2022	366.9	2022	1,681,433	47.2%
2022 - 23	418.0	2023	376.7	2023	1,727,744	47.2%
2023 - 24	428.1	2024	385.4	2024	1,774,543	47.2%
2024 - 25	439.9	2025	395.8	2025	1,818,217	47.2%
2025 - 26	451.2	2026	405.7	2026	1,865,352	47.2%
2026 - 27	462.3	2027	415.6	2027	1,911,922	47.2%
2027 - 28	471.5	2028	423.8	2028	1,956,114	47.2%
2028 - 29	483.4	2029	434.5	2029	2,000,772	47.3%
2029 - 30	494.9	2030	444.6	2030	2,048,860	47.3%

Table 1-1 (continued)

Owen Electric 2010 Load Forecast Peaks Summary
Including Gallatin

Winter		*Summer*			
Season	Noncoincident Peak Demand (MW)	Year	Noncoincident Peak Demand (MW)	Year	Purchased Power (MWh)	Load Factor (%)
1989 - 90	121.3	1990	87.9	1990	418,457	39.4%
1990 - 91	105.6	1991	95.3	1991	458,941	49.6%
1991 - 92	116.5	1992	93.6	1992	458,929	45.0%
1992 - 93	122.5	1993	109.8	1993	508,188	47.4%
1993 - 94	148.5	1994	110.1	1994	530,926	40.8%
1994 - 95	152.3	1995	231.0	1995	874,312	43.2%
1995 - 96	254.9	1996	232.7	1996	1,264,151	56.6%
1996 - 97	278.6	1997	265.0	1997	1,388,430	56.9%
1997 - 98	266.0	1998	274.1	1998	1,369,699	57.0%
1998 - 99	285.1	1999	296.4	1999	1,627,169	62.7%
1999 - 00	301.0	2000	295.5	2000	1,697,367	64.4%
2000 - 01	322.5	2001	324.3	2001	1,862,308	65.6%
2001 - 02	308.3	2002	338.6	2002	1,920,948	64.8%
2002 - 03	364.2	2003	359.7	2003	1,958,288	61.4%
2003 - 04	363.6	2004	371.1	2004	2,048,528	63.0%
2004 - 05	389.9	2005	432.9	2005	2,100,670	55.4%
2005 - 06	406.4	2006	442.4	2006	2,134,120	55.1%
2006 - 07	440.5	2007	425.2	2007	2,222,021	57.6%
2007 - 08	447.5	2008	430.5	2008	2,199,649	56.1%
2008 - 09	464.1	2009	429.2	2009	2,053,585	50.5%
2009 - 10	427.6	2010	433.5	2010	2,206,361	58.1%
2010 - 11	465.0	2011	438.0	2011	2,228,081	54.7%
2011 - 12	475.7	2012	448.0	2012	2,278,631	54.7%
2012 - 13	482.5	2013	454.2	2013	2,303,911	54.5%
2013 - 14	490.7	2014	461.1	2014	2,338,249	54.4%
2014 - 15	498.9	2015	468.2	2015	2,371,456	54.3%
2015- 16	506.6	2016	474.8	2016	2,408,122	54.3%
2016 - 17	516.8	2017	483.7	2017	2,443,561	54.0%
2017 - 18	526.3	2018	492.0	2018	2,482,037	53.8%
2018 - 19	536.1	2019	500.4	2019	2,522,767	53.7%
2019 - 20	544.9	2020	508.0	2020	2,565,010	53.7%
2020 - 21	556.3	2021	517.9	2021	2,606,493	53.5%
2021 - 22	566.7	2022	526.9	2022	2,650,177	53.4%
2022 - 23	578.0	2023	536.7	2023	2,694,041	53.2%
2023 - 24	588.1	2024	545.4	2024	2,740,130	53.2%
2024 - 25	599.9	2025	555.8	2025	2,784,712	53.0%
2025 - 26	611.2	2026	565.7	2026	2,833,004	52.9%
2026 - 27	622.3	2027	575.6	2027	2,879,349	52.8%
2027 - 28	631.5	2028	583.8	2028	2,923,373	52.8%
2028 - 29	643.4	2029	594.5	2029	2,967,158	52.6%
2029 - 30	654.9	2030	604.6	2030	3,016,441	52.6%

Executive Summary *(continued)*

Overall Results

Percent Growth Per Year

2010-2030

	With Gallatin	Without Gallatin
Total Annual Sales	1.6%	2.6%
Winter Peak Demand	1.8%	2.6%
Summer Peak Demand	1.7%	2.5%

Load factor will remain steady at 47% for the forecast period. See Figure 1-3.

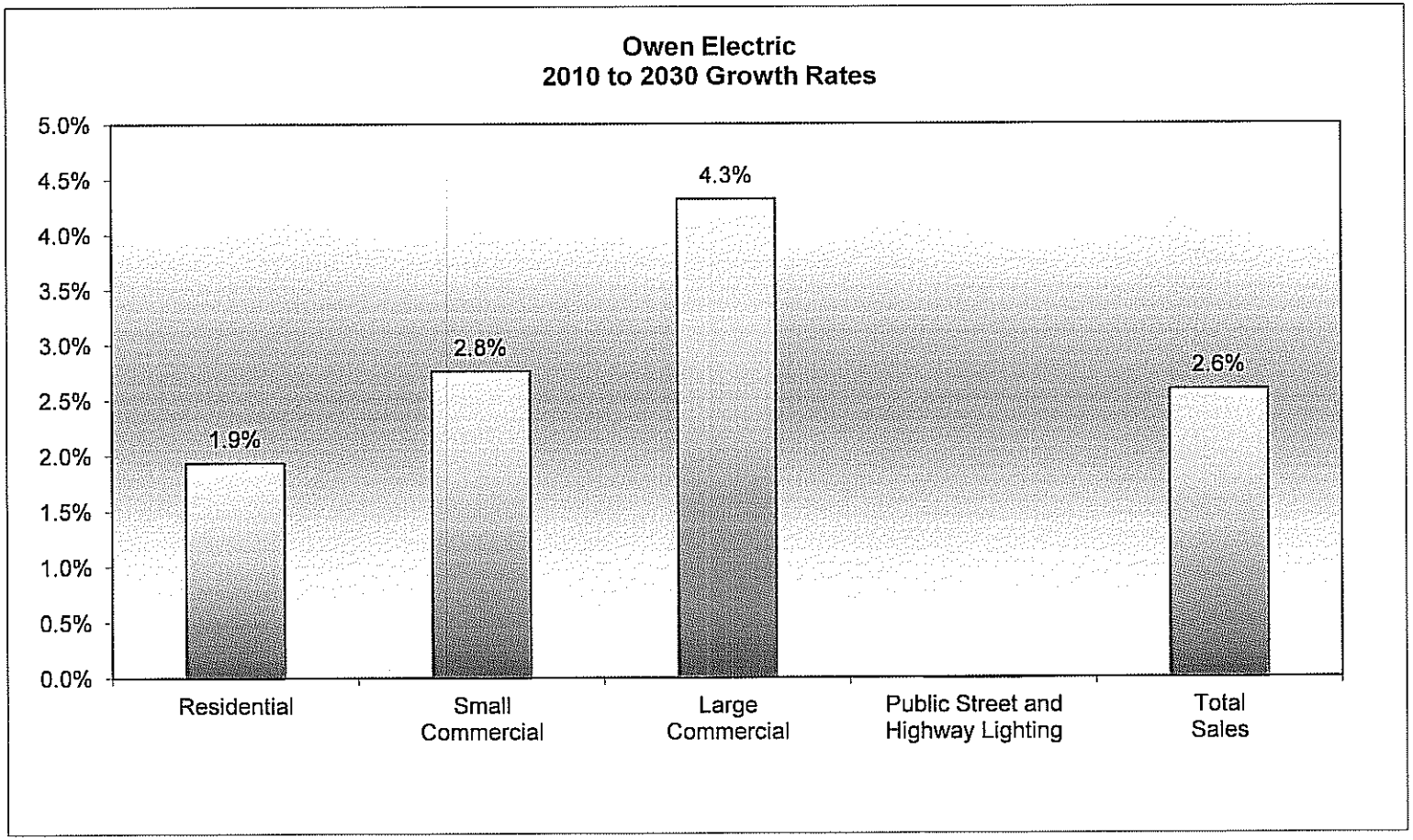
Executive Summary *(continued)*

Overall Results

Table 1-2
Owen Electric 2010 Load Forecast
Summary of Sales Growth Excluding Gallatin

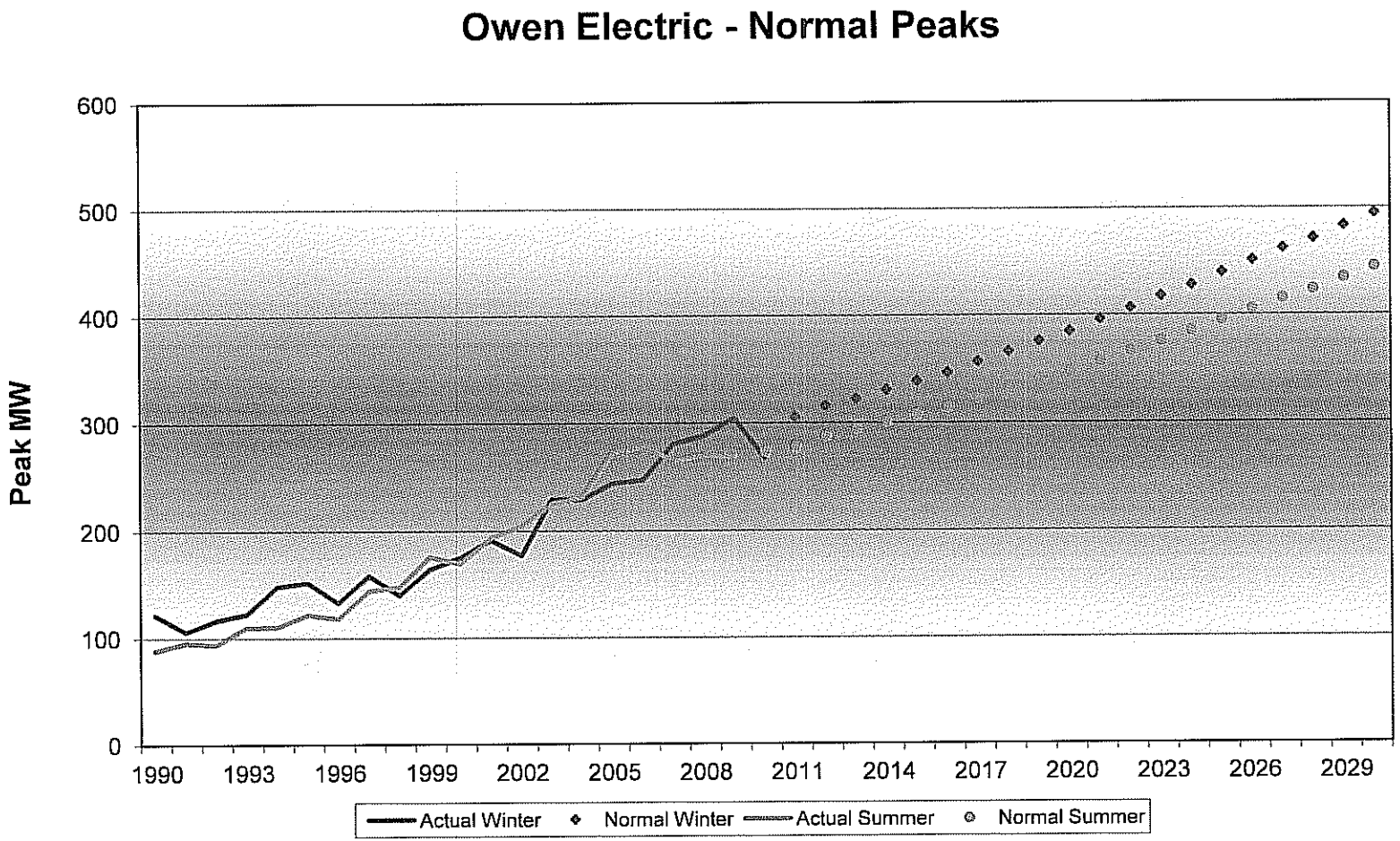
	Time Period	Residential	Small Commercial	Large Commercial	Public Street and Highway Lighting	Total Sales
5 Year Growth Rates	1999-2004	5.0%	5.1%	26.2%	30.0%	6.9%
	2004-2009	1.9%	4.5%	7.3%	2.5%	3.4%
	2010-2015	1.1%	2.7%	7.2%	0.0%	2.6%
	2015-2020	2.2%	2.8%	3.8%	0.0%	2.7%
	2020-2025	2.4%	2.8%	3.4%	0.0%	2.7%
	2025-2030	2.1%	2.6%	3.0%	0.0%	2.4%
10 Year Growth Rates	1999-2009	3.4%	4.8%	16.4%	15.4%	5.1%
	2010-2020	1.6%	2.8%	5.5%	0.0%	2.6%
	2020-2030	2.3%	2.7%	3.2%	0.0%	2.6%

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



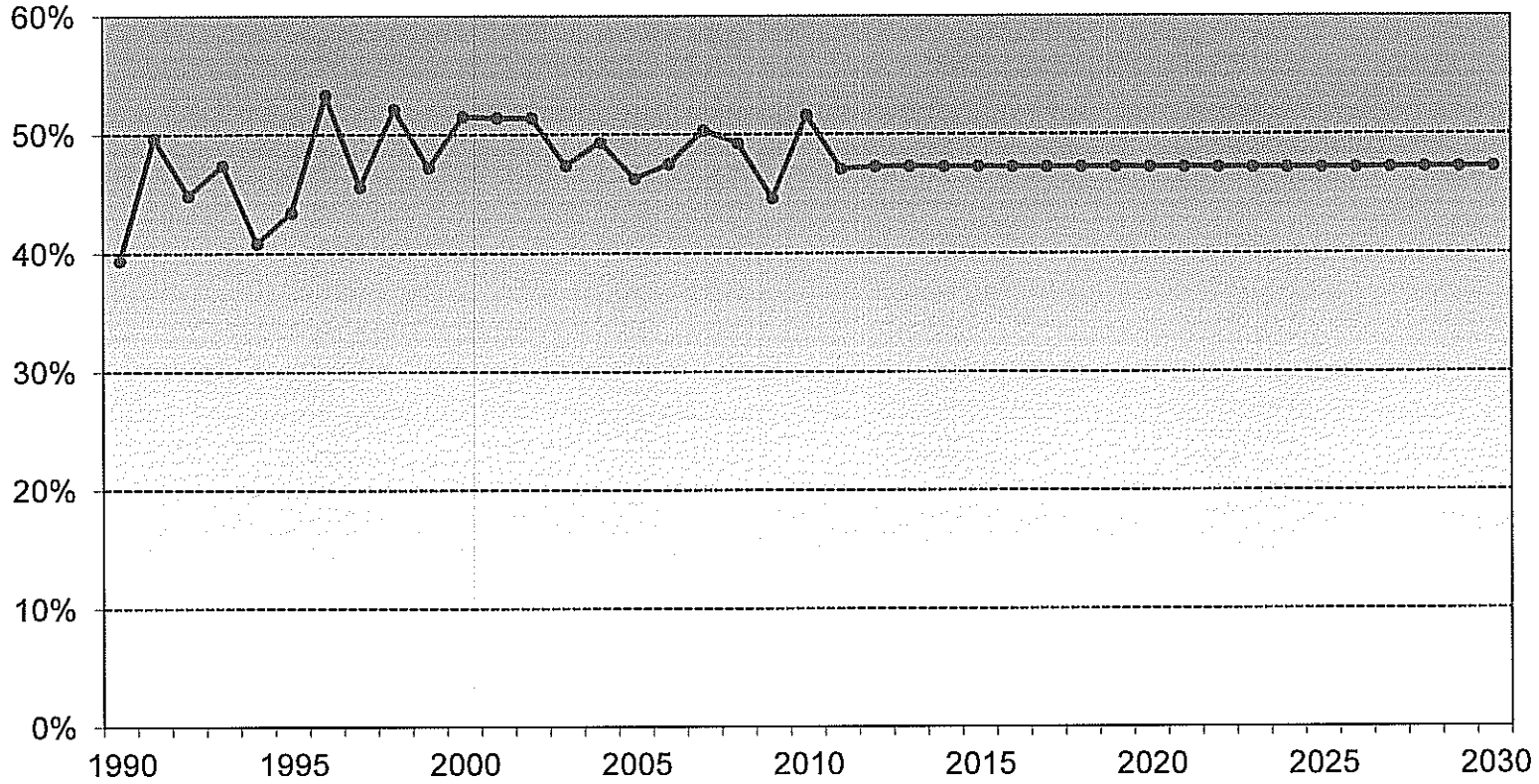
Note: Data excludes Gallatin Steel

Figure 1-2
Peak Demand Forecast
Winter and Summer



Note: Data excludes Gallatin Steel

Figure 1-3
Annual System Load Factor



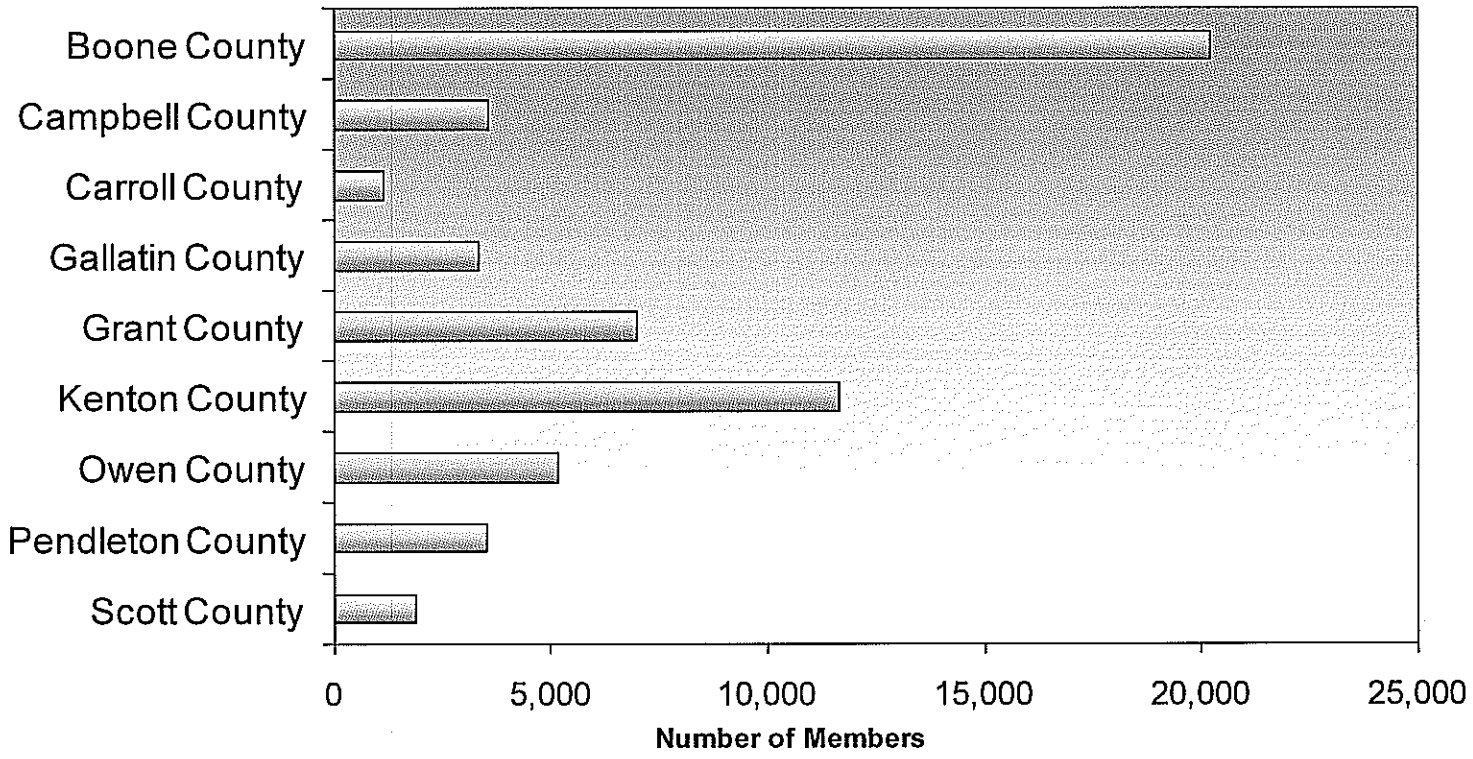
Narrative

Owen Electric Cooperative headquarters are located in Owenton, Kentucky. Owen Electric serves over 57,000 members over approximately 4,400 miles of electric line. Owen serves regions in Boone, Campbell, Carroll, Gallatin, Grant, Kenton, Owen, Pendleton, and Scott Counties.

Narrative *(continued)*
Counties Served

Owen Electric provides service to members in 9 counties.

Figure 1-4



Narrative *(continued)*
Owen Electric Members
Demographic Information

There is an average of 2.72 people per household.

49% of all homes are headed by someone age 55 or greater.

13% of homes have farm operations, with beef cattle being most prevalent.

31% of all homes served are less than 10 years old.

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 9.942 cents/kWh in 2009 to 21.302 cents/kWh in 2030.

Key Assumptions *(continued)*
Northern Economic Region History and Forecast

	Population		Households		Total Employment		Unemployment Rate		Regional Total Income	
		(%) Change		(%) Change		(%) Change		(%) Change		(%) Change
1990	126,781		126,781		125,272		4.2%		$9,167	
1991	129,687	2.3%	129,687	2.3%	126,775	1.2%	5.8%	38.6%	$9,552	4.2%
1992	132,664	2.3%	132,664	2.3%	130,709	3.1%	6.3%	9.5%	$9,921	3.9%
1993	134,841	1.6%	134,841	1.6%	135,367	3.6%	4.9%	-21.8%	$10,152	2.3%
1994	137,448	1.9%	137,448	1.9%	143,822	6.2%	4.6%	-6.4%	$10,530	3.7%
1995	140,973	2.6%	140,973	2.6%	147,542	2.6%	4.3%	-6.2%	$10,775	2.3%
1996	144,201	2.3%	144,201	2.3%	155,557	5.4%	4.4%	0.9%	$11,343	5.3%
1997	147,044	2.0%	147,044	2.0%	160,532	3.2%	3.3%	-23.9%	$11,943	5.3%
1998	149,623	1.8%	149,623	1.8%	167,605	4.4%	3.3%	-1.5%	$12,659	6.0%
1999	152,170	1.7%	152,170	1.7%	174,797	4.3%	3.4%	2.8%	$13,160	4.0%
2000	154,230	1.4%	154,230	1.4%	177,459	1.5%	3.4%	2.4%	$13,721	4.3%
2001	156,176	1.3%	156,176	1.3%	177,228	-0.1%	4.7%	36.5%	$13,707	-0.1%
2002	158,047	1.2%	158,047	1.2%	180,662	1.9%	4.5%	-4.9%	$13,983	2.0%
2003	160,069	1.3%	160,069	1.3%	182,913	1.2%	5.1%	13.4%	$14,230	1.8%
2004	162,280	1.4%	162,280	1.4%	186,964	2.2%	4.5%	-10.9%	$14,658	3.0%
2005	163,861	1.0%	163,861	1.0%	190,713	2.0%	5.5%	21.5%	$14,676	0.1%
2006	164,905	0.6%	164,905	0.6%	191,949	0.6%	4.9%	-11.0%	$15,290	4.2%
2007	166,135	0.7%	166,135	0.7%	196,553	2.4%	5.1%	3.6%	$15,377	0.6%
2008	167,622	0.9%	167,622	0.9%	194,309	-1.1%	7.1%	39.7%	$15,494	0.8%
2009	169,672	1.2%	169,672	1.2%	185,905	-4.3%	10.9%	54.1%	$14,699	-5.1%
2010	173,425	2.2%	173,425	2.2%	188,294	1.3%	10.6%	-3.2%	$14,869	1.2%
2011	176,563	1.8%	176,563	1.8%	194,169	3.1%	9.3%	-11.9%	$15,088	1.5%
2012	178,825	1.3%	178,825	1.3%	200,735	3.4%	8.3%	-10.4%	$15,672	3.9%
2013	181,722	1.6%	181,722	1.6%	205,879	2.6%	7.8%	-6.2%	$16,228	3.5%
2014	183,813	1.2%	183,813	1.2%	210,309	2.2%	7.4%	-5.6%	$16,861	3.9%
2019	197,626	1.2%	197,626	1.0%	229,445	1.3%	5.0%	-5.4%	$19,784	2.3%
2029	221,088	1.1%	221,088	1.1%	269,462	1.6%	4.9%	-0.2%	$26,732	3.1%

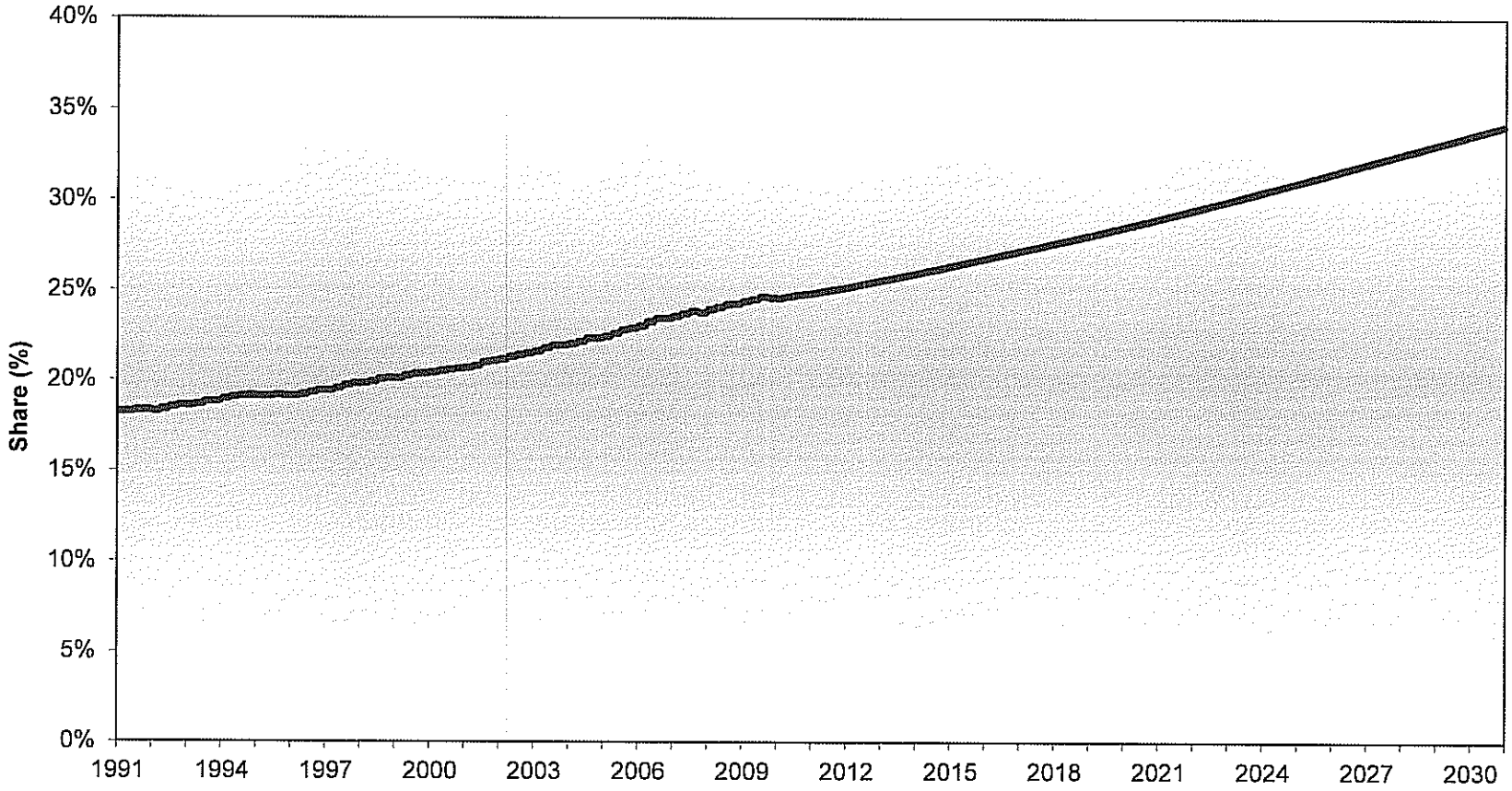
EKPC's source for economic forecasts is Global Insight. Regional Income is reported in millions of 2009 dollars. Growth rates are average annual changes.

Key Assumptions *(continued)*

Share of Regional Homes Served

Owen Electric's market share will increase for the forecast period.

Figure 1-5

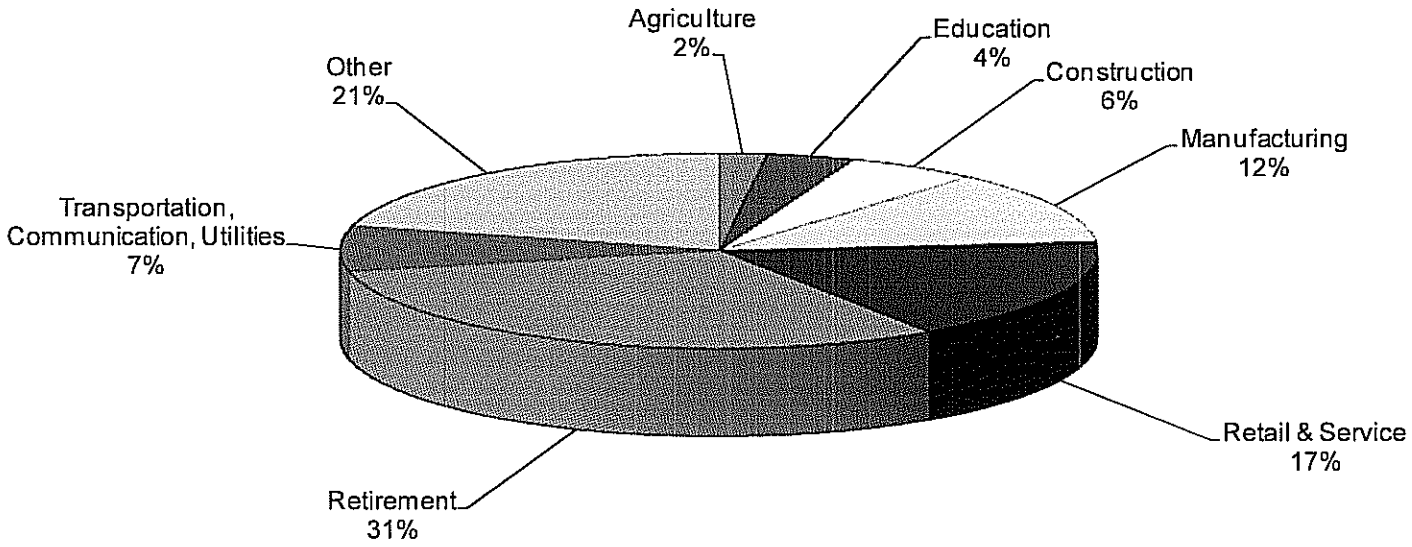


Key Assumptions *(continued)*

Household Income

Members' Greatest Sources

Figure 1-6



Key Assumptions *(continued)*
Appliance Saturations

- Electric heat saturation will increase from 36 percent to approximately 40 percent.
- Central air conditioning will continue its penetration into the service area with approximately 92 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 decline to approximately 60 percent.
- Appliance efficiency trends are accounted for in the model. The data is collected from Energy Information Administration (EIA). See Figure 1-7.
- 79 percent of homes report having at least 1 Compact Fluorescent Light.

Key Assumptions *(continued)*

Saturation Rates

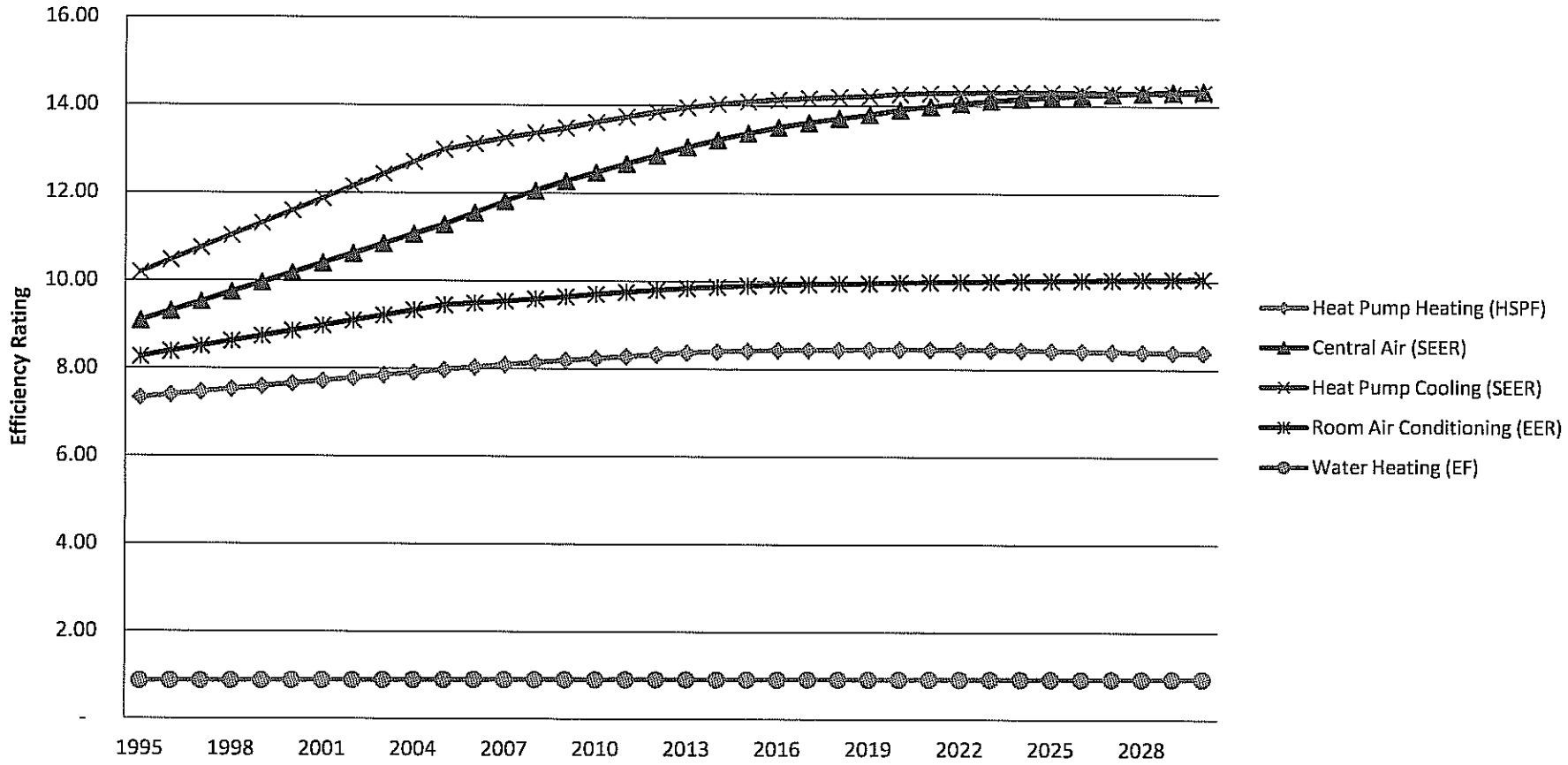
Non HVAC Appliances

Electric Range	95%
Dishwasher	77%
Freezer	54%
Clothes Dryer	98%
Personal Computer	78%

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 Covington weather station.
- Normal weather, a 30-year average of historical hourly 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 Owen Electric as reported on RUS Form 736 and RUS Form 5.

A preliminary forecast is prepared during the first quarter depending on when Owen Electric 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

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Table 1-3

Owen Electric Comparative Annual Operating Data

Year	kWh Purchased And Generated	Change	kWh Sold	Change	kWh Loss	% Loss	Billing Peak Demand	Average Number Of Consumers	Miles Of Line	Consumers Per Mile	Cost Of Purchased Power	Cents / kWh
1995	874,312,027		847,342,649		25,913,235	3.0%	221.4	35,211	4,130	8.5	$29,665,439	3.4
1996	1,264,150,637	44.6%	1,230,821,751	45.3%	32,255,254	2.6%	270.0	36,529	4,200	8.7	$37,464,023	3.0
1997	1,388,429,731	9.8%	1,360,714,324	10.6%	26,714,795	1.9%	262.1	38,556	4,296	9.0	$40,692,945	2.9
1998	1,369,699,421	-1.3%	1,330,777,376	-2.2%	37,974,892	2.8%	268.0	40,439	4,372	9.2	$41,010,947	3.0
1999	1,627,169,307	18.8%	1,592,622,090	19.7%	33,548,545	2.1%	288.3	42,174	4,445	9.5	$48,128,495	3.0
2000	1,697,366,577	4.3%	1,671,168,087	4.9%	25,111,859	1.5%	296.3	43,880	4,544	9.7	$55,268,343	3.3
2001	1,862,308,397	9.7%	1,805,755,763	8.1%	55,535,786	3.0%	312.6	45,691	4,618	9.9	$63,076,154	3.4
2002	1,920,948,184	3.1%	1,883,985,919	4.3%	35,920,987	1.9%	328.4	47,741	4,690	10.2	$64,790,614	3.4
2003	1,958,287,793	1.9%	1,911,737,016	1.5%	45,348,695	2.3%	340.6	49,940	4,771	10.5	$72,451,538	3.7
2004	2,048,527,629	4.6%	2,008,544,392	5.1%	38,084,041	1.9%	342.7	51,811	4,836	10.7	$85,026,798	4.2
2005	2,100,670,151	2.5%	2,052,510,159	2.2%	46,271,471	2.2%	395.4	53,598	4,940	10.8	$99,819,927	4.8
2006	2,134,119,750	1.6%	2,076,641,776	1.2%	55,619,200	2.6%	412.3	55,141	4,400	12.5	$102,910,227	4.8
2007	2,222,021,434	4.1%	2,167,799,044	4.4%	52,178,381	2.3%	416.8	56,290	4,428	12.7	$115,800,725	5.2
2008	2,199,648,833	-1.0%	2,146,727,475	-1.0%	50,790,795	2.3%	436.6	56,794	4,451	12.8	$121,334,659	5.5
2009	2,053,585,292	-6.6%	2,005,380,649	-6.6%	46,109,691	2.2%	413.6	57,223	4,486	12.8	$110,001,447	5.4
Average						2.3%						4.1

Note: Data includes Gallatin Steel

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Table 1-3

Owen Electric Comparative Annual Operating Data

Year	kWh Purchased And Generated	Change	kWh Sold	Change	kWh Loss	% Loss	Billing Peak Demand	Average Number Of Consumers	Miles Of Line	Consumers Per Mile	Cost Of Purchased Power	Cents / kWh
1995	579,477,027		552,507,649		25,913,235	4.5%	152.3	35,211	4,130	8.5	$21,724,773	3.7
1996	623,394,249	7.6%	590,065,363	6.8%	32,255,254	5.2%	133.2	36,529	4,200	8.7	$19,806,024	3.2
1997	633,150,928	1.6%	605,435,521	2.6%	26,714,795	4.2%	158.7	38,556	4,296	9.0	$20,380,581	3.2
1998	673,648,607	6.4%	634,726,562	4.8%	37,974,892	5.6%	140.0	40,439	4,372	9.2	$21,396,104	3.2
1999	725,483,811	7.7%	690,936,594	8.9%	33,548,545	4.6%	164.3	42,174	4,445	9.5	$24,272,221	3.3
2000	791,195,280	9.1%	764,996,790	10.7%	25,111,859	3.2%	175.1	43,880	4,544	9.7	$26,813,792	3.4
2001	869,870,885	9.9%	813,318,251	6.3%	55,535,786	6.4%	191.5	45,691	4,618	9.9	$31,664,192	3.6
2002	915,456,744	5.2%	878,494,479	8.0%	35,920,987	3.9%	177.3	47,741	4,690	10.2	$33,554,011	3.7
2003	950,612,176	3.8%	904,061,399	2.9%	45,348,695	4.8%	229.2	49,940	4,771	10.5	$35,853,342	3.8
2004	1,001,061,799	5.3%	961,078,562	6.3%	38,084,041	3.8%	228.7	51,811	4,836	10.7	$41,578,800	4.2
2005	1,107,846,309	10.7%	1,059,686,317	10.3%	46,271,471	4.2%	243.8	53,598	4,940	10.8	$54,639,607	4.9
2006	1,155,180,858	4.3%	1,097,702,884	3.6%	55,619,200	4.8%	246.7	55,141	4,400	12.5	$62,235,179	5.4
2007	1,235,502,993	7.0%	1,181,280,603	7.6%	52,178,381	4.2%	280.4	56,290	4,428	12.7	$71,442,867	5.8
2008	1,243,317,295	0.6%	1,190,395,937	0.8%	50,790,795	4.1%	281.4	56,794	4,451	12.8	$121,334,659	9.8
2009	1,189,079,145	-4.4%	1,140,874,502	-4.2%	46,109,691	3.9%	282.4	57,223	4,486	12.8	$110,001,447	9.3
Average						4.4%						5.1

Note: Data excludes Gallatin Steel

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Table 1-4

Owen Electric 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	kWh Sales	% Change	kWh Sales	% Change	kWh Sales	% Change	kWh Sales	% Change	kWh Sales	% Change	kWh Sales	% Change
1995	429,960,127		0		93,085,177		324,145,388		151,957		0	
1996	452,162,183	5.2%	0		92,936,699	-0.2%	676,359,799	108.7%	148,010	-2.6%	9,215,060	
1997	459,953,451	1.7%	0		102,511,730	10.3%	789,114,202	16.7%	149,912	1.3%	8,985,029	-2.5%
1998	479,197,336	4.2%	0		113,645,143	10.9%	728,359,514	-7.7%	140,190	-6.5%	9,435,193	5.0%
1999	512,391,708	6.9%	0		125,680,412	10.6%	944,924,650	29.7%	153,438	9.5%	9,471,882	0.4%
2000	538,817,463	5.2%	0		140,359,442	11.7%	982,010,619	3.9%	350,636	128.5%	9,629,927	1.7%
2001	563,942,641	4.7%	0		141,591,470	0.9%	1,089,934,508	11.0%	412,556	17.7%	9,874,588	2.5%
2002	615,131,733	9.1%	0		138,298,048	-2.3%	1,118,994,429	2.7%	559,418	35.6%	11,002,291	11.4%
2003	621,330,747	1.0%	0		150,926,754	9.1%	1,126,931,163	0.7%	664,915	18.9%	11,883,437	8.0%
2004	652,705,506	5.0%	0		161,106,275	6.7%	1,181,741,263	4.9%	570,391	-14.2%	12,420,957	4.5%
2005	696,107,196	6.6%	0		178,068,306	10.5%	1,165,884,543	-1.3%	522,176	-8.5%	11,927,938	-4.0%
2006	679,964,307	-2.3%	0		207,408,159	16.5%	1,177,002,458	1.0%	681,403	30.5%	11,585,449	-2.9%
2007	746,858,240	9.8%	0		226,685,405	9.3%	1,178,657,108	0.1%	588,969	-13.6%	15,009,322	29.6%
2008	740,084,902	-0.9%	0		214,939,442	-5.2%	1,168,425,331	-0.9%	646,375	9.7%	22,631,425	50.8%
2009	718,200,933	-3.0%	0		200,851,144	-6.6%	1,061,316,477	-9.2%	644,160	-0.3%	24,367,935	7.7%
Average Annual Change												
2 Year	-14,328,654	-6.4%			-12,917,131	-7.9%	-58,670,316	-4.7%	27,596	6.6%	4,679,307	-10.9%
5 Year	13,099,085	-1.6%			7,948,974	-2.7%	-24,084,957	-2.8%	14,754	2.8%	2,389,396	0.6%
10 Year	20,580,923	-1.0%			7,517,073	-1.7%	11,639,183	-3.9%	49,072	-1.0%	1,489,605	0.7%

Note: Reclassification in 2007 for Commercial/Industrial over 1 MW Class;

Data includes Gallatin Steel

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Table 1-5

Owen Electric 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	34,180	1,048	0		1,007	7,703	6	4,502,019	18	704	0	
1996	35,416	1,064	0		1,087	7,125	8	7,045,415	18	685	0	
1997	37,159	1,031	0		1,165	7,333	10	6,575,952	18	694	204	3,670
1998	38,931	1,026	0		1,264	7,492	12	5,058,052	19	615	213	3,691
1999	40,550	1,053	0		1,373	7,628	18	4,374,651	20	639	213	3,706
2000	42,113	1,066	0		1,510	7,746	21	3,896,868	19	1,538	217	3,698
2001	43,799	1,073	0		1,625	7,261	24	3,784,495	19	1,809	224	3,674
2002	45,779	1,120	0		1,690	6,819	22	4,238,615	20	2,331	230	3,986
2003	47,906	1,081	0		1,753	7,175	29	3,238,308	21	2,639	231	4,287
2004	49,741	1,094	0		1,791	7,496	31	3,176,724	21	2,263	227	4,560
2005	51,461	1,127	0		1,853	8,008	37	2,625,866	21	2,072	226	4,398
2006	52,935	1,070	0		1,930	8,955	27	3,632,724	19	2,989	230	4,198
2007	54,003	1,152	0		2,016	9,370	14	7,015,816	17	2,887	240	5,212
2008	54,427	1,133	0		2,086	8,587	17	5,727,575	16	3,367	248	7,605
2009	54,805	1,092	0		2,134	7,843	16	5,527,690	18	2,982	250	8,123
10 Year Avg	1,426	4			76	22	0	115,304	0	234	3.7	441.7
5 Year Avg	1,013	0			69	69	-3	470,193	-1	144	4.6	712.6
2 Year Avg	401	-30			59	-763	1	-744,063	1	48	5	1456

Annual Changes In Owen Electric's Residential Class

	1998	*1999*	*2000*	*2001*	*2002*	*2003*	*2004*	*2005*	*2006*	*2007*	*2008*	*2009*
Consumers	1,772	1,619	1,563	1,686	1,980	2,127	1,835	1,720	1,474	1,068	424	378
kWh/month	-6	27	13	7	47	-39	13	34	-57	82	-19	-41

Note: Reclassification in 2007 for Commercial/Industrial over 1 MW Class;

Data includes Gallatin Steel

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Methodology and Results *(continued)*

The preliminary forecast was presented to Owen Electric 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 Owen Electric 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 Owen Electric'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 Owen Electric's energy forecast.

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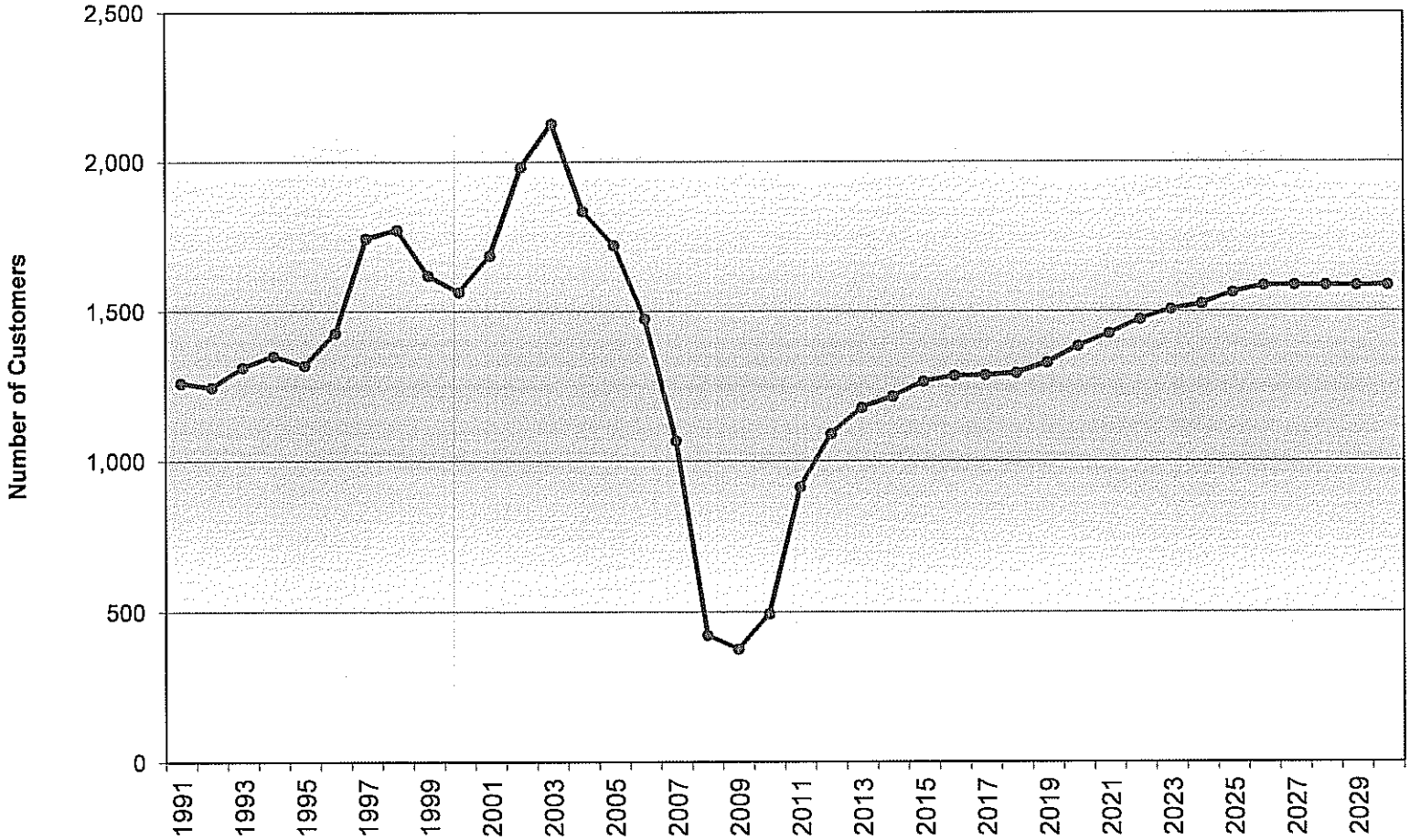
Table 1-6

Owen Electric
2010 Load Forecast
Residential Summary

	Customers			*Use Per Customer*			*Class Sales*		
	Annual Average	Annual Change	% Change	Monthly Average (kWh)	Annual Change (kWh)	% Change	Total (MWh)	Annual Change (MWh)	% Change
1990	27,499			947			312,603		
1991	28,760	1,261	4.6	995	48	5.1	343,499	30,896	9.9
1992	30,006	1,246	4.3	951	-44	-4.4	342,536	-962	-0.3
1993	31,319	1,313	4.4	1,008	57	6.0	378,860	36,323	10.6
1994	32,670	1,351	4.3	1,019	11	1.0	399,328	20,468	5.4
1995	33,989	1,319	4.0	1,033	14	1.4	421,304	21,976	5.5
1996	35,416	1,427	4.2	1,064	31	3.0	452,162	30,858	7.3
1997	37,159	1,743	4.9	1,031	-32	-3.0	459,953	7,791	1.7
1998	38,931	1,772	4.8	1,026	-6	-0.6	479,197	19,244	4.2
1999	40,550	1,619	4.2	1,053	27	2.7	512,392	33,194	6.9
2000	42,113	1,563	3.9	1,066	13	1.3	538,817	26,426	5.2
2001	43,799	1,686	4.0	1,073	7	0.6	563,943	25,125	4.7
2002	45,779	1,980	4.5	1,120	47	4.4	615,132	51,189	9.1
2003	47,906	2,127	4.6	1,081	-39	-3.5	621,331	6,199	1.0
2004	49,741	1,835	3.8	1,094	13	1.2	652,706	31,375	5.0
2005	51,461	1,720	3.5	1,127	34	3.1	696,107	43,402	6.6
2006	52,935	1,474	2.9	1,070	-57	-5.0	679,964	-16,143	-2.3
2007	54,003	1,068	2.0	1,152	82	7.7	746,858	66,894	9.8
2008	54,427	424	0.8	1,133	-19	-1.7	740,085	-6,773	-0.9
2009	54,805	378	0.7	1,092	-41	-3.6	718,201	-21,884	-3.0
2010	55,299	494	0.9	1,108	16	1.5	735,354	17,153	2.4
2011	56,212	913	1.7	1,091	-17	-1.5	736,129	775	0.1
2012	57,302	1,090	1.9	1,078	-13	-1.2	741,123	4,994	0.7
2013	58,480	1,178	2.1	1,064	-14	-1.3	746,663	5,540	0.7
2014	59,695	1,215	2.1	1,062	-2	-0.2	760,875	14,212	1.9
2015	60,960	1,265	2.1	1,060	-2	-0.2	775,178	14,303	1.9
2016	62,244	1,284	2.1	1,060	1	0.1	792,060	16,882	2.2
2017	63,530	1,286	2.1	1,060	0	0.0	808,370	16,310	2.1
2018	64,823	1,293	2.0	1,062	1	0.1	825,758	17,388	2.2
2019	66,151	1,328	2.0	1,065	3	0.3	845,043	19,285	2.3
2020	67,534	1,383	2.1	1,065	1	0.1	863,358	18,315	2.2
2021	68,960	1,426	2.1	1,067	1	0.1	882,748	19,390	2.2
2022	70,433	1,473	2.1	1,069	3	0.3	903,883	21,135	2.4
2023	71,940	1,507	2.1	1,073	4	0.3	926,445	22,562	2.5
2024	73,465	1,525	2.1	1,077	4	0.3	949,186	22,740	2.5
2025	75,028	1,563	2.1	1,078	1	0.1	970,462	21,277	2.2
2026	76,615	1,587	2.1	1,080	2	0.2	993,002	22,540	2.3
2027	78,203	1,588	2.1	1,081	1	0.1	1,014,825	21,823	2.2
2028	79,791	1,588	2.0	1,082	1	0.1	1,036,228	21,403	2.1
2029	81,378	1,587	2.0	1,082	-1	-0.1	1,056,133	19,905	1.9
2030	82,966	1,588	2.0	1,084	3	0.2	1,079,339	23,206	2.2

Figure 1-8
Annual Change in Residential Customers



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Methodology and Results *(continued)*

Public Building Forecast

Public building sales are projected using two equations, a customer equation and an energy equation. Both are determined through regression analysis and utilize inputs relating to the economy, electric price, and the residential customer forecast. Projections are reported in Table 1-7.

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Table 1-7

Owen Electric
2010 Load Forecast
Public Buildings Summary

	Customers			*Use Per Customer*			*Class Sales*		
	Annual Average	Annual Change	% Change	Monthly Average (kWh)	Annual Change (kWh)	% Change	Total (MWh)	Annual Change (MWh)	% Change
1990	153			1,998			3,669		
1991	157	4	2.6	2,185	186	9.3	4,116	447	12.2
1992	167	10	6.4	2,991	806	36.9	5,994	1,878	45.6
1993	178	11	6.6	3,502	511	17.1	7,480	1,486	24.8
1994	185	7	3.9	3,601	99	2.8	7,995	515	6.9
1995	193	8	4.3	3,738	136	3.8	8,656	661	8.3
1996	197	4	2.1	3,898	161	4.3	9,215	559	6.5
1997	204	7	3.6	3,670	-228	-5.8	8,985	-230	-2.5
1998	213	9	4.4	3,691	21	0.6	9,435	450	5.0
1999	213	0	0.0	3,706	14	0.4	9,472	37	0.4
2000	217	4	1.9	3,698	-8	-0.2	9,630	158	1.7
2001	224	7	3.2	3,674	-25	-0.7	9,875	245	2.5
2002	230	6	2.7	3,986	313	8.5	11,002	1,128	11.4
2003	231	1	0.4	4,287	301	7.5	11,883	881	8.0
2004	227	-4	-1.7	4,560	273	6.4	12,421	538	4.5
2005	226	-1	-0.4	4,398	-162	-3.5	11,928	-493	-4.0
2006	230	4	1.8	4,198	-201	-4.6	11,585	-342	-2.9
2007	240	10	4.3	5,212	1,014	24.2	15,009	3,424	29.6
2008	248	8	3.3	7,605	2,393	45.9	22,631	7,622	50.8
2009	250	2	0.8	8,123	518	6.8	24,368	1,737	7.7
2010	251	1	0.4	8,242	119	1.5	24,824	456	1.9
2011	254	3	1.2	8,365	123	1.5	25,497	673	2.7
2012	257	3	1.2	8,432	67	0.8	26,004	507	2.0
2013	261	4	1.6	8,465	32	0.4	26,511	506	1.9
2014	265	4	1.5	8,496	31	0.4	27,017	506	1.9
2015	268	3	1.1	8,558	62	0.7	27,524	506	1.9
2016	272	4	1.5	8,588	29	0.3	28,030	506	1.8
2017	276	4	1.5	8,616	28	0.3	28,537	506	1.8
2018	280	4	1.4	8,644	28	0.3	29,043	506	1.8
2019	284	4	1.4	8,671	27	0.3	29,549	506	1.7
2020	289	5	1.8	8,667	-4	0.0	30,056	506	1.7
2021	293	4	1.4	8,692	26	0.3	30,562	506	1.7
2022	298	5	1.7	8,688	-4	0.0	31,069	506	1.7
2023	302	4	1.3	8,713	25	0.3	31,575	506	1.6
2024	307	5	1.7	8,708	-4	-0.1	32,082	506	1.6
2025	312	5	1.6	8,704	-4	0.0	32,588	506	1.6
2026	317	5	1.6	8,700	-4	0.0	33,094	506	1.6
2027	321	4	1.3	8,723	23	0.3	33,601	506	1.5
2028	326	5	1.6	8,719	-4	0.0	34,107	506	1.5
2029	331	5	1.5	8,714	-4	0.0	34,614	506	1.5
2030	336	5	1.5	8,710	-4	0.0	35,120	506	1.5

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 1-8.

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Table 1-8

Owen Electric
2010 Load Forecast
Small Commercial Summary

	Customers			*Use Per Customer*			*Class Sales*		
	Annual Average	Annual Change	% Change	Annual Average (MWh)	Annual Change (MWh)	% Change	Total (MWh)	Annual Change (MWh)	% Change
1990	654			71			46,235		
1991	745	91	13.9	82	12	16.5	61,339	15,104	32.7
1992	820	75	10.1	75	-7	-8.6	61,727	389	0.6
1993	879	59	7.2	75	0	-0.1	66,082	4,355	7.1
1994	939	60	6.8	77	2	2.5	72,341	6,259	9.5
1995	1,007	68	7.2	92	15	20.0	93,085	20,744	28.7
1996	1,087	80	7.9	85	-7	-7.5	92,937	-148	-0.2
1997	1,165	78	7.2	88	2	2.9	102,512	9,575	10.3
1998	1,264	99	8.5	90	2	2.2	113,645	11,133	10.9
1999	1,373	109	8.6	92	2	1.8	125,681	12,036	10.6
2000	1,510	137	10.0	93	1	1.5	140,359	14,678	11.7
2001	1,625	115	7.6	87	-6	-6.3	141,591	1,232	0.9
2002	1,690	65	4.0	82	-5	-6.1	138,298	-3,293	-2.3
2003	1,753	63	3.7	86	4	5.2	150,927	12,629	9.1
2004	1,791	38	2.2	90	4	4.5	161,106	10,180	6.7
2005	1,853	62	3.5	96	6	6.8	178,068	16,962	10.5
2006	1,930	77	4.2	107	11	11.8	207,408	29,340	16.5
2007	2,016	86	4.5	112	5	4.6	226,685	19,277	9.3
2008	2,086	70	3.5	103	-9	-8.4	214,939	-11,746	-5.2
2009	2,134	48	2.3	94	-9	-8.7	200,851	-14,088	-6.6
2010	2,175	41	1.9	96	2	1.6	208,010	7,158	3.6
2011	2,215	40	1.8	96	1	0.6	213,146	5,136	2.5
2012	2,264	49	2.2	97	0	0.4	218,708	5,562	2.6
2013	2,320	56	2.5	97	0	0.3	224,898	6,190	2.8
2014	2,381	61	2.6	97	0	0.3	231,414	6,515	2.9
2015	2,445	64	2.7	97	0	0.2	238,219	6,805	2.9
2016	2,510	65	2.7	98	0	0.3	245,227	7,008	2.9
2017	2,577	67	2.7	98	0	0.2	252,322	7,095	2.9
2018	2,644	67	2.6	98	0	0.2	259,459	7,137	2.8
2019	2,712	68	2.6	98	0	0.2	266,695	7,236	2.8
2020	2,782	70	2.6	99	0	0.2	274,155	7,460	2.8
2021	2,854	72	2.6	99	0	0.2	281,873	7,718	2.8
2022	2,929	75	2.6	99	0	0.2	289,834	7,961	2.8
2023	3,006	77	2.6	99	0	0.2	298,034	8,200	2.8
2024	3,084	78	2.6	99	0	0.2	306,389	8,356	2.8
2025	3,164	80	2.6	100	0	0.2	314,899	8,510	2.8
2026	3,246	82	2.6	100	0	0.2	323,596	8,697	2.8
2027	3,328	82	2.5	100	0	0.2	332,370	8,773	2.7
2028	3,410	82	2.5	100	0	0.2	341,167	8,797	2.6
2029	3,493	83	2.4	100	0	0.1	349,971	8,804	2.6
2030	3,576	83	2.4	100	0	0.1	358,777	8,807	2.5

Methodology and Results *(continued)*

Large Commercial Forecast

Large commercial customers are those with loads 1 MW or greater. Owen Electric currently has 15 customers reported in this class and is projected to increase to 39 customers by 2030. Large commercial results are reported in Table 1-9.

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Table 1-9

Owen Electric
2010 Load Forecast
Large Commercial Summary
Excluding Gallatin

	Customers			*Use Per Customer*			*Class Sales*		
	Annual Average	Annual Change	% Change	Annual Average (MWh)	Annual Change (MWh)	% Change	Total (MWh)	Annual Change (MWh)	% Change
1990	2			10,061			20,123		
1991	2	0	0.0	12,404	2,343	23.3	24,809	4,686	23.3
1992	2	0	0.0	12,096	-308	-2.5	24,192	-617	-2.5
1993	2	0	0.0	12,268	172	1.4	24,535	343	1.4
1994	4	2	100.0	6,301	-5,967	-48.6	25,204	669	2.7
1995	6	2	50.0	4,885	-1,416	-22.5	29,310	4,106	16.3
1996	8	2	33.3	4,450	-435	-8.9	35,603	6,293	21.5
1997	10	2	25.0	3,384	-1,067	-24.0	33,835	-1,768	-5.0
1998	12	2	20.0	2,692	-691	-20.4	32,309	-1,527	-4.5
1999	17	5	41.7	2,543	-149	-5.5	43,239	10,930	33.8
2000	20	3	17.6	3,792	1,248	49.1	75,839	32,600	75.4
2001	23	3	15.0	4,239	447	11.8	97,497	21,658	28.6
2002	21	-2	-8.7	5,405	1,166	27.5	113,503	16,006	16.4
2003	28	7	33.3	4,259	-1,146	-21.2	119,256	5,753	5.1
2004	30	2	7.1	4,623	364	8.5	138,685	19,430	16.3
2005	36	6	20.0	4,807	184	4.0	173,061	34,376	24.8
2006	26	-10	-27.8	7,618	2,811	58.5	198,064	25,003	14.4
2007	13	-13	-50.0	14,780	7,162	94.0	192,139	-5,925	-3.0
2008	16	3	23.1	13,256	-1,524	-10.3	212,094	19,955	10.4
2009	15	-1	-6.3	13,121	-135	-1.0	196,810	-15,283	-7.2
2010	19	4	26.7	11,408	-1,713	-13.1	216,749	19,938	10.1
2011	19	0	0.0	12,189	781	6.8	231,587	14,838	6.8
2012	21	2	10.5	12,928	739	6.1	271,488	39,901	17.2
2013	22	1	4.8	12,925	-3	0.0	284,344	12,856	4.7
2014	23	1	4.5	12,837	-88	-0.7	295,246	10,902	3.8
2015	24	1	4.3	12,756	-81	-0.6	306,150	10,904	3.7
2016	25	1	4.2	12,686	-70	-0.6	317,152	11,001	3.6
2017	26	1	4.0	12,690	4	0.0	329,940	12,788	4.0
2018	27	1	3.8	12,696	6	0.0	342,789	12,849	3.9
2019	28	1	3.7	12,703	7	0.1	355,689	12,900	3.8
2020	29	1	3.6	12,713	10	0.1	368,677	12,988	3.7
2021	30	1	3.4	12,727	14	0.1	381,797	13,120	3.6
2022	31	1	3.3	12,744	17	0.1	395,063	13,267	3.5
2023	32	1	3.2	12,765	21	0.2	408,486	13,422	3.4
2024	33	1	3.1	12,789	24	0.2	422,044	13,559	3.3
2025	34	1	3.0	12,815	26	0.2	435,715	13,671	3.2
2026	35	1	2.9	12,843	28	0.2	449,503	13,788	3.2
2027	36	1	2.9	12,872	29	0.2	463,387	13,884	3.1
2028	37	1	2.8	12,901	29	0.2	477,327	13,940	3.0
2029	38	1	2.7	12,929	28	0.2	491,295	13,969	2.9
2030	39	1	2.6	12,956	27	0.2	505,278	13,982	2.8

Methodology and Results *(continued)*

Public Street and Highway Lighting Forecast

Owen Electric serves street light accounts which are classified in the 'Public Street and Highway Lighting' category. This class is modeled separately. Results are reported in Table 1-10.

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Table 1-10

Owen Electric
2010 Load Forecast
Public Street and Highway Lighting

	Customers			*Use Per Customer*			*Class Sales*		
	Annual Average	Annual Change	% Change	Monthly Average (kWh)	Annual Change (kWh)	% Change	Total (MWh)	Annual Change (MWh)	% Change
1990	17			870			177		
1991	17	0	0.0	843	-27	-3.1	172	-6	-3.1
1992	18	1	5.9	796	-46	-5.5	172	0	0.1
1993	17	-1	-5.6	773	-24	-3.0	158	-14	-8.4
1994	17	0	0.0	745	-28	-3.6	152	-6	-3.6
1995	18	1	5.9	704	-41	-5.6	152	0	0.0
1996	18	0	0.0	685	-18	-2.6	148	-4	-2.6
1997	18	0	0.0	694	9	1.3	150	2	1.3
1998	19	1	5.6	615	-79	-11.4	140	-10	-6.5
1999	20	1	5.3	639	24	4.0	153	13	9.5
2000	19	-1	-5.0	1,538	899	140.5	351	197	128.5
2001	19	0	0.0	1,809	272	17.7	413	62	17.7
2002	20	1	5.3	2,331	521	28.8	559	147	35.6
2003	21	1	5.0	2,639	308	13.2	665	105	18.9
2004	21	0	0.0	2,263	-375	-14.2	570	-95	-14.2
2005	21	0	0.0	2,072	-191	-8.5	522	-48	-8.5
2006	19	-2	-9.5	2,989	916	44.2	681	159	30.5
2007	17	-2	-10.5	2,887	-102	-3.4	589	-92	-13.6
2008	16	-1	-5.9	3,367	479	16.6	646	57	9.7
2009	18	2	12.5	2,982	-384	-11.4	644	-2	-0.3
2010	17	-1	-5.6	3,158	175	5.9	644	0	0.0
2011	17	0	0.0	3,159	1	0.0	644	0	0.0
2012	17	0	0.0	3,154	-4	-0.1	644	-1	-0.1
2013	17	0	0.0	3,158	3	0.1	644	1	0.1
2014	17	0	0.0	3,158	0	0.0	644	0	0.0
2015	17	0	0.0	3,159	1	0.0	644	0	0.0
2016	17	0	0.0	3,154	-4	-0.1	644	-1	-0.1
2017	17	0	0.0	3,158	3	0.1	644	1	0.1
2018	17	0	0.0	3,158	0	0.0	644	0	0.0
2019	17	0	0.0	3,159	1	0.0	644	0	0.0
2020	17	0	0.0	3,154	-4	-0.1	644	-1	-0.1
2021	17	0	0.0	3,154	0	0.0	644	0	0.0
2022	17	0	0.0	3,154	0	0.0	644	0	0.0
2023	17	0	0.0	3,154	0	0.0	644	0	0.0
2024	17	0	0.0	3,154	0	0.0	644	0	0.0
2025	17	0	0.0	3,154	0	0.0	644	0	0.0
2026	17	0	0.0	3,154	0	0.0	644	0	0.0
2027	17	0	0.0	3,154	0	0.0	644	0	0.0
2028	17	0	0.0	3,154	0	0.0	644	0	0.0
2029	17	0	0.0	3,154	0	0.0	644	0	0.0
2030	17	0	0.0	3,154	0	0.0	644	0	0.0

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Methodology and Results *(continued)*

Peak Day Weather Scenarios

Extreme temperatures can dramatically influence Owen Electric's peak demands. Table 1-11 and Figure 1-9 reports the impact of extreme weather on system demands.

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Table 1-11

Owen Electric
Peak Day Weather Scenarios
Excludes Gallatin

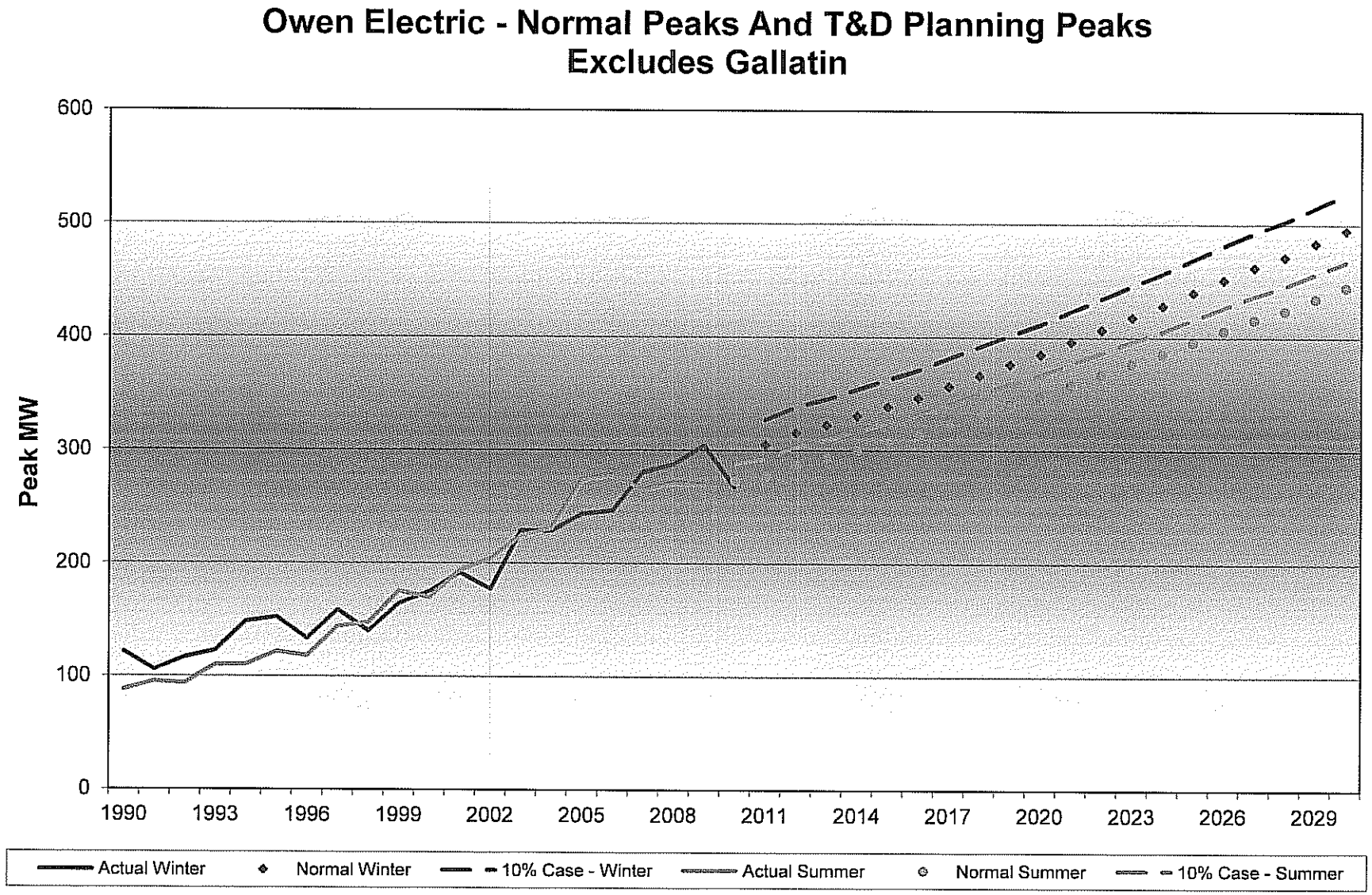
Winter Peak Day Minimum Temperatures					
	Mild	Normal		**Extreme**	
Degrees	10	-6	-15	-21	-30
Probability	*99%*	*50%*	*20%*	*10%*	*3%*
Occurs Once Every		**2 Years**	**5 Years**	**10 Years**	**30 Years**

Summer Peak Day Maximum Temperatures				
	Normal		**Extreme**	
Degrees	95	98	100	103
Probability	*50%*	*20%*	*10%*	*3%*
	2 Years	**5 Years**	**10 Years**	**30 Years**

Noncoincident Winter Peak Demand - MW					
Season	Mild	Normal		Extreme	
2010 - 11	282	305	318	327	340
2011 - 12	292	316	329	338	351
2012 - 13	298	322	336	345	359
2013 - 14	306	331	345	354	368
2014 - 15	314	339	353	363	377
2015- 16	321	347	361	371	385
2016 - 17	330	357	372	381	396
2017 - 18	339	366	381	391	407
2018 - 19	349	376	391	402	417
2019 - 20	357	385	401	411	427
2020 - 21	368	396	412	423	439
2021 - 22	378	407	423	434	450
2022 - 23	388	418	435	446	463
2023 - 24	398	428	445	457	474
2024 - 25	409	440	457	469	486
2025 - 26	420	451	469	481	499
2026 - 27	430	462	480	493	511
2027 - 28	439	471	490	502	521
2028 - 29	450	483	502	515	534
2029 - 30	461	495	514	527	546

Noncoincident Summer Peak Demand - MW				
Year	Normal		Extreme	
2010	273	281	288	296
2011	278	285	293	301
2012	288	296	303	311
2013	294	302	310	318
2014	301	309	317	325
2015	308	316	325	333
2016	315	323	331	340
2017	324	332	341	349
2018	332	341	349	358
2019	340	349	358	367
2020	348	357	366	375
2021	358	367	376	386
2022	367	376	386	395
2023	377	386	396	406
2024	385	395	405	415
2025	396	406	416	426
2026	406	416	426	437
2027	416	426	437	447
2028	424	434	445	456
2029	434	445	456	467
2030	445	456	467	478

Figure 1-9


Owen Electric - Normal Peaks And T&D Planning Peaks
Excludes Gallatin
Peak MW
600
500
400
300
200
100
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

Question:

Refer to Table I-C-1, Systems Additions and Improvements Summary, on page 1 of Section I-C of the CWP. For Category 700, provide an explanation for the use and cost for the AMR.

Response:

The AMR system is used for obtaining energy usage for billing purposes. It is also used for operational purposes such as outage verification and restoration verification. AMR costs included in this CWP are primarily for projected replacement of damaged equipment based on historical equipment failure rates.

Question:

Refer to the footnote to Tables II-B, 1 and 2, on page 1 of Section II-B of the CWP. Explain how Owen Electric derived 60 percent for indirect labor and provide an example showing the calculation.

Response:

The annual projected dollars/mile includes all labor, materials, and an estimated 60% for labor overheads(benefits, taxes, etc. associated with labor charged). 60% is used for planning purposes because historically the cost to Owen of providing employee benefits such as insurance, contribution to retirement, taxes, etc. is approximately 60% of net payroll dollars. For example: if the labor dollars charged to job A is expected to be $1,000, then the projected overheads for that job would be $600. All amounts included in the CWP are based upon historical costs for each associated finance code and include all projected associated costs.

Question:

Refer to page 1 of Section II-C of the CWP regarding the status of previous CWP items. For the projects that were carried over or deferred, provide the date Owen Electric expects to complete the projects.

Response:

The deferred projects were projects identified in the previous CWP which was based on a higher load forecast (2008). The 2010 load forecast projects a moderate growth level. All deferred projects will be re-examined for construction in the next CWP. Those projects that were carried over into this CWP will be completed during the 2012 CWP timeframe. The exact scheduling of these projects is to be determined.

Question:

Refer to page 1 of the Executive Summary. From 2005–2009, the annual average increase in residential energy sales was 2.0 percent. This rate is projected to be 2.0 percent over the next two years. Small commercial sales are projected to increase 2.4 percent over the next two years. Large Commercial/Industrial energy sales are projected to increase 7.7 percent over the next two years. Provide the percentage change of sales for 2010 as compared to 2009 by residential, commercial and industrial.

Response:

Sales data is as follows:

	2009 Revenue	2010 Revenue	Difference	%
Residential	$71,405,333	$77,481,108	$6,075,775	8.51%
Small Commercial	$17,405,222	$17,805,277	$ 400,055	2.30%
Large Commercial	$12,766,924	$13,171,694	$ 404,770	3.17%

Question:

Refer to page 2 of the Executive Summary. The last sentence states, "[t]the high side fuse of Grantslick II need to be upgraded." Explain "needs to be upgraded."

Response:

The high side fuse capacity for the Grantslick 2 substation will be reached based on the 2 year winter projection. EKP has been notified, and will be addressing before the projected load is reached.

Question:

Refer to page 3 of the Executive Summary. Explain the difference between the two-year planning period of 2012-2013 on page 1 and 2012-2015 CWP on page 3.

Response:

The date range of 2012-2013 referred to on page 1 refers to the two-year planning period of the OEC Construction Work Plan. The date range of 2012-2015 referred to on page 3 refers to the four-year planning period of East Kentucky Power's Construction Work Plan.

Question:

Refer to Owen Electric CWP: I-A, pages 4 to 6.

a. Explain whether the 2010 load forecast is an estimate or an actual.

Response:

The data for the year 2010 on pages 1-A, 4-6 is an estimate since the Load Forecast that it was taken from was created during the course of 2010.

b. If the answer to part a. is an estimate, provide the actual for 2010 for residential, commercial and industrial, if available.

Response:

The actual 2010 data requested is as follows:

	Customers			*Use Per Customer*			*Class Sales*		
	Annual Average	Annual Change	% Change	Monthly Average (kWh)	Change (kWh)	% Change	Total (MWh)	Annual Change (MWh)	% Change
Residential Summary									
2010	54,991	186	0.3	1,179	87	8.0	778,309	60,108	8.4
Small Commercial Summary									
2010	2,199	65	3.0	92	-2	-2.5	201,794	943	0.5
Large Commercial Summary Excluding Gallatin									
2010	20	5	33.3	10,624	-2,497	-19.0	212,475	15,665	8.0

Question:

Refer to Owen Electric CWP: II-D, page 1. It states, "[t]he Williamstown expansion will need to occur at the onset of the next CWP. A new 5MW amusement park, The Ark, will be served by the Williamstown substation and is scheduled to open in late 2014 or early 2015." Explain whether The Ark will provide any amount of contribution in aid of construction for the Williamstown expansion.

Response:

The Ark will not pay any contribution in aid of construction. Three phase power is available on the site, and significant improvements to the distribution feeder serving The Ark will not be required. Any substation upgrade/expansion due to the projected 5MW load will fall under EKP's area of responsibility.

Question:

Refer to Owen Electric CWP: II-D, page 2. Explain how often the O&M Survey report is filed.

Response:

O&M Surveys are performed and filed with RUS every three years.

Question:

Refer to Owen Electric CWP: IV-A, page 1. Explain whether the total projected cost of $4,862,246 for new service construction is net of any underground cost differentials from customers.

Response:

Yes. The projected cost is based upon Owen Electric's historical costs for new service construction that includes any contribution by its members, including any cost differential received.

Question:

Refer to Appendix C, Smart Grid Initiatives. It states:

> "Another smart grid initiative that OEC is presently involved with, in conjunction with the DOE, is self-healing. Self-healing pertains to automated distribution control whereby intelligent electronic devices are automatically operated based on a set of logic criteria being met. OEC currently has one location at the southern portion of its system where a self-healing scheme is in place. In the next year there will be two additional locations where critical loads will require continuous power, and in the event of an outage, must have power restored within minutes. The components that make up a self-heal system include mainline reclosers with communication capability, logic controls, plus a central master control located at OEC headquarters. This intelligent scheme allows for switching between feeders in fewer than 5 minutes. The system can either be reset manually or through remote control."

Explain how a circuit or partial distribution system self-heals in a storm sever enough to cause outages.

Response:

The self-healing process is based upon the availability of an adjacent "healing" or backup circuit. If an outage is more widespread due to severe weather conditions, self-healing may not be available.

Question:

Refer to the Owen Electric CWP, Section IV-C, Miscellaneous Distribution Equipment – RUS Code 600's, page 5. Under the area labeled Miscellaneous Replacements – RUS Code 607, Owen states that part of the $1.3 million assigned to miscellaneous replacement is to fund a "recent hardening initiative at OEC that will serve to improve the overall reliability of the OEC system." Provide a detailed description of the hardening initiative that Owen Electric is currently implementing.

Response:

The hardening initiative during the CWP period will focus on worst performing feeders (SAIFI & SAIDI). The hardening initiative consists of reducing span lengths by adding additional structures, increasing the structural BIL, and the replacement of necessary arresters, broken crossarms, and items such as porcelain-based materials.

Question:

Provide two copies of the voltage drop studies based on:

a. Existing loads using existing system circuitry;
b. Projected loads using existing system circuitry;
c. Projected loads using proposed system circuitry.

Response:

See voltage drop studies accompanying this response.

Question:

Has Owen Electric compared actual measured voltage and the calculated voltage to determine the accuracy of the voltage drop studies?

a. If yes, provide the voltage reading and indicate the substation, line section, and date on which each reading was taken. If the actual reading differs from the calculated voltage by more than two volts, explain the reason for the difference.
b. If no, explain why a comparison is not necessary.

Response:

Voltage readings from several locations on OEC's system were taken from end-of-line AMR meters to validate voltage calculations in Windmil™. These readings represent secondary voltages. Assumptions were made in the model for the impedance of the distribution transformers. Secondary wire is not modeled. Since secondary voltage readings can fluctuate based on load fluctuations of the consumers, applicable minimum and maximum values were used as the comparison of undervoltage or overvoltage conditions reflected in the peak summer model.

Substation	Consumer	Date	Metered voltage	Windmil Voltage	Notes
Carson	91171135011	9/5/2011	126.9	126.3	
Carson	91210142698	9/4/2011	125.3	126.4	
Carson	91226237224	9/2/2011	114.7	115.8	
Downing	62505137283	9/3/2011	113.5	115.6	
Penn	51013183408	9/1/2011	125.3	126.2	
Penn	51013187392	9/8/2011	126.0	124.9	
Penn	51013187302	9/7/2011	126.2	124.0	
Penn	51004125019	9/3/2011	116.0	118.2	
Penn	51004125136	9/3/2011	115.2	120.8	Note 1
Penn	51004125263	9/3/2011	117.1	112.7	Note 2

Note 1. There is a phase mismatch between the model and actual phasing in the field on this feeder. The Windmil model reflects less load on this phase than in reality so therefore the voltage drop on this phase in the model is less severe than in reality.
Note 2. The converse to note 1 is true, and this offsets the error in note 1 since these consumers are on the same feeder. In this case th phase of this consumer has more load associated with it in the model than in reality. Therefore the voltage drop in the model is more significant than in reality.

Question:

Refer to the CWP, Meters-RUS Code 601, which indicates that 110 of the 150 new meters are allocated to the Smart Home project.

a. Provide an explanation of the Smart Home project.

Response:

The purpose of the Smart Home project is to put equipment in the members' home that will allow them to monitor and control all major electrical loads and to allow the member to have Owen Electric, or another third party, to assist them in this endeavor. For a full description of Owen's Smart Home pilot project, please see Owen Electric's response to Question #16 of the Attorney General's supplemental data request in Case No 2011-00037.

b. What additional capabilities from the standard AMI residential meters would those 110 meters have?

Response:

The new meters will have communication capability into members' homes that will allow the Home Area Network (HAN) system to retrieve and use select meter data directly from the meter. This will be very near real time and provide extensive data for the member and Owen to use to manage the members' load and for future analysis.

c. Provide the capability of the standard AMI residential meter.

Response:

The standard AMI meter that Owen is currently using makes meter data available over the power line to the network at Owen's headquarters. This is a slow process and only a few meters can be integrated at one time.