City and Borough of Sitka

2008 Electric System Load Forecast

FINAL REPORT
September 12, 2008

Prepared for

City and Borough of Sitka
Municipal Electric Department
105 Jarvis Street
Sitka, Alaska 99835

by

DHITTLE & ASSOCIATES, INC.
Engineers and Consultants

City and Borough of Sitka
2008 Electric System Load Forecast

Report

Page

Introduction and Overview 1
Customer Account Forecast 3
Energy Consumption per Customer 7
Large Customer Loads 8
Total Energy Sales 10
Total Energy Requirements 11
Peak Demand 12
Interruptible Energy Sales 13
Appendix

TABLES

1. Forecasted Population Used in Load Forecast 5
2. Forecasted Total Number of Customer Accounts (Medium Growth Scenario) 6
3. Annual Energy Consumption per Customer Account 8
4. Forecasted Total Retail Energy Sales 10
5. Forecasted Total Energy Requirements 11
6. Forecasted Peak Demand 13
7. Historical Number of Customer Accounts and Usage Per Customer ..... Appendix
8. Historical Energy Sales, Total Requirements and Losses ..... Appendix

8A. Historical Peak Loads and Loadfactor ..... Appendix

9. Forecasted Number of Customer Accounts and Usage per Customer ..... Appendix
10. Forecasted Energy Sales, Total Requirements, Losses and Peak ..... Appendix
11. Assumed Residential Electric Heat Customers and Net Use per Cust. ..... Appendix
12. Estimated Interruptible Energy Sales ..... Appendix

12A. Assumed New Interruptible Loads ..... Appendix

13. Estimated Electric Vehicle Loads ..... Appendix
14. Large Customer Loads ..... Appendix

FIGURES

1. Historical Energy Sales by Customer Class and Total Generation 3
2. Historical and Forecasted Population 5
5. Historical and Projected Total Energy Requirements (1973-2028) 12

City and Borough of Sitka
2008 Electric System Load Forecast

Report

Introduction and Overview

A 20-year annual forecast of electric customers, energy requirements and system peak demand has been developed for the City and Borough of Sitka (City) Electric Department. Although the 2008 forecast uses a similar approach to that used for the City's 2005 load forecast, a significant adjustment has been made in the new forecast to acknowledge the expected conversion to electric space heat in the community as a result of very high fuel oil prices. In addition, it is expected that in a few years there could be a number of electric vehicles operating in Sitka. As a result, an alternative high load growth case was developed that includes the energy requirements for electric vehicles.

The number of customers and total energy sales have been forecasted for each of the City's customer classifications on an annual basis for the period 2009 through 2029.[1] Four alternative growth scenarios: medium, high, low, and high electric vehicle were developed. A forecast of the energy requirements for the largest power users has been developed based on input from the City. In addition, a forecast of interruptible energy sales has also been developed that is based on the projected availability of surplus hydroelectric generation.

It is important to note that the forecast has not been adjusted to reflect the potential increase in the cost of electricity that may be needed if power requirements exceed the hydroelectric energy generation capability of the City's system and more diesel generation is needed. With more diesel generation on a regular basis, the cost of electricity to consumers would potentially be higher than it presently is and demand could drop somewhat. The Electric Department has indicated that it intends to use the forecast to determine when additional hydroelectric capability should be developed. As such, the forecast provides a projection of total power requirements that could be expected if electricity prices remain in the same range as they are today.

Since the City's last load forecast in 2005, total annual energy sales and energy requirements have increased every year. The total number of electric accounts has increased from 5,034 in 2005 to 5,180 in 2008, representing an average annual increase of 1.0%. Annual energy consumption per customer has increased since 2005 for residential and commercial customer classifications. It is believed that the increase in electricity consumption per customer is due to an increase in the use of electric space heat.

In the year ended June 30, 2008, the City's total energy requirements were 112,772 MWh, an increase of 1.3% over the requirements in 2007. Following the closure of the Alaska Pulp

[1] All references to annual totals are for years ending June 30, based on the City's fiscal year.

Company (APC) mill in 1993, total energy requirements decreased somewhat and remained relatively constant between 1994 and 2001 at which time they began to increase. Annual peak demand also dropped after 1993 and remained relatively constant between 1998 and 2003 at approximately 17.5 MW. Beginning in 2004 the peak demand began to increase annually reaching a record high 22.24 MW in 2008[2]. Prior to 2008, the all time annual system peak demand was 22.0 MW in 1993 attributed, in part, to the partial requirements demand of APC on the City system.

The 2008 forecast has been developed using an energy demand model that independently projects customers and energy consumption for each of the City's electric customer classifications for each year of a 20-year forecast period, 2009 through 2028. Although relationships between the number of customers and several variables were considered, the most significant correlations were established with population and the previous year's number of customers. Similarly, the number of commercial and public authority customers appears to be closely related to the number of residential customers when compared to the other variables evaluated.

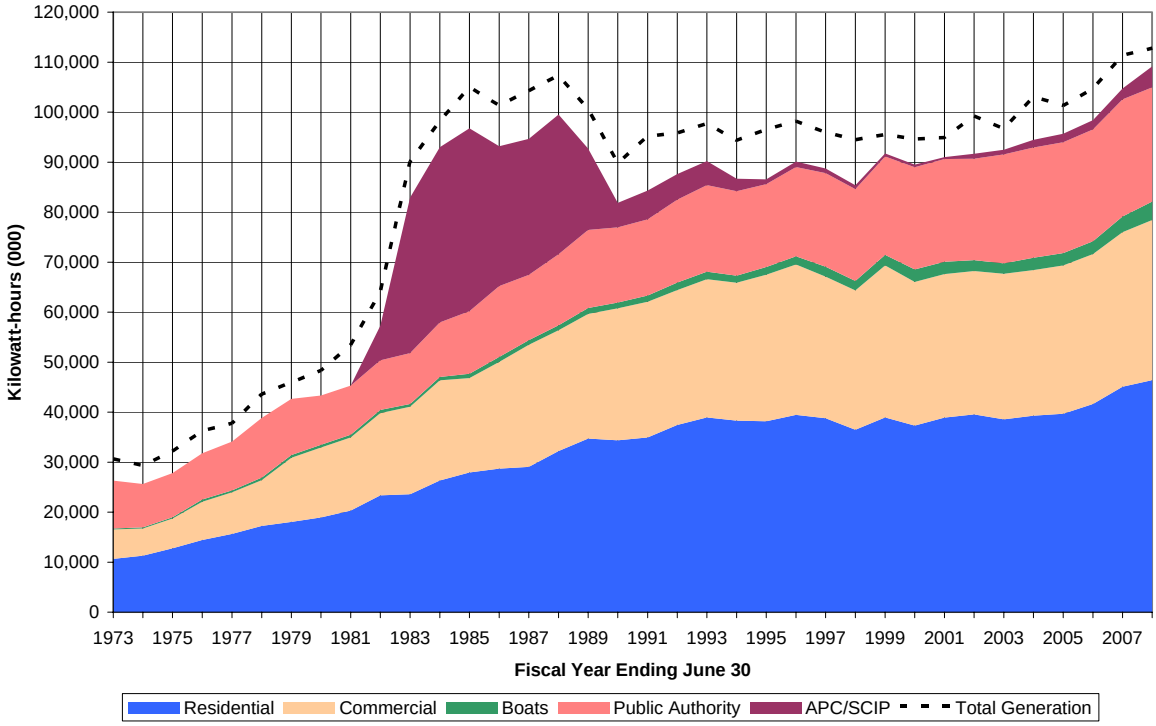
Energy use per residential customer has increased steadily since 2003, due most likely to an increase in electric space heat as fuel oil prices have continued to increase. Between 1993 and 2003, electric energy use per customer dropped each year. An increase in the price of electricity to consumers in 1993 is considered to have contributed to a price-induced reduction in electricity consumption. Prior to 1993, residential energy consumption per customer increased steadily over a 20-year period. Average annual energy consumption per Boat customer account has continued to increase year after year as more shore power is used by moored boats for heat and other purposes.

Average energy consumption per commercial account has remained relatively constant in recent years but increased noticeably in 2008. Public Authority customers have also shown an increase in consumption in the past two years. Prior to the recent increase, the average energy consumption per Public Authority account remained relatively constant.

Total energy sales by customer class for the years 1973 through 2008 are shown in Figure 1. As can be seen in Figure 1, a significant amount of energy was sold to APC between 1982 and 1990. The number of customer accounts and energy consumption per customer for the period 1973 through 2008 are shown in Table 7. Historical annual energy sales by customer classification, total system energy requirements and annual energy losses for the same period are shown in Table 8. Table 8A shows peak demand, average annual demand and annual loadfactors for the City's electric system for the same period. All three of these tables are located following the text of this report.

[2] The peak demand in 2008 occurred with an outdoor temperature of 6 degrees Fahrenheit.

Figure 1
City and Borough of Sitka
Historical (1973-2008) Energy Sales by Customer Class and Total Generation



Customer Account Forecast

The forecasted number of residential customers is based primarily on the relationship between population and the number of electric customers, with acknowledgement of recent trends in the number of electric customers served. Population projections for the City and Borough are periodically developed by the State of Alaska Department of Labor (DOL). DOL's last detailed long-term projection was prepared in 2007 and the results were presented in the report, *Alaska Population Projections: 2007-2030*. This latest DOL forecast projects the total state population to increase at an average annual basis of 0.9% for the middle scenario. The low and high scenarios indicate average annual population growth of 0.4% and 1.5%, respectively.

The 2007 DOL population projections indicate some minimal growth in the population of the City and Borough between 2007 and 2010 but show a gradual decrease in the City and Borough population over the ensuing 20 year period 2010-2030. In the 2007 DOL projection, the 2006 population was indicated to be 8,833 for the City and Borough. This value is somewhat lower than the reported population estimate of 8,989 provided in DOL's report[3] on actual population characteristics. Further the actual population in Sitka was indicated by DOL to have actually declined by 349 to 8,640 in 2007 as a result of the closure of the Sheldon Jackson College.

[3] *Characteristics Of Boroughs And Census Areas And Components Of Change By Region, 1970-2007, Alaska Department of Labor and Workforce Development, Research and Analysis Department, Demographics Unit..*

DOL's population characteristics are noted as estimates[4] based on a number of factors and it can't be verified through other sources yet as to whether or not this reduction in Sitka population has actually occurred.

In 1993, the population of Sitka was nearly 9,000. Following closure of the pulp mill, the population declined to approximately 8,700 in 1997 before stabilizing and beginning a slight increase. Between 1997 and 2006, the population increased at an average annual rate of approximately 0.4%. Over the 25 year period, 1981 to 2006, the City's population increased by 1,006, representing a 12.6% overall increase and 0.48% average annual growth.

For the purpose of the electric load forecast it has been necessary to develop a population projection to serve as the basis for the number of future electric consumers in Sitka. Based on the DOL forecast it has been assumed that the City and Borough population will increase slightly in the near-term but will then decrease gradually resulting in an average annual population change of -0.12% through 2030. This results in an overall population decrease of 211 by 2030 representing a total decrease of 2.3% over the estimated 2006 population. Alternative average annual population growth rates of -0.36% and 0.50% have been assumed for the low and high scenarios, respectively.

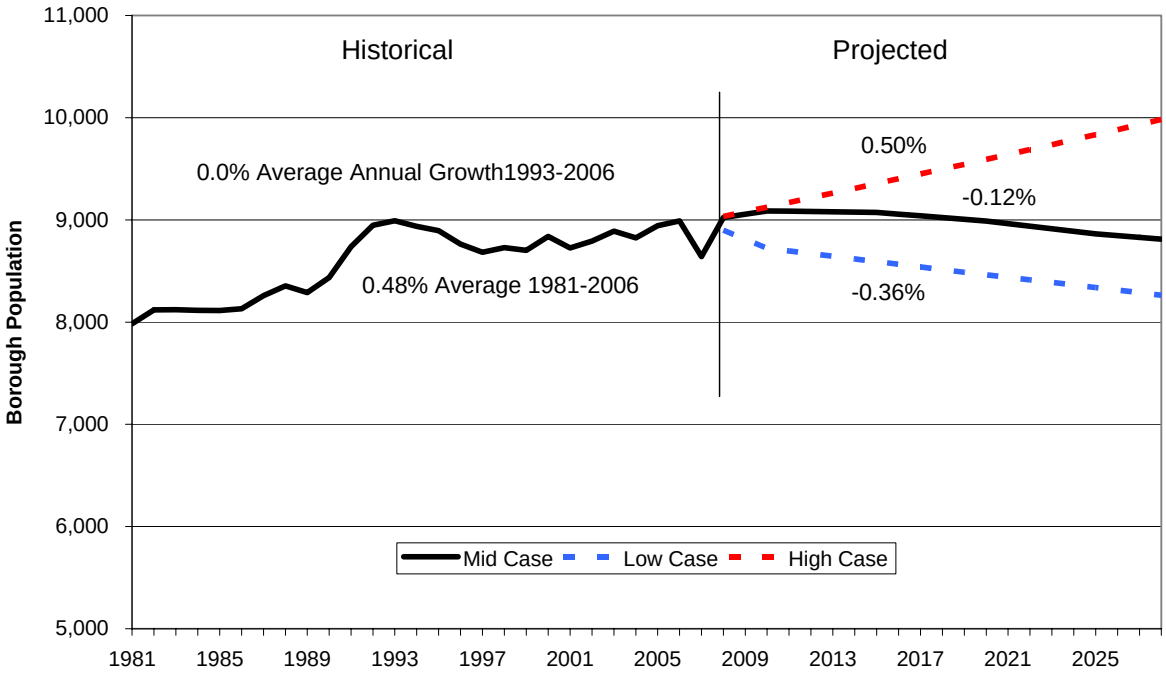
The population projections used in the forecast are presented in Table 1 and Figure 2, below. Historical population from 1981 to 2007 is also shown in Figure 2.

[4] The DOL estimated population numbers provide interim estimates of population between the federal census counts made every ten years. The next census will occur in 2010.

Table 1
Forecasted Population Used in Load Forecast
City and Borough of Sitka

	Forecasted Population		
	Medium	Low	High
2006 (Estimated Actual)	8,989	8,989	8,989
2008	9,022	8,899	9,034
2010	9,088	8,722	9,124
2015	9,073	8,592	9,355
2020	8,988	8,463	9,591
2025	8,863	8,338	9,833
2030	8,778	8,213	10,081
Average Annual Growth Rates			
2006 - 2010	0.37%	-1.00%	0.50%
2010 - 1015	-0.04%	-0.30%	0.50%
2015 - 2020	-0.19%	-0.30%	0.50%
2020 - 2025	-0.28%	-0.30%	0.50%
2025 - 2030	-0.19%	-0.30%	0.50%
2008 - 2030	-0.12%	-0.36%	0.50%

Figure 2
City and Borough of Sitka
Historical and Forecasted Population
and Average Annual Growth Rates in Population



The number of residential accounts has been projected based on the calculated relationship between customers served, population and recent trends in the number of residential accounts served. A regression analysis of the historical trend in the number of residential accounts indicates that the change from year to year is highly dependent on the previous year's number of accounts. This would mean that although the local population may change somewhat from year to year, the number of accounts served is more closely tied to the number of residences in Sitka. In other words, when the population decreases the number of persons per household drops slightly but the number of active residential electric accounts remains very similar. Long-term permanent trends in population due to major changes in the economy may show different results.

The number of electric commercial accounts served by the City has historically been related to the number of residential accounts. Between 2005 and 2008, there were approximately 5.8 residential accounts per commercial account. The forecast of commercial, public authority and boats customer accounts has been developed as a function of residential customers.

Forecasted number of customer accounts, by customer classification are shown in Table 9 for the medium, high and low growth scenarios. Since the number of residential customers is projected relative to forecasted population and recent trends in the number of customers served, there is a projected decrease in the number of customers served for the low growth scenario and a slight increase for the medium and high growth scenario. The projected number of customers for the medium scenario are summarized in Table 2. As can be seen in Table 2, the total number of customer accounts served by the City is projected to increase at an average annual rate of 0.6% per year. A more detailed presentation of the number of customer accounts is shown in Table 9.

Table 2
Forecasted Total Number of Customer Accounts
(Medium Growth Scenario) [1]

	Customer Classification				
Forecast Year	Residential	Commercial	Boats	Public Authority	Total
2008 (Actual)	3,621	611	748	182	5,162
2010	3,669	629	776	202	5,276
2015	3,770	667	838	214	5,489
2020	3,845	699	890	220	5,654
2025	3,895	723	932	225	5,775
2029	3,921	739	960	227	5,847
Average Annual Growth Rates					
2008-2010	0.6%	1.4%	1.8%	2.5%	1.0%
2010-2015	0.5%	1.1%	1.5%	0.9%	0.7%
2015-2020	0.3%	0.8%	1.1%	0.5%	0.5%
2020-2029	0.2%	0.6%	0.8%	0.3%	0.4%
2008-2029	0.4%	0.9%	1.2%	1.1%	0.6%

[1] Excludes eight large commercial and four large public authority customers.

Energy Consumption per Customer

Establishing a good relationship between energy consumption and variables such as weather conditions, per capita income, inflation and others, was not possible. Energy consumption is most likely affected by these variables, but based on the City's experience in recent years, no consistent relationship can be determined. For purposes of the forecast, energy consumption per customer has been assumed to be based on an average of consumption in recent years with assumed explicit changes applied, primarily related to assumed increases in the amount of electric space heat.

Following completion of the Green Lake hydroelectric project in the mid-1980's and until the early 1990's, new residential construction in Sitka often employed electric space heating. Some of this electric space heating was supplanted with fuel-oil based Monitor type stoves, which is reflected in the significant reduction in per customer residential electric energy consumption since 1993. With the current high price of fuel oil, the potential exists for a return to the use of electricity for space heating and a corresponding increase in overall electric energy use. The relatively high increase in energy consumption per residential customer the past two years would indicate that more electric space heat is being used in Sitka than was used prior to 2007.

In all three load forecast scenarios, it has been assumed that a fairly significant number of residential customers will convert from oil to electric space heat. For some customers this conversion may entail replacement of the central heating system in the residence. In other cases it may be that portable electric heaters are used to supplement or replace space heating needs. At the present time, it is estimated that approximately one-third of the 3,620 residential customers in Sitka are currently using electric heat. For the medium load growth scenario, it is assumed that the saturation of residential electric heat customers will increase to about 50% over the next five years. For the high and low growth scenarios, the residential electric heat saturation is assumed to increase to 66% and 45%, respectively. Residential electric heat customers are assumed to require 1,700 kWh per month on average throughout the year compared to 700 kWh per month on average for non-electric heat customers.

In addition to the medium, low and high load growth scenarios, a fourth forecast scenario has been developed to provide for electric loads related to electric vehicles. Automobile manufacturers have indicated that a greater emphasis will be placed on the development and marketing of electric vehicles. It is thought that with available hydroelectric power and a limited local road distances, Sitka may be a good community to employ electric vehicles as they become commercially available. For the electric vehicle scenario which is a modification of the high growth scenario, it is assumed that over an 18-year period, 75% of the passenger vehicles in Sitka will be electric. This transition is expected to occur gradually as existing vehicles wear out and are replaced. At the present time it is estimated that there are 4,860 passenger vehicles in Sitka. Electric vehicles are assumed to travel 4,380 miles per year at a rate of 5.0 miles per kWh. In addition, it is estimated that an electric vehicle will require 1,095 kWh per year for interior heating.

Base consumption amounts and assumed changes in consumption in the future are shown in Table 3. The energy consumption per customer for the commercial and public authority customer classes is adjusted net of the large customer loads discussed later in this report. Forecasted energy consumption per customer for each customer class through the forecast period is shown in Table 9. Details on electric space heat consumption are shown in Table 11 and assumptions related to electric vehicle loads are shown in Table 13.

Table 3
Annual Energy Consumption per Customer Account and Assumed Future Changes in Consumption [1]

	Customer Classification			
	Residential	Commercial	Boats	Public Authority
Annual kWh per Customer:				
Actual 2008	12,813	28,830	4,923	103,970
Assumed Average Annual Change:				
Medium Growth Scenario				
2008-2010	3.1%	0.5%	0.5%	0.5%
2010-2015	1.1%	0.5%	0.5%	0.5%
2015-2020	0.1%	0.5%	0.5%	0.5%
2020-2029	0.1%	0.5%	0.5%	0.5%
High Growth Scenario				
2008-2010	3.9%	2.0%	1.0%	3.0%
2010-2015	2.9%	1.0%	1.0%	1.0%
2015-2020	0.1%	1.0%	1.0%	1.0%
2020-2029	0.1%	1.0%	1.0%	1.0%
Low Growth Scenario				
2008-2010	1.4%	-1.5%	-1.5%	-1.5%
2010-2015	1.0%	0.0%	0.0%	0.0%
2015-2020	0.2%	0.0%	0.0%	0.0%
2020-2029	0.1%	0.0%	0.0%	0.0%

[1] Energy consumption in 2008 shown for the commercial and public authority classifications is net of large customer loads.

Large Customer Loads

The City has identified several large power loads based on energy consumption of about 100,000 kWh per month or higher. At the present time, there are twelve customers that meet this criteria, eight of which are commercial customers and four which are public authority customers. Energy sales reports prepared by the City include the large loads as commercial and public authority customers, respectively. Power sales have been forecasted separately for the large power users.

The large power users include three large fish processors. The two well established processors pack a wide variety of seafood and use a large amount of electric power almost every month of

the year. The products are frozen and so the major load is refrigeration. In 2007 both plants upgraded refrigeration capacity to process pink and chum salmon in a whole body form. This was in response to the construction of a large processor at the Sawmill Cove Industrial Park which is designed to freeze whole salmon, herring, and roe. This new processor has very high use in late March and early April and high use during pink and chum salmon runs in the summer. All the processors indicate that large investments were made in 2007 which should carry them into the foreseeable future.

The City Cold Storage Facility is fundamentally a large refrigerated box. Product is delivered already frozen and energy use is probably more related to outside temperature than to the amount of product handled. About three years ago outlets were added for several freezer vans and this would be reflected in the 2007 energy use. No expansion is planned and it is expected that energy use at this facility will remain constant in the future.

In 2007, there was a record herring harvest but a greatly reduced salmon harvest. The long term outlook does not seem good for a sustained high level salmon harvest. For the processors in the medium and high growth scenarios, it has been assumed that electric loads in the future will remain the same as 2007. In the low case the processor energy use is assumed to drop 10% between 2008 and 2012, another 10% over 2013 to 2019, and another 10% out to 2029. Since maximum demand is based normally on total compressor capacity, it is not expected that demand will change unless a processor ceased to operate.

The two large grocery stores in Sitka have performed lighting and refrigeration upgrades in the past few years and there is little reason to think these loads will change significantly even with moderate changes in population. As a result, it has been assumed that the grocery store loads will not change from 2007 levels.

SEARHC, the Southeast Alaska Regional Health Consortium is the largest employer in Sitka with over 500 employees. SEARHC is the regional health care center primarily for native health care. It is relatively certain that this facility will continue to operate in the far future. Further, the hospital is being upgraded and some housing is being added to the site. It has been assumed for the medium and high cases that the hospital load remains unchanged and for the low case that some functions are exported to new village clinics and perhaps an outpatient facility in Juneau.

Four public authority loads are among the large power consumers. These loads include the US Coast Guard and three facilities of the School District. The US Coast Guard ship Maple, the rescue helicopter base, administrative buildings and housing units would seem to be stable in size and energy use in the foreseeable future and it is assumed that no change will occur in the load for all growth scenarios. The School District has undergone upgrades over the last few years, including a new auditorium in 2007. Student population is declining slightly and no significant new construction is indicated. Schools, however, do not typically reduce electricity use with moderate decreases in enrollment. As a result, it has been assumed that the School District energy use will remain constant for all cases.

Energy requirements of the large loads are shown in Table 14.

Total Energy Sales

Based on the forecasted number of customers and the projected electricity use per customer account, total annual energy sales have been forecasted. The results of the forecast for each of the customer classes and for each year of the forecast period are shown in Table 10 and are summarized for selected years in Table 4. As can be seen in Table 4, total energy sales are forecasted to be 115,982 MWh in 2010 for the medium growth scenario. This amount is approximately 6,830 MWh more than was sold in 2008, representing an increase of 6.3%. Much of the increase between actual sales in 2008 and forecasted sales in 2010 is due to the assumption of fairly significant residential electric heat conversions because of high fuel prices. In addition, the increased power sales at the Sawmill Cove industrial site experienced in 2008 are assumed to continue in the future.

Total electricity consumption at the Sawmill Cove industrial site (former site of the Alaska Pulp Company pulp mill) was approximately 4,190 MWh in 2008, up significantly over the previous year. Part of the increase is attributable to the summer processing load of Silver Bay Seafoods. This load is expected to continue at its present level. The load of Silver Bay Seafoods is included among the large customer loads described in the previous section of this report. For the purpose of the load forecast, it is assumed that the loads at Sawmill Cove will remain at about the level experienced in 2008 with a slight increase over time for the medium load growth scenario. Alternative high and low forecasts of the load are also included. The total estimated energy requirements at the Sawmill Cove site for each year of the forecast period are shown in Table 10 in the column labeled "SMC". As previously mentioned, the load of Silver Bay Seafoods, which is located at the Sawmill Cove Industrial Park, is included among the large customer loads.

Table 4
Forecasted Total Retail Energy Sales [1]

	Total Energy Sales (MWh)			
	Medium	High	Low	Elec. Vehicle
2008 (Actual)	109,154	109,154	109,154	109,154
2010	115,982	119,515	108,660	119,560
2015	124,184	134,481	113,554	136,330
2020	128,879	141,645	115,473	145,630
2025	132,931	148,573	117,111	154,500
2029	135,696	154,148	117,972	160,280
Average Annual Growth Rates				
2008-2010	3.1%	4.6%	-0.2%	4.7%
2010-2015	1.4%	2.4%	0.9%	2.7%
2015-2020	0.7%	1.0%	0.3%	1.3%
2020-2029	0.6%	0.9%	0.2%	1.1%
2008-2029	1.0%	1.7%	0.4%	1.8%

[1] Energy sales shown for 2008 exclude 852,120 MWh of interruptible sales.

Total Energy Requirements

The City's total energy requirements are the sum of total energy sales, interruptible energy sales and energy losses. Non-billed public authority use is approximately 2,200 MWh per year at the present time, however, for the most part this load is accounted for in the public authority customer classification. Interruptible energy sales were 852 MWh in 2008, down significantly from 1,747 MWh in 2007. Interruptible energy sales are only made if surplus hydroelectric energy is available. It can be expected that interruptible sales will vary from year to year and will be under pressure to increase as a result of high fuel oil prices. .

Energy losses experienced by the City in the years 2003 through 2008 have varied between 2.5% and 8.2% of total energy requirements, averaging 5.1%. Prior to 2003, energy losses were typically in excess of 6.0% of total energy requirements. It is not known if the significant decrease noted in recent years is due to accounting changes or other factors. For the purpose of the load forecast, energy losses are assumed to be 5.5%, 6.5% and 5.0% of total energy requirements for the medium, high and low load growth scenarios.

Forecasted total energy requirements are shown in Table 10 and are summarized in Table 5. Historical and forecasted energy requirements are shown in Figure 3 with average annual growth rates over the periods 1973–2008 and 2008–2029 indicated also.

Table 5
Forecasted Total Energy Requirements
(Excludes Potential Interruptible Sales)

	Total Energy Requirements (MWh)			
	Medium	High	Low	Elec. Vehicle
2008 (Actual)	111,919	111,919	111,919	111,919
2010	122,730	127,820	114,380	127,870
2015	131,410	143,830	119,530	145,810
2020	136,380	151,490	121,550	155,750
2025	140,670	158,900	123,280	165,240
2029	143,590	164,860	124,180	171,420
Average Annual Growth Rates				
2008-2010	4.7%	6.9%	1.1%	6.9%
2010-2015	1.4%	2.4%	0.9%	2.7%
2015-2020	0.7%	1.0%	0.3%	1.3%
2020-2029	0.6%	0.9%	0.2%	1.1%
2008-2029	1.2%	1.9%	0.5%	2.1%

Figure 3
Historical and Projected Total Energy Requirements (1973-2029)

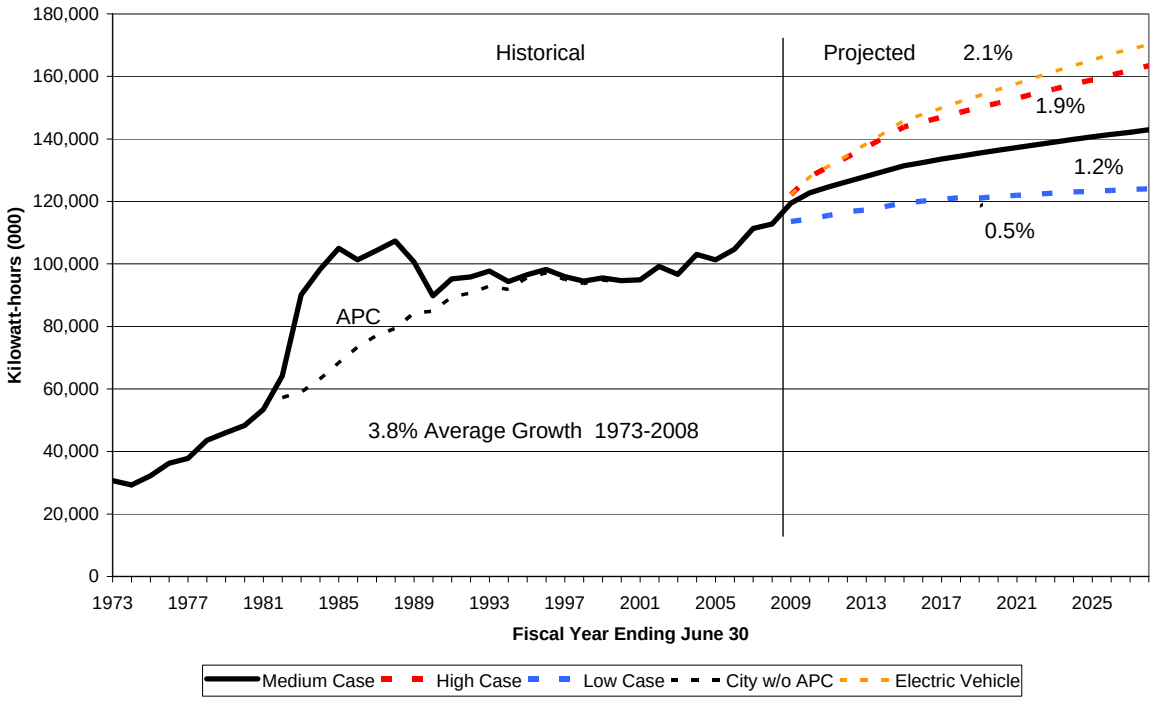


Figure 3 shows that average annual load growth experienced by the City was 3.8% over the period 1973 through 2008. Prior to 1995, average annual load growth was significantly higher. The results of the forecast indicate average annual load growth over the next 20 years of 1.2% for the medium growth scenario, 1.9% average annual load growth for the high scenario, 0.5% average growth in loads for the low growth scenario and 2.1% average annual load growth for the electric vehicle scenario.

The 2008 Load Forecast indicates higher growth than was forecasted in the 2005 Load Forecast, 1.2% as compared to 0.8% average annual growth for the medium scenario. Most of the higher rate of load growth is attributable to the expected higher use of electric space heat in Sitka.

Peak Demand

Peak demand of the City's electric system has been forecasted based on the forecast of total energy requirements and an assumed annual load factor. The load factor is the ratio of peak demand to average demand. In recent years, the City's annual load factor has been relatively consistent at approximately 60%. For the purposes of the forecast, the annual load factor has been assumed to be 58% for the medium growth scenario, 60% for the low growth scenario and 52% for the high and electric heat scenarios. The forecasted peak demand for each year is shown in Table 10 for the four growth scenarios and is summarized in the following table.

Table 6
Forecasted Peak Demand (kW)

	Peak Demand (kW)			
	Medium	High	Low	Elec. Vehicle
2008 (Actual)	22,240	22,240	22,240	22,240
2010	24,200	25,600	21,800	25,600
2015	25,900	30,400	22,700	30,800
2020	26,800	33,300	23,100	34,200
2025	27,700	34,900	23,500	36,300
2029	28,300	36,200	23,600	37,600
Average Annual Growth Rates				
2008-2010	2.1%	6.3%	0.9%	6.5%
2010-2015	1.3%	2.9%	0.8%	3.2%
2015-2020	0.7%	1.0%	0.3%	1.3%
2020-2029	0.6%	0.9%	0.2%	1.1%
2008-2029	1.2%	2.3%	0.3%	2.5%

Interruptible Energy Sales

The City has recently established an interruptible energy sales program to sell surplus hydroelectric generation to government buildings, and potentially industrial facilities, to supplant the use of fuel oil for space and water heating. The price of electricity sold through this program will be tied to the price of fuel oil in Sitka. At the present time, the City Electric Department has identified several interruptible energy customers, primarily schools and other municipal facilities that could potentially begin receiving interruptible service within the next several years. In total, it is estimated that these electric customers can use approximately 52,600 MWh per year of electric energy purchased under the interruptible energy program. Other municipal and commercial facilities have also been identified that could potentially purchase interruptible electric energy in the future.

The amount of energy available to serve this interruptible load is dependent on the available hydroelectric generation in any given year. As with all hydroelectric systems, the City's generation potential varies from year to year depending on local precipitation. It is presently estimated that the average annual energy generation capability of the City's hydroelectric system is 124,000 MWh. This generation capability is estimated to vary between 85,000 MWh in extremely dry years to 135,000 MWh in very wet years. Further, the City has indicated that a third turbine could potentially be installed at the Blue Lake hydroelectric project that would produce about 16,000 MWh on an average annual basis. In extremely wet years, it is estimated that the third turbine could generate an additional 25,000 MWh whereas in dry years there would be no additional energy generation. Additional hydroelectric capacity is envisioned for the

future including 19,000 MWh per year from a further expansion of the Blue Lake project and 106,000 MWh per year from the Takatz Lake project that could be constructed as early as 2021.

An estimate of potential interruptible energy sales has been developed based on the City's estimate of potential interruptible municipal and industrial loads and the estimated amount of hydroelectric generation surplus to the needs of the City's firm energy service customers. As the City's firm energy loads increase over time, the amount of surplus hydroelectric generation available for interruptible sales will decrease. Further, the amount of surplus hydroelectric generation available in any given year will vary significantly due to seasonal precipitation levels at the time. The estimated interruptible energy sales are shown in Table 12.

In summary, interruptible energy sales with the existing installed hydroelectric capacity are estimated to be somewhat limited, ranging between zero in most low and average water years to as high as 12,600 MWh in wet years. Under average water conditions with medium retail load growth and assuming the third turbine at Blue Lake is installed in 2015, interruptible energy sales are estimated to increase.

Table 7

City and Borough of Sitka

Historical Number of Customer Accounts and Usage Per Customer Account

Number of Accounts

Fiscal Year	Residential	Commercial	Res/Comm Ratio	Boats	Public Authority	Public Safety	Total	Annual % Change
1973	1,457	216	6.75	153	40	-	1,873	
1974	1,560	221	7.06	160	44	-	1,992	6.4%
1975	1,666	231	7.21	189	51	-	2,144	7.6%
1976	1,748	244	7.16	221	53	-	2,273	6.0%
1977	1,857	252	7.37	236	55	-	2,407	5.9%
1978	2,015	259	7.78	297	58	-	2,637	9.5%
1979	2,105	282	7.46	325	63	-	2,782	5.5%
1980	2,200	298	7.38	334	65	-	2,904	4.4%
1981	2,316	331	7.00	330	72	-	3,056	5.2%
1982	2,436	336	7.25	333	70	-	3,182	4.1%
1983	2,492	369	6.75	347	71	-	3,286	3.3%
1984	2,540	390	6.51	350	79	-	3,366	2.4%
1985	2,583	411	6.28	426	90	-	3,516	4.5%
1986	2,697	419	6.44	462	122	-	3,706	5.4%
1987	2,784	431	6.46	482	131	-	3,834	3.5%
1988	2,842	431	6.59	475	135	-	3,890	1.4%
1989	2,856	418	6.83	453	166	-	3,900	0.3%
1990	2,898	417	6.95	535	160	-	4,017	3.0%
1991	2,952	425	6.95	556	154	-	4,094	1.9%
1992	2,990	431	6.94	590	156	-	4,174	2.0%
1993	2,952	425	6.95	589	157	-	4,130	-1.1%
1994	3,010	421	7.15	547	144	-	4,129	0.0%
1995	3,044	438	6.95	531	139	-	4,159	0.7%
1996	3,117	440	7.08	557	154	4	4,279	2.9%
1997	3,160	456	6.93	651	153	3	4,430	3.5%
1998	3,193	472	6.76	662	156	3	4,493	1.4%
1999	3,218	506	6.36	690	171	1	4,592	2.2%
2000	3,243	516	6.28	757	172	1	4,695	2.2%
2001	3,333	534	6.24	747	170	1	4,791	2.0%
2002	3,409	570	5.98	699	179	1	4,864	1.5%
2003	3,484	560	6.22	685	185	1	4,921	1.2%
2004	3,473	563	6.17	746	192	1	4,981	1.2%
2005	3,488	597	5.84	754	189	-	5,034	1.1%
2006	3,524	614	5.74	728	189	-	5,061	0.5%
2007	3,584	620	5.78	723	184	-	5,117	1.1%
2008	3,621	619	5.85	748	186	-	5,180	1.2%
Compound Annual Growth Rates (Unless Marked Average):								Average
1973-2008	2.6%	3.1%	-0.4%	4.6%	4.5%		2.9%	3.0%
1973-1993	3.6%	3.4%	0.1%	7.0%	7.1%		4.0%	4.1%
1993-2008	1.4%	2.5%	-1.1%	1.6%	1.1%		1.5%	1.4%
2001-2008	1.2%	2.1%	-0.9%	0.0%	1.3%		1.1%	1.2%
2003-2008	0.8%	2.0%	-1.2%	1.8%	0.1%		1.0%	1.1%

Average Usage per Customer Account (kWh)

Residential	Commercial	Boats	Public Authority	Public Safety	Total
7,308	27,214	1,489	238,838	-	14,047
7,254	24,602	1,316	197,394	-	12,875
7,664	25,696	1,557	172,662	-	12,967
8,248	31,425	1,971	174,911	-	13,985
8,428	33,005	1,623	177,207	-	14,164
8,562	35,392	1,705	205,455	-	14,731
8,577	45,457	1,677	178,357	-	15,330
8,611	46,959	1,560	152,109	-	14,924
8,776	44,159	1,591	136,644	-	14,825
9,593	48,922	1,945	141,655	-	15,828
9,460	47,407	1,597	143,430	-	15,766
10,367	51,387	1,844	138,461	-	17,221
10,816	45,948	1,961	139,051	-	17,112
10,648	50,898	2,110	116,448	-	17,598
10,432	56,642	1,954	99,577	-	17,589
11,333	56,078	2,135	104,930	-	18,398
12,154	59,656	2,609	94,016	-	19,600
11,861	63,306	2,134	93,904	-	19,153
11,835	63,816	2,273	98,930	-	19,188
12,525	62,549	2,540	106,165	-	19,758
13,197	64,992	2,565	110,200	-	20,676
12,720	65,573	2,535	117,395	-	20,388
12,544	66,888	2,900	119,237	-	20,581
12,659	68,339	2,930	115,986	54,243	20,855
12,272	62,090	3,044	122,392	60,156	19,861
11,425	59,022	2,853	117,698	60,246	18,868
12,104	60,045	3,074	115,032	137,400	19,873
11,508	55,633	3,326	118,849	137,960	18,982
11,681	53,727	3,286	120,730	152,680	18,942
11,596	50,357	3,092	113,360	145,600	18,675
11,070	52,006	3,036	117,753	260,367	18,657
11,317	51,690	3,297	114,935	178,659	18,692
11,379	49,677	3,245	117,341	-	18,668
11,811	48,830	3,550	118,234	-	19,075
12,575	49,885	4,339	127,205	-	20,040
12,813	51,739	4,923	122,901	-	20,264
1.6%	1.9%	3.5%	-1.9%		1.1%
3.0%	4.4%	2.8%	-3.8%		2.0%
-0.2%	-1.5%	4.4%	0.7%		-0.1%
1.3%	-0.5%	5.9%	0.3%		1.0%
3.0%	-0.1%	10.2%	0.9%		1.7%

Table 8

City and Borough of Sitka

Historical Energy Sales, Total Requirements and Losses

(kilowatt-hours)

Fiscal Year	Residential	Commercial	Boats	Public Authority	Public Safety	Total Retail	Annual % Change	APC/SCIP	Interruptible Sales	Total Sales	PA - Nonbill	Losses	Total Requirements	Loss %
1973	10,647,500	5,878,143	227,791	9,553,520	-	26,306,954		-	-	26,306,954	-	4,346,746	30,653,700	14.2%
1974	11,315,790	5,437,106	210,480	8,685,340	-	25,648,716	-2.5%	-	-	25,648,716	-	3,660,084	29,308,800	12.5%
1975	12,768,138	5,935,735	294,250	8,805,740	-	27,803,863	8.4%	-	-	27,803,863	-	4,401,237	32,205,100	13.7%
1976	14,417,801	7,667,679	435,571	9,270,277	-	31,791,328	14.3%	-	-	31,791,328	-	4,462,772	36,254,100	12.3%
1977	15,650,544	8,317,159	382,960	9,746,410	-	34,097,073	7.3%	-	-	34,097,073	-	3,673,927	37,771,000	9.7%
1978	17,253,384	9,166,472	506,411	11,916,385	-	38,842,652	13.9%	-	-	38,842,652	-	4,751,348	43,594,000	10.9%
1979	18,054,525	12,818,950	545,180	11,236,489	-	42,655,144	9.8%	-	-	42,655,144	-	3,316,556	45,971,700	7.2%
1980	18,943,385	13,993,874	521,013	9,887,091	-	43,345,363	1.6%	-	-	43,345,363	-	5,004,037	48,349,400	10.3%
1981	20,324,848	14,616,568	525,157	9,838,403	-	45,304,976	4.5%	-	-	45,304,976	-	8,135,824	53,440,800	15.2%
1982	23,368,046	16,437,777	647,625	9,915,842	-	50,369,290	11.2%	6,900,000	-	57,269,290	-	6,868,310	64,137,600	10.7%
1983	23,573,597	17,493,123	554,146	10,183,532	-	51,804,398	2.8%	31,109,600	-	82,913,998	-	7,186,902	90,100,900	8.0%
1984	26,333,102	20,040,862	645,320	10,938,427	-	57,957,711	11.9%	35,036,400	-	92,994,111	-	5,229,889	98,224,000	5.3%
1985	27,936,606	18,884,763	835,230	12,514,602	-	60,171,201	3.8%	36,607,200	-	96,778,401	-	8,224,599	105,003,000	7.8%
1986	28,718,308	21,326,412	974,641	14,206,699	-	65,226,060	8.4%	27,937,800	-	93,163,860	-	8,151,140	101,315,000	8.0%
1987	29,043,644	24,412,603	941,876	13,044,581	-	67,442,704	3.4%	27,190,800	-	94,633,504	-	9,642,496	104,276,000	9.2%
1988	32,209,398	24,169,740	1,014,325	14,165,572	-	71,559,035	6.1%	27,963,600	-	99,522,635	-	7,816,665	107,339,300	7.3%
1989	34,710,595	24,936,120	1,181,668	15,606,679	-	76,435,062	6.8%	16,258,800	-	92,693,862	-	7,917,138	100,611,000	7.9%
1990	34,373,267	26,398,742	1,141,738	15,024,583	-	76,938,330	0.7%	4,905,600	-	81,843,930	664,622	7,947,370	89,791,300	8.9%
1991	34,935,593	27,121,821	1,263,561	15,235,263	-	78,556,238	2.1%	5,737,400	-	84,293,638	1,369,132	10,888,362	95,182,000	11.4%
1992	37,451,051	26,958,569	1,498,453	16,561,759	-	82,469,832	5.0%	5,132,400	42,000	87,602,232	1,544,472	8,229,008	95,831,240	8.6%
1993	38,956,991	27,621,495	1,510,874	17,301,455	-	85,390,815	3.5%	4,785,912	180,120	90,176,727	1,356,274	7,535,192	97,711,919	7.7%
1994	38,288,017	27,606,075	1,386,858	16,904,829	-	84,185,779	-1.4%	2,485,564	-	86,671,343	1,608,195	7,677,558	94,348,901	8.1%
1995	38,184,665	29,296,821	1,540,057	16,573,953	-	85,595,496	1.7%	961,581	-	86,557,077	2,086,615	9,981,332	96,538,409	10.3%
1996	39,458,367	30,069,034	1,632,084	17,861,827	216,970	89,238,282	4.3%	1,074,420	-	90,312,702	1,036,839	7,894,079	98,206,781	8.0%
1997	38,779,249	28,313,214	1,981,768	18,725,998	180,468	87,980,697	-1.4%	904,915	-	88,885,612	947,659	7,043,924	95,929,536	7.3%
1998	36,481,297	27,858,302	1,888,963	18,360,839	180,737	84,770,138	-3.6%	789,265	-	85,559,403	911,692	8,940,267	94,499,670	9.5%
1999	38,950,365	30,382,830	2,121,381	19,670,460	137,400	91,262,436	7.7%	629,585	-	91,892,021	988,605	3,635,201	95,527,222	3.8%
2000	37,321,128	28,706,403	2,517,425	20,441,975	137,960	89,124,891	-2.3%	506,274	-	89,631,165	1,480,197	4,998,244	94,629,409	5.3%
2001	38,932,335	28,690,283	2,454,601	20,524,065	152,680	90,753,964	1.8%	399,516	-	91,153,480	1,493,985	3,761,159	94,914,639	4.0%
2002	39,530,730	28,703,289	2,161,435	20,291,474	145,600	90,832,528	0.1%	969,844	-	91,802,372	1,577,104	7,402,134	99,204,506	7.5%
2003	38,569,146	29,123,395	2,079,515	21,784,389	260,367	91,816,812	1.1%	914,387	-	92,731,199	1,723,933	3,925,133	96,656,332	4.1%
2004	39,303,610	29,101,299	2,459,212	22,067,517	178,659	93,110,297	1.4%	1,524,713	-	94,635,010	1,723,855	8,412,968	103,047,978	8.2%
2005	39,690,807	29,657,231	2,446,827	22,177,417	-	93,972,282	0.9%	1,702,168	-	95,674,450	1,500,000	5,651,447	101,325,897	5.6%
2006	41,623,109	29,981,828	2,584,622	22,346,191	-	96,535,750	2.7%	1,871,596	-	98,407,346	1,597,586	6,286,474	104,693,820	6.0%
2007	45,069,093	30,928,679	3,137,092	23,405,628	-	102,540,492	6.2%	2,203,633	1,746,960	106,491,085	1,934,921	4,882,087	111,373,172	4.4%
2008	46,396,181	32,026,170	3,682,664	22,859,652	-	104,964,667	2.4%	4,189,777	852,120	110,006,564	2,195,316	2,765,003	112,771,567	2.5%

Compound Annual Growth Rates (Unless Marked Average):					Average							Average
1973-2008	4.3%	5.0%	8.3%	2.5%	4.0%	4.1%		4.2%	-1.3%	3.8%		8.4%
1973-1993	6.7%	8.0%	9.9%	3.0%	6.1%	6.2%		6.4%	2.8%	6.0%		9.9%
1993-2008	1.2%	1.0%	6.1%	1.9%	1.4%	1.6%		1.3%	-6.5%	1.0%		6.4%
2003-2008	3.8%	1.9%	12.1%	1.0%	2.7%	2.5%	35.6%	3.5%	5.0%	-6.8%	3.1%	5.1%

Table 8A

City and Borough of Sitka

Historical Peak Loads and Load Factor

(kilowatts)

Fiscal Year	City	System	Total Generation (Average kW)	Less: Sales to APC (Average kW)	Net Retail Generation (Average kW)	System Loadfactor	Retail Loadfactor
1973	6,400		3,499	-	3,499	54.7%	54.7%
1974	5,950		3,346	-	3,346	56.2%	56.2%
1975	7,100		3,676	-	3,676	51.8%	51.8%
1976	7,200		4,127	-	4,127	57.3%	57.3%
1977	7,550		4,312	-	4,312	57.1%	57.1%
1978	8,795		4,976	-	4,976	56.6%	56.6%
1979	9,200		5,248	-	5,248	57.0%	57.0%
1980	9,700		5,504	-	5,504	56.7%	56.7%
1981	10,500		6,101	-	6,101	58.1%	58.1%
1982	11,000		7,322	788	6,534	66.6%	59.4%
1983	12,055		10,285	3,551	6,734	85.3%	55.9%
1984	12,343		11,182	3,989	7,193	90.6%	58.3%
1985	14,738		11,987	4,179	7,808	81.3%	53.0%
1986	15,440		11,566	3,189	8,376	74.9%	54.3%
1987	14,636		11,904	3,104	8,800	81.3%	60.1%
1988	16,711		12,220	3,183	9,036	73.1%	54.1%
1989	17,512		11,485	1,856	9,629	65.6%	55.0%
1990	16,785	19,868	10,250	560	9,690	61.1%	57.7%
1991	17,670	20,320	10,866	655	10,211	61.5%	57.8%
1992	16,557	19,829	10,910	584	10,325	65.9%	62.4%
1993	18,972	22,047	11,154	546	10,608	58.8%	55.9%
1994	19,105	19,255	10,770	-	10,770	56.4%	56.4%
1995	19,364	19,364	11,020	-	11,020	56.9%	56.9%
1996	19,938	19,938	11,180	-	11,180	56.1%	56.1%
1997	18,730	18,730	10,951	-	10,951	58.5%	58.5%
1998	17,527	17,527	10,788	-	10,788	61.5%	61.5%
1999	17,732	17,732	10,905	-	10,905	61.5%	61.5%
2000	17,664	17,664	10,773	-	10,773	61.0%	61.0%
2001	17,582	17,582	10,835	-	10,835	61.6%	61.6%
2002	18,113	18,113	11,325	-	11,325	62.5%	62.5%
2003	17,544	17,544	11,034	-	11,034	62.9%	62.9%
2004	19,834	19,834	11,731	-	11,731	59.1%	59.1%
2005	19,100	19,100	11,567	-	11,567	60.6%	60.6%
2006	20,770	20,770	11,951	-	11,951	57.5%	57.5%
2007	20,480	20,480	12,714	-	12,714	62.1%	62.1%
2008	22,240	22,240	12,838	-	12,838	57.7%	57.7%
Compound Annual Growth Rates (Unless Marked Average):						Average	Average
1973-2008	3.6%		3.8%		3.8%	63.0%	57.9%
1973-1993	5.6%		6.0%		5.7%	65.3%	56.6%
1993-2004	0.4%		0.5%	-17.1%	0.9%	59.7%	59.5%
2003-2008	4.9%	4.9%	3.1%		3.1%	60.0%	60.0%

Table 9

City and Borough of Sitka

2008 Electric Load Forecast

Forecasted Number of Customer Accounts and Usage Per Customer Account

MEDIUM CASE

Number of Accounts

Fiscal Year	Residential	Commercial	Res/Comm Ratio	Boats	Public Authority	Interrpt. Industr.	Large Loads	Total	% Change
2008 (Act)	3,621	611	5.85	748	182	-	12	5,174	
2009	3,645	620	5.88	762	196	1	12	5,236	1.2%
2010	3,669	629	5.83	776	202	3	12	5,291	1.1%
2011	3,692	637	5.80	789	206	7	12	5,343	1.0%
2012	3,713	645	5.76	802	208	7	12	5,387	0.8%
2013	3,733	653	5.72	814	210	7	12	5,429	0.8%
2014	3,752	660	5.68	826	212	7	12	5,469	0.7%
2015	3,770	667	5.65	838	214	7	12	5,508	0.7%
2016	3,787	674	5.62	849	215	7	12	5,544	0.7%
2017	3,803	681	5.58	860	217	7	12	5,580	0.6%
2018	3,818	687	5.56	870	218	7	12	5,612	0.6%
2019	3,832	693	5.53	880	219	7	12	5,643	0.6%
2020	3,845	699	5.50	890	220	7	12	5,673	0.5%
2021	3,857	704	5.48	899	221	7	12	5,700	0.5%
2022	3,868	709	5.46	908	222	7	12	5,726	0.5%
2023	3,878	714	5.43	916	223	7	12	5,750	0.4%
2024	3,887	719	5.41	924	224	7	12	5,773	0.4%
2025	3,895	723	5.39	932	225	7	12	5,794	0.4%
2026	3,902	727	5.37	939	226	7	12	5,813	0.3%
2027	3,909	731	5.35	946	226	7	12	5,831	0.3%
2028	3,915	735	5.33	953	227	7	12	5,849	0.3%
2029	3,921	739	5.31	960	227	7	12	5,866	0.3%

Compound Annual Growth Rates (Unless Marked Average):							Average
2008-2010	0.6%	1.4%	-0.7%	1.8%	2.5%	1.0%	1.1%
2010-2015	0.5%	1.1%	-0.6%	1.5%	0.9%	0.7%	0.8%
2015-2020	0.3%	0.8%	-0.5%	1.1%	0.5%	0.5%	-6.5%
2020-2029	0.2%	0.6%	-0.4%	0.8%	0.3%	0.4%	
2008-2029	0.4%	0.9%	-0.5%	1.2%	1.1%	0.6%	

Average Usage per Customer Account (kWh)

Residential	Commercial	Boats	Public Authority	Non-Billed	Total
12,813	28,830	4,923	103,970	-	17,226
13,210	28,970	4,950	104,490	-	21,198
13,610	29,110	4,970	105,010	-	21,535
13,760	29,260	4,990	105,540	-	21,540
13,910	29,410	5,010	106,070	-	21,780
14,060	29,560	5,040	106,600	-	21,902
14,210	29,710	5,070	107,130	-	22,025
14,370	29,860	5,100	107,670	-	22,156
14,390	30,010	5,130	108,210	-	22,160
14,410	30,160	5,160	108,750	-	22,223
14,430	30,310	5,190	109,290	-	22,254
14,450	30,460	5,220	109,840	-	22,286
14,470	30,610	5,250	110,390	-	22,320
14,490	30,760	5,280	110,940	-	22,320
14,510	30,910	5,310	111,490	-	22,320
14,530	31,060	5,340	112,050	-	22,320
14,550	31,220	5,370	112,610	-	22,320
14,570	31,380	5,400	113,170	-	22,320
14,590	31,540	5,430	113,740	-	22,320
14,610	31,700	5,460	114,310	-	22,320
14,630	31,860	5,490	114,880	-	22,320
14,650	32,020	5,520	115,450	-	22,320

3.1%	0.5%	0.5%	0.5%	0.0%	
1.1%	0.5%	0.5%	0.5%	0.0%	
0.1%	0.5%	0.5%	0.5%	0.0%	
0.1%	0.5%	0.5%	0.5%		

Table 9

City and Borough of Sitka

2008 Electric Load Forecast

Forecasted Number of Customer Accounts and Usage Per Customer Account

HIGH CASE

Number of Accounts

Fiscal Year	Residential	Commercial	Res/Comm Ratio	Boats	Public Authority	Interrpt. Industr.	Large Loads	Total	% Change
2008 (Act)	3,621	611	5.85	748	182	-	12	5,174	
2009	3,645	620	5.88	762	196	1	12	5,242	1.3%
2010	3,669	629	5.83	776	202	3	12	5,297	1.0%
2011	3,692	637	5.80	789	206	7	12	5,349	1.0%
2012	3,715	645	5.76	802	208	7	12	5,395	0.9%
2013	3,737	653	5.72	814	210	7	12	5,439	0.8%
2014	3,759	660	5.70	826	212	7	12	5,482	0.8%
2015	3,780	667	5.67	838	214	7	12	5,524	0.8%
2016	3,801	674	5.64	849	216	7	12	5,565	0.7%
2017	3,821	681	5.61	860	218	7	12	5,605	0.7%
2018	3,841	688	5.58	871	220	7	12	5,645	0.7%
2019	3,861	694	5.56	881	222	7	12	5,683	0.7%
2020	3,880	700	5.54	891	223	7	12	5,719	0.6%
2021	3,899	706	5.52	900	225	7	12	5,755	0.6%
2022	3,918	712	5.50	909	227	7	12	5,791	0.6%
2023	3,937	718	5.48	918	228	7	12	5,825	0.6%
2024	3,955	723	5.47	927	230	7	12	5,859	0.6%
2025	3,973	728	5.46	935	231	7	12	5,891	0.5%
2026	3,991	733	5.44	943	233	7	12	5,924	0.6%
2027	4,009	738	5.43	951	234	7	12	5,956	0.5%
2028	4,026	743	5.42	958	236	7	12	5,987	0.5%
2029	4,043	748	5.41	965	237	7	12	6,017	0.5%
Compound Annual Growth Rates (Unless Marked Average):									Average
2008-2010	0.6%	1.4%	-0.7%	1.8%	2.5%			1.0%	1.1%
2010-2015	0.6%	1.1%	-0.5%	1.5%	1.0%			0.8%	0.8%
2015-2020	0.5%	0.8%	-0.4%	1.1%	0.8%			0.6%	0.6%
2020-2029	0.5%	0.9%	-0.4%	1.2%	1.0%			0.7%	0.7%

Average usage per Customer Account (kWh)

	Residential	Commercial	Boats	Public Authority	Non-Billed	Total
2008 (Act)	12,813	28,830	4,923	103,970	-	-
2009	13,310	29,410	4,970	107,090	-	21,396
2010	13,820	30,000	5,020	110,300	-	21,972
2011	14,220	30,300	5,070	111,400	-	21,970
2012	14,630	30,600	5,120	112,510	-	22,656
2013	15,050	30,910	5,170	113,640	-	23,007
2014	15,480	31,220	5,220	114,780	-	23,363
2015	15,920	31,530	5,270	115,930	-	23,728
2016	15,940	31,850	5,320	117,090	-	23,730
2017	15,960	32,170	5,370	118,260	-	23,894
2018	15,980	32,490	5,420	119,440	-	23,980
2019	16,000	32,810	5,470	120,630	-	24,069
2020	16,020	33,140	5,520	121,840	-	24,145
2021	16,030	33,470	5,580	123,060	-	24,140
2022	16,040	33,800	5,640	124,290	-	24,330
2023	16,050	34,140	5,700	125,530	-	24,407
2024	16,060	34,480	5,760	126,790	-	24,503
2025	16,070	34,820	5,820	128,060	-	24,586
2026	16,080	35,170	5,880	129,340	-	24,688
2027	16,090	35,520	5,940	130,630	-	24,774
2028	16,100	35,880	6,000	131,940	-	24,884
2029	16,110	36,240	6,060	133,260	-	24,978
2008-2010	3.9%	2.0%	1.0%	3.0%	0.0%	
2010-2015	2.9%	1.0%	1.0%	1.0%	0.0%	
2015-2020	0.1%	1.0%	1.0%	1.0%	0.0%	
2020-2029	0.1%	1.0%	1.0%	1.0%	0.0%	

Table 9

City and Borough of Sitka

2008 Electric Load Forecast

Forecasted Number of Customer Accounts and Usage Per Customer Account

LOW CASE

Number of Accounts

Fiscal Year	Residential	Commercial	Res/Comm Ratio	Boats	Public Authority	Interrpt. Industr.	Large Loads	Total	% Change
2007 (Act)	3,584	611	5.78	723	182	-	12	5,112	
2009	3,608	619	5.83	740	193	1	12	5,179	1.3%
2010	3,630	627	5.79	756	199	3	12	5,233	1.0%
2011	3,649	635	5.75	772	202	7	12	5,283	1.0%
2012	3,667	643	5.70	787	204	7	12	5,326	0.8%
2013	3,684	650	5.67	801	206	7	12	5,366	0.8%
2014	3,699	657	5.63	814	207	7	12	5,402	0.7%
2015	3,713	663	5.60	827	209	7	12	5,437	0.6%
2016	3,726	669	5.57	839	210	7	12	5,469	0.6%
2017	3,738	675	5.54	850	211	7	12	5,499	0.5%
2018	3,749	681	5.51	861	212	7	12	5,528	0.5%
2019	3,759	686	5.48	871	213	7	12	5,553	0.5%
2020	3,768	691	5.45	881	214	7	12	5,578	0.4%
2021	3,776	696	5.43	890	215	7	12	5,601	0.4%
2022	3,783	701	5.40	899	215	7	12	5,622	0.4%
2023	3,790	705	5.38	907	216	7	12	5,642	0.4%
2024	3,796	709	5.35	915	217	7	12	5,661	0.3%
2025	3,801	713	5.33	922	217	7	12	5,677	0.3%
2026	3,806	717	5.31	929	217	7	12	5,693	0.3%
2027	3,810	720	5.29	936	218	7	12	5,708	0.3%
2028	3,813	723	5.27	942	218	7	12	5,720	0.2%
2029	3,816	726	5.26	948	218	7	12	5,732	0.2%

Compound Annual Growth Rates (Unless Marked Average):							Average
2008-2010	0.6%	1.3%	-0.7%	2.1%	2.3%	1.0%	1.1%
2010-2015	0.4%	1.0%	-0.6%	1.7%	0.8%	0.7%	0.7%
2015-2020	0.2%	0.7%	-0.5%	1.0%	0.3%	0.4%	0.4%
2020-2028	0.3%	0.8%	-0.5%	1.2%	0.6%	0.5%	0.5%

Average usage per Customer Account (kWh)

Residential	Commercial	Boats	Public Authority	Non-Billed	Total
12,575	28,830	4,339	103,970	-	17,434
12,750	28,400	4,270	102,410	-	20,522
12,930	27,970	4,210	100,870	-	20,540
13,060	27,970	4,210	100,870	-	20,540
13,190	27,970	4,210	100,870	-	20,646
13,320	27,970	4,210	100,870	-	20,545
13,450	27,970	4,210	100,870	-	20,596
13,590	27,970	4,210	100,870	-	20,668
13,610	27,970	4,210	100,870	-	20,670
13,630	27,970	4,210	100,870	-	20,632
13,650	27,970	4,210	100,870	-	20,618
13,670	27,970	4,210	100,870	-	20,453
13,690	27,970	4,210	100,870	-	20,444
13,700	27,970	4,210	100,870	-	20,440
13,710	27,970	4,210	100,870	-	20,409
13,720	27,970	4,210	100,870	-	20,400
13,730	27,970	4,210	100,870	-	20,393
13,740	27,970	4,210	100,870	-	20,377
13,750	27,970	4,210	100,870	-	20,360
13,760	27,970	4,210	100,870	-	20,357
13,770	27,970	4,210	100,870	-	20,344
13,780	27,970	4,210	100,870	-	20,331

1.4%	-1.5%	-1.5%	-1.5%	0.0%	
1.0%	0.0%	0.0%	0.0%	0.0%	
0.2%	0.0%	0.0%	0.0%	0.0%	
0.1%	0.0%	0.0%	0.0%	0.0%	

Table 10

City and Borough of Sitka

2008 Electric Load Forecast

Forecasted Energy Sales, Total Requirements, Losses and Peak Demand

(kilowatt-hours)

MEDIUM CASE

Fiscal Year	Residential	Commercial	Boats	Public Authority	Large Loads	Total Retail	Annual % Change	SMC (less Silver Bay Seafoods)	Total Sales	PA - Nonbill (Included in Pub Auth)	Losses	Total Requirements	Loss %	Peak Demand (kW)	Load Factor
2008 (Act)	46,396,181	17,617,210	3,682,664	18,921,972	20,688,080	107,306,107		1,848,337	109,154,444	2,195,316	2,765,003	111,919,447	2.5%	22,240	57.7%
2009	48,150,500	17,961,400	3,771,900	20,480,000	20,629,460	110,993,260	3.4%	1,863,360	112,856,620	2,376,100	6,568,380	119,425,000	5.5%	23,500	58.0%
2010	49,935,100	18,310,200	3,856,700	21,212,000	20,629,460	113,943,460	2.7%	2,038,560	115,982,020	2,461,000	6,750,280	122,732,300	5.5%	24,200	58.0%
2011	50,801,900	18,638,600	3,937,100	21,741,200	20,629,460	115,748,260	1.6%	2,060,460	117,808,720	2,522,400	6,856,580	124,665,300	5.5%	24,500	58.0%
2012	51,647,800	18,969,500	4,018,000	22,062,600	20,629,460	117,327,360	1.4%	2,082,360	119,409,720	2,559,700	6,949,780	126,359,500	5.5%	24,900	58.0%
2013	52,486,000	19,302,700	4,102,600	22,386,000	20,629,460	118,906,760	1.3%	2,104,260	121,011,020	2,597,200	7,042,980	128,054,000	5.5%	25,200	58.0%
2014	53,315,900	19,608,600	4,187,800	22,711,600	20,629,460	120,453,360	1.3%	2,126,160	122,579,520	2,635,000	7,134,280	129,713,800	5.5%	25,500	58.0%
2015	54,174,900	19,916,600	4,273,800	23,041,400	20,629,460	122,036,160	1.3%	2,148,060	124,184,220	2,673,300	7,227,680	131,411,900	5.5%	25,900	58.0%
2016	54,494,900	20,226,700	4,355,400	23,265,200	20,629,460	122,971,660	0.8%	2,169,960	125,141,620	2,699,300	7,283,380	132,425,000	5.5%	26,100	58.0%
2017	54,801,200	20,539,000	4,437,600	23,598,800	20,629,460	124,006,060	0.8%	2,191,860	126,197,920	2,738,000	7,344,880	133,542,800	5.5%	26,300	58.0%
2018	55,093,700	20,823,000	4,515,300	23,825,200	20,629,460	124,886,660	0.7%	2,213,760	127,100,420	2,764,300	7,397,380	134,497,800	5.5%	26,500	58.0%
2019	55,372,400	21,108,800	4,593,600	24,055,000	20,629,460	125,759,260	0.7%	2,235,660	127,994,920	2,791,000	7,449,480	135,444,400	5.5%	26,700	58.0%
2020	55,637,200	21,396,400	4,672,500	24,285,800	20,629,460	126,621,360	0.7%	2,257,560	128,878,920	2,817,800	7,500,880	136,379,800	5.5%	26,800	58.0%
2021	55,887,900	21,655,000	4,746,700	24,517,700	20,629,460	127,436,760	0.6%	2,279,460	129,716,220	2,844,700	7,549,580	137,265,800	5.5%	27,000	58.0%
2022	56,124,700	21,915,200	4,821,500	24,750,800	20,629,460	128,241,660	0.6%	2,301,360	130,543,020	2,871,700	7,597,780	138,140,800	5.5%	27,200	58.0%
2023	56,347,300	22,176,800	4,891,400	24,987,200	20,629,460	129,032,160	0.6%	2,323,260	131,355,420	2,899,100	7,644,980	139,000,400	5.5%	27,400	58.0%
2024	56,555,900	22,447,200	4,961,900	25,224,600	20,629,460	129,819,060	0.6%	2,345,160	132,164,220	2,926,600	7,692,080	139,856,300	5.5%	27,500	58.0%
2025	56,750,200	22,687,700	5,032,800	25,463,300	20,629,460	130,563,460	0.6%	2,367,060	132,930,520	2,954,300	7,736,680	140,667,200	5.5%	27,700	58.0%
2026	56,930,200	22,929,600	5,098,800	25,705,200	20,629,460	131,293,260	0.6%	2,388,960	133,682,220	2,982,400	7,780,480	141,462,700	5.5%	27,800	58.0%
2027	57,110,500	23,172,700	5,165,200	25,834,100	20,629,460	131,911,960	0.5%	2,410,860	134,322,820	2,997,400	7,817,780	142,140,600	5.5%	28,000	58.0%
2028	57,276,500	23,417,100	5,232,000	26,077,800	20,629,460	132,632,860	0.5%	2,432,760	135,065,620	3,025,700	7,860,980	142,926,600	5.5%	28,100	58.0%
2029	57,442,700	23,662,800	5,299,200	26,207,200	20,629,460	133,241,360	0.5%	2,454,660	135,696,020	3,040,700	7,897,680	143,593,700	5.5%	28,300	58.0%
Compound Annual Growth Rates (Unless Marked Average):							Average						Average		
2008-2010	3.7%	1.9%	2.3%	5.9%	-0.1%	3.0%	3.0%	5.0%	3.1%	5.9%	56.2%	4.7%	4.5%	2.1%	0.0%
2010-2015	1.6%	1.7%	2.1%	1.7%	0.0%	1.4%	1.4%	1.1%	1.4%	1.7%	1.4%	1.4%	5.5%	1.3%	0.0%
2015-2020	0.5%	1.4%	1.8%	1.1%	0.0%	0.7%	0.7%	1.0%	0.7%	1.1%	0.7%	0.7%	5.5%	0.7%	0.0%
2020-2029	0.4%	1.1%	1.4%	0.8%	0.0%	0.6%	0.6%	0.9%	0.6%	0.8%	0.6%	0.6%	5.5%	0.6%	0.0%
2008-2029	1.0%	1.4%	1.7%	1.6%	0.0%	1.0%	1.0%	1.4%	1.0%	1.6%	5.1%	1.2%	5.5%	1.2%	0.0%

Table 10

City and Borough of Sitka

2008 Electric Load Forecast

Forecasted Energy Sales, Total Requirements, Losses and Peak Demand

(kilowatt-hours)

HIGH CASE

Fiscal Year	Residential	Commercial	Boats	Public Authority	Large Loads	Total Retail	Annual % Change	SMC (less Silver Bay Seafoods)	Total Sales	PA - Nonbill	Losses	Total Requirements	Loss %	Peak Demand (kW)	Load Factor
2008 (Act)	46,396,181	17,617,210	3,682,664	18,921,972	20,688,080	107,306,107		1,848,337	109,154,444	2,195,316	2,765,003	111,919,447	2.5%	22,240	57.7%
2009	48,515,000	18,234,200	3,787,100	20,989,600	20,629,460	112,155,360	4.5%	2,038,560	114,193,920	2,435,200	7,938,580	122,132,500	6.5%	24,500	57.0%
2010	50,705,600	18,870,000	3,895,500	22,280,600	20,629,460	116,381,160	3.8%	3,133,560	119,514,720	2,585,000	8,308,480	127,823,200	6.5%	25,600	57.0%
2011	52,500,200	19,301,100	4,000,200	22,948,400	20,629,460	119,379,360	2.6%	3,190,500	122,569,860	2,662,500	8,520,940	131,090,800	6.5%	27,700	54.0%
2012	54,350,500	19,737,000	4,106,200	23,402,100	20,629,460	122,225,260	2.4%	3,247,440	125,472,700	2,715,100	8,722,700	134,195,400	6.5%	28,400	54.0%
2013	56,241,900	20,184,200	4,208,400	23,864,400	20,629,460	125,128,360	2.4%	3,304,380	128,432,740	2,768,700	8,928,460	137,361,200	6.5%	29,000	54.0%
2014	58,189,300	20,605,200	4,311,700	24,333,400	20,629,460	128,069,060	2.4%	3,361,320	131,430,380	2,823,100	9,136,920	140,567,300	6.5%	29,700	54.0%
2015	60,177,600	21,030,500	4,416,300	24,809,000	20,629,460	131,062,860	2.3%	3,418,260	134,481,120	2,878,300	9,348,980	143,830,100	6.5%	30,400	54.0%
2016	60,587,900	21,466,900	4,516,700	25,291,400	20,629,460	132,492,360	1.1%	3,448,920	135,941,280	2,934,300	9,450,420	145,391,700	6.5%	31,900	52.0%
2017	60,983,200	21,907,800	4,618,200	25,780,700	20,629,460	133,919,360	1.1%	3,479,580	137,398,940	2,991,100	9,551,760	146,950,700	6.5%	32,300	52.0%
2018	61,379,200	22,353,100	4,720,800	26,276,800	20,629,460	135,359,360	1.1%	3,510,240	138,869,600	3,048,700	9,654,000	148,523,600	6.5%	32,600	52.0%
2019	61,776,000	22,770,100	4,819,100	26,779,900	20,629,460	136,774,560	1.0%	3,540,900	140,315,460	3,107,100	9,754,540	150,070,000	6.5%	32,900	52.0%
2020	62,157,600	23,198,000	4,918,300	27,170,300	20,629,460	138,073,660	0.9%	3,571,560	141,645,220	3,152,400	9,846,980	151,492,200	6.5%	33,300	52.0%
2021	62,501,000	23,629,800	5,022,000	27,688,500	20,629,460	139,470,760	1.0%	3,602,220	143,072,980	3,212,500	9,946,220	153,019,200	6.5%	33,600	52.0%
2022	62,844,700	24,065,600	5,126,800	28,213,800	20,629,460	140,880,360	1.0%	3,632,880	144,513,240	3,273,400	10,046,360	154,559,600	6.5%	33,900	52.0%
2023	63,188,900	24,512,500	5,232,600	28,620,800	20,629,460	142,184,260	0.9%	3,663,540	145,847,800	3,320,600	10,139,200	155,987,000	6.5%	34,200	52.0%
2024	63,517,300	24,929,000	5,339,500	29,161,700	20,629,460	143,576,960	1.0%	3,694,200	147,271,160	3,383,400	10,238,140	157,509,300	6.5%	34,600	52.0%
2025	63,846,100	25,349,000	5,441,700	29,581,900	20,629,460	144,848,160	0.9%	3,724,860	148,573,020	3,432,200	10,328,580	158,901,600	6.5%	34,900	52.0%
2026	64,175,300	25,779,600	5,544,800	30,136,200	20,629,460	146,265,360	1.0%	3,755,520	150,020,880	3,496,500	10,429,220	160,450,100	6.5%	35,200	52.0%
2027	64,504,800	26,213,800	5,648,900	30,567,400	20,629,460	147,564,360	0.9%	3,786,180	151,350,540	3,546,500	10,521,660	161,872,200	6.5%	35,500	52.0%
2028	64,818,600	26,658,800	5,748,000	31,137,800	20,629,460	148,992,660	1.0%	3,816,840	152,809,500	3,612,700	10,623,100	163,432,600	6.5%	35,900	52.0%
2029	65,132,700	27,107,500	5,847,900	31,582,600	20,629,460	150,300,160	0.9%	3,847,500	154,147,660	3,664,300	10,716,140	164,863,800	6.5%	36,200	52.0%
Compound Annual Growth Rates (Unless Marked Average):							Average						Average		
2008-2010	4.5%	3.5%	2.8%	8.5%	-0.1%	4.1%	4.1%	30.2%	4.6%	8.5%	73.3%	6.9%	5.2%	6.3%	-2.7%
2010-2015	3.5%	2.2%	2.5%	2.2%	0.0%	2.4%	2.4%	1.8%	2.4%	2.2%	2.4%	2.4%	6.5%	2.9%	-0.8%
2015-2020	0.6%	2.0%	2.2%	1.8%	0.0%	1.0%	1.0%	0.9%	1.0%	1.8%	1.0%	1.0%	6.5%	1.0%	0.0%
2020-2029	0.5%	1.7%	1.9%	1.7%	0.0%	0.9%	0.9%	0.8%	0.9%	1.7%	0.9%	0.9%	6.5%	0.9%	0.0%
2008-2029	1.6%	2.1%	2.2%	2.5%	0.0%	1.6%	1.6%	3.6%	1.7%	2.5%	6.7%	1.9%	6.5%	2.3%	-0.5%

Table 10

City and Borough of Sitka

2008 Electric Load Forecast

Forecasted Energy Sales, Total Requirements, Losses and Peak Demand

(kilowatt-hours)

LOW CASE

Fiscal Year	Residential	Commercial	Boats	Public Authority	Large Loads	Total Retail	Annual % Change	SMC (less Silver Bay Seafoods)	Total Sales	PA - Nonbill	Losses	Total Requirements	Loss %	Peak Demand (kW)	Load Factor
2008 (Act)	46,396,181	17,617,210	3,682,664	18,921,972	20,688,080	107,306,107		1,848,337	109,154,444	2,195,316	2,765,003	111,919,447	2.5%	22,240	57.7%
2009	46,002,000	17,579,600	3,159,800	19,765,100	19,774,616	106,281,116	-1.0%	1,615,704	107,896,820	2,293,100	5,678,780	113,575,600	5.0%	21,600	60.0%
2010	46,935,900	17,537,200	3,182,800	20,073,100	19,753,113	107,482,113	1.1%	1,177,704	108,659,817	2,328,800	5,718,983	114,378,800	5.0%	21,800	60.0%
2011	47,655,900	17,761,000	3,250,100	20,375,700	19,731,825	108,774,525	1.2%	958,704	109,733,229	2,363,900	5,775,471	115,508,700	5.0%	22,000	60.0%
2012	48,367,700	17,984,700	3,313,300	20,577,500	19,710,751	109,953,951	1.1%	958,704	110,912,655	2,387,300	5,837,545	116,750,200	5.0%	22,200	60.0%
2013	49,070,900	18,180,500	3,372,200	20,779,200	18,835,042	110,237,842	0.3%	1,192,848	111,430,690	2,410,700	5,864,810	117,295,500	5.0%	22,300	60.0%
2014	49,751,600	18,376,300	3,426,900	20,880,100	18,814,387	111,249,287	0.9%	1,192,848	112,442,135	2,422,400	5,917,965	118,360,100	5.0%	22,500	60.0%
2015	50,459,700	18,544,100	3,481,700	21,081,800	18,793,938	112,361,238	1.0%	1,192,848	113,554,086	2,445,800	5,976,514	119,530,600	5.0%	22,700	60.0%
2016	50,710,900	18,711,900	3,532,200	21,182,700	18,773,693	112,911,393	0.5%	1,192,848	114,104,241	2,457,500	6,005,459	120,109,700	5.0%	22,900	60.0%
2017	50,948,900	18,879,800	3,578,500	21,283,600	18,753,651	113,444,451	0.5%	1,192,848	114,637,299	2,469,200	6,033,501	120,670,800	5.0%	23,000	60.0%
2018	51,173,900	19,047,600	3,624,800	21,384,400	18,733,810	113,964,510	0.5%	1,192,848	115,157,358	2,480,900	6,060,942	121,218,300	5.0%	23,100	60.0%
2019	51,385,500	19,187,400	3,666,900	21,485,300	17,859,323	113,584,423	-0.3%	1,426,992	115,011,415	2,492,600	6,053,185	121,064,600	5.0%	23,000	60.0%
2020	51,583,900	19,327,300	3,709,000	21,586,200	17,839,876	114,046,276	0.4%	1,426,992	115,473,268	2,504,300	6,077,532	121,550,800	5.0%	23,100	60.0%
2021	51,731,200	19,467,100	3,746,900	21,687,100	17,820,624	114,452,924	0.4%	1,426,992	115,879,916	2,516,000	6,098,984	121,978,900	5.0%	23,200	60.0%
2022	51,864,900	19,607,000	3,784,800	21,687,100	17,801,564	114,745,364	0.3%	1,426,992	116,172,356	2,516,000	6,114,344	122,286,700	5.0%	23,300	60.0%
2023	51,998,800	19,718,900	3,818,500	21,787,900	17,782,695	115,106,795	0.3%	1,426,992	116,533,787	2,527,700	6,133,313	122,667,100	5.0%	23,300	60.0%
2024	52,119,100	19,830,700	3,852,200	21,888,800	17,764,014	115,454,814	0.3%	1,426,992	116,881,806	2,539,400	6,151,694	123,033,500	5.0%	23,400	60.0%
2025	52,225,700	19,942,600	3,881,600	21,888,800	17,745,521	115,684,221	0.2%	1,426,992	117,111,213	2,539,400	6,163,787	123,275,000	5.0%	23,500	60.0%
2026	52,332,500	20,054,500	3,911,100	21,888,800	17,727,212	115,914,112	0.2%	1,426,992	117,341,104	2,539,400	6,175,896	123,517,000	5.0%	23,500	60.0%
2027	52,425,600	20,138,400	3,940,600	21,989,700	17,709,086	116,203,386	0.2%	1,426,992	117,630,378	2,551,100	6,191,122	123,821,500	5.0%	23,600	60.0%
2028	52,505,000	20,222,300	3,965,800	21,989,700	17,691,142	116,373,942	0.1%	1,426,992	117,800,934	2,551,100	6,200,066	124,001,000	5.0%	23,600	60.0%
2029	52,584,500	20,306,200	3,991,100	21,989,700	17,673,377	116,544,877	0.1%	1,426,992	117,971,869	2,551,100	6,209,031	124,180,900	5.0%	23,600	60.0%
Compound Annual Growth Rates (Unless Marked Average):							Average						Average		
2008-2010	0.6%	-0.2%	-7.0%	3.0%	-2.3%	0.1%	0.1%	-20.2%	-0.2%	3.0%	43.8%	1.1%	4.2%	0.9%	0.0%
2010-2015	1.5%	1.1%	1.8%	1.0%	-1.0%	0.9%	0.9%	0.3%	0.9%	1.0%	0.9%	0.9%	5.0%	0.8%	0.0%
2015-2020	0.4%	0.8%	1.3%	0.5%	-1.0%	0.3%	0.3%	3.6%	0.3%	0.5%	0.3%	0.3%	5.0%	0.3%	0.0%
2020-2029	0.2%	0.6%	0.8%	0.2%	-0.1%	0.2%	0.3%	0.0%	0.2%	0.2%	0.2%	0.2%	5.0%	0.2%	0.0%
2008-2029	0.6%	0.7%	0.4%	0.7%	-0.7%	0.4%	0.4%	-1.2%	0.4%	0.7%	3.9%	0.5%	5.0%	0.3%	0.2%

Table 10

City and Borough of Sitka

2008 Electric Load Forecast

Forecasted Energy Sales, Total Requirements, Losses and Peak Demand

(kilowatt-hours)

HIGH ELECTRIC VEHICLE CASE

Fiscal Year	Residential	Commercial	Boats	Public Authority	Large Loads	Total Retail	Annual % Change	SMC (less Silver Bay Seafoods)	Electric Vehicles	Total Sales	Losses	Total Requirements	Loss %	Peak Demand (kW)	Load Factor
2008 (Act)	46,396,181	17,617,210	3,682,664	18,921,972	20,688,080	107,306,107		1,848,337	-	109,154,444	2,765,003	111,919,447	2.5%	22,240	57.7%
2009	48,515,000	18,234,200	3,787,100	20,989,600	20,629,460	112,155,360	4.5%	2,038,560	-	114,193,920	7,938,580	122,132,500	6.5%	24,500	57.0%
2010	50,705,600	18,870,000	3,895,500	22,280,600	20,629,460	116,381,160	3.8%	3,133,560	47,000	119,561,720	8,311,780	127,873,500	6.5%	25,600	57.0%
2011	52,500,200	19,301,100	4,000,200	22,948,400	20,629,460	119,379,360	2.6%	3,190,500	193,000	122,762,860	8,534,340	131,297,200	6.5%	27,800	54.0%
2012	54,350,500	19,737,000	4,106,200	23,402,100	20,629,460	122,225,260	2.4%	3,247,440	483,000	125,955,700	8,756,300	134,712,000	6.5%	28,500	54.0%
2013	56,241,900	20,184,200	4,208,400	23,864,400	20,629,460	125,128,360	2.4%	3,304,380	964,000	129,396,740	8,995,460	138,392,200	6.5%	29,300	54.0%
2014	58,189,300	20,605,200	4,311,700	24,333,400	20,629,460	128,069,060	2.4%	3,361,320	1,388,000	132,818,380	9,233,320	142,051,700	6.5%	30,000	54.0%
2015	60,177,600	21,030,500	4,416,300	24,809,000	20,629,460	131,062,860	2.3%	3,418,260	1,850,000	136,331,120	9,477,580	145,808,700	6.5%	30,800	54.0%
2016	60,587,900	21,466,900	4,516,700	25,291,400	20,629,460	132,492,360	1.1%	3,448,920	2,311,000	138,252,280	9,611,120	147,863,400	6.5%	32,500	52.0%
2017	60,983,200	21,907,800	4,618,200	25,780,700	20,629,460	133,919,360	1.1%	3,479,580	2,767,000	140,165,940	9,744,160	149,910,100	6.5%	32,900	52.0%
2018	61,379,200	22,353,100	4,720,800	26,276,800	20,629,460	135,359,360	1.1%	3,510,240	3,223,000	142,092,600	9,878,100	151,970,700	6.5%	33,400	52.0%
2019	61,776,000	22,770,100	4,819,100	26,779,900	20,629,460	136,774,560	1.0%	3,540,900	3,548,000	143,863,460	10,001,240	153,864,700	6.5%	33,800	52.0%
2020	62,157,600	23,198,000	4,918,300	27,170,300	20,629,460	138,073,660	0.9%	3,571,560	3,984,000	145,629,220	10,123,980	155,753,200	6.5%	34,200	52.0%
2021	62,501,000	23,629,800	5,022,000	27,688,500	20,629,460	139,470,760	1.0%	3,602,220	4,418,000	147,490,980	10,253,420	157,744,400	6.5%	34,600	52.0%
2022	62,844,700	24,065,600	5,126,800	28,213,800	20,629,460	140,880,360	1.0%	3,632,880	4,845,000	149,358,240	10,383,160	159,741,400	6.5%	35,100	52.0%
2023	63,188,900	24,512,500	5,232,600	28,620,800	20,629,460	142,184,260	0.9%	3,663,540	5,272,000	151,119,800	10,505,700	161,625,500	6.5%	35,500	52.0%
2024	63,517,300	24,929,000	5,339,500	29,161,700	20,629,460	143,576,960	1.0%	3,694,200	5,521,000	152,792,160	10,621,940	163,414,100	6.5%	35,900	52.0%
2025	63,846,100	25,349,000	5,441,700	29,581,900	20,629,460	144,848,160	0.9%	3,724,860	5,929,000	154,502,020	10,740,780	165,242,800	6.5%	36,300	52.0%
2026	64,175,300	25,779,600	5,544,800	30,136,200	20,629,460	146,265,360	1.0%	3,755,520	6,336,000	156,356,880	10,869,720	167,226,600	6.5%	36,700	52.0%
2027	64,504,800	26,213,800	5,648,900	30,567,400	20,629,460	147,564,360	0.9%	3,786,180	6,324,000	157,674,540	10,961,360	168,635,900	6.5%	37,000	52.0%
2028	64,818,600	26,658,800	5,748,000	31,137,800	20,629,460	148,992,660	1.0%	3,816,840	6,313,000	159,122,500	11,062,000	170,184,500	6.5%	37,400	52.0%
2029	65,132,700	27,107,500	5,847,900	31,582,600	20,629,460	150,300,160	0.9%	3,847,500	6,129,000	160,276,660	11,142,240	171,418,900	6.5%	37,600	52.0%
Compound Annual Growth Rates (Unless Marked Average):							Average						Average		
2008-2010	4.5%	3.5%	2.8%	8.5%	-0.1%	4.1%	4.1%	30.2%		4.7%	73.4%	6.9%	5.2%	6.5%	-2.7%
2010-2015	3.5%	2.2%	2.5%	2.2%	0.0%	2.4%	2.4%	1.8%	108.5%	2.7%	2.7%	2.7%	6.5%	3.2%	-0.8%
2015-2020	0.6%	2.0%	2.2%	1.8%	0.0%	1.0%	1.0%	0.9%	16.6%	1.3%	1.3%	1.3%	6.5%	1.3%	0.0%
2020-2029	0.5%	1.7%	1.9%	1.7%	0.0%	0.9%	0.9%	0.8%	4.9%	1.1%	1.1%	1.1%	6.5%	1.1%	0.0%
2008-2029	1.6%	2.1%	2.2%	2.5%	0.0%	1.6%	1.6%	3.6%		1.8%	6.9%	2.1%	6.5%	2.5%	-0.5%

Table 11
City and Borough of Sitka
2008 Electric Load Forecast

Assumed Residential Electric Heat Customers and Net Use per Customer

MEDIUM SCENARIO

	Total Res Customers	Estimated Existing Heat Customers	New Heat Customers	% Res Heat Customers	Annual kWh/Cust		Estimated Annual Load (MWh)			Total Est. Annual KWh/Cust
					Heat	Non-Heat	Heat	Non-Heat	Total	
2007	3,621	1,250	-	35%	12,000	8,400	15,000	30,416	45,416	12,543
2008	3,645	1,250	90	34%	12,000	8,400	16,080	30,618	46,698	12,812
2009	3,669	1,340	150	37%	12,000	8,400	17,880	30,820	48,700	13,273
2010	3,692	1,490	150	40%	12,000	8,400	19,680	31,013	50,693	13,730
2011	3,713	1,640	150	44%	12,000	8,400	21,480	31,189	52,669	14,185
2012	3,733	1,790	50	48%	12,000	8,400	22,080	31,357	53,437	14,315
2013	3,752	1,840	50	49%	12,000	8,400	22,680	31,517	54,197	14,445
2014	3,770	1,890	18	50%	12,000	8,400	22,896	31,668	54,564	14,473
2015	3,787	1,908	17	50%	12,000	8,400	23,100	31,811	54,911	14,500
2016	3,803	1,925	16	51%	12,000	8,400	23,292	31,945	55,237	14,525
2017	3,818	1,941	15	51%	12,000	8,400	23,472	32,071	55,543	14,548
2018	3,832	1,956	14	51%	12,000	8,400	23,640	32,189	55,829	14,569
2019	3,845	1,970	13	51%	12,000	8,400	23,796	32,298	56,094	14,589
2020	3,857	1,983	12	51%	12,000	8,400	23,940	32,399	56,339	14,607
2021	3,868	1,995	11	52%	12,000	8,400	24,072	32,491	56,563	14,623
2022	3,878	2,006	10	52%	12,000	8,400	24,192	32,575	56,767	14,638
2023	3,887	2,016	9	52%	12,000	8,400	24,300	32,651	56,951	14,652
2024	3,895	2,025	8	52%	12,000	8,400	24,396	32,718	57,114	14,663
2025	3,902	2,033	7	52%	12,000	8,400	24,480	32,777	57,257	14,674
2026	3,909	2,040	7	52%	12,000	8,400	24,564	32,836	57,400	14,684
2027	3,915	2,047	6	52%	12,000	8,400	24,636	32,886	57,522	14,693
2028	3,921	2,053	6	52%	12,000	8,400	24,708	32,936	57,644	14,701
Average Annual Increase										
2007-2010					700					3.1%
2010-2015										1.1%
2015-2020										0.1%
2020-2028										0.1%

Table 11
City and Borough of Sitka
2008 Electric Load Forecast

Assumed Residential Electric Heat Customers and Net Use per Customer

HIGH SCENARIO

	Total Res Customers	Estimated Existing Heat Customers	New Heat Customers	% Res Heat Customers	Annual kWh/Cust		Estimated Annual Load (MWh)			Total Est. Annual KWh/Cust
					Heat	Non-Heat	Heat	Non-Heat	Total	
2007	3,621	1,250	-	35%	12,000	8,400	15,000	30,416	45,416	12,543
2008	3,645	1,250	90	34%	12,000	8,400	16,080	30,618	46,698	12,812
2009	3,669	1,340	200	37%	12,000	8,400	18,480	30,820	49,300	13,437
2010	3,692	1,540	200	42%	12,000	8,400	20,880	31,013	51,893	14,055
2011	3,713	1,740	200	47%	12,000	8,400	23,280	31,189	54,469	14,670
2012	3,733	1,940	200	52%	12,000	8,400	25,680	31,357	57,037	15,279
2013	3,752	2,140	200	57%	12,000	8,400	28,080	31,517	59,597	15,884
2014	3,770	2,340	100	62%	12,000	8,400	29,280	31,668	60,948	16,167
2015	3,787	2,440	17	64%	12,000	8,400	29,484	31,811	61,295	16,186
2016	3,803	2,457	16	65%	12,000	8,400	29,676	31,945	61,621	16,203
2017	3,818	2,473	15	65%	12,000	8,400	29,856	32,071	61,927	16,220
2018	3,832	2,488	14	65%	12,000	8,400	30,024	32,189	62,213	16,235
2019	3,845	2,502	13	65%	12,000	8,400	30,180	32,298	62,478	16,249
2020	3,857	2,515	12	65%	12,000	8,400	30,324	32,399	62,723	16,262
2021	3,868	2,527	11	65%	12,000	8,400	30,456	32,491	62,947	16,274
2022	3,878	2,538	10	65%	12,000	8,400	30,576	32,575	63,151	16,284
2023	3,887	2,548	9	66%	12,000	8,400	30,684	32,651	63,335	16,294
2024	3,895	2,557	8	66%	12,000	8,400	30,780	32,718	63,498	16,302
2025	3,902	2,565	7	66%	12,000	8,400	30,864	32,777	63,641	16,310
2026	3,909	2,572	7	66%	12,000	8,400	30,948	32,836	63,784	16,317
2027	3,915	2,579	6	66%	12,000	8,400	31,020	32,886	63,906	16,323
2028	3,921	2,585	6	66%	12,000	8,400	31,092	32,936	64,028	16,330

Average Annual Increase

2007-2010	3.9%
2010-2015	2.9%
2015-2025	0.1%
2020-2028	0.1%

Table 11
City and Borough of Sitka
2008 Electric Load Forecast

Assumed Residential Electric Heat Customers and Net Use per Customer

LOW SCENARIO

	Total Res Customers	Estimated Existing Heat Customers	New Heat Customers	% Res Heat Customers	Annual kWh/Cust		Estimated Annual Load (MWh)			Total Est. Annual KWh/Cust
					Heat	Non-Heat	Heat	Non-Heat	Total	
2007	3,621	1,250	-	35%	12,000	8,400	15,000	30,416	45,416	12,543
2008	3,645	1,250	90	34%	12,000	8,400	16,080	30,618	46,698	12,812
2009	3,669	1,340	50	37%	12,000	8,400	16,680	30,820	47,500	12,946
2010	3,692	1,390	50	38%	12,000	8,400	17,280	31,013	48,293	13,080
2011	3,713	1,440	50	39%	12,000	8,400	17,880	31,189	49,069	13,216
2012	3,733	1,490	50	40%	12,000	8,400	18,480	31,357	49,837	13,350
2013	3,752	1,540	50	41%	12,000	8,400	19,080	31,517	50,597	13,485
2014	3,770	1,590	50	42%	12,000	8,400	19,680	31,668	51,348	13,620
2015	3,787	1,640	50	43%	12,000	8,400	20,280	31,811	52,091	13,755
2016	3,803	1,690	16	44%	12,000	8,400	20,472	31,945	52,417	13,783
2017	3,818	1,706	15	45%	12,000	8,400	20,652	32,071	52,723	13,809
2018	3,832	1,721	14	45%	12,000	8,400	20,820	32,189	53,009	13,833
2019	3,845	1,735	13	45%	12,000	8,400	20,976	32,298	53,274	13,855
2020	3,857	1,748	12	45%	12,000	8,400	21,120	32,399	53,519	13,876
2021	3,868	1,760	11	46%	12,000	8,400	21,252	32,491	53,743	13,894
2022	3,878	1,771	10	46%	12,000	8,400	21,372	32,575	53,947	13,911
2023	3,887	1,781	9	46%	12,000	8,400	21,480	32,651	54,131	13,926
2024	3,895	1,790	8	46%	12,000	8,400	21,576	32,718	54,294	13,939
2025	3,902	1,798	7	46%	12,000	8,400	21,660	32,777	54,437	13,951
2026	3,909	1,805	7	46%	12,000	8,400	21,744	32,836	54,580	13,963
2027	3,915	1,812	6	46%	12,000	8,400	21,816	32,886	54,702	13,972
2028	3,921	1,818	6	46%	12,000	8,400	21,888	32,936	54,824	13,982

Average Annual Increase

2007-2010	1.4%
2010-2015	1.0%
2015-2025	0.2%
2020-2028	0.1%

Table 12
City and Borough of Sitka
2008 Electric Load Forecast

Estimated Interruptible Energy Sales

Fiscal Year	Projected Interruptible Base Load (kWh)			Hydroelectric Generation Capability (kWh)			Potential Interruptible Sales - Average Water			Potential Interruptible Sales - High Water		
	Muni. Heat	Industrial	Total	Low Water	Average	High Water	Medium Retail Loads	High Retail Loads	Low Retail Loads	Medium Retail Loads	High Retail Loads	Low Retail Loads
2007	-	-	-	85,000,000	124,000,000	135,000,000	-	-	-	-	-	-
2008	-	4,380,000	4,380,000	85,000,000	124,000,000	135,000,000	4,380,000	1,867,500	4,380,000	4,380,000	4,380,000	4,380,000
2009	-	4,380,000	4,380,000	85,000,000	124,000,000	135,000,000	1,267,700	-	4,380,000	4,380,000	4,380,000	4,380,000
2010	-	10,950,000	10,950,000	85,000,000	124,000,000	135,000,000	-	-	8,491,300	10,334,700	3,909,200	10,950,000
2011	-	10,950,000	10,950,000	85,000,000	124,000,000	135,000,000	-	-	7,249,800	8,640,500	804,600	10,950,000
2012	-	10,950,000	10,950,000	85,000,000	124,000,000	135,000,000	-	-	6,704,500	6,946,000	-	10,950,000
2013	-	37,230,000	37,230,000	85,000,000	124,000,000	135,000,000	-	-	5,639,900	5,286,200	-	16,639,900
2014	-	37,230,000	37,230,000	85,000,000	124,000,000	135,000,000	-	-	4,469,400	3,588,100	-	15,469,400
2015	-	37,230,000	37,230,000	85,000,000	140,000,000	160,000,000	7,575,000	-	19,890,300	27,575,000	14,608,300	37,230,000
2016	-	52,560,000	52,560,000	85,000,000	140,000,000	160,000,000	6,457,200	-	19,329,200	26,457,200	13,049,300	39,329,200
2017	-	52,560,000	52,560,000	85,000,000	159,000,000	175,000,000	24,502,200	10,476,400	37,781,700	40,502,200	26,476,400	52,560,000
2018	-	52,560,000	52,560,000	85,000,000	159,000,000	175,000,000	23,555,600	8,930,000	37,935,400	39,555,600	24,930,000	52,560,000
2019	-	52,560,000	52,560,000	85,000,000	159,000,000	175,000,000	22,620,200	7,507,800	37,449,200	38,620,200	23,507,800	52,560,000
2020	-	52,560,000	52,560,000	85,000,000	159,000,000	175,000,000	21,734,200	5,980,800	37,021,100	37,734,200	21,980,800	52,560,000
2021	-	52,560,000	52,560,000	85,000,000	265,000,000	281,000,000	52,560,000	52,560,000	52,560,000	52,560,000	52,560,000	52,560,000
2022	-	52,560,000	52,560,000	85,000,000	265,000,000	281,000,000	52,560,000	52,560,000	52,560,000	52,560,000	52,560,000	52,560,000
2023	-	52,560,000	52,560,000	85,000,000	265,000,000	281,000,000	52,560,000	52,560,000	52,560,000	52,560,000	52,560,000	52,560,000
2024	-	52,560,000	52,560,000	85,000,000	265,000,000	281,000,000	52,560,000	52,560,000	52,560,000	52,560,000	52,560,000	52,560,000
2025	-	52,560,000	52,560,000	85,000,000	265,000,000	281,000,000	52,560,000	52,560,000	52,560,000	52,560,000	52,560,000	52,560,000
2026	-	52,560,000	52,560,000	85,000,000	265,000,000	281,000,000	52,560,000	52,560,000	52,560,000	52,560,000	52,560,000	52,560,000
2027	-	52,560,000	52,560,000	85,000,000	265,000,000	281,000,000	52,560,000	52,560,000	52,560,000	52,560,000	52,560,000	52,560,000
2028	-	52,560,000	52,560,000	85,000,000	265,000,000	281,000,000	52,560,000	52,560,000	52,560,000	52,560,000	52,560,000	52,560,000

Compound Annual Growth Rates (Unless Marked Average):		
2008-2010	58.1%	58.1%
2010-2015	27.7%	27.7%
2015-2020	7.1%	7.1%
2020-2028	0.0%	0.0%

Table 12A
City and Borough of Sitka
2008 Electric Load Forecast

Assumed New Interruptible Loads

Sequence	**Building / Facility**	**kW**	**Load factor**	**Annual kWh**	**Estimated On-Line**
1	Blatchley Middle School / Pool	1,000	50%	4,380,000	2007
2	Sitka High School	1,500	50%	6,570,000	2009
3	Future K School	500	50%	2,190,000	2012
4	Baranof School	500	50%	2,190,000	2012
5	Search Hospital	1,500	50%	6,570,000	2012
6	Sitka Hospital	1,500	50%	6,570,000	2012
7	Mt. Edgecumbe	2,000	50%	8,760,000	2012
8	Pioneer Home	1,500	50%	6,570,000	2015
9	Coast Guard	1,000	50%	4,380,000	2015
10	Other Public Buildings	1,000	50%	4,380,000	2015

Table 13
City and Borough of Sitka
2008 Electric Load Forecast

Estimated Electric Vehicle Loads

	Estimated Number of Passenger Cars	Percent Electric Cars	Estimated Number of Electric Cars	Annual Miles per Electric Car	Average Electricity Consumption (miles/kWh)	Annual Vehicle Space Heat (kWh/car)	Total Annual Electric Car Load (kWh)
2008	4,860	0.0%	-	4,380	5.00	1,095	-
2009	4,878	0.5%	24	4,380	5.00	1,095	47,304
2010	4,896	2.0%	98	4,380	5.00	1,095	193,158
2011	4,894	5.0%	245	4,380	5.00	1,095	482,895
2012	4,892	10.0%	489	4,380	5.00	1,095	963,819
2013	4,890	15.0%	734	4,380	5.50	1,095	1,388,261
2014	4,888	20.0%	978	4,380	5.50	1,095	1,849,754
2015	4,886	25.0%	1,222	4,380	5.50	1,095	2,311,246
2016	4,877	30.0%	1,463	4,380	5.50	1,095	2,767,065
2017	4,868	35.0%	1,704	4,380	5.50	1,095	3,222,884
2018	4,859	40.0%	1,944	4,380	6.00	1,095	3,547,800
2019	4,850	45.0%	2,183	4,380	6.00	1,095	3,983,975
2020	4,841	50.0%	2,421	4,380	6.00	1,095	4,418,325
2021	4,828	55.0%	2,655	4,380	6.00	1,095	4,845,375
2022	4,815	60.0%	2,889	4,380	6.00	1,095	5,272,425
2023	4,802	65.0%	3,121	4,380	6.50	1,095	5,520,569
2024	4,789	70.0%	3,352	4,380	6.50	1,095	5,929,172
2025	4,776	75.0%	3,582	4,380	6.50	1,095	6,336,007
2026	4,767	75.0%	3,575	4,380	6.50	1,095	6,323,625
2027	4,758	75.0%	3,569	4,380	6.50	1,095	6,313,012
2028	4,749	75.0%	3,562	4,380	7.00	1,095	6,129,184

Average Vehicle Daily Use (miles)	12
Vehicle Heater (Watts)	1,500
Average daily heating hours	2

Table 14
City and Borough of Sitka
2008 Electric Load Forecast

Projected Large Customer Loads
(kWh)

Medium and High Growth Scenarios

	Sitka Sound Seafood	Seafood Producer's Coop	SEARHC Hospital	Sitka Community Hospital	City of Sitka Cold Storage	Seamart Grocery	Lakeside Grocery	Silver Bay Seafoods	US Coast Guard	Blatchley	High School	Auditorium	Total
2008 (Act.)	3,633,000	2,574,000	2,150,280	1,231,500	1,126,080	1,892,400	1,587,400	2,341,440	1,727,200	1,124,400	881,760	360,000	20,629,460
2009	3,633,000	2,574,000	2,150,280	1,231,500	1,126,080	1,892,400	1,587,400	2,341,440	1,727,200	1,124,400	881,760	360,000	20,629,460
2010	3,633,000	2,574,000	2,150,280	1,231,500	1,126,080	1,892,400	1,587,400	2,341,440	1,727,200	1,124,400	881,760	360,000	20,629,460
2011	3,633,000	2,574,000	2,150,280	1,231,500	1,126,080	1,892,400	1,587,400	2,341,440	1,727,200	1,124,400	881,760	360,000	20,629,460
2012	3,633,000	2,574,000	2,150,280	1,231,500	1,126,080	1,892,400	1,587,400	2,341,440	1,727,200	1,124,400	881,760	360,000	20,629,460
2013	3,633,000	2,574,000	2,150,280	1,231,500	1,126,080	1,892,400	1,587,400	2,341,440	1,727,200	1,124,400	881,760	360,000	20,629,460
2014	3,633,000	2,574,000	2,150,280	1,231,500	1,126,080	1,892,400	1,587,400	2,341,440	1,727,200	1,124,400	881,760	360,000	20,629,460
2015	3,633,000	2,574,000	2,150,280	1,231,500	1,126,080	1,892,400	1,587,400	2,341,440	1,727,200	1,124,400	881,760	360,000	20,629,460
2016	3,633,000	2,574,000	2,150,280	1,231,500	1,126,080	1,892,400	1,587,400	2,341,440	1,727,200	1,124,400	881,760	360,000	20,629,460
2017	3,633,000	2,574,000	2,150,280	1,231,500	1,126,080	1,892,400	1,587,400	2,341,440	1,727,200	1,124,400	881,760	360,000	20,629,460
2018	3,633,000	2,574,000	2,150,280	1,231,500	1,126,080	1,892,400	1,587,400	2,341,440	1,727,200	1,124,400	881,760	360,000	20,629,460
2019	3,633,000	2,574,000	2,150,280	1,231,500	1,126,080	1,892,400	1,587,400	2,341,440	1,727,200	1,124,400	881,760	360,000	20,629,460
2020	3,633,000	2,574,000	2,150,280	1,231,500	1,126,080	1,892,400	1,587,400	2,341,440	1,727,200	1,124,400	881,760	360,000	20,629,460
2021	3,633,000	2,574,000	2,150,280	1,231,500	1,126,080	1,892,400	1,587,400	2,341,440	1,727,200	1,124,400	881,760	360,000	20,629,460
2022	3,633,000	2,574,000	2,150,280	1,231,500	1,126,080	1,892,400	1,587,400	2,341,440	1,727,200	1,124,400	881,760	360,000	20,629,460
2023	3,633,000	2,574,000	2,150,280	1,231,500	1,126,080	1,892,400	1,587,400	2,341,440	1,727,200	1,124,400	881,760	360,000	20,629,460
2024	3,633,000	2,574,000	2,150,280	1,231,500	1,126,080	1,892,400	1,587,400	2,341,440	1,727,200	1,124,400	881,760	360,000	20,629,460
2025	3,633,000	2,574,000	2,150,280	1,231,500	1,126,080	1,892,400	1,587,400	2,341,440	1,727,200	1,124,400	881,760	360,000	20,629,460
2026	3,633,000	2,574,000	2,150,280	1,231,500	1,126,080	1,892,400	1,587,400	2,341,440	1,727,200	1,124,400	881,760	360,000	20,629,460
2027	3,633,000	2,574,000	2,150,280	1,231,500	1,126,080	1,892,400	1,587,400	2,341,440	1,727,200	1,124,400	881,760	360,000	20,629,460
2028	3,633,000	2,574,000	2,150,280	1,231,500	1,126,080	1,892,400	1,587,400	2,341,440	1,727,200	1,124,400	881,760	360,000	20,629,460
2029	3,633,000	2,574,000	2,150,280	1,231,500	1,126,080	1,892,400	1,587,400	2,341,440	1,727,200	1,124,400	881,760	360,000	20,629,460

Table 14
City and Borough of Sitka
2008 Electric Load Forecast

Projected Large Customer Loads
(kWh)

Low Growth Scenario

	Sitka Sound Seafood	Seafood Producer's Coop	SEARHC Hospital	Sitka Community Hospital	City of Sitka Cold Storage	Seamart Grocery	Lakeside Grocery	Silver Bay Seafoods	US Coast Guard	Blatchley	High School	Auditorium	Total
2008 (Act.)	3,269,700	2,316,600	2,150,280	1,231,500	1,126,080	1,892,400	1,587,400	2,107,296	1,727,200	1,124,400	881,760	360,000	19,774,616
2009	3,269,700	2,316,600	2,150,280	1,231,500	1,126,080	1,892,400	1,587,400	2,107,296	1,727,200	1,124,400	881,760	360,000	19,774,616
2010	3,269,700	2,316,600	2,128,777	1,231,500	1,126,080	1,892,400	1,587,400	2,107,296	1,727,200	1,124,400	881,760	360,000	19,753,113
2011	3,269,700	2,316,600	2,107,489	1,231,500	1,126,080	1,892,400	1,587,400	2,107,296	1,727,200	1,124,400	881,760	360,000	19,731,825
2012	3,269,700	2,316,600	2,086,415	1,231,500	1,126,080	1,892,400	1,587,400	2,107,296	1,727,200	1,124,400	881,760	360,000	19,710,751
2013	2,906,400	2,059,200	2,065,550	1,231,500	1,126,080	1,892,400	1,587,400	1,873,152	1,727,200	1,124,400	881,760	360,000	18,835,042
2014	2,906,400	2,059,200	2,044,895	1,231,500	1,126,080	1,892,400	1,587,400	1,873,152	1,727,200	1,124,400	881,760	360,000	18,814,387
2015	2,906,400	2,059,200	2,024,446	1,231,500	1,126,080	1,892,400	1,587,400	1,873,152	1,727,200	1,124,400	881,760	360,000	18,793,938
2016	2,906,400	2,059,200	2,004,201	1,231,500	1,126,080	1,892,400	1,587,400	1,873,152	1,727,200	1,124,400	881,760	360,000	18,773,693
2017	2,906,400	2,059,200	1,984,159	1,231,500	1,126,080	1,892,400	1,587,400	1,873,152	1,727,200	1,124,400	881,760	360,000	18,753,651
2018	2,906,400	2,059,200	1,964,318	1,231,500	1,126,080	1,892,400	1,587,400	1,873,152	1,727,200	1,124,400	881,760	360,000	18,733,810
2019	2,543,100	1,801,800	1,944,675	1,231,500	1,126,080	1,892,400	1,587,400	1,639,008	1,727,200	1,124,400	881,760	360,000	17,859,323
2020	2,543,100	1,801,800	1,925,228	1,231,500	1,126,080	1,892,400	1,587,400	1,639,008	1,727,200	1,124,400	881,760	360,000	17,839,876
2021	2,543,100	1,801,800	1,905,976	1,231,500	1,126,080	1,892,400	1,587,400	1,639,008	1,727,200	1,124,400	881,760	360,000	17,820,624
2022	2,543,100	1,801,800	1,886,916	1,231,500	1,126,080	1,892,400	1,587,400	1,639,008	1,727,200	1,124,400	881,760	360,000	17,801,564
2023	2,543,100	1,801,800	1,868,047	1,231,500	1,126,080	1,892,400	1,587,400	1,639,008	1,727,200	1,124,400	881,760	360,000	17,782,695
2024	2,543,100	1,801,800	1,849,366	1,231,500	1,126,080	1,892,400	1,587,400	1,639,008	1,727,200	1,124,400	881,760	360,000	17,764,014
2025	2,543,100	1,801,800	1,830,873	1,231,500	1,126,080	1,892,400	1,587,400	1,639,008	1,727,200	1,124,400	881,760	360,000	17,745,521
2026	2,543,100	1,801,800	1,812,564	1,231,500	1,126,080	1,892,400	1,587,400	1,639,008	1,727,200	1,124,400	881,760	360,000	17,727,212
2027	2,543,100	1,801,800	1,794,438	1,231,500	1,126,080	1,892,400	1,587,400	1,639,008	1,727,200	1,124,400	881,760	360,000	17,709,086
2028	2,543,100	1,801,800	1,776,494	1,231,500	1,126,080	1,892,400	1,587,400	1,639,008	1,727,200	1,124,400	881,760	360,000	17,691,142
2029	2,543,100	1,801,800	1,758,729	1,231,500	1,126,080	1,892,400	1,587,400	1,639,008	1,727,200	1,124,400	881,760	360,000	17,673,377