

FORT PIERRE
MUNICIPAL UTILITIES

ELECTRIC RATE STUDY



NOVEMBER 2008

November 18, 2008

Fort Pierre City Council
8 East 2nd Avenue
Fort Pierre, SD 57532

Members of the Fort Pierre City Council:

Missouri River Energy Services (MRES) is pleased to submit this electric rate study report for Fort Pierre. This study had four principal objectives:

- To determine whether estimated total revenues will be sufficient to cover estimated revenue requirements and provide a reserve for replacements and contingencies
- To determine the cost to serve each customer class
- To design retail rates for the various classes
- To review the competitive position of Fort Pierre through utility rate comparisons

The proposed rates were designed to recover increasing operating costs and planned capital expenditures while building reserves above Fort Pierre's targeted minimum level. Section 5 of this report contains all of the recommendations, **but further adjustments to the rates may be necessary in future years if the system characteristics or financial needs of the utility change drastically.**

MRES appreciated the opportunity to prepare this study for Fort Pierre Municipal Utilities and would like to thank your staff for its valuable assistance.

Respectfully submitted,

Missouri River Energy Services

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ELECTRIC RATE STUDY
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This rate study was completed in accordance with the agreed upon terms as set forth in the Proposal Letter and Exhibit A, Scope of Services between Missouri River Energy Services and its member, Fort Pierre. In completing this study, Missouri River Energy Services has relied on the data and materials provided by Fort Pierre and others to be accurate, and has not independently verified their accuracy. The analysis, conclusions, and recommendations contained in this report constitute the opinions of Missouri River Energy Services based on the data and materials provided. Final responsibility for the implementation of the recommendations in this report rests with the staff and governing board of Fort Pierre.

EXECUTIVE SUMMARY

Missouri River Energy Services (MRES) has analyzed the revenue requirements, costs of service, and current electric rates of Fort Pierre for the purpose of assisting staff in proposing new rates. The primary reasons for the study were the need to evaluate the adequacy of projected revenues and reserves and the need to determine if each class is paying an appropriate share of the costs. Fort Pierre's electric rates were last adjusted in January 2008.

The system annual peak demand, total annual wholesale power billing demand, and energy requirements (MWh=1,000 kWh), as shown in the table below, are expected to increase in the long-term by an annual average of around 1.2% during the study period. A higher growth rate is expected in 2008 and 2009 in part due to new business loads. The projections are discussed in Section 1.

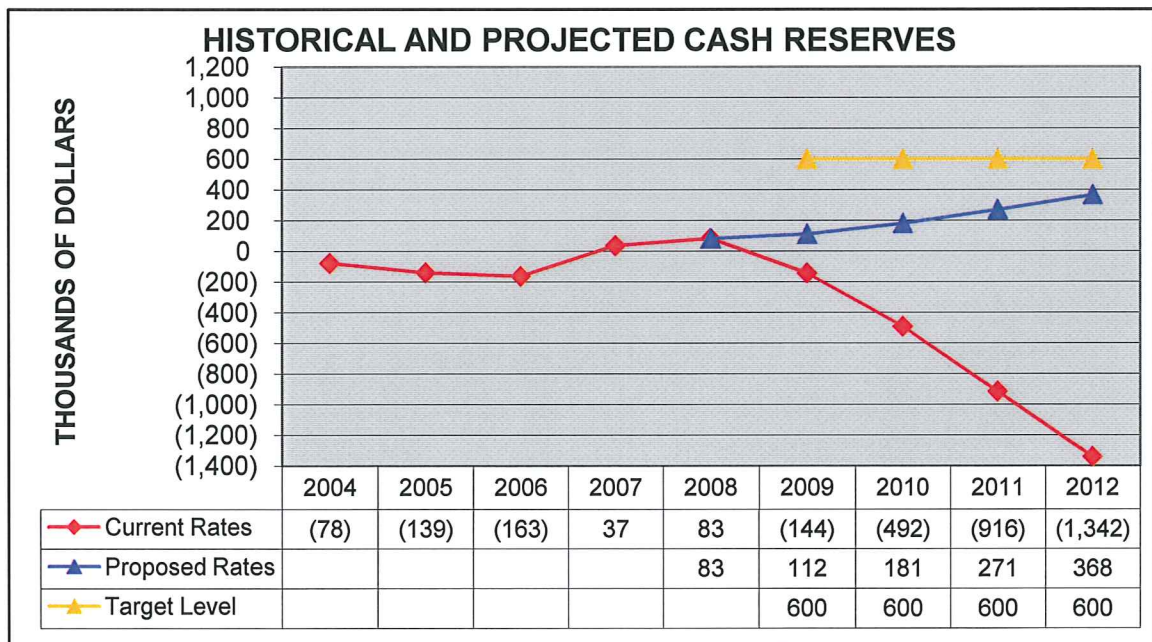
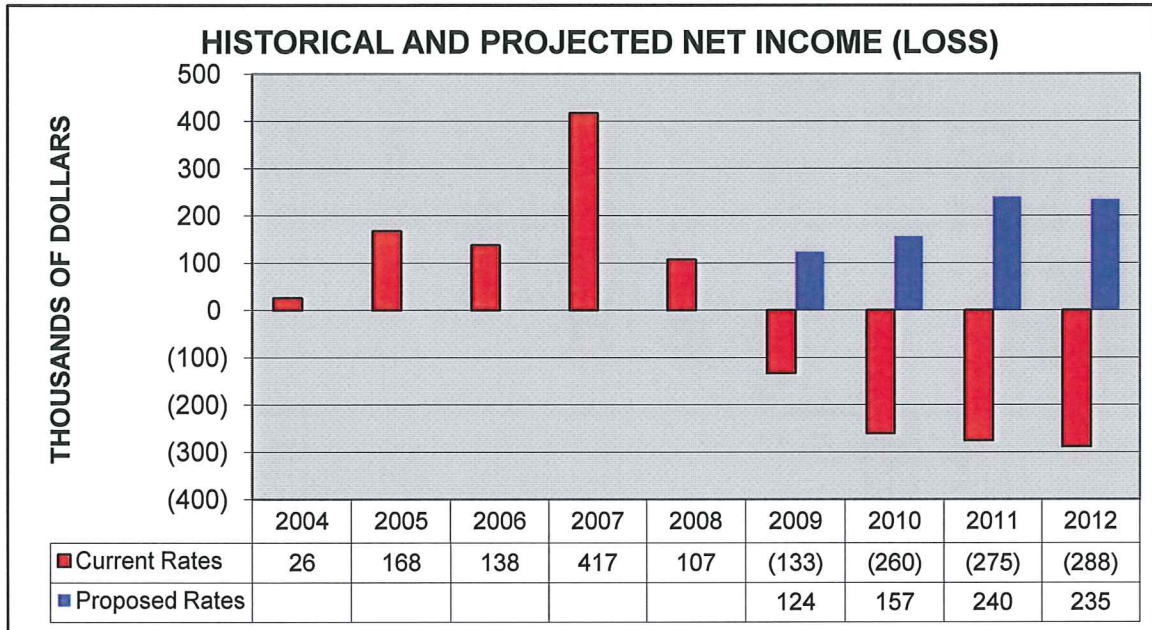
Historical and Forecasted Demand and Energy Requirements						
	Year	Peak Demand (kW)	Total Wholesale Billing Demand (kW)	% Change	Wholesale Energy (MWh)	% Change
Historical	2004	4,841	48,196		21,720	
	2005	5,342	51,000	5.8%	23,343	7.5%
	2006	5,558	51,803	1.6%	23,761	1.8%
	2007	5,754	55,529	7.2%	24,514	3.2%
Forecasted	2008	5,139	53,299	(4.0%)	25,013	2.0%
	2009	5,563	56,262	5.6%	25,558	2.2%
	2010	5,626	56,895	1.1%	25,846	1.1%
	2011	5,695	57,597	1.2%	26,165	1.2%
	2012	5,764	58,298	1.2%	26,483	1.2%

Based on the assumptions described in Section 2, MRES has projected the operating results and cash reserves as shown on the graphs on the next page. Cash reserves exclude funds restricted by bond covenants. The projections indicate rate increases are necessary to avoid cash deficits in 2009 and beyond. The projections under proposed rates assumed rate increases of 15% in 2009, 7% in 2010, and 4% in 2011.

Changing power supply costs will have an impact on operating results. The Western Area Power Administration (WAPA) has increased rates a total of over 70% from 2004 to 2008 due to prolonged drought conditions. WAPA has proposed an increase of 19.8% in 2009, and an additional increase of 9% has been assumed for 2010. In 2009 alone, Fort Pierre will pay approximately \$160,000 in drought-related costs, or 9.2% of metered sales revenue.

MRES has increased its rates by a total of 18.6% in 2007 and 2008. In addition, the MRES Board of Directors recently approved an increase of 18.4% for 2009. The study has also assumed an additional MRES increase of 9% in 2010. The table on the next page shows the estimated wholesale power expenses, which make up approximately 60% of the total operating expenses. The wholesale power cost assumptions are discussed in greater detail in Section 2.

Estimated Wholesale Power Expenses				
Year	WAPA	MRES	Total Expense	Percentage Increase
2008	\$342,405	\$581,759	\$924,164	11.5%
2009	\$409,852	\$744,342	\$1,154,194	24.9%
2010	\$446,459	\$833,212	\$1,279,671	10.9%
2011	\$441,848	\$862,201	\$1,304,049	1.9%
2012	\$442,559	\$881,722	\$1,324,281	1.6%

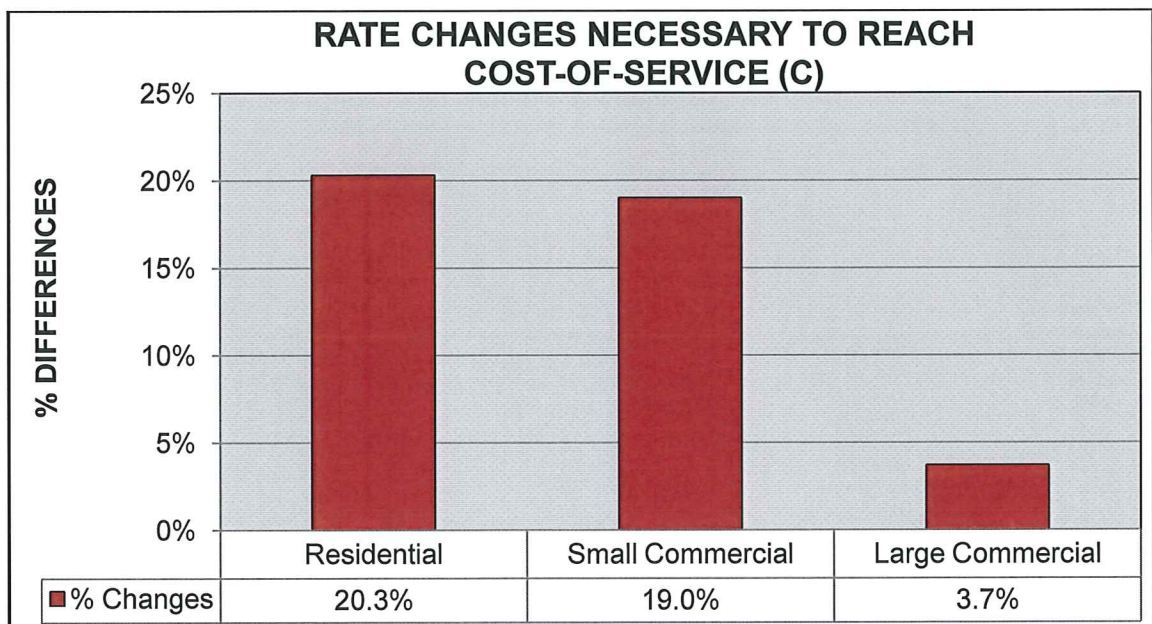


*Reserves exclude funds restricted by bond covenants

The cost-of-service study, discussed in Section 3, indicated that Large Commercial customers are paying more than the costs of providing service to them, while Residential and Small Commercial customers are paying less than the costs of service.

Percentage Comparison of Revenues and Allocated Costs				
Customer Classification	Percentage of Allocated Costs	Percentage of Revenues	Increase/ Decrease (A)	Including Overall Rate Increase (B)
Residential	54.6%	52.2%	4.7%	20.3%
Small Commercial	17.7%	17.1%	3.5%	19.0%
Large Commercial	27.7%	30.7%	-9.9%	3.7%
Total	100.0%	100.0%	0.0%	15.0%

- (A) The percentages in this column do not represent proposed rate increases or decreases but rather represent the results of the cost-of-service study in percentage terms based on the Test Year data.
- (B) This column represents the results of the cost-of-service study in percentage terms, and adding an overall 15% rate increase.



- (C) The changes represent the results of the cost-of-service study in percentage terms, and adding the overall 15% rate increase.

Proposed Rate Recommendations

Rate increases will be necessary over the next three years due to rising wholesale power and operations costs. A portion of the increases is also necessary to build cash reserves.

Implementing the proposed rates shown on the next page would result in a 15% overall increase in 2009. Based on current projections, additional increases of 7% in 2010 and 4% in 2011 will likely be necessary. The Appendix shows the proposed 2010 and 2011 rates, which may need to be changed during each year's budget process based on revenue requirements.

The recommendations include a proposed rate structure change in the Residential class. From June through September, Residential customers would pay a flat energy rate for all usage to reflect higher wholesale power costs during those months. Residential power usage patterns in the summer tend to increase average power costs for the utility. In the future, Fort Pierre may wish to consider seasonal rates for all customer classes. Meanwhile, in October through May, customers would be charged a lower rate for monthly energy over 750 kWhs, which is primarily electric heating usage for many customers.

The other proposed rate structure change is to implement a flat energy rate for all usage by Small Commercial customers. Currently, approximately 75% of usage is billed in the last energy rate block, which includes usage over 500 kWhs per month. This change would simplify the rate schedule and better reflect the costs of providing service.

As a result of the 2009 proposed rates, a Residential customer with usage of 1,000 kWhs per month would see an increase of \$15.40 per month from June through September, and \$12.15 per month from October through May. The average increase at 1,000 kWhs would be \$13.23 per month, or 18.2%. The rate proposals and customer impacts are discussed in greater detail in Section 5.

Other Observation

Prior to 2003, the City of Fort Pierre was charged a discounted rate for usage at various city facilities. In 2003, these meters were moved to the full commercial rates. Consistent with this change, MRES suggests that the electric utility begin billing the City of Fort Pierre for street lighting at a rate of \$0.08 per kWh. Currently, there is no charge, but most utilities bill for street lighting so that the utility receives revenue for all electric service that is provided. The rate would recover not only the cost of power but also the costs of providing and maintaining street lights and poles, along with a small portion of distribution system costs. The annual revenues would be approximately \$48,000 based on estimated street lighting energy of 600,000 kWhs. The utility could then either retain the additional revenues or transfer the amounts back to the City at the end of the year at the Council's discretion.

The rate study has assumed no additional net revenues from street lighting at this time. If this change is made in the future, the proposed rates could be reduced by approximately 2%, or these amounts could be used to build electric utility cash reserves.

Current and Proposed Rates				
Customer Class	Rate Components	Current Rates	2009 Proposed Rates	2009 Percent Change (A)
Overall Increase			15.0%	
Residential	Customer Charge	\$8.00	\$9.00	18.2%
	Energy Charge – per kWh			
	All Months			
	0-500 kWh	0.0599		
	Over 500 kWh	0.0517		
	June-September		0.070	
Small Commercial	Customer Charge			18.6%
	Single Phase	14.00	15.00	
	Three Phase	18.00	20.00	
	Energy Charge – per kWh			
	0-500 kWh	0.0635		
	Over 500 kWh	0.0568		
Large Commercial (Over 25 kW)	Customer Charge	25.00	28.00	7.5%
	Energy Charge	0.033	0.033	
	Demand Charge	9.8483	11.25	
Outside City Limits Surcharge	All kWh	0.0215	0.023	7.0%
Generation Surcharge	All kWh	0.0088	0.009	N/A
Security Lights	Monthly Charge	10.00	10.00	0.0%
Street Lights	Energy Charge – All kWh	No Charge	0.080	N/A

(A) Percentage changes include generation surcharge revenues under current and proposed rates.

Targeted Minimum Reserve Level

Maintaining adequate reserve levels is always important, and especially in the electric utility industry since it is very capital intensive. In a study of 64 area municipal utility financial statements, MRES found that the median level of cash as a percentage of operating revenues was 55% for these utilities. Since the electric utility had a cash deficit at the end of three of the past four years, Fort Pierre had the lowest cash reserves among those 64 utilities.

MRES recommends a targeted minimum reserve level of \$600,000, which would be about 24% of 2012 operating revenues under proposed rates. This total excludes restricted bond reserves.

Targeted Minimum Reserve Level (continued)

Maintaining at least this reserve level would provide for unanticipated expenses or contingencies that may arise. MRES recommends reserves for the following purposes:

- Capital improvements and equipment replacement fund would include a minimum of \$150,000, which is equal to two years of average cash outlay.
- Operations fund would include \$350,000, or two months of operating expenses. This fund would include the cash needed for daily operating costs, including paying the wholesale power bills and payroll.
- Contingencies and emergencies fund would include \$100,000 to cover unexpected expenses or lost revenues due to storm damage; bankruptcy or closing of a large customer; substation failure; or other catastrophes. This fund would also pay any expenses until insurance reimbursement or government aid occurs.

SECTION 1 – RATE STUDY INTRODUCTION AND POWER REQUIREMENTS

INTRODUCTION

Fort Pierre Municipal Utilities, under the direction of the City Council, provides electric service to about 1,400 meters.

Missouri River Energy Services (MRES) was engaged to perform a review of Fort Pierre’s rates, including an analysis of revenues and revenue requirements for the study period of 2008 to 2012, the allocation of costs to serve each customer class based on a Test Year, and the design of retail rates. The Fort Pierre study was prompted, in part, by the need to evaluate the adequacy of revenues due to rising wholesale power costs. Lastly, the study was to determine if each class is paying an appropriate share of the costs.

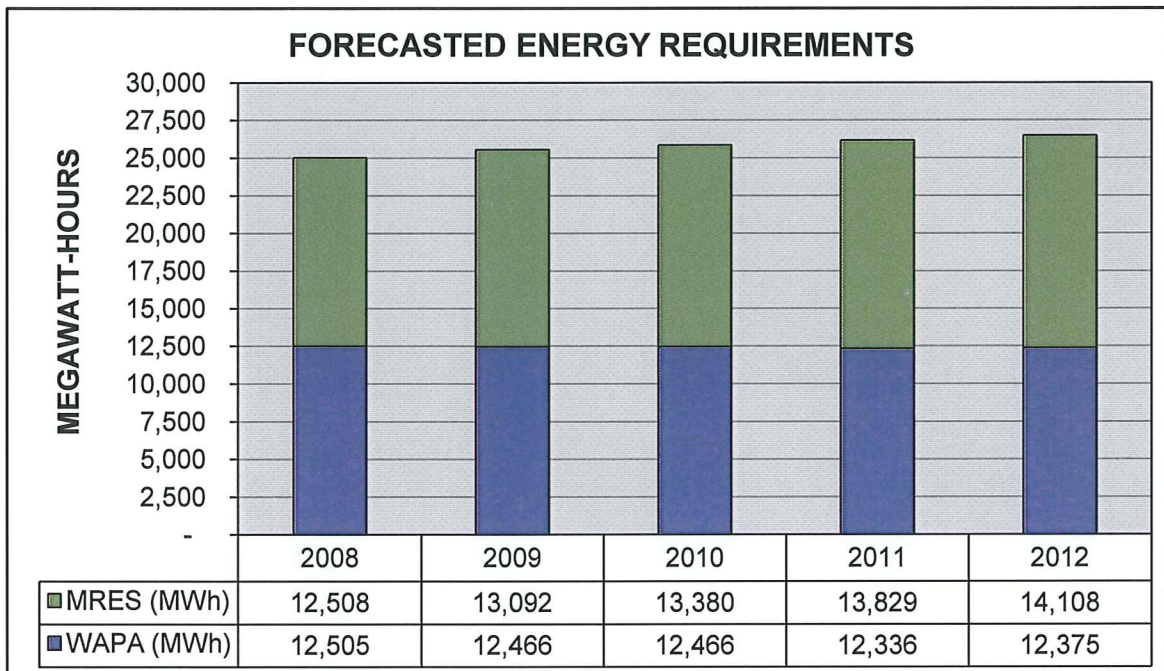
WHOLESALE DEMAND AND ENERGY REQUIREMENTS

Fort Pierre Municipal Utilities receives a fixed monthly power allocation from the Western Area Power Administration (WAPA), which operates several hydroelectric plants on the Missouri River. Fort Pierre receives all requirements above the WAPA allocation from MRES.

The following table shows the total annual wholesale power billing demand and energy requirements (MWh=1,000 kWh) for Fort Pierre from 2004 to 2012. Demand and energy is measured at the city gate. The system annual peak typically occurs in July or August. Energy requirements have grown by an average of 4.2% per year from 2004 through 2007 as a result of strong growth in all three customer classes. The percentage increases are expected to drop to around 1.2% for 2010 through 2012, although the periodic addition of Large Commercial customers could increase these percentages.

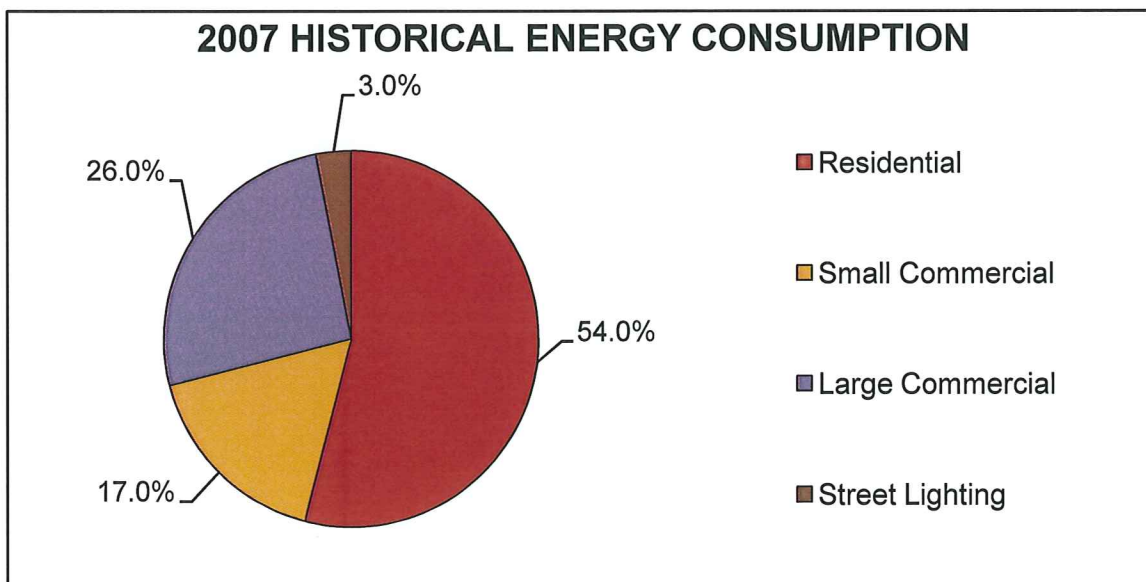
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	2006	5,558 (July)	51,803	1.6%	23,761	1.8%
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	2011	5,695	57,597	1.2%	26,165	1.2%
	2012	5,764	58,298	1.2%	26,483	1.2%

During the last four years, Fort Pierre has purchased between 42% and 49% of its energy requirements from MRES. That percentage is forecasted to increase to 53% by 2012 due to load growth and the anticipated loss of up to 1% of the WAPA energy (and demand) allocation on January 1, 2011. The chart below shows the forecasted energy requirements broken down between WAPA and MRES.



HISTORICAL ENERGY CONSUMPTION BY CLASS

The Fort Pierre historical energy consumption by class for 2007 is shown in the pie chart below. The breakdown of MWhs consumed shows the Residential class used 54% of the total energy used, or about 986 kWhs per month per customer. The average consumption by Residential customers in other MRES member communities is approximately 42%.



PROJECTED CUSTOMER CLASS AND ENERGY GROWTH

Based on discussions with staff, Fort Pierre anticipates the following additional customers per year between 2008 and 2012:

- Residential – 15
- Small Commercial – 2
- Large Commercial – 1

Energy consumption in most classes is expected to remain stable or increase up to 1.5% per year. Higher Large Commercial growth of 6% per year is expected in 2008 and 2009 due to the addition of two new customers.