

Final Report

2008 COMPREHENSIVE ENGINEERING REPORT

LAFAYETTE CONSOLIDATED
GOVERNMENT, LOUISIANA
LAFAYETTE UTILITIES SYSTEM

Year Ended October 31, 2008

August 24, 2009



An SAIC Company



August 24, 2009

Mr. Terry Huval
Director of Utilities
Lafayette Utilities System
1314 Walker Road
Lafayette, LA 70502

Subject: **2008 Comprehensive Engineering Report - FINAL**

Dear Terry:

Enclosed please find 15 copies of R. W. Beck's final 2008 Comprehensive Engineering Report. This Report is based on field reviews and interviews conducted during the week of March 2, 2009.

It was a pleasure working with you and your staff on this project. If you have any questions, please feel free to contact me directly at (303) 299-5342.

Sincerely,

R. W. BECK, INC.

A handwritten signature in black ink, appearing to read "Scott H. Burnham".

Scott H. Burnham
Project Manager

SHB/jh

Enclosure

cc. Kerney Simoneaux, LCG
Jill A. Sangster, R. W. Beck, Inc.

LAFAYETTE UTILITIES SYSTEM 2008 COMPREHENSIVE ENGINEERING REPORT

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This report has been prepared for the use of the client for the specific purposes identified in the report. The conclusions, observations and recommendations contained herein attributed to R. W. Beck, Inc. (R. W. Beck) constitute the opinions of R. W. Beck. To the extent that statements, information and opinions provided by the client or others have been used in the preparation of this report, R. W. Beck has relied upon the same to be accurate, and for which no assurances are intended and no representations or warranties are made. R. W. Beck makes no certification and gives no assurances except as explicitly set forth in this report.

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Section 1

EXECUTIVE SUMMARY



An SAIC Company

Section 1

EXECUTIVE SUMMARY

The City of Lafayette (the City) operates with Lafayette Parish Government (the Parish) as a consolidated government known as the Lafayette City-Parish Consolidated Government (referred to as Lafayette Consolidated Government or LCG). The Lafayette City-Parish Council (the Council) and Lafayette Public Utilities Authority (LPUA) are the governing authorities of the Lafayette Utilities System (LUS). The City issued the Utilities Revenue Bonds, Series 2004 and the Communications System Revenue Bonds, Series 2007. As required by the bond ordinances in each of these offerings, this 2008 Comprehensive Engineering Report (Report) has been prepared in accordance with the bond covenants of the General Bond Ordinance dated June 29, 2004 (the 2004 Bond Ordinance), and General Bond Ordinance dated June 12, 2007 (the 2007 Bond Ordinance) (collectively the Bond Ordinances). This Report covers the fiscal year 2008 (November 1, 2007 to October 31, 2008) period (the Report Period). Unless otherwise stated, financial data and operational data were reported on a fiscal year basis.

This Report has been prepared by R. W. Beck, Inc. (the Consulting Engineer) and is intended to meet the requirements of the 2004 Bond Ordinance and 2007 Bond Ordinance as indicated above. This Report is presented in nine sections. Section 1 provides an Executive Summary of the Consulting Engineer's opinions regarding achievement of the covenants described in the bond ordinances mentioned above, as well as a summary of our recommendations as a result of the review of the Utilities and Communications Systems. Section 2 provides a description of the governing authority for LUS, the Utilities Revenue Bonds, Series 2004 and the Communication System Revenue Bonds, Series 2007, respectively, and other high level information regarding LUS, LCG and the City. Section 3 provides a description of the organization and management of LUS and LCG, and includes a discussion of insurance requirements and salary of employees. Section 4 provides detailed information regarding the financial data for the Utilities and Communication Systems. Section 5, 6 and 7 provide a discussion of the Electric, Water and Wastewater Utility operations, respectively. Section 8 provides a discussion of the Communications System operations. Section 9 provides a discussion of environmental issues that impact the Utilities and Communication systems.

The preparation of an annual engineering report is required pursuant to provisions of the Bond Ordinances as described above. The provisions of the Bond Ordinances are not intended to provide information to prospective investors concerning LUS securities; such provisions are intended to provide engineering and management information to LUS, LCG, and Bondholders. Copies of this Report have been placed on file with the Bond Fund Trustee, LUS and others.

This Report summarizes the results of our studies and analyses, and those of others included herein, as of the dates of those studies or statements. Changed conditions occurring after such dates may not be reflected in this Report. Any such changed

conditions could affect the material presented herein to the extent of such changed conditions and such changed conditions would not be reflected in this Report. We have not been retained by LUS or LCG to update this Report beyond the date hereof or any underlying studies beyond the dates thereof.

Any statements in this Report involving matters of opinion or estimates, whether or not expressly so stated, are intended merely as such and not as representations of fact and are subject to being affected by fluctuating economic and regulatory conditions and the occurrence of other future events which cannot be assured. Therefore, actual results achieved may vary from projections and estimates, and such variations may be material. All capitalized terms used herein that are not conventionally capitalized are defined within the various Sections of this Report, or in the agreements or documents in which they appear.

Field interviews were initiated as part of this Report during March 2009. The Consulting Engineer interviewed LUS staff regarding operations and performed analyses of operating statistics that are indicative of the general operating condition of LUS' facilities.

R. W. Beck visited and made general field observations of the Utilities System and Communications System, which were visual, above-ground examinations of selected areas which were deemed adequate to comment. Other than as expressly stated herein, the observations and examinations were not in the necessary detail to reveal conditions with respect to safety, the internal physical condition of any facilities, or conformance with agreements, codes, permits, rules, or regulations of any party having jurisdiction with respect to the operation and maintenance of the Utilities System and Communications System.

Utilities Revenue Bonds, Series 2004 Bond Covenants

Article VII of the 2004 Bond Ordinance puts forward a number of covenants for LUS. The following discussion addresses compliance with each such covenant.

Table 1-1
2004 Bond Covenant Opinions

Section	Description	Opinion
7.1	Operations Covenant	The Utilities System was operated in a business-like manner, was adequately maintained, and maintained the necessary staff to properly operate and protect the system.
7.2	Maintenance of Utilities System: Disposition	The Utilities System was maintained in accordance with Prudent Utility Practices.
7.3	No Competitive Facilities	No competitive facility franchise was granted during the Report Period and there are no existing competitive franchises.

Section	Description	Opinion
7.4	Obligation to Connect Sewerage Users	LUS has met the requirements of this covenant.
7.5	No Free Service	No free service was supplied by the Utilities System during the Report Period.
7.6	Operating Budget	An operating budget for fiscal year 2008 was adopted October 3, 2008.
7.7	Rate Covenant	LUS has reasonably complied with the elements of the rate covenant of the 2004 Bond Ordinance during the Report Period.
7.8	Books and Records	From the perspective of the Consulting Engineer, the basic accounting principles and requirements with respect to the Utilities System, as addressed in the 2004 Bond Ordinance, have been complied with by the City during the Report Period.
7.9	Reports and Annual Audits	From the perspective of the Consulting Engineer, the basic accounting principles and requirements with respect to the Utilities System, as addressed in the 2004 Bond Ordinance, have been complied with by the City during the Report Period.
7.10	Insurance and Condemnation Awards	The Utilities System has worked with their insurance consultants (not the Consulting Engineer) to identify risks to be addressed through self-insurance and industry standard policies. We are not aware of any unreasonable policies or gaps in their program.
7.11	Enforcement of Collections	The collection of fees and revenues associated with the use of the Utilities System has been reasonably enforced during the Report Period.
7.12	Additions to Utilities System	No significant additions to the Utilities System were identified during the Report Period.

Summary

Based on R. W. Beck's review of the 2004 Bond Ordinance together with verbal and written reports provided by LCG and LUS staff, no events of material default were identified during the Report Period.

Communications System Revenue Bonds, Series 2007 Bond Covenants

Article VIII of the 2007 Bond Ordinance puts forward a number of covenants for LUS Fiber. The following discussion addresses compliance with each such covenant.

Table 1-2
2007 Bond Covenant Options

Section	Description	Opinion
8.1	Operations Covenant	During the Report Period, the communications network, was, in general, operated in a business-like manner, and was maintained in accordance with Prudent Utility Practices, and the necessary staff were available to operate and protect the system.
8.2	Maintenance of Communications System	The Communications System was maintained in accordance with Prudent Utility Practices.
8.3	Operating Budget	An operating budget for fiscal year 2008 was adopted October 3, 2008.
8.4	Rate Covenant	LUS has reasonably complied with the elements of the rate covenant of the 2007 Bond Ordinance during the Report Period.
8.5	Books and Records	From the perspective of the Consulting Engineer, the basic accounting principles and requirements with respect to the Communications System, as addressed in the 2007 Bond Ordinance, have been complied with by the City during the Report Period.
8.6	Reports and Annual Audits	From the perspective of the Consulting Engineer, the basic accounting principles and requirements with respect to the Communications System, as addressed in the 2007 Bond Ordinance, have been complied with by the City during the Report Period.
8.7	Insurance and Condemnation Awards	LUS Fiber has worked with their insurance consultants (not the Consulting Engineer) to identify risks to be addressed through self-insurance and industry standard policies. We are not aware of any unreasonable policies or gaps in their program.
8.8	Enforcement of Collections	The collection of fees and revenues associated with the use of the Communications System has been reasonably enforced during the Report Period.
8.9	No Free Service	No significant additions to the Communications System were identified during the Report Period.

Summary

Based on R. W. Beck's review of the 2007 Bond Ordinance together with verbal and written reports provided by LCG and LUS Fiber staff, no events of material default were identified during the Report Period.

Recommendations

In addition to the specific Bond Ordinance covenant opinions above, LUS has requested that we provide recommendations on specific categories as more fully described in the body of our Report. The following section is a summary of those

recommendations. For more information on specific recommendations, including defined terms, please see the corresponding section in the full Report.

Definitions

In order to help LUS focus on the different recommendations, R. W. Beck has devised a categorical priority system as follows:

Highest Priority

Recommendations with this priority designation should receive maximum focus from LUS. Lack of adequate attention to these items may contribute to a significantly weakened LUS in the future. It is anticipated that by the next review period, these Highest Priority recommendations should have already been acted upon.

High Priority

Recommendations with the priority designation should receive a high level of focus by LUS. Without adequate attention to these recommendations with the next review period, High Priority recommendations could be elevated to Highest Priority. It is anticipated that solution implementation be completed or a clear strategy or plan be in place by the next review period.

Normal Priority

Recommendations with this priority designation should receive normal focus from LUS. The LUS strategic plan should include these items and LUS should assign adequate resources to implement these recommendations within a reasonable period of time.

Recommendation Summary

A summary of the recommendations from this Report follows.

Section 2 – Introduction

Introduction	Priority	Status
LUS should continue to review necessary security actions to ensure employee security and asset preservation	High	In Progress
LUS should establish a formalized Enterprise Risk Management Program to reduce operational and financial risk exposure	High	In Progress

Section 1

Section 3 – Organization and Management

Organization and Management	Priority	Status
LUS should continue its preparation for the succession of key management positions due to potential retirements in these areas in the next 3-5 years.	High	In Progress
LUS should consider mechanisms to facilitate efficient communication within its divisions and utilities	Normal	New
LUS should conduct a full scale review of salaries and benefits to determine the impacts of the market-based pay system adopted on November 1, 2009.	High	Progress Seen
LUS should update and review its Strategic Plan consistently. LUS should review the measurable goals throughout the year to determine status with regards to the Strategic Plan	High	In Progress

Section 4 – Finance and Accounting

Finance and Accounting	Priority	Status
LUS should continue to actively conduct financial planning, particularly as LUS increases Utilities System debt	Highest	In Progress
LUS should continue to pursue a strategy of increasing water and wastewater rates over the next several years	Highest	In Progress
LUS should continue to explore ways of improving the timeliness of financial reporting, including the implementation of new financial management tools	Highest	In Progress
LUS should increase the water and wastewater systems debt to equity ratio and continue to work towards financing a considerable portion of future capital improvement projects with debt	High	In Progress
LUS should continue to improve the five-year capital budgetary process (cash-needs capital budget). The process should include some form of activity-based analysis and costing. The current CIP should be reviewed and each project checked for correct priority, schedule and estimate	High	No Progress Seen
LUS should review and evaluate the accuracy of accounting policies related to booking transmission and distribution investment and related O&M expense	Normal	No Progress Seen
LUS should continue its efforts to identify opportunities for wholesale power sales	High	In Progress

Section 5 – Electric Utility

Electric Utility	Priority	Status
LUS should continue the development of a comprehensive operator training program NERC certification	High	On-going
LUS should continue to review and improve the management of the	High	Investigating

Electric Utility	Priority	Status
CIP, including the cost and schedule estimate and control processes		
LUS should monitor system impacts due to the addition of Rodemacher Unit 3 as it becomes operational.	High	Investigating
LUS should continue T&D personnel training and complete the training for substation relay testing	Normal	In Progress
LUS should continue to install microprocessor relays for new construction and continue the replacement of existing electromechanical relays with microprocessor relays	Normal	In Progress
LUS should continue efforts to update and enhance the Cityworks and investigate ways to streamline the design, material ordering, and construction process	Normal	In Progress
LUS should continue efforts to update and enhance the GIS mapping system and integration with Cityworks	Normal	In Progress
LUS should continue testing generator and other equipment at the Doc Bonin Plant through coordination between plant personnel and the LUS T&D section personnel	Normal	In Progress
LUS should continue the implementation and maintenance of a spare parts and inventory control system, with particular emphasis on the spare parts needs of the new generation projects and other major system components	Normal	In Progress
LUS should continue its implementation and expansion of the preventative and predictive maintenance programs currently in place	Normal	In Progress
LUS should determine the actual heat rate versus output relationship for each of its generating units	Normal	In Progress
In the T&D functions, LUS should continue to review Occupational Safety & Health Administration (OSHA) requirements and/or APPA safety guidelines and pursue ongoing training programs for linemen and foremen	Normal	In Progress
LUS should continue to work to implement both internal and external processes to mitigate the impacts of fuel price volatility	Normal	Investigating
LUS should expand the 5-Year Planning Report to include a 10-year planning horizon	Normal	Investigating
LUS should proceed with plans to repaint the externals of the Doc Bonin Plant Units 2-3	Normal	Investigating

Section 6 – Water Utility

Water Utility Recommendations	Priority	Status
LUS should give priority to constructing ground storage and booster pumping systems in low pressure areas of system to improve system pressure	Highest	In Progress

Section 1

Water Utility Recommendations	Priority	Status
LUS should continue to develop in-house expertise with use of the water system model and acquire a system capable of modeling time of travel and concentration of introduced pollutants	Highest	In Progress
LUS should integrate the distribution SCADA system within the plant control system	Highest	In Progress
LUS should implement a backflow prevention program including documentation of backflow preventers and testing requirements	Highest	In Progress
LUS should coordinate planning and operations of water improvements with wholesale water customers	High	In Progress
LUS should develop a long-term capital planning process (20-50 years) for improvements to the water system	Normal	Investigating
LUS should implement a certification/recertification training program for Water Plant Operation staff	High	Investigating

Section 7 – Wastewater Utility

Wastewater Utility	Priority	Status
LUS should continue to develop the wastewater hydraulic model of the system and complete a wastewater master plan	Highest	In Progress
LUS should continue evaluating alternatives for reallocating flows from existing treatment facilities to other treatment facilities	High	In Progress
LUS should complete final strategy for sludge processing (Class A/B) and disposal	High	In Progress
LUS should develop a strategy for reducing the number of lift stations within the wastewater collection system	High	In Progress
LUS should develop policy/strategy for implementing wastewater service Parish-wide	High	In Progress
LUS should implement a certification and recertification training program for staff	Normal	Investigating
LUS should develop and implement CMOM program to meet anticipated permit requirements	Normal	In Progress
LUS should evaluate treatment plant processes for future nitrogen and phosphorus effluent discharge limits	Normal	In Progress

Section 8 – Communications System

Telecommunications Issues	Priority	Status
LUS should focus on hiring additional staff to serve the LUS Fiber Utility customers.	Highest	In Progress
LUS should develop incremental and full-embedded cost financial reports and pricing analyses to evaluate the short-term and long-term profitability of the Fiber Utility business and specific service offerings	Highest	In Progress
Achieve forecasted retail market penetration rates	Highest	New
LUS should continue to evaluate how to market their wholesale and retail services within the telecommunications business.	High	In Progress
LUS must improve the flexibility and sophistication of its billing function and the interface of such function with the accounting system.	High	In Progress
Investigate insurance needs	High	New
Complete installation of the new billing system	High	New
Complete installation of new operational support system	High	New
Research reliability data acquisition and reporting	High	New
Track retail customer complaints	High	New
Improve physical security at the head end building/LUS Fiber office	High	New
LUS should continue reviewing how common costs are allocated to the Fiber Utility. The allocation methodology should consider cost causation	Normal	Complete and on-going
Provide on-going training for staff	Normal	New
Research video program packages to reduce costs	Normal	New
Develop a maintenance program	Normal	New
Research the implementation of alarm reports in the network mode management	Normal	New

Section 1

Section 9 – Environmental Issues

Environmental Issues	Priority	Status
LUS should continue dialog with LDEQ regarding Doc Bonin Plant Unit 3 NO _x emissions compliance and evaluate the proposed compliance strategy, as operations allow, to bring this issue to a conclusion.	High	In Progress
LUS should continue to develop and implement a plan to clean and decommission the aboveground storage tanks and associated piping located the Doc Bonin Plant.	Normal	In Progress
LUS should monitor the monetary implications of the RPS2 environmental compliance obligations.	Normal	In Progress
LUS should continue to evaluate and update its environmental plans, including its SPCC plans, Facility Response Plan, Stormwater Pollution Prevention Plan, etc, to ensure that they include the latest changes to the respective regulations and facility infrastructure.	Normal	In Progress
LUS should monitor the development and implementation of the CAIR, regulations to control mercury and/or future MACT standards, and the potential for future green house gas regulations to ensure compliance strategies are implemented for all affected power plants.	Normal	In Progress

Section 2 INTRODUCTION



An SAIC Company

Section 2

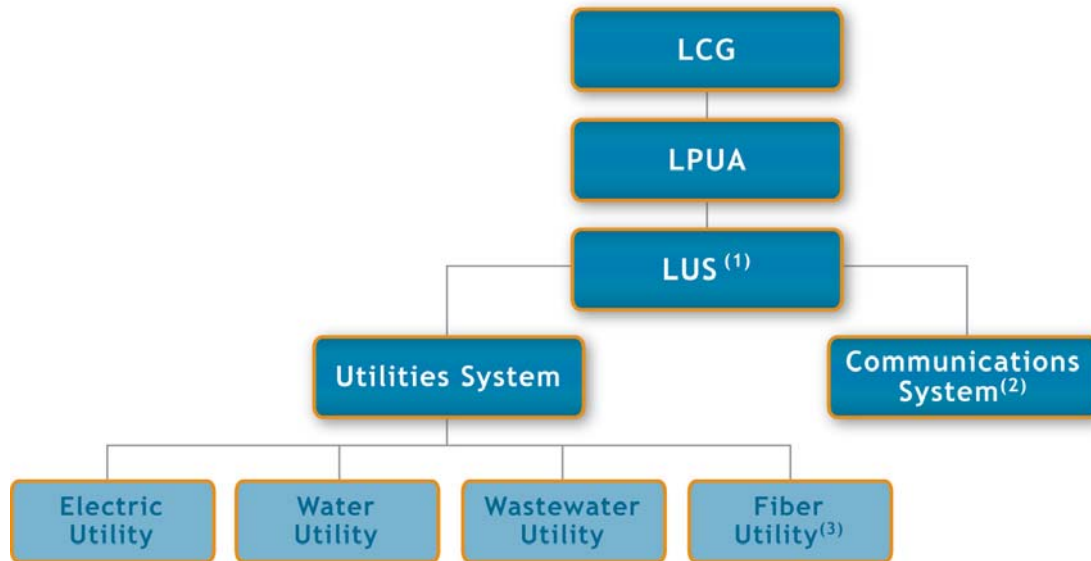
INTRODUCTION

Authority

The City of Lafayette operates with Lafayette Parish Government as a consolidated government known as the Lafayette City-Parish Consolidated Government. The Council and LPUA are the governing authorities of LUS. The Council is the governing authority of the Lafayette Public Power Authority (LPPA). The Chief Executive Officer of LPPA is the President of the LCG. The Director of Utilities is also the Managing Director of LPPA.

LPPA was created January 11, 1977 for the purpose of planning, financing, constructing, acquiring, improving, operating, maintaining and managing public power projects or improvements singly or jointly with other public or private corporations, and for the purpose of purchasing and selling wholesale electric power to, or exchanging electric power with, the City and others.

LUS is a department of LCG and consists of the Utilities System and the Communications System. LUS' properties and assets, controlled and operated by the LCG, are designated by existing bond ordinances as the Utilities System and Communications System. The Communications System is also referred to as LUS Fiber, and for the purposes of this Report, the two terms are interchangeable. The Utilities System is comprised of an electric system (including generation, transmission and distribution facilities), a water system (including supply, treatment, transmission, distribution and storage facilities) and a wastewater system (including wastewater collection and treatment facilities). The Communications System is comprised of a fiber optic loop that runs throughout the City. In 2008, the Communications System was expanded to provide retail telephone, cable television, and internet services to the City on a test basis. The relationship between these entities is shown below in Figure 2-1.



(1) From an operational perspective the Utilities System and the Communications System both fall under LUS.

(2) From an accounting perspective, the Utilities System and Communications System are separate. Communications System is also referred to as 'LUS Fiber.'

(3) On November 1, 2007 the beginning of fiscal year 2008, the wholesale fiber services were transferred to the Communications System.

Figure 2-1: LCG and LUS Structure

Requirements of Report

The City issued the Utilities Revenue Bonds, Series 2004 and the Communications System Revenue Bonds, Series 2007. This Report has been prepared as provided for by each of the authorizing bond ordinances for the offerings mentioned above. This Report covers the fiscal year 2008 (November 1, 2007 to October 31, 2008) (the Report Period). Unless otherwise stated, financial data and operational data are reported on a fiscal year basis.

2004 Bond Ordinance

This Report is prepared in accordance with the provisions of Sections 8.1 and 8.2 of the 2004 Bond Ordinance that states in part:

"...The Issuer shall retain Consulting Engineer for the purpose of providing the Issuer immediate and continuous counsel and advise regarding the Utilities System...The Consulting Engineer shall prepare within one hundred eighty (180) days after the close of each fiscal year a comprehensive report... upon the operations of the Utilities System during the preceding year, the maintenance of the properties, the efficiency of the management of the property, the proper and adequate keeping of books of account and record, the adherence to budget and budgetary control provisions, the adherence to all the provisions of the Ordinance, and all other things having a bearing upon the efficient and

profitable operations of the Utilities System, and shall include whatever criticism of any phase of the operation of the Utilities System the Consulting Engineer may deem proper and such recommendation as to changes in operation and the making of repairs, renewals, replacements, extensions, betterments and improvements as the Consulting Engineer may deem proper including recommended changes in organization, pay scales and risk management practices...”

2007 Bond Ordinance

This Report is also prepared in accordance with the provisions of Sections 9.1 and 9.2 of the 2007 Bond Ordinance that states in part:

“...The Issuer shall retain Consulting Engineer for the purpose of providing the Issuer immediate and continuous counsel and advise regarding the Utilities System...The Consulting Engineer shall prepare within one hundred eighty (180) days after the close of each fiscal year a comprehensive report... upon the operations of the Communications System and the Utilities System during the preceding year, the maintenance of the properties, the efficiency of the management of the property, the proper and adequate keeping of books of account and record, the adherence to budget and budgetary control provisions, the adherence to all the provisions of the Ordinance, and all other things having a bearing upon the efficient and profitable operations of the Communications System and the Utilities System, and shall include whatever criticism of any phase of the operation of the Communications System and the Utilities System the Consulting Engineer may deem proper, and such recommendation as to changes in operation and the making of repairs, renewals, replacements, extensions, betterments and improvements as the Consulting Engineer may deem proper including recommended changes in organization, pay scales and risk management practices...”

Report Purpose

In addition to the requirements of the bond covenants described above, this Report has several purposes. These include the following:

- Provide an annual review of the physical operations of the Utilities System and Communications System
- Provide an annual review of financial operation of the Utilities System and Communications System
- Provide a reference document for LUS, which includes historical analysis and data
- Provide recommendations to LUS concerning various aspects of its Utilities System and Communications System

Consulting Engineer

The firm of R. W. Beck, Inc. is presently retained by LCG as its Consulting Engineer (Consulting Engineer or R. W. Beck), and has been so retained since the inception of the LUS revenue bond program.

The duties of the Consulting Engineer, which are specifically defined in the Bond Ordinances, include advising LUS on its appointment of Chief Operating Officer, providing continuous engineering counsel to LCG in connection with the operations of the Utilities System and Communications System, advising on rate revisions, and preparing an annual comprehensive report (specifically, this Report) on the operations of LUS after the close of each fiscal year.

This Report includes our opinions and suggestions on the following issues:

- Operations of LUS
- Maintenance of the properties
- Efficiency of management of the properties
- Proper and adequate keeping of books of account and record
- Adherence to budget and budgetary control provisions
- Adherence to all the provisions of the Bond Ordinances
- Other items having a bearing on efficient and profitable operations

In addition, the Consulting Engineer may make recommendations regarding changes in operations, making of repairs, renewals, replacements, extension, betterments, improvements, organization, pay scales, and risk management practices.

Revenue Bond Program

Utilities Revenue Bonds have been an important source of capital for additions and improvements to the Utilities System.

Utilities Revenue Bonds, Series 2004

Prior to the issuance of the Utility Revenue Bonds, Series 2004 (the 2004 Bonds), the proceeds from two prior bond issues remained outstanding. Specifically, the prior outstanding debt included \$6,020,000 from the Revenue Refunding Bond Series 1993 (the 1993 Bonds) and \$13,520,000 from the Utilities Revenue Bond Series 1996 (the 1996 Bonds). With the issuance of the 2004 Bonds, the City defeased the 1993 Bonds. The Louisiana Department of Environmental Quality (LDEQ), the sole holder of the 1996 Bonds, allowed that the 2004 Bonds could be issued on parity with the 1996 Bonds and will become Outstanding Parity Bonds.

The 2004 Bonds were issued for the purpose of financing the construction of the North and South Generation Projects (subsequently renamed the T. J. Labbé and

Hargis-Hébert Electric Generation Station Projects, respectively), Electric Utility Transmission and Distribution Improvements, and Wastewater Utility Capital Improvement Projects. The total amount of the debt issued under the 2004 Bonds was approximately \$183,990,000.

Table 2-1 provides an estimate of the consolidated amortization schedule for the outstanding long-term debt for the Utilities System.

Table 2-1
Projected Lafayette Utility Revenue Bonds
Bond Amortization Schedule

Payment Date	Interest Payment (\$)	Principal Payment (\$)	Total Payment (\$)	Bonds Outstanding (\$)
2008	9,835,285	890,000	10,725,285	194,145,000
2009	9,809,030	915,000	10,724,030	193,255,000
2010	9,782,038	940,000	10,722,038	192,340,000
2011	9,754,308	970,000	10,724,308	191,400,000
2012	9,725,693	1,575,000	11,300,693	190,430,000
2013	9,673,140	8,625,000	18,298,140	188,855,000
2014	9,243,903	9,055,000	18,298,903	180,230,000
2015	8,792,780	9,510,000	18,302,780	171,175,000
2016	8,318,575	9,985,000	18,303,575	161,665,000
2017	7,820,123	10,485,000	18,305,123	151,680,000
2018	7,296,225	9,820,000	17,116,225	141,195,000
2019	6,780,675	10,335,000	17,115,675	131,375,000
2020	6,238,088	10,875,000	17,113,088	121,040,000
2021	5,667,150	11,445,000	17,112,150	110,165,000
2022	5,066,288	12,045,000	17,111,288	98,720,000
2023	4,433,925	12,680,000	17,113,925	86,675,000
2024	3,768,225	13,345,000	17,113,225	73,995,000
2025	3,067,613	14,045,000	17,112,613	60,650,000
2026	2,330,250	14,785,000	17,115,250	46,605,000
2027	1,591,000	15,520,000	17,111,000	31,820,000
2028	815,000	16,300,000	17,115,000	16,300,000

Source: 2004 Bonds, Official Statement. Amortization schedule includes 2004 Bonds and 1996 Bonds.

Communications System Revenue Bonds, Series 2007

The Communications System Revenue Bonds, Series 2007 were issued for the purpose of constructing, acquiring, extending and improving the Communications System. In addition to funding capital, the bonds also funded a Reserve Account for payments of capitalized interest through June 1, 2010. Specifically, the bonds were issued to develop a communications system that offers retail telephone, cable television and internet services to the residents of the City. The total amount of the debt issued under the 2007 Bonds was approximately \$110,405,000.

Table 2-2 provides an estimate of the consolidated amortization schedule for the outstanding long-term debt for the 2007 Bonds.

Table 2-2
Projected Lafayette Communications System Revenue Bonds
Bond Amortization Schedule

Maturity Date	Principal Payment (\$)	Interest Payment (\$)	Total Debt Payment (\$)	Bonds Outstanding (\$)
2008	0	5,494,331	5,494,331	110,405,000
2009	0	5,494,331	5,494,331	110,405,000
2010	0	5,494,331	5,494,331	110,405,000
2011	3,190,000	5,494,331	8,684,331	107,215,000
2012	3,320,000	5,366,731	8,686,731	103,895,000
2013	3,450,000	5,233,931	8,683,931	100,445,000
2014	3,590,000	5,095,931	8,685,931	96,855,000
2015	3,755,000	4,927,238	8,682,238	93,100,000
2016	3,940,000	4,743,950	8,683,950	89,160,000
2017	4,125,000	4,561,169	8,686,169	85,035,000
2018	4,320,000	4,362,831	8,682,831	80,715,000
2019	4,535,000	4,146,831	8,681,831	76,180,000
2020	4,765,000	3,920,081	8,685,081	71,415,000
2021	5,015,000	3,669,919	8,684,919	66,400,000
2022	5,275,000	3,406,631	8,681,631	61,125,000
2023	5,515,000	3,169,256	8,684,256	55,610,000
2024	5,805,000	2,879,719	8,684,719	49,805,000
2025	6,075,000	2,611,238	8,686,238	43,730,000
2026	6,390,000	2,292,300	8,682,300	37,340,000
2027	6,725,000	1,956,825	8,681,825	30,615,000
2028	7,075,000	1,607,288	8,682,288	23,540,000
2029	7,450,000	1,235,850	8,685,850	16,090,000
2030	7,840,000	844,725	8,684,725	8,250,000
2031	<u>8,250,000</u>	<u>433,125</u>	<u>8,683,125</u>	<u>0</u>
	110,405,000	88,442,893	198,847,893	

Source: 2007 Bonds, Official Statement

History of Revenue Bond Program

Bond authorization programs and associated expenditures of bond proceeds follow a predetermined plan of facility additions and improvements based upon an engineering planning and feasibility study. A summary of the issuance of authorized and issued revenue bonds as of October 31, 2007 is provided in Table 2-3 below.

Table 2-3
Utilities System Bonds Summary

Date Issued	Authorized Amount (\$)	Application of Proceeds
1949 – 1958	18,000,000	Steam-electric generating plant and improvements and extensions to the electric, water and wastewater systems
1962 –1965	12,500,000	Improvements and extensions to the electric, water and wastewater systems

Date Issued	Authorized Amount (\$)	Application of Proceeds
1966 – 1969	19,800,000	Addition to electric generation, water and wastewater treatment capacity, and extensions and improvements
1973 – 1976	39,000,000	Addition to electric generation capacity and extensions, additions and improvements to the electric, water and wastewater systems
1978 – 1981	26,000,000	Additions to the electric transmission system and extensions and improvements to the electric, water distribution and wastewater collection systems
1983 – 1996	40,400,000	Additions, extensions and improvements to the electric, water and wastewater system and acquisition of electric distribution customers
2004	190,000,000	Addition to electric generation capacity and extensions, and wastewater improvements
2007	110,405,000	Creation of the Communications System to provide retail telephone, cable television and internet service to the residents of the City

Source: Official Statements

Security Issues

Following the terrorist attacks of September 11, 2001, increased emphasis has been placed on addressing security measures for the infrastructure systems and facilities in the United States. Terrorist activities aimed at the Utilities System could impact the operation of the Utilities System and interfere with the ability of LUS to provide service and generate revenues. Additionally, terrorist activities have the potential to affect organizations other than LUS, the continued performance of which is critical to continued operation of the Utilities System. These other organizations may be located either upstream or downstream of LUS.

The Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (Bioterrorism Act) amended the Safe Drinking Water Act by adding Section 1433. Section 1433(a) requires that certain community water systems conduct Vulnerability Assessments, certify to the United States Environmental Protection Agency (USEPA) that the Vulnerability Assessments were conducted, and submit a copy of the Vulnerability Assessments to the USEPA. Section 1433(b) requires that certain community water systems prepare or revise Emergency Response Plans and certify to the USEPA that an Emergency Response Plan has been completed.

LUS is subject to the Bioterrorism Act. LUS attained full compliance with the Bioterrorism Act early in 2003. LUS is using the results of its Vulnerability Assessment to plan for and implement improvements to its water system to enhance security.

According to LUS representatives, Sheriff Department personnel were stationed at the Louis “Doc” Bonin Electric Generating Station (Doc Bonin Plant), and the North and

South Water Treatment Plants, seven days a week, 24 hours per day, during the Report Period to provide additional security at each facility. LUS has installed additional security equipment and established operating procedures to further enhance security at its water treatment facilities. Although the Hargis-Hébert and T. J. Labbé Plants were not staffed with security personnel, the plants were staffed by a plant operator when the plants were running. At the end of the Report Period the Hargis-Hébert and T. J. Labbé Plants were fully gated and had surveillance cameras for added security. LUS staff was reported to have been trained in emergency planning and appropriate response that is integrated with ongoing programs for hurricane emergency response.

Evaluation by the Consulting Engineer of the security of LUS, as well as other entities with which the LUS has business or operational relations, relative to security issues, is beyond the scope of this Report. We have not been engaged to conduct, and have not conducted, any independent evaluations or on-site review in any way to ascertain the effectiveness of the measures LUS has undertaken to address security issues for its Utilities System. In the event that currently unknown shortcomings in security should arise which lead to significant operational problems, such problems could have an adverse impact on LUS. We recommend that LUS conduct all necessary security studies to ensure employee security and asset preservation.

Financial and Statistical Data

Selected financial and statistical data provided by LCG for the City and Lafayette Parish has been included as Appendix A to this Report. This data was determined to be a requirement of this Report by LCG and LUS Bond Counsel and has not been independently verified by the Consulting Engineer.

General Remarks

Hurricane Gustav

Hurricane Gustav made landfall on September 1, 2008 near Cocodrie, Louisiana (located southwest of the City). Lafayette Parish sustained major damage as a result of the strong winds and rainfall associated with this storm event. Approximately 40 percent of LUS' retail electric customers lost power during the storm; however, all services were restored within a 72 hour time frame. LUS has prepared a claim of approximately \$4,000,000 to the Federal Emergency Management Agency (FEMA) primarily associated with the recovery of costs expended for restoration of its system.

Recommendations

Recommendations and status thereof are provided in Table 2-4. The priorities of these recommendations are High and Normal, as defined in Section 1 of this Report.

Table 2-4
Recommendations

Introduction	Priority	Status
LUS should continue to review necessary security actions to ensure employee security and asset preservation	High	In Progress
LUS should establish a formalized Enterprise Risk Management Program to reduce operational and financial risk exposure	High	In Progress

Section 3

ORGANIZATION AND MANAGEMENT



An SAIC Company

Section 3

ORGANIZATION AND MANAGEMENT

LCG Organization and Management

The current form of government includes both the City and certain areas of the Parish and is referred to as LCG. This City-Parish form of government includes the President and nine Council members who are elected by the citizens of the Lafayette Parish to four-year terms of office. Names of each official and offices held by each during the reporting period are shown in the Table 3-1.

Table 3-1
President and Council Members

Office	2008
President	L. J. Durel, Jr.
District 1 Member	Purvis Morrison
District 2 Member	Jay Castille
District 3 Member	Brandon Shelvin
District 4 Member	Kenneth P. Boudreaux
District 5 Member	Jared Bellard
District 6 Member	Bruce Conque/Michelle Ezell *
District 7 Member	Donald L. Bertrand
District 8 Member	Keith Patin
District 9 Member	William G. Theriot

* Bruce Conque resigned and was replaced by Michelle Ezell effective October 2008.

Source: LCG, 3/09

The President and his Chief Administrative Officer (CAO), Mr. Dee Stanley, direct and supervise the administration of all departments, offices, and agencies of LCG, except as may otherwise be provided by the Home Rule Charter (Charter) or by law.

Home Rule Charter

In the fall of 1992, the electorate of the Parish, including the City, adopted a Charter establishing LCG for the purpose of consolidating the governmental functions of the City and the Parish. The new government became operative on June 3, 1996 when LCG officials took office pursuant to the Charter. The Charter set up the LCG departments and defined the responsibilities of each department. The following described departments provide services to LUS.

Department of Finance and Management

Financial responsibilities are handled by the Department of Finance and Management. These duties as outlined on pages 20-21 in the Charter include:

- Collection (except where specifically otherwise provided for by law) and custody of all monies of LCG from whatever source
- Assistance to the President in the preparation of the annual operating budget and the capital improvement budget
- Maintenance of a record of indebtedness and payment of the principal and interest on such indebtedness
- Ascertaining that funds are available for payment of all contract obligations, purchase orders and any other documents that establish a financial obligation for LCG, and that such documents are consistent with established LCG procedures
- Disbursement of LCG funds
- Administration of a uniform central accounting system for all LCG departments, offices and agencies, using nationally accepted standards where applicable
- Preparation of a monthly statement of revenues and expenditures, which shall be completed and made available for public inspection not later than 31 days after the end of each month
- Procurement of all personal property, materials, supplies and services required by LCG under a central purchasing system for all departments, offices and agencies in accordance with applicable state law, council policy and administrative requirements
- Investment of idle funds, as permitted by law, so as to receive the maximum rate of return consistent with federal and state laws and regulations
- Maintenance of an inventory of all property, real and personal

Duties of utility billing and revenue collection are handled by the Department of Utilities.

Ms. Rebecca Lalumia serves as the Chief Financial Officer (CFO) for the Department of Finance and Management. Key division managers under this office are provided in Table 3-2.

Table 3-2
Department of Finance and Management

Division	Manager
Accounting	Melinda Felps
Controller	Santhoshi Chander
Financial System & Reporting Supervisor (Accounting Functions for LUS)	Kerney Simoneaux
Budget Management	Sharon Borel
Purchasing and Property Management	Kenneth Fontenot

Source: LUS, 3/09

Descriptions of the functions performed by the divisions listed in Table 3-2 are provided below.

Accounting Division

The Accounting Division is responsible for: (i) processing invoices, payroll and other accounts payable transactions; (ii) maintaining accounts receivable records and associated management reports; and (iii) managing and maintaining the entire accounting system including the general ledger, completion of periodic financial statements, payroll, management reports and special accounting assignments, including those for LUS.

Budget Management Division

The Budget Management Division employs a municipal budget management system. The concepts embodied in this management tool initially require recognition of financial and operational goals by the department managers. Based on these goals, the management of each department determines dollar amounts necessary to reach the goals. Budgeting for utility capital needs and facility addition and renewal projects is the responsibility of LUS.

Purchasing and Property Management Division

The Purchasing and Property Management Division is responsible for all LCG purchasing and control of the fixed assets. The management of central receiving, central warehousing and distribution of inventory for the operations of the Utilities System are the responsibility of the Electric Operations Division of LUS.

Department of Administrative Services

As described on page 21 in the Charter, the Director of the Department of Administrative Services shall direct and be responsible for:

- Personnel matters for employees other than those under the jurisdiction of the civil service director and civil service board. Responsibilities shall include but

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not be limited to personnel policies, employee relations, employee counseling and unemployment and worker's compensation reports and hearings

- Developing and implementing a communications system
- Risk management, insurance and safety programs
- The Division also provides printing and communications services to LUS

The Director of the Department of Administrative Services is Ms. Gail Smith. Ms. Smith oversees information systems (data processing), communication systems, and risk management.

Operations Division

The Operations Division consists of three sections: Human Resources, Communications and Printing.

The **Human Resources** section provides employee and payroll records, employee relations, and compensation services as well as policy administration on such matters as attendance, conditions of employment, performance evaluation, anti-harassment and related matters for a staff of approximately 2,000.

The **Communications** section provides telephone answering and call directing services for the City-Parish government, including a substantial utility billing function.

The **Printing** section uses digital photo-imaging and printing in addition to traditional offset presses to serve all printing, binding and related needs of the City-Parish Government.

Records Management Division

The Records Management Division provides inventory, storage, retention schedules, protection and disaster recovery planning. The Records Management Division was created to: control records creation and growth, reduce operating expenses, improve efficiency and productivity, assimilate new records management technologies, ensure regulatory compliance, minimize litigation risks, identify and protect vital information, support better management decision making, and preserve the corporate memory.

Risk Management Division

The Risk Management Division provides oversight for risk related activities experienced in day-to-day activities at LUS. As an example, part of Risk Management activities included providing a Safety Officer to address safety-related matters of LUS, including loss prevention programs for all divisions of LUS and to comply with federal, state, and local regulations regarding safety matters.

The program implemented by this Division includes the establishment of an uninsured loss reserve fund designed and administered by the Risk Management Division. The Division is comprised of a Risk Manager, a self-administered property and casualty claims section, a safety and loss prevention section, a full time registered nurse and a self-administered and self-insured group health/life claims section.

The cost of finance and administrative services are allocated to all LCG Departments, including the operation of the Utilities System on the basis of allocation procedures adopted by LCG.

Department of Information Services Technology

In 2004, LCG created the Information Services and Technology Department (IS&T) and appointed Mr. Keith Thibodeaux as the Chief Information Officer (CIO). The IS&T Department is responsible for managing the coordinated development of an integrated information technology system for LCG and external organizations who contract with LCG for computer services.

Software Services Division

The Software Services Division is responsible for developing, maintaining, and supporting computer applications, Database Administration, and the Internet website.

Technical Services Division

The Technical Services Division is responsible for planning, designing, and supporting the data and telecommunications infrastructure of LCG to include hardware, software, and help desk support. Also responsible for daily computer operations including running applications, generating reports and checks, such as Payroll, Accounts Payable, Utility Billing, etc., performing system backups and restores, and handling end-user special requests.

Geographic Information Systems Division

The Geographic Information Systems (GIS) Division is responsible for developing, maintaining, and supporting the enterprise GIS system. GIS is a system of computer software, computer hardware, data, and personnel to help manipulate, analyze and present the information that is tied to a geographic location (map).

Office of the Director Division

The Office of the Director is a division which includes the CIO and support staff.

Legal Department

Mr. Patrick S. Ottinger is retained as the City-Parish Attorney to render legal opinions and to counsel and advise LCG and LUS. Various Assistant City Attorneys have also been appointed and serve under the direction, and at the discretion, of the City-Parish Attorney.

LUS Organization and Management

The duties, responsibilities, management and organization of LUS under LCG are taken from the Charter.

The governing authority of LUS is the LPUA. LPUA consists of those members of the Council whose districts include 60 percent or more of persons residing within the

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boundaries of the City as they existed on the effective date of the Charter. Members may be added should the boundaries of the City change. The latest census reports of the United States Census Bureau were the basis for determining the council districts including 60 percent or more of persons residing within the City.

LPUA members for the period reported herein are provided in Table 3-3.

Table 3-3
LPUA Members

Name	Office
Brandon Shelvin	Chair
Keith Patin	Vice Chair
Donald Bertrand	Member
Kenneth Boudreaux	Member
Bruce Conque/Michelle Ezell *	Member

* Bruce Conque resigned and was replaced by Michelle Ezell effective October 2008.

Source: LCG, 3/09

The Director of the Utilities Department is appointed by the President, subject to approval by LPUA, in accordance with provisions included in current or future bond resolutions and covenants. The Charter does not affect franchises and contracts in existence at the time the Charter became effective for the remaining life of these franchises and contracts.

LPUA, subject to approval by the President and the Council by ordinance, may expand the area of end-user electric service only into areas authorized by R. S. 45:123, or other controlling State law, or into areas annexed into the City by LCG. Nevertheless, LPUA may enter into contracts with governmental bodies, exclusive of LCG, and other public or private utilities for other than end-user services.

The Utilities Department functions in accordance with conditions included in current bond resolutions and covenants. Funds paid by LUS to LCG for in-lieu-of taxes must be used only for programs and services within the City. LPUA fixes rates, incurs indebtedness, approves the LUS budget, and approves proposals for the improvement and extension of LUS, subject to approval by the President and Council.

A person residing in an area served by LUS may appeal to LPUA any proposed rate increases or issuance of bonds. The decision of LPUA is final, subject to appeal to the appropriate courts.

LPUA must not sell, lease or, in any manner, dispose of the LUS, or any substantial part thereof, without approval by majority vote of the qualified electors residing within the boundaries of the City voting in an election called for that purpose. This may not be construed to prevent the disposal of property that has become obsolete, unserviceable and not necessary for the efficient operation of the LUS. The proceeds of the sale of such property must be used to purchase or construct other capital

improvements for the LUS. In the event of the sale or lease of the entire LUS, the proceeds are to be used for capital improvements in the entire City.

Management of the Utilities System

The President, who is the Chief Executive Officer of LCG, and his Chief Administrative Officer direct and supervise the administration of various departments of LCG. The LCG departments involved in day-to-day management and operation of LUS are the Department of Administrative Services, the Department of Finance and Management, the Department of Information Services Technology and the Legal Department.

The Administrative Services Department provides the following functions to the LUS: personnel services, training and safety, printing, communications, information services, and risk management. The Department of Finance and Management is responsible for accounting, budget management and procurement. The Department of Information Services Technology is responsible for software, hardware, help desk support, daily computer operations, and the GIS.

The CAO supervises all departments, offices, and agencies of LCG under the direction and supervision of the President, except the Legal Department. The Legal Department is headed by the City-Parish Attorney.

Organization

The Director of the Utilities Department is responsible for the operations of the LUS in all areas of activity not otherwise provided for by the Departments of Administrative Services, Finance, or Information Services Technology. As outlined in the Charter, the duties of the Director of Utilities are as follows:

- Production and distribution of electricity
- Water production, treatment and distribution
- Sewerage collection, treatment and disposal
- Utility engineering services
- Supervision of contract construction work for the Utilities System
- Maintaining utility equipment in cooperation with the central garage
- Reading of utility meters
- Other such activities as may be directed by the President as necessary or incidental to the operation of the Utilities System

The Managing Director of LPPA and the City's Director of Utilities is Mr. Terry Huval. Mr. Huval is a graduate of the University of Southwestern Louisiana with a B.S. in Electrical Engineering. He has been employed in the utility industry throughout his career and has served in various management positions with

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Entergy-Gulf States Utilities, until his appointment as LUS' Director of Utilities on December 5, 1994.

The personnel serving as managers of the divisions within LUS are shown in Table 3-4.

Table 3-4
LUS Division Managers, Fiscal Year 2008

Division	Manager
Utilities System	
Engineering	Frank Ledoux
Water Operations	Don Broussard
Wastewater Operations	Craig Gautreaux
Electric Operations	Mike Boustany
Power Production	Frank Ledoux
Utilities Support Services	Andrew Duhon
Customer Service	Andrew Duhon
Environmental Compliance	Allyson Pellerin
Air Quality Compliance	Frank Ledoux
Communications System	Frank Ledoux

Source: LUS, 3/09

Engineering Division

The Engineering Division is responsible for all engineering activities necessary to operate and maintain the Utilities System. The functional activities of this division include forecasting, system planning, system design, contract administration, construction management, and engineering analysis in support of other operating divisions. The Engineering Division manager is responsible for the four sections described below.

The **Civil Engineering Section** focuses on the Water and Wastewater Utilities. Services include design, planning and construction of major water and wastewater infrastructure projects that are scheduled and budgeted with a system of work orders.

The **Power Marketing Section** responsibilities include the following areas:

- Special contracts
- Wholesale electric purchases and sales contracts and negotiations (including the LUS involvement with The Energy Authority, as described in Section 5 of this report)
- Fuel supply contract management (coal, gas and transportation)
- Transmission and interconnection contract management

- Federal Energy Regulatory Commission (FERC) related issues and compliance reporting
- Work with developers to meet special electric service expansion needs
- Wholesale water and contract administration
- LUS representative on Southwest Power Pool (SPP) Markets & Operation Policy Committee
- SPP participation on various working groups
- Electric distribution for commercial services, residential services, Street Lighting and Private Lighting

The **System Engineering Section** areas of focus include:

- GIS development to provide infrastructure locations and system mapping
- Network Engineering
 - Design and installation of Ethernet and wireless networks
 - Oversight of the entire LUS information technology budget
 - Operation and maintenance of the computer network hardware for all LUS facilities
 - Installation and support for applications
 - Technical support for the Supervisory Control and Data Acquisition (SCADA) system and fiber networks
- Drafting functions
- Acquisition of real property rights including easements and property ownership required for infrastructure expansions
- Material specifications for Electric, Water, Wastewater, and Fiber Utilities
- Annual material purchase contracts through warehouse
- Document management for record center and water distribution
- Special projects including generation plants, building expansion and remediation

The **System Construction Section** responsibilities include:

- Electric substation design and planning
- Transmission line design
- Electric system planning
- Fiber construction and installation
- Electric system communications
- Electric system personnel training

Water Operations Division

The Water Operations Division is responsible for the water supply, production, storage, and distribution facilities. This includes maintenance as well as operations and water quality.

Wastewater Operations Division

The Wastewater Operations Division responsibilities include operation and maintenance (O&M) of the treatment and collection facilities. Also included is the management of wastewater discharge quality.

Electric Operations Division

The Electric Operations Division is responsible for the field activities associated with operating and maintaining the electrical transmission and distribution facilities. The functional activities include service calls, system construction, system control, meter shop, security, and substation operations.

Power Production Division

The Power Production Division is responsible for the O&M of the electric power production facilities. This division is also responsible for the project management, engineering, procurement, construction, etc., for its capital and O&M project budget.

Utilities Support Services Division

The Utilities Support Services Division is responsible for certain administrative duties associated with operating the Utilities System. These activities include employee training and safety, public information, utility service rates, facilities management, financial planning, and meter reading.

The Meter Services Section uses an electronic meter reading system that consists of hand-held remote data collection devices carried by meter readers, as well as computer-based translation and processing equipment at the meter services office, to provide meter data for the customer billing function.

The Meter Services Section compiles monthly statistics related to meter reading accuracy, read rates, and customer connects and disconnects in a continuous effort to identify trends and evaluate opportunities to improve the section's effectiveness. The Customer Information System (CIS) provides tracking "re-reads" of customer accounts. Tracking the number of re-reads reflects the overall efficiency of a meter reader, of a crew, and of Meter Services in general. In 2008, the Meter Services section was required to re-read approximately 12,000 electric and water meters.

LUS is exploring opportunities for improving meter reading efficiency. In 2008, LUS conducted an economic evaluation of Advanced Metering Infrastructure (AMI) systems, which it intends to pursue in 2009 and beyond. Other technologies are being explored to assist with commercial and industrial (C&I) accounts that may need hourly profiling data or other value-added services available from LUS through the

meter. With the inception of the LUS Fiber System, communication efficiencies can be realized.

Customer Service Division

The Customer Service Division collects and processes utility customer deposits and bills daily. This division also provides utility customers with service and responses to billing questions. Customer bill paying and other business facilities, including a drive-up window, are located in the LCG building. The cashier function includes receiving all payments delivered by mail or by hand. LUS plans to build a new customer service facility near the current administrative building within the next five years.

Revenue collection service is an important and financially critical function for any utility. It is the “cash register” of the business, as well as an excellent opportunity to communicate directly with customers. As competition moves into the electric business, an effective customer-oriented, revenue collection division will become essential to the success of LUS.

In 2005, LUS added the option for bill payments over the Internet. Approximately 6,400 customers were registered with the website to utilize this option during 2008. In 2007, LUS introduced an integrated voice response system (IVR) that allows automated handling of customer calls and customer payments. During 2008, approximately 3,200 bills were paid over the telephone.

Environmental Compliance Division

The Environmental Compliance Division was added to the Utilities Department in 1991 as part of the LUS commitment to employees, customers, and the environment. This division was established to oversee the LUS environmental regulatory requirements, including management of industrial discharge permits and fees.

Air Quality Compliance Division

The Air Quality Compliance Division was created in 2008 to focus on the specific air quality related regulatory requirements as they relate to the power production activities of LUS.

LUS Fiber System

LUS Fiber is responsible for O&M activities for the wholesale and retail fiber system throughout the City. The fiber system was built in 1999 and provides internal communications capabilities that are critical to the operation and reliability of LUS.

The fiber system offers wholesale broadband services to providers who may then use the infrastructure to offer services to the public. It also provides voice, video, broadband and Internet service to most LCG facilities, schools and libraries. LUS Fiber is also responsible for the development and implementation of telecommunication contracts for vendors, wholesale and retail customers. LUS Fiber launched its retail business on a limited, test basis during 2008.

LUS Personnel

Staffing Levels

Approximately 14.2 percent of the LUS total budgeted positions were unfilled at the end of 2008 (71 vacancies out of 500 positions). The average annual vacancy rate was approximately 17.2 percent or 86 vacant positions per month. The employee turnover rate for 2008 was reported as approximately 25.1 percent (including departures, transfers, retirements, etc.). The number of people employed by LUS, as well as LUS Fiber, as of October 31, 2008 and the number of full-time employees authorized in the budget for the same fiscal year are shown in Table 3-5.

Table 3-5
LUS Employees as of October 31, 2008

Division	2007-2008 Budget	2008 Actual Full Time	Difference	Percent Vacancy
Director's Office	2	2	0	0.0%
Support Services				
Admin & Support	10	10	0	0.0%
Training	1	1	0	0.0%
Meter Services	<u>27</u>	<u>26</u>	<u>1</u>	3.7%
Total Support Services	38	37	1	2.6%
Customer Service	32	28	4	12.5%
Environmental Compliance	20	16	4	20.0%
Power Production	36	28	8	22.2%
Electric Operations				
Admin & Support	4	3	1	25.0%
Transmission & Distribution	49	43	6	12.0%
Energy Control	17	16	1	5.9%
Substation & Communication	7	5	2	28.6%
Facilities Management	<u>16</u>	<u>12</u>	<u>4</u>	25.0%
Total Electric Operations	93	79	14	15.0%
Water Operations				
Production	23	22	1	4.3%
Distribution	<u>39</u>	<u>36</u>	<u>3</u>	7.7%
Total Water Operations	62	58	4	6.4%
Wastewater Operations				
Treatment	61	60	1	1.6%
Collection	<u>39</u>	<u>28</u>	<u>11</u>	28.2%

Division	2007-2008 Budget	2008 Actual Full Time	Difference	Percent Vacancy
Total Wastewater Operations	100	88	12	12.0%
Engineering				
Civil	18	15	3	16.7%
Administration	11	11	0	0.0%
Power Marketing	9	9	0	0.0%
System Engineering	22	21	1	4.5%
Electric System Construction	<u>5</u>	<u>5</u>	<u>0</u>	0.0%
Total Engineering	65	61	4	12.9%
LUS Fiber				
Administration	3	2	1	33.3%
Operations	12	12	0	0.0%
Warehouse	3	0	3	100.0%
Business Support	17	3	14	82.3%
Engineering	<u>17</u>	<u>15</u>	<u>2</u>	11.8%
Total LUS Fiber	52	32	20	38.5%
Total Staff	500	429	71	14.2%

Source: LUS, 'Personnel Strength Monthly Report,' 03/09

Succession Planning

LUS has a large number of highly qualified staff approaching retirement or eligible to retire. LUS acknowledges the importance of training and hiring staff to replace those that have or will be retiring in the next few years. Although LUS struggles to fill vacant positions with qualified personnel and has difficulty retaining staff, LUS has been proactive within their pay scale constraints. LUS has been proactive by identifying key staff members to be mentored and working to fill vacant positions. LUS should continue these activities and maintain their proactive approach to succession planning.

Intra Department Communication

Utility staff expressed issues related to communication between divisions within LUS. In some cases it was noted communication has improved as groups reached full staffing levels but in other cases a communication "gap" and ineffective communication were identified. Additionally, a lack of current accounting information on "projects and normal capital operating expenses and budgets" was identified as an issue. LUS should consider ways to facilitate efficient communication among the utilities and divisions.

Compensation

Utilities System

Section 8.2 of the 2004 Bond Ordinance requires the Consulting Engineer to review and make necessary recommendations related to the pay scales of LUS employees.

The average LUS employee salary during 2008 and prior years is shown in Table 3-6. Changes in the average annual salary from year to year reflect salary administration and alterations to the total employee mix relating to both longevity and the proportion of senior and junior positions (supervisory employees, senior employees, and new hires). As noted previously, in 2008 LUS Fiber was created as a stand alone system. The data in the table below includes the salaries associated with LUS Fiber.

Table 3-6
LUS Average Annual Salaries

	2004	2005	2006	2007	2008*
Average Annual Salary (\$)	33,578	34,469	35,899	37,789	37,224

Source: LUS, 3/09. * Note: Salary data from the Communications Division (LUS Fiber) is included in the value above.

Pay Scale Review

Regional market data was collected to examine the pay ranges for numerous positions within LUS. The positions chosen were based on key positions at LUS, the availability of data for positions comparable to those at LUS, and positions covering the Electric, Water and Wastewater Utilities.

A comparison to market and utility-specific data for similar positions was performed. For this comparison, the following activities were conducted:

- LUS job descriptions were compared to the descriptions available from global data sources. Where an exact match in title or job description was not evident, R. W. Beck determined how to align the various positions. A general correlation was made between the positions based on job titles, education, and experience requirements.
- The salary comparison was based on annual median salary ranges for January 2009. The review includes minimum, midpoint, and maximum salary ranges from Louisiana. The salary data obtained from the Dietrich Associates is from fall 2008.
- 2007 readily available data from the Bureau of Labor Statistics (BLS) was escalated to 2008 using a 4.2 percent factor. The 4.2 percent factor is based on the annual CPI increase for the South Urban area of the nation as published by the BLS.

The comparative analysis between the LUS median salary ranges for the defined positions and the median salary obtained from market sources suggests that the LUS median salary ranges are on average 25 percent below market for most management

positions within the Electric Utility. However, median salary ranges for Staff level positions range from 2 to 11 percent above market. LUS has made progress in some divisions by implementing market-based pay (see below).

The pay scale review only includes the salaries of employees and does not consider the combination of employees' salaries and benefits. A full review of salaries and benefits is beyond the scope of this Report; however, a full-scale review should be considered by management given the continuing staffing issues.

Employment Practices and Employee Benefits

LCG employees, except for a few exempt employees and employees of the Police and Fire Departments, are under a Civil Service System. The result of the Civil Service System is that the ranges for wages and salaries of employees of LUS are often influenced by the overall financial position of LCG. This places restraints on LUS' ability to employ and retain well-qualified applicants for positions requiring special technical skills and experience.

In 2008, LCG investigated and ultimately passed, a market based rate system for positions across LCG, beginning in FY 2009. Therefore, the impact of this pay plan on salaries is beyond the scope of this Report. However, it appears that LUS is addressing the issues related to discrepancies in compensation levels between its employees and those of non-municipally owned systems as noted in previous Reports.

The procedure for filling personnel vacancies in LUS begins with a list of eligible applicants. The applicable appointing authority makes the final selection for the specific position. An applicant hired for a permanent position must then serve an initial probationary period of six months. The career advancement process includes an employee evaluation program, which is used to assist management in determining which employees have potential for promotion.

A group life and medical insurance program for employees is provided through the LCG self-insurance program. LCG pays approximately 81 percent of employee health insurance, 100 percent of life insurance premiums, and 59 percent of the cost for dependent medical coverage. The group life insurance plan provides coverage equal to two times the employees' annual salary.

Paid vacation (annual leave) up to a maximum of 24 working days per year is earned and provided to employees. The maximum annual level is reached after 20 years of service. Sick leave with pay is credited at the rate of one day per month of employment, with no limit to the amount of sick leave an employee may accumulate. Provisions are established for payment of accumulated unused sick leave upon retirement.

LCG employees are enrolled in the supplementary plan of either the Louisiana Municipal Employees' Retirement System (MERS) or the Louisiana Parochial Employees' Retirement System (PERS), although all new employees are enrolled into PERS. Disability and survivor benefits are also provided.

LUS has a drug-free workplace policy for the purpose of deterring or detecting illegal drugs and unauthorized substances in the workplace. It established a random testing

program, as well as testing procedures, for reasonable suspicion or probable cause. It also provided employees with an employee assistance program comprised of counseling and rehabilitation programs.

LUS encourages its personnel to attend numerous technical short courses and seminars to keep abreast of changing technology and procedures in the utility industry. Examples of training courses taken by management include computer training; management training; and technical courses, such as water quality, wastewater treatment, electric relay, system protection, and electric distribution system design. Clerical staff skills are also enhanced with course topics such as office management and writing skills.

Insurance

Insurance is handled by LCG's Risk Management Division. LCG maintains a self-insurance fund for property and casualty claims. LCG fully self-insures general liability, auto liability, fleet collision/fleet fire, and directors' and officers' liability. LCG also self-insures the group health plan and administers a flex-funded life insurance plan. Excess policies are carried for fire and extended coverage, boiler, machinery, and worker's compensation. Coverage values for existing generation assets are based on previous appraisals and conversations with appropriate LUS personnel.

According to LCG's financial report for 2008, LCG is in compliance with Governmental Accounting Standards Board 10, Reporting for Risk Financing and Related Issues, for public entities.

Insurance related expenditures and recoveries from the Risk Management Fund for LUS for 2008 and the previous five years are provided in Table 3-7.

Table 3-7
LUS Insurance Transactions ⁽¹⁾

	2004	2005	2006	2007	2008
Payments (\$)	1,065,232	740,476	1,172,068	1,783,006	617,358
Recovery (\$)	(350,584)	(267,976)	(159,023)	(612,087)	(26,796)
Effective Payments (\$)	714,648	472,500	1,013,045	1,170,919	590,563

(1) Cash basis. Expenditures incurred, recoveries collected during year, not necessarily at time of claim.

Source: L. Shearer, LCG, 06/09/09.

LUS Organizational Goals

LUS updated its Strategic Plan in 2007 and anticipates updating the plan on a tri-annual basis. No changes to the strategic plan were made in 2008. Various employee committees developed goals in five areas consistent with LUS' vision, mission, values, and departments. Specific key areas and goals are provided in Table 3-8.

Electric, Water and Wastewater Utilities' objectives include supporting the customer focus and include promotion of customer growth and creation of a customer-focused culture, in addition to the specific key areas listed in Table 3-8.

Table 3-8
Strategic Plan Goals

Focus	Key Areas
Customer Focus (Main Focus)	Improve customer service. Retain and expand Customer base. Maintain community partnerships. Keep abreast of legal issues.
Employee Focus	Reinforce LUS core values. Develop appropriate training. Provide career development. Benchmark for system improvements.
Electric Focus	Ensure adequate self-generation capacity. Maintain supply of competitively-priced fuel. Operate and maintain generating and transmission and distribution facilities using best practices. Ensure adequate transmission system capacity with N-1 reliability criteria. Explore initiatives to promote customer sales growth. Create and nurture a customer focused culture.
Water Focus	Ensure adequate supply, treatment, and distribution capacity. Operate and maintain systems using best practices. Develop strategies and methodologies to extend service to our customers. Create and nurture a customer focused culture.
Wastewater Focus	Ensure adequate treatment and collection capacity. Operate and maintain systems using best practices. Explore initiatives to promote customer growth. Create and nurture a customer focused culture.
Telecom Focus	Ensure adequate telecommunication facilities. Operate and maintain telecom facilities using best practice. Explore initiatives to promote customer sales growth. Create and nurture a customer focused culture. Deploy fiber-to-the-home and business communication system. Engage in state, regional, and national activities that have a direct impact on the provision of telecommunication services. Use proven technologies and methodologies for O&M.

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Focus	Key Areas
Telecom Focus (continued)	Develop strategies and methodologies to extend service to our customers.
Technology Focus	Ensure adequate network facilities and equipment. Use proven technologies and methodologies for operation and maintenance. Develop strategies and methodologies to extend services to employees. Identify and respond to internal technology needs and concerns.

Source: LUS, Strategic Plan FY 2007

The plan sets measurable goals that LUS can use to determine how well LUS is progressing towards the goals of the Strategic Plan. In addition, LUS expects to use the plan in conjunction with their budgeting procedures. We recommend that LUS update and review its Strategic Plan on a consistent basis, including a review of measurable goals throughout the year.

Recommendations

Recommendations and their status are provided in Table 3-9. We have indicated the priority of the recommendation as either highest, high or normal.

Table 3-9
Recommendations

Organization and Management	Priority	Status
LUS should continue its preparation for the succession of key management positions due to potential retirements in these areas in the next 3-5 years.	High	In Progress
LUS should consider mechanisms to facilitate efficient communication within its divisions and utilities	Normal	New
LUS should conduct a full scale review of salaries and benefits to determine the impacts of the market-based pay system adopted on November 1, 2009.	High	Progress Seen
LUS should update and review its Strategic Plan consistently. LUS should review the measurable goals throughout the year to determine status with regards to the Strategic Plan	High	In Progress

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FINANCE AND ACCOUNTING

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FINANCE AND ACCOUNTING

LUS provides electric, water, and wastewater, and, until November 1, 2007, wholesale fiber services to customers located both inside and outside the City limits. LUS is directed by the President and regulated by the Council with regard to utility service pricing and revenue bond financing.

Beginning November 1, 2007, LUS sold all assets to telecommunications to LUS Fiber to form the Communications System. Currently, the Communications System provides telecommunications services to wholesale customers, and is in the process of building the infrastructure to serve retail customers, inside the City limits.

The following discussion summarizes the findings of the Consulting Engineer with respect to the financial condition of LUS based upon discussions with, and information supplied by, LUS, LUS Fiber and LCG personnel. This section of the report has two parts: Utilities System (LUS) and Communications System (LUS Fiber). The Utilities System includes the Electric, Water, and Wastewater systems. Due to the 2007 Bond Ordinance, the Communications System maintains a separate budget, as well as financial and operating statements. The Utilities System is discussed first, followed by the Communications System.

Utilities System

Accounting

Section 7.8 of the 2004 Bond Ordinance requires that the City of Lafayette keep separate identifiable financial books, records, accounts and data regarding the Utilities System.

The Home Rule Charter, Section 4-07, 'Utilities Department,' states: *"The utility department shall function in accordance with conditions included in current or future bond resolutions and covenants except that reference to "city" therein shall refer to the Lafayette Public Utilities Authority."*

LCG currently prepares monthly financial statements that include important operating financial and managerial data. Except for several months following the close of a fiscal year, these internal statements are scheduled to be issued by the 20th day of the month following the reporting period. However, the final statements for the first several months of the new fiscal year are delayed by several months because they cannot be completed until the prior year's independent auditor's report is received by the City. This audit for the fiscal year ending in October is not available until approximately April of the following year.

The Consulting Engineer is particularly concerned about this delay in the availability of important financial information necessary for informed management of LUS. This

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is particularly critical for the telecommunications business. Timely information is essential for all LUS business, particularly as margins diminish. Basic financial and operating results including costs, revenue and performance measurements should be available from two to four weeks after the end of a given month if the utility is to be responsive to the dynamics of the rapidly changing utility industry.

LCG is in the process of choosing a new financial management system. This system is anticipated to be in place by June 1, 2009. One of the goals of the new system is to provide timely and accurate reports to LUS.

Rate Revisions

The Council and LPUA have the exclusive right to regulate LUS' rates and charges for services within and outside the corporate limits of the City. The 2004 Bond Ordinance, Section 8.3, states that it is the duty of the Consulting Engineer to advise on any revisions of rates and charges except fuel adjustment charges. Historical rate changes are shown below in Table 4-1.

Table 4-1
Historical Rate Changes approved by LPUA ⁽¹⁾

	2004	2005	2006	2007	2008
Electric					
Retail (%) ⁽²⁾	0.0	0.0	7.0	0.0	0.0
Water					
Retail (%)	0.0	0.0	0.0	5.0	0.0
Wholesale (%)	0.0	0.0	0.0	0.0	0.0
Wastewater					
Retail (%) ⁽³⁾	8-16	0.0	25.0	12.5	0.0

(1) Rate changes shown took effect on November 1 of each year.

(2) Rate increase applied to base rate. Fuel adjustment charge not included in table.

(3) For fiscal year 2004, the residential customer charge increased by 16.0 percent and the volumetric charge increased by 7.4 percent. For fiscal year 2004, the commercial customer charge decreased by 2.4 percent and the volumetric charge increased by 11.0 percent.

LUS indicated that it intends to conduct a comprehensive cost-of-service study to examine the adequacy and equity of existing rates. This will include a combined system cost of service study including Electric, Water and Wastewater Utilities. In addition, the overhead costs shared by the Utilities System and the Communications System will be reviewed for proper allocation methodology. This analysis is important in that LUS must understand the cost structure associated with the new capital and operating requirements of LUS.

In-Lieu-of Tax

The In-Lieu of Tax (ILOT) payment to the general fund is based on the previous year's revenues. As shown in Table 4-2, the amount paid in each year was calculated

according to the Bond Resolution using the previous year's revenues. Based on revenues in 2007, the amount paid in 2008 was \$18.6 million. This is equal to 9.0 percent of LUS 2007 revenues. The budgeted amount to be paid in 2009 is \$18.6 million, or 8.0 percent of LUS 2008 revenues.

By comparison, APPA's survey (published March 2009 containing 2006 data) of 382 public power systems shows that the median payments and contributions to their community's general fund were 5.0 percent of electric operating revenues. LUS' payment in 2008 of 9.0 percent of LUS 2007 revenues was approximately 70 percent higher than APPA's median value.

Table 4-2
Historical ILOT Payments

	2004	2005	2006	2007	2008	Average
LUS Operating Revenues (\$)	173,121,000	217,628,000	209,501,000	206,987,000	231,358,000	
LUS Calculated ILOT (\$)	16,317,000	16,654,000	18,832,000	18,606,000	18,603,000	
ILOT as a percent of Revenues (%)	9.42	7.65	8.99	8.99	8.04	8.57
Electric Operating Revenues (\$)	145,273,000	187,848,000	175,050,000	169,696,000	195,197,000	
Electric Calculated ILOT (\$)	13,331,000	14,612,000	14,550,000	14,539,000	15,108,000	
ILOT as a percent of Revenues (%)	9.18	7.78	8.31	8.57	7.74	8.26

Source: LCG Annual Budget Document 2008-2009.

LUS Financial and Operating Statements 2004-2008 audited.

Note: 2008 ILOT estimated until data provided. Beginning in fiscal year 2008 LUS Fiber wholesale is no longer included in with LUS.

Utilities System Disposition of Unpledged Cash

Table 4-3 summarizes the Utilities System revenues and expenses for the Electric, Water, Wastewater and Fiber Utilities, until 2008, over the most recent five years. Overall in 2008, the Utilities System total revenues (including retail sales, wholesale sales and other sources of income, and excluding Communications System totals) increased by \$24.8 million (12.0 percent), and operating expenses increased by \$28.0 million (18.0 percent). This resulted in a decrease in Net Operating Revenue of approximately 11.3 percent, or \$6.7 million. A major factor contributing to the decrease in revenues were the purchased power and fuel costs.

The debt service payment for the 2004 bonds increased to \$9.1 million in 2008 according to the 2004 Official Statement. Normal capital expenditures for additions to plant paid from cash, not including retained earnings, decreased by 29 percent.

Table 4-3
Utilities System Disposition of Unpledged Cash

	2004	2005	2006	2007	2008
Utilities System Operating Revenues (\$)	173,121,340	217,628,071	209,501,392	206,987,370	231,787,922

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	2004	2005	2006	2007	2008
Utilities System Operating Expenses (\$)	136,463,280	177,901,032	153,561,453	156,329,581	184,397,854
Utilities System Other Revenues (Expenses) (\$)	<u>1,129,051</u>	<u>3,356,667</u>	<u>5,404,907</u>	<u>8,626,426</u>	<u>5,214,420</u>
Net Operating Revenues (\$)	37,787,111	43,083,706	61,344,845	59,284,215	52,604,488
Debt Service					
Interest (\$)	656,367	3,745,587	7,041,490	9,043,138	8,239,988
Principal (\$)	<u>12,213,278</u>	<u>815,000</u>	<u>840,000</u>	<u>860,000</u>	<u>890,000</u>
Total Debt Service(\$)	12,869,645	4,560,587	7,881,490	9,903,138	9,129,988
Balance After Debt Service (\$)	24,917,466	38,523,119	53,463,355	49,381,077	43,474,500
Less Expenditures for Normal Additions to Plant Considered Payable from Operating Revenues (\$)	<u>9,385,964</u>	<u>6,486,719</u>	<u>9,136,459</u>	<u>14,300,895</u>	<u>10,150,440</u>
Change in Cash due to Operations (\$)	15,531,502	32,036,400	44,326,896	35,080,182	33,324,059
Less In-Lieu-of-Tax Payment (\$)	16,332,000	16,316,608	16,653,751	18,831,929	18,605,822
Changes in Balance Sheet Accounts affecting Cash (\$)	(1,862,839)	20,711,295	33,445,388	20,704,169	13,479,461
Resulting Change in 'Unpledged Cash' (\$)	(1,062,341)	4,991,503	5,772,243	4,455,916	(1,238,776)

Source: LUS Financial and Operating Statements 2004-2008 audited.

LUS Unofficial Status of Construction Work Orders, October 2008.

NOTE: Beginning in fiscal year 2008 LUS Fiber wholesale is no longer included in with LUS.

Financial and Operating Ratio Comparison

Table 4-4 provides a comparison of LUS' Electric Utility with other large electric power systems nationwide; however, not all ratios are based on the same number of power systems since some did not have data applicable to each ratio. The 2007 data for these systems was obtained from the American Public Power Association (APPA) website¹. This may significantly impact the comparisons that are based on fuel costs as fuel costs have changed dramatically in recent years.

Table 4-4
Financial & Operating Ratios - Public Power Systems

Financial Ratios – 2007 Median Values	20,000 to 50,000 Customers	50,000 to 100,000 Customers	Southwest	LUS 2007	LUS 2008
1. Revenue per kWh for Retail Customers (\$)	0.075	0.092	0.075	0.087	0.098
2. Debt to Total Assets	0.331	0.327	0.323	0.335	0.336
3. Operating Ratio (Electric only)	0.874	0.852	0.849	0.784	0.823
4. Current Ratio	1.99	2.47	2.73	1.217	1.258

¹ <http://www.appanet.org/files/PDFs/selectedratios.pdf>

Financial Ratios – 2007 Median Values	20,000 to 50,000 Customers	50,000 to 100,000 Customers	Southwest	LUS 2007	LUS 2008
5. Times Interest Earned	4.89	3.34	5.46	5.338	5.158
6. Debt Service Coverage	3.85	3.38	2.42	3.961	3.752
7. Net Income per Revenue Dollar (\$)	0.071	0.051	0.094	0.035	0.019
8. Uncollectible Accounts per Revenue Dollar (\$)	0.0022	0.0028	0.0029	0.003	0.003

Source: Ratios from the 'Selected Financial and Operating Ratios of Public Power Systems' published in March 2009 by APPA, 2007 Data.
For description on ratios, see glossary following this table.
LUS Financial and Operating Statements 2004-2008 audited.

LUS had 61,753 electric retail customers – hence the two columns for number of customers. The financial ratios (debt to total asset) indicate that LUS has a higher than average debt level but LUS can more than cover its debt obligations (debt service coverage). LUS' net earnings per dollar of revenue in 2008 were lower than the averages reported in the APPA study.

Glossary for Electric Financial and Operating Ratios

The following definitions and comments relate to the ratio input data and national ratio statistics and are excerpted from APPA's *Selected Financial and Operating Ratios of Public Power Systems* shown in Table 4-4.

Revenue per kWh (Line 1)

The ratio of total electric operating revenues from sales to ultimate customers to total kilowatt-hour sales measures the amount of revenue received for each kilowatt-hour of electricity sold to all classes of customers, including residential, commercial, industrial, public street and highway lighting, and other customers.

Debt to Total Assets (Line 2)

The ratio of long-term debt, plus current and accrued liabilities, to total assets and other debits measures a utility's ability to meet its current and long-term liabilities based on the availability of assets.

Long-term debt includes bonds, advances from the municipality, other long-term debt, any unamortized premium on long-term debt and any unamortized discount on long-term debt. Current and accrued liabilities include warrants, notes and accounts payable, payables to the municipality, customer deposits, taxes accrued, interest accrued, and miscellaneous current and accrued liabilities. Total assets and other debits include utility plant, investments, and current and accrued assets and deferred debits.

This ratio may be influenced by the extent to which its components include information applicable to the non-electric portion of the utility, if any (e.g., gas, water or other). In addition, the ratio may be influenced by a utility's financial policies.

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Operating Ratio (Line 3)

The ratio of total electric O&M expenses to total electric operating revenues measures the proportion of revenues received from electricity sales, rate adjustments and other electric activities required to cover the O&M costs associated with producing and selling electricity.

O&M expenses include the costs of power production, purchased power, transmission, distribution, customer accounting, customer service, sales, and administrative and general expenses. This ratio may be influenced by the availability of alternative power options and the costs of purchased power.

Current Ratio (Line 4)

The ratio of total current and accrued assets to total current and accrued liabilities is a measure of the utility's short-term liquidity (the ability to pay bills). The current ratio takes a snapshot of the utility's liquidity at a point in time and thus may vary considerably at other times of the year.

Total current and accrued assets include cash and working funds, temporary cash investments, notes and accounts receivable, receivables from the municipality, materials and supplies, prepayments and miscellaneous current and accrued assets. Total current and accrued liabilities include warrants, notes and accounts payable, payables to the municipality, customer deposits, taxes accrued, interest accrued and miscellaneous current and accrued liabilities.

Times Interest Earned (Line 5)

The ratio of net electric utility income, plus interest paid on long-term debt, to interest on long-term debt, measures the ability of a utility to cover interest charges and is indicative of the safety margin to lenders. Utilities that do not report any long-term debt are excluded from this ratio. This ratio may be influenced by a utility's financial policies.

Debt Service Charge (Line 6)

The ratio of net revenues available for debt service to total long-term debt service for the year measures the utility's ability to meet its annual long-term debt obligation.

Net revenues available for debt service equal net electric utility operating income (operating revenues minus operating expenses) plus net electric utility non-operating income, plus depreciation. Debt service includes principle and interest payments on long-term debt. This ratio may be influenced by a utility's financial policies.

Net Income per Revenue Dollar (Line 7)

The ratio of net electric utility income to total electric operating revenues measures the amount of income remaining—after accounting for O&M expenses, depreciation, taxes and tax equivalents—for every dollar received from sales of electricity.

The ratio may be influenced by the type and availability of power supply options and by the amount of taxes and tax equivalents that a utility transfers to the municipality or

other governmental body. Financial policies and the amount of debt may also affect this ratio (e.g., how a utility finances capital investments).

Uncollectible Accounts per Revenue Dollar (Line 8)

The ratio of total uncollectible accounts to total electric utility operating revenues measures the portion of each revenue dollar that will not be collected by the utility. This ratio will be influenced by the financial and customer service policies of the utility.

Electric Utility

Operating Results

Table 4-5 summarizes the Electric Utility revenues and expenses for the most recent five years. In 2008, the Electric Utility operating revenues increased by approximately 15.3 percent, or \$25.9 million, from 2007. A major contributing factor to this revenue increase was from an increase in fuel costs. Fuel adjustment revenues also increased by approximately 23.5 percent from 2007 levels

During 2008, Electric Utility total O&M expenses increased by 20.6 percent. The natural gas costs increased by 66.1 percent, or \$18.4 million, due to higher natural gas prices and increased self generation. The purchased power costs increased 10.4 percent, or \$8.0 million, due to increased market purchases. Other electric system O&M costs increased by about 3.3 percent, or \$916,539, during 2008.

LUS passes fuel costs on to retail customers via a fuel adjustment factor. LUS reviews the fuel adjustment factor monthly and adjusts the calculation periodically in order to recover fuel and purchased power costs.

In 2008, the Net Margin decreased by approximately 8.5 percent, or \$3.7 million from 2007 levels.

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Table 4-5
Electric Utility Operating Results

	2004	2005	2006	2007	2008
Electric Operating Revenues (\$)					
Retail	130,780,046	164,899,400	166,022,707	166,149,829	189,513,152
Wholesale	12,742,061	20,812,121	6,927,781	1,150,327	1,329,215
Other	<u>1,751,337</u>	<u>2,136,070</u>	<u>2,100,012</u>	<u>2,395,985</u>	<u>4,784,975</u>
Total Electric Operating Revenues (\$)	145,273,444	187,847,591	175,050,499	169,696,141	195,627,343
Electric Operating Expenses (\$)					
Operation Expenses					
Fuel – Gas	28,871,511	60,387,193	19,521,843	27,863,787	46,286,299
Purchased Power – LPPA	44,566,751	46,266,400	56,789,937	62,412,389	61,874,524
Purchased Power – Other	20,315,416	24,666,146	30,969,958	14,803,604	23,405,229
Other	17,773,657	18,985,504	19,073,385	20,426,428	21,087,919
Maintenance Expenses	<u>6,702,630</u>	<u>6,958,327</u>	<u>5,759,089</u>	<u>7,470,080</u>	<u>7,725,129</u>
Total Operating Expenses (\$)	118,229,964	157,263,570	132,114,212	132,976,289	160,379,100
Electric Non Operating Revenues (Expenses) (\$)					
Interest Revenues	1,613,012	4,199,950	5,014,681	5,415,927	4,402,446
LUS Fiber Start –up Cost Reimbursement	0	0	0	1,059,598	0
Miscellaneous Non Operating Revenues	0	0	478	0	91,873
FTTH Start Up Project	(306,984)	(929,271)	(501,721)	0	(24,173)
Interest on Customer Deposits	(1,413)	(15,316)	(9,496)	(9,538)	(10,711)
Loss on Extinguishment of Debt	(61,104)	0	0	0	0
Hurricanes Rita and Katrina	0	(55,123)	90,375	0	0
Hurricane Gustav (Loss in Disposition of Property)	0	0	0	0	(65,769)
Hurricane Lili	0	0	0	0	(81,970)
Power Plant Decommissioning ⁽²⁾	(298,643)	0	0	0	0
Miscellaneous Non Operating Expense	<u>(8,217)</u>	<u>(2)</u>	<u>0</u>	<u>0</u>	<u>(32,767)</u>
Total Non Operating Revenues (Expenses) (\$)	\$936,650	\$3,200,239	\$4,594,317	\$6,465,987	\$4,278,929
Net Margin (\$) ⁽¹⁾	\$27,980,131	\$33,784,259	\$47,530,604	\$43,185,840	\$39,527,172

(1) Before Depreciation and Debt Service.

Source: LCG Audited Financial & Operating Statement.

Statistical Data

The selected statistical data in this section pertaining to the number of customers, customer usage, and revenues by class was obtained or developed from the LUS Financial and Operating Statements for years 2003 through 2008.

Revenues

Table 4-6 shows the Electric Utility statistics for the most recent five years. The total sales (megawatt hour or MWh) increased by less than 1.0 percent. The number of electric accounts increased by 2.9 percent over the last fiscal year.

In 2008, the average electric usage per retail customer decreased by 2.0 percent, from 31,955 kilowatt hours (kWh) to 31,308 kWh. The average electric revenue per retail customer, including fuel cost adjustment charges increased by 10.9 percent in 2008 compared to 2007.

The wholesale revenue on a per MWh basis increased by 21.1 percent, indicating the increase in wholesale energy sales seen during 2008.

Table 4-6
Electric Sales Revenue and Statistics

	2004	2005	2006	2007	2008
Electric Sales Revenues (\$)					
Retail - Rate Base	62,038,819	64,125,021	69,066,474	70,333,804	71,213,614
Retail - Fuel Adjustment	68,741,227	100,774,379	96,956,233	95,816,026	118,299,538
Wholesale	12,742,061	20,812,121	6,927,781	1,150,327	1,329,215
Other	<u>1,751,337</u>	<u>2,136,070</u>	<u>2,100,012</u>	<u>2,395,985</u>	<u>4,784,975</u>
Total Electric Sales Revenues (\$)	145,273,444	187,847,591	175,050,499	169,696,141	195,627,343
Electric Sales (MWh)					
Retail	1,803,558	1,869,428	1,883,007	1,917,891	1,933,371
Wholesale	<u>284,095</u>	<u>423,524</u>	<u>101,846</u>	<u>34,661</u>	<u>33,071</u>
Total Sales	2,087,653	2,292,952	1,984,853	1,952,552	1,966,442
Electric Number of Accounts (Average)					
Retail	57,489	57,906	58,722	60,018	61,753
Wholesale	<u>12</u>	<u>12</u>	<u>12</u>	<u>13</u>	<u>13</u>
Total Accounts	57,501	57,918	58,734	60,031	61,766
Electric Statistics – Retail					
Usage per Account (kWh)	31,372	32,284	32,066	31,955	31,308
Revenue per Account (with fuel)	\$2,275	\$2,848	\$2,827	\$2,768	\$3,069
Revenue per Account (without fuel)	\$1,079	\$1,107	\$1,176	\$1,172	\$1,153
Revenue per MWh (with fuel)	\$72.51	\$88.21	\$88.17	\$86.63	\$98.02
Revenue per MWh (without fuel)	\$34.40	\$34.30	\$36.68	\$36.67	\$36.83
Electric Statistics - Wholesale					
Usage per Account (kWh)	23,674,583	35,293,667	8,487,167	2,666,231	2,543,923
Revenue per Account (with fuel) (\$)	1,061,838	1,734,343	577,315	88,487	102,247
Revenue per MWh (with fuel) (\$)	44.85	49.14	68.02	33.19	40.19

Source: LUS Financial and Operating Statements 2004-2008 audited.

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Power Costs

Table 4-7 summarizes Electric Utility power costs for the most recent five years. As shown in this table, the total Electric Utility energy costs increased overall by 23.4 percent to \$65.64 per MWh in 2008. Self-generation costs increased by 14.7 percent per MWh primarily due to increased fuel prices. On a unit basis, total purchased power costs increase by 15.9 percent per MWh from 2007 to 2008. LPPA purchased power costs increased by 9.2 percent per MWh during the same period.

Table 4-7
Electric Utility Annual Power Costs

	2004	2005	2006	2007	2008
Expenses					
Self Generation (\$)					
Fuel	28,871,511	60,387,193	19,521,843	27,863,787	46,286,299
Other	<u>4,448,433</u>	<u>5,225,347</u>	<u>3,877,304</u>	<u>5,685,003</u>	<u>6,495,265</u>
Total Self Generation (\$)	33,319,945	65,612,540	23,399,147	33,548,790	52,781,564
Purchases (\$)					
LPPA	44,566,751	46,266,400	56,789,937	62,412,389	61,874,524
Other Supplies	<u>20,315,416</u>	<u>24,666,146</u>	<u>30,969,958</u>	<u>14,803,604</u>	<u>23,405,229</u>
Total Purchased Power (\$)	<u>64,882,166</u>	<u>70,932,546</u>	<u>87,759,895</u>	<u>77,215,993</u>	<u>85,279,753</u>
Total Supply (\$)	98,202,111	136,545,087	111,159,042	110,764,782	138,061,317
Energy (MWh)					
Self Generation	463,145	632,728	230,855	283,191	388,408
Purchases					
LPPA	1,339,136	1,412,515	1,484,509	1,576,314	1,430,888
Other Supplies	<u>412,996</u>	<u>354,414</u>	<u>421,554</u>	<u>223,593</u>	<u>284,029</u>
Total Purchased Power	<u>1,752,132</u>	<u>1,766,929</u>	<u>1,906,063</u>	<u>1,799,907</u>	<u>1,714,917</u>
Total Supply	2,215,277	2,399,657	2,136,918	2,083,098	2,103,325
Average Costs (\$/MWh)					
Self Generation (\$)					
Fuel	62.34	95.44	84.56	98.39	119.17
Other	<u>9.60</u>	<u>8.26</u>	<u>16.80</u>	<u>20.07</u>	<u>16.72</u>
Total Self Generation (\$)	71.94	103.70	101.36	118.47	135.80
Purchases (\$)					
LPPA	33.28	32.75	38.26	39.59	43.24
Other Supplies	<u>49.19</u>	<u>69.60</u>	<u>73.47</u>	<u>66.21</u>	<u>82.40</u>
Total Purchased Power (\$)	<u>37.03</u>	<u>40.14</u>	<u>46.04</u>	<u>42.90</u>	<u>49.73</u>
Total Supply (\$)	44.33	56.90	52.02	53.17	65.64

Source: LUS Financial and Operating Statements 2004-2008 audited.

Detailed Expenses

As shown in Table 4-8, the compounded annual average changes in Electric Utility expenses over the last five years are as follows:

- Production Expense – Non-Fuel – 10.0 percent increase
- Transmission Expense – 1.7 percent decrease
- Distribution Expense – 4.3 percent increase
- Administrative Support – 3.7 percent increase

Administrative Support expenses include Customer Operations, Customer Services, and Administrative and General Expense. The Utilities System has experienced a significant growth in Administrative and General Expense. This significant growth is a result of changes in accounting practices, employee health insurance rates, and credits for Administrative Expenses transferred.

Table 4-8
Electric Utility Detailed Expenses

	2004	2005	2006	2007	2008
Electric Production Expense (\$)					
Operation – Fuel Expense	28,871,511	60,387,193	19,521,843	27,863,787	46,286,299
Operation – Non Fuel	1,544,458	1,851,350	1,955,089	2,135,202	2,552,478
Maintenance	2,903,976	3,373,997	1,922,215	3,549,801	3,942,787
Purchased Power – LPPA	44,566,751	46,266,400	56,789,937	62,412,389	61,874,524
Purchased Power – Other	20,315,416	24,666,146	30,969,958	14,803,604	23,405,229
Electric Transmission Expense (\$)					
Operation	4,360,383	4,422,913	4,264,403	4,017,349	4,094,431
Maintenance	150,917	98,093	94,166	153,215	122,595
Electric Distribution Expense (\$)					
Operation	2,103,120	1,967,032	1,652,025	3,160,416	3,156,114
Maintenance	3,647,737	3,486,237	3,742,709	3,767,064	3,659,747
Other Electric Expense (\$)					
Customer Operations Expense	2,566,156	2,606,374	2,899,652	2,309,474	2,464,103
Customer Services	103,182	65,304	47,426	76,140	67,450
Administrative & General	<u>7,096,358</u>	<u>8,072,532</u>	<u>8,254,790</u>	<u>8,727,846</u>	<u>8,753,343</u>
Total Electric Expense (\$)	118,229,964	157,263,570	132,114,212	132,976,289	160,379,100

Source: LUS Financial and Operating Statements 2004-2008 audited.

Comparative Operation and Maintenance Expenses

Table 4-9 compares LUS O&M expenses with other public power systems across the United States. The data in Table 4-9 for the other public power systems are from the APPA *Selected Financial and Operating Ratios of Public Power Systems* survey report published March 2009 (APPA Report). The survey included 208 public power systems. The APPA data represents 2007 operations.

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Table 4-9
O&M Expense Comparison - Public Power Systems

Operating Ratios – 2007 Median Values	20,000 to 50,000 Customers	50,000 to 100,000 Customers	Southwest	LUS 2007	LUS 2008
1. Total O&M Expenses per kWh Sold (\$)	0.065	0.069	0.069	0.067	0.082
2. Total O&M Expense (excluding Power Supply) per Retail Customer (\$)	331	332	382	357	361
3. Total Power Supply Expense per kWh Sold (\$)	0.057	0.060	0.056	0.056	0.070
4. Purchased Power Cost per kWh (\$)	0.054	0.046	0.048	0.046	0.050
5. Retail Customers per Meter Reader	6,031	9,556	4,295	3,091	2,941
6. Distribution O&M Expense per Retail Customer (\$)	117	120	125	92	110
7. Distribution O&M Expense per Circuit Mile (\$)	4,877	7,766	4,495	6,229	7,609
8. Customer Accounting, Service and Sales Expense per Retail Customer (\$)	47	62	49	50	41
9. Administrative & General Expense per Retail Customer (\$)	114	138	161	141	142

Source: Ratios from 'Selected Financial and Operating Ratios of Public Power Systems' published by APPA in March 2009, 2007 Data.

For description on ratios, see glossary later in this section.

LUS Financial and Operating Statements 2004-2008 audited.

Because LUS had 61,753 electric retail customers in 2008, LUS would be comparable with utilities in the 20,000 to 50,000 customer range as well as utilities in the 50,000 to 100,000 customer range.

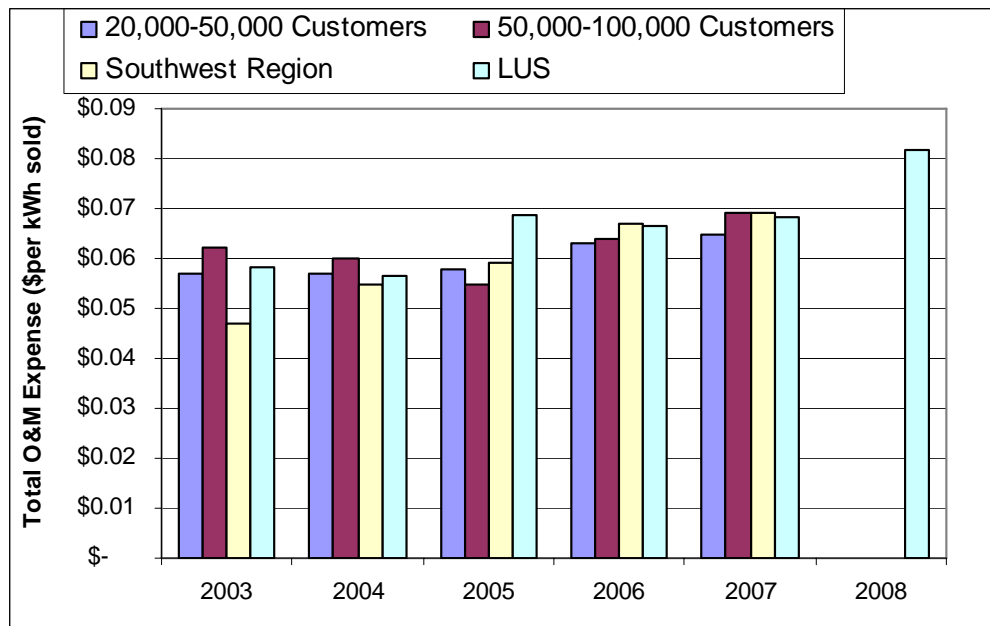


Figure 4-1: Total O&M Expense on a per kWh Basis

When comparing LUS' Total O&M expense on a unit basis to utilities in the APPA report, LUS' expenses generally appear to be on the slightly higher side in recent years as shown in Figure 4-1.

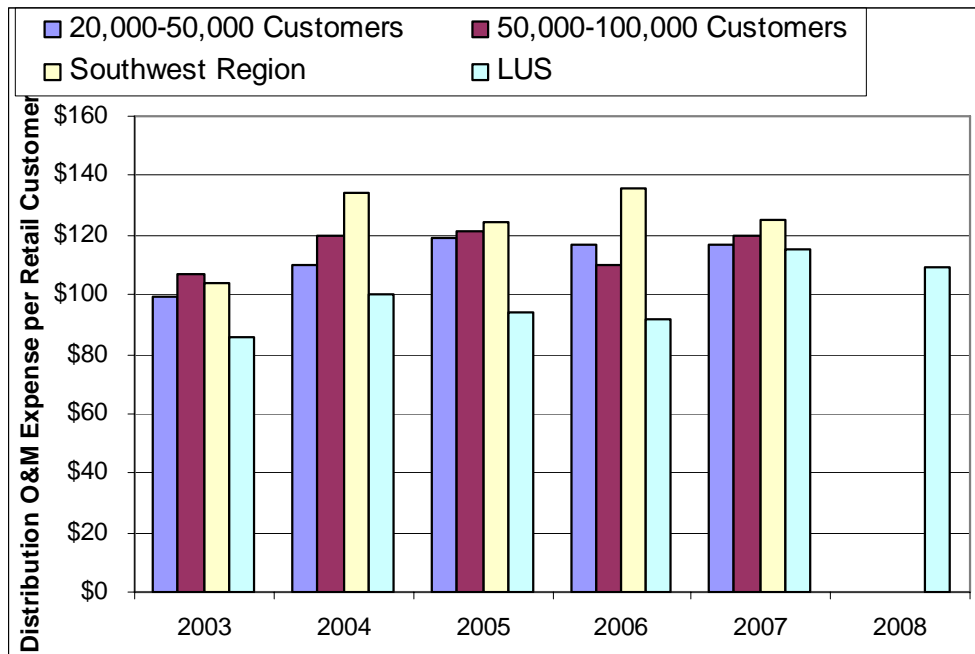


Figure 4-2: Distribution O&M Expense per Retail Customer

As shown in Figure 4-2, LUS' Distribution O&M expense on a retail customer basis is generally lower when compared with other utilities in the APPA report. The same holds true when comparing Distribution O&M expense on a per circuit mile basis.

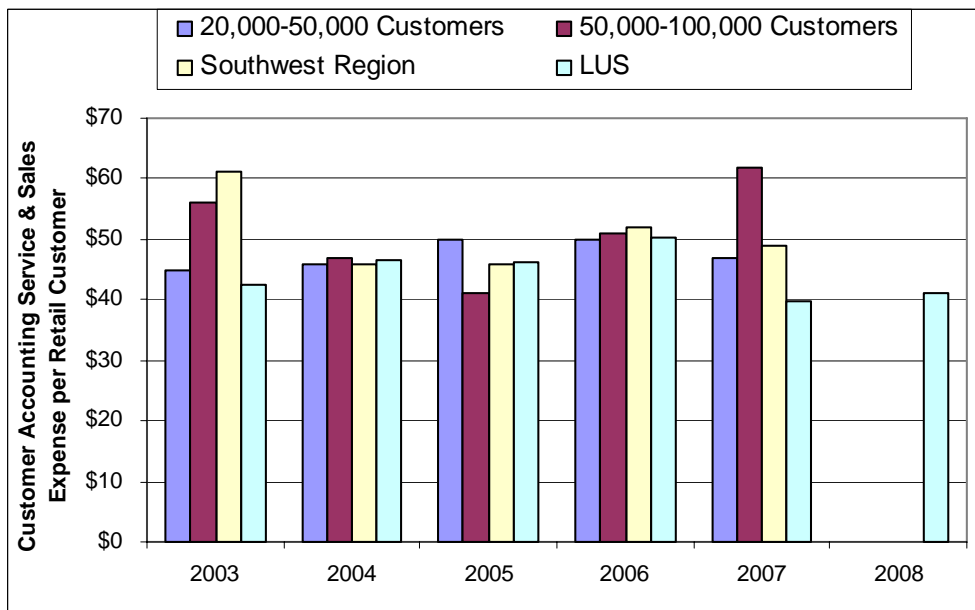


Figure 4-3: Customer Accounting Service & Sales Expense per Retail Customer

As shown in Figure 4-3, LUS' customer-related expenses on a retail customer basis are average or slightly lower when compared with other utilities in the APPA report.

According to Table 4-9, LUS' purchased power costs on a unit basis for 2006 are slightly lower than the APPA averages, and in 2008 purchased power costs on a unit basis is slightly above the Southwest Region reporting utilities average. However, LUS' retail customers per meter reader are much lower than the APPA averages. The 2007 and 2008 customer-related and A&G expenses appear to be somewhat higher than average when compared to the APPA data.

Glossary for Electric Operating Ratios

The following definitions and comments are excerpted from APPA's report entitled *Selected Financial and Operating Ratios of Public Power Systems* and related to the ratio input data and national ratio statistics shown in Table 4-9.

Total Operation and Maintenance Expense per Kilowatt-Hour Sold (Line 1)

The ratio of total electric utility O&M expenses, including the cost of generated and purchased power, to total kWh sales to ultimate and resale customers includes the cost of generated and purchased power and measures average total O&M expenses associated with each kilowatt-hour of electricity sold, either for resale or to ultimate customers.

Included in O&M costs are the expenses associated with power supply (generation and purchased power), transmission, distribution, customer accounting, customer services, sales, and administrative and general functions of the electric utility. Because power supply expenses typically comprise the largest component of total O&M expenses, this ratio may be influenced by the proportion of power generated by a utility and the availability of alternative power supplies. Kilowatt-hours of electricity produced but not sold (i.e., energy furnished without charge or energy used internally and energy losses) are not included in the denominator.

Total Operation and Maintenance Expense (Excluding Power Supply Expense) per Retail Customer (Line 2)

The ratio of total electric utility O&M expenses, excluding all costs of power supply, to the total number of ultimate customers, is the total O&M expense per retail customer.

O&M expenses include the costs of transmission, distribution, customer accounting, customer services, sales and administrative and general expenses. The cost of power supply (generation and purchased power) is excluded from the ratio. This ratio may be affected by population density and the mix of customers between various classes (residential, commercial, industrial or other). In addition, the extent that a utility services a large number of resale customers will influence the ratio.

Total Power Supply Expense per Kilowatt-Hour Sold (Line 3)

The ratio of the total costs of power supply to total sales to both ultimate and resale customers is the total power supply expense per kilowatt-hour sold. This ratio

measures all power supply costs, including generation and purchased power, associated with the sale of each kilowatt-hour of electricity.

The ratio includes O&M costs arising from all generation types, including steam, nuclear, hydraulic and other types of generation. O&M expenses include the costs of fuel, labor, supervision, engineering, materials and supplies, and also include the cost of purchased power. The ratio may be influenced by the geographic location of the utility, the availability of alternative power supplies, the degree to which the utility can generate its own power, and access to transmission. The ratio does not include kilowatt-hours produced but not sold (i.e., energy used internally, energy furnished without charge, or energy losses).

Purchased Power Cost per Kilowatt-Hour (Line 4)

The ratio of the cost of purchased power to the amount of kilowatt-hours purchased measures the purchased power component of power supply costs.

Purchased power includes purchases from investor-owned utilities, municipalities, cooperatives or other public authorities for subsequent distribution and sale to ultimate customers. It does not include power exchanges. Adjustments to the cost data were made in a small number of cases to eliminate power exchanges. The cost reflects the amount billed, including adjustments and other charges.

The ratio may be influenced by the geographic location of the utility, availability of alternative power supplies, access to transmission, and the type of purchase agreement, such as firm power, economy power or surplus sales.

Retail Customers per Meter Reader (Line 5)

The ratio of retail customers to the number of meter readers employed by the utility measures the average number of retail customers served by each meter reader.

The number of meter readers includes the total number of full-time meter readers plus half of all part-time meter readers. It is assumed that all part-time employees work half time (i.e., one full-time employee is equivalent to two part-time employees). Population density, frequency of meter readings, and the technology or method used to read meters will influence this ratio.

Distribution Operation and Maintenance Expenses per Retail Customer (Line 6)

The ratio of total distribution O&M expenses to the total number of retail customers measures the average distribution expense associated with delivering power to each retail customer.

Distribution costs include expenses associated with labor, supervision, engineering, materials and supplies used in the operation and maintenance of the distribution system. The ratio will be influenced by population density and the mix of customer classes served by the utility.

Distribution Operation and Maintenance Expenses per Circuit Mile (Line 7)

The ratio of total distribution O&M expenses to the total number of circuit miles of distribution line measures the total distribution costs associated with each circuit mile of distribution line used to deliver power to customers.

Distribution costs include expenses associated with labor, supervision, engineering, materials and supplies used in the O&M of the distribution system. The ratio will be affected by population density, the mix of customer classes served by the utility, the dispersion of customers within the utility's service territory, and the proportion of underground and overhead distribution lines.

Customer Accounting, Customer Service and Sales Expenses per Retail Customer (Line 8)

The ratio of total customer accounting, service, and sales expenses to the total number of retail customers measures the average expenses incurred by the utility in handling each customer's account. This includes the costs of obtaining and servicing all retail customers. Uncollectible accounts and meter reading expenses are included in this ratio.

The ratio includes the cost of labor, materials, and other expenses associated with advertising, billing, collections, records and handling inquiries and complaints. It also includes the costs of promoting and providing customer service programs such as energy services or conservation programs. The ratio will be influenced by the degree to which the utility provides various energy services and other types of customer programs, and also by the mix of customer classes it serves.

Administrative and General Expenses per Retail Customer (Line 9)

The ratio of total electric utility administrative and general expenses to the total number of retail customers measures the average administrative and general expenses incurred by the utility on behalf of each retail customer.

Administrative and general expenses are those electric O&M expenses not allocable to the costs of power production (generation and power purchases), transmission, distribution, or customer accounting, service and sales. Items which may be included are compensation of officers and executives, office supplies, professional fees, property insurance and claims, pensions and benefits, and other expenses not provided for elsewhere.

Rate Revisions

For 2008, the existing Electric Utility rates were sufficient to fully fund the Electric Utility operation on a stand-alone basis. LUS Electric Utility rates consist of a base and fuel component. The base rate was not changed during fiscal year 2008. The base rate was last increased by 7 percent on November 1, 2005. During 2006, LUS began to realize fuel savings due to the operation of two new combustion turbine power plants. The fuel savings offset the increase in base electric rates during 2006.

LUS adjusted the Electric Utility fuel charge during 2008 due to fluctuating fuel costs. At the beginning of fiscal year 2008, the fuel cost was \$0.052 per kWh. At the close

of the fiscal year 2008 the rate had increased by 35.6 percent to \$0.07. When considering fuel costs, retail revenues per kWh increased by 13.1 percent overall.

As shown in Table 4-10, Electric Utility average Residential, Small Commercial and Large Commercial base rates remained generally flat during 2008 compared to the prior year.

Since 2004, the average residential rates have increased by approximately 7.2 percent. The Small Commercial rates have increased by 6.9 percent since 2004, and the Large Commercial rates have increased by 7.2 percent. Minor fluctuations in base rates over the years can be attributable to changes in customer usage patterns, while more significant changes can be attributed to rate changes.

Table 4-10
Electric Retail Base Rate Revenue

Class	2004	2005	2006 ⁽¹⁾	2007	2008
Residential (\$/kWh)	0.0341	0.0340	0.0364	0.0364	0.0365
Small Commercial-No Demand (\$/kWh)	0.0466	0.0465	0.0498	0.0498	0.0498
Large Commercial-Demand (\$/kWh)	0.0316	0.0315	0.0337	0.0336	0.0339

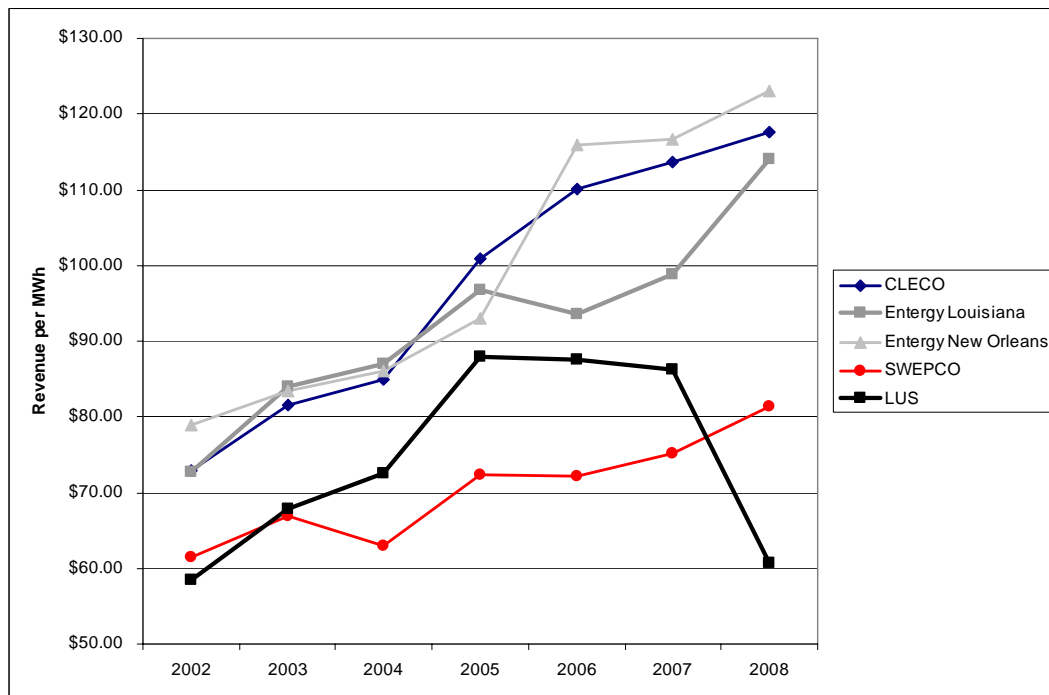
(1) The Electric Utility experienced a 7 percent base rate increase on November 1, 2005.

Source: LUS Financial and Operating Statements 2004-2008 audited.

Rate Comparison

Figures 4-4 and 4-5 graphically compare the average electric residential and commercial retail rates for LUS and other selected Louisiana utilities for years 2002 through 2008. The data shown was gathered from the Global Energy Decision's Velocity Suite database.

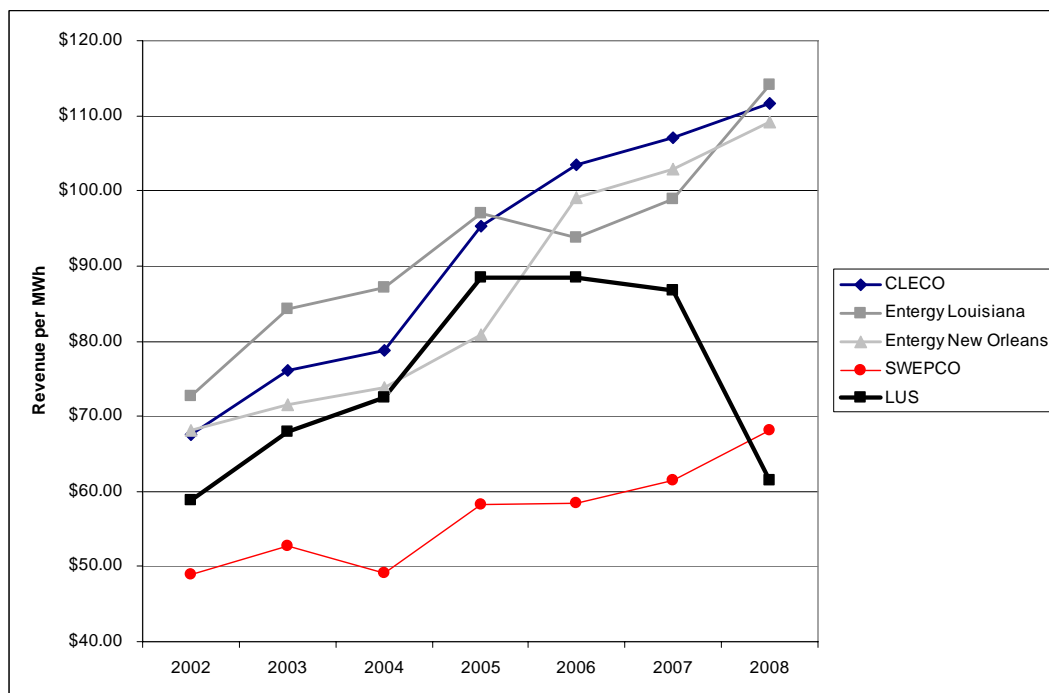
Figure 4-4 displays LUS residential customers' average costs compared to surrounding utilities in Louisiana. Overall, LUS' residential rates were the lowest among the utilities reviewed, which was limited to investor-owned utilities.



Source: Global Energy Decisions

Figure 4-4: Residential Rates for LUS and Selected Louisiana Utilities

Figure 4-5 displays LUS commercial customers' average costs compared to surrounding utilities in Louisiana. Overall, LUS' commercial rates were the lowest among the utilities reviewed which was limited to investor-owned utilities.



Source: Global Energy Decisions

Figure 4-5: Commercial Rates for LUS and Selected Louisiana Utilities

Water Utility

Operating Results

Table 4-11 summarizes the Water Utility revenues and expenses for the most recent five years. In 2008, the Water Utility operating revenues increased by approximately 6.7 percent over 2007. Retail water revenues increased by 6.6 percent over the previous year. The wholesale revenues increased by 14.7 percent due to the increased sales. The Water Utility operating expenses increased approximately 6.5 percent over 2007.

In January 2008, a structural rate change was applied to the retail water rates, not wholesale water rates. During fiscal year 2008, the retail water sales dropped by approximately 5 percent and the wholesale water sales increased by over 5 percent. Total revenues increased by 6.7 percent and a 3.8 percent decrease in operating margin. The decreased retail sales can be contributed primarily to the normal weather conditions regarding precipitation.

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Table 4-11
Water Utility Operating Results

	2004	2005	2006	2007	2008
Water Operating Revenues (\$)					
Retail	9,885,284	10,196,348	10,455,314	10,677,248	11,379,071
Wholesale	1,715,164	1,895,433	1,938,108	2,078,985	2,383,734
Other	<u>265,109</u>	<u>774,653</u>	<u>385,660</u>	<u>496,203</u>	<u>376,342</u>
Total Water Operating Revenues (\$)	11,865,556	12,866,433	12,779,083	13,252,435	14,139,148
Water Operating Expenses (\$)					
Operation Expenses	3,237,792	3,618,283	3,997,746	3,454,424	4,330,083
Maintenance Expenses	1,115,341	1,080,016	1,239,624	1,092,949	1,104,849
Other Expenses	<u>3,007,651</u>	<u>3,403,409</u>	<u>3,543,744</u>	<u>4,675,183</u>	<u>4,385,407</u>
Total Operating & Maintenance Expenses (\$)	7,360,784	8,101,708	8,781,114	9,222,556	9,820,340
Water Non Operating Revenues (Expenses) (\$)					
Interest Revenues	131,747	287,671	366,083	422,957	318,191
Water Tapping Fees	123,100	140,536	160,700	141,100	140,500
LUS Fiber Start-up Reimbursement	0	0	0	359,507	0
Miscellaneous Non Operating Revenues	0	0	35	0	6,640
FTTH Start Up Project ⁽¹⁾	(88,453)	(267,756)	(133,792)	0	(7,634)
Interest on Customer Deposits	(235)	(2,386)	(884)	(1,047)	(1,312)
Extinguishment of Debt	(8,962)	0	0	0	0
Miscellaneous Non Operating Expense	<u>(2,368)</u>	<u>(1)</u>	<u>0</u>	<u>0</u>	<u>(10,347)</u>
Total Non Operating Revenues (Expenses) (\$)	154,829	158,064	392,142	922,517	446,038
Net Margin (\$) ⁽²⁾	4,659,601	4,922,789	4,390,110	4,952,397	4,764,846

(1) Water allocation of FTTH project start up cost. Allocation pursuant to LUS proposed Cost Allocation Manual.

(2) Before Depreciation and Debt Service.

Source: LUS Financial and Operating Statements 2004-2008 audited.

Statistical Data

The selected statistical data in this section pertains to the number of customers, customer usage, and revenues by classes was obtained or developed from the LUS Financial and Operating Statements for years 2004 through 2008.

Revenues

Table 4-12 shows the Water Utility retail statistics for the most recent five years. During 2008, the total revenues increased 6.7 percent, the total volume sales decreased by 2.6 percent, and the number of accounts increased by 3.0 percent.

Compared to the prior year, the average water usage per retail customer decreased by 7.0 percent, from 128,000 gallons to 119,000 gallons. Retail water sales decreased in total volume by 4.6 percent. The average water usage per retail customer has decreased by 11.7 percent from 2004 levels. The average water revenue per retail customer increased by 3.9 percent in 2008. The retail water revenue on a per gallon basis increased by 11.7 percent.

Compared to the prior year, the average water usage per wholesale customer decreased by 1.5 percent from 305,000 gallons to 300,000 gallons. Wholesale water sales increased in total volume by 5.4 percent during 2008. The water revenue on a per gallon basis increased by 8.7 percent during 2008. Since 2004, the wholesale water sales have increased by 32 percent and the wholesale revenues have increased by 39 percent for an overall revenue per thousand gallons increase of 5.3 percent.

Table 4-12
Water Sales Revenue and Statistics

	2004	2005	2006	2007	2008
Water Sales Revenues (\$)					
Retail	9,885,284	10,196,348	10,455,314	10,677,248	11,379,071
Wholesale	1,715,164	1,895,433	1,938,108	2,078,985	2,383,734
Other	<u>265,109</u>	<u>774,653</u>	<u>385,660</u>	<u>496,203</u>	<u>376,342</u>
Total Water Sales Revenues (\$)	11,865,556	12,866,433	12,779,083	13,252,435	14,139,148
Water Sales (1,000 gallons)					
Retail	5,745,371	5,939,361	6,075,782	5,757,205	5,492,975
Wholesale	<u>1,171,125</u>	<u>1,304,080</u>	<u>1,326,594</u>	<u>1,465,618</u>	<u>1,545,275</u>
Total Sales	6,916,496	7,243,441	7,402,376	7,222,823	7,038,250
Water Number of Accounts					
Retail	42,467	43,212	44,081	44,809	45,983
Wholesale	<u>4,155</u>	<u>4,317</u>	<u>4,536</u>	<u>4,813</u>	<u>5,151</u>
Total Accounts	46,622	47,529	48,617	49,622	51,134
Water Statistics Retail					
Usage per Account (1,000 gallons)	135	137	138	128	119
Revenue per Account (\$)	232.78	235.96	237.18	238.28	247.46
Revenue per 1,000 gallons (\$)	1.72	1.72	1.72	1.85	2.07
Water Statistics - Wholesale					
Usage per Account (1,000 gallons)	282	302	292	305	300
Revenue per Account (\$)	412.80	439.06	427.27	431.95	462.77
Revenue per 1,000 gallons (\$)	1.46	1.45	1.46	1.42	1.54

Source: LUS Financial and Operating Statements 2004-2008 audited.

Detailed Expenses

As shown in Table 4-13, the compounded annual average changes in Water Utility expenses over the last five years are as follows:

- Supply Expense – 53.9 percent decrease
- Power and Pumping Expense – 5.0 percent increase
- Purification Expense – 7.8 percent increase
- Distribution Expense – 2.7 percent increase
- Administrative Support – 9.9 percent increase

Table 4-13
Water Utility Detailed Expenses

	2004	2005	2006	2007	2008
Water Source of Supply Expense (\$)					
Operation	11,428	82,691	13,830	2,970	148
Maintenance	1,392	1,341	15,063	499	433
Water Power & Pumping Expense (\$)					
Operation	708,850	725,041	847,321	1,008,639	862,714
Maintenance	0	0	34,000	0	0
Water Purification Expense (\$)					
Operation	1,770,445	1,958,553	2,236,692	1,653,192	2,638,385
Maintenance	438,916	464,143	530,149	453,006	348,244
Water Distribution Expense (\$)					
Operation	747,069	851,998	899,904	789,623	828,837
Maintenance	675,033	614,533	660,411	639,443	756,171
Other Water Expense (\$)					
Customer Operations	826,959	847,005	908,250	976,245	1,038,942
Customer Services	54,598	31,505	99,910	85,717	72,899
Administrative & General	<u>2,126,093</u>	<u>2,524,899</u>	<u>2,535,583</u>	<u>3,613,222</u>	<u>3,273,567</u>
Total Water Expense (\$)	7,360,784	8,101,708	8,781,114	9,222,556	9,820,340

Source: LUS Financial and Operating Statements 2004-2008 audited.

Rate Revisions

During the 2008 fiscal year the existing Water Utility retail rates were modified, creating a two tiered rate structure. Existing water rates, although recently increased, are not expected to be sufficient to fully fund the Water Utility operation on a stand-alone basis for an extended period. The Water Utility is partially subsidized by Electric Utility revenues due to capital and operating requirements of the Water Utility. On January 1, 2008, an inclining block rate was introduced to residential customers. This rate change is estimated to collect an addition \$1 million of revenues. The Water Utility will be faced with continued rate increases over the next few years

before it will be financially self-sufficient. The rates should continue to be monitored closely to ensure that rate revenue can support the Water Utility.

The Water Utility average residential rates increased by 12.6 percent during 2008. The Commercial average base rates increased by 12.5 percent during 2008 as shown in Table 4-14. Since 2004, the average residential base rates have increased 23.6 percent and commercial base rates have increased 18.3 percent. For years 2004 through 2008, changes in average revenue per thousand gallons may be attributable to water usage levels as rainfall fluctuated each year, as well as the rate restructuring in January 2008.

Table 4-14
Water Retail Rates (Revenue/1,000 gallons)

Class	2004	2005	2006	2007 ⁽¹⁾	2008
Residential (\$)	1.85	1.84	1.85	2.04	2.29
Commercial (\$)	1.46	1.46	1.46	1.54	1.73

(1) Water retail customers experienced a rate increase of 5 percent on November 1, 2006.

Source: LUS Financial and Operating Statements 2004-2008 audited.

Wastewater Utility

Operating Results

Table 4-15 summarizes the Wastewater Utility revenues and expenses for the most recent five years. The Wastewater Utility operating revenues decreased approximately 1.0 percent, or approximately \$150,000 due to a \$513,000 reduction in Contribution in Aid of Construction. Wastewater Utility operating expenses increased approximately 7.3 percent or approximately \$925,000 from 2007. Overall the Wastewater Utility operating margin decreased by approximately 17.8 percent due to the LUS Fiber startup cost reimbursement 100 percent reduction, as well as the Contribution in Aid of Construction 100 percent reduction.

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Table 4-15
Wastewater Utility Operating Results

	2004	2005	2006	2007	2008
Wastewater Operating Revenues (\$)					
Service	15,140,093	15,436,805	19,663,521	21,479,609	21,893,058
Other	<u>79,990</u>	<u>204,602</u>	<u>264,150</u>	<u>692,444</u>	<u>128,374</u>
Total Wastewater Operating Revenues (\$)	15,220,083	15,641,408	19,927,672	22,172,054	22,021,432
Wastewater Operating Expenses (\$)					
Operation Expenses	5,210,368	5,588,641	6,095,764	6,324,360	6,904,585
Maintenance Expenses	1,294,289	2,278,263	1,661,598	1,930,553	2,020,107
Other Expense	<u>3,726,228</u>	<u>4,187,612</u>	<u>4,249,505</u>	<u>4,978,554</u>	<u>5,273,723</u>
Total Operating Expenses (\$)	10,230,885	12,054,516	12,006,867	13,233,467	14,198,414
Wastewater Non Operating Revenues (Expenses) (\$)					
Interest Revenues	168,993	349,715	570,869	707,631	495,576
LUS Fiber Start-up Reimbursement	0	0	0	454,114	0
Miscellaneous Non Operating Revenues	0	0	54	0	10,342
FTTH Start Up Project ⁽¹⁾	(114,469)	(346,508)	(192,326)	0	(10,602)
Interest on Customer Deposits	(261)	(1,796)	(1,752)	(2,322)	(2,377)
Extinguishment of Debt	(11,406)	0	0	0	0
Miscellaneous Non Operating Expense	<u>(3,064)</u>	<u>(1)</u>	<u>0</u>	<u>0</u>	<u>(14,371)</u>
Total Non Operating Revenues (Expenses) (\$)	39,793	1,410	376,845	1,159,423	478,568
Net Margin (\$) ⁽²⁾	5,028,992	3,588,302	8,297,650	10,098,010	8,301,585

(1) Wastewater allocation of FTTH project start up cost. Allocation pursuant to LUS Cost Allocation Manual.

(2) Before Depreciation and Debt Service.

Source: LUS Financial and Operating Statements 2004-2008 audited.

Statistical Data

The selected statistical data in this section pertaining to the number of customers, customer usage, and revenues by class was obtained or developed from the LUS Financial and Operating Statements for years 2004 through 2008.

Revenues

Table 4-16 shows the Wastewater Utility statistics for the most recent five years. Compared to the prior year, the average wastewater usage per customer in 2008 decreased by approximately 2.4 percent, from 142,000 gallons to 138,000 gallons. Estimated wastewater usage per customer has decreased by 19.8 percent from 2004 levels. The average wastewater rate revenue decreased 2.3 percent in 2008 compared to 2007.

Table 4-16
Wastewater Sales Revenue and Statistics

	2004	2005	2006	2007	2008
Wastewater Sales Revenues (\$)					
Retail Service	15,140,093	15,436,805	19,663,521	21,479,609	21,893,058
Other	<u>79,990</u>	<u>204,602</u>	<u>264,150</u>	<u>692,444</u>	<u>128,374</u>
Total Wastewater Sales Revenues (\$)	15,220,083	15,641,408	19,927,672	22,172,054	22,021,432
Wastewater Intake (1,000 gallons)	6,601,199	5,638,655	5,319,763	5,711,781	5,669,875
Wastewater Number of Accounts	38,325	39,056	39,815	40,353	41,043
Wastewater Statistics					
Intake per Account (1,000 gallons)	172	144	134	142	138
Revenue per Account (\$)	397.13	400.49	500.51	549.45	536.55
Revenue per 1,000 gallons (\$)	2.31	2.77	3.75	3.88	3.88

Source: LUS Financial and Operating Statements 2004-2008 audited.

Detailed Expenses

As shown in Table 4-17, the compounded annual average increases in Wastewater Utility expenses over the past five years are as follows:

- Collection Expense – 11.0 percent increase
- Treatment Expense – 6.7 percent increase
- Administrative Support – 9.1 percent increase

Table 4-17
Wastewater Utility Detailed Expenses

	2004	2005	2006	2007	2008
Wastewater Collection Expense (\$)					
Operation	1,036,545	1,128,068	1,115,262	1,229,554	1,457,596
Maintenance	1,140,669	2,127,847	1,513,286	1,757,778	1,850,105
Wastewater Treatment Expense (\$)					
Operation	4,173,823	4,460,572	4,980,502	5,094,806	5,446,989
Maintenance	153,619	150,416	148,313	172,775	170,002
Other Wastewater Expense (\$)					
Customer Operations Expense	484,251	528,974	580,581	680,712	732,283
Customer Services (\$)	360,200	333,743	342,385	361,978	304,243
Administrative & General	<u>2,881,777</u>	<u>3,324,895</u>	<u>3,326,539</u>	<u>3,935,864</u>	<u>4,237,197</u>
Total Wastewater Expense (\$)	10,230,885	12,054,516	12,006,867	13,233,467	14,198,414

Source: LUS Financial and Operating Statements 2004-2008 audited.

Rate Revisions

Wastewater Utility rates had no change during the 2008 fiscal year. Existing wastewater rates, although recently increased, are not expected to be sufficient to fully fund the Wastewater Utility operation on a stand-alone basis for an extended period. The Wastewater Utility is partially subsidized by Electric Utility revenues due to capital and operating requirements of the Wastewater Utility. The Wastewater Utility will be faced with continued rate increases over the next few years before it will be financially self-sufficient. The rates should be monitored closely to ensure that rate revenue can support the Wastewater Utility.

The Wastewater Utility average residential rates increased by 1.5 percent during 2008, as shown in Table 4-18. Since 2004, the average residential rates for the Wastewater Utility have significantly increased by 34.6 percent over the five-year period. The Wastewater Utility average commercial rates decreased 2.5 percent during 2008; however, commercial average rates have increased from 2004 by 35.1 percent. The Wastewater Utility rate increases are consistent with what we expect to see due to capital requirements.

Table 4-18
Wastewater Retail Rates (Revenue/1,000 gallons)

Class	2004 ⁽¹⁾	2005	2006 ⁽²⁾	2007 ⁽³⁾	2008
Residential (\$)	246.97	247.62	307.50	327.53	332.41
Commercial (\$)	1,339.24	1,327.87	1,681.82	1,855.70	1,809.92

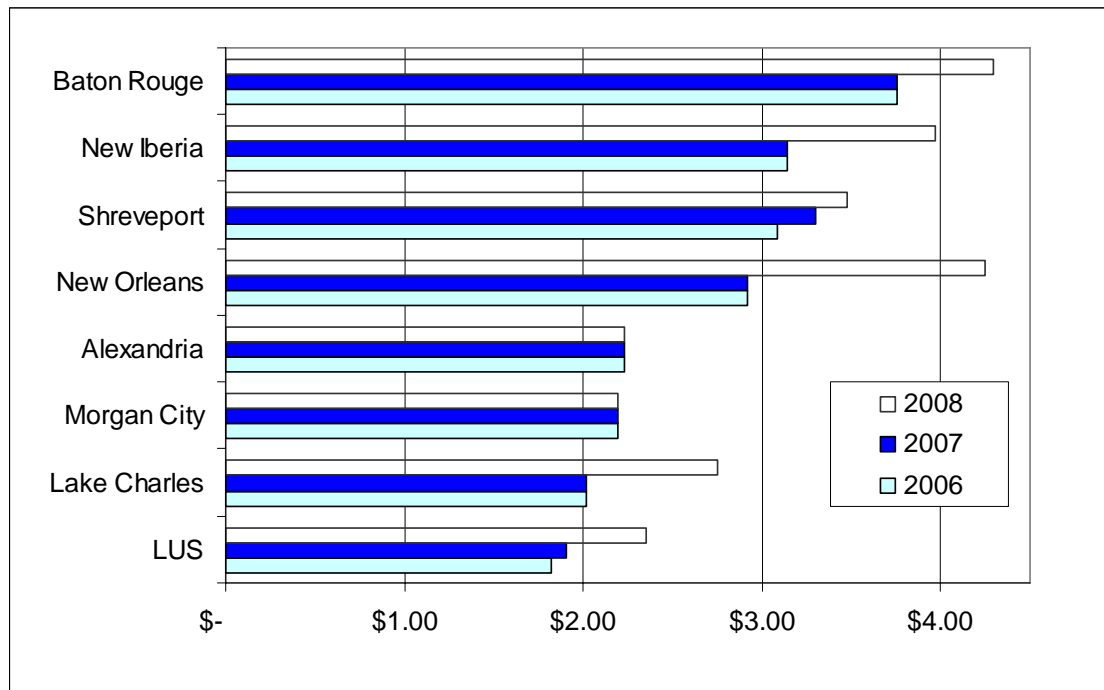
(1) For fiscal year 2004, the residential customer charge increased by 16.0 percent and the volumetric charge increased by 7.4 percent. The commercial customer charge decreased by 2.4 percent and the volumetric charge increased by 11.0 percent.

(2) The Wastewater Utility customers experienced a rate increase of 25 percent on November 1, 2005.

(3) The Wastewater Utility customers experienced a rate increase of 12.5 percent on November 1, 2006.

Source: LUS Financial and Operating Statements 2004-2008 audited.

Figure 4-6 displays the rate benefit LUS water customers experience compared to surrounding utilities in Louisiana. LUS' water rates were the lowest among the utilities reviewed.

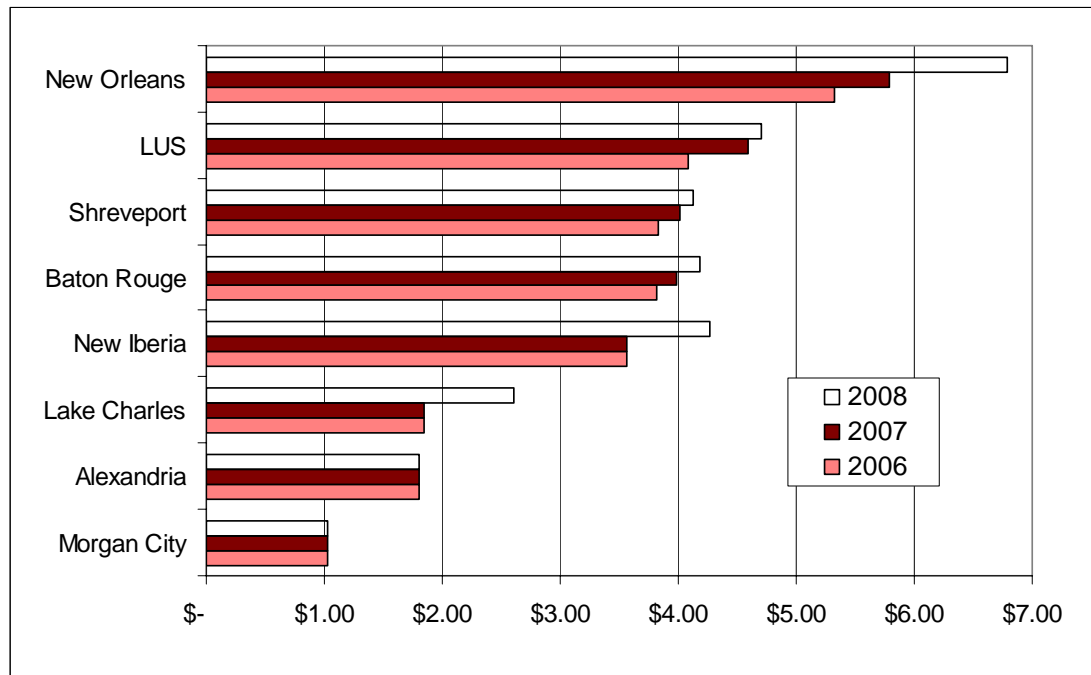


Source: LUS, Based on a monthly bill with 7,000 gallons consumption. Includes customer charge, if applicable.

Figure 4-6: Water Rates for LUS and Selected Louisiana Utilities (\$/1000 gallons)

Section 4

Figure 4-7 displays the wastewater rates for LUS and surrounding utilities in Louisiana. Wastewater rates are difficult to compare because many cities and towns subsidize wastewater systems with local taxes. The extent to which other cities and towns have subsidized their systems is unknown. Figure 4-7 shows LUS wastewater rates as the second highest of the utilities reviewed.



Source: LUS, Based on a monthly bill with 7,000 gallons consumption. Includes customer charge, if applicable.

Figure 4-7: Wastewater Rates for LUS and Selected Louisiana Utilities (\$/1000 gallons)

Operating Budget

The Operating Budget (Budget) for the year ended October 31, 2008 was adopted by Council. Included in the Ordinance is the five-year capital plan beginning in 2008.

A comparison of the projected operations in the Amended Budget with actual operating results is shown in Table 4-19.

Table 4-19
Comparison of Actual Results to the Adopted Budget

	Actual	Adopted Budget	Difference	% Difference
Receipts (\$)	231,788,000	266,542,000	(34,754,000)	(13.0)
O&M (\$)	<u>184,298,000</u>	<u>234,888,000</u>	<u>(50,490,000)</u>	<u>(21.5)</u>
Balance After O&M (\$)	47,390,000	31,654,000	15,736,000	49.7
Debt Service (\$)	<u>9,130,000</u>	<u>10,724,000</u>	<u>(1,594,000)</u>	<u>(14.9)</u>
Balance After Debt Service (\$)	38,260,000	20,930,000	17,330,000	82.8
Capital Expenditures (\$)	10,150,000	14,980,000	(4,830,000)	(32.2)
In-Lieu-of-Tax (\$)	<u>18,606,000</u>	<u>18,692,000</u>	<u>(86,000)</u>	<u>(0.5)</u>
Balance of Revenues (\$)	9,540,000	(12,743,000)	22,246,000	(174.6)

Source: LCG Annual Budget Document 2008-2009.

LUS Financial and Operating Statement 2008 audited.

The comparisons shown in Table 4-19 are on a cash basis and, therefore, will not necessarily agree with audited amounts that are on an accrual basis.

The LCG's fiscal year 2008-2009 budget (November 1, 2008 through October 31, 2009), including LUS' budget, was submitted by the President to the Council and approved by the Council by Ordinance No. O-143-2008. LUS' Utilities System budget for the fiscal year ending October 31, 2009 as adopted by the LCG is summarized in Table 4-20

Table 4-20
Utilities System Budget (\$)

Estimated Fund Balances as of November 1, 2007	50,790,743
Receipts	
Electric Retail Sales - Base Rate	71,822,157
Electric Retail Sales - Fuel Adjustment Charge	154,994,954
Electric Wholesale Sales	343,059
Water Retail Sales	14,706,349
Water Wholesale Sales	0
Wastewater Retail Sales	24,675,106
Contributions in Aid of Construction	0
Interdepartmental Sales	0
Interest - Operating Funds	4,150,000
Miscellaneous	692,500
Accounts Receivable & Others	<u>0</u>
Total Receipts	271,384,125
 Total Receipts and Cash Balance	 322,174,868
 Operating & Maintenance	
Fuel Costs	70,490,128
Purchased Power - LPPA	66,819,000
Purchased Power - Other	36,170,912
Electric O&M	36,152,889
Water O&M	10,059,474
Wastewater O&M	<u>15,195,496</u>
Total Operation & Maintenance	234,887,899
 Interest & Principal Amounts	 10,724,030
 Capital Renewals & replacements	
Normal Renewals & Special Equipment	14,070,816
Retained Earnings Capital Improvement	909,312
Reserve Requirement Reduction	0
Bond Capital Improvements	<u>0</u>
Total Capital Expenditures	14,980,128
 In-Lieu-of-Tax Payments	 19,287,315
 Total Expenditures	 279,879,372
 Fund Balances as of October 31, 2008	 <u>42,295,496</u>

Source: LCG Annual Budget Document 2008-2009.

The end-of-year balance of all Utilities System Funds is budgeted at \$42.3 million, as shown in Table 4-20. The above operating budget anticipates an increase of approximately \$32 million in cash balances less In-Lieu-of-Tax-Payments during the 2008-2009 period. LUS continues to review and adjust the current budgeting system

to increase financial and accounting controls and meet changing operating requirements.

Capital Improvement Program

The combined estimated requirements for capital improvements to the Electric, Water, Wastewater, and Fiber Utilities through October 31, 2012 are summarized in Table 4-21. Each year, as the City revises its five-year Capital Improvement Program (CIP) for the Utilities System, the priorities for each of the work items are re-examined. This review process needs to be improved in order that priorities and costs are established which are more manageable.

Table 4-21
Capital Improvement Program 2009 – 2013

Year Ending	2009	2010	2011	2012	2013	Total
Revenues (\$)						
Retained Earnings Capital	(3,990,688)	365,364	494,080	325,093	165,112	(2,641,039)
Bond Proceeds - Utilities Revenue	23,100,000	32,000,000	36,500,000	8,700,000	5,500,000	105,800,000
Proceeds - LDEQ	0	0	0	0	0	0
Prior Year Reserve Balance	<u>14,034,589</u>	<u>38,301</u>	<u>210,665</u>	<u>78,745</u>	<u>65,638</u>	<u>14,034,589</u>
Total Revenues (\$)	33,143,901	32,403,665	37,204,745	9,103,838	5,730,750	117,193,550
Appropriations (\$)						
Electric	15,639,000	12,426,000	12,672,000	1,450,000	2,462,000	44,649,000
Water	5,725,000	5,920,000	720,000	1,170,000	20,000	13,555,000
Wastewater	9,755,000	11,095,000	20,595,000	5,670,000	2,720,000	49,835,000
Reserve Fund / Capitalized Interest	1,986,600	2,752,000	3,139,000	748,200	473,000	9,098,800
Balance Available	<u>38,301</u>	<u>210,665</u>	<u>78,745</u>	<u>65,638</u>	<u>55,750</u>	<u>55,750</u>
Total Appropriations (\$)	33,143,901	32,403,665	37,204,745	9,103,838	5,730,750	117,193,550

Source: LUS 5-Year Capital Outlay Program Summary, FY 2008-09 Adopted Budget, Combined Summary Retained Earnings and Bond Capital.

Capital Improvement Program

The current capital budgeting process requires LUS to fully appropriate a project before LUS can request bids. This process results in a skewing of projected capital expenditures toward the first year of the capital forecast. This prematurely escalates the projected capital needs and makes for difficult decision planning such as projected service rate charges, bond financing and resource planning. We recommend that LUS consider implementing a capital budgeting process that includes some form of activity-based analysis and costing. Matching available resources with the requirements necessary for completion of these capital projects will add practical realism to the capital appropriations budget.

The CIP in the utility business is generally the largest financial requirement. LCG's budgeting and accounting system does not offer LUS the degree of information and

control needed to manage construction. Comprehensive changes to the CIP management process should consider the following questions:

- Does the process include a coherent, identifiable and relevant product useful to management of the construction activities and investment?
- Are the purposes and objectives of the process identified?
- Is the process clearly communicated to those responsible for carrying it out?
- Is the process supported by a reasonable activity-based allocation of resources?
- Is the process sufficiently detailed and scheduled?
- Does the process agree with mandated requirements and other administrative/management plans?
- Is the process improvement periodically reviewed?
- Is there clear accountability for process implementation?

Other criteria are more specific to the CIP:

- Is it realistic; i.e., not a “wish list?”
- Does it extend over a sufficient period of time (normally, at least 10 years) with clearly identified and costed projects and does it contain detailed plans/schedules and costs for the short-term?
- Is it formulated and reviewed, particularly with input from the field and other concerned parties?
- Is it reviewed periodically (normally at least quarterly by a CIP committee with broad utility representation)?
- Is it clearly and effectively presented annually to the LUS administration to promote a continuous “buy-in?”
- What are the consequences to LUS operations of project slippage?

Table 4-22 shows that many of the planned capital projects have not been accomplished within the scheduled timeframe. LUS should improve project budgeting and/or improve the accomplishment of the planned activities. The lack of precision in budgeting and scheduling affects cash flow planning, planning for the sale of bonds and service rate changes. To adjust for this difference between budget and actual expenditures, the total budget expenditure amounts for each utility are arbitrarily reduced for cash flow planning. This reduction is based on the fact that historically the actual expenditures are significantly less than the budgeted expenditures.

Table 4-22
Comparison of Budget and Actual Capital Expenditures (\$1,000)

	2004	2005	2006	2007	2008	Total
Electric Utility						
Budgeted	17,597	12,427	14,840	10,594	10,702	66,160
Actual	<u>7,927</u>	<u>4,831</u>	<u>2,324</u>	<u>2,030</u>	<u>2,702</u>	<u>19,814</u>
Unspent	9,670	7,596	12,516	8,564	8,000	46,346
Unspent Percentage (%)	55	61	84	81	75	70
Water Utility						
Budgeted	3,925	2,150	3,750	4,225	1,639	15,689
Actual	<u>1,489</u>	<u>738</u>	<u>1,442</u>	<u>4,376</u>	<u>1,120</u>	<u>9,164</u>
Unspent	2,436	1,412	2,308	(151)	519	6,525
Unspent Percentage (%)	62	66	62	-4	32	42
Wastewater Utility						
Budgeted	24,800	21,300	28,170	10,295	1,730	86,295
Actual	<u>5,896</u>	<u>5,787</u>	<u>2,889</u>	<u>1,414</u>	<u>4,229</u>	<u>20,213</u>
Unspent	18,904	15,513	25,281	8,881	(2,499)	66,082
Unspent Percentage (%)	76	73	90	86	-145	77
Fiber Utility						
Budgeted	1,700	400	1,200	900	20,000	24,200
Actual	809	1,348	1,631	1,663	(5,814)	(364)
Unspent	<u>891</u>	<u>948</u>	<u>(431)</u>	<u>(763)</u>	<u>25,814</u>	<u>24,564</u>
Unspent Percentage (%)	52	-237	-36	-85	129	102
Total Utility						
Budgeted	48,022	36,277	47,960	26,014	14,071	172,344
Actual	<u>16,121</u>	<u>12,704</u>	<u>8,284</u>	<u>9,482</u>	<u>8,051</u>	<u>54,642</u>
Unspent	31,901	23,573	39,676	16,532	6,020	117,702
Unspent Percentage (%)	66	65	83	64	43	68

Source: LCG Annual Budget Document 2008-2009.

Source: LUS Un-Official Status of Construction Work Orders, October 2008.

Note: 2004 and 2005 Electric Capital Expenditures exclude the generation project funded from the 2004 Series Bonds.

Note: Actual includes the budgeted plus the previous year's carryovers.

Note: Total Budgeted - from 5 year CIP in budget - includes RE and Bonds capital.

Over the above five-year period, the total budget expenditures amounted to approximately \$172.3 million compared with actual expenditures amounting to approximately \$54.6 million. Over the past five years, on average of 33 percent of the budget is actually spent. We recommend that the capital budgetary process be altered so that the estimated capital needs are more accurately developed.

We recommend the current CIP be reviewed and each project checked for correct priority, schedule and estimate. We suggest the schedule address the start of engineering, approval of engineering, finalization of estimate, purchase of material, approval of purchase and contracting, the start of construction and completion of

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project. The CIP should indicate if the engineering will be accomplished by LUS engineering or if it will be outsourced.

Restricted Asset Transactions and Fund Balances

The 2004 Bond Ordinance contains certain provisions and covenants pertaining to the separation and maintenance of funds. The 2004 Bond Ordinance established the following funds in Article V, Section 5.1:

- (i) Receipts Fund
- (ii) Operating Fund
- (iii) Sinking Fund
- (iv) Reserve Fund
- (v) Capital Additions Fund

Receipts & O&M Fund

The Receipts & O&M Fund transactions during the year are presented in Table 4-23.

Table 4-23
Receipts & O&M Fund (\$1,000)

Cash Balance as of November 1, 2007	8,656
Receipts during the Period:	
Retail Sales	226,326
Wholesale Sales	1,328
Interest	4,754
Miscellaneous	4,078
Reimbursement – 2004 Const Fund	7,319
Reimbursement – Comm Fund	260
Total Receipts	244,065
Total Receipts and Cash Balance	252,721
Disbursements during the Period:	
Fuel & Purchased Power	126,170
Other O&M	59,982
Sales Tax	2,794
2004 Const Fund Expenditures	7,296
Normal Capital / Ret. Earn.	(4,019)
Transfer to Bond & Interest Fund	10,725
Transfer to Capital Additions Fund	<u>35,115</u>
Total Disbursements	238,063
Fund Balance as of October 31, 2008	14,658

Source: LUS Funds Flow Statement FY 07-08.

Sinking Fund

The Sinking Fund transactions during the year are presented in Table 4-24.

Table 4-24
Sinking Fund (\$1,000)

Cash Balance as of November 1, 2007	0
Receipts during the Period:	
Transfer from Receipts Fund	10,725
Other	0
Total Receipts	10,725
Total Receipts and Cash Balance	10,725
Disbursements during the Period:	
Debt Service Payment	10,725
Total Disbursements	10,725
Fund Balance as of October 31, 2008	\$0

Source: LUS Funds Flow Statement FY 07-08.

Reserve Fund

The Reserve Fund transactions during the year are presented in Table 4-25.

Table 4-25
Reserve Fund (\$1,000)

Cash Balance as of November 1, 2007	18,603
Receipts during the Period:	
Transfer from Capital Additions	0
Other	0
Total Receipts	0
Total Receipts and Cash Balance	18,603
Disbursements during the Period:	
Transfer to Receipts Fund	0
Other	0
Total Disbursements	0
Fund Balance as of October 31, 2008	18,603

Source: LUS Funds Flow Statement FY 07-08.

Capital Additions Fund

In compliance with the requirements of the 2004 Bond Ordinance concerning receipts and disbursements of the Capital Additions Fund, the transactions during the 2008 fiscal year are presented in Table 4-26. Required transfers of principal and interest were made in a timely fashion to the City's paying agent.

Table 4-26
Capital Additions Fund (\$1,000)

Cash Balance as of November 1, 2007	80,833
Receipts during the Period:	
Transfer from Receipts Fund	35,115
Transfer from Bond & Interest Fund	0
Transfer from Bond Construction Fund	0
Miscellaneous Revenues	<u>1,015</u>
Total Receipts	36,130
Total Receipts and Cash Balance	116,963
Disbursements during the Period:	
In Lieu-of-Tax Payment	18,799
Transfer to Bond Reserve	0
Transfer to O&M	0
Normal Capital to O&M	10,815
Retained Earnings to O&M	8,911
Special Capital to O&M	<u>0</u>
Total Disbursements	38,525
Fund Balance as of October 31, 2008	78,438
The above balance is available for the 2008-2009 fiscal year requirements	
In Lieu-of-Tax Payment	18,603
Fund Balance not specially committed	59,835
Fund Balance as of October 31, 2008	78,438

Source: LUS Funds Flow Statement FY 07-08.

Construction Fund

The Construction Fund, identified in Table 4-27, was established as a result of the Series 2004 bond financing for major Electric and Wastewater Utility construction projects. The beginning balance of this fund in 2007 was \$20.8 million. Subsequent

interest earnings of \$536,000 and construction and work order payments of \$7.3 million resulted in an ending balance of \$14.1 million.

Table 4-27
Construction Fund (\$1,000) – 2004 Bonds

Cash Balance as of November 1, 2007	20,847
Receipts during the Period:	
Bond Proceeds	0
Interest Earnings	536
Miscellaneous	<u>0</u>
Total Receipts	536
 Total Receipts and Cash Balance	 21,383
Disbursements during the Period:	
Construction Wire Payments	\$0
Work Orders Paid	7,311
MBIA Payments	9
Other	<u>0</u>
Total Disbursements	7,320
 Fund Balance as of October 31, 2008	 14,063

Source: LUS Funds Flow Statement FY 07-08.

A separate 1996 LDEQ Construction Fund was established for purposes of financing major wastewater construction projects. Bonds for these projects total \$18,400,000. Proceeds from these bonds are drawn down from LDEQ when needed by LUS. Interest is charged only on the cumulative amounts drawn. Draw downs through October 31, 2008 total \$18,053,278. For this period, the 1996 LDEQ Construction Fund has a zero balance since the draw-downs requested were all expended by the end of the reporting period.

Balance Sheet

To determine the extent and character of the changes in assets and liabilities for 2008, a Comparative Balance Sheet is shown on Table 4-28. The comparison shows a 1.4 percent increase in Total Assets and 1.5 percent increase in retained earnings. The significant changes in the restricted assets, deferred debits, and arbitrage liability between 2003 and 2004 are due to the sale of the 2004 Bonds.

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Table 4-28
Comparative Balance Sheet (\$)

	2004	2005	2006	2007	2008
Assets & Other Debits					
Utility Plant					
Plant in Service	597,540,034	708,880,107	761,358,897	792,979,794	801,467,870
Less Accumulated Depreciation & Amortization	<u>(231,829,008)</u>	<u>(246,547,727)</u>	<u>(263,256,582)</u>	<u>(282,466,635)</u>	<u>(292,162,949)</u>
Net Plant in Service	365,711,027	462,332,380	498,102,316	510,513,160	509,304,920
Construction Work in Progress	<u>14,232,223</u>	<u>3,685,307</u>	<u>2,520,572</u>	<u>2,686,045</u>	<u>3,192,985</u>
Total Utility Plant	<u>379,943,250</u>	<u>466,017,687</u>	<u>500,622,888</u>	<u>513,199,204</u>	<u>512,497,905</u>
Current Assets					
Receipts Fund	145,959	973,281	56,282	548,920	435,240
O&M Fund (Cash & Temp. Cash Investment)	3,666,462	6,081,467	8,085,446	8,182,793	14,195,956
Revolving Cashier's Fund and Water District Operating Fund (Cash)	9,800	9,800	9,800	12,200	12,200
Accounts Receivable					
Utility Consumers (less Uncollectible)	17,848,512	23,081,798	18,223,708	19,376,564	23,882,499
Other Utilities	1,245,780	3,721,739	34,263	97,860	3,966
Municipal & Other Receivables (less Reserve for Uncollectible Masc.)	<u>1,898,346</u>	<u>3,028,312</u>	<u>3,492,130</u>	<u>2,141,382</u>	<u>4,083,736</u>
Total Accounts Receivable	<u>20,992,638</u>	<u>29,831,849</u>	<u>21,750,101</u>	<u>21,615,806</u>	<u>27,970,201</u>
Notes Receivable					
LUS Fiber Start-up Cost	0	0	0	0	2,289,259
LUS Fiber Assets	0	0	0	0	8,883,646
LUS Fiber 2007 Expenses	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>127,088</u>
Total Notes Receivable	0	0	0	0	11,299,992
Inventories					
Inventories - Fuel Oil	698,678	698,678	698,678	698,678	0
Inventories - Other	4,230,998	4,178,919	5,274,665	4,894,243	4,304,666
Interest Receivable and Enamor Premiums	53,673	425,296	599,313	744,051	629,012
Prepayments	<u>114,027</u>	<u>81,538</u>	<u>33,523</u>	<u>80,376</u>	<u>465,021</u>
Total Inventories	<u>5,097,375</u>	<u>5,384,431</u>	<u>6,606,178</u>	<u>6,417,348</u>	<u>5,398,699</u>
Total Current Assets	29,912,234	42,280,827	36,507,808	39,367,493	59,312,288
Restricted Assets					
Capital Additions Fund	64,134,899	72,409,617	77,413,551	80,693,888	78,269,468
Bond Reserve	18,526,844	18,511,521	18,527,824	18,654,469	18,642,493
Bond and Interest Redemption Fund	9,645,973	0	0	0	0
Allowance for Market Value Adjustment	(202,941)	(783,872)	(131,564)	510,977	767,469
Security Deposits Fund Investments	4,237,143	4,609,871	5,129,150	5,497,347	5,989,670
Investment in Risk Management Fund	1,051,526	1,192,230	337,977	426,329	0
2004 Construction Fund - Cash & Investment	143,394,858	65,685,303	30,388,115	20,904,201	14,124,322
Expense Fund Escrow	0	0	0	0	0
Cash on Deposit with Paying Agent	<u>2,145,535</u>	<u>4,767,856</u>	<u>4,767,856</u>	<u>4,767,856</u>	<u>0</u>
Total Restricted Assets	<u>242,933,836</u>	<u>166,392,528</u>	<u>136,432,910</u>	<u>131,455,068</u>	<u>117,793,422</u>

Table 4-28
Comparative Balance Sheet (\$) (continued)

	2004	2005	2006	2007	2008
<u>Assets & Other Debits (continued)</u>					
Deferred Debits					
Unamortized Debt Discount and Expense	0	3,070,967	2,942,172	2,806,855	2,664,684
Unamortized Loss of Refunded Debt	0	0	0	0	0
Communications Business Assessment	0	0	31,063	31,629	142
New Acquisitions	\$0	\$0	\$0	\$0	\$0
Holiday Gardens	5,682	5,682	0	0	0
Communication Fund 06 Bond Issue Costs	0	2,694	5,897	0	(142)
2004 Revenue Bond Issuance Costs	3,220,823	0	0	3	0
Clearing Accounts & Other	93,647	1,428	(29)	0	(369)
Total Deferred Debits	<u>3,320,152</u>	<u>3,080,771</u>	<u>2,979,103</u>	<u>2,838,488</u>	<u>2,664,315</u>
Total Assets & Other Debts	656,109,472	677,771,813	676,542,708	686,860,254	692,267,930

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Table 4-28
Comparative Balance Sheet (\$) (continued)

	2004	2005	2006	2007	2008
<u>Long Term Liabilities</u>					
Revenue Bonds (inclusive of current maturities)	196,660,000	195,845,000	195,005,000	194,145,000	193,255,000
Current Liabilities (payable from Current Assets)					
Accounts Payable (Fuel)	4,806,707	12,505,006	2,307,406	2,734,049	7,902,703
Accounts Payable (O&M Fund)	400,814	1,317,136	621,122	1,276,821	766,349
Accounts Payable (Payroll)	254,330	480,611	553,105	536,739	683,534
Accounts Payable (Miscellaneous)	18,383,222	14,448,034	9,171,420	5,905,057	7,658,445
Accounts Payable (Purchased Power LPPA)	1,386,060	3,624,005	712,000	(216,136)	(1,269,264)
Accounts Payable (Purchased Power Other)	296,749	4,446,260	1,803,440	3,297,871	4,601,023
Accounts Payable (Environmental Clean Up 'Grant St')	1,750,000	1,750,000	1,750,000	1,750,000	1,750,000
Miscellaneous Current and Accrued Liabilities	3,443,702	4,060,246	4,323,354	4,569,779	4,809,866
Accrued Interest on Security Deposits	0	9,146	(0)	(2)	0
A/P Water District North	<u>206,840</u>	<u>232,674</u>	<u>224,349</u>	<u>228,604</u>	<u>231,382</u>
Total Current Liabilities Payable from Current Assets	30,928,423	42,873,118	21,466,196	20,082,782	27,134,038
Other Liabilities (payable from Restricted Assets)					
Interest Accrued on Bonds	2,145,535	4,767,856	4,767,856	4,767,856	0
Interest Accrued on Security Deposits WDN	0	18	0	(0)	0
Customer Deposits	4,230,294	4,597,959	5,110,117	5,475,595	5,986,815
Arbitrage Liability	<u>5,674,897</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Other Liabilities Payable from Restricted Assets	12,050,727	9,365,834	9,877,973	10,243,451	5,986,815
Long-Term Liabilities					
Unamortized Premium on 2004 Revenue Bonds	<u>0</u>	<u>5,410,860</u>	<u>5,183,932</u>	<u>4,945,511</u>	<u>4,695,013</u>
Total Long-Term Liabilities	0	5,410,860	5,183,932	4,945,511	4,695,013
Reserves					
Reserve for Revenue Bond Debt Service	18,526,844	18,511,521	18,527,824	18,654,469	18,642,493
Reserve for Capital Additions	64,134,899	72,409,617	77,413,551	80,693,888	78,269,468
Reserve for Security Deposits	4,237,143	4,609,871	5,129,150	5,497,347	5,989,670
Reserve for Risk Management	<u>1,051,526</u>	<u>1,192,230</u>	<u>337,977</u>	<u>426,329</u>	<u>0</u>
Total Reserves	87,950,411	96,723,240	101,408,502	105,272,034	102,901,631
Contributions					
Contributions from Municipality	0	0	0	0	0
Contributions from Others	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Contributions	0	0	0	0	0
Retained Earnings (not including Reserves)	328,519,910	327,553,762	343,601,104	352,171,476	358,295,432
Total Liabilities & Other Credits	656,109,472	677,771,813	676,542,708	686,860,254	692,267,930

Source: LUS Financial and Operating Statements 2004-2008 audited.

Operating Results

Table 4-29 summarizes the LUS Fiber Operating Revenues and Expenses for the most recent five years. The Fiber Utility operating revenues increased 13.3 percent over 2008. Fiber Utility operating expenses increased significantly percent or approximately \$2,331,000 over 2008. The majority of the expense increase was related to the Administrative and General expenses. It should be noted that historical numbers do not reflect uniform treatment and application of LUS Combined Utilities administration, general, and other overhead costs to the Fiber Utility. In addition, beginning in 2008, LUS sold any remaining assets of the telecommunications division to LUS Fiber.

The LUS Fiber Utility is now a retail and wholesale fiber business that is still in the start-up phase. The first year that the Net Margin was positive was in 2004, while still owned by LUS. A significant percent increase in Net Margin occurred during the 2008 fiscal year.

Table 4-29
LUS Fiber Operating Results

	2004	2005	2006	2007	2008
Fiber Operating Revenues (\$)					
Fiber Service and Access Revenues	762,143	1,264,928	1,741,647	1,856,789	0
Wholesale Revenues	N/A	N/A	N/A	N/A	2,109,099
Miscellaneous Fiber Revenues	<u>113</u>	<u>7,711</u>	<u>2,492</u>	<u>9,950</u>	<u>5,435</u>
Total Fiber Operating Revenues (\$)	762,256	1,272,639	1,744,138	1,866,739	2,114,534
Fiber Operating Expenses (\$)					
Operation Expenses	641,648	481,237	659,261	897,270	3,228,348
Maintenance Expenses	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Operating & Maintenance Expenses (\$)	641,648	481,237	659,261	897,270	3,228,348
Fiber Non Operating Revenues (Expenses) (\$)					
Interest Revenues	8,464	28,454	49,964	59,578	4,546,277
FTTH Start Up Project	(10,406)	(31,500)	(8,362)	0	0
LUS Fiber Start-up Cost Reimbursement	0	0	0	18,921	0
Miscellaneous Non Operating Expense	<u>(279)</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Non Operating Revenues (Expenses) (\$)	(2,221)	(3,046)	41,602	78,499	4,546,277
Net Margin (\$) ⁽¹⁾	118,387	788,355	1,126,480	1,047,968	3,432,463

(1) Before Depreciation and Debt Service.

Source: LUS Financial and Operating Statements 2004-2008 audited.

Statistical Data

The selected statistical data in this section pertaining to the number of customers, customer usage, and revenues by class was obtained or developed from the LUS Financial and Operating Statements for years 2004 through 2008.

Revenues

Table 4-30 shows the Fiber Utility statistics for the most recent five years.

Table 4-30
Fiber Sales Revenue and Statistics

	2004	2005	2006	2007	2008
Fiber Sales Revenue(\$)'s					
Service and Access Revenues	762,143	1,264,928	1,741,647	1,856,789	0
Wholesale Revenues	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>2,109,099</u>
Total Fiber Sales Revenue (\$)	762,143	1,264,928	1,741,647	1,856,789	2,109,099
Fiber Number of Accounts	31	35	35	36	N/A ⁽¹⁾
Fiber Statistics					
Revenue per Account (\$)	24,585	36,141	49,761	51,577	N/A

Source: LUS Financial and Operating Statements 2004-2008 audited.

Detailed Expenses

As shown in Table 4-31, the annual average Fiber Utility expenses over the last year are as follows:

Table 4-31
Fiber Utility Detailed Expenses

	2008
Fiber Expenses (\$)	
Costs of Goods Sold	96,857
Plant Specific Expense	775,451
Plant Non-Specific Expense	912,721
Customer Operations Expense	233,475
Administrative & General	1,205,437
Other Operating Expense	0
Operating Taxes	<u>4406</u>
Total Fiber Expense (\$)	<u>3,228,348</u>

Source: LCG Financial and Operating Statements, October 2008 audited.

As shown in Table 4-31, the Fiber Utility Administrative and General, Plant Specific and Non-Specific expenses represent the majority LUS Fiber expenses. Because the Fiber Utility is a new business venture, trends in O&M costs are not yet meaningful.

Accounting

LCG currently prepares monthly financial statements that include important operating financial and managerial data. Except for several months following the close of a fiscal year, these internal statements are scheduled to be issued by the 20th day of the month following the reporting period. However, the final statements for the first several months of the new fiscal year are delayed because they cannot be completed until the prior year's independent auditor's report is received by the City. The audit for the fiscal year ending in October is not available until approximately April of the following year.

The Consulting Engineer is particularly concerned about the delay in the availability of important financial information necessary for informed management of LUS Fiber. Additionally, the management of a new business venture, such as telecommunications, is extremely difficult when current financial initiatives may exist. Basic financial and operating results including costs, revenue and performance measurements should be available from two to four weeks after the end of a given month if the utility is to be responsive to the dynamics of the rapidly changing utility industry.

LCG is in the process of choosing a new financial management system. This system is anticipated to be in place by June 1, 2009. One of the goals of the new system is to provide timely and accurate reports to LUS Fiber.

The Consulting Engineer is of the opinion that the basic accounting principles and requirements of LUS Fiber, as contained in the 2007 Bond Ordinance, have been complied with by the City for the period ended October 31, 2008.

Rate Revisions

The Council and LPUA have the exclusive right to regulate LUS' rates and charges for services within and outside the corporate limits of the City. The 2007 Bond Ordinance, Section 9.2 states that it is the duty of the Consulting Engineer to advise on any revisions of rates and charges.

In-Lieu-of Tax

The ILOT payment to the general fund is based on the previous year's revenues. Since the wholesale telecommunications business was transferred from LUS to LUS Fiber on November 1, 2007 and there was no retail revenue during the reporting period, there are no ILOT requirements for the reporting period.

Table 4-32
ILOT Payments (\$1,000)

	2008
Deposits into Receipts Account	N/A
Less Cost of Goods Sold	N/A
Total Net Deductions	N/A
Balance Available for Improvement and ILOT	N/A
ILOT Provision – Balance x 12%	N/A
Test of Adequacy of Flow of Funds	N/A
Total Flow Available – Receipts Account to Capital Additions	N/A
Less Provision for System Improvements at 7.5%	N/A
Adequacy or (Deficiency) of Flow	N/A
ILOT Amount Due	N/A

Source: LCG Annual Budget Document 2007-2008.
LCG Financial and Operating Statements 2008 audited.

Operating Results

The data included in this section is based on audited reports generated by LUS, LUS Fiber and LCG. Table 4-33 summarizes the LUS Fiber revenues and expenses for the most recent five years.

LUS Fiber service and access revenues increased by 13.6 percent over 2008. Fiber Utility operating expenses increased significantly over 2008. The majority of the increase in expenses was related to Administrative and General expenses. It should be noted that historical numbers do not reflect uniform treatment and application of LUS Combined Utilities administration, general, and other overhead costs to the Fiber Utility.

LUS Fiber is still in its start-up phase. The first year that the Net Margin was positive was in 2004. While retail services were not being offered during fiscal year 2008, \$1,205,437 of expense was realized. A significant increase in Net Margin occurred between 2007 and 2008.

Table 4-33
LUS Fiber Wholesale and Retail Net Operating Revenues (\$)

	2004	2005	2006	2007	2008
Fiber Operating Revenues					
Wholesale Revenues					
Fiber Service and Access Revenues	762,143	1,264,928	1,741,647	1,856,789	0
Miscellaneous Fiber Revenues	<u>113</u>	<u>7,711</u>	<u>2,492</u>	<u>9,950</u>	<u>5,435</u>
Total Wholesale Revenues	762,256	1,272,639	1,744,138	1,866,739	2,109,099
Retail Services	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Fiber Operating Revenues	762,256	1,272,639	1,744,138	1,866,739	2,114,534
Fiber Operating Expenses					
Wholesale Expenses					
Operation Expenses	641,648	481,237	659,261	897,270	3,228,348
Fiber Maintenance Expenses	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Wholesale Expense	641,648	481,237	659,261	897,270	3,228,348
Retail Expense	<u>0</u>	<u>0</u>	<u>0</u>	<u>87,008</u>	<u>0</u>
Total Operating Expenses	641,648	481,237	659,261	984,278	3,228,348
Fiber Non Operating Revenues (Expenses)					
Interest Revenues	8,464	28,454	49,964	59,578	4,546,277
FTTH Start-Up Project ⁽¹⁾	(10,406)	(31,500)	(8,362)	0	0
LUS Fiber Start up Cost Reimbursement	0	0	0	18,921	0
Miscellaneous Non Operating Expense	<u>(279)</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Non Operating Revenues (Expenses)	(2,221)	(3,046)	41,602	78,499	4,546,277
Net Margin ⁽²⁾	118,387	788,355	1,126,480	960,961	3,432,463

(1) Fiber allocation of FTTH project start up cost. Allocation pursuant to LUS proposed Cost Allocation Manual.

(2) Before Depreciation and Debt Service.

Source: LUS Financial and Operating Statements 2004-2008 audited.

LCG Financial and Operating Statements 2008 audited.

Statistical Data

The selected statistical data in Table 4-34 pertaining to the number of customers and revenues was obtained or developed from the LUS Financial and Operating Statements for years 2003 through 2006 and from the LUS Fiber Financial Statements for years 2007 through 2008.

Table 4-34
Fiber Sales Revenue and Statistics

	2004	2005	2006	2007	2008
Wholesale Fiber Sales Revenues					
Service and Access Revenues (\$)	<u>762,143</u>	<u>1,264,928</u>	<u>1,741,647</u>	<u>1,856,789</u>	<u>2,109,099</u>
Total Fiber Sales Revenue (\$)	762,143	1,264,928	1,741,647	1,856,789	2,109,099
Fiber Number of Accounts (Average)	31	35	35	36	NA
Fiber Statistics					
Revenue per Account (\$)	24,585	36,141	49,761	51,577	NA

Source: LUS Financial and Operating Statements 2004-2008 audited.

LCG Financial and Operating Statement 2008 audited.

Operation & Maintenance Expenses

As shown in Table 4-35, LUS Fiber expenses have significantly increased over the most recent five years. Because the Fiber Utility is a new business venture, trends in O&M costs are not yet meaningful.

Table 4-35
Fiber Utility Detailed Expenses

	2008
Fiber Expenses (\$)	
Costs of Goods Sold	96,857
Plant Specific Expense	775,451
Plant Non-Specific Expense	912,721
Customer Operations Expense	233,475
Administrative & General	1,205,437
Other Operating Expense	0
Operating Taxes	<u>4,406</u>
Total Fiber Expense (\$)	3,228,348

A review of retail operating expenses is not applicable at this time as LUS Fiber did not have any retail or wholesale customers during fiscal year 2008.

Operating Budget

The Operating Budget for the year ended October 31, 2008 was adopted by Council. Included in the Ordinance is the five-year capital plan beginning in 2008.

Since LUS Fiber was still in its infancy during the reporting period, comparisons between actual and budgeted amounts are not meaningful.

Capital Improvement Program

The estimated requirements for capital improvements to LUS Fiber are summarized in Table 4-36. Each year, LUS Fiber is expected to revise its five-year CIP and prioritize each of the work items.

Table 4-36
Capital Improvement Program 2009 – 2013

Year Ending	2009	2010	2011	2012	2013	Total
LUS Fiber CIP (\$)	5,096,748	12,024,534	14,800,064	22,568,869	33,022,713	47,190,813

Source: LUS 5-Year Capital Outlay Program Summary, FY 2007-08 Adopted Budget, Combined Summary Retained Earnings and Bond Capital.

The current capital budgeting process requires LUS Fiber to fully appropriate a project before it can request bids. This process results in a skewing of projected capital expenditures toward the first year of the capital forecast. This prematurely escalates the projected capital needs and makes for difficult decision planning such as projected service rate charges, bond financing and resource planning. We recommend that LUS Fiber consider implementing a capital budgeting process that includes some form of activity-based analysis and costing. Matching available resources with the requirements necessary for completion of these capital projects will add practical realism to the capital appropriations budget.

Table 4-37
Comparison of Budget and Actual Capital Expenditures (\$1,000) - Fiber

	2004	2005	2006	2007	2008	Total
Budgeted	1,700	400	1,200	900	20,000	5,115
Actual	<u>809</u>	<u>1,348</u>	<u>1,631</u>	<u>1,663</u>	<u>(5,814)</u>	<u>5,559</u>
Unspent	891	(948)	(431)	(763)	25,814	(444)
Unspent Percentage	52%	-237%	-36%	-85%	129%	-9%

Restricted Asset Transactions and Fund Balances

The 2007 Bond Ordinance contains certain provisions and covenants pertaining to the separation and maintenance of funds. The 2007 Bond Ordinance established the following funds in Article VI, Section 6.1:

- (i) Receipts Account
- (ii) Operating Account
- (iii) Debt Service Account
- (iv) Reserve Account
- (vi) Capital Additions Account

Fund requirements were impacted significantly in 2007 as a result of the Series 2007 Bond.

Each of the above accounts is discussed below.

Receipts Account

The following table summarizes the Receipts Account, as required by the 2007 Bond Ordinance for the reporting year.

Table 4-38
Receipts Account (\$1,000)

Cash Balance as of November 1, 2007	0
Receipts during the Period	2,620
Total Receipts and Cash Balance	2,620
Disbursements during the Period	2,620
Fund Balance as of October 31, 2008	0

Source: LUS Fiber Funds Cash Flow Statement FY 07-08

Operating Account

The following table summarizes the Operating Account, as required by the 2007 Bond Ordinance for the reporting year.

Table 4-39
Operating Account (\$1,000)

Cash Balance as of November 1, 2007	5,671
Receipts during the Period	6,181
Total Receipts and Cash Balance	6,181
Disbursements during the Period	510
Fund Balance as of October 31, 2008	4,906

Source: LUS Fiber Funds Cash Flow Statement FY 07-08

Debt Service Account

The following table summarizes the Debt Service Account, as required by the 2007 Bond Ordinance for the reporting year.

Table 4-40
Debt Service Account (\$1,000)

Cash Balance as of November 1, 2007	14,194
Receipts during the Period	582
Total Receipts and Cash Balance	582
Disbursements during the Period	6,076
Fund Balance as of October 31, 2008	8,699

Source: LUS Fiber Funds Cash Flow Statement FY 07-08

Reserve Account

The following table summarizes the Reserve Account, as required by the 2007 Bond Ordinance for the reporting year.

Table 4-41
Reserve Account (\$1,000) ⁽¹⁾

Cash Balance as of November 1, 2006	0
Receipts during the Period	0
Total Receipts and Cash Balance	0
Disbursements during the Period	0
Fund Balance as of October 31, 2008	0

(1) LCG purchased Bond Insurance in lieu of a Reserve Account
Source: LUS Fiber Funds Cash Flow Statement FY 07-08

Capital Additions Account

In compliance with the requirements of the 2007 Bond Ordinance concerning receipts and disbursements of the Capital Additions Account, the transactions during the 2007 are presented in Table 4-42.

Table 4-42
Capital Additions Account (\$1,000)

Cash Balance as of November 1, 2007	274
Receipts during the Period	274
Total Receipts and Cash Balance	274
Disbursements during the Period	0
Fund Balance as of October 31, 2008	783

Source: LUS Fiber Funds Cash Flow Statement FY 07-08

2007 Construction Fund

In compliance with the requirements of the 2007 Bond Ordinance concerning receipts and disbursements of the Construction Fund Account, the transactions during the 2007 are presented in Table 4-43.

Table 4-43
2007 Construction Fund (\$1,000)

Cash Balance as of November 1, 2007	91,242
Receipts during the Period	4,098
Total Receipts and Cash Balance	4,098
Disbursements during the Period	18,301
Fund Balance as of October 31, 2008	77,040

Source: LUS Funds Cash Flow Statement FY 07-08

Balance Sheet

To determine the extent and character of the changes in assets and liabilities for 2008, a Balance Sheet is shown on Table 4-44.

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Table 4-44
Balance Sheet (\$)

	October 31, 2008 Ending Balance
Assets	
Current Assets	
Cash and Cash Equivalents	
Receipts Account - Investments	0
Receipts Account - Cash	0
Operating Account - Investment	4,918,216
Operating Account - Cash	0
Debt Service Account - Investment	8,852,454
Debt Service Account - Cash	0
Unamort. Premium/Discounts - Investment	(159,558)
Consolidated Cash Reserve	50,000
Fair Value Adjustment - Cons. Cash Reserve	187
Petty Cash	0
Total Cash and Cash Equivalents	13,661,299
Accounts Receivable	
Customers	0
General Fund	7,763
LUS	315,782
Other	32,334
Interest Receivable - Bond Account & Others	569,380
Total Accounts Receivable	925,259
Less:	
Allowance for Uncollectibles	0
Allowance - Customers	0
Allowance - Others	0
Total Allowance for Uncollectibles	0
Inventories	
Materials Inventory	734,054
Total Inventory	734,054
Prepayments	
Prepaid ILOT	0
Prepaid Group Insurance Premiums	0
Prepaid Insurance	0
Prepaid Other	0
Total Prepayments	0
Total Current Assets	15,320,611

Table 4-44
Balance Sheet (\$) (continued)

	October 31, 2008 Ending Balance
Assets (continued)	
Bonds and Special Accounts	
2007 Bond Account - Investment	77,215,506
2007 Bond Account Cash	0
Bond Reserve Account - Investment	0
Bond Reserve Account - Cash	0
Capital Additions Account - Investment	793,982
Capital Additions Account - Cash	0
Allowance for Market Value Adjustment	847,302
Investment in Risk Management Fund	0
Cash on Deposit with Paying Agent	2,747,166
Total Bonds and Special Accounts	81,603,956
Communications Plant	
Plant in Service	8,030,187
Construction Work in Progress	21,040,358
Plant Acquisition Adjustments	0
Depreciation Reserve (Plant in Service)	(772,120)
Construction Work in Progress - Accrued	0
Total Communications Plant	28,298,425
Deferred Debits	
2007 Revenue Bond Issue Cost	1,708,511
Deferred Start-up costs	2,386,933
Deferred Charges - LUS 2007 Expenses	203,494
Unamortized Debt Discount	0
Total Deferred Debits	4,298,938
Total Assets	129,521,931

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Table 4-44
Balance Sheet (\$) (continued)

	October 31, 2008 Ending Balance
Liabilities and Equity	
Current Liabilities	
Accounts Payable - O&M Fund	310,550
Accounts Payable - Payroll	138,463
Accounts Payable - Employee Deductions	6,452
Accounts Payable - Miscellaneous	0
Accounts Payable - General Fund	6,331
Accounts Payable - LUS	589,306
Accounts Payable - Local Franchise Tax	0
Accounts Payable - 911 Tax	0
Accounts Payable - USF Fees	0
LUS Notes Payable - Current Portion	251,101
Misc. Current & Accrued Liabilities	0
Interest Accrued - Customer Deposits	0
Interest Accrued - 2007 Revenue Bonds	2,747,166
Interest Accrued - LUS Note Payable	504,247
Total Current Liabilities	4,553,616
Long-Term Liabilities	
LUS Note Payable - Start-up Costs	2,259,321
LUS Note Payable - LUS 2007 Expenses	166,044
LUS Note Payable - Fiber Assets	8,756,759
Unamortized Premium on 2007 Revenue Bonds	3,693,829
Capital Leases	0
Total Long-Term Liabilities	14,875,952
Long-Term Debt	
Series 2007 Revenue Bonds	110,405,000
Total Long-Term Debt	110,405,000
Retained Earnings	
Balance - Beginning of Fiscal Year	1,649,140
Earnings - Current Year	(1,961,777)
Total Retained Earnings	(312,637)
Total Liabilities and Equity	129,521,931

Recommendations

Based on our review of the LUS and LUS Fiber financial and accounting records, the Consulting Engineer recommends the following recommendations, as shown in Table 4-45.

**Table 4-45
Recommendations**

Finance and Accounting	Priority	Status
LUS should continue to actively conduct financial planning, particularly as LUS increases Utilities System debt	Highest	In Progress
LUS should continue to pursue a strategy of increasing water and wastewater rates over the next several years	Highest	In Progress
LUS should continue to explore ways of improving the timeliness of financial reporting, including the implementation of new financial management tools	Highest	In Progress
LUS should increase the water and wastewater systems debt to equity ratio and continue to work towards financing a considerable portion of future capital improvement projects with debt	High	In Progress
LUS should continue to improve the five-year capital budgetary process (cash-needs capital budget). The process should include some form of activity-based analysis and costing. The current CIP should be reviewed and each project checked for correct priority, schedule and estimate	High	No Progress Seen
LUS should review and evaluate the accuracy of accounting policies related to booking transmission and distribution investment and related O&M expense	Normal	No Progress Seen
LUS should continue its efforts to identify opportunities for wholesale power sales	High	In Progress

Section 5 ELECTRIC UTILITY



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Section 5

ELECTRIC UTILITY

During March 2009, the Consulting Engineer interviewed LUS staff regarding Electric Utility operations and performed analyses of operating statistics that are indicative of the general operating condition of LUS' Electric Utility facilities. The following discussion summarizes the findings of the Consulting Engineer with respect to the maintenance and management of the property based upon discussions with and information supplied by LUS' personnel.

A summary of the Electric Utility's historical capacity and energy requirements, load forecast projections, organizational structure, major contracts, generation, transmission and distribution facilities, O&M statistics and practices, historical expenditures, historical and projected capital expenses, key issues, goals and achievements, and the associated findings and recommendations of the Consulting Engineer are below. The information and findings of the Consulting Engineer are based upon general observations, discussions with utility supervisory personnel, and information supplied by LUS personnel.

Electric Utility Organization

The Electric Utility is supported primarily by the Power Production Division and the Electric Operations Division of LUS. Other LUS Divisions, including Engineering, Customer Service, Utilities Support Services and Environmental Compliance, provide services to the Electric Utility.

The Power Production Division is charged with power production along with O&M of the wholly owned generation facilities of LUS, including capital planning and implementation. The Power Production Division is also responsible for O&M of a 10-inch natural gas pipeline owned by LUS.

The Electric Operations Division is responsible for transmission, distribution, metering, and delivery of electrical power to consumers; inventory management of electric, water and wastewater materials and LUS security. The Electric Operations Division is also responsible for the Energy Control System (ECS) section, which provides for the scheduling and dispatch of generating resources (including the purchase and sale of wholesale power), the operation of the SCADA system, and all line switching orders.

Power Production

The production of power for the Electric Utility is primarily provided from three gas-fired generating facilities located in the City and one coal-fired generating facility (through purchases from LPPA). The discussion below provides a description of the facilities, the historical operating statistics for each facility, a summary of the O&M

history and plans, and the condition of the facilities as observed by the Consulting Engineer.

Gas-fired Generation

The gas-fired generating facilities which supply a portion of the demand and energy requirements of LUS include the Doc Bonin Plant, the T. J. Labbé Electric Generation Station (T. J. Labbé Plant), and the Hargis-Hébert Electric Generating Station (Hargis-Hébert Plant). The Curtis A. Rodemacher Electric Generating Station (Rodemacher Station) (also located in the City) has not operated since 1994 and LUS is in the process of decommissioning the plant (see Section 9). Construction and commissioning of the T. J. Labbé Plant was completed in 2005 and the Hargis-Hébert Plant in 2006.

Doc Bonin Plant

The Doc Bonin Plant, shown in Figure 5-1, is located in the northwest part of the City and consists of three natural gas-fired conventional utility boilers each with a dedicated steam turbine (ST). The units were installed in 1964, 1970, and 1976, respectively. Unit 1 generates steam at 1,250 pounds per square inch (psi) and includes a non-reheat, tandem compound, bottom exhaust ST. Unit 2 and Unit 3 generate steam at 1,800 psi and include tandem compound, bottom exhaust STs with reheat. Each unit has a dedicated cooling tower for heat rejection. Well water is utilized for cooling tower make-up and municipal potable water is supplied to the water treatment system. Each unit has a dedicated exhaust stack and none of the units have emission control equipment. Unit 1 and Unit 2 are electrically interconnected to the LUS system at the 69 kilovolt (kV) level and Unit 3 is connected at the 138kV level.

Typically, only one of the three active gas-fired generating units at the Bonin Plant is operated at one time. In this mode of operation, there are essentially “spare” generating units to ensure system reliability. The units are currently dispatched on the basis of load requirements and transmission system limitations.



Figure 5-1: Doc Bonin Plant

T. J. Labbé and Hargis-Hébert Plants

The T. J. Labbé Plant, shown in Figure 5-2, is located toward the northern portion of the Parish, and consists of two natural gas-fired LM6000PC Sprint combustion turbines (CTs) with water injection for nitrogen oxides (NO_x) control and chillers for inlet air cooling to enhance power production when operating at high ambient temperatures. The T. J. Labbé Plant is equipped with three 50 percent capacity gas compressors and is electrically connected by means of a looped 230kV interconnect to the existing Pont des Mouton to Doc Bonin 230kV line.



Figure 5-2: T. J. Labbé Plant

The Hargis-Hébert Plant is a similar configuration as the T. J. Labbé Plant and is located toward the southern portion of the City, and consists of two natural gas-fired LM6000PC Sprint CTs with water injection for NO_x control and chillers for inlet air cooling to enhance power production when operating at high ambient temperatures. The Hargis-Hébert Plant has been designed with two 50 percent capacity natural gas heaters and is electrically connected to the existing Elks Substation by means of a new 1.2-mile 69kV transmission line.

The T. J. Labbé and Hargis-Hébert Plants have blackstart capability, allowing operation of the units in the event of the loss of power from the transmission grid. Also, these plants are equipped such that personnel at the Doc Bonin Plant can monitor, as well as control (start-up, shutdown, load adjustment, etc.) the CTs remotely; however, normally, the CTs are operated locally with site personnel and

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monitored by personnel at the Doc Bonin Plant. Both CTs of the Hargis-Hébert Plant are equipped with synchronous condensers, or clutches, between the turbine and the generator to provide voltage support to the system.

General information including gross capacity for each unit at the Doc Bonin Plant, T. J. Labbé Plant and Hargis-Hébert plants are listed in Table 5-1.

Table 5-1
Gas-Fired Generation

Unit	Gross Capacity (MW) ⁽²⁾	Fuel	Boiler Manufacturer	Turbine Manufacturer
Doc Bonin Unit 1	40	Gas/Oil ⁽¹⁾	Babcock and Wilcox	Westinghouse
Doc Bonin Unit 2	75	Gas/Oil ⁽¹⁾	Combustion Engineering	General Electric
Doc Bonin Unit 3	<u>160</u>	Gas/Oil ⁽¹⁾	Babcock and Wilcox	General Electric
Doc Bonin Plant Total	275			
T. J. Labbé Unit 1	45	Gas	N/A	General Electric
T. J. Labbé Unit 2	<u>45</u>	Gas	N/A	General Electric
T. J. Labbé Plant Total	<u>90</u>			
Hargis-Hébert, Unit 1	45	Gas	N/A	General Electric
Hargis-Hébert, Unit 2	<u>45</u>	Gas	N/A	General Electric
Hargis-Hébert Plant Total	<u>90</u>			
Total	455			

(1) Natural gas is the primary fuel for generation, with oil used as an alternative supply.

(2) Summer rating with Automatic Generation Control.

Source: Jamie Webb, LUS, 3/09

Operating Statistics

LUS personnel reported the following significant operating statistics for the gas-fired generating units.

Table 5-2 contains operating statistics for Doc Bonin for the last five years. Annual generation at the Bonin Plant has averaged approximately 267 gigawatt hours (GWh) (net) over the 2004 to 2008 period, the majority of which was provided by Unit 3. Annual natural gas consumption averaged 3,152,903 MMBtu over the same period. The annual average heat rate of the Bonin Plant was approximately 12,698 British thermal units per kilowatt-hour (Btu/kWh).

Table 5-2
Doc Bonin Gas-Fired Generation Operating Statistics

	2004	2005	2006	2007	2008	5-Year Average
Doc Bonin – 1						
Gross Generation (MWh)	48,826	53,509	5,053	6,834	45,528	31,950
Gross Capacity Factor (%) ⁽¹⁾	11	12	1	2	10	7
Service Factor (%) ⁽²⁾	26	30	3	3	17	16
Availability Factor (%) ⁽³⁾	99	99	91	56	97	88
Forced Outage Rate (%) ⁽⁴⁾	0.25	0.30	2.8	0.00	8.7	2.4
Number of Starts	5	4	2	3	4	4
Doc Bonin – 2						
Gross Generation (MWh)	135,825	161,212	90,823	53,984	90,797	106,528
Gross Capacity Factor (%) ⁽¹⁾	17	20	12	7	12	14
Service Factor (%) ⁽²⁾	50	48	36	17	28	36
Availability Factor (%) ⁽³⁾	93	66	89	96	97	88
Forced Outage Rate (%) ⁽⁴⁾	1.20	0.00	4.6	12.8	10.8	5.9
Number of Starts	13	12	6	2	5	7.6
Doc Bonin – 3						
Gross Generation (MWh)	318,104	451,418	0	0	0	153,904
Gross Capacity Factor (%) ⁽¹⁾	19	28	0	0	0	9
Service Factor (%) ⁽²⁾	47	71	0	0	0	24
Availability Factor (%) ⁽³⁾	60	97	92	100	98.38	90
Forced Outage Rate (%) ⁽⁴⁾	0.05	2.09	31.0	N/A	N/A	11.0
Number of Starts	6	7	0	0	0	2.6
Doc Bonin Totals						
Total Gross Generation (MWh)	502,755	666,139	95,876	60,818	136,325	292,383
Total Net Generation (MWh)	463,146	622,333	82,785	46,441	119,372	266,815
Total Gas Usage (MMBtu)	5,227,479	7,225,407	1,090,523	670,089	1,551,016	3,152,903
Net Heat Rate (Btu/kWh)	11,287	11,610	13,173	14,429	12,993	12,698

(1) Gross Capacity Factor is the actual electric generation divided by the maximum the unit is capable of generating.

(2) Service Factor reflects the percent of time the unit was electrically connected to the transmission system.

(3) Availability Factor reflects the percent of time the unit was capable of providing service.

(4) Forced Outage Rate reflects the percent of time the unit was removed from service due to an unplanned failure.

Source: Jamie Webb, LUS 3/09

Section 5

Table 5-3 contains operating statistics for T. J. Labbé for the last five years. Annual generation at the T. J. Labbé Plant has averaged approximately 96 GWh (net) since 2006, with the electrical production generally split evenly between Unit 1 and Unit 2. Annual natural gas consumption averaged 1,159,817 MMBtu over the same period. The annual average heat rate of the T. J. Labbé Plant was approximately 12,068 Btu/kWh.

Table 5-3
T. J. Labbé Gas-Fired Generation Operating Statistics

	2004	2005 ⁽⁵⁾ ⁽⁶⁾	2006 ⁽¹⁾	2007	2008	5-Year Average
T. J. Labbé - 1						
Gross Generation (MWh)	N/A	N/A	51,548	49,468	55,239	52,085
Gross Capacity Factor (%) ⁽¹⁾	N/A	N/A	12	11	13	12
Service Factor (%) ⁽²⁾	N/A	N/A	22	25	26	24
Availability Factor (%) ⁽³⁾	N/A	N/A	94	95	59	83
Forced Outage Rate (%) ⁽⁴⁾	N/A	N/A	5.1	4.4	61.1	23.5
Number of Starts	N/A	N/A	122	60	34	72
T. J. Labbé - 2						
Gross Generation (MWh)	N/A	N/A	46,664	51,199	48,915	48,926
Gross Capacity Factor (%) ⁽¹⁾	N/A	N/A	11	12	11	11
Service Factor (%) ⁽²⁾	N/A	N/A	19	25	23	22
Availability Factor (%) ⁽³⁾	N/A	N/A	97	90	77	88
Forced Outage Rate (%) ⁽⁴⁾	N/A	N/A	1.6	22.4	9.5	11.2
Number of Starts	N/A	N/A	114	60	57	77
T. J. Labbé Totals						
Total Gross Generation (MWh)	N/A	N/A	98,212	100,667	104,154	101,014
Total Net Generation (MWh)	N/A	N/A	92,501	94,209	101,531	96,080
Total Gas Usage (MMBtu)	N/A	N/A	1,051,884	1,202,723	1,224,845	1,159,817
Net Heat Rate (Btu/kWh)	N/A	N/A	11,372	12,767	12,064	12,068

(1) Gross Capacity Factor is the actual electric generation divided by the maximum the unit is capable of generating.

(2) Service Factor reflects the percent of time the unit was electrically connected to the transmission system.

(3) Availability Factor reflects the percent of time the unit was capable of providing service.

(4) Forced Outage Rate reflects the percent of time the unit was removed from service due to an unplanned failure.

(5) T. J. Labbé commenced operation August 19, 2005.

(6) Operating Statistics not available.

Source: Jamie Webb, LUS 3/09

Table 5-4 contains operating statistics for Hargis-Hébert for the last five years. Annual generation at the Hargis-Hébert Plant has averaged approximately 123 GWh (net) since 2006, with the electrical production generally split evenly between Unit 1 and Unit 2. Annual natural gas consumption averaged 1,486,777 MMBtu over the same period. The annual average heat rate of the Hargis-Hébert Plant was approximately 11,994 Btu/kWh.

Table 5-4
Hargis-Hébert Gas-Fired Generation Operating Statistics

	2004	2005	2006 ⁽⁵⁾	2007	2008	5-Year Average
Hargis-Hébert - 1						
Gross Generation (MWh)	N/A	N/A	31,589	79,474	79,332	63,465
Gross Capacity Factor (%) ⁽¹⁾	N/A	N/A	7	18.1	18	14
Service Factor (%) ⁽²⁾	N/A	N/A	13	36.91	34	28
Availability Factor (%) ⁽³⁾	N/A	N/A	95	95.99	96	96
Forced Outage Rate (%) ⁽⁴⁾	N/A	N/A	1.60	0.19	8.7	3
Number of Starts	N/A	N/A	38	72	109	73
Hargis-Hébert - 2						
Gross Generation (MWh)	N/A	N/A	27,418	71,263	98,825	65,835
Gross Capacity Factor (%) ⁽¹⁾	N/A	N/A	6	16.3	23	15
Service Factor (%) ⁽²⁾	N/A	N/A	10	34.75	44	30
Availability Factor (%) ⁽³⁾	N/A	N/A	95	94.14	97	95
Forced Outage Rate (%) ⁽⁴⁾	N/A	N/A	1.10	5.3	5.1	4
Number of Starts	N/A	N/A	53	61	111	75
Hargis-Hébert Totals						
Total Gross Generation (MWh)	N/A	N/A	59,007	150,737	178,158	129,301
Total Net Generation (MWh)	N/A	N/A	55,573	142,547	170,328	122,816
Total Gas Usage (MMBtu)	N/A	N/A	640,913	1,769,260	2,050,158	1,486,777
Net Heat Rate (Btu/kWh)	N/A	N/A	11,533	12,412	12,037	11,994

(1) Gross Capacity Factor is the actual electric generation divided by the maximum the unit is capable of generating.

(2) Service Factor reflects the percent of time the unit was electrically connected to the transmission system.

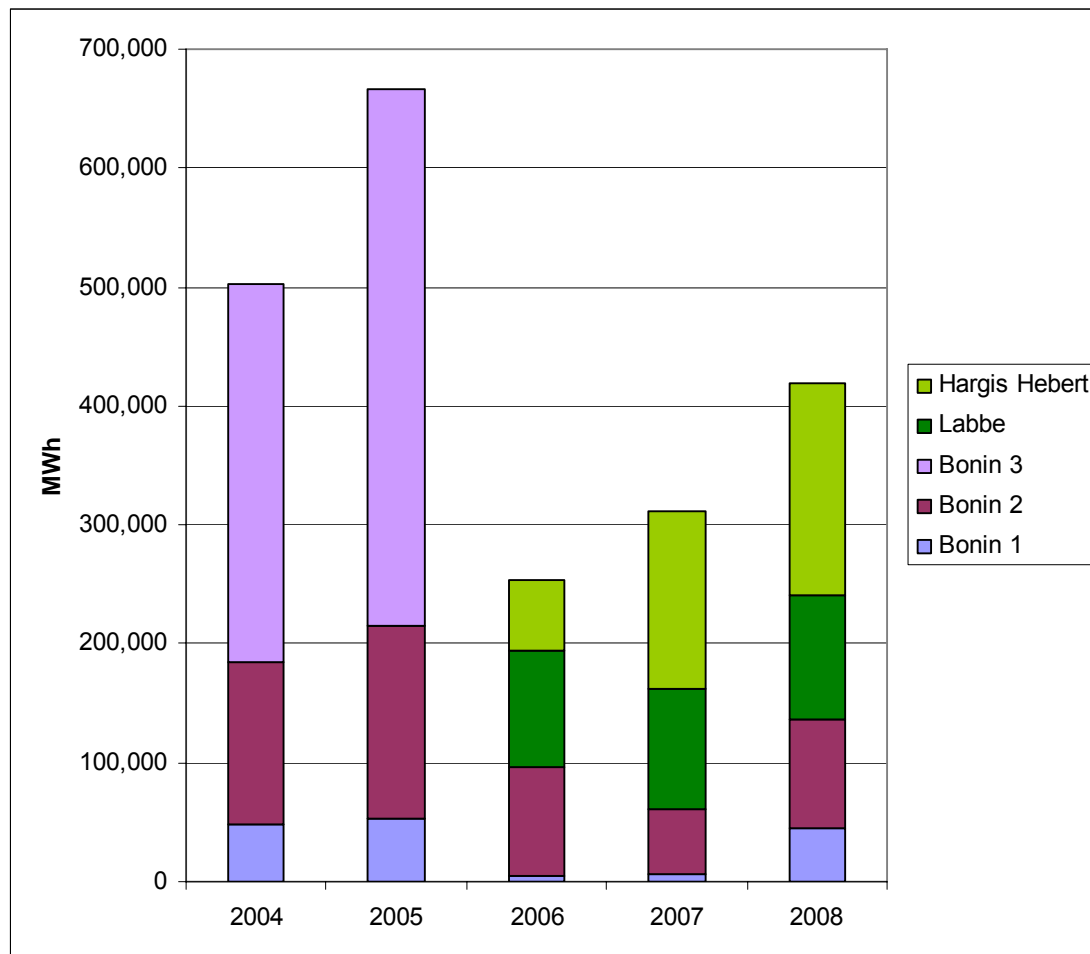
(3) Availability Factor reflects the percent of time the unit was capable of providing service.

(4) Forced Outage Rate reflects the percent of time the unit was removed from service due to an unplanned failure.

(5) Hargis-Hébert achieved commercial operation June 9, 2006 and the data presented is for a partial year.

Source: Jamie Webb, LUS 3/09

Figure 5-3 below shows the total energy production from the gas-fired generation facilities and illustrates the energy contributed by each of the units.



Source: Jamie Webb, LUS 3/09

Figure 5-3: Total Gas-Fired Generation Unit Contributions

LUS attempts to utilize their coal-fired capacity at Rodemacher Power Station Unit 2 (RPS2) to provide as much energy as possible throughout the year. In the past, delivery limitations from RPS2 due to transmission constraints occurred quickly and with limited warning. Therefore, because several hours are required to start-up one of the Doc Bonin units, one or more of the Doc Bonin units were kept on-line. However, the addition of the T. J. Labbé Plant and the Hargis-Hébert Plant, which have much quicker start-up times and are more efficient than the Doc Bonin units, has significantly altered the operating profile of the Doc Bonin units and the energy production of the gas-fired generation resources in general. Figure 5-3 shows an overall trend of decreasing gas-fired generation over the past five years since 2004; however, gas-fired generation has increased since 2006. Additionally, the figure shows a decrease in Doc Bonin generation over the past five years.

The 2008 availability of each of the Doc Bonin units was higher than we would expect the long-term average availability to be for units of similar, size, type and age. Due to

the nature of their operation, the Doc Bonin units are within the range of expected values for forced outage rate for units of similar size, type, and age.

In 2008, the availability and forced outage rates of the T. J. Labbé Plant were lower and higher, respectively, than what we would expect the long-term average to be for units of similar, size, type and age. The availability and forced outage rate for the T. J. Labbé Plant were impacted by major maintenance repairs of the CTs in 2008. The 2008 availability of the Hargis-Hébert Plant was similar to what we would expect for a long-term average availability; however, the 2008 forced outage rate of the Hargis-Hébert Plant was higher than we would expect for a long-term average forced outage rate. The availability factor of a unit can reflect higher performance if it is in reserve standby for a considerable amount of time during a review period, as is the case for all of the LUS plants in 2008. It is not uncommon for newly installed CTs to have higher than normal forced outage rates due to the various issues that can be encountered as the CTs go from construction to operation.

Fuel Infrastructure and Supply Contracts

LUS owns a ten mile, 10-inch gas supply pipeline, which connects to Texas Gas Transmission Corporation (Texas Gas) and Columbia Gulf Transmission Company (Columbia Gas) pipeline systems. The LUS-owned gas pipeline offers an alternative means of supplying gas to the LUS generation facilities in lieu of the gas supply contract with Crosstex Gulf coast Marketing, Ltd. (Crosstex). The LUS-owned gas pipeline also crosses (but is not interconnected with) two other gas pipelines, Florida Gas Transmission, a subsidiary of CrossCountry Energy, LLC, and Gulf South Pipeline Company, LP. (Gulf South).

Fuel supply to the T. J. Labbé Plant is provided via a pipeline expansion branch from the LUS-owned 10-inch gas supply pipeline that connects the Bonin Plant with Columbia Gulf and Texas Gas. The supply pipeline is a 10-inch line that follows a 2,250 foot westerly route parallel with Renaud Drive, then north for approximately 500 feet to the T. J. Labbé Plant.

Fuel supply for the Hargis-Hébert Plant is provided by interconnection with the east-west Gulf South system between Louisiana Highway 89 (Southpark Road) and Commission Boulevard, at the intersection of the Gulf South pipeline with American Boulevard. Gulf South owns, operates, and maintains a 10-inch, 2,500-foot supply lateral. Gulf South also operates and maintains a metering station at the Hargis-Hébert Plant site that is owned by LUS.

Operations and Maintenance

Day-to-day O&M of the three LUS wholly-owned generating facilities is accomplished by a plant staff of 39. As of the end of 2008, 10 positions were vacant, but 10 contract employees were utilized to meet staffing needs in 2008. Some positions were filled in 2008 and some positions were also vacated. However, the net staffing level remained the same. LUS currently staffs the Doc Bonin Plant and the T. J. Labbé and Hargis-Hébert Plants with at least one staff member 24 hours a day seven days a week.

Day-to-day operational challenges include coordination of dispatch and generation requirements. The long-term challenge facing operations is a shortage of qualified labor. Key power plant positions remain vacant, but the plant has overcome this by outsourcing and hiring contract labor. The labor shortage has not yet impacted plant reliability; however, the shortage along with the longevity of the present workforce may impact operations in the future.

We previously noted that LUS raised the minimum load level of Unit 3 of the Doc Bonin Plant to approximately 75 megawatt (MW) in order to mitigate excessive NO_x emissions events relative to the air permit. In 2008, Unit 3 was not used to generate electrical power.

LUS has implemented a formal training program for operations personnel, consisting of industry specific plant science and process training. Also, LUS Operations utilizes power plant technician demonstration notebooks that require new operators to perform system checkouts with a Shift Foreman. The Power Plant Operator Apprentice program, ICE Technician Apprentice program, and Power Plant Machinist Apprentice program have been revised to include power plant specific knowledge along with industry standard components for fossil plant operator and maintenance technicians. In 2008, one technician participated in the ICE Technician apprenticeship and two technicians participated in Power Plant Operator apprenticeship.

Operations are accomplished through the use of operational procedures incorporated in Original Equipment Manufacturer (OEM) manuals. Power Production Division staff reports routine use of the boiler chemistry lab, start-up/shutdown checklist and the common practice of apprentice training of operations technicians, routine turbine over-speed trip tests, relief valve testing, piping hanger walkdowns and the weekly functional test of the Doc Bonin Plant's diesel generator.

Predictive maintenance programs include vibration monitoring, lube oil analysis, meggar testing, ultrasonic leak detection (air systems), and boiler tube porosity and thickness testing. These programs can detect problems prior to catastrophic failure of the equipment. The repair of the equipment will typically have less of an adverse impact on operation, can be better planned, and may cost less to perform the repair. Preventative maintenance includes routine lubrication, cleaning, and general inspection of equipment.

Both predictive and preventative maintenance tasks are generated and tracked by the existing maintenance management program, which employs the network version of the MP2 software package. Maintenance management systems such as the MP2 system are designed to track work orders from origination through completion. This allows plant personnel to monitor progress, identify backlog and produce planning and scheduling information.

The MP2 system also has the capability to maintain spare parts inventory control as well as cross-referencing parts inventory with maintenance tasks. This provides for more efficient job planning and scheduling along with monitoring inventory levels and ordering replacements. Consumable and capital spares have been integrated in the MP2 system. Minimum and maximum levels have been established in the system for the consumable spares. LUS personnel have assembled the available capital and

consumable spare parts in three areas of the facilities in separate bins with assigned tag numbers. At the end of 2007, LUS started construction of maintenance buildings at the T. J. Labbé Plant and the Hargis-Hébert Plant for storage of plant spares. The maintenance buildings were completed in 2008. Critical spares were identified for the CTs in 2008, and subsequently purchased.

Maintenance and Condition of the Property

Major maintenance work of the Doc Bonin Plant in past years has included steam turbine overhauls for Doc Bonin Plant Unit 2 in 2005, Unit 3 in 2004, and Unit 1 in 2007. There were no major overhauls of the steam turbines at the Doc Bonin Plant in 2008.

CT major maintenance will be driven by the manufacturers recommended maintenance schedule, which is based on equivalent baseload operating hours. The T. J. Labbé Plant CTs had boroscope inspections in November 2007 and during their engine depot major maintenance performed in 2008. The Hargis-Hébert Plant CTs had boroscope inspections performed in September 2008.

In November 2007, T. J. Labbé Plant Unit 1 CT experienced failure of its intermediate gear box spline adapter, which disengaged the high-pressure compressor. In its subsequent repair, Unit 1 CT was retrofitted with an improved spline adapter and returned to service in April 2008. Consequently, Unit 2 was removed from service in April 2008 and retrofitted with similar equipment. Unit 2 CT was returned to service in June 2008. According to LUS, the Hargis-Hébert Plant CTs do not require the spline adapter retrofit.

The units at the Doc Bonin Plant are generally well maintained and LUS has continued to make capital improvements. In 2001, LUS completed condenser tube replacement on Unit 3. In 2002, LUS replaced Unit 2's turbine control system, installed a camera in Unit 1's boiler, replaced Unit 2 boiler corner tubes around the burners, replaced two instrument air dryers, and upgraded plant lighting. In 2003, LUS replaced Unit 1's generator step up transformer, and replaced Unit 1 and Unit 2 flame scanner system. In 2004, a reverse osmosis system was installed to increase the period between regenerations for the existing demineralizer trains. Also in 2004, an additional emergency diesel generator was installed to provide increased emergency power and the fuel gas controls were upgraded. In 2005, LUS installed a boiler camera on Unit 2. In 2007, material projects included work to construct a new oil and chemical storage building. In 2008, capital improvements included a continuous emissions monitoring system (CEMS) replacement at the Doc Bonin Plant as well as warehouse/office space additions at the T. J. Labbé and Hargis-Hébert Plants.

Plant personnel indicated that plans are in place to repaint the external facilities of Doc Bonin Unit Nos. 2 and 3 in the Fall 2010. We recommend proceeding with the plans to repaint the affected areas as soon as possible to prevent further degradation. The areas inside the three facilities are clean and well kept and the yard areas of the facilities are generally neat and well maintained.

Coal-Fired Generation

LPPA supplies a significant portion (from 50 to 70 percent) of LUS' electric energy production. LPPA has a 50 percent ownership interest in a fossil-fuel steam-electric generating unit, RPS2, located in northwest Rapides Parish near Boyce, Louisiana, approximately 100 miles northwest of Lafayette. RPS2, which is operated by Cleco, consists of a Foster-Wheeler steam boiler and a General Electric reheat steam turbine generator with a nominal rating of 510,828 kilowatt (kW) (see Figure 5-4 below).

The RPS2 is equipped with a hot-gas electrostatic precipitator to remove fly ash, and is designed to operate with an efficiency of 99.5 percent when burning high sulfur coal, and 95 percent when burning oil. The boiler is rated at 3,800,000 pounds of steam per hour. Design throttle pressure is 2,400 psig with five percent continuous over-pressure capability. Boiler main steam temperature is 1,005 degrees Fahrenheit (°F) with a reheat temperature of 1,005°F. The electric generator is rated at 620,000 kilovolt amperes (kVA) and operates at 3,600 revolutions per minute (rpm).

Circulating water for cooling and condensing the steam is supplied from Lake Rodemacher by circulating water pumps that are located in the screened water intake structure. Evaporation and water otherwise lost from the lake is replaced by rainfall runoff within the Lake Rodemacher's drainage area, which is approximately 34 square miles.



Figure 5-4: Rodemacher Power Station Unit No. 2 (RPS2)

Transmission

There are five 230-kV lines owned by Cleco out of the Rodemacher switching station. Four of the 230-kV lines extend to Clarence, Leesville, Rapides, and St. Landry (Cocodrie), while the fifth line from the Rodemacher Power Station extends to Sherwood. The existing Pineville-Rapides 138-kV line has been converted to 230 kV. Two new 230-kV lines have been constructed from Sherwood to the existing Pineville-Rapides line. Related substation facility additions were made by Cleco at the Station and at Pineville, Rapides, Forest Hill and Sherwood Substations.

Through these Cleco transmission facilities, the Rodemacher switching station is interconnected with the area transmission grid. The City is interconnected with the area transmission grid through its 138-kV and 230-kV ties to Cleco and Entergy. Interconnection facilities provide capability for the City to receive power and energy at rates of delivery up to 500,000 kW.

Coal for Rodemacher Unit No. 2

The principal fuel for RPS2 is coal and is supplied by Rio Tinto Energy America, formerly known as Kennecott Energy Company from coal properties in Campbell County, Wyoming. The coal is transported via rail from Wyoming to the facility in Boyce, Louisiana. The original contract was executed in 1973 and renegotiated several times.

LPPA owns two unit trains that are operated by Cleco in coordination with Cleco's unit trains to bring LPPA's coal to the facility. A portion of the proceeds from the Series 2007 LPPA Bonds was utilized by LPPA to replace the steel unit trains with higher capacity aluminum unit trains.



Figure 5-5: New Aluminum Rail Car purchased with proceeds of Series 2007 Bonds

We note that past rail transportation difficulties have resulted in the procurement of small amounts of coal from other mines to support the test burn of various coal blends in the event that coal deliveries become more problematic in the future. LUS indicates that the results of the test burn of the various coals were successful and certain small quantities of coal from other sources were procured to supplement the coal pile.

Performance

In conjunction with our periodic report work for LPPA, we have reviewed certain unit performance measurements provided by Cleco, such as gross and net generation, station service, heat rate, and availability as indicators of plant performance. The heat rate is calculated by multiplying the average Btu content of the fuel (as reported from the mine's coal analysis) by fuel quantities taken from the plant's fuel weighting device (gravimetric stock feeder), and dividing by the energy in megawatt hours generated and delivered to the transmission grid. These performance measurements are provided in Table 5-5. The generation statistics shown above are for the entire RPS2 plant, not just LPPA's 50 percent ownership.

**Table 5-5
RPS2 Operating Statistics**

	2004	2005	2006 ⁽⁴⁾	2007	2008	5-Year Average
Gross Generation (MWh)	3,209,806	3,454,019	3,395,693	3,730,004	3,387,322	3,435,369
Station Service (MWh)	<u>225,587</u>	<u>240,478</u>	<u>234,014</u>	<u>253,045</u>	<u>228,966</u>	<u>236,418</u>
Net Generation (MWh)	2,984,219	3,213,541	3,161,679	3,476,959	3,158,356	3,198,951
Station Service (%)	7.0	7.0	6.9	6.8	6.8	6.9
Net Capacity Factor (%) ⁽¹⁾	65.0	70.1	69.0	75.9	68.8	69.8
Hours Available	7,508	7,791	7,427	7,997	7,356	7,616
Net Unit Heat Rate (Btu/kWh)	11,053	11,171	11,043	10,928	10,975	11,034
Availability Factor (%) ⁽²⁾	85.5	88.9	84.8	91.3	83.7	86.8
Forced Outage Factor (%) ⁽³⁾	1.4	0.1	1.3	1.5	2.6	1.4
Scheduled Outage Factor (%)	13.2	11.0	13.9	7.2	13.7	11.8

(1) Net Capacity Factor is the actual electric generation divided by the maximum the unit is capable of generating.

(2) Availability Factor reflects the percent of the time the unit was capable of providing service.

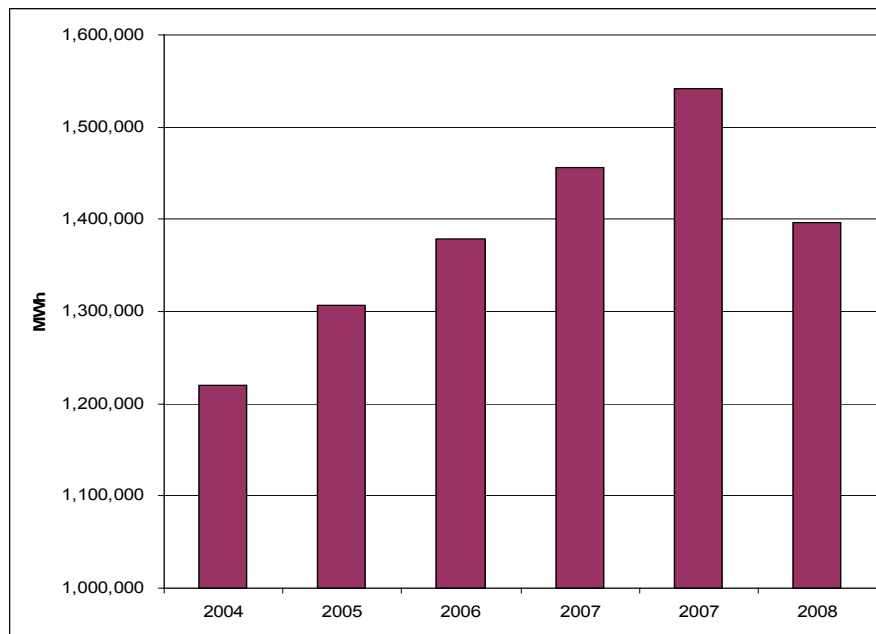
(3) Forced Outage Factor reflects the percent of time the unit was removed from service due to an unplanned failure.

(4) The October 2007 LPPA Managers Monthly Report contains revised data for fiscal year 2006.

Source: LPPA Manager's Monthly Reports

The five-year average availability of the Rodemacher Plant is within the range of expected values for availability at coal-fired power plants of similar size, type and age.

Figure 5-6 shows the MWh delivered to LUS annually from RPS2.

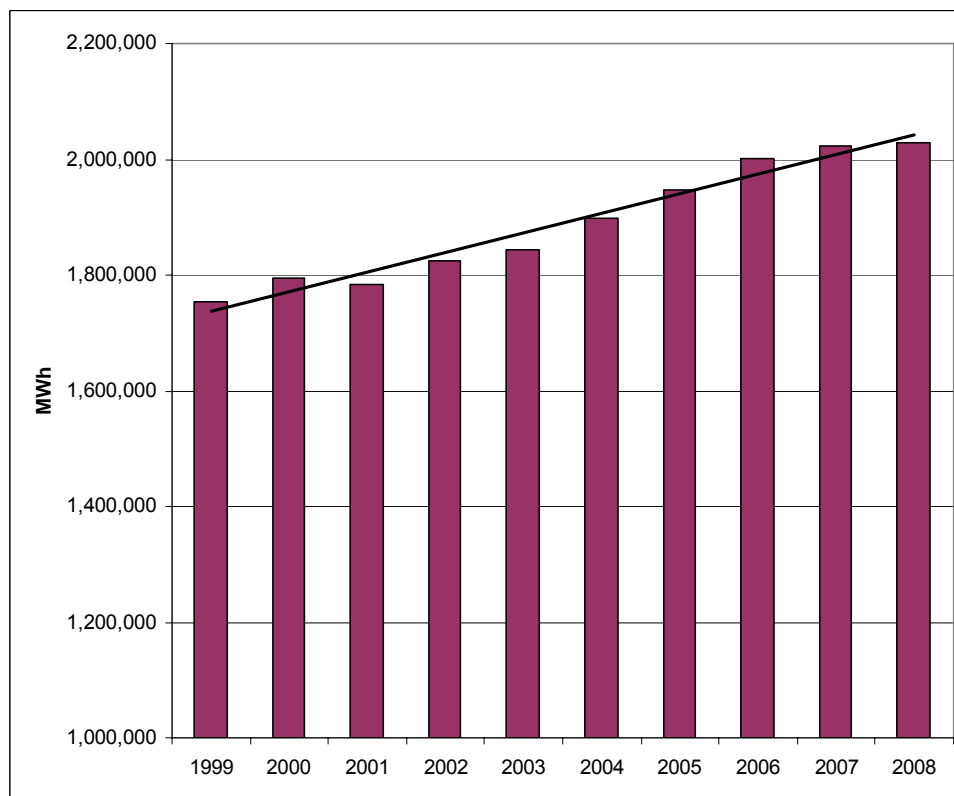


Source: LPPA Manager's Monthly Reports

Figure 5-6: Annual RPS2 MWh Delivery to LUS

Historical Capacity and Energy Requirements

The Electric Utility of LUS has met customer demands for service, and provided its customers with adequate and reliable utility services during the period reported herein. The historical net power and energy requirements are presented in Figure 5-7 and Table 5-6. A linear regression line was included in Figure 5-7 for the period 1998 through 2007, which indicates a normalized growth rate for the period of approximately 1.6 percent.



Source: LUS Financial and Operating Statements 1997-2008 audited.

Figure 5-7: Historical Energy Requirements

Table 5-6
Historical Capacity and Energy Requirements

	2004	2005	2006	2007	2008
Number of Customers	57,489	57,906	58,722	60,018	61,752
Peak Demand (MW) ⁽¹⁾	411	438	447	478	451
Energy Requirements (MWh) ⁽¹⁾	1,898,660	1,948,129	2,000,973	2,023,226	1,966,442
Change in Energy Requirements (%)	2.9	2.6	2.7	1.1	-2.8
Annual Load Factor (%)	52.6	50.8	51.1	48.3	49.8

(1) Does not include sales to other utilities and associated losses.

Source: LUS Financial and Operating Statements 1997-2008 audited.

Retail electric service has grown steadily over the period shown above. Customer growth has averaged 1.1 percent per year while average usage per customer has grown at 0.5 percent per year. These two influences have resulted in average annual energy growth of approximately 1.6 percent.

Major Contracts

LCG has many contracts and agreements in place related to the business of the Electric Utility. Principal Electric Utility contracts and agreements are summarized in the following paragraphs

Power and Fuel Marketing

The Energy Authority

LUS signed a Resource Management Agreement (RMA) with The Energy Associates (TEA) on November 28, 2000. The objective of this contract is for TEA to market LUS' electrical capacity and energy in excess of the requirements of its retail customers and to purchase power on behalf of LUS as needed. The TEA agreement was amended in 2007 to modify terms of compensation.

Contractually, LUS provides the following information to TEA on a daily basis for a seven-day period:

- Hourly electric demand.
- Generating unit costs and availability.
- Quantities of capacity and energy that LUS has determined it is willing to sell or purchase.
- Hourly incremental and decremental costs.
- TEA is responsible for:
 - Reservation and verification of transmission paths.
 - Confirmation of schedule with counterparties.
 - Creation of tags.
 - Timely and effective notification of all schedules.
 - Performance of daily checkouts.
- Adhering to LUS' credit policy.
- Execution of all transactions in the wholesale market within the forward year.

On a day-to-day basis, LUS primarily uses their TEA arrangement to balance energy the hours when LUS has surplus power or is deficient. In recent years, LUS has purchased wholesale power to serve their native load when RPS2 was off-line and during the summer months (when demand is high). In 2008, LUS sold 27,307 MWh

of energy to TEA and purchased 225,467 MWh of energy from TEA. Because of transmission constraints in the LUS region, buying and selling large amounts of wholesale power is not a viable alternative for most hours.

LUS signed Letter Agreement Number Two for Natural Gas Services, dated February 1, 2005 (the Letter Agreement) with TEA, which supersedes the previous agreements for natural gas services. The Letter Agreement authorizes TEA to provide resource management services, including but not limited to, purchasing natural gas and transportation on behalf of LUS, and marketing LUS' surplus natural gas and transportation. The Letter Agreement continues until either party provides 30 day written notice of termination to the other party.

TEA may also enter into financial transactions to manage risk associated with power and fuel for LUS. Financial transactions are not necessarily intended by the parties to go to physical delivery, but are used to manage risk exposure to market price volatility. Financial transactions include purchases or sales of futures, options, and swaps. While these activities are currently limited in nature, they should nevertheless be governed by a best practices-based Energy Risk Management Policy and associated procedures. LUS has not yet developed such policies and procedures.

LUS' electric power and energy requirements are met through purchases from power suppliers, through its contract with TEA, LPPA and the Southwestern Power Administration (SPA), as well as by the locally installed generating capacity.

Power Purchases

Lafayette Public Power Authority

LCG, through LPPA, acquired a 50 percent ownership interest in RPS2. The primary fuel supply to the RPS2 is low-sulfur Wyoming coal and the output is sold by LPPA to LCG in accordance with a long-term power sales contract.

The City and LPPA entered into the Power Sales Contract (PSC), whereby LPPA agreed to sell, and the City agreed to purchase, LPPA's share of the power and energy produced from the RPS2. The PSC expires on August 31, 2047.

Under the PSC, payments are specified to be sufficient to pay all costs of LPPA in connection with RPS2, including LPPA's share of operation and maintenance of the RPS2, debt service requirements, and all other financial obligations of LPPA's share of the RPS2. The PSC provides that the obligations of the City to make such payments in each contract year shall constitute obligations payable as an operating expense of the LUS and payable solely from the revenues of such utilities system. Such payments are to be made whether or not RPS2 is operating or operable.

Southwestern Power Administration

LCG has a purchase agreement with SPA and a current capacity allocation of 18.6 MW and energy allocation of 1,200 kWh per kW per year. The contract with SPA has a term of 15 years, which ends on May 31, 2018. Typically, the total annual energy under this contract represents approximately two percent of LUS' total annual

energy requirement. The cost of this power for the 2008 was \$51.21 per MWh for peaking energy and \$31.29 per MWh for the combination of both peaking and supplemental energy.

Due to weather conditions, SPA is expected to have a limited quantity of peaking capacity available for sale in the near term. LCG and SPA amended the contract on June 28, 2006 to defer some of the peaking energy until future years at current costs to help mitigate the impacts of the energy availability shortfall being encountered by SPA. LCG received 19,000 kWh of replacement energy in June 2008 and expects to receive similar amounts of deferral energy in the summer of 2009.

Power Sales

Louisiana Energy and Power Authority

There has been no agreement with LEPA since the previous agreement terminated in December 2005.

Electric Interconnection and Interchange

System interconnection refers to a connection between two electric systems permitting the transfer of electric energy in either direction. Interchange refers to kilowatt-hours delivered to, or received by, one electric utility or pooling system from another. Transmission access refers to the ability of third parties to make use of transmission facilities owned by others (wheeling utilities) to deliver power to another utility.

The various interconnection, interchange, and transmission agreements in effect between LCG and other electric utilities and agencies are with Entergy Gulf States, Cleco, Cajun Electric Cooperative Inc. (now Louisiana Generating LLC, Louisiana Generating), Entergy Louisiana (formerly Louisiana Power and Light), Southwestern Electric Power Company (SWEPCO), and SPA. These agreements provide various terms for the purchase and sale of emergency, replacement, and economy energy. The existing agreements appear to be working satisfactorily for LUS. Certain details of these agreements are presented below.

Entergy Gulf States

The City signed a long-term (31 years) Interconnection Agreement (Interconnection Agreement) with Entergy Gulf States (formerly Gulf States Utilities) in October 1984, which expires in 2015. LCG is recognized as a supplier to total requirements customers connected to the Entergy Gulf States system, and Entergy Gulf States has agreed to provide transmission service for delivery of the RPS2 power from the Cleco System to LCG if Cleco's System is unable to make direct deliveries to LCG. The Interconnection Agreement provides for certain service and rate schedules as applicable between the parties, or which may be negotiated and entered into by the parties in the future. Under the Interconnection Agreement with Entergy Gulf States, LCG provides for reserve capacity requirements consistent with the reserve capacity guide as adopted or recommended by the South Central Systems of the North

American Power Systems Interconnection Committee, or any successor body. Reserves are to be consistent with the Utilities System's load responsibilities taking into account any firm purchases and sales.

Central Louisiana Electric Company

Cleco and LCG entered into an Electric System Interconnection Agreement (ESIA) in 1991. The term of the agreement is such that the ESIA shall not terminate sooner than August 29, 2016, and thereafter shall continue in effect for five-year periods unless terminated by written notice given by one party to the other. The Cleco Interconnection Agreement has been amended to reflect expiration of LEPA Contract. The agreement provides the following:

- Identification of the Unit – a point where power may flow into Cleco facilities from an LCG power source, or an LCG-contracted power source.
- Identification of the following power delivery points and associated capacity effective with agreement modifications are presented in Table 5-7.

Table 5-7
Power Delivery Points

138kV and Above	Contract Demand – MW
Lafayette	221
LEPA	25

Source: Ron Gary, LUS, 3/09

Interchange

LUS has entered into interchange agreements with Louisiana Generating, SWEPCO, Entergy Louisiana, and the SPA. The expiration and extensions provisions of each of these agreements are provided in Table 5-8, however, all of these agreements are still in effect.

Table 5-8
Interchange Agreements

Entity	Term and Extension Provisions
Louisiana Generating	Any date after May 23, 1993 with three years notice
Entergy Louisiana	Automatically extends for three-year periods until terminated with 18 months notice
SWEPCO	January 1, 1996, or the first of any year following a four-year notice
SPA	May 2018

Source: R. W. Beck, Previous CER

Joint Ownership/Use

The Amended and Restated Agreement for Joint Ownership, Construction and Operation of the RPS2 between LPPA, Cleco, and LEPA was entered into in November 1982 and is to remain in effect throughout the useful life of RPS2. This agreement was amended in 1986 to provide for the transmission of LPPA's ownership percentage of generation from RPS2 to points of delivery other than the point of interconnection with LCG.

Fuel Supply

Coal for Rodemacher Unit No. 2

The principal fuel for the Rodemacher Plant is coal, which is supplied to the plant by Rio Tinto Energy America and mined in Campbell County, Wyoming. As operator of the RPS2, Cleco has the responsibility to represent the other Owners in connection with fuel supply and associated contracts. The original contract was executed in 1973 by Cleco and since that time has been renegotiated several times.

In December 2002, a new master coal purchase agreement was executed for purchase of coal in quantities as set forth in confirmation notices. A second confirmation contract sets the quantity of coal and price for the years 2005 and 2006. Under this confirmation, the annual quantity of coal for LPPA is 750,000 tons per year for both 2005 and 2006. The base price of \$6.30 in 2005 and \$6.70 in 2006 includes a provision for adjustment of the coal price based on changes in law, sulfur content and Btu content of coal. A third confirmation at pricing of \$13.62 and \$12.97 was executed for the annual quantity of 875,000 and 500,000 tons per year for 2007 and 2008, respectively.

In November 2007, a second master coal purchase agreement was executed with Coalsales, LLC for purchase of coal in quantities as set forth in confirmation notices. The initial confirmation was for supply of 350,000 tons in 2008 at a base price of \$12.30 per ton. The second confirmation was for an additional 30,000 tons in 2008 at a base price of \$13.40 per ton. This agreement provides LPPA with additional options to purchase its coal needs.

Crosstex Gulf Coast Marketing, Ltd

Natural gas supply and delivery is provided from Crosstex for 1,000,000 MMBtu minimum annual requirement pursuant to a base contract between Crosstex and TEA dated September 1, 2002, which is backed by LUS, in conjunction with a confirmation between TEA and Crosstex dated January 1, 2007. The confirmation expires December 31, 2009. Contractually, there is a requirement for LUS to nominate daily requirements one week prior to the beginning of each month. Coupled with the nomination requirement is a daily true-up of the actual volumes purchased vs. nominated volumes. In the event LUS purchased less than the nominated volume of gas, Crosstex would sell the difference into the market at the current sales price. Delivery is to the Doc Bonin Plant on pipelines owned by Crosstex and is considered firm.

ATMOS Energy Marketing, LLC

Natural gas supply is also provided from ATMOS Energy Marketing, LLC (ATMOS) for up to 20,000 MMBtu per day pursuant to a base contract between ATMOS and TEA dated February 1, 2004, which is backed by LUS, in conjunction with a confirmation between TEA and ATMOS dated August 1, 2007. This confirmation was scheduled to expire on June 30, 2008 but continued on a month to month basis upon mutual agreement of the parties while a new confirmation was being negotiated. A new confirmation between TEA and ATMOS was executed on October 28, 2008. Delivery to the Hargis-Hébert Plant is on pipelines owned by Gulf South. While delivery has not been curtailed the transportation is considered interruptible.

In addition to the “base” volumes purchased from Crosstex, TEA purchases natural gas on the spot market from Crosstex and multiple other suppliers for LUS in order to fulfill LUS’ annual gas requirements.

Other Agreements

Southwestern Louisiana Electric Membership Co-op

In 1987, LUS entered into a non-competitive agreement with Southwestern Louisiana Electric Membership Co-op (SLEMCO) for certain electric customers outside of the City limits. On September 10, 2004, LUS entered into a new 15-year non-competitive agreement with SLEMCO. The agreement allows for an orderly acquisition of customers from SLEMCO at pricing specified in the agreement.

CT Parts Agreement

LUS and TransCanada Turbines, Inc. entered into a combustion turbine Parts Agreement for the supply of parts for the CTs installed or being installed in the City. The CT Parts effective November 9, 2006 Agreement essentially gives LUS CT parts price certainty for a five-year term.

CT Maintenance Agreement

LUS and GE Packaged Power, Inc. (GE) entered into a Services Agreement dated September 21, 2006 (executed on November 9, 2006) for maintenance activities relating to the four LM6000 CTs. Pursuant to the agreement, GE is to provide engineering, field supervision, and craft labor on an as needed basis at the request of LUS. The term of the agreement is through the later of completion of one major inspection on the covered units or six years.

Major Contract Summary

A summary of the contracts and agreements is provided in Table 5-9.

Table 5-9
Contracts and Agreements

Contracts & Agreements Between		Date Signed/Renewed	Termination Date	Provisions
LUS	TEA	November 28, 2000	Upon 30 days notice	Power and Fuel Marketing
LPPA	Cleco, LEPA	November 1, 1982	End of useful life	Joint ownership of RPS2
LCG	LPPA	May 1, 1997	End of useful life	Purchase of power from LPPA's 50 percent share in Rodemacher Unit 2
LCG	SPA	January 1, 2004	December 31, 2018	Purchase of Power
LCG	Entergy Gulf States	October 1, 1984	October 1, 2015	Interconnection agreement for delivery of power
LCG	Cleco	1991	August 29, 2016	Interconnection agreement for delivery of power
LUS	Louisiana Generating	May 23, 1983	Upon 3 year notice	Interchange agreement for electric transmission
LUS	Entergy Louisiana	October 6, 1988	Upon 18 month notice	Interchange agreement for electric transmission
LUS	SWEPCO	May 1, 1994	Upon 45 days notice	Interchange agreement for electric transmission.
LUS	Kennecott Coal	May 31, 2006	December 2008	Purchase of coal for RPS2
LUS	Coalsales LLC	December 29, 2005	December 31, 2006	Purchase of coal for RPS2
LUS	Coalsales, LLC	November 7, 2007	60 days written notice	Purchase of coal for RPS2
TEA	Crosstex	January 1, 2007	December 31, 2009	Supply of natural gas for LUS generating facilities
TEA	ATMOS	August 1, 2007	June 30, 2008	Supply of natural gas for LUS generating facilities
TEA	ATMOS	October 28, 2008	October 31, 2010	Supply of natural gas for LUS generating facilities
LUS	SLEMCO	September 10, 2004	September 10, 2019	Customer acquisition agreement
LUS	TransCanada	November 9, 2006	5 years	CT Parts
LUS	GE	November 9, 2006	6 years	CT Maintenance Services
LUS	TEA	February 7, 2007	Upon 30 days notice	Amended Section 9 – Compensation
LUS	Arch Coal Sales, Inc	November 29, 2006	December 31, 2007	Purchase of coal for RPS2

Source: Ron Gary, Karen Hoyt, LUS 3/09

Electric Operations

Scheduling and delivery of reliable energy to the Electric Utility customers is accomplished through a network of transmission and distribution lines monitored by an integrated communication system and the functions performed by the Electric Operations Division. The discussion below provides a description of the facilities, historical O&M statistics, a summary of the O&M history and plans, and the condition of the facilities as observed by the Consulting Engineer. Additionally, a summary of

the major functions of the Electric Operations Division is provided, including energy control, SCADA, metering, transmission, substation, and distribution O&M; inventory management; and LUS site and facility security.

The Electric Operations Division consists of four discrete operating sections: Transmission and Distribution, Substation and Communications, ECS and Metering, and Facilities Management. The Electric Operations Division is currently organized as provided in Figure 5-8 below.

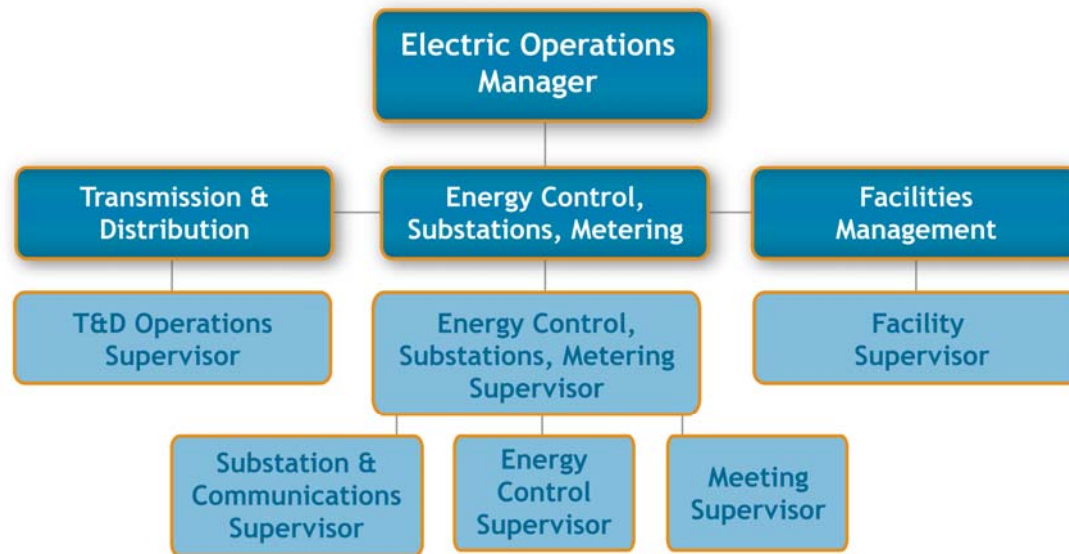


Figure 5-8: Electric Operations Division Reporting Structure

Additionally, significant support is provided to the Electric Utility from the Engineering Division. The Power Marketing section of the Engineering Division coordinates with ECS for fuel supply along with power purchases and sales to and from LUS. The Power Marketing Section serves as the primary interface with the coal-fired RPS2 and coordinates with the ECS and Power Production Division for delivery of baseload energy from RPS2 to the Electric Utility as described in more detail below. The Power Marketing Section also coordinates with independent system operators and regional transmission operators on issues pertinent to the Electric Utility. The Administration Section of the Engineering Division administers various third party contracts for O&M materials and services required by the Electric Utility.

Each division plays a critical role in determining the degree of success LUS will have in meeting its Electric Utility customer expectations. Although each division has its own responsibilities, they interact extensively and operate in a cohesive manner.

Transmission and Distribution Overview

LCG's electric transmission system includes 230kV transmission facilities and a 69kV loop. Step-down transformation provides the connection between the 230kV, 138kV

and the 69kV systems and from the 230kV, 69kV systems and the 13.8kV distribution service voltage at 14 distribution substations located throughout the City. The system still has a small amount of 2,400V service at Doc Bonin Plant that will remain in service for the life of the plant. The service area covers approximately 40 square miles and is primarily residential and commercial customers.

The 230kV transmission system is comprised of 14.6 miles of line with interconnections to Cleco at Pont Des Mount Substation in the north, two 138kV ties to Entergy at the Doc Bonin Plant Substation, a 138kV tie to Cleco at the Flanders Substation in the southern part of the City, and a quasi radial tap from the Flanders Substation to Beadle and Elks Substations. The Elks Substation has an autotransformer connecting the 230kV and 69kV systems. The 69kV system has 28.2 miles of line with multiple loops throughout the north and central parts of the City.

There are 14 distribution substations typically consisting of two step-down transformers with two to three feeders each, and two new transmission/generation substations, T. J Labbé and Hargis-Hébert Plants. The distribution system has 79 13.8kV feeders with 461 miles of overhead lines and 445 miles of underground cable. The miles of lines are now being reported from the updated GIS mapping system.

Operating Statistics

The Electric Operations Manager monitors customer outage minutes and categorizes them by five primary groups: tree-related, animal-related, equipment-failure-related, lightning, and unknown. Table 5-10 provides a summary of outages in the LUS System for 2007 and 2008.

Table 5-10
Outage-Cause Summary

	<u>2007 – 2008 Comparison</u>				
	Tree	Animal	Equip Fail	Lightning	Unknown
	CusMin (T)	CusMin (T)	CusMin (T)	CusMin (T)	CusMin (T)
2007	487,469	892,457	1,000,563	416,161	126,049
2008	433,808	486,293	780,813	537,894	118,273
Diff	-11%	-46%	-22%	29%	-6%

It was reported that tree-related outages, both non-preventable and preventable, were down 11 percent from last calendar year. Reviewing the tree related outages, LUS has correlated the months with higher than normal customer minutes out were months with bad weather with high winds that attributed to the falling branches. In September, Hurricane Gustav passed through the LUS service area which broke or damaged many branches in the trees. From past experience, the damaged branches will dry, break and fall months after the hurricane. Animal related outages were down

46 percent and equipment failure-related outages were down 22 percent from the previous year. The reduced equipment failure-related outages are from LUS' squirrel guard and lightning arrester replacement programs. Lightning related outages were up 29 percent from last year, which is consistent with weather related outages.

Tree trimming activities through the use of outside contractors has made continuous progress. The majority of the power lines have had tree trimming maintenance and the second pass through the system is underway based on the three year four trimming cycle. Crews are testing alternative methods to resolving tree related outage such as applying Tree Growth Retardant to extend the frequency of tree trimming. Future plans to the tree trimming process include tracking information in Cityworks, which is an application that interfaces with the GIS mapping system. This will provide crews with historic tree trimming information including areas that have faster growing vegetation, progress of planned work, areas that require more frequent maintenance as well as other data related to customer issues in one location.

LUS maintains a tree trimming contractor for the day to day tree trimming work and maintenance. From the previous year success of bidding tree trimming by circuit, LUS competitively bid four 13kV circuits during 2008. All four circuits were completed at lower cost than the annual tree trimming contract.

LUS has also overlaid the GIS map with the previous four years of tree trimming and has learned that it trims on average 100 circuit miles a year. LUS will continue to monitor the tree trimming outages to ensure that the tree trimming cycle is adequate.

Based on conversations between LUS staff and the Consulting Engineer, it appears that overall system reliability is improving. There will continue to be slight dips in the monitored indexes due to weather related conditions but the indices are all within acceptable parameters.

LUS is in the process of improving customer count per feeder and taps. This refinement is being implemented as sections of the GIS survey are completed. The record keeping and database for outages and reliability indexes are being maintained and updated by LUS personnel. LUS' plan for the implementation of an OMS system in the 2008 budget year was delayed due to funding and will be pursued in the 2009-2010 budget year. Outage Management Systems (OMS) once operational, will record outage data and calculate the reliability indices in an automated and consistent manor.

Continuous recording of outage data allow staff to quickly identify changes in reliability. Recent historical indices for LUS are summarized in Table 5-11 and Table 5-12 summarizes the same metrics for similar electric systems in the region.

Table 5-11
LUS Reliability Index Summary

	2004	2005	2006	2007	2008 ⁽¹⁾
System Average Interruption Duration Index (SAIDI) Minutes/Customer	60.1	56.0	41.7	52.6	44.9
System Average Interruption Frequency Index (SAIFI) Interruptions/Customer	1.41	1.32	0.98	1.43	1.00

(1) The reliability indexes for 2008 are calculated for the calendar year, not the fiscal year as shown for 2004, 2005, 2006, and 2007. This change was made to be consistent with the industry and other published reports.

Source: Mike Boustany, Jr., LUS, 2009

Table 5-12
2008 Reliability Index for Similar Utilities

Energy Provider	SAIDI Minutes/Customer	SAIFI Interruptions/Customer
Entergy	2.46	1.72
Louisiana Valley Electric Cooperative	3.07	1.41
Claiborne Electric Cooperative	6.19	2.85

Note: The LPSC does not set any minimum for municipally owned utilities.

Source: Brian McManus, Louisiana Public Service Commission, 3/28/09

In addition to the above reliability indices, LUS also monitors crew response time and trouble-shooter response time.

Trouble-shooter Response Time is defined as:

The time recorded by crew dispatch from when an outage occurs (trouble-shooter is notified) and the trouble-shooter arriving at the outage site (trouble-shooter notifies crew dispatch of their arrival on site).

Crew Response Time is defined as:

The time recorded by crew dispatch, from the time the Trouble-shooter requests a crew to the time that a crew arrives on site (crew notifies crew dispatch of arrival on site).

Crews responded to 1,291 outage calls in 2008, which is a decrease of 12 percent from the 1,463 outage calls that crews responded to in 2007. The average Trouble-shooters and Crew response time were up slightly from 2007. Table 5-13 shows the response times for the past five years.

Table 5-13
Response Time in Minutes

	2004	2005	2006	2007	2008 ⁽¹⁾
Average Crew Response Time	18.8	21.8	21.5	18.6	20.2
Average Trouble-shooter Response Time	33.2	24.5	23.9	25.3	28.7

(1) The 2008 Crew Response Time and Trouble Shooter Response Time are calculated on the calendar year basis verse the past fiscal year comparison for 2004, 2005, 2006, and 2007.

Source: Mike Boustany, Jr., LUS, 2009

Operations and Maintenance

General

Predictive and preventative maintenance on the system continue to improve the reliability of the electric system. One of the reasons that LUS has been able to demonstrate a high level of system reliability is due to their commitment to equipment monitoring. Infrared scanning, formal testing programs, and visual inspection continue to enhance the reliability of the electric system.

Substation and Communications

The Substation and Communications (S&C) Section is using the CASCADE (a propriety software system) which is a Computerized Maintenance Management System (CMMS), for the scheduling and tracking of equipment maintenance. The NERC guidelines for protection and control (PRC-005) are used as a basis to create the regular maintenance & testing intervals.

The results of oil analysis are also being utilized for the scheduling of major power equipment. Maintenance may be initiated following a predetermined time interval or number of events that “trigger” the need, where triggers could be gas levels, breaker operations, or tap operations to name a few. A Breaker Oil Analysis and Tap Changer Signature Analysis are also used in the predictive maintenance program.

LUS, using a hand-held infrared device, schedules the following equipment each year to be scanned to identify system weakness or potential overloading conditions:

- Transmission line 69kV and higher
- Substation breakers
- Substation bus
- Substation transformer bushings
- Substation Switches
- Infrared testing was performed for all substations 2008. No items were identified as being of major concern.

In addition to infrared scanning, substation transformers are subjected to annual preventive maintenance and testing programs. Biannual tests on distribution breakers

include oil filtering, oil dielectric tests, contact resistance tests, operational tests and protective relaying tests.

Another type of reliability test is the visual inspection of all substations. LUS field crews visually inspect all substations on a weekly basis. This includes visual analyses of transformer bushings, the general substation environment, feeder voltages, battery water levels, alarms, and nitrogen bottle levels. All scheduled maintenance and test for year 2008 was completed on schedule and appropriated actions taken when warranted.

Training was provided for the substation maintenance crews in various areas of equipment testing and maintenance. Training will be an on-going requirement to provide information on the new electronic relays and other equipment as the electric system is upgraded with more modern facilities. In 2008, the S&C Section became a licensed member of the Doble Group and will begin training staff to power factor test and work toward becoming more self-sufficient.

Transmission and Distribution

The Transmission and Distribution (T&D) Section includes the T&D crews, service crews, and the Dispatcher staff. The total staffing in this section was 48 employees as of October 31, 2008, including the Section Supervisor.

The T&D line crews are comprised of four overhead line crews, two underground crews, two streetlight crews, and two service crews. The T&D crews are currently staffed with only a few vacancies. Competing with neighboring utilities for qualified linemen has made recruiting efforts a major concern. Keeping up with the local market pay for these types of workers will be required to fill the vacant positions and turnover.

The T&D section conducts a variety of ongoing training classes for its staff including Troubleshooter training, underground systems training, technical training, and climbing labs.

The T&D section's wood pole testing and maintenance program has been in place for several years and continues to aggressively address the integrity of wood poles. In 2008, a total of 117 poles were identified and replaced.

LUS has successfully combined the street light crews and service crews to form four crews and organized the crews to service specific districts within the City. Three of the crews handle connection orders, private lighting maintenance, troubleshooting, and service request. The fourth crew does most of the arterial lighting maintenance. These changes continue to increase the overall efficiency of the crews by reducing travel times. The result has been a reduction in the service request response time of one to three days for street lights and typically next day for service connections. The T&D Section is also converting its present work management program over to Cityworks, a proprietary work management software system. The street light and tree trimming maintenance and trouble tickets have been converted to Cityworks. At the present time, T&D is using Cityworks for engineering request for LUS Fiber to the Home initial buildout.

The Lafayette Utilities System had an active hurricane season in 2008. Two hurricanes passed through the service area creating restoration work for several days. During Hurricane Gustav, approximately 25,000 customers lost power the first day and within 24 hours 12,000 were restored. Total time to restore power to all customers was 72 hours.

Energy Control System

The ECS section is responsible for generating unit commitment, dispatch, the purchase and sale of wholesale power and the operation of the SCADA system for all LUS facilities. LUS uses an outside service, TEA, to perform the wholesale power negotiations and transactions. ECS provides TEA daily with capacity and load requirement data for a seven day resource plan. In addition, ECS is in continual communication with TEA regarding existing capacity and load requirements.

Presently, there are 17 staff positions in the ECS group. Four operators run the ECS working 12-hour shifts. A fifth operator works a regular 40-hour week assisting shift operators with checkouts, switching orders, coordinating and filling in while other ECS operators are in training. In addition, ECS has four electrical engineers (three are working primarily on electrical SCADA related projects and the fourth working on water/wastewater SCADA related projects), and two SCADA technicians. All ECS operators are North American Reliability Corporation (NERC) certified as mandated by NERC. NERC certified training for the ECS operators included emergency operations for the year 2008. The Supervisor position that would oversee the ECS section is still vacant.

All NERC documentation was reviewed in 2008 to assure full compliance in preparation of SPP's Compliance Audit scheduled for 2009.

SCADA System

The SCADA system maintains control of all electric transmission and distribution substation breakers, feeder circuit breakers, and other equipment on the electric system. The SCADA system collects a wide range of electric system operating data and information regarding alarms, system energy flow, voltage, switch positions, protective equipment operations and transmission interchange status. The availability of this data positively affects system reliability, as system status information is instantly available to operations and engineering staff.

The EMS/SCADA system received an upgrade during 2008 by the manufacturer. The EMS system is assisting both the Doc Bonin Plant staff and ECS staff in strengthening their coordination and help gain an understanding of operating costs to aid future opportunities for power sales and purchases. The EMS is also assisting in the refinement and verification of O&M costs, start-up costs, and real-time fuel monitoring data.

The SCADA system is designed for full redundancy including a back-up Master Station. The SCADA system uses a robust communication system built on LUS' fiber network using dedicated fibers and a ring configuration Ethernet network. This provides an isolated network enhancing the security and the integrity of the system. In addition, the SCADA network is constantly monitored for security issues and will

undergo periodic maintenance to ensure the integrity of the EMS and SCADA system based on NERC requirements. The SCADA entire network is isolated from all other system using dedicated hardware and software. A connection to the outside world is made through dedicated network switches and firewall devices. In addition, all computers connected to the SCADA network have virus protection software installed that is routinely updated.

During 2008, the fire suppression system was upgraded at the Back-up Control Center (BCC). Other upgrades included adding acoustic panels, anti static carpet for noise suppression, and addition of map board/server room. The BCC houses all EMS/SCADA and associated equipment required to fully operate the electric system in the event of the loss of the main ECS. The BCC has its own emergency power and UPS systems. This BCC facility is exercised 8 hours a month to test for functionality and is also used for training purposes.

The ECS system collects data from 14 electric substations, two (2) water wells, five (5) water towers, and thirty-six (36) lift stations in the wastewater system. LUS intends to eventually install remote terminal units (RTUs) at all 127 lift stations.

LUS utilizes load tap changers on each of the distribution power transformers to control the system voltage. The compactness of the LUS service area and general load characteristic has enabled LUS to avoid the use of down line regulators and individual feeder regulation. The result is savings in material and maintenance cost that are typically incurred by most distribution systems. Load and phase balancing is performed on an ongoing basis and VAR management is achieved by installing fixed and switched capacitors on the distribution feeders to achieve an overall system power factor of approximately 98 percent lagging. Switched capacitors are operated on seasonal settings with voltage and time of day over-rides to control power factors. A higher power factor and balanced load reduces system losses and help achieve lower electrical rates.

Metering

The Metering Section is staffed by three electric metering technicians and one electric metering supervisor. A new electric meter technician was added in 2008 order to meet metering section's work demands.

Metering maintains high accuracy levels through a formal testing program. The program tests all commercial and industrial meters that fall under one of the following categories:

- For commercial and industrial customers, every meter is tested once every five years.
- Meters that reflect a deviation of 30 percent or more from the same month, one year-ago, are tested.
- Metering checks all active accounts with little or no electric consumption.
- Meters are tested whenever customers express concern about the accuracy of their bills.

Previous random testing of residential meters has concluded that it would not be cost effective to extend the program to residential meters.

If a problem is detected through any of the aforementioned procedures, the meter is replaced and tested. If the meter is found to be out of tolerance, it is recalibrated and re-furnished for future use. The Meter Section along with Customer Service determines if the customer's bill is adjusted based on the findings of the meter test report and historical electrical consumption. Meter Services section issues a monthly report of the top commercial and industrial users. This list aids the identification of meters that require testing. The Meter Shop also keeps abreast of the latest technology available in the meter industry by replacing older obsolete meters with new microprocessor digital meters that provide more accurate readings, thus maximizing revenues.

The Metering Section also provides power quality monitoring for LUS residential and commercial customers that have expressed concerns related to voltage, radio frequency interference (RFI), electric magnetic fields (EMF) and harmonics.

The Metering Section is participating in a task force, which includes outside consultants, to evaluate the possibilities of incorporating Advanced Metering Infrastructure.

Facilities Management

The Facilities Management Division is responsible for inventory control of electric, water, wastewater, and LUS Fiber. Additionally, the Facilities Management Division is responsible for security at all LUS facilities, the maintenance of electrical and mechanical systems at the Walker Road complex, grounds keeping for the 13 substations, and janitorial services for the Walker Road complex.

There are 16 personnel assigned to the Facilities Management group, five positions of which are vacant. In addition, Facilities Management uses staff from other departments on a part-time basis.

The security is comprised of a combination of in-house and contracted security staffing with the Sheriff's department. Security staff includes 1 full time staff and currently has two openings. LUS has implemented motorized vehicle gates with cameras, voice box and employee access card control at the Walker Road complex entrance. Similar systems are in place at other offsite LUS facilities (i.e. Labbe and Hargis-Hébert Generation Plants). LUS has access control on exterior doors on all buildings at the Walker Road complex and cameras that view different areas of the complex. These are monitored and recorded. Presently, three substations have video monitoring.

Facilities Management has reorganized materials with the addition of a new 40 ft x 112.5 ft storage facility at the Bowers Road site. The seven (7) 8 ft x 40 ft self-contained storage units at the Walker Road complex have provided additional space for the Transmission and Distribution Section, the gas station, and civil engineering. These containers house spare materials and materials that are not used frequently.

Electrical System Construction

Transmission

LUS staff reports that the transmission and distribution systems have been prudently planned and designed. The capacity of the transmission system is reviewed annually using Siemens PTI PSS/E and ASPEN software analysis programs. These programs are updated through yearly maintenance updates/upgrades and the results are reported in LUS' Five-Year Planning Report and One-Year Contingency Report. The analysis concludes that there is sufficient capacity in the transmission system to meet existing and future loads under normal conditions through 2010 and that no system component is loaded above 80 percent of maximum rating.

Substations

Currently, substation loads are well within maximum capabilities.

A dedicated fiber optic communications system links all substations. The fiber optic system has allowed LUS to keep pace with the increasing communication requirements of a sophisticated protection system. The microwave communication system is in place and functioning to communicate with the RPS2 unit.

LUS has also completed or initiated several substation projects to improve system reliability. Major projects in 2008 include:

- Doc Bonin Switchyard - Tie Line Improvements. The project included the removal of three (3) relay panels in the Doc Bonin Switchyard control building and addition of two (2) new panels to handle the line relaying responsibilities for the east and west ties to the Entergy system. The portion completed in 2008 included the replacement of the line relaying for the west tie on the Bonin-Scott 138 kV transmission line. Additionally, thirteen (13) electromechanical relays were replaced with new microprocessor relays.
- Pont Des Mouton Substation – Pont Des Mouton – T. J. Labbé Primary Relaying Upgrade. Included in the scope was the removal of sixteen (16) electromechanical relays and their replacement with a new microprocessor relay.
- Acadiana Mall Substation – Acadiana Mall 230kV V Switch Replacement. The project called for the replacement of four (4) older Siemens-Allis V switches because of recurring hotspots found while the station was checked with the infrared system used by the S&C division.
- Acadiana Mall Substation – Acadiana Mall – Doc Bonin Switchyard Primary Relaying Upgrade. Included in the scope was the removal of ten (10) electromechanical relays and their replacement with a new microprocessor relay.

Distribution

The capacity of the distribution system is reviewed annually using Siemens ADEPT software. The distribution system undergoes a power flow analysis of loads and capacities as part of this review. The ADEPT software is no longer currently supported by the manufacturer and staff is currently pursuing a replacement. According to LUS staff, contingency studies found no inadequacies in the distribution system. LUS has continued their efforts in standardizing construction, material specifications, and contract documents. This, along with working closely with construction and operations staff, ensures that the distribution system is designed and constructed in accordance with prudent industry practices.

GIS

The Network Engineering Group is responsible for the GIS mapping and computer systems. LUS continues to upgrade software systems to improve system graphics and improve its interface capability with the GIS mapping system. The current focus of this effort is on completing the final updates to the databases and graphical information. Information pertaining to the electric transmission and distribution, water, and wastewater systems has been entered into the GIS system. Field crews can now access GIS mapping and detailed information as well as access to Cityworks systems.

The street light and tree trimming maintenance and trouble tickets have been converted to Cityworks. At the present time, T&D is using Cityworks for engineering request for LUS Fiber to the Home initial buildout.

An additional responsibility was added to the GIS group for acquiring and maintaining easements for the electric, water, wastewater and LUS Fiber utilities. The easement group consists of one full time staff, 1 full time contract staff, and has used between two to five temporary staff to help meet schedule demands.

Condition of the Property

The electric transmission, substation, and distribution facilities are in good condition and are being well maintained. Older equipment is continually being reviewed for replacement based on maintenance costs and good utility practices. In general, capital improvements projects are being completed on time based on the 5-Year CIP in the LCG Adopted Budget fiscal year 2008-2009.

Capital Improvement Program

Fiscal Year 2008

Table 5-14 provides the fixed plant and equipment expenditures made during 2008. LUS accounts for such expenditures by using a capital work order system. All extensions or improvements made to the Utilities System are considered economically sound or otherwise necessary for the profitable operation of LUS.

Table 5-14
Capital Work Order Expenditures

Source of Funds	Electric
Normal Capital	
Bond Reserve & Capital Additions	\$5,519,748
Special Equipment	1,675,026
2004 Revenue Bonds	5,894,724
Retained Earnings	<u>2,702,083</u>
Total	\$15,791,581

Source: "Status of Construction Work Orders" 10/08

Five-Year Capital Plan

LUS established a system improvement program, CIP, in 1989. The program is a five-year "look ahead," and is revised annually to plan for and manage the major capital projects for the electric system.

We recommend that LUS review and continue to improve the management of the CIP, including the cost and schedule estimation and control processes. Schedules and the estimated costs of each project should be refined as the project moves from conceptual design to detailed construction design. This will allow a detailed budget and schedule to be established two to six months prior to commencing the project.

The estimated requirements for improvements to the electric department through October 31, 2012 are summarized in Table 5-15 and were obtained from the 5-Year CIP in the LCG Adopted Budget fiscal year 2007-2008. Each year, as the City revises its five-year CIP for the Utilities System, the priorities for each of the work items are re-examined by the managers, giving consideration to improvements then in process, and to the developing patterns of growth in the area to be served by the City. This review process needs to be improved in order that priorities and costs are established which are more manageable, and therefore, budget planning becomes an accurate reflection of reality.

Table 5-15
Capital Improvement Programs 2009 – 2013 (\$)

	2009	2010	2011	2012	2013	Total
Acquisitions	800,000	1,500,000	200,000	100,000	100,000	2,700,000
Production	4,055,000	6,740,000	1,410,000	410,000	410,000	13,025,000
Distribution	3,334,000	1,381,000	660,000	260,000	1,922,000	7,557,000
Transmission	1,000,000	1,560,000	3,182,000	10,000	10,000	5,762,000
Substation	4,325,000	1,185,000	7,160,000	660,000	10,000	13,340,000
General	<u>2,125,000</u>	<u>60,000</u>	<u>60,000</u>	<u>10,000</u>	<u>10,000</u>	<u>2,265,000</u>
Total	15,639,000	12,426,000	12,672,000	1,450,000	2,462,000	44,649,000

Source: LUS 5-Year Capital Outlay Program Summary, FY 2008-09 Adopted Budget, Combined Summary Retained Earnings and Bond Capital

Acquisitions

LUS has planned for the acquisition of utility customers from SLEMCO. LUS entered into a 15-year contract with SLEMCO, which allows for serving its 3,104 customers from 2004 through 2019.

LUS has acquiring approximately 400 electric customers who reside within the annexed areas of the City and were previously served by Entergy. Electric service has been transferred to LUS for the majority of these customers. Plans are being designed to extend distribution circuit as required to serve the remaining customers.

Production

Production funds represent improvements to existing power plants, including improvements to boilers, turbines, control systems, fire protection, and cooling towers.

Distribution

LUS has plans for the re-conductoring of circuits, road widening, feeder extensions, new feeders and feeder ties to extend service to new areas of the City in 2009 as identified from engineering and planning, and to serve new customers and developments.

Transmission

Transmission funds represent the planned building and improvement of transmission lines for the new Northeast, Pont des Mouton, Peck, Beadle, Southeast and Hargis-Hébert substations.

Substation

Substation funds represent improvements, oil spill containment, software, breakers, and autotransformers improvements or additions. Improvements projects are in progress, however they have not been completed in the 2008 calendar year and will be listed in future reports. Some of these projects include:

- St. George Rehabilitation
- Pont Des Mouton Transformer Addition
- Beadle Transformer Addition
- Southeast Substation
- Peck Substation Rehabilitation

One issue that staff is concerned about is impact on the system when Rodemacher Unit 3 comes on line. Although a system impact study was performed, staff questions the assumptions using the transmission flow analysis may not represent current operating practices. Also of concern in the coming years are the reliability constraints of the transmission system in the area. The mitigation plan for these constraints is addressed in the agreement between LUS, CLECO, and Entergy to fund, construct, own and operate a set of transmission facilities upgrades in the Acadiana Load Pocket (ALP).

General

Video monitoring will be extended to all 13 substation sites in 2009. In addition, card access is planned to be installed at all 13 substation sites. A new warehouse is planned for construction in 2009 to house the LUS Fiber materials and equipment.

General funds shown in the CIP are mostly for the new Customer Service and Operations Facility. Smaller projects include software and a property purchase.

Load Forecast

The actual electric quantities for 2008 and the forecasts of system, off-system and total electric power and energy requirements for 2009 through 2013 are shown in Table 5-16. The forecasts reflect the current assessment of expected load growth for the period. The table above indicates that available resources provide the Electric Utility with surplus capacity through 2012.

Table 5-16
Projected and Energy Sales

	2008 ⁽²⁾	2009	2010	2011	2012	2013
Peak Demand (MW)	451	477	483	489	495	502
Demand Plus Reserves	532	563	570	577	584	592
Retail Sales (MWh) ⁽¹⁾	1,933,371	1,950,149	1,983,837	2,009,390	2,034,785	2,056,974
Wholesale Sales (MWh)	<u>33,071</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Sales (MWh)	1,966,442	1,950,149	1,983,837	2,009,390	2,034,785	2,056,974

(1) Retail sale projections provided by LUS.

(2) Source, October 2008 audited Financial Statement

Sources: LUS Financial and Operating Statements 2008 audited.
LUS 2008 load forecast results.

Changing Electric Utility Environment

Deregulation of the electric utility industry at the retail level is currently not an issue of significance in the state of Louisiana. Although retail deregulation is currently in place in neighboring Texas and in other states across the country, the movement has lost much political and public interest in the last several years. However, at the wholesale level, LUS is facing new challenges resulting from increased competition in the wholesale power market. Part of this challenge is being met by LUS' newly installed generation resources. This competition is pressing LUS management to make timely business decisions regarding plant dispatch, operations and maintenance, purchasing power, selling power, pricing power, plant capital improvements, plant upgrades, etc. There may be significant opportunities for LUS to take advantage of these changes in the utility environment. Capitalizing on these opportunities will be extremely difficult if the decision-making process is not quick and efficient. Although the current process is consistent with other municipal utilities, it will not provide the flexibility to compete with other participants in the industry, such as independent power producers, investor-owned utilities, non-regulated subsidiaries of utility holding companies, and power marketers.

Enterprise Risk Management

As with most utilities, LUS conducts a wide range of planning and coordination activities that serve to reduce operational and financial risk exposures. In keeping with current trends toward greater risk disclosure and control, LUS should establish a formalized Enterprise Risk Management Program. An Enterprise Risk Management Program incorporates such activities as electric power marketing, organizational and operational issues, and other concerns that potentially impact the financial integrity of the LUS as a whole.

Regional Reliability Councils

LUS is located in an area that is primarily served by two separate Investor Owned Utilities, Cleco and Entergy Gulf States, Inc. (Entergy-GSU). Cleco and LUS are members of the SPP, which is a FERC approved Regional Transmission Organization (RTO) and a NERC region. As an RTO, SPP has forty seven members across eight southwestern states that currently provide independent reliability coordination and tariff administration, planning, operating and reliability assessment studies. SPP provides regional transaction scheduling, and on February 1, 2007 SPP launched its Energy Imbalance Services (EIS) Market. The wholesale energy market is to allow for more efficient deployment of wholesale electricity generation across the SPP region through the establishment of an offer-based market for energy imbalance services. SPP, an independent, non-profit organization, is operating the EIS Market under a tariff approved by FERC. The SPP tariff is consistent with the mandate of FERC Order No. 2000, which requires RTOs to provide Real-Time energy imbalance services and a market-based mechanism for congestion management. Entergy, the parent of Entergy-GSU, is a member of the NERC Southeastern Electric Reliability Council (SERC) which does not operate as an RTO.

Long-term firm sales or purchases of generating resources not utilizing existing firm transmission service arrangements may require substantial transmission upgrades to ensure firm delivery over either the SPP or Entergy systems. Currently, LUS uses the electric power market to purchase short-term energy when it is economically advantageous to do so. LUS will also sell into the market when it has excess generation and it is economical to do so. LUS has an agreement with TEA who performs the wholesale power negotiations and transactions.

Energy Policy Act of 2005

The Energy Policy Act of 2005 (EPAct 2005) covers many components that may affect LUS and related energy markets in the future. This legislation addresses, among other things, energy efficiency; renewable energy; nuclear energy; electricity related reforms; and provides incentives for oil and gas production and encourages the deployment of clean coal technology. A summary of the bill's reforms relating to electricity and renewable energy and certain relevant FERC actions related thereto is provided in the following section.

Electricity – Title XII

Title XII of EPAct 2005 covers electricity, with the majority of the provisions requiring implementation by FERC, some of which have already been acted on or are in process as discussed below.

EPAct 2005 creates a self-regulating reliability organization that is charged with developing electric reliability rules that are mandatory and subject to enforcement penalties for all market participants, including LUS, with FERC having oversight over the rules and their enforcement.

In March 2007, FERC issued Order No. 693 entitled “Mandatory Reliability Standards for the Bulk-Power System” or “Reliability Standards Order”. In this order, FERC approved 83 of 107 proposed reliability standards developed by the NERC, which FERC has certified as the Electric Reliability Organization (ERO) responsible for developing and enforcing these mandatory reliability standards. The Reliability Standards Order applies to all users, owners and operators of the bulk-power system within the United States (other than Alaska or Hawaii), including LUS.

In February 2007, FERC issued Order No. 890 reforming its pro forma Open Access Transmission Tariff (OATT) adopted in 1996 pursuant to Order Nos. 888 and 889. Order No. 890’s reforms include: (i) greater consistency and transparency in available transmission capacity calculations; (ii) open, coordinated and transparent planning; (iii) reforms of energy imbalance penalties; (iv) reform of rollover rights policy; (v) clarification of tariff ambiguities; and (vi) increased transparency and customer access to information. All public utilities, including RTOs (e.g., PJM and MISO) and Independent System Operators are required to file revisions to their OATT to conform to Order No. 890 pursuant to a compliance schedule established by FERC.

LUS’ ECS section is responsible for generating unit commitment, dispatch, the purchase and sale of wholesale power and the operation of the SCADA system for all LUS facilities. All shift operators are NERC certified as mandated by NERC. The ECS division was audited by NERC in 2006 for compliance with standards and operating procedures and LUS was found to be compliant in all areas reviewed.

Time-Based Metering

EPAct 2005 requires electric utilities with retail sales in excess of 500 million kWh per year to consider offering time-based rates and metering to their customers. With Time of Use (TOU) rates, the rates charged vary during different time periods and reflect any variance in the utility’s costs of generating or of purchasing electricity at the wholesale level. The retail electric sales of LUS are over 500 million kWh per year, thus it appears that LUS is subject to the TOU rates requirements.

Key Issues, Goals, and Achievements

The following are some of the challenges or key issues that LUS and R. W. Beck have identified:

- Review system impacts when Rodemacher Unit 3 is on line.
- Limit impact of fuel price volatility.
- Staff resources are improving.
- Utilization of assets, facilities and properties.
- Enhancing the communication and coordination between the power plant operations staff, ECS operations staff, neighboring utilities, and the SPP.

LUS continues working toward meeting these challenges by setting the following goals related to the Electric Utility:

- Attract and retain adequate staffing and experience levels.
- Balance staffing levels and workload by sharing staff between groups.
- Develop best practices-based Energy Risk Management Policy and associated procedures related to power and fuel transactions.
- Continue updating and enhancing the GIS mapping system.
- Developing and maintaining relationships with power marketers and other utilities in addition to LUS' traditional business associates in the wholesale power market.
- Maintaining tree trimming program in order to continue reducing tree-related outages and improve reliability.
- Develop succession planning to replace retiring staff.
- Provide training to personnel as needed.
- Continue address all mandatory standards as mandated by NERC.
- Hold monthly interdepartmental coordination meetings.
- Continue monitoring of statistical operational data and mapping of unit characteristics.
- Continue program of capital improvement within Power Production including the project to address CT silencer issues.

During the past year LUS achieved the following:

- Completed major maintenance of the T. J. Labbé Plant CTs.
- Continued construction of maintenance buildings at the T. J. Labbé Plant and Hargis-Hébert Plant for storage of combustion turbine parts.
- Purchase of spare parts for CTs.
- Selling of fuel oil at the Doc Bonin Plant.
- Completed initial effort for the customized programming for the GIS mapping system.
- Completed the integration of the field lap tops to provide electronic mapping for field crews in each of the three utilities.
- Documentation of NERC Reliability requirements.
- Outsourced specific tree trimming project using competitive bid process.
- Installed portable generation connection for the operations center.
- Updated sprinkler system for the backup EMS center.
- Updated EMS software.
- Relocated the automatic transfer switch for the EMS center to inside the building.
- Added air conditioning units to the EMS center network computer room.
- Doc Bonin Switchyard - Tie Line Improvements.

- Pont Des Mouton Substation – Pont Des Mouton – T. J. Labbé Primary Relaying Upgrade.
- Acadiana Mall Substation – Acadiana Mall 230kV V Switch Replacement.
- Acadiana Mall Substation – Acadiana Mall – Doc Bonin Switchyard Primary Relaying Upgrade.

Key Strategies

LUS' Strategic Plan, updated in 2008 identifies the following strategies for electric:

- Ensure adequate self generation capacity.
- Maintain and adequate supply of competitively priced fuel and purchased power options.
- Operate and maintain generation and T&D facilities using best practices.
- Insure adequate transmission system capacity with M-1 reliability criteria.
- Explore initiatives to promote customer growth.
- Create and nurture a customer-focused culture.

Recommendations

Recommendations and their status are provided in Table 5-17. We have indicated the priority of the recommendation as either highest, high or normal.

Table 5-17
Recommendations

Electric Utility	Priority	Status
LUS should continue the development of a comprehensive operator training program NERC certification	High	On-going
LUS should continue to review and improve the management of the CIP, including the cost and schedule estimate and control processes	High	Investigating
LUS should monitor system impacts due to the addition of Rodemacher Unit 3 as it becomes operational.	High	Investigating
LUS should continue T&D personnel training and complete the training for substation relay testing	Normal	In Progress
LUS should continue to install microprocessor relays for new construction and continue the replacement of existing electromechanical relays with microprocessor relays	Normal	In Progress
LUS should continue efforts to update and enhance the Cityworks and investigate ways to streamline the design, material ordering, and construction process	Normal	In Progress

Electric Utility	Priority	Status
LUS should continue efforts to update and enhance the GIS mapping system and integration with Cityworks	Normal	In Progress
LUS should continue testing generator and other equipment at the Doc Bonin Plant through coordination between plant personnel and the LUS T&D section personnel	Normal	In Progress
LUS should continue the implementation and maintenance of a spare parts and inventory control system, with particular emphasis on the spare parts needs of the new generation projects and other major system components	Normal	In Progress
LUS should continue its implementation and expansion of the preventative and predictive maintenance programs currently in place	Normal	In Progress
LUS should determine the actual heat rate versus output relationship for each of its generating units	Normal	In Progress
In the T&D functions, LUS should continue to review Occupational Safety & Health Administration (OSHA) requirements and/or APPA safety guidelines and pursue ongoing training programs for linemen and foremen	Normal	In Progress
LUS should continue to work to implement both internal and external processes to mitigate the impacts of fuel price volatility	Normal	Investigating
LUS should expand the 5-Year Planning Report to include a 10-year planning horizon	Normal	Investigating
LUS should proceed with plans to repaint the externals of the Doc Bonin Plant Units 2-3	Normal	Investigating

Section 6

WATER UTILITY



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Section 6

WATER UTILITY

During March 2009, the Consulting Engineer interviewed LUS staff regarding Water Utility operations and performed analyses of operating statistics that are indicative of the general operating condition of LUS' Water Utility facilities. The following discussion summarizes the findings of the Consulting Engineer with respect to the maintenance and management of the property based upon discussions with, and information supplied by, LUS personnel.

Description

The Water System includes 18 wells, two water treatment facilities and a distribution system. The wells serve the system with a combined production capacity of 48.4 million gallons per day (mgd).

The Water Utility provided its customers with adequate and reliable utility service during the reporting period. During periods of high demand, however, low pressure complaints have been received in the past insolated areas of the distribution system. Similar complaints were not received by LUS during the summer of 2008 as higher than normal rainfall during this period reduced overall demand.

Organization

The Water Production Division is responsible for the supply of raw water and the production of potable water for distribution including O&M responsibilities of its wells, pumps and treatment facilities. The Water Distribution Division is responsible for the distribution of potable water to over 50,000 residential, retail and industrial consumers, including O&M responsibilities of its distribution network infrastructure.

The Water Utility is supported primarily by the Water Production Division and the Water Distribution Division of LUS. Other LUS Divisions, including Engineering, Customer Service, Utilities Support Services and Environmental Compliance provide services to the Water Utility as well.

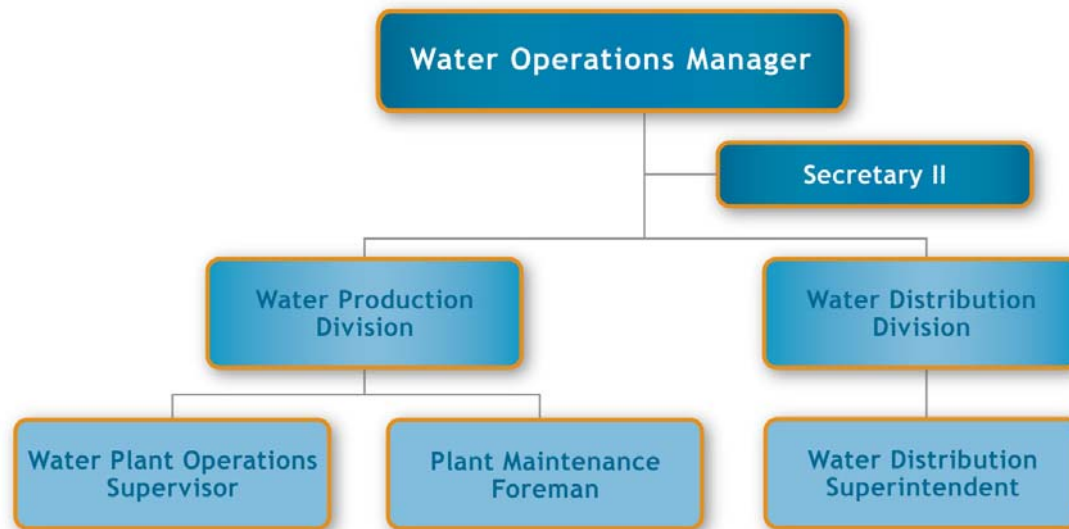


Figure 6-1: Water Utility Organization Chart

Water Supply

The Chicot underground aquifer is the sole source of water supply for LUS. Groundwater from the Chicot aquifer provides LUS with a reliable and abundant source of good quality water. The USEPA has designated the Chicot aquifer as a sole source aquifer thereby requiring special consideration for federal permitting of projects that could adversely affect it. The Water System has joined with the LDEQ to implement a wellhead protection program for the LUS water supply. Potential contamination sources within the wellhead protection areas have been identified by LUS and LDEQ has authority to take appropriate action to assure contamination is prevented.

During 2002, LUS completed construction of Well No. 23 located in the southern portion of the Water System, with production beginning January 1, 2003. The 1,000 gallons per minute (gpm) well provides peak demand in the weakest portion of the distribution system and reduces the occurrence of low pressures in the area it serves. Minimal water treatment is provided, consisting of chlorination and phosphate addition. A relatively new facility in the northern portion of the water system, Well No. 24, similar in purpose, scope, production and treatment to Well No. 23, began operation in June 2006. While Well No. 24 was not typically in use during the reporting period, pressure filters are currently being installed with an anticipated completion date in 2009. Additionally, Well No. 25 is scheduled to be online summer of 2009 further bolstering the Utility's production capacity into the future.

Water Treatment

The Water System includes two water treatment facilities, the North Water Plant and the South Water Plant, which provide for removal of iron and manganese by

coagulation, sedimentation and filtration; hardness reduction by a lime-softening process; and chlorination.

Figure 6-2 shows the pipe gallery at the South Plant.



Figure 6-2: Pipe Gallery at South Plant

Well No. 23 (1.4 mgd) serves the southern portion of the distribution system, where the majority of growth is occurring. Minimal water treatment is provided at Well No. 23, consisting of chlorination and phosphate addition. Due to water quality concerns, Well No. 24 is not in continuous operation but can be placed into operation when needed. The present system treatment capacity (both plants and Well Nos. 23 and 24) is approximately 48.4 mgd.

The treatment capacities of the North Water Plant, South Water Plant, Well No. 23, and Well No. 24 are shown in Table 6-1. Although the two plants are each capable of producing over 20 mgd of treated water, the total amount of water that can effectively be delivered to customers is constrained by the capability of the distribution system to deliver the water at an acceptable pressure. The revised 5-Year CIP (refer to *Five Year Capital Plan* in the subsection below for additional information) includes \$6.8 million (of \$10.7 million) of improvements to the distribution system to reduce this constraint. Currently, the preferred total production capability is estimated by LUS to be 25 mgd. While actual production capabilities exceed this figure (2005 through 2008 peak day production all exceeded 25.0 mgd), pressure and delivery within some portions of the system may suffer upwards of 25 mgd. Once completed

the projects included in the 5-Year CIP would increase the production capability to 30-32 mgd.

Table 6-1
Plant Treatment Capacity ⁽¹⁾

	(mgd)
North Water Plant	21.5
South Water Plant	24.0
Well No. 23	1.4
Well No. 24	<u>1.5</u>
Total Plant Capacity	48.4
Total Effective Plant Capacity	28.8 ⁽²⁾

(1) Treatment Plant capacity is less than total well production capacity.

(2) Highest recorded production. At this production some location specific pressure issues exist within the distribution system.

Source: Don Broussard, LUS, 3/09

The water production facilities use chlorine for disinfection of water before it is introduced into the water distribution system. The chlorine used at each treatment plant is supplied in the form of a gas that is stored on-site in several cylinders, each containing one ton of chlorine when full. LUS is also using sodium hypochlorite on a limited basis at certain wells.

The water production facilities have backup electric power generating facilities on site that are adequate to sustain a basic level of water production. The South Water Plant has full back up generation and the North Water Plant has enough back up generation to produce approximately 60 percent of its normal output.

The historical water production and growth is presented in Table 6-2. The growth rate in water production has been (on average) approximately 2.0 percent per year since 2004 while annual growth in the number of customers has been approximately 1.9 percent per year. In addition to annual requirements, peak day production requirements are also provided in Table 6-2 and indicate an average annual increase of 2.9 percent. While annual demand correlates well with customer growth, peak day demand appears to be outpacing both.

Table 6-2
Historical Water System Production

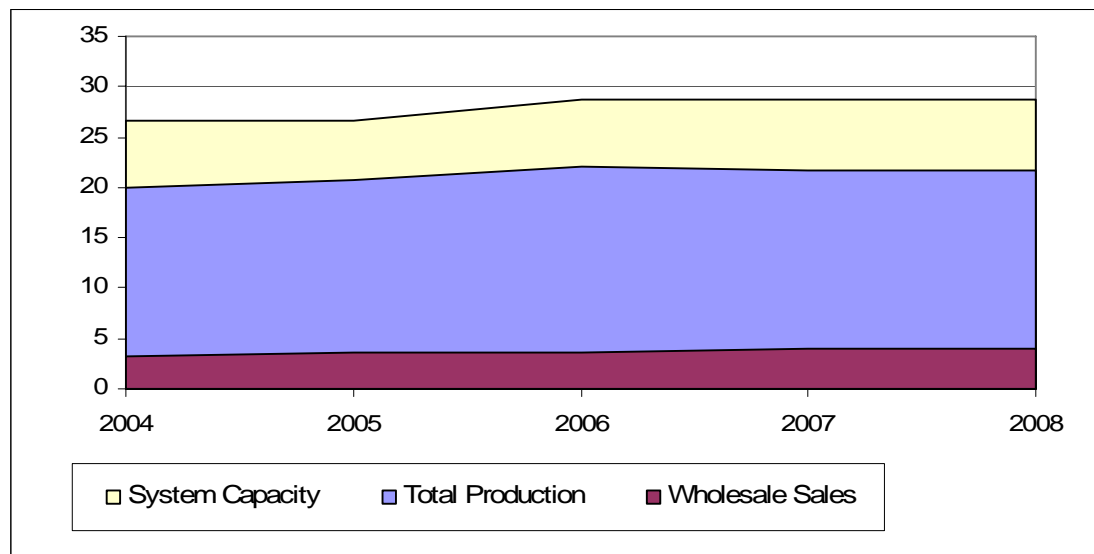
	2004	2005	2006	2007	2008
Number of Customers ⁽¹⁾	46,622	47,529	48,617	49,622	51,134
Annual (million gallons) ⁽²⁾	7,326	7,545	8,051	7,904	7,038
Annual (mgd) ⁽²⁾	20.0	20.7	22.1	21.7	19.3
Peak Day (million gallons)	23.0	26.3	28.8	25.5	25.8

(1) Number of meters in service.

(2) Based on water distributed.

Source: LUS Financial and Operating Statements 2004-2008 audited
Water Production Division and Don Broussard, LUS, 3/09

Total water production is shown in Figure 6-3.



Source: LUS Financial and Operating Statements 2004-2008 audited
Water Production Division

Figure 6-3: Water Production (mgd)

Total retail water sales volume (represented as the difference between total production and wholesale sales) has increased approximately one percent slightly since 2004. Total water production has increased approximately two percent during this time; however, wholesale sales have increased at a rate nearly three times that of total production (approximately six percent). It is clear wholesale customers are requiring an increasing percentage of the total water produced and this trend is expected to continue. This will place continued pressure on the distribution system and could adversely affect LUS retail customers. Therefore, coordination with wholesale customers and adequate planning for improvements to the LUS system and the wholesale customer's systems is necessary to protect the interests of retail customers. Exacerbating this condition is a lack of projected demographics and demand information from the wholesale customers with which LUS can better plan for future

needs. LUS may wish to insist that this data be provided by those wholesale customers (who are supposed to provide this information) and consider rate structures to better accommodate this type of growth.

Treatment Plant Security

LUS has implemented a policy of stationing armed, uniformed Sheriff's Department personnel at each water plant 24 hours per day, seven days per week. Security cameras with recorders have been installed at the treatment plants. LUS staff has been provided training in emergency planning and reaction that is integrated with ongoing programs for hurricane emergency response. Standby generators have been installed at strategic locations within the production and treatment system. Portable generators have also been purchased and are available to connect to wells as needed. LUS staff report that 70 percent of production capacity could be met for four days without refueling generators in the event of a system-wide power outage.

LUS staff and managers are also involved in several association and/or agency programs related to safety and terrorism. LUS' Water Operations Manager is the Chair of Water Sector Coordinating Council (WSCC), which is a policy, strategy and coordination mechanism that recommends actions to reduce and eliminate significant security vulnerabilities to the water sector through interactions with the Federal Government (primarily Department of Homeland Security and Environmental Protection Agency) and other critical infrastructure sectors.

LUS is also involved in the Louisiana Water/Wastewater Agency Response Network (LaWARN), which is a statewide group of water agencies that have jointly created a mutual response network. This organization, one of 37 active nationwide, is an outgrowth of cooperative efforts implemented in response to Hurricane Katrina. LUS staff assisted with those recovery efforts in 2005 and its involvement in these organizations and other national trade organizations brings positive notoriety to LUS and serves as a conduit for current security and industry information.

It should be noted the Water Utility performed very well during Hurricane Gustav in 2008; experiencing no significant internal issues or failures. The only problems experienced during the event were a result of power loss which can be addressed via the installation of additional backup power supplies namely at the North Treatment Plant which currently only has approximately 60 percent production capacity on auxiliary power supplies. These needs have been identified and the required capital expenditures are currently budgeted for a future fiscal year.

Water Storage

Treated water storage totals approximately 12.2 million gallons. This includes 4.3 million gallons of elevated storage and 7.9 million gallons of ground storage, including pumping station wet wells.

LUS staff has noted that the LUS system is likely to experience difficulty in meeting peak demands of its wholesale customers without addition of water storage either in LUS' system or the wholesale customers' systems. To address this concern LUS has

budgeted to construct the Fabacher Field facilities comprised of a 2 million gallon ground storage and booster pumping facilities to improve the pressure conditions. The design of these facilities is now complete and anticipated to be online summer 2010. LUS should continue to investigate the use of these facilities along with other distribution system improvements to reduce the peak demand concerns throughout the system.

Water Distribution

The Water System distribution network consists of 1,043 miles of pipe, most of which is in the 6-inch to 12-inch diameter range. The distribution system includes 20,745 valves and 6,060 fire hydrants. Table 6-3 illustrates the historical trends in key water distribution system statistics. Generally, the increase in miles of line, valves, and hydrants has paralleled or slightly lagged the increase in customers potentially exacerbating the condition of the distribution system as the limiting factor in the Utility's system.

Table 6-3
Water Distribution System ⁽¹⁾

	2004	2005	2006	2007	2008
Miles of Main Lines	963	978	1,006	1,030	1043
Number of Valves	18,807	19,139	19,732	20,314	20,745
Number of Hydrants	5,757	5,812	5,911	6,016	6,060

(1) Includes LUS contract service to Water District North

Source: Don Broussard, LUS, 3/09

In 2003, LUS completed the last phase of construction of large diameter (16-inch and 24-inch pipe) water pipe from the South Water Plant to the southern portion of the distribution system. This project improved distribution capability and reliability to this portion of the water distribution system. The water main also serves as a connection point for wholesale water sales and other potential extensions. Additionally, a 12" line along LA Highway 93 is set to be constructed in 2009 which will further enhance the distribution system's capacity. Despite these specific projects, LUS recognizes its plant treatment and distribution pumping is limited by restrictions of the water distribution network and the CIP addresses this with additional transmission and distribution improvements.

The Property Insurance Association of Louisiana (PIAL) conducts periodic assessment of the City of Lafayette's fire protection system, including the Fire Department. In September 2008, the PIAL conducted a visit to LUS to review records and perform site investigations in support of its fire district rating program. Initial feedback from the PIAL indicated a rating of 3 (on a scale of 1 to 10 with 1 being the best possible rating and 10 representing no fire protection) representing a drop from the current rating of 2. However, after subsequent discussions (extending into FY09) and re-flowing of fire hydrants, the PIAL awarded a rating of 2 based on the final evaluation.

Staffing Levels

While the overall situation has improved in 2008 there remain a number of current and anticipated vacancies within the Water Utility. Specifically, there are two entry level utility repair and two maintenance positions to be filled for which few applicants have appeared. This situation may be worsened by the recent market based pay adjustments in which both maintenance and production division entry level positions pay scales were decreased slightly. Additionally, staff anticipates needing to fill new positions associated with the Fabacher Field facilities and valve exercising. Staff noted staffing levels are barely sufficient to deal with day-to-day needs and that any loss of personnel (i.e., sickness, vacations, etc.) often results in a need for other personnel to work overtime. In general, there is concern about overdependence on overtime in order to run the Water Utility.

The November 2008 pay adjustments included pay increases in many instances and Water Utility staff believes this may postpone the retirement of some senior level staff (in an effort to achieve a higher three year average salary level for pension purposes). However, this will not remedy the situation and may worsen it by resulting in more retirements occurring simultaneously in 2011 rather than gradually over the next three years.

Given the conditions explained above a succession plan should be implemented to identify key staff approaching retirement age/experience, identify possible successors and develop and implement a knowledge transfer process. Staff believes there is potential opposition to a formal succession plan due to a perception that creating “heir apparents” will stifle competition and lower morale.

Contracts and Agreements

In addition to the facilities owned by LCG, LUS operates and maintains the water distribution facilities of certain water districts in accordance with contracts between LCG and the districts. Contractual arrangements between LCG and other entities (both water districts and municipalities), which own or operate water utility properties, currently represent 17.3 percent (by revenue) of LUS’ annual water revenues. Features of these contracts are discussed below. LCG has executed agreements with two water districts: Water District North and South. Water service to Water District North customers is billed by LCG in the name of the Water District North consistent with the applicable rate schedules. The North and South Water Districts construct their own additions and extensions according to standards set by LUS. A summary of the contracts and agreements for the Water Utility is provided in Table 6-4 below.

Table 6-4
Contracts and Agreements for Wholesale Water Sales

Contracts and Agreements	Date Signed/Renewed	Termination Date
Water District North Consolidated Contract	October 17, 2002	October 17, 2032

Contracts and Agreements	Date Signed/Renewed	Termination Date
Water District South	August 21, 1995	August 21, 2035
City of Scott	May 27, 1997	May 27, 2022
Town of Youngsville	December 24, 1998	December 24, 2038
City of Broussard	March 5, 1998	March 5, 2038
Milton Water District	April 28, 1997	April 28, 2037

Source: Ron Gary, LUS, 2/09

Water District North

This district generally serves the northern portion of Lafayette Parish, which is neither currently incorporated as a municipality nor included in another water district. LCG and Lafayette Parish Water District North amended their existing water agreements by entering into a new water agreement (the Water District North Agreement) in October of 2002 with a 30 year term of agreement and provisions for automatic five-year extensions upon concurrence by both parties. Water sales to Water District North amounted to 5.6 percent of total water sales revenue and 5.0 percent of total water sales volume for 2008.

The Water District North Agreement includes the following provisions.

- LCG shall furnish potable water to the entire district and operate and maintain all district water distribution facilities except those specifically excluded by the Water District North Agreement.
- LCG shall construct a water production facility (Well No. 24) in the northwest region of Lafayette Parish and place it in operation within 12 months of purchasing the site. Well No. 24 was placed into operation in June 2006 but taken offline very shortly thereafter due to water quality concerns. As indicated before, pressure filters are anticipated to be installed and operational in 2009.
- Plans and specifications for District facilities that LCG is obligated to operate and maintain must be approved by LCG as conforming to LCG material and construction standards.
- LCG shall provide meter reading services and customer billing services for all Water District North retail and wholesale meters in accordance with the rate schedule adopted by the Water District North.
- In the event that an area within the Water District North is annexed to LCG, the District properties within the new corporate boundaries shall be sold to LCG by the Water District North upon request by LCG. Calculation of the payment for acquiring the Water District North's properties is described in the Water District North Agreement.

Water District South

This district serves the southern portion of Lafayette Parish. The LUS water sales to the Water District South represent approximately 2.9 percent of the total LUS water revenues and 4.2 percent of the total water volume for 2008.

The wholesale service agreement with Water District South was signed in August 1995 and terminates in August 2035. The agreement provides for delivery of wholesale water to the Water District South's distribution system. Revenues for water service are billed and collected by the Water District South. LUS provides operational assistance.

Due to mechanical issues with its production facility, Water District South discontinued production operations in 2006. LUS is currently providing Water District South with sufficient water volume to meet its customer demand with the long term plan for Water District South to convert its existing production facility into a booster station.

City of Scott

LCG sells water to the City of Scott, Louisiana, for distribution and resale under a 25-year contract, which terminates May 27, 2022. Water is delivered to the City of Scott at several interconnection points. Water sales to the City of Scott represent approximately 3.2 percent of total LUS water sales revenues and 4.6 percent of water sales volume for 2008.

Town of Youngsville

Under the provisions of a contract effective on December 24, 1998 with a term of 40 years, LCG may sell water to the Town of Youngsville, Louisiana for distribution and resale. Water sales to the Town of Youngsville first occurred in 2003 and represent 1.3 percent of LUS water sales revenues and 1.9 percent of water sales volume for 2008. Engineering staff indicated Youngsville has expressed a desire to purchase more water.

City of Broussard

LCG and the City of Broussard, Louisiana signed a 40-year water supply contract, which expires on March 5, 2038. Water sales to the City of Broussard represent approximately 1.1 percent of the total LUS water sales revenues and 1.5 percent of water sales volume for 2008.

Milton Water District

LCG serves the Milton Water District under a 40-year contract signed April 28, 1997. Water sales to Milton represent approximately 1.4 percent of the total LUS water sales revenues and 2.0 percent of water sales volume for 2008.

During 2008, water delivered to wholesale customers amounted to 22.0 percent of the water sold by LUS and 17.3 percent of the revenue. The difference is attributed to the difference between water rates for wholesale and retail service. In 2009 LUS intends to perform a cost-of-service study to evaluate the current rates and/or set appropriate rates for retail and wholesale customers. Additionally, the study should consider the impacts of customer service issues such as recovering fuel charges associated with customer requested services which the Water Utility does not currently charge any fee.

Table 6-5 shows wholesale water sales by year for the last five years. Table 6-6 shows wholesale water revenue for the same years.

Table 6-5
Wholesale Water Sales Volumes (1,000 gallons) ⁽¹⁾

Customer	2004	2005	2006	2007	2008
City of Scott	271,704	285,683	238,149	298,098	320,467
Water District North	286,737	316,156	327,149	352,441	348,351
City of Broussard	69,216	111,663	103,501	99,734	108,392
Water District South	228,603	243,106	270,856	310,003	292,176
Milton Water System	79,065	60,631	92,743	106,946	141,517
Town of Youngsville	78,208	130,184	116,032	123,665	133,450
Water District North – Wholesale	<u>157,592</u>	<u>156,657</u>	<u>178,164</u>	<u>174,731</u>	<u>200,922</u>
Total Wholesale Water Sales	<u>1,171,125</u>	<u>1,304,080</u>	<u>1,326,594</u>	<u>1,465,618</u>	<u>1,545,275</u>
Total Water Sales (Wholesale and Retail)	6,916,496	7,243,441	7,400,526	7,222,823	7,038,250
Percent of Total Water Sales from Wholesale Sales (%)	16.9	18.0	17.9	20.3	22.0

(1) New meters installed in 2005-2006 period and transient population associated with Hurricane Katrina in 2005 contributed to fluctuations in this timeframe

Source: LUS Financial and Operating Statements 2004-2008 audited.

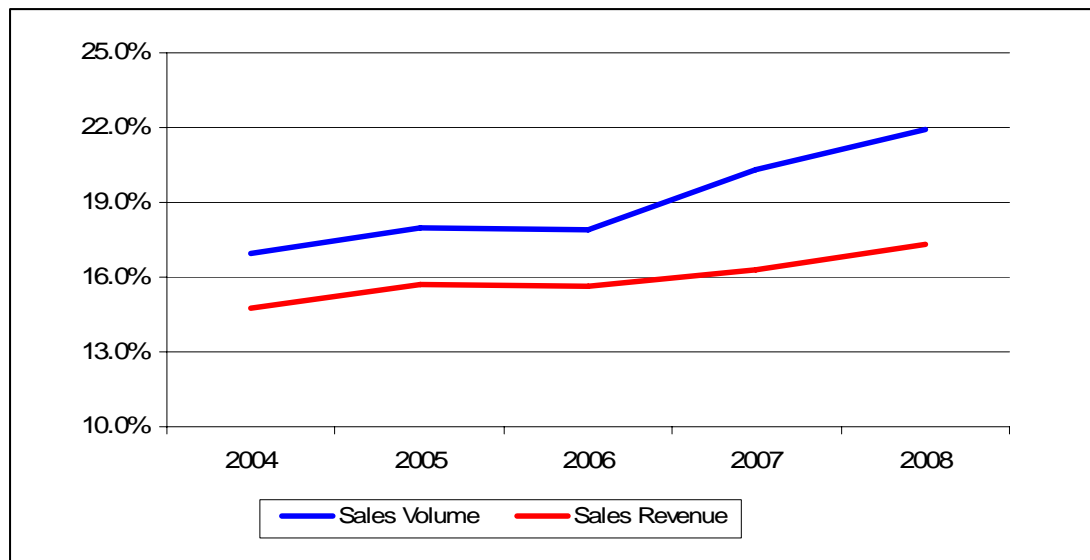
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Table 6-6
Wholesale Water Sales Revenue (\$)⁽¹⁾

Customer	2004	2005	2006	2007	2008
City of Scott	350,499	368,531	307,210	384,549	440,801
Water District North	598,741	647,539	677,721	673,156	763,594
City of Broussard	86,519	139,576	129,378	124,666	145,715
Water District South	285,755	303,884	338,569	387,504	391,993
Milton Water System	97,325	75,787	115,926	133,684	190,719
Town of Youngsville	97,758	162,729	145,044	154,582	180,170
Water District North-Wholesale	<u>198,567</u>	<u>197,386</u>	<u>224,260</u>	<u>220,843</u>	<u>270,742</u>
Total Wholesale Water Sales)	<u>1,715,164</u>	<u>1,895,433</u>	<u>1,938,108</u>	<u>2,078,985</u>	<u>2,383,734</u>
Total Water Sales	11,600,448	12,091,780	12,393,422	12,756,232	13,762,805
Percent of Total Water Sales from Wholesale Sales (%)	14.8	15.7	15.6	16.3	17.3

(1) New meters installed in 2005-2006 period and transient population associated with Hurricane Katrina in 2005 contributed to fluctuations in this timeframe

Source: LUS Financial and Operating Statements 2004-2008 audited.



Source: LUS Financial and Operating Statements

Figure 6-4: Percent of Total Water Sales from Wholesale Sales

Capital Improvement Program

Fiscal Year 2008

The expenditures for fixed plant and equipment made during 2008 are presented in Table 6-7. LUS accounts for such expenditures by using a capital work order system. All extensions or improvements made to the water system are considered economically sound or otherwise necessary for the profitable operation of LUS.

Table 6-7
Capital Work Order Expenditures

Source of Funds	Water (\$)
Normal Capital	
Bond Reserve & Capital Additions	1,197,317
Special Equipment	362,753
2004 Revenue Bonds	1,197,159
Retained Earnings	<u>1,119,741</u>
Total	3,876,969

Source: "Status of Construction Work Orders," LCG, 3/09

Five-Year Capital Plan

LUS established a system improvement program in 1989. The program is a five-year "look ahead," and is revised annually to plan for and manage the major capital projects for the water system. LUS should consider longer planning horizons (at least 20 years) allowing for improved financial planning to mitigate any major effects on water rates. The estimated annual capital budget requirement amounts are presented in the following table and were obtained from 5-Year CIP in the LCG Adopted Budget for fiscal year 2008-2009. It should be noted the 5-Year CIP has been revised as part of a proposed bond issuance planned for summer of 2009 and in response to State Revolving Fund and stimulus package money made available after the budgeting process was complete.

Table 6-8
Capital Improvement Program 2009 – 2013 (\$)

	2009	2010	2011	2012	2013	Total
Production	2,050,000	2,160,000	210,000	10,000	10,000	4,440,000
Distribution	<u>3,675,000</u>	<u>3,760,00</u>	<u>510,000</u>	<u>1,160,000</u>	<u>10,000</u>	<u>9,115,000</u>
Totals	5,725,000	5,920,000	720,000	875,000	20,000	13,555,000

Source: LUS 5-Year Capital Outlay Program Summary FY08-09 Adopted Budget, 10/08

Production Improvements

Water production funds include increased treatment capabilities via the addition of pressure filters at the Commission Boulevard facilities (i.e., water well 23, water well 25 and associated treatment and pumping facilities), South Plant filter rehabilitation, additional back up generation, a Master Plan Update (to be completed March 2009), and increased facility security in addition to typical renewals and replacements.

Distribution Improvements

Water distribution funds include the design and construction of two ground storage booster stations, main installation, main replacements and main improvements as well as typical renewals and replacements. Specifically, the plan includes \$6.8 million worth of improvements to the distribution system anticipated to increase overall system capacity to 30-32 mgd when completed.

Unbilled Water Volumes

During the 2005 – 2006 timeframe the Water Utility embarked upon a citywide effort to repair/replace large meters. This initiative to repair or replace large (3-inch or greater) meters was completed in 2008. This results in more accurate measurements but also makes direct comparisons between years pre- and post-replacement difficult and potentially misleading.

Table 6-9 indicates the annual percent of water volumes that are lost (not accounted for) and suggests a general increasing trend. Taking into account the meter replacement initiative and using 2006 as a baseline, the 2008 estimate represents a modest 27.0 percent increase. Even at the higher rates the unaccounted for volumes are below the generally accepted range of 12-15 percent for similar water systems.

Table 6-9
Water Volumes Not Accounted For

	2004	2005	2006	2007	2008
Not Accounted For (%)	5.59	4.00	8.08	8.43	10.71

Source: LUS Financial and Operating Statements 2004-2008 audited

Drinking Water Quality

LUS, in response to the requirements of the Safe Drinking Water Act (SDWA), must prepare and distribute an annual water quality report to its customers. The 2008 Water Quality Report (which will be published in June 2009) includes results of periodic monitoring of the quality of water distributed to LUS customers. The following Table 6-10 summarizes monitoring results for the latest year for which this data is currently available.

As shown on the table, all monitoring results show LUS water quality to be within the regulatory limits. Biological water quality is also monitored throughout the system although it is not required to be reported in the annual report.

Table 6-10
Water Quality Results ⁽¹⁾ ⁽²⁾

Monitored Before Any Treatment

Substance	Major Source in Drinking Water	USEPA Designated Contaminant Level	USEPA Designated Maximum Contaminant Level Goal	LUS Maximum
Atrazine	Run off from herbicide used on row crops	3 ppb	3 ppb	NA **

Monitored as Finished Water

Barium	Discharge from drilling wastes Discharge from metal refineries Erosion of natural deposits	2 ppb	2ppm	0.077 ppm
Fluoride	Erosion of natural deposits	4 ppm	4 ppm	<0.5 ppm

Monitored in the Water Distribution System

Substance	Major Source in Drinking Water	Maximum Contaminant Level	Maximum Contaminant Level Goal	LUS Maximum
Total Trihalomethanes (TTHM)	By-Product of drinking water chlorination	80 ppb	--	17.1 ppb
Haloacetic Acids (HAA5)	By-Product of drinking water chlorination	60 ppb	--	1.7 ppb

Monitored At Customer's Tap

Substance	Major Source in Drinking Water	USEPA Designated Action Level (requires treatment) at 90th Percentile	LUS Results at 90th Percentile Testing
Copper	Corrosion of household plumbing	1.3 ppm	0.0 ppm or less*
Lead	Corrosion of household plumbing	15 ppb	1.0 ppb or less*

(1) ppb is parts per billion.

(2) ppm is parts per million.

Source: Nadine Perry, LUS, 03/09

* No individual sample exceeded the Action Level.

** No results during FY08

Forecasts

Forecasts of water use for the five-year period of 2009 through 2013 are presented below in Table 6-11. The forecasts reflect the current assessment of expected growth for the five-year period.

Table 6-11
Water System Projected Requirements ^{(1) (2)}

	2008 (Actual)	2009	2010	2011	2012	2013 ⁽³⁾
Daily mgd	21.7	22.4	23.0	23.7	24.4	24.4
Peak mgd	25.8	26.6	27.4	28.2	29.0	29.0

(1) Includes unaccounted-for volumes.

(2) Projections based on five year historical growth rate and does not account for effects of extreme weather conditions (i.e., drought) and excessive rainfall) as these figures are heavily weather dependent.

(3) Year 2013 assumes no increase in daily average or peak demands over previous year as staff anticipates a period of stagnant growth (resulting from the current depressed economic conditions) to lag the local economy by 3 to 4 years.

Source: Don Broussard, 2/09

LUS has completed a System Development Plan that is intended to provide a basis for long term planning of the Water Utility system. LUS has begun internal discussion regarding options for the future including possible consolidation of water districts, parish-wide water system service and water system service beyond the parish boundaries. LUS has not approached external parties to date and anticipated many complexities involved with the above scenarios and significant opposition to such efforts.

One of the challenges to LUS faced in the recent past was blocks of new customers being added to the system with little or no notice resulting in a sudden increase in demand. Staff does anticipate this will happen again, but there remains a possibility that similar circumstances can occur in the future with similar results. As a result staff is sensitive to unplanned annexations.

LCG has adopted a water ordinance to assist in reducing the occurrence of low pressure in the water distribution system. The ordinance is directed at reducing peak system demand by restricting watering of lawns to the hours between midnight and 2 p.m. and enforcement of the ordinance began in August of 2001. LCG's ordinance requires wholesale customers to enact similar restrictions or be subject to restrictions on supply of water by LUS during the period from May 1 to September 30 of each year. These efforts have not been as successful as hoped (as evidenced by the high usage and resulting low pressure complaints during the summer of 2006). In an effort to further promote conservation an ordinance which established an increasing block rate structure was adopted in January 2008. However, calendar year 2008 was a relatively wet year (resulting in less irrigation demand) and as a result, it is not yet clear whether the above measures have had a significant impact on water usage.

Future Regulatory Requirements

The SDWA passed in 1974 and amended in 1986 and 1996, gives the USEPA the authority to set standards to protect drinking water. USEPA has delegated responsibility for implementing drinking water standards to the Louisiana Department of Health and Hospitals.

There are two categories of drinking water standards: primary and secondary. Primary standards are legally enforceable standards that apply to public water systems. Primary standards protect drinking water quality by limiting the levels of specific contaminants that are known or anticipated to occur in water. Secondary standards are non-enforceable guidelines regarding contaminants that may cause cosmetic or aesthetic effects. Primary standards go into effect three years after they are finalized. If capital improvements are required, USEPA's Administrator or a state may allow this period to be extended up to two additional years.

New and proposed rules and standards, listed below in Table 6-12, are in various stages of development and publication.

Table 6-12
New and Proposed Rules

Rule/Regulation	Compliance Date	Comments
Groundwater Rule	Effective Dec. 2009	Requires monitoring for bacterial contamination in distribution system and corrective action as needed
Total Coliform Rule	Based on Population	Requires bacterial monitoring and corrective action based on population
Fluoridation Law	March 1, 2009	Furnish capital and O&M estimates of cost of compliance (implementation not required at this time)
Chemical Facility Anti-Terrorism Standards	None (Under Consideration)	Establishes <u>risk-based performance standards</u> and requires certain chemical facilities to prepare Security Vulnerability Assessments and develop and implement Site Security Plans

LUS is aware of these regulations and has or will incorporate the requirements into current and future operations. Compliance with the regulations is not anticipated to require major capital expenditures.

The USEPA upgraded water treatment plant operator certification requirements on February 5, 1999 upon publication of "Federal Guidelines for the Certification and Re-certification of the Operators of Community and Non-transient Non-community Public Water Systems." In April 2002, the State of Louisiana implemented these guidelines and changed the Louisiana Administrative Code Title 48; Chapter 73 entitled "Certification." LUS upgraded the qualifications of its water treatment plant operators by April 2006, thereby, complying with those requirements. Moreover, R. W. Beck recommends LUS consider developing an operator certification (and recertification) program. Additionally, staff anticipates needing certifications for distribution (along with operator certification) by operators at the proposed Fabacher Field facilities.

Key Challenges, Issues and Goals

Challenges and key issues that LUS has identified for the Water Utility include: succession planning and employee hiring and retention issues, distribution system capacity, integration of SCADA and plant controls, backflow prevention, capital planning, and security.

The Water Utility has staff members throughout the organization that are approaching retirement. In addition, the utility struggles to fill vacant positions with qualified personnel and has difficulty retaining staff.

The capacity of the production and treatment facilities far exceeds the capacity that can be distributed to water customers. This is due to constraints within the water distribution system.

The main issue relating to the new certification requirements is that candidates applying for Water Plant Operator vacancies must attain full certification within six years of appointment. A careful review of the certification requirements suggests applicants must have two full years of college to meet this six year deadline. The current pay scale at LUS appears to be unattractive to candidates with this level of education, a condition exacerbated by the recent market based pay adjustments in which the entry level operator pay scale was lowered. The LUS pay rate for new Water Plant Operators may need to be re-adjusted to attract and retain skilled and certified operators.

Currently water utility operators have no direct operational control access to the distribution system SCADA system. If the SCADA system was fully integrated into the plant controls (Wonderware) system, it would allow for real-time monitoring and control of the distribution system by onsite Water Utility staff rather than the personnel located at Walker Road facility (who are also responsible for operation of the electric utility SCADA system) as is currently the situation. R. W. Beck recommends the water distribution system SCADA system be integrated in the water treatment plant control system for increased system operational efficiency. On a related note, additional pressure monitoring capabilities within the distribution system should be considered for improved system performance monitoring. This capital work has been identified in a future budget cycle but preliminary work including identifying potential new monitoring site locations within the system was performed in FY2008.

The first step in implementing a backflow prevention program (BPP) is field inventory and surveying via global positioning satellite technology. LUS began assessing and documenting backflow prevention facilities of its customers in 2006 and essentially completed the effort in 2008 (there are 20-30 left to field verify). Devices already located are being integrated into the geographic information system and the Water Utility is working with the codes department to track and GPS newly installed units. Subsequent steps in fully implementing a BPP are training of certified testers, testing units and educating customers. Despite having a contract in place to provide these services, LUS has not moved forward with these steps due to disagreement concerning where a BPP should reside within the organization and to what degree LUS needs such a program.

The full implementation of a working hydraulic model of the water distribution system and a long-range capital planning process is increasing the ability of the Water Utility to plan for development and to maximize the existing water distribution system. For example, the Engineering staff recently used the water model to evaluate improvement scenarios indicating overall system capacity will be increased to 30-32 mgd as part of the currently proposed capital improvements.

LUS has improved the security and reliability of its water production, treatment and distribution systems. Security remains a high priority for the utility.

Key Strategies

LUS' Strategic Plan, updated in 2008 identifies the following strategies for water:

- Ensure adequate supply treatment and distribution capacity.
- Operate and maintain systems using best practices.
- Develop strategies and methodologies to extend service to customers.
- Explore initiatives to promote customer growth.
- Create and nurture a customer focused culture.

Recommendations

Recommendations and their status are provided in Table 6-13 below. We have indicated the priority of the recommendation as either highest, high or normal.

**Table 6-13
Recommendations**

Water Utility Recommendations	Priority	Status
LUS should give priority to constructing ground storage and booster pumping systems in low pressure areas of system to improve system pressure	Highest	In Progress
LUS should continue to develop in-house expertise with use of the water system model and acquire a system capable of modeling time of travel and concentration of introduced pollutants	Highest	In Progress
LUS should integrate the distribution SCADA system within the plant control system	Highest	In Progress
LUS should implement a backflow prevention program including documentation of backflow preventers and testing requirements	Highest	In Progress
LUS should coordinate planning and operations of water improvements with wholesale water customers	High	In Progress
LUS should develop a long-term capital planning process (20-50 years) for improvements to the water system	Normal	Investigating
LUS should implement a certification/recertification training program for Water Plant Operation staff	High	Investigating

Section 7 WASTEWATER UTILITY



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Section 7

WASTEWATER UTILITY

During March 2009, the Consulting Engineer interviewed LUS staff regarding wastewater operations and performed analyses of operating statistics that are indicative of the general operating condition of LUS' Wastewater Utility facilities. The following discussion summarizes the findings of the Consulting Engineer with respect to the maintenance and management of the property based upon discussions with and information supplied by LUS' personnel.

Description

The Wastewater System includes four treatment plants and a collection system comprised of over 561 miles of pipe (excluding service lines), 11,213 manholes and 148 lift stations. This system reliably serves 41,273 retail customers with a total permitted treatment capacity of 18.5 mgd.

Organization

The Wastewater Utility is comprised of three Sections: (1) Plant operations, (2) Wastewater Collection, and (3) Plant Maintenance responsible for treatment of raw wastewater, collection and delivery of wastewater to the treatment facilities and O&M responsibilities, respectively. Figure 7-1 provides an organizational chart of the Wastewater Utility.

Other LUS Divisions, including Engineering, Customer Service, Utilities Support Services and Environmental Compliance provide services to the Wastewater Utility as well.



Figure 7-1: Wastewater Utility Organization Chart

Wastewater Treatment

The four wastewater treatment plants are the South Plant, the East Plant, the Ambassador Caffery Parkway Plant, and the Northeast Plant. The total permitted capacity for these plants is 18.5 mgd. The South Plant is an activated sludge facility with a permitted capacity of 7.0 mgd. The East Plant and Northeast Plant are oxidation ditch facilities with permitted capacities of 4.0 and 1.5 mgd, respectively. The Ambassador Caffery Parkway Plant treatment system formerly included a rotating biological contactor (RBC) and oxidation ditch but has undergone improvements to replace the RBC with sequencing batch reactors. Although the treatment capacity has been significantly increased the permitted capacity will effectively remain at 6.0 mgd. The permitted plant capacities are shown in Table 7-1.

The LUS wastewater facilities have met customer demands for service, and provided its customers with adequate and reliable utility services during the period reported herein. The historical loads as served by the Wastewater Utility are presented in Table 7-1.

Table 7-1
Wastewater Utility Average Day Hydraulic Loads (mgd)⁽¹⁾

	2004	2005	2006	2007	2008	Permitted Capacity
South Plant	8.0	6.5	6.3	6.7	5.8	7.0
East Plant	3.3	2.9	2.8	3.1	3.3	4.0
Ambassador Caffery Plant	5.4	5.1	4.6	4.7	5.2	6.0 ⁽²⁾
Northeast Plant	1.3	1.1	1.0	1.2	1.2	1.5
Totals	18.0	15.6	14.7	15.7	15.5	18.5

(1) Average day hydraulic loads are not adjusted to dry weather conditions and therefore include infiltration.

(2) Permitted capacity remains at 6.0 mgd but plant capacity is 9.25 mgd

Source: Craig Gautreaux, LUS, 2/17/09.

Figures 7-2 through 7-5 provide a view of each treatment plant.



Figure 7-2: South Plant



Figure 7-3: East Plant



Figure 7-4: Ambassador Caffery Plant



Figure 7-5: Northeast Plant

Each year, LUS must prepare an annual municipal water pollution prevention audit report for each wastewater plant. The report is submitted to the Council and the LDEQ. The report compares the design hydraulic and biological treatment capacity of each plant with the actual conditions. Table 7-2 outlines the number of months during which the design capacity of each plant was exceeded.

Table 7-2
Wastewater Number of Months During Which
Design Capacity was Exceeded

	2004	2005	2006	2007	2008
Flow					
South Plant	10	3	1	2	1
East Plant	3	1	0	1	2
Ambassador Caffery Plant	3	1	0	1	1
Northeast Plant	1	0	0	0	0
Biological Loading					
South Plant	1	0	0	0	0
East Plant	0	0	0	0	0
Ambassador Caffery Plant	6	3	6	12 ⁽¹⁾	3
Northeast Plant	0	0	0	0	0

(1) Increase in biological loading exceedance due to limited treatment capacity during conversion to SBRs at ACTP.

Source: Craig Gautreaux, LUS 2/17/09

Design is underway for plans to expand the South Plant from 7 mgd to 12 mgd. Improvements included in the expansion are the construction of additional sequencing batch reactors, additional aerobic digestion capacity, sludge thickening and dewatering, and a new headworks facility to treat a portion of the incoming flow. The design engineering consultant estimates preliminary plans at 40 percent completion at the time of this report. The design process has been placed on hold as LUS pursues funding options for construction.

LUS has completed construction of additional storage capacity and replacement of the rotating biological contactors with sequencing batch reactors at the Ambassador Caffery Plant. Construction, started in 2005, was completed and the improvements formally accepted by LUS in November 2008, thereby, achieving permit compliance. The upgraded capacity 9.25 mgd including construction of a 7 million gallon retention /equalization basin.

A long-term plan for sludge stabilization and disposal is needed. An investigation of this issue will be included in the wastewater master planning activities.

Wastewater Collection

The wastewater collection system consists of gravity sewers, interceptors, manholes, pumping stations and force mains, as tabulated in Table 7-3.

Table 7-3
Wastewater Collection System

	2004	2005	2006	2007	2008
Number of Customers	38,325	39,056	39,815	40,353	41,273
Miles of Pipe ⁽¹⁾	678	538 ⁽³⁾	546	556	561
Number of Manholes	10,365	10,646	10,805	11,041	11,213
Number of Lift Stations ⁽²⁾	138	141	145	147	148

(1) Not including service lines.

(2) Includes three lift stations from Holiday Utilities bankruptcy.

(3) Corrected for program calculation problem

Source: Craig Gautreaux, LUS 2/17/09

The above statistics show that the total pipe in the wastewater collection system has increased at a slightly lower rate than the number of customers, while the number of lift stations and manholes has increased at nearly the same rate as customers. Generally, these metrics appear to be in line with the growth in customers.

The flat topography of the service area means that additional lift stations will be needed as the system expands unless major interceptors are constructed. LUS is making efforts to slow the increase in the number of lift stations and the wastewater master plan (and associated hydraulic modeling) is investigating alternatives for eliminating existing lift stations. In addition, LUS is working with developers on alternatives to adding lift stations as development occurs to further limit the number of lift stations in the system. To date, the Wastewater Utility has successfully eliminated several lift stations and the current figures suggest fewer lift stations being installed per unit of pipe.



Figure 7-6: Heyman Park Wastewater Collection Site

Inflow and Infiltration

The wastewater collection system has, in the past, experienced excessive wastewater flow resulting in treatment plant bypasses and overflows of the wastewater collection system. The excess flows are due to infiltration and inflow of surface and groundwater into the wastewater collection system during and after rainfall events. As a result of these continuing events, USEPA issued administrative orders (AO) requiring treatment plant upgrades and expansions. The AO issued by the USEPA requires LUS to submit quarterly progress reports as construction of new facilities and repair of existing facilities proceeds. LUS previously completed requirements for the South Plant, East Plant and Northeast Plant and recently completed requirements for the Ambassador Caffery Plant in FY08. In June 2001, USEPA officially transferred permitting authority for the National Pollution Discharge Elimination System (NPDES) to the LDEQ for the South, East and Northeast Plants. Permitting Authority the Ambassador Caffery Plant is currently in the process of being transferred to LDEQ (reporting is scheduled to move to LDEQ beginning in April 2009).

The wastewater collection division recorded the number and type of overflows that have occurred in the system. The information is summarized in Table 7-4. LUS staff actively seek rain-related problems during periods of rainfall when normal work assignments are interrupted.

Table 7-4
Wastewater Collection System Overflows

	2004	2005	2006	2007	2008
Rain Related	141	33	21	51	43
Lift Station Equipment Failure	4	4	2	9	0
Main Line Stoppage	1	8	13	12	16
Broken Pipe	3	4	4	5	6
Total	149 ⁽¹⁾	49 ⁽²⁾	40	77	75 ⁽³⁾
Total Annual Precipitation (inches)	91	56	55	67	67

(1) Includes three large rain events over 10 inches; does not include occurrences during one 17 inch rain event.

(2) Does not include overflows caused by electrical outages due to Hurricane Rita .

(3) Does not include overflows caused by electrical outages due to Hurricane Gustav

Source: Craig Gautreaux, LUS 2/17/09

The number of lift station equipment failures, which rose significantly in 2007, has subsided in 2008. The lift station failure phenomenon was attributed to the transition to electronic controls but this no longer appears to be a issue. The number of main line stoppages also increased in 2008 due mostly to incidents involving the local prison (prisoners flushing jumpsuits, bed sheets and other materials) and a 21” line break. Staff does expect main line breaks to continue at a similar pace as long as construction activity occurs and anticipates a possible increase in service line breaks due to fiber installation activities.

Additionally, it should be noted the Wastewater Utility performed very well during Hurricane Gustav in 2008; experiencing no significant internal issues or failures. The only problems experienced during the event were a result of power loss which is being addressed via installation of backup power supplies at various facilities.

An inflow/infiltration reduction program is ongoing and includes manhole repair, pipe point repair, smoke testing, television inspection, and pipe lining. Some of these activities began in response to AO’s but the program will continue as a normal maintenance activity. Additional activities being implemented are Capacity, Management, Operations and Maintenance (CMOM), Fats, Oils and Greases (FOG) and Sewer Overflow Reporting (SORP) programs. USEPA staff have been very complimentary of efforts undertaken and accomplishments by the Wastewater Utility.

In compliance with regulations and administrative orders by USEPA, LUS has initiated a pretreatment, user permit, and fee program for the purpose of issuing wastewater discharge permits and pretreatment standards to industrial, commercial and non-residential customers who discharge wastewater to the wastewater collection system. LUS performs this service as a benefit to its customers. If LUS did not have an approved program, these customers could not discharge to the sewer system and would have to construct their own treatment facilities. LUS has established a monthly permit fee, surcharge rates and a volumetric rate for industrial users to recover a portion of program costs. Industrial users have the option to implement suitable best

management practices (BMPs) in lieu of paying the monthly permit fee and nearly all eligible users have opted to utilize BMPs. Currently, only nine user permits are active.

Wastewater Discharge Permits

The wastewater discharge permit renewals for all four plants began in FY2008 but were not completed until the following year. At the time of this Report, the Ambassador Caffery, South and Northeast Plants' permits have been re-issued beginning in April 2009 and East Plant's beginning in June 2009. It is anticipated the permits for each plant contain identical effluent limits for biological oxygen demand, total suspended solids, ammonia-nitrogen, dissolved oxygen, total residual chlorine and pH and have not changed as a result of the renewals. The daily maximum criteria have changed to weekly maximum, however. Each plant must, among other things:

- Conduct whole effluent toxicity testing using bioassay methods (quarterly)
- Perform an annual Environmental Audit Report including a resolution from the governing body
- Operate an industrial pretreatment program
- Submit monthly reports to LDEQ

R. W. Beck's review of certain wastewater discharge permits indicates that the wastewater treatment plants are in material compliance with their permit conditions. There are times during or shortly after periods of heavy rainfall when the permit limits for suspended solids and occasionally biochemical oxygen demand and ammonia are exceeded. LUS has indicated that it is current with its reporting requirements for exceedances to the regulatory agencies, as required by their permit conditions.

New to the permitting process in 2009 is the incorporation of the stormwater permits into the discharge permits. This change consolidates the once distinct permits (linking compliance between the two) but does not include any changes to the requirements of the permit. Therefore, no additional capital expenditures or operational changes are anticipated to remain in compliance.

LUS has also taken over a system previously operated by Holiday Utilities and is constructing improvements to eliminate most of the lift stations and to tie the system into the Wastewater Utility System. Significant progress has been made including elimination of four lift stations leaving only three additional facilities of the original seven inherited from Holiday Utilities.

Bio-solids Reuse

LUS reports the bio-solids reuse program continues to provide for disposal of all LUS wastewater treatment sludge. LUS contracts with privately owned farms for use of their farmland for bio-solids application. LUS staff has noted that land use trends and potential changes in land ownership are likely to make continued use by LUS of private farmland more difficult in the future. LUS staff is investigating alternative methods of sludge management including improvement in sludge treatment to

generate a marketable product. The cost of the conversion to more advanced treatment could be substantial.

Historical Wastewater Flows

Wastewater flows are measured (as effluent) of the treatment facility and vary annually depending on rainfall events. Total retail wastewater flows decreased at a rate of approximately 3.0 percent per year on average between 2004 and 2008 as provided in Table 7-5 below. While this may seem counterintuitive, it is a result of excessive rainfall occurring in 2004 followed by much drier conditions in the years 2005-2006 and near average precipitation levels in 2007-2008. Since the available figures include additional flows attributable to inflow/infiltration, rainfall patterns can noticeably affect these estimates thus skewing trends in true wastewater (versus stormwater) flows. Data suggests the rainfall occurring in 2007 may have occurred in such a manner that, despite only an average annual depth, significant amount of inflow/infiltration occurred resulting in a slightly higher annual wastewater flow estimate than 2008 which had the same amount of annual precipitation. Taking these factors into account the true wastewater flows appear to be relatively stable.

Based on projected growth in the number of customers, with intake per customer remaining steady, LUS expects an average annual growth rate of approximately one percent in terms of projected retail wastewater flows through 2013. LUS has completed construction of improvements to the Ambassador Caffery Parkway Plant to meet anticipated growth and is underway with design work on the South Plant. The South Plant design efforts are estimated to be at 40 percent complete but are currently on hold while the Utility explores funding options. It is expected that upon completion in 2013, these improvements will provide sufficient capacity for the foreseeable future.

Table 7-5
Historical Wastewater System Intake Flow

	2004	2005	2006	2007	2008	Growth Rate ⁽²⁾
Retail Intake Flow ⁽¹⁾ (1,000 gallons)	6,601,199	5,638,655	5,319,763	5,711,781	5,669,875	-2.98%

(1) The Retail Intake Flow is measured as effluent of the treatment facilities and will vary annually depending on rainfall events.

(2) The Growth Rate is the compounded average annual growth rate for the period 2004-2008.

Source: LUS Financial and Operating Statements 2004-2008 audited.

Contracts and Agreements

Principal contracts and agreements for wastewater services are summarized in the following paragraphs and are listed in Table 7-6.

On June 16, 1975, the City entered into an agreement with Sewerage District No. 6 (District) to provide treatment and disposal of all sewage collected, and to provide the operation and maintenance for the District's sewer system. The term of the agreement is for a period of time until more than 50 percent of the District's customers are located within the City limits.

In August of 1995, LUS entered into a wastewater operation and maintenance agreement with an area known as the Grossie Avenue Area. This area is served by a system that is separately located and owned and consists of a very small number of customers (approximately 50). The 40-year agreement expires in August 2035.

Table 7-6
Contracts and Agreements

Contracts and Agreements between		Date Signed/Renewed	Termination Date	Provisions
LCG	Sewerage District 6	June 16, 1975	until 50% served	Wastewater treatment by LUS
LUS	Grossie Ave Area	August 21, 1995	August 21, 2035	Wastewater treatment by LUS

Source: Craig Gautreaux, LUS 2/17/09

Capital Improvement Program

Fiscal Year 2007

Table 7-7 provides expenditures for fixed plant and equipment that were made during 2008. LUS accounts for such expenditures by using a capital work order system. All extensions or improvements made to the Wastewater Utility are considered economically sound or otherwise necessary for the profitable operation of LUS.

Table 7-7
Capital Workorder Expenditures

Source of Funds	Wastewater Utility (\$)
Normal Capital	
Bond Reserve & Capital Additions	5,519,748
Special Equipment	1,675,026
2004 Revenue Bonds	5,894,724
Retained Earnings	<u>2,702,083</u>
Total	15,791,581

Source: "Status of Construction Work Orders," LCG, 3/09

Five-Year Capital Plan

LUS established a system improvement program, CIP, in 1989. The program is a five-year "look ahead," and is revised annually to plan for, and manage, the major capital projects for the Wastewater Utility.

The estimated annual capital budget requirement amounts are presented in the following table and were obtained from the 5-Year CIP in the LCG Adopted Budget for fiscal year 2008-2009. Previously, 2009 exhibited a substantially higher value to account for the planned improvements to South Plant. Given the size and scope of this initiative LUS has broken out the various components into multiple smaller projects to be completed over a several year period. Currently, the estimated cost of these improvements is \$27 million (up from \$20 million) in order to account for the start date and longer period of construction now planned. If sufficient State Revolving Funds are made available, however, these projects may be reconsolidated and completed sooner than currently scheduled in 2013. South Plant improvements represent the last anticipated major plant upgrades in the foreseeable future.

Table 7-8
Capital Improvement Program 2009 – 2013

	2009	2010	2011	2012	2013	Total
Collection (\$)	7,780,000	2,785,000	1,760,000	2,410,000	2,160,000	16,895,000
Treatment (\$)	<u>1,975,000</u>	<u>8,310,000</u>	<u>18,835,000</u>	<u>3,260,000</u>	<u>560,000</u>	<u>32,940,000</u>
Total (\$)	9,755,000	11,095,000	20,595,000	5,670,000	2,720,000	49,835,000

Source: LUS 5-Year Capital Outlay Program Summary, FY 2008-09 Adopted Budget, Combined Summary Retained Earnings and Bond Capital

Wastewater Treatment Plant Improvements

South Plant improvements include construction of a sludge treatment facility. Previously the intent was to treat sludge from all of the plants centrally at South Plant but this is not necessarily the intent anymore. The Sewer Master Plan underway will evaluate alternatives for sludge treatment. Other improvements for the South Plant include facilities that will allow diversion of wet weather inflows from the South Plant to the Ambassador Caffery Parkway Plant, thereby reducing risk of bypass and overflow.

Wastewater Collection System Improvements

Proposed improvements to the wastewater collection system include installation of a new sewer interceptor and improvements to the existing interceptors located in Pont des Mouton corridor and those located parallel to Ambassador Caffery Parkway and Kaliste Saloom Road, complete the installation of emergency power generators for use at lift stations, telemetry equipment and odor control. After these capital improvements, staff anticipate a slow down in growth in the coming years resulting in a shift towards O&M rather than capital expenditures.

Forecasts

Load forecasts for the average daily flow to each of the wastewater treatment plants for the five-year period of 2008 through 2013 are presented in Table 7-9. The forecasts reflect the current assessment of expected load growth for the period.

Table 7-9
Wastewater Utility
Projected Average Day Hydraulic Loads (mgd) ⁽¹⁾

	2008 (Actual)	2009	2010	2011	2012	2013	Permitted Capacity
South Plant	5.8	6.0	6.0	6.2	6.3	6.4	7.0
East Plant	3.3	3.3	3.3	3.4	3.4	3.4	4.0
Ambassador Caffery Plant	5.2	5.3	5.3	5.4	5.4	5.5	6.0 ⁽²⁾
Northeast Plant	1.2	1.2	1.2	1.2	1.2	1.3	1.5
Totals	15.5	15.8	15.8	16.2	16.4	16.6	18.5

(1) Average day hydraulic loads are not adjusted to dry weather conditions and therefore include infiltration.

(2) Permitted capacity remains at 6.0 mgd but plant capacity is 9.25 mgd

Source: Craig Gautreaux, LUS, 2/17/09.

The above forecast of wastewater treatment flows is based upon recent historical trends for each wastewater plant and taking into account the capability to shift flow between treatment plants. These projections are subject to change depending upon the success of the inflow and infiltration program in controlling or reducing rain-related effects. It should be noted there are a number of small package type treatment plants scattered throughout the Parish serving as many as 6,000 customers. Of these, it is estimated 2,500 to 3,000 customers could, if emergency circumstances dictate, be quickly connected to the LUS system resulting in a sudden increase in wastewater inflow. However, this amount of additional flow would not place a burden on the existing system. LUS plans to re-route wastewater flows among the Ambassador Caffery Plant and the South Plant to avoid overloads and to accommodate the recently completed construction at Ambassador Caffery Plant. As discussed above, LUS has begun engineering design of improvements and expansions to the South Plant and is investigating methods for reallocating flows where treatment capacity is available and/or alternative treatment locations.

LUS is also discussing expanding wastewater service within Lafayette Parish and a committee has been formed to investigate the possibilities and ramifications related to the expansion of the Wastewater Utility. Additionally, the wastewater master planning process will also consider expansion of the Wastewater Utility into Lafayette Parish. In the meantime LUS is proposing an ordinance requiring developments within the Parish greater than 15 homes to install “community based systems” (rather than individual septic systems) constructed to LUS standards with the intent they are set up as “operating arms of sewer districts”. These entities will be operated and maintained by LUS Wastewater Utility staff.

Future Regulatory Requirements

The Federal Water Pollution Control Act Amendments of 1972 and 1977, commonly known as the Clean Water Act, established the basic structure for regulating discharges of pollutants into the waters of the United States. It gives the USEPA the authority to implement pollution control programs such as setting wastewater discharge standards and water quality standards for all contaminants in surface waters. In many instances the USEPA has delegated program administration to the states and in the case of the State of Louisiana, LDEQ has assumed responsibility for administering the NPDES program.

USEPA also funded the construction of sewage treatment plants under the construction grants program and recognized the need for planning to address the critical problems posed by non-point source pollution. Programs implemented by the USEPA that directly affect municipal systems include:

- LWDPS/NPDES Permit Program, including stormwater management, and control of combined sewer and sanitary sewer overflows
- The National Pretreatment Program, emphasizing control and prevention of water pollution from industrial facilities
- Biosolids (sewage sludge) management program promoting compliance with the Federal biosolids rule and practices for managing biosolids
- Administration of the Clean Water State Revolving Fund (CWSRF)
- CMOM program addressing sanitary sewer overflows

A Department of Homeland Security initiative which could potentially affect municipal treatment facilities appears to be less likely at the time of this report. Previously, this proposed legislation included wastewater facilities but has since exempted them and has not progressed through the legislature. This program, known as the Chemical Facility Anti-Terrorism Standards (CFAS), establishes risk-based performance standards and requiring certain chemical facilities to prepare Security Vulnerability Assessments and develop and implement Site Security Plans. It is not clear if LUS would be required to follow the proposed CFAS regulations.

Sanitary Sewer Overflow Control Policy

In 2003, the USEPA proposed a policy addressing NPDES permit requirements for municipal wastewater treatment plants (serving sanitary sewers) during wet weather conditions. The proposed policy was intended to provide clarity about managing peak wastewater flows that are sometimes diverted from secondary treatment unit processes during significant wet weather events. USEPA has since abandoned this wet weather policy but is in the process of implementing its CMOM program instead.

As discussed above Wastewater Utility staff anticipate CMOM requirements to be incorporated into upcoming discharge permitting. This program will likely include the following steps:

- (1) identification and inventory of infrastructure,

- (2) prioritization of needs and actions, and
- (3) performance of repair and rehabilitation efforts.

Vermilion River Water Quality Standards

Section 303(d) of the 1972 Clean Water Act requires all states to develop a list of their state's impaired water bodies that do not meet state regulatory water quality standards even with the current pollution controls in place. The Clean Water Act requires all states to develop Total Maximum Daily Loads for these waters based on priority ranking. A Total Maximum Daily Load is a pollution budget for a specific water body (river, lake, stream, etc.) and is the maximum amount of a pollutant from point and non-point sources that it can receive without causing it to violate state water quality standards. Once the Total Maximum Daily Loads are established, they are then translated into requirements to reduce the contributions of pollutants by point sources such as municipal wastewater treatment plants, industrial wastewater discharges and by non-point sources such as stormwater runoff from agricultural fields. If water quality monitoring shows that the water body is no longer impaired, no further reductions are needed. However, if pollution levels are still unacceptable at the end of a reasonable time period, LDEQ must revise the Total Maximum Daily Loads and implement additional control measures.

The current discharge permits for LUS wastewater plants reflect the Total Maximum Daily Load that were established for the Vermilion watershed after water quality monitoring that occurred in 2003. Requirements to establish stricter wastewater discharge limits did not occur after results of the monitoring were analyzed.

LDEQ adopted Total Maximum Daily Load standards for sulfate for the Vermilion River similar to those for the Atchafalaya River but which are not expected to require LUS to upgrade its wastewater plants to remove sulfate. LDEQ informed LUS it will establish Total Maximum Daily Load limits on discharge of mercury to the Vermilion River and required LUS to conduct mercury sampling in the effluent from the wastewater treatment plants in 2006. Based on test results, LDEQ could require LUS to implement Best Management Practices for reduction of mercury in its wastewater but has not done so to date (including as part of permit renewals in 2009).

Because the Vermilion River is considered oxygen deficient, maximum waste load allocations have been established for carbonaceous biological oxygen demand and ammonia nitrogen. These allocations limit the quantity of these pollutants that can be discharged to the river. Due to these limitations and based on discussions with LDEQ it is highly unlikely LUS will receive any increase in its present waste load allocations. This implies that future growth in the wastewater service area will require more efficient wastewater treatment in order to stay within existing allocations. Indeed, recent discussions between LUS and LDEQ revealed the next Vermilion River TMDL will re-evaluate dissolved oxygen levels in the river and will likely result in more stringent discharge permit limits. Additionally, LDEQ and USEPA are considering a trading program for pollutant discharge allocations. If this occurs it could ease or delay the need for upgrades at the LUS wastewater plants. LUS staff is

monitoring these regulatory developments and will incorporate the requirements into planning and capital requirements as they become more definite.

It is also a possibility that nutrient limits for nitrate and phosphorus could be added to the LUS wastewater permits within the next 10 years. LUS is currently evaluating alternatives for converting existing treatment facilities to accommodate nutrient reduction.

LUS is aware of these regulations and has or will incorporate the requirements into current and future operations. Compliance with the regulations is not anticipated to require major capital expenditures.

Key Strategies

The LUS Strategic Plan, updated for 2007 identifies the following strategies for wastewater:

- Ensure adequate treatment and collection capacity.
- Operate and maintain systems using best practices.
- Explore initiatives to promote customer growth.
- Create and nurture a customer focused culture.

Recommendations

Recommendations and their status are provided in Table 7-10 below. We have indicated the priority of the recommendation as either highest, high or normal.

Table 7-10
Recommendations

Wastewater Utility	Priority	Status
LUS should continue to develop the wastewater hydraulic model of the system and complete a wastewater master plan	Highest	In Progress
LUS should continue evaluating alternatives for reallocating flows from existing treatment facilities to other treatment facilities	High	In Progress
LUS should complete final strategy for sludge processing (Class A/B) and disposal	High	In Progress
LUS should develop a strategy for reducing the number of lift stations within the wastewater collection system	High	In Progress
LUS should develop policy/strategy for implementing wastewater service Parish-wide	High	In Progress
LUS should implement a certification and recertification training program for staff	Normal	Investigating
LUS should develop and implement CMOM program to meet anticipated permit requirements	Normal	In Progress
LUS should evaluate treatment plant processes for future nitrogen and phosphorus effluent discharge limits	Normal	In Progress

Section 8 COMMUNICATIONS SYSTEM



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Section 8

COMMUNICATIONS SYSTEM

In 1997, LPUA and the Council approved funding to upgrade LUS' telecommunications capabilities using retained earnings. The initial purpose of the project was to replace an aging and increasingly costly LUS microwave communication system, which was providing internal communications capabilities that are critical to the operation and reliability of LUS. The LPUA and the Council approved the installation of a fiber optic system to replace the LUS microwave system functions. LUS was also authorized to provide enhanced services to LCG and other local, state, and federal governmental entities, as well as third party wholesale customers in the LUS service area. The network has been branded as "LUS Fiber" and in 2008 began provisioning retail services.

Description

LUS Fiber is a 65-mile, 96-strand SONET-based fiber backbone infrastructure that provides wholesale broadband and high-speed Internet access with direct connections to major carriers with broadband backbone facilities that span the country, called Tier 1 providers. As of October 31, 2008, LUS Fiber also included provisioning retail services on a test basis. The system also contains approximately 160 miles of distribution fiber that is used to connect wholesale and retail providers to their customer premise locations throughout Lafayette. LUS Fiber offers Internet connectivity and transport to wholesale providers, who may then use the broadband Internet connectivity to offer services to the public. It also provides broadband and Internet access to most of LCG's facilities, many other local government facilities, 45 schools and four libraries.

Communications products include broadband service on the LUS backbone, dedicated and shared services, direct Internet access, customer premise equipment, lease space for wireless applications on its towers, and last mile loop service connecting carriers to customer premises in the City.

The fiber backbone passes within approximately one mile of every home and business in the City. The fiber network has been extended to businesses on an as requested basis by wholesale customers. LUS Fiber reached approximately 238 premise locations as of October 31, 2008.

Organization

Figure 8-1 depicts the LUS Fiber's organizational structure.



Figure 8-1: Communications Division Organizational Chart

Wholesale Services

Surplus fiber laid the groundwork for high-bandwidth availability of multi-service network connections for use by wholesale customers, including Competitive Local Exchange Carriers, Internet Service Providers, and wireless carriers. Each wholesale customer requires specialized applications to promote their business model. LUS Fiber works individually with each wholesale customer to determine their telecommunications needs/speeds/applications in order for them to implement their technological ideas while making the most of their financial resources.

LUS Fiber offers the following wholesale services:

- **Broadband Service** – offers broadband access on the LUS backbone at speeds from 1.544 (T1) megabits per second (Mbps) up to Optical Carrier Level 48 (OC 48) which is 2.4 gigabits per second (Gbps)
- **Last Mile Service** – extends major carrier services to the customer premise at symmetrical speeds between 1.544 Mbps to 2.4 Gbps
- **Packet Services** – sends data in packets at speeds between 10 Mbps and 1 Gbps, using either a dedicated or shared packet service
- **Direct Internet Access** – provides Internet access at speeds from 1.5 Mbps to 155 Mbps
- **Customer Premise Equipment Service** – offers the necessary equipment to connect customers to the Internet and the LUS fiber network along with monitoring and maintenance services for these routers, switches and transceivers
- **Tower Lease Packages** – lease available space on up to 15 tower locations throughout the City for wireless applications

In 2008, LUS provided wholesale fiber service to 16 governmental, 15 wholesale, and 5 other customers, including tower lease and dark fiber leases.

Retail Service

Upon the issuance of the Communications System Revenue Bonds, Series 2007 (2007 Bonds) in June of 2007, LUS Fiber obtained the financing to launch a retail communications utility which will provide telephone, video (analog and advanced IP television) and Internet service. Provisioning retail services commenced during the 2008 fiscal year on a test basis to a small number of customers. Network expansion includes extending new fiber and distribution equipment off of the existing fiber to reach to reach every street and alley within the LUS service area. Additionally, as each new communications customer requests service, a fiber service drop will be constructed from the main fiber network to the residence or business. LUS Fiber will install inside wiring as necessary to provide services.

One important factor in provisioning retail services is customer feedback. Such feedback provides insight into customers' willingness to switch telecommunications service providers (e.g., churn) and selling by word of mouth. LUS does not currently have a process to track retail customer complaints. It is recommended that LUS develop a methodology for tracking customer feedback.

Personnel and Training

Staffing levels were found to be a major concern in the prior year's report. However, additional staff have been added during FY 2008 and the number of Full Time Employees (FTE) and temporary employees was 37 and 5, respectively, on October 31, 2008. LUS Fiber reports that the response to recent job openings has been high and there is a sufficient pool of applicants to draw from. LUS Fiber expects to hire an additional 21 new FTE during FY 2009, including 9 customer representatives.

Interviews with LUS Fiber staff discovered that some individuals may not be fully conversant with state-of-the-art technologies. This is partly due to the fact that the telecommunications industry is dynamic and consistently coming forward with new technologies. Consequently, it is recommended that LUS Fiber institute a training program and budget for its staff.

Billing System

As the number of LUS Fiber wholesale customers continued to increase and with the expectation of new retail customers in January 2009, the existing billing system was re-evaluated to determine if it could handle future demands. The current billing system requires manual handling to enter new customer information and review monthly bills. The staff time required for this manual review of customer billing could be used more efficiently towards improving the system or working towards gaining new customers. The addition of retail services also made it apparent that the existing billing system would not be able to meet the needs of the business. During the first quarter of 2008, LUS Fiber issued a Request for Proposals which resulted in the implementation of a new billing software system. The new billing system is expected to be fully operational during FY 2009.

Contracts and Pricing

LUS Fiber contracts with wholesale customers under a comprehensive standard service agreement for periods of 12 to 60 months. The agreements are flexible and allow customers to add or modify services within the broader terms and conditions set forth in the agreement.

Wholesale pricing is market based and designed to attract new customers. LUS routinely monitors competitor service offerings and prices to ensure cost competitiveness and strives to offer the lowest priced service for equivalent services. Wholesale customers may receive discounts based on the volume of fiber services and the length of the contract term. These incentives enhance the attractiveness of LUS' wholesale products and services.

LUS Fiber expects to take a similar approach to attract new retail customers by setting its retail rates at an average of 20 percent below market pricing. LUS Fiber will make it convenient for new customers to switch from the incumbent providers by offering a free standard installation for customers signing up for service during the initial rollout. Retail customers will not be required to execute contracts as services will be offered on a month to month basis.

Financial Performance

LUS Fiber purchased the fiber backbone and inventory from LUS and will reimburse the Utilities System for startup costs. The network was transferred to LUS Fiber on November 1, 2007. LUS Fiber will fund the purchase of the existing assets and startup costs by establishing an internal loan from the Utilities System with terms that generally match the Communications Bonds. The net book value of the existing fiber network has been estimated by LCG to be approximately \$30,709,328 (including construction work in progress). The total amount of 2007 Bond funds expensed as of October 31, 2008 are \$28,757,022.

Although the Communications Division is financially separate from the Utilities System, if the Communications Division defaults on the Communications Bonds, the Utilities System Residual Revenues will be used to cover any debt service shortfalls.

The composition of wholesale revenue by service category for years 2004 through 2008 are shown in Table 8-1. Retail revenue during this period did not exist.

Table 8-1
Wholesale Revenue Composition by Service Category by Percent of Total

Service Category	2004	2005	2006	2007	2008
Broadband	32.0	26.9	28.6	30.3	27.8
Internet	19.0	15.7	15.7	16.4	18.1
Local Loop	23.0	21.7	25.7	28.4	24.9
Other-Tower Lease	13.5	9.4	6.4	6.8	5.0

Service Category	2004	2005	2006	2007	2008
Customer Premises Equipment	6.1	7.8	11.1	14.2	14.6
Non-Reoccurring Connection Fees	2.9	15.1	8.7	2.3	6.1
Other-Dark Fiber	2.3	1.6	1.0	1.0	1.0
Other	<u>1.2</u>	<u>1.8</u>	<u>2.8</u>	<u>0.6</u>	<u>2.5</u>
Total	100.0	100.0	100.0	100.0	100.0

The above table indicates that broadband and local loop services have consistently been LUS Fiber's most significant sources of wholesale revenue, accounting for approximately 53 percent of total revenues during FY 2008.

Fiber wholesale revenues have been indicative of a start-up business with early high growth rates, as shown in Table 8-2. LUS Fiber reports that wholesale revenues have consistently exceeded its revenue projections.

Table 8-2
Wholesale Annual Revenues – LUS Fiber

	2004	2005	2006	2007	2008
Annual Revenues (\$)	762,256	1,272,639	1,744,139	1,866,739	2,120,276
Percent Change (%)	57	67	37	7	14

Source: LUS Financial and Operating Statements 2004-2008 audited.

In 2001, LCG began separately recording financial information related to the LUS Fiber. During 2008, LUS Fiber continued to work toward gaining the capability to access accounting data in a timely manner. Accounting reports appear to be accurate and available in a timely manner, thereby improving LUS Fiber's ability to react quickly to unanticipated changes in revenues and expenses.

Operating and Maintenance Expense

Operating and maintenance expense during the past five fiscal years are shown in Table 8-3 below.

Table 8-3
Operating and Maintenance Expense

	2004	2005	2006	2007	2008
Total (\$)	641,648	481,237	659,261	995,796	3,676,413
Percent Change (%)	13	(25)	37	51	270

Source: LUS Financial and Operating Statements 2004-2008 audited.

During FY 2008, the most significant sources of wholesale expense were classified as Plant Non-specific Expense and Corporate Expense, which includes Administrative

and General (A&G). These two categories accounted for approximately 66 percent of total annual expense.

Overhead Cost Allocation

The allocation of total overhead A&G costs to LUS Fiber has varied in the past. Currently, A&G costs are allocated based on each utility's share of O&M expenses (less fuel and purchased power for the Electric Utility). LCG has investigated how to best allocate costs to LUS Fiber and an Allocation Manual has been developed (effective January 30, 2009). LCG reports that such manual is based on the analysis and recommendations of an outside consultant (Maximus Financial Services, Inc.). Based on reports from LCG, it is R. W. Beck's opinion that this manual indicates LCG's and LUS Fiber's intent to be in compliance with the Local Government Fair Competition Act, No. 736 (effective July 6, 2004).

Video Programming

One of LUS Fiber's most significant operating costs is video programming. As of October 31, 2008, LUS Fiber has not been able to participate in purchasing video programs through a collective. However, discussions with LUS Fiber staff indicate that access to such collective packages may be changing. Consequently, it is recommended that LUS Fiber investigate alternative sources for purchasing video packages to reduce its operating expense.

System Condition and Capital Requirements

Fiscal Year 2008

LUS built the fiber optic network in 1999 and began transmitting working traffic in December 2000 for its own internal purposes. Service to wholesale customers began in May 2002 and to date, has exhibited high reliability. For example, the system remained operational during hurricanes Lili (2002), Rita (2005), Ike (2008) and Gustav (2008), which traveled in close proximity to Lafayette.

In February 2007, the Louisiana Supreme Court ruled in LUS' favor permitting the sale of bonds to finance building a retail fiber system. In November 2007, LUS began the implementation of a retail telecommunications business that will provide video, Internet, and telephone services to customers within the LUS electric system service territory known as the "Fiber to the Home" (FTTH) project. By the end of FY 2008, several test customers began utilizing retail services. LUS Fiber's formal launch of retail services is expected to begin in January 2009.

Total capital appropriations and expenditures for fiscal year 2008 are shown in Table 8-4 below.

Table 8-4
2008 Appropriations and Expenditures – LUS Fiber

Fiscal Year 2008	Amount (\$)
Appropriations	78,285,726
Expense	19,833,243

Capital was appropriated in 2008 for extensions to the fiber distribution system, circuit installations required to connect customers and purchase telecommunications equipment necessary to offer telephone, video, and Internet service to consumers in the City.

Communications Facilities

The estimated capital costs required to expand the telecommunications system are expected to be significant. Such funds are needed to construct network connections from the existing fiber backbone to each home or business that purchases telecommunications services from LUS Fiber. These estimated capital costs are based on the appropriation balance for fiscal years 2008 through 2013.

Physical Security

As of October 31, 2008, key telecommunications facilities (e.g., head end building and LUS Fiber office) did not have any physical security. It is recommended that LUS investigate the installation of a secure fence, keypad access and video surveillance at the head end building and LUS Fiber office.

Fiber Backbone and Capitalized Fiber Drops

The communications fiber network expansion will include extending new fiber and distribution equipment off of the existing fiber ring along every street and alley within the LUS service area. Additionally, as each new communications customer requests service, a fiber service drop will be constructed from the main fiber network at the street to the residence or business. As of October 31, 2008, the fiber backbone was nearly complete. In addition, as of October 31, 2008, other outside plant was approximately 10 percent complete.

LUS Fiber purchased the existing communication system network and inventory from LUS and will also reimburse LUS for startup costs. LUS Fiber is funding these purchases through three loans (Start-up Costs, LUS 2007 Expense and Asset Acquisition) with terms generally based on the terms of the Communications Bonds.

FTTH Network and Customer Premise Electronics

The Communications System's FTTH electronics consist of two components; base network electronics and electronics at each customer location. The base network electronics are the devices that integrate signals onto the fiber system and deliver high-speed data, video, and voice services throughout the fiber network. The electronics at

the customer premise consist of a device referred to as an ONT that converts the light signal from the network to electrical signals that provide telephone service, video service, and high-speed Internet service. ONT electronics will be installed as new customers request service. As of October 31, 2008, the base network was approximately 90 percent complete.

Video Head-end and Equipment

The video head-end consists of numerous devices needed to receive and disseminate video signals. It includes the dishes required to receive signals from satellites, a tower used to mount antennas to receive over-the-air channels such as local network stations, and electronics used to decode video signals and reformat the signal to be used by the FTTH network equipment. Video equipment also includes customer premise set top boxes for customers who subscribe to digital cable TV service. As of October 31, 2008, the video head-end and associated equipment was approximately 90 percent complete.

Telephone Switch

The telephone switch provides carrier-grade, traditional telephone services to business and residential customers. Services will include local dial tone, and local calling features such as caller ID, call waiting and access to long distance services. The switch will also support state-of-the-art Voice over Internet Protocol (VoIP) telephone sets and services. As of October 31, 2008, the telephone switch was approximately 90 percent complete.

Internet Equipment and Other Assets

Other assets include a hub for providing Internet and data services to customers, vehicles, computers, tools, and work equipment. This category also includes a new building to house the telephone switch, the cable TV head-end, and Internet equipment. As of October 31, 2008, Internet equipment had been installed and high speed Internet was provided to retail test customers. The majority of other supporting assets was obtained and is currently being utilized. The acquisition of several vehicles has been behind schedule, which has not adversely impacted LUS Fiber since the majority of construction has been performed by contractors.

Inventory

LUS Fiber will maintain a significant inventory that will include fiber, spare parts to back up all electronics systems and customer electronics, and set top boxes.

Software

LUS Fiber will require software for maintaining customer records and billing. Additional software is necessary to provide an operational support system for the automatic provisioning of services, customer premise equipment (CPE), inventory and scheduling personnel. As of October 31, 2008, the new billing system was nearly complete. New operational support system software is expected to be fully installed

during the middle of 2009. Separately, LUS Fiber has installed a network mode management software system (NMM) that continuously monitors the status of the network. As of October 31, 2008, the NMM was not fully installed and certain capabilities, such as automatic alarms, were not yet available. It is recommended that LUS Fiber continue to install the NMM and fully utilize its capabilities.

Insurance

As of October 31, 2008, LCG reported that the total amount of property insurance in effect for LUS Fiber was approximately \$1.7 million. At that point in time, the net book value of such assets was approximately \$30.7 million. LCG reported that insurance for the following items was “bare”: automobile liability, general liability, errors and omissions, automobile property damage and boilers and machinery. It should be noted that during 2009, LCG significantly increased the amount of insurance on LUS Fiber.

Maintenance

As of October 31, 2008, LUS Fiber did not have a formal maintenance program for its telecommunications plant. This is due, in part, to the fact that nearly all of its assets are fairly new and many of such assets are still under a manufacturer’s warranty. However, as telecommunications assets age, a maintenance program may become increasingly important and could proactively prevent service outages. Consequently, it is recommended that LUS Fiber develop a maintenance program for its telecommunications plant.

Rate Structure

LUS Fiber will allow LUS to offer what is commonly referred to as a triple-play of communications services at the retail level, as well as continuing to serve wholesale customers. Additionally, LUS will buy long distance minutes from a wholesale provider and offer low-cost long distance packages to its customers.

LUS Fiber plans to implement rate related recommendations. Such recommendations indicate that LUS Fiber’s rates for retail telephone, video and high-speed Internet services should reflect an average discount of 20 percent relative to the current market prices of incumbent service providers.

Environmental Issues

LUS Fiber is expected to have minimal environmental impact, although it will involve considerable activity around the City. Since the fiber optic cable will be primarily installed on existing overhead electric utility structures and along existing underground electric lines, the added physical and aesthetic impacts will be minimal. The impacts of installing new overhead lines will likely be limited to temporary local vehicle traffic flow interruptions. For those portions installed underground, impacts associated with site disturbance will be incurred at various locations where directional

boring machines will be positioned. The acquisition of new property for the proposed project is also expected to be limited. Any required acquisition will be made only after completing an environmental site assessment to ensure that potential environmental liabilities have been appropriately mitigated.

Recommendations

New and prior recommendations and their status are listed in Tables 8-5 below. The priority of such recommendations has been identified as being highest, high or normal. During FY 2008, LUS Fiber made significant progress on all recommendations that were noted in the previous Consulting Engineer's Report (CER). The highest priority items are the hiring and integration of new LUS Fiber staff, completion of a fully-embedded cost accounting and reporting procedure and achievement of market penetration.

Table 8-5
Recommendations – LUS Fiber

Telecommunications Issues	Priority	Status
LUS should focus on hiring additional staff to serve the LUS Fiber Utility customers.	Highest	In Progress
LUS should develop incremental and full-embedded cost financial reports and pricing analyses to evaluate the short-term and long-term profitability of the Fiber Utility business and specific service offerings	Highest	In Progress
Achieve forecasted retail market penetration rates	Highest	New
LUS should continue to evaluate how to market their wholesale and retail services within the telecommunications business.	High	In Progress
LUS must improve the flexibility and sophistication of its billing function and the interface of such function with the accounting system.	High	In Progress
Investigate insurance needs	High	New
Complete installation of the new billing system	High	New
Complete installation of new operational support system	High	New
Research reliability data acquisition and reporting	High	New
Track retail customer complaints	High	New
Improve physical security at the head end building/LUS Fiber office	High	New
LUS should continue reviewing how common costs are allocated to the Fiber Utility. The allocation methodology should consider cost causation	Normal	Complete and on-going
Provide on-going training for staff	Normal	New

COMMUNICATIONS SYSTEM

Telecommunications Issues	Priority	Status
Research video program packages to reduce costs	Normal	New
Develop a maintenance program	Normal	New
Research the implementation of alarm reports in the network mode management	Normal	New

Section 9 ENVIRONMENTAL ISSUES



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Section 9

ENVIRONMENTAL ISSUES

Introduction

The LUS Electric, Water and Wastewater Utilities, as well as the Communications System, are subject to various environmental permits, approvals, laws, rules, and regulations. This section provides a discussion of the current status of major environmental permits and potentially significant environmental liabilities for the Utilities System. This section is not meant to provide a comprehensive environmental compliance assessment of the system. The intent is to provide a description of our understanding of the status of the Utilities System with respect to requirements set forth in its permits and approvals, and applicable environmental laws and regulations. The information provided is based on review of documents provided by, and discussions with, persons providing information on behalf of the Utilities System and primarily addresses the major requirements that affect the electric, water and wastewater systems including: the Clean Air Act and the Clean Air Act Amendments of 1990 (CAA), the Clean Water Act (CWA), and the SDWA. Requirements of the CAA are addressed through a permit program administered by LDEQ and USEPA. Requirements of the CWA are administered through a permit process whereby any discharge into surface waters requires an NPDES permit (administered by the LDEQ under the Louisiana Pollutant Discharge Elimination System (LPDES) permit program). The SDWA establishes standards for public water systems, whereby tap water must meet certain quality standards for different chemicals as established by the USEPA.

In addition to the regulations discussed above, LUS facilities, operations and associated activities are subject to regulations that cover the following areas: waste storage and disposal, superfund liability, groundwater, underground and aboveground petroleum storage tanks, oil spills, emergency planning and community right-to-know, management of polychlorinated biphenyl compounds (PCB or PCBs), used oil, pesticides, wood poles, and asbestos.

Environmental Compliance Division

The Environmental Compliance Division operates under the supervision of Frank Ledoux, Engineering and Power Production Manager. Ms. Allyson Pellerin is the Environmental Compliance Manager for water and wastewater and Ms. Gini Ingram is the Air Quality Compliance Administrator. The Environmental Compliance Division supports the Utilities System in the following areas:

- Regulatory compliance for the electric, water, and wastewater divisions
- Administration of the Industrial Pretreatment Program

- Analytical services relative to analyses of drinking water, wastewater analysis and biosolids reuse

In 2008, the Environmental Compliance Division consisted of 20 full time employees. Currently, there are two vacant positions in the air quality area and two vacant positions in the water and wastewater area. Although the required workload demands have been met, it should be noted that the addition of the two electric generation stations during 2005 and 2006, and the additional regulatory obligations created by new Part 70 Operating Permits for each of the generation stations, has expanded the workload and breadth of responsibility of the Division in recent years. With the potential implementation of a mercury minimization program and compliance with CMOM requirements under the wastewater treatment plant LPDES permits (both possibly beginning in FY 2009), as well as the requirements for CAIR implementation and compliance, additional staff are needed to cover the additional workload. During the past few years, there has been considerable difficulty attracting and retaining qualified employees to help meet the expanded workload. However, due to the current economic situation and measures put in place by LUS to attract and retain employees, LSU staff report an increase in applicants who appear qualified to fill the vacant positions.

LUS has contracted with an environmental management system software supplier to help maintain and improve upon the existing programs under the Environmental Compliance Division. An environmental management system is currently being developed and implementation is in progress. Implementation is scheduled to be complete by the end of 2009.

Electric Generating Stations

LUS operates the Doc Bonin Plant, T. J. Labbé Plant, Hargis-Hébert Plant, and owns an interest in RPS2 in Boyce, Louisiana. Another LUS facility, the Curtis Rodemacher Station in Lafayette, is no longer in operation and is being decommissioned. A brief discussion of environmental compliance and environmental issues at each facility is provided in the sections below and a list of the major permits for each of the plants operated by LUS is provided in Table 9-1.

Table 9-1
List of Major Permits for LUS Electric Generating Stations

Permit	Responsible Agency	Expiration Date	Comments/Description
Doc Bonin Electric Generating Station			
Part 70 Operating Permit Number 1520-00002-V1 (Title V Air Permit)	LDEQ	March 24, 2011	Allows for the discharge of air pollutants from the turbine stacks and other emissions sources located at the site. Sets forth monitoring, recordkeeping, and reporting requirements.
Acid Rain Program Permit Number 1520-00002-IV1 (Title IV Air Permit)	USEPA	March 24, 2011	Allows for discharge of acid rain constituents from the turbine stacks and requires the owner to hold annual emissions allowances equal to applicable emissions.
Louisiana Pollution Discharge Elimination System Permit Number LA0005711	LDEQ	February 1, 2014	Issued January 9, 2009 with effective date February 1, 2009. Allows for the discharge of boiler blowdown, cooling tower blowdown, low volume wastewater, and stormwater runoff to the Vermilion River via local drainage. Sets forth monitoring, recordkeeping, and reporting requirements.
Clean Air Interstate Rule Permit	LDEQ	Permit not yet issued.	Not yet issued. LDEQ review in progress. Required for compliance with Clean Air Interstate Rule requirements.
T. J. Labbé Electric Generating Station			
Part 70 Operating Permit Number 1520-00128-V1 (Title V Air Permit)	LDEQ	October 8, 2013	Issued October 8, 2008. Allows for the discharge of air pollutants from the turbine stacks and other emissions sources located at the site. Sets forth monitoring, recordkeeping, and reporting requirements.
Acid Rain Program Permit Number 1520-00128-IV1 (Title IV Air Permit)	USEPA	October 8, 2013	Allows for discharge of acid rain constituents from the turbine stacks and requires the owner to hold annual emissions allowances equal to applicable emissions.
Clean Air Interstate Rule Permit No. 1520-00128-IR0	LDEQ	October 8, 2013	Issued October 8, 2008. Required for compliance with Clean Air Interstate Rule requirements.
Hargis-Hébert Electric Generating Station			
Part 70 Operating Permit Number 1520-00131-V1 (Title V Air Permit)	LDEQ	January 8, 2014	Issued January 8, 2009. Allows for the discharge of air pollutants from the turbine stacks and other emissions sources located at the site. Sets forth monitoring, recordkeeping, and reporting requirements.
Acid Rain Program Permit Number 1520-00131-IV1 (Title IV Air Permit)	USEPA	January 8, 2014	Allows for discharge of acid rain constituents from the turbine stacks and requires the owner to hold annual emissions allowances equal to applicable emissions.
Clean Air Interstate Rule Permit No. 1520-00131-IR0	LDEQ	January 8, 2014	Issued January 8, 2009. Required for compliance with Clean Air Interstate Rule requirements.

Source: LDEQ Permits

Doc Bonin Electric Generating Station

As discussed in detail in Section 5 of this Report, the Doc Bonin Plant is comprised of three steam electric generating units capable of firing natural gas and No. 2 fuel oil. Permits issued to the Doc Bonin Plant generally include all activities of the Walker Road Complex, which encompasses the Doc Bonin Plant, LUS administrative offices, warehouses, an automobile service station, and a waste collection facility.

NPDES Permit

As indicated in Table 9-1, the Doc Bonin Plant is subject to the requirements of an LPDES permit. LUS received a new permit in January 2009. The permit includes minor changes to discharge limits and the relaxation of monitoring frequencies for some compounds. Overall there are no concerns related to the new permit.

In 2008, LUS reports that a Stormwater Pollution Prevention Plan has been prepared and implemented pursuant to LPDES requirements. The plan is currently being revised to meet regulatory requirements. Completion of the revisions and implementation is scheduled by August 1, 2009. There was one exceedance of the total organic compounds limit in the LPDES permit reported on the Discharge Monitoring Report (DMR) for March 2008. The DMR for the first quarter of 2008 was submitted late. This appears to be due to procedural confusion and steps have been taken to prevent reoccurrence. No notices of violation were issued by LDEQ in 2008.

Air Permit

A final Part 70 Operating Permit was received during March 2006 for the Doc Bonin Plant. The permit allows for Unit 1 and Unit 2 to fire either natural gas or No. 2 fuel oil with little restrictions on emissions levels. For Unit 3, the permit allows for unlimited use of natural gas and continued restricted use of No. 2 fuel oil for periods when the natural gas supply is interrupted (not to exceed 150 hours per year). Historically, the units at the Doc Bonin Plant have rarely operated on No. 2 fuel oil.

The Part 70 Operating Permit contained a provision to perform emissions testing on each of the boiler units within 180 days of the issuance of the permit. Due to the infrequent operations of the units at the Doc Bonin Plant, LUS requested, and LDEQ approved, certain amendments to the Part 70 Operating Permit allowing LUS to perform these emissions tests at a later date. LUS successfully tested and demonstrated compliance for boiler Unit 1 in 2007. Testing on Unit 2 was completed the previous year and testing on Unit 3 will be completed in the future as unit operations allow.

Due to the construction date and size of Unit 3, emissions must also meet the requirements of the New Source Performance Standards (NSPS) under the CAA. During 2005, it was observed that the NO_x emissions from Unit 3 were not consistently meeting NSPS requirements. After identification and confirmation of this issue, LUS personnel provided a notification to LDEQ. Since that time, LUS personnel have provided LDEQ with an initial evaluation of potential operational or

equipment changes and the results of operational evaluation tests performed by Babcock and Wilcox (the boiler manufacturer). The test results suggest that increasing the minimum operating load level of the unit to approximately 75 MW will resolve this issue. LUS has submitted these suggestions to LDEQ. LDEQ has not provided an official response nor addressed the possibility of issuing LUS a Notice of Violation and monetary penalty for historic NO_x exceedances.

Pursuant to the requirements of Acid Rain Program under the CAA, all three units at the Doc Bonin Plant were equipped with a CEMS prior to 1996. LUS personnel report that during 2008 the CEMS complied with the applicable performance specifications for relative accuracy and quality assurance, the required quarterly CEMS reports were submitted to USEPA, and the applicable emissions allowance accounts were covered as necessary. Also during 2008, the CEMS were upgraded with new analyzers and replacement of major equipment. The Data Acquisition and Handling System was also replaced in order to comply with requirements for the Acid Rain program of 40 CAR Part 75. The CEMS will need certification in 2009, or when unit operations allow.

Pursuant to state requirements, an annual emissions inventory for the Doc Bonin Plant was submitted to LDEQ during 2008. Additionally, all necessary quarterly, semi-annual, and annual emissions compliance reports were submitted during 2008.

Oil Storage

The Doc Bonin Plant includes four large fuel storage tanks, which currently contain limited quantities of fuel oil sludge, as shown in Table 9-2 below. The majority of the No. 2 fuel in Tanks 1 and 2.

Table 9-2
Fuel Oil Storage Tanks

Tank	Type	Capacity (Gallons)	Contents (Gallons)
Tank No. 1	No. 2 Fuel Oil	440,000	6,700 ⁽¹⁾
Tank No. 2	No. 2 Fuel Oil	<u>1,443,000</u>	<u>50,000</u> ⁽¹⁾
No. 2 Fuel Oil Total		1,883,000	0
Tank No. 3	No. 6 Fuel Oil	2,538,000	6,000 ⁽²⁾
Tank No. 4	No. 6 Fuel Oil	<u>2,538,000</u>	<u>85,000</u> ⁽²⁾
No. 6 Fuel Oil Total		5,076,000	188,000 ⁽²⁾

(1) No. 2 Fuel Oil Sludge.

(2) No. 6 Fuel Oil Sludge.

Source: Gin Ingram, LUS, 3/16/09

Due to the condition of the tanks and associated piping, the tanks must be cleaned, inspected, and likely retrofitted with new piping and other associated peripheral equipment prior to future use.

The contents of Tank Nos. 3 and 4 were sold in 1999 (all that remains is sludge), and the Part 70 Operating Permit does not allow for the use of No. 6 fuel oil. LUS is in the process of removing the sludge and decommissioning of these tanks.

LUS has prepared and implemented a Spill Prevention Control and Countermeasure (SPCC) Plan and a Facility Response Plan for the Walker Road Complex and has indicated that no reportable spills occurred during 2008. The SPCC plan is currently being updated in accordance with regulatory requirements. It is noted that some aspects of the Facility Response Plan, including training, are currently in the implementation process.

T. J. Labbé Plant

As discussed in detail in Section 5 of this Report, the T. J. Labbé Plant is comprised of two natural gas fired simple-cycle combustion turbines. Construction was completed during 2005.

Air Permit

As indicated in Table 9-1 above, the T. J. Labbé Plant must maintain compliance with the requirements of its Part 70 Operating Permit and Acid Rain Program Permit. Due to recent federal regulatory changes applicable to combustion turbine units, LUS applied for several permit modifications in 2006 to provide clarity to the existing permit requirements. A modified permit was issued by LDEQ on October 8, 2008. Since there are slight differences in the Operating Permits for T. J. Labbé and Hargis-Hebert, another minor permit modification is in progress for T. J. Labbé in order to make the Operating Permit identical to the permit for Hargis-Hebert. Compliance during operations is demonstrated by monitoring fuel usage and quality, operating time, and NO_x emissions with a certified CEMS. LUS personnel report that during 2008 the CEMS have complied with the applicable performance specifications for relative accuracy and quality assurance, the required quarterly CEMS reports were submitted to USEPA, and the applicable emissions allowance accounts were covered as necessary. RATA testing was conducted on Unit 1 on May 14, 2008. As a result of Hurricane Gustav, the scheduled RATA on Unit 2 was missed and caused the unit to be down for a week. Unit 2 RATA was successfully completed on September 9, 2008.

Pursuant to state requirements, an annual emissions inventory for the T. J. Labbé Plant was submitted to LDEQ during 2008. Additionally, quarterly, semi-annual, and annual emissions compliance reports were submitted during 2008.

Wastewater Discharge

Process wastewater from the T. J. Labbé Plant, including cooling tower blow down and sanitary wastes, is discharged to the City's sewer system. The facility is not subject to the requirements of an Industrial Wastewater Discharge permit. Turbine water-wash wastes are collected in the water-wash drain tank, sampled and evaluated, and pumped to the City sewer system or picked up and disposed of by an outside contractor.

Oil Storage

Pursuant to recent regulatory changes and further changes during 2006, LUS must comply with certain SPCC planning requirements for the T. J. Labbé Plant by July 1, 2009. The site SPCC plan has recently been updated and implemented. LUS personnel indicated that no reportable spills occurred during 2008.

Hargis-Hébert Plant

As discussed in detail in Section 5 of this Report, the Hargis-Hébert Plant is comprised of two natural gas fired simple-cycle combustion turbines. Construction was completed during 2006.

Air Permit

As indicated in Table 9-1 above, the Hargis-Hébert Plant must maintain compliance with the requirements of its Part 70 Operating Permit and Acid Rain Program Permit. Due to recent federal regulatory changes applicable to combustion turbine units, LUS applied for several permit modifications in 2006 to provide clarity to the existing permit requirements. A modified permit was issued by LDEQ on January 8, 2009. Compliance during operations is demonstrated by monitoring fuel usage and quality, operating time, and NO_x emissions with a certified CEMS. LUS personnel report that during 2008 the CEMS have complied with the applicable performance specifications for relative accuracy and quality assurance, the required quarterly CEMS reports were submitted to USEPA, and the applicable emissions allowance accounts were covered as necessary. RATA testing for both units was successfully completed on May 13, 2008.

Pursuant to state requirements, an annual emissions inventory for the Hargis-Hébert Plant was submitted to LDEQ during 2008. Necessary quarterly, semi-annual, and annual emissions compliance reports were submitted during 2008.

Wastewater Discharge

Process wastewater from the Hargis-Hébert Plant, including cooling tower blow down and sanitary wastes, is discharged to the City's sewer system. The facility is not subject to the requirements of an Industrial Wastewater Discharge permit. Turbine water-wash wastes are collected in the water-wash drain tank, sampled and evaluated, and pumped to the city sewer system or picked up and disposed of by an outside contractor.

Oil Storage

Pursuant to recent regulatory changes and further changes during 2006, LUS must comply with certain SPCC planning requirements for the Hargis-Hébert Plant by July 1, 2009. The site SPCC plan has recently been updated and implemented. LUS personnel indicated that no reportable spills occurred during 2008.

RPS2 in Boyce, LA

As discussed in detail in Section 5, LUS has an interest in the coal-fired steam electric generating unit RPS2 through their interests in LPPA. Since the beginning of 2008, we are aware of the following developments at RPS:

- CLECO is in the process of constructing a new wholly owned coal-fired electric steam generating boiler unit, Unit 3, at RPS.
- During February 2006, LDEQ issued a renewed final NPDES permit (LAR10D337) allowing the continued disposal of wastewater and stormwater to the Red River Basin. CLECO personnel report that the contents of the draft permit represent a compromise between USEPA and LDEQ with regard to CWA 316(b) applicability. The compromise involves performing an impingement study of the cooling water intake structure. This study was performed during 2007 and submitted to LDEQ in January 2008. The renewed permit continues to reflect that the man-made discharge reservoir will not be classified as “Waters of the State.” We are of the understanding that this compromise does not represent a final resolution as to the applicability of 316(b). We note that the 316(b) regulations were stayed in 2007. It is not known at the time of this Report whether the rules will be implemented as written or undergo revisions. As discussed in past reports, in the event that at some time in the future it is found that RPS2 must comply with 316(b) regulations, the cost to comply is likely to be substantial.
- The Clean Air Interstate Rule (CAIR) was finalized by USEPA in March 2005. The details are discussed below. As a result of rule implementation, additional costs will likely be incurred by the Unit 2 owners (including LUS) to manage future emissions allowance programs for NO_x and a tightened availability of existing sulfur dioxide (SO₂) allowances. New low-NO_x burners were installed on the unit between October and December 2008 to reduce the costs of compliance with the NO_x emissions trading program. The unit is scheduled to begin operation with the new burners in 2009.

PCB Transformers

The electrical transmission and distribution system includes oil filled electrical equipment. Occasionally, replacements and repairs can require disposal of the oil filled contents. A portion of this equipment contains trace amounts of PCBs, which are regulated under the Toxic Substance Control Act. LUS manages their PCB-containing equipment as required by federal and state regulations. LUS indicated that there were no PCB transformers (transformers containing >500 ppm PCBs in the oil) in its inventory, and they have a program to systematically remove and replace transformers with PCB contamination (transformers with >51 ppm PCBs in the oil). As mentioned earlier, LUS manages the disposal of regulated and non-regulated wastes, including PCB contaminated wastes, from a facility at the Walker Road Complex.

Groundwater and/or Soil Contaminated Sites

Following is a review of environmental compliance activities and known instances of soil and/or groundwater contamination at facilities owned by LUS.

Grant Street Substation

In September of 1991, LUS undertook a project to install and upgrade the electrical capabilities of Grant Street Substation No. 2. During the course of the construction activities, visible traces of petroleum products were discovered in the shallow ground water. Construction was halted and the upgrade plan was suspended.

Subsequent investigations at the site revealed petroleum contamination in the groundwater at the site, under adjoining property not owned by LUS, and at the nearby Grant Street Substation No. 1. In 2000, LUS submitted a Risk Evaluation Corrective Action Plan (RECAP) to LDEQ. LUS submitted a RECAP sampling and analysis plan to LDEQ in early 2005 and the plan was approved in late 2005. Sampling performed during late 2005 indicated that the extent of the contamination plume had not yet been determined, so additional sampling and analysis is required. As part of the settlement, LUS purchased property adjacent to the Grant Street site. A building on the property was dismantled in 2007. However, the slab is still in place. LUS is waiting on an LDEQ determination before removal of the slab and underlying soil. LUS continues to work with LDEQ to resolve the issue and future costs associated with soil remediation of this site (Grant Street Substation No. 1 and Grant Street Substation No. 2) could be significant.

Curtis Rodemacher Decommissioning

The Curtis Rodemacher Power Plant has been retired and most of the facility is in the process of decommissioning. Thus far, a new fence has been installed and additional security measures have been implemented. Fuel oil tanks, small buildings, above ground piping, boilers, and cooling towers have been removed from the site. LUS is continuing to perform air monitoring at the site. Remaining tasks for decommissioning include: remediation of existing PCB contamination, asbestos, bio-hazards created from pigeons, and lead-based paint in the power plant building; demolition of the warehouse and power plant building; and removal of underground piping. With the exception of a few capacitors temporarily stored at the site, all oil and oil containing devices were removed from the site in 2008. Based on current knowledge of the environmental conditions at the site, the process of removing underground piping may identify contamination issues and trigger further remediation requirements. The decommissioning schedule and long-term plan for the site are still being evaluated and the future costs associated with remediation of the site could be significant.

Flanders Substation

On April 26, 2007, a reportable spill of approximately 500 gallons of non-PCB transformer oil occurred at the Flanders Substation when a gasket sealing the manway hatch of a transformer failed. The spill was completely contained on-site. Contaminated soil, shell, and limestone was excavated and removed from the site, along with five 55-gallon drums containing transformer oil, water, and used absorbent. LUS reports that all necessary regulatory obligations have been fulfilled and a verbal “No Further Action” has been communicated from LDEQ. However, as of the date of this Report, no written confirmation has been received.

Water Production and Distribution System

LUS reports that the North and South Water Treatment Plants are currently complying with their operating permits and meeting all applicable drinking water standards of the SDWA. The South Water Treatment Plant is permitted to discharge wastewater from the treatment of potable water, stormwater and sanitary wastewater under LPDES Permit LA0079278 with an effective date of June 1, 2003 and a term of five years. LUS submitted a timely renewal application and continues to operate under the conditions of the expired permit until a new permit is issued by LDEQ.

The North Water Treatment Plant is permitted to discharge wastewater associated with the treatment of potable water under NPDES permit LAG380000 with an effective date of January 1, 2005 and a term of five years.

A discussion of the drinking water quality, plant operation, and future regulatory requirements is provided in Section 6 of this Report.

Wastewater Collection and Treatment

The wastewater discharge permits for each of the four LUS wastewater treatment plants (Ambassador Caffery, East, South, and Northeast) require LUS to regularly test for compliance with permit conditions and report any violations or exceedances of permit limits, including bypass or overflow of wastewater. A discussion of the plant operation is provided in Section 7. A summary listing of the treatment plant permits is included in Table 9-3. It is noted that LPDES permits for the four LUS wastewater treatment plants expired November 1, 2008. LUS submitted timely renewal applications and has received draft permits from LDEQ. Operation continues under the expired permits until the final permits are issued by LDEQ.

**Table 9-3
List of Major Permits**

Permit	Responsible Agency	Expiration Date	Comments/Description
Ambassador Caffery Wastewater Treatment Facility			
Louisiana Pollution Discharge Elimination System Permit Number LA0042561	LDEQ	November 1, 2008	Allows the discharge of treated sanitary wastewater into the Vermilion River. Sets forth monitoring, recordkeeping, and reporting requirements.
East Wastewater Treatment Facility			
Louisiana Pollution Discharge Elimination System Permit Number LA0036382	LDEQ	November 1, 2008	Allows the discharge of treated sanitary wastewater into the Vermilion River. Sets forth monitoring, recordkeeping, and reporting requirements.
South Wastewater Treatment Facility			
Louisiana Pollution Discharge Elimination System Permit Number LA0036374	LDEQ	November 1, 2008	Allows the discharge of treated sanitary wastewater into the Vermilion River. Sets forth monitoring, recordkeeping, and reporting requirements.
Northeast Wastewater Treatment Facility			
Louisiana Pollution Discharge Elimination System Permit Number LA0036391	LDEQ	November 1, 2008	Allows the discharge of treated sanitary wastewater into Bayou St. Claire thence to the Vermilion River. Sets forth monitoring, recordkeeping, and reporting requirements.
Driftwood Subdivision Wastewater Treatment Facility			
Louisiana Pollution Discharge Elimination System Permit Number LA10103764	LDEQ	October 1, 2009	Allows discharge of treated sanitary wastewater into un-named ditch, then to Vermilion River. Sets forth monitoring, recordkeeping, and reporting requirements.

In 2008, LDEQ conducted inspections of the Sludge Landfarming Application, East Wastewater Treatment plant, and the South Wastewater Plant. These inspections were conducted on June 26, October 9, and October 21, respectively. No areas of concern were identified by LDEQ as a result of the inspections.

In 2008, EPA conducted an inspection/audit of the Ambassador Caffery plant which led to alleged violations related to Risk Management Plan requirements. LUS received an Expedited Settlement Agreement on December 10, 2008 and paid a fine of \$1,600. The matter is now closed. As a result of the inspection, Risk Management Plans are being review for each of the treatment plants and revisions/updates, if necessary for compliance, will be made.

The DMRs for the treatment plants were reviewed and several exceedances of permit discharge limits were noted. The exceedances were due to construction related activities, Hurricane Gustav, and unknown causes. There was no indication that any of the exceedances were caused by a recurring issue or problem. LUS reports that the treatment plants are current with all fees and report submittals and there were no public complaints in 2008. Also, a review of the treatment plant Stormwater Pollution

Prevention Plans is currently in progress to confirm the accuracy of the plans and update as necessary.

Industrial Pretreatment

The Industrial Pretreatment Program (Pretreatment Program) was implemented in 1984 and is mandated by LDEQ through the LPDES permits issued to the wastewater treatment plants. LUS manages and enforces the Pretreatment Program to protect the integrity of the wastewater treatment plants and fulfill the following objectives:

- Prevention of the introduction of pollutants into the Publicly Owned Treatment Works (POTW) which will interfere with the operation of the plants, including interference with its use or disposal of municipal sludge
- Prevention of the introduction of pollutants into the POTW, which will pass through the treatment works and enter waters of the state
- Reduction of the risk of exposure of workers to chemical hazards
- Improving opportunities to recycle and reclaim municipal and industrial wastewaters and sludge

The Pretreatment Program provides a service to the community by allowing industry to discharge pretreated wastewater, to be further treated at the wastewater treatment plants, in lieu of meeting water quality regulations required for direct dischargers to the waters of the state. The Pretreatment Program regulates significant industrial users with a Wastewater Discharge Permit program, which requires monthly reporting requirements and permit fees. Less significant users are regulated under a Best Management Practices program, which enforces a set of guidelines on specified types of industrial activity. With the potential requirements of a mercury minimization program under Wastewater Treatment Plant LPDES permits, the Pretreatment Program would need to adopt such requirements.

As required by the conditions of the LPDES permits, the 2007 Annual Pretreatment Report was submitted in early 2008.

Biosolids Beneficial Reuse Land Application Program

LUS utilizes a land farming program to use biosolids that are produced as a result of its wastewater operations and lime sludge from its water treatment plant operations. This program is operated under a Sewage Sludge Landfarming / Beneficial Reuse Operation Permit (number P-0147R1) issued by the LDEQ. A new permit was received in 2008. Compliance with the permit is demonstrated through the sampling, analysis, recordkeeping, and reporting. As required by the conditions of the permit, LUS reports that the necessary quarterly, semiannual and annual application and soil and sludge testing reports were submitted to LDEQ during 2008.

LUS has land applied wastewater treatment plant sludge since the 1950s, and has operated under a permitted land application program since 1987. The program is reported to utilize a total of six permitted land application properties totaling 1,767 acres, which is considered to be in excess of the requirements for the program. It is noted that the land owner agreements must be renewed every ten years and contain provisions to allow for termination with 90 days notice two years from the effective date of the agreement. Some land owners have dropped out of the program over the years and the area of other properties has been reduced due to development. The issue regarding a potentially dwindling base of eligible land application property is being evaluated by LUS, but as of the date of this Report, there are no concerns for the near future.

Spill Prevention Control and Countermeasure Plans

Electric generation facilities, electric substations, and water and wastewater treatment facilities that are located where oil (or fuel) from a spill could reach navigable waters, and have a storage capacity of more than 1,320 gallons at a single facility, must have an SPCC plan prepared in accordance with federal regulations. SPCC plans must also be consistent with the Spill Prevention and Control (SPC) Planning regulations of the state. Recent modifications, and proposed modifications, to the federal regulations include a requirement to review, revise, and implement SPCC plans for existing facilities and develop and implement SPCC plans for new facilities (constructed after July 2002) in accordance with the modified regulation by July 1, 2009. An important requirement of the revised SPCC regulation will be the implementation of a recognized engineering standard for inspection and maintenance of the large fuel storage tanks at the Doc Bonin Plant. Such a standard will require tanks to be drained, cleaned, and internally inspected on occasion. SPCC plans for each of the generation facilities have been updated and implemented in accordance with regulatory requirements.

Capital improvements related to hazardous material storage and containment at each generation station were completed in 2008. For the T. J. Labbé Plant and the Hargis-Hebert Plant, containment structures were designed and built to ensure that spare totes of water treatment chemicals are stored within adequate secondary containment. For the Doc Bonin Plant, a fireproof hazardous materials shelter was erected.

Future Environmental Regulatory Obligations

The CAIR program was to take effect in 2009 and impose a cap-and-trade program for both NO_x and SO₂. However, the U.S. Court of Appeals for the District of Columbia Circuit (the Court) decided on July 11, 2008, to vacate the CAIR in response to petitions for review challenging various aspects of the rule. At that time, the Court vacated CAIR and its associated Federal Implementation Plan in its entirety and remanded both to the USEPA to promulgate a rule that is consistent with the Court's opinion. On December 23, 2008, the Court issued an opinion in response to a petition

for rehearing by the USEPA. The Court held that CAIR shall remain in effect until USEPA promulgates a new regulation that addresses the flaws that lead to the Court's decision to strike down the CAIR. The specific changes to the rule to be made by USEPA and associated schedule for such changes are not known at the present time.

The CAIR rule applies to electric generating units that are currently subject to Title IV of the CAA (known as the Acid Rain Program, or ARP). The RPS, Doc Bonin Plant, T. J. Labbé Plant, and the Hargis-Hébert Plant are all subject to the CAIR. The rule will be implemented in two phases. Phase 1 NO_x reductions begin in 2009, while Phase 1 SO₂ reductions begin in 2010. Phase 2 reductions begin in 2015. Under the cap-and-trade program, existing sources will be allocated SO₂ allowances in proportion to the existing SO₂ allowances that were allocated under the ARP. The rule specifies a 50 percent reduction in allowances when compared to the ARP for 2010 and a 65 percent reduction for 2015. NO_x allowances are distributed to states which, in turn, distribute the allowances to the pool of affected emissions source owners. LDEQ has allocated NO_x allowances to facilities within the state based on historic operations. The NO_x allowances allocated to the LUS units, as well as RPS2, are shown in the table below. The allocation of SO₂ allowances will continue under the Acid Rain program. However, as noted above, two allowances will be required for each ton of emissions. Overall, the allocations of NO_x and SO₂ allowances to LUS plants, including RPS2, may not cover all emissions during future years. Under such circumstances, LUS will be required to purchase allowances to cover facility emissions. However, since all of the LUS units except for RPS2 are gas-fired, the cost to purchase additional SO₂ allowances, should additional allowances be required, is not expected to be significant.

Table 9-4
NO_x Allowance Allocations to LUS under the CAIR

Unit	<u>Annual NO_x Allocations (ton)</u>			<u>Ozone Season NO_x Allocations (ton)</u>		
	2009	2010	2011	2009	2010	2011
Doc Bonin 1	192	147	145	101	99	97
Hargis-Hébert	136	132	130	60	58	58
T. J. Labbé	136	132	130	60	50	58
Rodemacher No. 2	2,812	2,714	2,670	1,396	1,352	1,332

With regard to the Clean Air Mercury Rule (CAMR), petitions for review of two final rules promulgated by the USEPA were heard before a three judge panel of the United States Court of Appeals for the District of Columbia Circuit on December 6, 2007. The first rule removed coal and oil-fired electric generating units (EGUs) from the list of sources whose emissions are regulated under Section 112 of the CAA. The second rule set performance standards pursuant to Section 111 of the CAA for new coal-fired EGUs and established total mercury emission limits for states and certain tribal areas, along with a cap-and-trade program for new and existing coal-fired EGUs. This second rule was known as the CAMR. On February 8, 2008, the Court recommended

that these two rules be vacated. A mandate was issued by the Court on March 14, 2008, formally overturning the CAMR. Thus, the CAMR no longer exists. The regulation of mercury emissions from coal-fired EGUs now falls under the requirements of Section 112, Maximum Available Control Technology (MACT) standards. It is noted that there are no MACT standards in place at the current time and the timeframe for rule development is currently unknown.

Due to the fact that RPS2 is controlled only with a hot-side electrostatic precipitator and is fired with Powder River Basin coal, it is possible that emission controls, such as a baghouse and activated carbon injection, could be required to comply with requirements of the rule. Also, if the MACT standards are implemented for electric generating units, oil-fired units could also be affected. This would potentially make Doc Bonin Units 1, 2, and 3 subject to new regulations.

Control of greenhouse gases such as carbon dioxide (CO₂) is receiving a great deal of attention within the United States Congress and many state legislatures. The predominant sentiment is that regulation is inevitable and only the timing and method of regulation is unknown. The two primary methods of regulation are either a tax imposed on emissions or some form of a cap and trade system comparable to what presently exists for SO₂ and NO_x emissions. While the specific details are not presently known, and the financial impacts to specific EGUs cannot be determined without the benefit of such details, the cost impacts could be significant.

We note that it is far too early to determine the implications resulting from the vacation of CAMR and potential CO₂ legislation to LUS and the RPS2 stakeholders (including LPPA). However, the costs for compliance, particularly for RPS2, a coal-fired unit, could be significant.

Key Challenges, Issues, and Goals

The following is a list of current challenges, issues, and goals of the Environmental Compliance Division:

- Attraction and retention of qualified employees.
- Training of new employees to achieve proficiency in required environmental compliance monitoring and reporting activities.
- Implementation of additional obligations due to currently known and potential future regulatory changes.
- Implementation of the environmental information management system.

Recommendations

Recommendations and their status are provided in Table 9-5 below. We have indicated the priority of the recommendation as either highest, high or normal.

Table 9-5
Recommendations

Environmental Issues	Priority	Status
LUS should continue dialog with LDEQ regarding Doc Bonin Plant Unit 3 NO _x emissions compliance and evaluate the proposed compliance strategy, as operations allow, to bring this issue to a conclusion.	High	In Progress
LUS should continue to develop and implement a plan to clean and decommission the aboveground storage tanks and associated piping located the Doc Bonin Plant.	Normal	In Progress
LUS should monitor the monetary implications of the RPS2 environmental compliance obligations.	Normal	In Progress
LUS should continue to evaluate and update its environmental plans, including its SPCC plans, Facility Response Plan, Stormwater Pollution Prevention Plan, etc, to ensure that they include the latest changes to the respective regulations and facility infrastructure.	Normal	In Progress
LUS should monitor the development and implementation of the CAIR, regulations to control mercury and/or future MACT standards, and the potential for future green house gas regulations to ensure compliance strategies are implemented for all affected power plants.	Normal	In Progress

APPENDIX A

FINANCIAL AND STATISTICAL DATA

APPENDIX A

FINANCIAL AND STATISTICAL DATA

Financial and Statistical Data

The following financial and statistical data is related to the City of Lafayette and Lafayette Parish. This information was provided by LCG and is included in this Report as a requirement determined by LCG and LUS Bond Counsel.

Location and Area of the City

The City is located on the Vermilion River, approximately 30 miles from the Gulf of Mexico. The City is the Parish seat, which was created on January 17, 1823, and covers a total area of approximately 277 square miles. The area of the City is approximately 50 square miles.

Table A-1
City of Lafayette Population

Year	Population
1960	40,400
1970	68,908
1980	81,961
1990	94,440
2000	110,257
2006	114,214
2007	112,199
2008	111,088

Source: U.S. Census

Source: Louisiana Tech University

The trend in the assessed valuation of the City appears in the following table.

Table A-2
Assessed Value of Taxable Property

Fiscal Year	Assessed Value (\$1,000)	Fiscal Year	Assessed Value (\$1,000)
1996	388,979	2003	692,626
1997	471,750	2004	716,544
1998	503,704	2005	785,937

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Fiscal Year	Assessed Value (\$1,000)	Fiscal Year	Assessed Value (\$1,000)
1999	542,680	2006	826,075
2000	552,896	2007	864,797
2001	584,023	2008	905,005
2002	673,318	2009	1,129,670

Sources: City of Lafayette Comprehensive Annual Financial Report and Lafayette Parish Assessor.

A breakdown of the City's 2008 assessed valuation by classification of property follows:

Table A-3
Property Assessed Valuation

Classification of Property	2008 Assessed Valuation (\$)
Real Estate	\$833,597,745
Personal Property	271,974,645
Public Service Property	<u>24,098,020</u>
Total	\$1,129,670,410

Source: Lafayette Parish Assessor's Office

Millage Rates

The recent trend in the ad valorem tax rates levied within the boundaries of the City as follows:

Table A-4
Millage Rates

	2003	2004	2005	2006	2007	2008
Parish wide Taxes:						
Schools	4.59	4.59	4.59	4.59	4.59	4.59
School District No. 1	0.76	0.72	0.69	0.52	0.19	
Special	7.27	7.27	7.27	7.27	7.27	7.27
Special School Improvements	5.00	5.00	5.00	5.00	5.00	5.00
School 1985 Operation	16.70	16.70	16.70	16.70	16.70	16.70
Courthouse & Jail Maintenance	2.25	2.25	2.25	2.25	2.25	2.34
Library(1987-1996) (1997-2006)	2.80	2.80	2.80	2.80	2.91	2.91
Library(1979-1998) (1999-2008)	1.55	1.55	1.55	1.55	1.55	1.55
Library (2003-2013)	1.63	1.64	2.00	2.00	2.00	2.00

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	2003	2004	2005	2006	2007	2008
Health Unit Maintenance	1.00	0.99	0.99	0.99	0.99	0.99
Juvenile Detention Maintenance	1.13	1.13	1.13	1.13	1.13	1.13
Lafayette Economic Development Authority	1.92	1.79	1.92	1.92	1.92	1.58
Assessment District	1.56	1.56	1.56	1.56	1.56	1.56
Law Enforcement	16.79	16.79	16.79	16.79	16.79	16.79
Airport Maintenance	1.71	1.71	1.71	1.71	1.71	1.71
Minimum Security Maintenance	1.98	1.98	1.98	1.98	1.98	2.06
Bridges and Maintenance	4.01	4.01	4.01	4.01	4.17	4.17
Lafayette Parish Bayou Vermillion -						
Bond & Interest	0.45	0.20	0.20	0.20	0.20	0.20
Maintenance	0.75	0.75	0.75	0.75	0.75	0.75
Drainage Maintenance	3.34	3.34	3.34	3.34	3.34	3.34
Public Improvement Bonds	2.50	2.50	2.90	3.50	3.50	3.50
Teche-Vermillion Water District	1.00	1.00	1.00	1.00	1.48	1.26
Mosquito Abatement & Control	1.50	1.50	1.50	1.50	1.50	1.50
Other Parish and Municipal Taxes:						
Parish Tax (Inside Municipalities)	1.52	1.52	1.52	1.52	1.52	1.52
Parish Tax (Outside Municipalities)	3.05	3.05	3.05	3.05	3.05	3.05
Lafayette Centre Development District	10.36	10.15	10.91	10.91	10.91	10.91
City of Lafayette	17.81	17.81	17.81	17.81	17.81	17.81

Sources: Lafayette Parish Assessor and Lafayette Consolidated Government

Leading Taxpayers

The ten largest property taxpayers of the City and their 2008 assessed valuation follow:

Table A-5
Ten Largest Property Taxpayers

Name of Taxpayer	Type of Business	2008 Assessed Valuation (\$)
AT&T	Public Service	20,122,600
Stuller	Manufacturing	19,776,480
Iberia Bank	Bank	12,384,040
Walmart/Sams	Retail/Wholesale	11,786,720
JP Morgan Chase Bank	Bank	6,615,770
BJ Services	Oilfield Service	6,181,600
Whitney National Bank	Bank	5,254,790
Weatherford	Oilfield Service	5,169,960

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Name of Taxpayer	Type of Business	2008 Assessed Valuation (\$)
Service Chevrolet	Auto Dealer	4,931,970
Cox	Cable Company	<u>4,903,850</u>
		\$97,127,780 ⁽¹⁾

(1) Approximately 10.8 percent of the 2007 assessed valuation of the City.
Source: Lafayette Parish Assessor's Office

Short term Indebtedness

According to the Chief Financial Officer, the Lafayette City-Parish Consolidated Government has no short term indebtedness, other than normal accounts payable or as otherwise disclosed in this Official Statement.

Default Record

According to the Chief Financial Officer, the Lafayette City-Parish Consolidated Government has never defaulted in the payment of its outstanding bonds or obligations.

Bank Balances

The Governing Authority reported the following balances in its various funds as of October 31, 2007:

Table A-6
Bank Balances

General Operating Funds	Cash and Investments (\$)
101 GENERAL FUND	30,838,995.74
102 PROPERTY TAX ESCROW FUND	21,698.95
105 GENERAL FUND-PARISH	9,846,822.67
154 FTA PLANNING GRANT FUND 07/08-06/09	(4,612.49)
155 FHWA PLANNING GRANT FUND 07/08-06/09	(78,827.09)
159 ACADIANA RECOVERY CENTER NON-GRANT FUND	423,231.53
161 FHWA 149/MPO (STP-2808-503) GRANT	(9,577.04)
168 LA SUPREME COURT DRUG CRT OFFICE GRANT 07/08-06/09	(12,872.60)
170 SAFE & DRUG FREE SCHOOLS GRT FUND FY 07/07-06/08	(73.12)
180 URBAN INFILL HOME PROGRAM FUND	623,852.48
181 DHH-GOVERNOR'S INITIATIVE HEALTH GRANT 08/07-06/08	(12,685.11)
183 WIA-STEP GRANT 07/08-06/09	(3,926.60)
184 DISABILITY NAVIGATOR PROGRAM GRANT 07/08-06/09	(674.76)
185 WIA-TITLE IB ADULT GRANT 07/08-06/09	32,878.03
186 WIA-TITLE IB YOUTH GRANT 07/08-06/09	(16,335.88)
187 WIA-TITLE IB DISLOCKED WORKER GRANT 07/08-06/09	(647.77)
189 T & T MPO-SAFE COMMUNITY GRANT 10/07-09/08	(1,508.31)

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General Operating Funds		Cash and Investments (\$)
190	FTA PLANNING GRANT FUND 07/07-06/08	(9,339.50)
191	FHWA PLANNING GRANT FUND 07/07-06/08	(61,959.65)
192	FHWA-FRONTAGE ROAD STUDY	(103,397.62)
194	FHWA 194/MPO (STP-2805-502) GRANT	(22,839.56)
203	TRANSIT SYSTEM	(1,291,811.57)
206	ANIMAL SHELTER	203,472.39
210	HOME PROGRAM FUND FY 99/00	1,284.32
211	HOME PROGRAM FUND FY 00/01	(22,207.95)
213	HOME PROGRAM FUND FY 01/02	(11,005.73)
214	HOME PROGRAM FUND FY 02/03	11,186.23
216	HOME PROGRAM FUND FY 03/04	(1,737.77)
217	HOME PROGRAM FUND FY 04/05	(31,400.13)
218	HOME PROGRAM FUND FY 05/06	6,306.90
219	HOME PROGRAM FUND FY 06/07	6,401.34
220	HOME PROGRAM FUND FY 07/08	(48,011.87)
221	HOME PROGRAM FUND FY 08/09	(6,194.76)
224	EMERGENCY SHELTER GRANT FUND	(14,018.93)
227	WIA-NEG GRANT-HURRICANE GUSTAV FUND	(8,469.60)
230	COMMUNITY DEVELOPMENT FUND FY 07/08	(90,034.54)
232	FHWA COMPREHENSIVE LAND USE PLAN GRANT	(27,282.49)
233	COMMUNITY DEVELOPMENT 00/01	(58,261.64)
234	COMMUNITY DEVELOPMENT 01/02	(23,228.70)
235	COMMUNITY DEVELOPMENT 02/03	(7,734.00)
236	COMMUNITY DEVELOPMENT 99/00	(17,337.52)
240	URBAN DEVELOPMENT ACTION GRANT	39.44
241	HUD HOUSING LOAN PROGRAM FUND	834,846.35
242	COMMUNITY DEVELOPMENT FUND FY 04/05	(6,709.49)
244	COMMUNITY DEVELOPMENT FUND FY 06/07	0.10
246	COMMUNITY DEVELOPMENT FUND FY 08/09	(52,941.32)
252	STATE SEIZED/FORFEITED PROPERTY FUND	18,585.96
253	FED. NARCOTICS SEIZED/FORFEITED PROPERTY	10,155.43
255	CRIMINAL NON-SUPPORT FUND	(105,926.96)
260	ROAD & BRIDGE MAINTENANCE FUND	3,707,185.37
261	DRAINAGE MAINTENANCE FUND	4,366,713.34
263	LIBRARY FUND	15,831,591.45
264	COURTHOUSE COMPLEX FUND	993,457.24
265	JUVENILE DETENTION FACILITY FUND	731,789.23
266	PUBLIC HEALTH UNIT MAINTENANCE FUND	2,558,641.38
268	CRIMINAL COURT FUND	(1,667,997.87)
271	MOSQUITO ABATEMENT & CONTROL FUND	2,772,786.84
272	JUSTICE DEPT FEDERAL EQUITABLE SHARING FUND	134,292.55
277	CRIMINAL JUSTICE SUPPORT SERVICES FUND	30,301.04
280	HUD SECTION 8 HOUSING FUND	7,926.24
281	DHH ACADIANA RECOVERY INPATIENT FUND 07/07-06/08	80,840.44
282	ARC-US PROBATION OUTPATIENT 10/07-09/08	(4,114.05)
284	ARC-US PROBATION OUTPATIENT 10/08-09/09	(8,279.62)
286	DHH ACADIANA RECOVERY INPATIENT FUND 07/08-06/09	(20,344.96)

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General Operating Funds		Cash and Investments (\$)
297	PARKING PROGRAM	259,997.09
298	ENVIROMENTAL SERVICES FUND	(1,153,482.43)
299	CODES & PERMITS FUND	3,672,731.58
599	COMBINED GOLF COURSES FUND	(81,657.34)
601	PAYROLL FUND	649,495.62
605	UNEMPLOYMENT COMPENSATION	(2,659.43)
607	GROUP HOSPITALIZATION	11,568,293.57
610	HURRICANE KATRINA FUND	2,695,729.11
611	HURRICANE RITA FUND	331,383.33
612	BNSF TRAIN DERAILMENT 05/08	(76,739.71)
613	HURRICANE GUSTAV FUND	(927,783.03)
701	CENTRAL PRINTING	50,330.63
702	VECHICLE MAINTENANCE	3,723,676.53
Total General Operating Funds		90,940,269.93

General Operating Funds:

Debt Service Funds:

215	1961 CITY SALES TAX TRUST FUND	388.83
222	1985 CITY SALES TAX TRUST FUND	
290	TIF CITY SALES TAX TRUST FUND-MM101	119,270.26
291	TIF CITY SALES TAX TRUST FUND-MM103	328.15
302	1961 SALES TAX BOND SINKING FUND	7,929,418.41
303	1961 SALES TAX BOND RESERVE FUND	16,628,638.56
304	1985 SALES TAX BOND SINKING FUND	3,946,505.10
305	1985 SALES TAX RESERVE FUND	14,363,930.71
306	CONTINGENCY SINKING FUND-PARISH	1,472,501.39
310	PARISH CERT OF INDEBT SINKING FUND-1999	103,226.25
801	CONSOLIDATED SEWERAGE SINKING FUND	712,655.47
821	CONSOLIDATED PAVING SINKING FUND	<u>397,942.45</u>
Total Debt Service Funds		45,674,805.58

Construction Funds:

401	SALES TAX CAPITAL IMPROVEMENT FUND	30,635,395.69
402	PARISH LIBRARY GENERAL OBLIG. BOND CONST.	5,354,505.03
403	PARISH CERTIFICATES OF INDEBTEDNESS FD	170,414.06
404	PARISH GENERAL OBLIGATION BOND CONST.	4,556,416.28
405	PARISH GENERAL OBLIGATION BOND CONST.	6,516,703.60
406	1989 SALES TAX BOND CONSTRUCTION	6,620,445.49
417	1993 SALES TAX BOND CONSTRUCTION	67,228.18
419	1997A SALES TAX BOND CONSTRUCTION	276,036.45
420	1997B SALES TAX BOND CONSTRUCTION	742,717.12
421	1998 SALES TAX BOND CONSTRUCTION	276,663.21
422	1999B SALES TAX BOND CONSTRUCTION	789,275.72
423	1999A SALES TAX BOND CONSTRUCTION	75,771.70

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General Operating Funds		Cash and Investments (\$)
424	2000B SALES TAX BOND CONSTRUCTION	456,627.10
425	2000A SALES TAX BOND CONSTRUCTION	170,190.29
426	2001A SALES TAX BOND CONSTRUCTION	3,029,549.98
427	2001B SALES TAX BOND CONSTRUCTION	3,129,181.64
428	2002A SALES TAX BOND CONSTRUCTION	1,019,355.15
429	2003B SALES TAX BOND CONSTRUCTION	2,725,304.26
430	2003C SALES TAX BOND CONSTRUCTION	301,609.49
431	2003D SALES TAX BOND CONSTRUCTION	3,859,886.21
432	2004 SALES TAX BOND CONSTRUCTION	5,102,317.58
433	2005C SALES TAX BOND CONSTRUCTION	1,446,222.31
434	2007 SALES TAX BOND CONSTRUCTION	13,308,170.51
435	2007B SALES TAX BOND CONSTRUCTION	1,573,999.08
436	2008 SALES TAX BOND CONSTRUCTION	<u>(73,176.03)</u>
Total Construction Funds:		92,130,810.10
Other:		
602	FIREMEN'S PENSION FUND	1,565,992.34
603	POLICE PENSION FUND	2,931.50
604	RISK MANAGEMENT FUND	<u>1,928,653.12</u>
Total Other		3,497,576.96
General Operating Funds:		
Utilities System Funds:		
501	RECEIPTS FUND	277,183.53
502	OPERATION AND MAINTENANCE	14,195,955.58
503	BOND & INTEREST	
504	CAPITAL ADDITIONS FUND	78,330,168.62
505	SECURITY DEPOSIT FUND	5,970,953.18
506	BOND RESERVE FUND	18,657,478.86
529	2004 BOND CONSTRUCTION FUND	<u>14,079,980.55</u>
Total Utilities System Fund		131,511,720.32
General Operating Funds:		
LUS Communications System Accounts:		
531	RECEIPTS ACCOUNT	0
532	OPERATING ACCOUNT	4,963,018.86
533	DEBT SERVICE ACCOUNT	8,779,090.83
537	CAPITAL ADDITIONS ACCOUNT	784,969.25
539	BOND CONSTRUCTION ACCOUNT	<u>77,140,274.12</u>
Total LUS Communications System Accounts		91,667,353.06
TOTAL ALL FUNDS		<u>504,387,194.70</u>

Economic Indicators

A comprehensive revision of the estimates of Per Capita Personal Income by State was published in April 2007 by the Bureau of Economic Analysis of the U.S. Department of Commerce. The recent trends in revised per capita personal income from Lafayette Parish, Louisiana, and the United States are indicated in the following table:

Table A-7
Per Capita Personal Income

	2001	2002	2003	2004	2005
Lafayette Parish (\$)	28,951	29,192	29,934	31,279	32,892
Louisiana (\$)	24,702	25,219	25,819	27,088	24,664
United States (\$)	30,562	30,795	31,466	33,090	34,471

Source: U.S. Department of Commerce, Bureau of Economic Analysis. April, 2007.

(The personal income level for the United States is derived as the sum of the county estimates; it differs from the national income and product accounts (NIPA) estimate of personal income because by definition, it omits the earnings of Federal civilian and military personnel stationed abroad and others. It can also differ from the NIPA estimate because of different data sources and revision schedules.)

Effective Buying Income

Table A-8
Median Household Effective Buying Income

Year	Lafayette Parish	City of Lafayette	Louisiana	Nation
2004 (\$)	36,854	35,580	32,993	39,324

Source: 2005 Survey of Buying Power, Sales and Marketing Management, 770 Broadway, New York, New York 10003.

Employment

The Louisiana Department of Labor has issued revised not seasonally adjusted annual average statistics for various employment areas within Louisiana. The revised not seasonally adjusted annual average figures for Lafayette Parish and the State were reported as follows:

Table A-9
Lafayette Parish Labor Statistics

Year	Labor Force	Employment	Unemployment	Parish Rate	State Rate
2000	97,296	93,576	3,720	3.80	5.00
2001	99,779	95,858	3,921	3.90	5.40
2002	98,724	94,269	4,455	4.50	5.90
2003	98,798	94,035	4,763	4.80	6.30
2004	99,691	95,371	4,320	4.30	5.70
2005	104,920	99,431	5,489	5.20	7.10
2006	107,748	104,830	2,918	2.70	4.00
2007	108,205	105,276	2,929	2.70	3.80
2008 ⁽¹⁾	110,553	106,528	4,025	3.60	5.50

(1) Preliminary figures as of February 2008.

Source: Louisiana Department of Labor

The following table shows the composition of the employed work force in the Lafayette MSA.

Table A-10
Non-Farm Wage and Salary
Employment by Major Industry
(Employees in thousands)

	February 2007	March 2007	February 2008	April 2009
Mining	15.70	15.70	16.40	17.0
Construction	6.60	6.60	6.50	6.90
Manufacturing	9.00	9.20	10.50	9.90
Trade, Transportation, & Utilities	28.80	28.90	28.60	29.10
Information	2.80	2.80	3.40	3.20
Financial Activities	8.90	8.90	9.50	8.50
Professional And Business Services	17.40	17.60	17.50	17.70
Educational and Health Services	21.00	21.10	20.80	21.20
Leisure and Hospitality	14.80	14.90	14.90	14.70
Other Services	4.90	5.00	4.90	5.10
Government	<u>16.20</u>	<u>16.30</u>	<u>16.80</u>	<u>17.60</u>
Total	<u>146.10</u>	<u>147.00</u>	<u>149.80</u>	<u>150.90</u>

Source: Louisiana Department of Labor

Table A-11
Annual Average Lafayette Parish Concurrent Economic
Indicators, 2003 – 2006 and 3rd Quarter 2007
 (All data not seasonally adjusted)

	2004	2005	2006	2007:3	2008:3
EMPLOYMENT					
Total	118,579	122,975	129,748	135,136	135,617
Agriculture, Forestry, Fishing, and Hunting	143	144	135	143	121
Mining	12,488	13,076	14,793	15,969	16,758
Utilities	467	467	475	497	486
Construction	5,846	5,990	6,071	6,060	6,358
Manufacturing	6,826	7,437	8,108	9,281	8,863
Wholesale Trade	5,691	6,146	6,244	7,003	7,166
Retail Trade	14,790	15,302	15,799	15,570	15,795
Transportation & Warehousing.	3,985	3,994	4,392	4,236	4,503
Information	2,977	3,233	3,201	3,443	3,254
Finance & Insurance	3,279	3,266	3,365	3,266	3,173
Real Estate and Rental and Leasing	3,949	4,097	4,338	4,845	4,213
Professional & Technical Services	6,493	6,644	7,086	7,518	7,810
Management of Companies and Enterprises	2,410	2,447	2,844	3,089	2,815
Administrative and Waste Services	5,259	5,467	6,201	6,662	6,600
Educational Services	6,823	7,296	7,624	7,759	7,333
Health Care and Social Services	17,710	18,195	18,603	18,790	19,249
Arts, Entertainment, and Recreation	1,996	1,761	1,866	2,021	2,120
Accommodation and Food Services	10,874	11,544	12,068	12,258	12,164
Other Services, except Public Administration	3,199	3,078	3,143	3,101	3,245
Public Administration	3,249	3,284	3,256	3,405	3,426
EARNINGS (\$1,000)	Annual	Annual	Annual	Quarterly	Quarterly
Total	\$4,021,835	\$4,384,564	\$5,068,989	\$1,367,250	\$14,554,567
Agriculture, Forestry, Fishing, and Hunting	3,735	3,268	3,223	812	743
Mining	767,409	856,034	1,063,767	287,512	322,466
Utilities	17,926	19,168	18,891	5,551	6,231
Construction	197,486	215,421	255,701	60,890	69,710
Manufacturing	253,780	274,202	326,812	102,462	101,132
Wholesale Trade	248,543	284,550	310,736	86,094	93,246
Retail Trade	317,563	350,468	378,298	93,244	98,434
Transportation & Warehousing.	152,894	152,709	175,980	41,916	46,107
Information	93,825	106,637	106,787	31,844	31,702
Finance & Insurance	148,178	160,803	168,855	41,994	39,559
Real Estate and Rental and Leasing	164,844	178,778	223,164	65,396	58,912
Professional & Technical Services	296,370	320,247	371,149	96,403	105,764
Management of Companies and Enterprises	109,244	130,010	179,303	50,706	49,015
Administrative and Waste Services	122,942	140,129	182,918	49,813	49,818
Educational Services	234,401	241,487	260,206	71,114	76,951
Health Care and Social Services	548,844	584,985	634,529	169,720	185,564
Arts, Entertainment, and Recreation	24,968	24,538	24,278	7,225	7,674

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	2004	2005	2006	2007:3	2008:3
Accommodation and Food Services	124,165	140,961	167,913	44,870	46,903
Other Services, except Public Administration	70,340	71,454	84,072	21,741	23,912
Public Administration	120,565	124,953	126,387	35,469	39,907

Source: Louisiana Department of Labor

The names of several of the largest employers located in City of Lafayette are as follows:

Table A-12
Largest Employers in the City of Lafayette

Name of Employer	Type of Business	Approximate No. of Employees
School Board Lafayette Parish	Education	4,250
Lafayette Consolidated Government	Public Administration	2,008
Univ of LA Lafayette	Education	1,900
Lafayette General Medical Ctr	Healthcare	1,757
Wal-Mart Stores, Inc.	Retail Trade	1,664
Island Operating Company	Oil and Gas	1,500
Stuller Inc.	Manufacturing	1,471
Halliburton Energy Svc	Oil and Gas	1,371
Our Lady of Lourdes Reg Med Ct	Healthcare	1,310

Source: Lafayette Economic Development Authority

There can be no assurance that any employer listed will continue to locate in the City or continue employment at the level stated.

Table A-13
Summary Debt Statement as of May 2, 2009

Type of Obligation	Principal Outstanding (\$)
A. Direct Debt of the City of Lafayette	
Sales Tax Bonds	261,520,000
Utilities Revenue Bonds	193,255,000
Taxable Revenue Bonds	41,940,000
Communications System Revenue Bonds	110,405,000
B. Overlapping Debt of the Parish of Lafayette	
Unlimited Ad Valorem Tax Bonds	46,405,000
Certificates of Indebtedness	1,025,000
C. Overlapping Debt of the Lafayette Parish School Board	
Sales Tax Bonds	59,880,000
Certificates of Indebtedness	11,585,000
D. Overlapping Debt of Lafayette Parish Bayou Vermilion District	
General Obligation Bonds	1,675,000

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	Type of Obligation	Principal Outstanding (\$)
F.	Overlapping Debt of the Lafayette Public Power Electric Revenue Refunding Bonds	75,305,000
F.	Partially Underlying Debt of Lafayette Parish Water Revenue Bonds	6,121,581
G.	Partially Underlying Debt of Lafayette Parish Water Revenue Bonds	4,208,000

(1) Excludes LCDA QZAB loan in the original principal amount of \$3,001,060, with a final maturity date of November 15, 2015, payable from available funds of the Lafayette Parish School Board.

Note: (The above statement excludes the outstanding indebtedness of the Lafayette Airport Commission, certain Mortgage Revenue Bonds of the Parish, certain Industrial Development Revenue Bonds of the Lafayette Economic Development Authority (formerly the Lafayette Harbor, Terminal and Industrial Development District) and certain mortgage revenue bonds of Lafayette Parish Public Trust Financing Authority.)

Table A-14
Statement of Direct, Overlapping and Underlying
Bonded Debt as of May 2, 2009
(The accompanying notes are an integral part of this statement.)

Notes	Name of Issuer & Issue	Interest Rates (%)	Dated Date	Final Maturity Date	Principal Outstanding (\$)	Principal Amount Due Within One Year (\$)
(1)	Direct Debt of the City of Lafayette					
(2)	Public Improvement Sales Tax Bonds, Series 2000A	5.3	11/01/00	03/01/10	435,000	435,000
(2)	Public Improvement Sales Tax Bonds, Series 2001A	4.0-5.75	12/01/01	03/01/26	18,600,000	695,000
(2)	Public Improvement Sales Tax Bonds, Series 2003A	4.25-6.25	01/01/03	03/01/27	9,285,000	390,000
(2)	Public Improvement Sales Tax Refunding Bonds, Series 2003	3.45-4.3	02/20/03	03/01/18	9,750,000	860,000
(2)	Public Improvement Sales Tax Bonds, Series 2003C	4.0-6.0	11/01/03	03/01/28	6,645,000	225,000
(2)	Public Improvement Sales Tax Refunding Bonds, Series 2005	3.25-5.0	03/22/05	03/01/24	40,460,000	1,990,000
(2)	Public Improvement Sales Tax Bonds, Series 2005B	4.0-6.0	06/01/05	03/01/30	23,090,000	120,000
(2)	Public Improvement Sales Tax Refunding Bonds, Series 2006B	4.0-4.35	09/09/06	03/01/25	10,195,000	60,000
(2)	Public Improvement Sales Tax Bonds, Series 2007A	4.0-7.0	08/01/07	03/01/32	16,800,000	395,000
(3)	Public Improvement Sales Tax Bonds, Series 2000B	5.75	11/01/00	05/01/10	570,000	570,000
(3)	Public Improvement Sales Tax Bonds, Series 2001B	4.0-5.75	12/01/01	05/01/26	12,985,000	485,000
(3)	Public Improvement Sales Tax Bonds, Series 2003B	4.25-6.25	01/01/03	05/01/27	12,680,000	270,000
(3)	Public Improvement Sales Tax Bonds, Series 2003D	4.0-5.75	11/01/03	05/01/28	15,450,000	115,000
(3)	Public Improvement Sales Tax Refunding Bonds, Series 2004	3.25-5.0	02/03/04	05/01/15	12,160,000	3,935,000
(3)	Public Improvement Sales Tax Refunding Bonds, Series 2004A	3.0-4.3	05/01/04	05/01/20	2,690,000	195,000

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Notes	Name of Issuer & Issue	Interest Rates (%)	Dated Date	Final Maturity Date	Principal Outstanding (\$)	Principal Amount Due Within One Year (\$)
(3)	Public Improvement Sales Tax Refunding Bonds, Series 2005A	4.0-5.0	03/22/05	05/01/24	20,960,000	1,095,000
(3)	Public Improvement Sales Tax Bonds, Series 2005C	4.0-5.5	06/01/05	05/01/30	2,190,000	60,000
(3)	Public Improvement Sales Tax Refunding Bonds, Series 2006A	4.0-4.35	09/07/06	05/01/25	13,130,000	80,000
(3)	Public Improvement Sales Tax Refunding Bonds, Series 2006C	4.0-5.0	11/30/06	05/01/23	31,345,000	1,640,000
(3)	Public Improvement Sales Tax Bonds, Series 2007B	4.5-6.0	08/01/07	05/01/32	2,100,000	50,000
(4)	Utilities Revenue Bonds, Series 1996	2.95	08/22/96	11/01/17	9,265,000	915,000
(4)	Utilities Revenue Bonds, Series 2004	4.0-5.25	08/10/04	11/01/28	183,990,000	0
(5)	Taxable Refunding Bonds, Series 2002	4.4-5.75	11/07/02	05/01/28	41,940,000	1,340,000
(6)	Communication System Revenue Bonds, Series 2007	4.0-5.25	06/28/07	11/01/31	110,405,000	0
(7)	Overlapping Debt of the Parish of Lafayette					
(8)	General Obligation Bonds, Series 2001 (a) (Roads)	4.0-5.75	12/01/01	03/01/26	8,290,000	300,000
(8)	General Obligation Bonds, Series 2001 (b) (Drainage)	4.0-5.75	12/01/01	03/01/26	2,680,000	100,000
(8)	General Obligation Bonds, Series 2001 (c) (Fire Protection)	4.0-5.75	12/01/01	03/01/26	410,000	15,000
(8)	General Obligation Bonds, Series 2001 (d) (Jail)	4.0-5.75	12/01/01	03/01/26	1,700,000	65,000
(8)	General Obligation Bonds, Series 2001 (e) (Courthouse)	4.0-5.75	12/01/01	03/01/26	405,000	15,000
(8)	General Obligation Bonds, Series 2001 (f) (Recreation)	4.0-5.75	12/01/01	03/01/26	325,000	10,000
(8)	General Obligation Bonds, Series 2003 (a) (Roads)	3.875-5.0	12/01/03	03/01/28	5,440,000	170,000
(8)	General Obligation Bonds, Series 2003 (b) (Drainage)	3.875-5.0	12/01/03	03/01/28	3,410,000	110,000
(8)	General Obligation Bonds, Series 2003 (c) (Fire Protection)	3.875-5.0	12/01/03	03/01/28	170,000	5,000
(8)	General Obligation Bonds, Series 2003 (d) (Jail)	3.875-5.0	12/01/03	03/01/28	2,505,000	80,000
(8)	General Obligation Bonds, Series 2003 (e) (Courthouse)	3.875-5.0	12/01/03	03/01/28	865,000	25,000
(8)	General Obligation Bonds, Series 2003 (f) (Recreation)	3.875-5.0	12/01/03	03/01/28	560,000	15,000
(8)	General Obligation Bonds, Series 2003 (g) (Library)	3.875-5.0	12/01/03	03/01/28	6,300,000	200,000
(8)	General Obligation Bonds, Series 2005	4.0-5.0	06/01/05	03/01/30	13,345,000	360,000
(5)	Certificates of Indebtedness, Series 1999	5.75	12/14/99	12/01/19	1,025,000	70,000
(9)	Overlapping Debt of Lafayette Parish School Board*					
(5)	Certificates of Indebtedness, Series 2002	3.75	11/26/02	11/01/10	1,255,000	615,000
(5)	Certificates of Indebtedness, Series 2003	3.68	12/15/03	11/01/13	1,790,000	330,000
(5)	Certificates of Indebtedness, Series 2005	3.25-3.95	03/02/05	03/01/15	2,610,000	385,000
(5)	Certificates of Indebtedness, Series 2007	3.61	12/17/07	11/01/17	5,930,000	535,000
(10)	Public School Bonds, Series 2001	4.7-5.0	08/01/01	04/01/21	8,855,000	550,000
(10)	Public School Refunding Bonds, Series	3.0-4.0	03/01/04	04/01/13	6,255,000	1,465,000

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Notes	Name of Issuer & Issue	Interest Rates (%)	Dated Date	Final Maturity Date	Principal Outstanding (\$)	Principal Amount Due Within One Year (\$)
	2004					
(10)	Public School Refunding Bonds; Series 2008	3.5-5.0	06/30/08	04/01/19	44,770,000	2,750,000
* Excludes LCDA OZAB loan in the original principal amount of \$3,001,060, with a final maturity date of November 15, 2015, payable from available funds of the Lafayette Parish School Board.						
(11)	Overlapping Debt of Lafayette Parish Vermillion District					
(7)	General Obligation Bonds, Series 2004	3.0-4.5	05/01/04	03/01/24	1,675,000	75,000
(12)	Underlying Debt of Lafayette Public Power Authority					
(13)	Electric Revenue Refunding Bonds, Series 2002	3.45-3.9	09/01/02	11/01/12	4,760,000	1,160,000
(13)	Electric Revenue Refunding Bonds, Series 2003A	5.0	08/04/03	11/01/12	28,115,000	7,550,000
(13)	Electric Revenue Refunding Bonds, Series 2003B	5.0	08/04/03	11/01/12	9,365,000	2,520,000
(13)	Electric Revenue Refunding Bonds, Series 2007	3.5-5.0	12/06/07	11/01/32	33,065,000	500,000
(14)	Partially Underlying Debt of Lafayette Parish Waterworks District North					
(15)	Water Revenue Bonds	5.625	06/30/93	10/27/32	787,744	16,299
(15)	Water Revenue Bonds, Series 1998	4.75	05/05/98	10/27/37	1,485,837	24,841
(15)	Water Revenue Bonds, Series 2004	3.45	06/03/04	10/01/25	2,578,000	81,000
(15)	Water Revenue Refunding Bonds, Series 2005	4.3	06/02/05	10/01/20	1,270,000	82,000
(16)	Partially Underlying Debt of Lafayette Parish Waterworks District South					
(15)	Water Revenue Bonds, Series 2002	5.1	04/23/02	08/12/21	1,492,000	70,000
(15)	Water Revenue Refunding Bonds, Series 2004	4.25	12/21/04	08/12/19	817,000	61,000
(15)	Water Revenue Refunding Bonds, Series 2006A	4.58	08/15/06	08/12/21	92,000	5,000
(15)	Water Revenue Refunding Bonds, Series 2006B	4.58	08/15/06	08/12/21	1,807,000	104,000