

Final Report

**2001 COMPREHENSIVE
ENGINEERING REPORT**

**LAFAYETTE CONSOLIDATED
GOVERNMENT, LOUISIANA
LAFAYETTE UTILITIES SYSTEM**

Year Ended October 31, 2001

July 16, 2002





July 16, 2002

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

Subject: **2001 Comprehensive Engineering Report - Final**

Dear Terry:

We are pleased to submit 10 copies of the 2001 Comprehensive Engineering Final Report for the Lafayette Consolidated Government's Lafayette Utilities System.

Sincerely,

R. W. BECK, INC.

A handwritten signature in black ink, appearing to read 'Scott H. Burnham', written over a horizontal line.

Scott H. Burnham
Project Manager

SHB/sb
Enclosure

LAFAYETTE UTILITIES SYSTEM 2001 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 INTRODUCTION

Requirements of Report

This Comprehensive Engineering Report ("Report") is prepared in accordance with the provisions of Sections 6.1 and 6.2 of the 1993 Bond Resolution that states in part:

"...The City...covenants and agrees that so long as any of the bonds remain outstanding it will retain a nationally known consulting utility engineer or a firm of consulting utility engineers on a continuing basis for the purpose of providing to the Issuer immediately and continuously utility engineering council in its operation of the utilities system... The consulting engineer shall prepare within ninety days after the close of each sinking fund 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 Bond Ordinance, and all other things having a bearing upon the efficient and profitable operations of the Utilities System..."

This Report covers the 2001 period. Financial data and most operational data is reported for the fiscal year (November, 2000 to October 31, 2001). Some electric generation plant and water system operating data is on a calendar year basis. The Report has been prepared in accordance with the requirements of the City of Lafayette (the "City") Bond Resolution dated March 12, 1963 (the "Bond Resolution"), and in accordance with subsequent pari passu indebtedness including the 1993 Board Resolution as referenced above. Pari passu means that the covenants on these bonds are identical to all other revenue bonds issued by the City.

Authority

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 ("Council") and Lafayette Public Utility Authority ("LPUA") are the governing authorities of the Lafayette Utilities System ("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 Lafayette City-Parish Consolidated Government. The LUS Director is also the Managing Director of LPPA.

Section 1

LUS' properties and assets, controlled and operated by the LCG, are designated by the Bond Resolution as the Utilities System. 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).

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. LPPA constitutes a legal governmental entity separate and apart from the City.

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;
- Provide an annual review of financial operation of LUS;
- Provide a reference document for LUS which includes historical analysis and data; and
- Provide recommendations to LUS concerning various aspects of its Utilities System.

Consulting Engineer

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

The duties of the Consulting Engineer, which are specifically defined in the Bond Resolution, include providing continuous engineering counsel to LCG in connection with the operations of the Utilities System, the preparation of analyses of LUS' monthly financial reports, and the preparation of an annual comprehensive report (specifically, this Report) on the operations of LUS after the close of each fiscal year.

The Bond Resolution contains certain covenants that pertain to the assets of LUS. These covenants state that the LCG:

- Will not expend Utilities System revenues for any extensions, betterments or improvements which are not economically sound;
- Will issue no other bonds or obligations of any kind or nature payable from or enjoying a lien on the Utilities System revenues and having priority over or parity with the bonds authorized under the existing Bond Resolution; however, bonds may hereafter be issued on a parity with the existing authorized bonds under conditions as set forth in the Bond Resolution;

- Will not sell, lease, or in any manner, dispose of the Utilities System or any substantial part thereof except in accordance with specific conditions set forth in Section 10F of the March 12, 1963 Bond Resolution; and
- Will maintain the Utilities System in good repair and working order and will make all reasonable and necessary repairs, renewals, and replacements thereto.

The Consulting Engineer is required to approve LUS' budget, and is also required to advise LCG with respect to the system of budgetary control used by LUS. The Consulting Engineer must review and comment on the economic soundness and feasibility of extensions, betterments, improvements, expenditures or purchases of equipment and materials or supplies which will involve the expenditure of more than \$1,000, or such greater amount as may be established in writing by the Consulting Engineer. The Consulting Engineer's budget approval includes all such expenditures except those from the Director's reserve, which are approved individually.

A certification by the Consulting Engineer is required with respect to certain activities which may be carried out by LUS, including: the sale of additional Utilities System Revenue Bonds and the use of proceeds from claims received from private insurance companies as settlements for losses. The sale of any properties of LUS must have the prior written approval of the Consulting Engineer and the revision of rates and charges for utility service must also be approved by the Consulting Engineer.

Field interviews were initiated as part of this Report in February, 2002. The Consulting Engineer interviewed LUS staff regarding utility operations and performed analyses of operating statistics that are indicative of the general operating condition of LUS' plant facilities.

Utilities System Revenue Bonds

Utilities System Revenue Bonds have been an important source of capital for additions and improvements to the Utilities System. On August 1, 1996, LUS issued Revenue Bonds Series 1996 exclusively for sewer facilities in the amount of \$18,400,000. With the issuance of the Series 1996 Bonds, the existing voter authorization for the issuance of Utility System Revenue Bonds amounting to \$40,400,000 became fully issued.

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

Table 1-1
Projected Lafayette Utilities Revenue Bonds
Bond Amortization Schedule

Payment Date	Interest Payment	Principal Payment	Total Payment	Bonds Outstanding
2001	1,491,474	5,995,000	7,486,474	38,240,000
2002	1,236,703	6,245,000	7,481,703	32,245,000
2003	967,225	6,520,000	7,487,225	26,000,000
2004	680,010	6,810,000	7,490,010	19,480,000
2005	373,765	815,000	1,188,765	12,670,000
2006	349,723	840,000	1,189,723	11,855,000
2007	324,943	860,000	1,184,943	11,015,000
2008	299,573	890,000	1,189,573	10,155,000
2009	273,318	915,000	1,188,318	9,265,000
2010	246,325	940,000	1,186,325	8,350,000
2011	218,595	970,000	1,188,595	7,410,000
2012	189,980	995,000	1,184,980	6,440,000
2013	160,628	1,025,000	1,185,628	5,445,000
2014	130,390	1,055,000	1,185,390	4,420,000
2015	99,268	1,090,000	1,189,268	3,365,000
2016	67,113	1,120,000	1,187,113	2,275,000
2017	<u>34,073</u>	<u>1,155,000</u>	<u>1,189,073</u>	<u>1,155,000</u>
TOTAL	\$7,143,106	\$38,240,000	\$45,383,106	\$0

Source: Joan Parish, LUS, 2/5/02

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. The above table shows that most of LUS' existing revenue bonds will be retired in 2004. Bonds remaining after 2004 relate exclusively to the Wastewater Utility. A summary of the issuance of authorized and issued revenue bonds as of October 31, 2001 is provided Table 1-2 below.

Table 1-2
Utilities System Revenue Bonds Summary

Date Issued	Authorized Amount		Application of Proceeds
11-09-49	\$ 7,000,000	(1)	Steam-electric generating plant and improvements and extensions to the electric, water and wastewater systems.
10-26-54	3,000,000	(1)	
05-01-58	<u>8,000,000</u>	(1)	
Total Authorization	\$18,000,000		
10-01-62	\$ 3,500,000		Improvements and extensions to the electric, water and wastewater systems.
06-01-63	6,600,000		
05-01-65	<u>2,400,000</u>		
Total Authorization	\$12,500,000		
06-01-66	\$ 3,300,000		Addition to electric generation capacity, extensions and improvements to the electric, water and wastewater systems and additional water and wastewater treatment capacity.
04-01-67	6,200,000		
06-01-68	4,500,000		
06-01-69	<u>5,800,000</u>	(2)	
Total Authorization	\$19,800,000		
10-01-73	10,000,000		Addition to electric generation capacity and extensions, additions and improvements to the electric, water and wastewater systems.
11-01-74	15,000,000	(2)	
09-01-75	5,000,000	(2)	
03-01-76	6,000,000	(2)	
11-01-76	<u>3,000,000</u>		
Total Authorization	\$39,000,000		
05-01-78	\$6,000,000	(2)	Additions to the electric transmission system and extensions and improvements to the electric, water distribution and wastewater collection systems.
08-01-80	7,000,000	(3)	
11-01-81	<u>13,000,000</u>	(4)	
Total Authorization	\$26,000,000		
04-01-83	\$10,000,000	(3)	Additions, extensions and improvements to the electric, water and wastewater system and acquisition of electric distribution customers.
06-01-84	12,000,000	(3)	
08-01-96	<u>18,400,000</u>	(5)	
Total Authorization	\$40,400,000		

(1) Utilities System Revenue Refunding Bonds were issued April 1, 1963 in the amount of \$18,485,000 for the purpose of refunding the outstanding balances of the then outstanding revenue bonds.

(2) These bonds were refunded by the Utilities System Refunding Bonds, Series 1993.

(3) These bonds were refunded by the Utilities System Refunding Bonds, Series 1987.

(4) Utilities System Revenue Refunding Bonds were issued May 1, 1983 in the amount of \$10,510,000 to refund the then outstanding balance of the Utilities System Revenue Bonds, series 1981, dated November 1, 1981 and originally issued in the total amount of \$13,000,000.

(5) The Series 1996 Revenue Bond Issue is the most recent issuance of bonds for system improvements pursuant to the Utilities System Revenue Bond Authorization approved by the City Council in Resolution No. 3241. With this issue, all bonds authorized have been issued.

Source: R. W. Beck, Previous CER.

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 the LUS to provide service and generate revenues.

Additionally, terrorist activities have the potential to affect organizations other than the LUS, the continued performance of which is critical to continued operation of the Utilities System. These other organizations may be located either up or down stream of LUS.

We have reviewed security-related matters with representatives of LUS who advised that security was increased at all facilities. Sheriff's Department personnel was added to each facility 7 days a week and 24 hours per day providing limited access to the facilities. The water treatment plants are scheduled for an upgrade to the fence around the facility and security cameras with recorders are to be installed. LUS staff has been provided training in emergency planning and reaction that is integrated with ongoing programs for hurricane emergency response.

Evaluation by R. W. Beck, Inc. of the actual security of the components of the Utilities System, as well as other entities with whom the LUS has business or operational relations, relative to security issues, is well beyond the scope of this Report. We have not been engaged to conduct, and in fact 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. 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 should conduct all necessary security studies to ensure employee security and asset preservation.

Changing Utility Environment

In January of 2001, the Louisiana Public Service Commission ("PSC") issued a draft restructuring plan to allow large industrial customers retail choice beginning in January of 2003. In addition, the utilities would not be required to divest the assets used to serve their customer loads. In July 2001, a final report was issued to the PSC by the PSC Staff. This report made suggestions to the PSC's report. The PSC Staff recommended allowing open access to competitive service providers for large industrial customers that average 5 MW of demand. The PSC Staff report also recommended another report be done by 2005 to study the effects of deregulation on all customer classes.

Recommendations

Recommendations and their status are provided in Table 1-3 below. We have indicated the priority of the recommendation as either highest, high or normal.

**Table 1-3
Recommendations**

Introduction	Priority	Status
We recommend LUS conduct all necessary security studies to ensure employee security and asset preservation.	Highest	New Recommendation
We recommend that LUS' management closely monitor electric deregulation events on the state and national level. Although deregulation in the State of Louisiana has slowed given the events in California, LUS should closely monitor the success of retail choice in Texas. If the Texas deregulation is successful Louisiana will likely reevaluate deregulation in the state.	High	Investigating

Section 2 RECOMMENDATIONS

Recommendations

This section provides a summary of the recommendations as they are presented at the end of each section within the 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.

Section 2

Section 1 – Introduction

Introduction	Priority	Status
We recommend LUS conduct all necessary security studies to ensure employee security and asset preservation.	Highest	New Recommendation
We recommend that LUS' management closely monitor electric deregulation events on the state and national level. Although deregulation in the State of Louisiana has slowed given the events in California, LUS should closely monitor the success of retail choice in Texas. If the Texas deregulation is successful Louisiana will likely reevaluate deregulation in the state.	High	Investigating

Section 3 – Organization and Management

Organization and Management	Priority	Status
We recommend LUS update its Strategic Plan and initiate and establish a process by which adequate emphasis is placed on its highest priority objectives.	Highest	New Recommendation
We recommend LUS investigate the succession of key management positions due to potential retirements in these areas in the next 3-5 years.	High	New Recommendation
We recommend LUS continue to investigate appropriate actions to attract and maintain qualified employees, thus reducing the turnover rate.	High	Investigating

Section 4 – Finance and Accounting

Finance and Accounting	Priority	Status
We recommend LUS increase the sewer rates as soon as possible.	Highest	New Recommendation
We recommend LUS focus more resources on financial planning because of the need for potential generation capacity.	Highest	New Recommendation
We recommend that LCG identify methods or procedures that shorten the purchasing and procurement process. The time interval needed to obtain services or equipment is critical to reliable services to both wholesale and retail utility customers who may shop elsewhere if not satisfied.	Highest	New Recommendation

RECOMMENDATIONS

Finance and Accounting	Priority	Status
We recommend LUS continue to explore ways of improving financial reporting.	High	Investigating
We recommend LUS continue to improve the five-year capital budgetary process (cash-needs capital budget).	High	Investigating

Section 5 – Electric Utility

Electric Utility	Priority	Status
We suggest that LUS continue transmission and distribution personnel training and retention efforts.	Normal	New Recommendation
LUS should continue use of microprocessor relays in lieu of electromechanical relays.	Normal	New Recommendation
LUS should investigate the need to test generator and other equipment electro-mechanical protective relays at the Bonin plant through coordination between plant personnel and the LUS transmission and distribution section personnel.	Normal	New Recommendation
We recommend LUS reevaluate plant-staffing levels. Interim needs have been met with contract personnel, but a long-term permanent staffing plan should be evaluated and compensation plan developed which will allow success in recruiting and retaining these individuals.	Highest	Investigating
We recommend LUS continue its efforts to investigate new power supply additions for the future.	High	Investigating
Previous reports identified a need for a comprehensive operator training program, which has been initiated. Additional training and ongoing re-qualification training is recommended.	High	Investigating
We suggest LUS consider the implementation and maintenance of a spare parts and inventory control system.	Normal	Investigating
LUS should continue its implementation and expansion of the preventative and predictive maintenance programs currently in place.	Normal	Investigating
We recommend implementation and maintenance of a unit-performance monitoring program to continuously monitor individual unit heat rates and execute appropriate heat rate improvement programs.	Normal	Investigating
We recommend LUS determine the actual heat rate versus output relationship for each unit. The Bonin Plant reports that progress was made in 2001 on the project to install energy metering/upgraded gas yard controls of the incoming gas supply. Further start-up/commissioning efforts of this system are expected in the summer of 2002. This metering and controls, which is connected to input signals from unit specific fuel flow and generation signals, will provide the actual heat rate versus output relationships forming the basis for economic dispatch and allow the on-line measurement of individual unit	Normal	Investigating

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Electric Utility	Priority	Status
heat rates.		
LUS should demonstrate plant operation on No. 2 fuel oil to verify its emergency use at the Bonin Plant. LUS reports that in 2001, a fuel oil start-up of Unit 3 was attempted, but the effort was unsuccessful. LUS indicates progress is expected in 2002, given the availability to perform such operation via dispatch.	Normal	Investigating
LUS should proceed with plans to repaint the externals of the Bonin Plant Units 2-3.	Normal	Investigating
We recommend LUS continue frequent monitoring of the 138/230-kV CLECO tie transformer T5, which is exhibiting high dissolved gases.	Normal	Investigating
LUS should continue progress made in the area of meter testing and implementation of automatic meter reading systems.	Normal	Investigating
We recommend that in the transmission and distribution functions, LUS should continue to review OSHA requirements and or APPA safety guidelines and pursue ongoing training programs for linemen and foremen.	Normal	Investigating

Section 6 – Water Utility

Water Utility	Priority	Status
We recommend LUS give priority to construction booster wells in northwest and south areas of system to improve system pressure.	Highest	New Recommendation
We recommend LUS continue to develop in-house expertise with use of water system model.	Highest	New Recommendation
LUS should consider developing an operator certification (and re-certification) program.	Normal	New Recommendation
We recommend LUS Complete the south water loop and associated new water storage tanks.	Highest	In Progress

Section 7 – Wastewater Utility

Wastewater Utility	Priority	Status
LUS should continue to give high priority to future expansion of South Plant.	High	New Recommendation
LUS should continue to develop the wastewater hydraulic model of the system.	Highest	New Recommendation
We recommend LUS develop a certification (and re-certification) program for wastewater utility employees.	Normal	New Recommendation
We recommend LUS give high priority to upgrades to Ambassador Caffery Plant to reduce risk of violating administrative orders.	High	Investigating

Section 8 – Environmental Issues

Environmental Issues	Priority	Status
LUS should evaluate purchase of farmland to assure low cost long-term sludge disposal option.	Highest	New Recommendation
LUS should complete a cost-benefit assessment of the Inflow and Infiltration (I&I) expenditures to determine the amount of I&I reduction relating to the amount of I&I remediation expenditures.	Highest	Investigating
LUS should continue to update its environmental plans, including its SPCC plan, to ensure that they include the latest information concerning its operations.	High	Investigating

Section 3

ORGANIZATION AND MANAGEMENT

Government Organization

Organization

The current form of government includes both the City and the Parish and is referred to as the Lafayette Consolidated Government ("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. The name of each of the officials and the offices held by each during the period reported on herein are shown in the Table 3-1 below:

Table 3-1
President and Council Members

Name	Office
Walter Comeaux, Jr.	President
Bobby Badeaux	District 1 Member
Bobby Castille	District 2 Member
Christopher Williams	District 3 Member
Louis C. Benjamin, Jr.	District 4 Member
Lenwood Broussard	District 5 Member
Jerry Trumps	District 6 Member
Marc F. Mouton	District 7 Member
Rob Stevenson	District 8 Member
Randal L. Menard	District 9 Member

Source: Norma Dugas, LCG. 2/5/02

The President and his Chief Administrative Officer 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 Home Rule Charter establishing LCG for the purposes of consolidating the governmental

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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.

Lafayette Utilities System

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

The governing authority of LUS is the Lafayette Public Utility Authority ("LPUA"). LPUA consists of those members of the Council whose districts include 60 percent or more of persons residing within the boundaries of the City as they existed on the effective date of the Charter. They may be changed in the future if the boundaries of the City are changed. The latest census reports of the United States Bureau of the Census are the basis for determining the council districts including 60 percent or more of persons residing within the City.

LPUA members are provided in Table 3-2 below.

Table 3-2
LPUA Members

Name	Office
Jerry Trumps	Chair
Louis C. Benjamin, Jr.	Member
Christopher Williams	Member
Marc F. Mouton	Member
Rob Stevenson	Vice Chair

Source: Norma Dugas, LCG. 2/5/02

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. Nothing in the Charter in any manner affects franchises and contracts in existence at the time the Charter becomes 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 service.

The Utilities Department functions in accordance with conditions included in current bond resolutions and covenants except that references in these documents to "city" are now intended to refer to LPUA. 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 LUS' budget, and approves proposals for the improvement and extension of the utilities, 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 submit an annual report to the President and Council on the operations of LUS and projections for the future.

LPUA must not sell, lease or, in any manner, dispose of the Utilities System, 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, with the approval of the consulting engineers, of property that has become obsolete, unserviceable and not necessary for the efficient operation of the Utilities System. The proceeds of the sale of such property must be used to purchase or construct other capital improvements for the Utilities System. In the event of the sale or lease of the entire Utilities System, the proceeds are to be used for capital improvements in the entire City.

LUS Management, Organization and Personnel

Management of the Utilities System

The President, Walter S. Comeaux, Jr., who is the Chief Executive Officer of LCG, and his Chief Administrative Officer, Mr. Glenn Weber, direct and supervise the administration of various departments of LCG. The three departments of LCG involved in day-to-day management and operation of LUS are the Department of Administrative Services, the Department of Utilities ("LUS"), and the Department of Finance.

Administrative Services provide the following functions to the Utilities System: personnel services, training and safety, reproduction, communications, data processing, and risk management. The Department of Finance is responsible for accounting, budget management and procurement. The Chief Administrative Officer supervises all departments, offices, and agencies of LCG under the direction and supervision of the President, except the legal department.

Organization

The Director of Utilities is responsible for the operations of the electric, telecommunications, water and wastewater systems in all areas of activity not otherwise provided for by the Departments of Administrative Services or Finance. As outlined in the Charter, the duties of the Director of Utilities are as follows:

- Electricity production and distribution;
- Telecommunication operations, maintenance and planning;
- Water production, treatment and distribution;
- Sewage collection, treatment and disposal;
- Utility engineering services;

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- Supervision of contract construction work for LUS;
- Maintenance of utility equipment in cooperation with the central garage;
- Revenue collection;
- Reading of utility meters; and
- Other such activities as may be directed by the President are necessary or incidental to the operation of LUS.

Mr. Terry Huval, Director of Utilities, 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. He served in various management positions with 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 provided in Table 3-3 below.

Table 3-3
LUS Division Managers

Division	Manager
Water Operations	Don Broussard
Wastewater Operations	Craig Gautreaux
Electric Operations	Ronald Landry
Engineering	Frank Ledoux
Power Production	Frank Ledoux
Utilities Support Services	Andrew Duhon
Customer Service	Andrew Duhon
Environmental Compliance	Allyson Chaumont

Source: Joan Parish, LUS, 2/7/02

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.

The **Wastewater Operation Division** responsibilities include operation and maintenance of the treatment and collection facilities. Also included is the management of wastewater discharge quality and industrial discharge permits and fees.

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

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

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

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. This division uses microfiche for billing register report retention to reduce storage and printing costs. Customer bill paying and other business facilities are located in the LCG building, including a drive-up window. The cashier function includes receiving all payments delivered by mail or by hand.

LUS installed a new PeopleSoft Customer Information System ("CIS") in September 2000. Accounts Receivables were transferred seamlessly from the old to the new system, and newly formatted customer bills were mailed successfully.

LUS developed a Request for Proposal for the procurement of an automated telephone Automatic Call Distribution system. This system will enable the utility to route calls to proper personnel, provide automatic responses when necessary, allow customers to retrieve account information, and track items such as call duration, number and type of call.

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 steadily into the electric business, an effective customer-oriented, revenue collection division will become essential to the success of LUS.

The **Environmental Compliance Division** was added to the Utilities Department in 1991 as part of LUS' commitment to employees, customers, and the environment. This division was established to oversee the LUS' environmental regulatory requirements.

Engineering Division

This major division of LUS provides technical engineering support to all four Utilities (Electric, Telecommunications, Water and Wastewater). Department organization includes six major sections including Civil Engineering, Utility Marketing, System

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Engineering and System Construction. The Engineering and Power Production Division Manager is responsible for the following sections.

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. Activities of this section also include acquisition of real property rights including easements and property ownership needed for infrastructure expansions. This latter function has been performed in the past by the Public Works Department of the City.

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

- Special Contracts;
- Wholesale electric purchases and sales contracts and negotiations (including 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 rates and contracts; and
- Development and implementation of telecommunication contracts.

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

- Graphical Information System (GIS) development to provide infrastructure locations and system mapping;
- Information Systems – computer network installations and maintenance for the LUS offices; and
- Drafting function.

The **System Construction Section** responsibilities are as follows:

- Electric substation design and planning;
- Transmission line design;
- Electric system planning;
- Fiber construction and installation;
- Management of the electric system communication system; and
- Electric system training.

Personnel

The average salary per employee during 2001 and prior years is shown in the Table 3-4. 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).

**Table 3-4
LUS Annual Salaries**

Year	Average Annual Salary
1990	\$24,540
1991	\$22,227
1992	\$25,834
1993	\$25,422
1994	\$25,941
1995	\$26,214
1996	\$27,584
1997	\$28,827
1998	\$30,409
1999	\$32,635
2000	\$33,696
2001	\$33,966

Source: Heather Albritton, LUS, 2/5/02

Approximately 10.6 percent of LUS' total budgeted positions were unfilled at the end of fiscal year 2001 (379 employees out of 424 positions). Employee turnover for the fiscal year was reported to be 17 percent of the total number of permanent employees. The level of compensation for technical and professional staff continues to be a problem for LUS. The turnover rate is, in part, indicative of salaries that are not sufficiently competitive to retain qualified staff in many areas. The number of people employed by LUS as of October 31, 2001 and the number of employees included in the budget for the same fiscal year, by Division, are shown in the Table 3-5 below.

**Table 3-5
LUS Employees as of October 2001**

Division	2001 Actual	2001 Budget	Change
Director's Office	2	2	0
Water Operations	55	58	3
Wastewater Operations	83	91	8
Electric Operations	87	99	12
Engineering	53	58	5
Power Production	26	36	10
Utilities Support Services	21	23	2
Customer Service	33	37	4
Environmental Compliance	<u>19</u>	<u>20</u>	<u>1</u>
TOTAL	379	424	45

Source: Heather Albritton, LUS, 2/5/02

Employment Practices and Employee Benefits

All 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.

Procedures for filling personnel vacancies in LUS begin with a list of eligible persons. The applicable appointing authority makes the final selection for the specific position. An employee 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 83 percent of employee health insurance, 100 percent of life insurance premiums, and 74 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 Employee's 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 in the various operating and engineering divisions 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

LCG maintains a self-insurance fund for property (fire and extended coverage/boiler and machinery) and worker's compensation. Liabilities in excess of the fund amount are covered by policies purchased from insurance carriers. LCG fully self-insures general liability, auto liability, fleet collision/fleet fire, and directors' and officers' liability. LCG also fully insures the group health plan and administers a flex-funded life insurance plan.

In addition, LCG has a Risk Management Division within the Department of Administrative Services. 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 composed 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 group health/life claims section.

LCG reports that the program effectively provides for the reduction of risk and monetary savings associated with premium reduction and has lowered the average cost of claims. LCG is in compliance with Governmental Accounting Standards Board 10, Reporting for Risk Financing and Related Issues, for public entities.

The current balance in the Risk Management Fund is approximately negative \$758,676. The 2001 fund balance is lower than the previous year's balance of approximately \$2.1 million. The recoveries through subrogation exceeded the gross loss during 2001, resulting in a negative loss position for 2001.

Causality and liability related expenditures net of recoveries from the Risk Management Fund are as provided in Table 3-6 below.

**Table 3-6
LUS Self Insurance Expenditures**

Year	Amount
1995	\$838,352
1996	\$613,822
1997	\$1,829,801
1998	\$1,846,469
1999	(\$90,059)
2000	\$1,417,145
2001	(\$758,676) ⁽¹⁾

(1) Recoveries through subrogation exceeded the gross loss of \$1,073,213 resulting in a negative loss position for 2001.

Source: Lewana Shearer, LUS, 3/7/01

Governmental Functions Supporting LUS

Department of Finance

Financial responsibilities are handled by the Department of Finance. These duties include:

- Assistance to the President in the preparation of the annual operating budget and the capital improvement budget;
- Maintenance of a record of indebtedness and the payment of the principal and interest on such indebtedness;
- Ascertaining that funds are available for payment of all contracts, purchase orders and any other documents that incur a financial obligation for LCG, and that such documents are in accordance with established 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; and
- Investment of idle funds, as permitted by law, so as to receive the maximum rate of return.

ORGANIZATION AND MANAGEMENT

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

Ms. Rebecca Lalumia serves as the Associate Chief Administrative Officer (“CAO”) for the Department of Finance. Key division managers under this office are provided in Table 3-7 below.

Table 3-7
Department of Finance
Associate CAO – Finance and Management

Division	Manager
Accounting	Melinda Felps
Budget Management	Karen Hover
Purchasing & Property Management	Jody Williamson

Source: Joan Parish, LUS, 3/7/01

A description of the functions of the divisions in Table 3-7 are provided below.

The **Accounting Division** is responsible for: (i) processing invoices, payroll and other accounts payable transactions; (ii) maintaining accounts receivable records including processing and mailing customer bills (including utility bills) and maintaining associated management reports of the accounts receivables; 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.

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.

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 Utility Support Services Division of LUS.

Department of Administrative Services

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

- Personnel matters for employees including personnel policies, employee relations, employee counseling, and unemployment and worker’s compensation reports and hearings;

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- Data processing, records management, microfilming, printing, copier services and related administrative services;
- Developing and implementing a communications system;
- Risk management, insurance and safety programs; and
- The Department of Administrative Services provides personnel services other than those performed by Civil Service through its Human Resources Section. The Division also provides printing and communications services to LUS.

The Director of the Department of Administrative Services is Mr. Benny Soulier. Mr. Soulier oversees information systems (data processing), communication systems, and risk management. The Information Systems Division provides staff support to LUS through the following programs: "on-line" input to property assessment accounts relative to wastewater collection facilities constructed pursuant to improvement districts, and "on-line" utility inventory actions.

The City's Risk Management Division continues to provide certain risk coverage for the operation of LUS. A Safety Officer assists in the safety-related matters of LUS, including loss prevention programs for assisting all divisions of LUS to comply with federal, state, and local regulations regarding safety matters.

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.

Counsel

Steven Dupuis 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 under the direction of the City Parish Attorney.

LUS Organizational Goals

During 2001, LUS operated under a Strategic Plan adopted in 1999. Various employee committees crafted goals in five areas consistent with LUS' vision and added specific tasks to these goals. Specific key areas and goals are provided in Table 3-8. We recommend LUS update its Strategic Plan and initiate and establish a process by which adequate emphasis is placed on its highest priority objectives.

ORGANIZATION AND MANAGEMENT

**Table 3-8
Key Areas and Goals**

Goals	Key Areas
New Products/Services Development Focus	Engineering & Construction Mgmt. Laboratory Services Bottled Water Wastewater Services Water Services Electric Services
Customer Focus	Customer Service Improvement Customer Expansion & Retention Community Partnerships
Employee Focus	Continuous Improvement Pay for Performance Employee Development Safety & Health
Legislative Focus	Legislative Issues
Environmental Focus	Eliminate/Prevent Administrative Orders
Operational Efficiency Focus	Performance Measurement Operational Cost Containment Strategic Cost Containment Information Systems General Fund

Source: Joan Parish, LUS 3/7/01

Recommendations

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

**Table 3-9
Recommendations**

Organization and Management	Priority	Status
We recommend LUS update its Strategic Plan and initiate and establish a process by which adequate emphasis is placed on its highest priority objectives.	Highest	New Recommendation
We recommend LUS investigate the succession of key management positions due to potential retirements in these areas in the next 3-5 years.	High	New Recommendation
We recommend LUS continue to investigate appropriate actions to attract and maintain qualified employees, thus reducing the turnover rate.	High	Investigating

Section 4 FINANCE AND ACCOUNTING

LUS Business

LUS, which consists of electric, water and wastewater utilities, provides services to customers located both inside and outside the City limits. The business of LUS is directed by the President and regulated by the Council with regard to utility service pricing and revenue bond financing.

The data included in this section of the report is based on audited reports generated by LUS and LCG.

During 2001, LUS' net revenues before debt service decreased by approximately 4.8 percent or approximately \$1.8 million from 2000 as shown in Table 4-1.

**Table 4-1
Combined System Net Operating Results
Major Changes Between 2000 and 2001**

	2001	2000	Percent Change
REVENUES:			
Electric and Fiber Revenues	\$139,609,382	\$133,336,583	4.7%
Water and Wastewater Revenues ⁽¹⁾	<u>23,564,777</u>	<u>23,231,623</u>	1.4%
Combined System Revenues	163,174,159	156,568,206	4.2%
EXPENSES:			
Electric Fuel & Purchased Power Costs	93,225,303	86,607,449	7.6%
Electric Other Operating Costs ⁽²⁾	15,726,405	15,002,701	4.8%
Electric Maintenance Costs ⁽²⁾	4,256,143	3,838,419	10.9%
Water and Wastewater Operating Expense	12,351,140	11,808,188	4.6%
Water and Wastewater Maintenance Expense	<u>2,071,961</u>	<u>1,977,961</u>	4.8%
Combined System Maintenance Costs	<u>127,630,952</u>	<u>119,234,718</u>	7.0%
NET OPERATING RESULTS ⁽³⁾	\$35,543,207	\$37,333,488	-4.8%

(1) Breakdown of separate water and wastewater revenues and expenses is provided in Exhibit 4-1

(2) Includes Fiber.

(3) Before Depreciation and Debt Service.

Source: LCG Financial and Operating Statement October, 2001, 5/02.

See Exhibit 4-1 for additional detail.



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In summary, the principal amounts leading to this decrease in net operating revenues are:

- Overall, the Combined System Revenues rose \$6.6 million in 2001 from 2000 but operating expenses rose nearly \$8.4 million. This resulted in a decline in Net Operating Results of approximately \$1.8 million;
- Revenues:
 - As shown in Table 4-1, Electric Revenues increased 4.7 percent or \$6.3 million over year 2000. A major contributing factor was the increased revenue from the pass through of higher fuel costs as seen in Table 4-2.
 - Overall, combined retail and wholesale sales volumes (kWh) decreased approximately 2.0 percent while the average price per kWh increased approximately 6.4 percent.
 - Water and wastewater revenues increased 1.4 percent (or \$360,000); and
- Expenses:
 - The cost of Electric Fuel & Purchased Power Costs increased approximately 7.6 percent (or \$6.6 million) over year 2000 as shown in Table 4-1.
 - Nearly all of the Electric Fuel & Purchased Power Costs consist of variable costs.
 - Overall, supply volume (kWh) decreased 4.8 percent from the year 2000. The supply volume decrease for production was 26.5 percent. Purchased power volume increased slightly at 3.0 percent.
 - Purchased power expenses increased by \$10.5 million (or 18.3 percent) over the year 2000. The average price of purchased power increased 14.9 percent over the year 2000 as shown below in Table 4-2.
 - Production expenses are responsible for a \$4.0 million dollar decrease since the year 2000. The average price of generation increased 19.0 percent. Table 4-2 displays the rate increase for Total Supply expenses (including production and purchased power) of 12.5 percent over the year 2000.
 - Water and wastewater expenses increased approximately \$640,000.

Table 4-2
Average Energy Costs (Mills/kWh)⁽¹⁾

	2001	2000	Percent Change
Self Generation:			
Fuel	53.79	45.58	18.0%
Other	<u>6.68</u>	<u>5.23</u>	<u>27.7%</u>
Total	60.47	50.81	19.0%
Purchases:			
LPPA	32.15	29.77	8.0%
Other Supplies	<u>49.04</u>	<u>42.60</u>	<u>15.1%</u>
Total Purchases	<u>36.75</u>	<u>31.98</u>	<u>14.9%</u>
Total Supply	41.58	36.95	12.5%

(1) Developed in Exhibit 4-3.

Source: LCG Financial and Operating Statement, October 2001, 5/02

LUS provides customers with a stable monthly service bill by maintaining the same Fuel Adjustment Factor on a continual basis. LUS reviews the Fuel Adjustment Factor monthly and adjusts the calculation in order to recover fuel and purchased power costs. Detailed actual power cost data is essential when strategically dispatching the electric resource mix for the purpose of minimizing the supply costs of electricity.

Adequacy of Revenues

The Bond Resolution contains the following covenants as to the adequacy of revenues.

“...The City will fix, establish and maintain such rates and collect such fees, rents or other charges for all water, electric and sewer services and facilities furnished by the Utilities System, after making due allowances for delinquencies in collection, as shall be sufficient to provide for the payment of all reasonable and necessary expenses of administering, operating and maintaining the Utilities System, to provide for the payment of interest on and principal of all bonds or other obligations payable therefrom, including the bonds herein authorized, as and when the same shall become due and payable, including the creation of a reserve therefore, and to make the payments into the Bond Reserve and Capital Additions Fund hereinabove required...”

“...The City will not permit free water, electricity or sewer service to be supplied by the Utilities System to the City or any department thereof or to any person, firm or corporation, public or private, or to any public agency or instrumentality. The reasonable cost and value of all water, electricity and sewer service rendered to the City and its various departments, except

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interdepartmental charges within the Utilities System, by the Utilities System, including a minimum fire hydrant rental of twenty-five dollars (\$25.00) per hydrant per year, will be charged against the City and will be paid for as the service accrues, from the City's current funds, including the proceeds of taxes which will be levied in an amount sufficient for that purpose. All payments so made shall be considered revenues of the Utilities System and shall be deposited in the Receipts Fund in the manner hereinabove provided..."

LUS' revenues have met the above covenants for the reporting period and all previous reporting periods.

Rates and Franchises

The Bond Resolution contains covenants to the effect that rates and charges:

"...shall in no event in the future be reduced to an extent which will prevent the revenues derived from the operation of the Utilities System being fully sufficient to pay all expenses of operation and maintenance, to pay principal of and interest on the bonds and make possible the retirement of all of the bonds on or prior to their maturity, and to carry out all the provisions of this resolution..."

The revenues and other receipts of LUS considered revenues for this purpose were sufficient for the twelve months ended October 31, 2001 to pay the costs of operating and maintaining LUS and to pay the required principal and interest of all outstanding revenue bonds. Accordingly, LUS has complied with all elements of the above rate covenant of the Bond Resolution for this reporting period and all previous reporting periods.

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 residential electric base rates decreased in November of 2000 by \$0.0023 to a rate of \$0.03109 per kWh. The wastewater rates experienced increases in the customer and volumetric rates. The residential customer charge increased by \$0.46 to a rate of \$3.25 per month and the residential volumetric charge increased by \$0.28 to a rate of \$2.25 per million gallons (mg). The commercial customer charge increased by \$1.73 to a rate of \$11.75 per month and the commercial volumetric charge increased by \$0.25 to a rate of \$2.10 per mg. In addition, other commercial rates increased including the Biological Oxygen Demand ("BOD"), the Chemical Oxygen Demand ("COD"), and the Total Suspended Solids ("TSS"). The BOD rate increased by \$0.40 to a rate of \$3.00 per unit. The COD rate increased by \$0.20 to a rate of \$1.50 per unit. The TSS rate increased by \$0.40 to a rate of \$3.00 per unit.

Covenants in the Bond Resolution also state that the government:

"...will not grant a franchise to any competing water, electric or sewer system or service for operation within the boundaries of the City..."

No such franchise was granted during the current reporting period and no such franchise now exists.

The existing water and wastewater rates are partially subsidized by the electric revenues, which come from a disproportionately large allocation of retained earnings capital to the water and wastewater capital improvement programs. If the allocation were based on the source of these prior-year earnings, the electric utility would be allocated most, if not all, of these retained earnings, and the water and wastewater utilities would be required to issue bonds, raise service rates or both.

A joint pole attachment agreement with the South Central Bell Telephone Company ("SCB") specifies that LCG will pay to SCB a rate of \$8.00 per pole, per year, for use of SCB poles; SCB will pay LCG \$6.00 per pole per year for the use of LUS' poles. The difference would be based on use per pole. LCG also has an agreement with Telecable Associates, Inc. for pole rental of LCG's poles to Telecable at \$7.00 per pole per year.

In-Lieu-Of Tax

On August 22, 2000, the City adopted the following change to the computation of taxable receipts for purposes of calculating the in-lieu-of tax payment to the City's General Fund. The Ordinance (No. O-217-2001) authorizing this change reads as follows:

In computing the annual in-lieu-of-tax payment to the city general fund by the system pursuant to the bond resolution adopted by the City of Lafayette Board of Trustees on March 12, 1963 (Ordinance No. O-1523, Section 3, adopted August 9, 1977):

- (1) The cost of fuel shall be excluded from "receipts fund deposits" for such computation. Except that for the purpose of yielding additional in-lieu-of-tax, there shall be a partial amount of fuel cost restored to "receipts fund deposits" for the fiscal year 2000-2001 (for payment in the general fund during fiscal year 2001-2002). This fuel restoration shall be \$41,666,667.00 and shall be applied as adopted in this section. The cost of fuel shall include all component costs of fuel burned to deliver energy to retail and wholesale electric customers, including all component costs of power purchased to offset or supplement generation by the city and the Lafayette Public Power Agency (LPPA).*
- (2) Revenues derived from the sale of unused capacity and energy from Rodemacher Power Station No. 2 to the other owners shall be excluded from the "receipts fund deposits" for such computation.*
- (3) The additional \$5,000,000.00 of in-lieu-of-tax payment generated through the fuel restoration of \$41,666,667.00 is made up of two components. The first \$25,000,000.00 of fuel restoration implemented in prior years and generating \$3,000,000.00 of in-lieu-of-tax is not subject to any of the considerations listed below. However, it is confirmed that \$1,000,000.00 of this amount was implemented at the same time that approximately \$1,000,000.00 of street*

lighting costs were transferred to the city general fund. The second component of the fuel restoration equal to \$16,666,667, generating \$2,000,000.00 of in-lieu-of-tax, and implemented for the first time with this ordinance shall be applied as credit for utility relocation costs owed by the city utilities system to the city's general and/or capital funds. For the purposes of this exchange of relocation costs for in-lieu-of-tax, and for as long as the \$2,000,000.00 amount is in effect, the credit will be granted annually, and cumulatively. The annual credit will be equal to the additional in-lieu-of-tax generated when the fuel restoration exceeds the first \$25,000,000.00 component. In years when cumulative relocation costs exceed the cumulative credit, the utilities system will owe the balance...Public works will be responsible for compiling the total relocation costs, including any documentation necessary for the utilities department to verify said costs, due by the utilities department annually, and retro-active to the effective date of utilities taking over such responsibility. The first year of accounting will be the first year of this formula change, fiscal year beginning November 1, 2000 through October 31, 2001. The calculated amount developed by public works will be verified and, once approved by LUS, forwarded to the office of finance and management. Public works will provide projected utility relocation costs to the utilities department seven months prior to the beginning of the fiscal year when funding will be necessary for payment to public works for said relocation costs.

The in-lieu-of tax payment to the general fund is based on the previous year's revenues. The amount paid in 2001 (based on 2000 LUS revenues) was \$14,200,000. This represented a slight decrease from the amount paid in 2000 (based on 1999 LUS revenues) of \$14,828,023. Based on the new ordinance and revenues in 2001, the amount to be paid in 2002 is \$17,293,176. These in-lieu-of tax payments average approximately 10 percent of the prior year's combined operating revenues. By comparison, American Public Power Association's ("APPA") survey (published May 2000) of 549 public power systems shows that the median payments and contributions to their community's general fund was 5.8 percent of electric operating revenues. LUS' average payment rate (based on the last three years) was approximately 72 percent higher than the nation's median.

Customer Sales Data

The selected statistical data in Table 4-3 pertaining to the number of customers, customer usage, and revenues by classes of customers was obtained or developed from LUS' Financial Statement for the twelve months ended October 31, 2001.

**Table 4-3
Utilities System Selected
Customer Accounts and Usage Data**

Utility Service	Annual Averages, Fiscal Year 2001		
	Average No. of Accounts	Usage per Account	Revenue per Account (\$) ⁽¹⁾
Electric (kWh Usage):			
Residential ⁽¹⁾	94,983	16,216	553
Commercial Non-Demand ⁽¹⁾	5,845	29,256	1,356
Commercial Demand Metered	2,069	357,684	11,059
Private Security Lighting	1,760	1,220	181
Traffic Lighting	1	1,769,891	82,714
Street Lighting	1	14,061,797	636,452
Schools, Churches, Other	319	125,389	4,792
Municipal - General Fund	147	99,091	4,707
UL	2	24,250,800	741,125
Interdepartmental	<u>141</u>	<u>62,570</u>	<u>2,967</u>
Total Electric System	55,268	32,033	1,101
Water (Gallon Usage in 1,000s):			
General Service	39,910	149	233
Contracts	<u>4,429</u>	<u>247</u>	<u>360</u>
Total Water System	44,339	159	246
Wastewater:			
General Service	35,914	N/A	362

(1) Electric revenue per account is shown in dollars without fuel adjustment charges.

Source: LUS Financial and Operating Statement, October 2001 5/02

Certain sales revenue and related data for 2001 and 2000 are compared in Table 4-4.

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Table 4-4
City of Lafayette, Louisiana Utilities System
Selected Statistical Sales Revenue and Related Data

	2001	2000	Percent Change
Number of Customers (Average):			
Electric	55,263	55,027	0.4%
Water	44,339	44,221	0.3%
Wastewater	35,914	35,902	0.0%
Electricity Sales (MWh):			
Retail	1,770,388	1,707,490	3.7%
For Resale	508,041	616,338 ⁽²⁾	-17.6%
Total Megawatt Hour Sales	2,278,429	2,323,828	-2.0%
Water Sales (1,000 Gallons)	7,054,947	6,938,260	1.7%
Sales Revenues:			
Electric – Retail ⁽¹⁾	\$113,588,781	\$105,716,568	7.4%
Electric – Resale	24,696,671	26,597,737	-7.1%
Electric – Other	1,323,180	1,022,278	29.4%
Total Electric Sales Revenues:	139,608,632	133,336,583	4.7%
Water	11,049,883	11,522,769	-4.1%
Wastewater	12,514,894	11,708,854	6.9%
Total Sales Revenues ⁽²⁾	\$163,173,409	\$156,568,206	4.2%
Electric:			
Annual Energy Usage per Meter ⁽³⁾ (kWh)	32,033	31,030	3.2%
Annual Revenue per Meter-with Fuel Adjustment Revenues	\$2,155	\$1,921	12.2%
Annual Revenue per Meter-without Fuel Adjustment Revenues	\$1,101	\$1,099	0.2%
Average Revenue per kWh Sold-with Fuel Adjustment Revenues	\$0.0673	\$0.0616	9.3%
Average Revenue per kWh Sold Without Fuel Adjustment Revenues	\$0.0344	\$0.0354	0.0%
Water:			
Annual Water Usage (1,000 Gal/Meter)	159	161	-1.2%
Annual Water Revenue per Meter	\$257.83	\$258.81	-0.4%
Average Sales Revenue (1,000) Gallons Water Sold	\$1.62	\$1.65	-1.8%
Wastewater:			
Annual Revenue per Wastewater Account	\$361.97	\$323.28	12.0%

(1) Includes Fuel Adjustment Clause Revenues: 2001 - \$55,401,694.93

(2) Total Sales Revenue does not include \$750.00 in revenue for 2001 associated with fiber (telecommunications).

(3) A slight adjustment was made after the close of the fiscal year 2000.

Source: LCG Financial & Operating Statement, October 2001, 5/02

Compared to the prior year, the average electric usage per customer in fiscal year 2001 increased by approximately 3.2 percent from 31,030 kWh to 32,033 kWh. The average electric revenue per customer, including fuel cost adjustment charges rose significantly (9.3 percent) in 2001 compared to 2000 due to the pass through of higher fuel costs (\$0.0673 in 2001 and \$0.0616 in 2000).

Financial and Operating Ratios

Figures 4-1 through 4-2 graphically compare the average retail rates for LUS and other selected Louisiana utilities for year 2000 and 2001. Values for selected Louisiana Utilities were not available for 2001 at the time of this report. Figure 4-1 displays the rate benefit LUS residential customers experience compared to surrounding utilities in Louisiana. LUS' residential rates are some of the lowest in Louisiana along with multiple cooperative utilities.

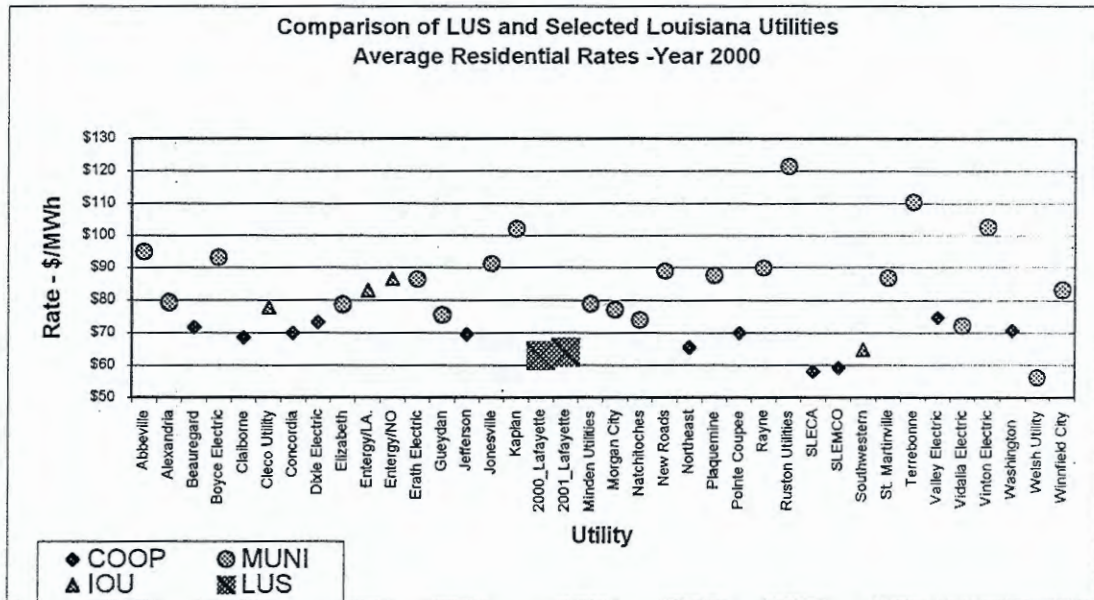


Figure 4-1: Comparison of LUS and Selected Louisiana Utilities Average Residential Rates – Year 2000

Figure 4-2 displays the rate benefit LUS commercial customers experience compared to surrounding utilities in Louisiana. LUS' commercial rates are some of the lowest in Louisiana. A comparison of industrial rates was not performed because LUS does not maintain an industrial class of rates in its preparation of the Energy Information Administration ("EIA") Form 861.

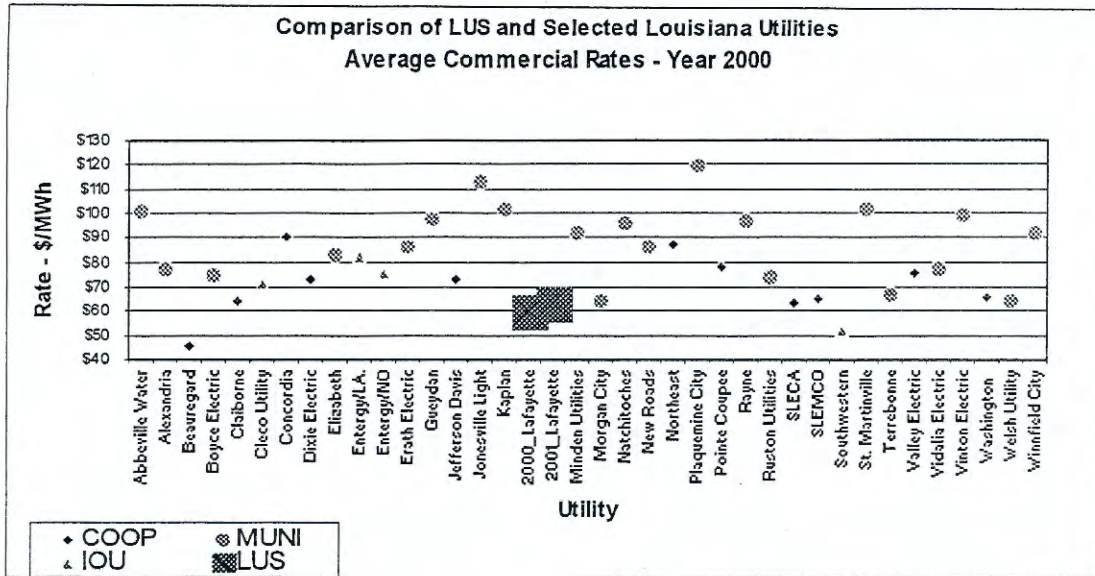


Figure 4-2: Comparison of LUS and Selected Louisiana Utilities Average Commercial Rates – Year 2000

Figure 4-3 shows the production O&M expense as a percentage of production plant in service for LUS and other selected utilities. LUS’ production O&M as a percent of production plant in service exceeds all but one of the other selected utilities.

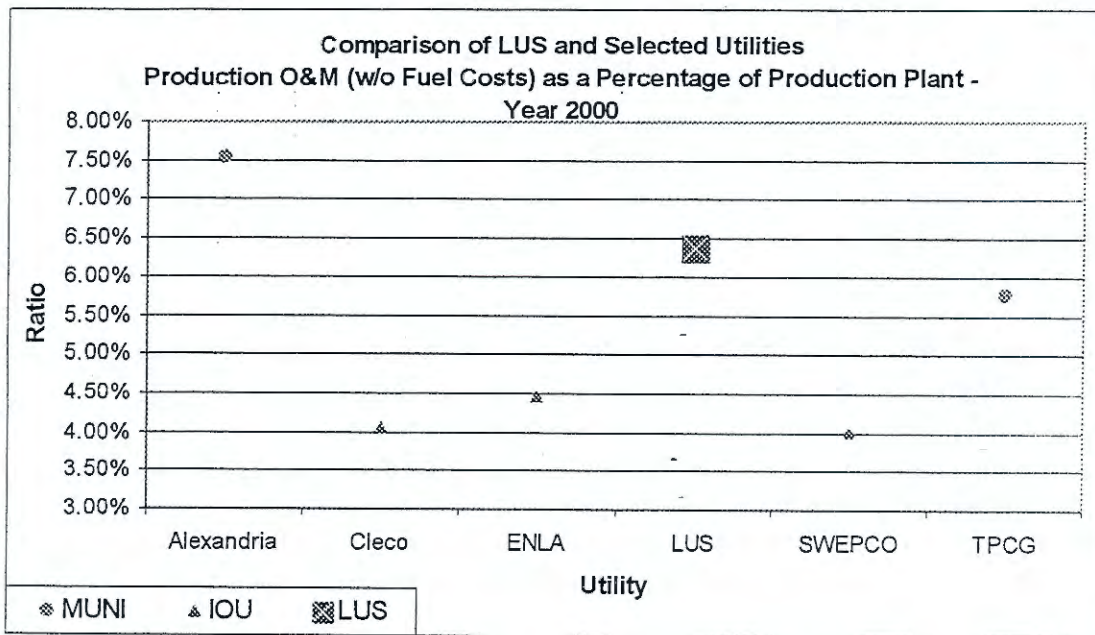


Figure 4-3: Comparison of LUS and Selected Utilities Production O&M (without Fuel Costs) as a Percentage of Production Plant – Year 2000

Figure 4-4 displays the production O&M expense on a per MWh sales basis (including retail and wholesale sales) for LUS and other selected utilities. LUS' production O&M on a per MWh basis has the second lowest rate of the other utilities.

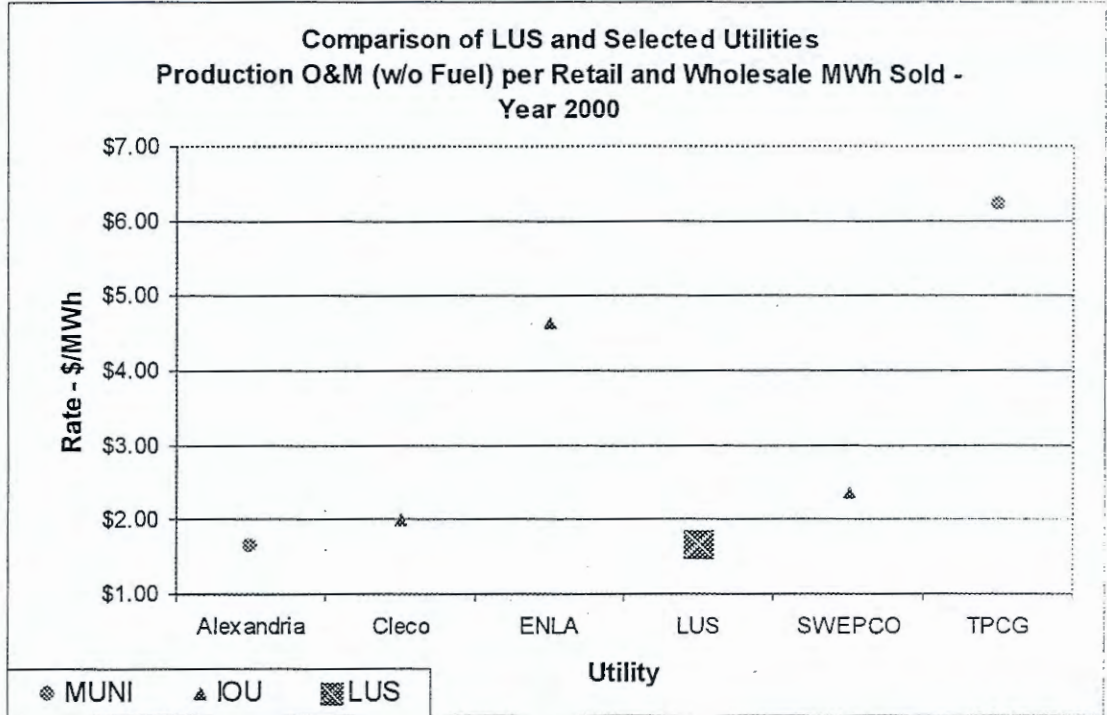


Figure 4-4: Comparison of LUS and Selected Utilities Production O&M (without Fuel) per Retail and Wholesale MWh Sold – Year 2000

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Figure 4-5 shows the transmission O&M expense as a percentage of transmission plant in service for LUS and other selected utilities. LUS' transmission O&M as a percent of transmission plant in service greatly exceeds the other selected utilities.

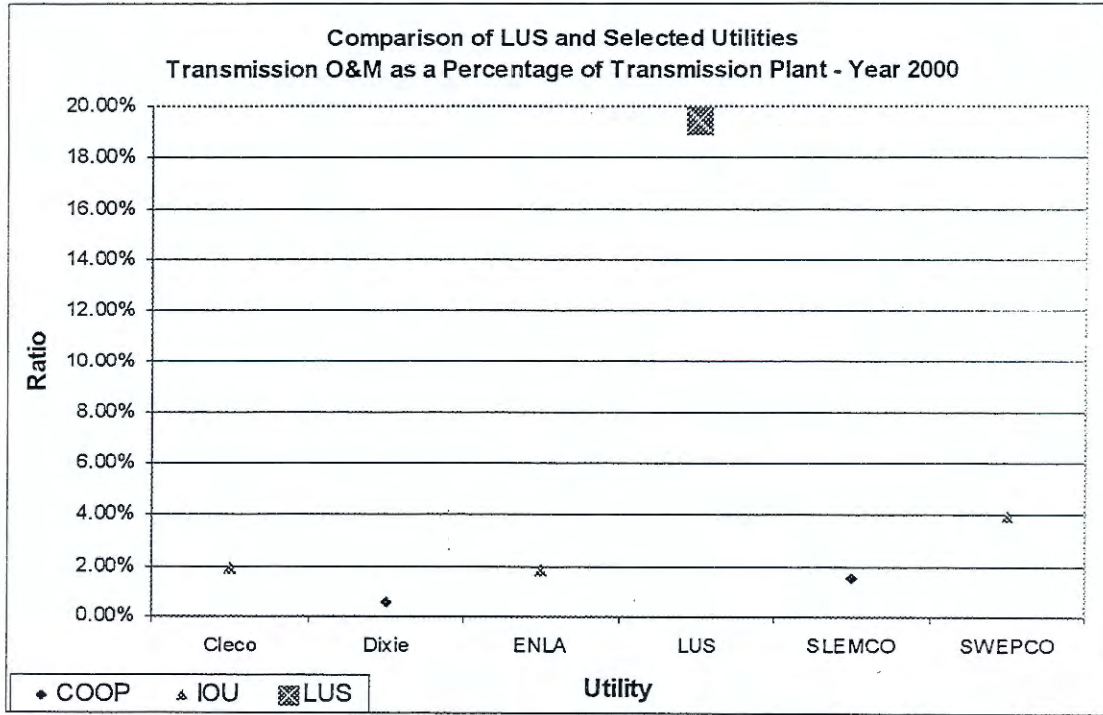


Figure 4-5: Comparison of LUS and Selected Utilities Transmission O&M as a Percentage of Transmission Plant – Year 2000

Figure 4-6 displays the transmission O&M expense on a per MWh sales basis (including retail sales only) for LUS and other selected utilities. LUS' transmission O&M on a per MWh basis exceeds the other selected utilities.

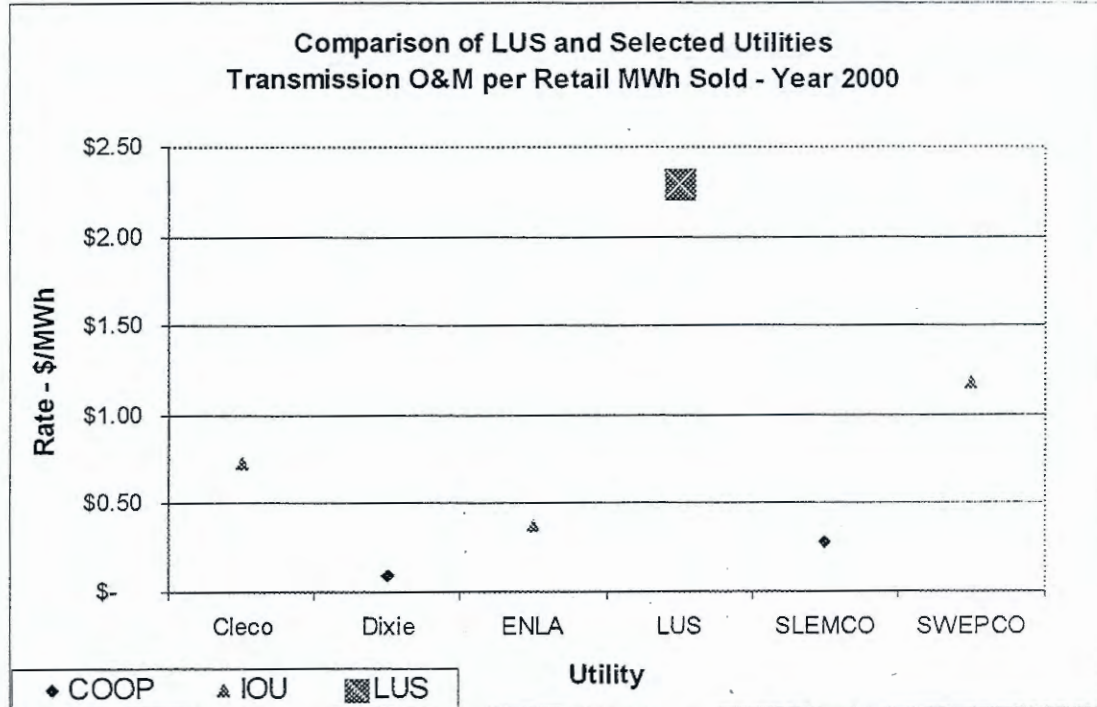


Figure 4-6: Comparison of LUS and Selected Utilities Transmission O&M per Retail MWh Sold - Year 2000

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Figure 4-7 shows the distribution O&M expense as a percentage of distribution in service for LUS and other selected utilities. LUS' distribution O&M as a percent of distribution plant in service is in line with the other selected utilities.

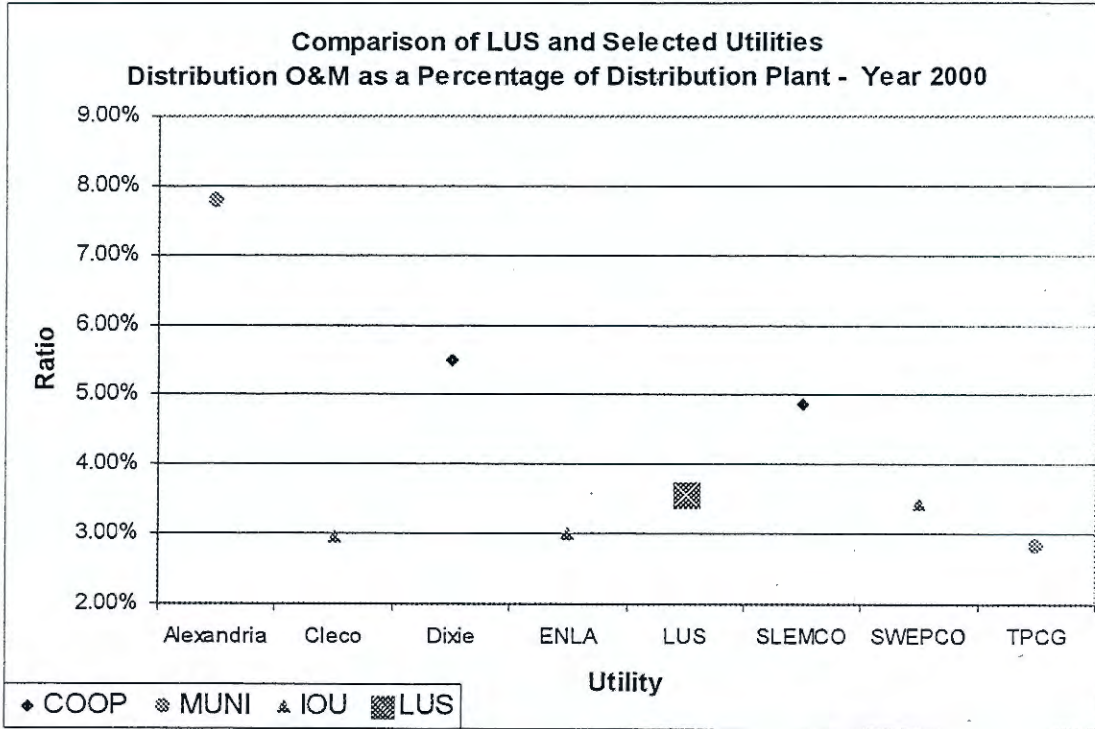


Figure 4-7: Comparison of LUS and Selected Utilities Distribution O&M as a Percentage of Distribution Plant – Year 2000

Figure 4-8 displays the distribution O&M expense on a per MWh sales basis (including retail sales only) for LUS and other selected utilities. LUS' distribution O&M on a per MWh basis is in line with the other selected utilities.

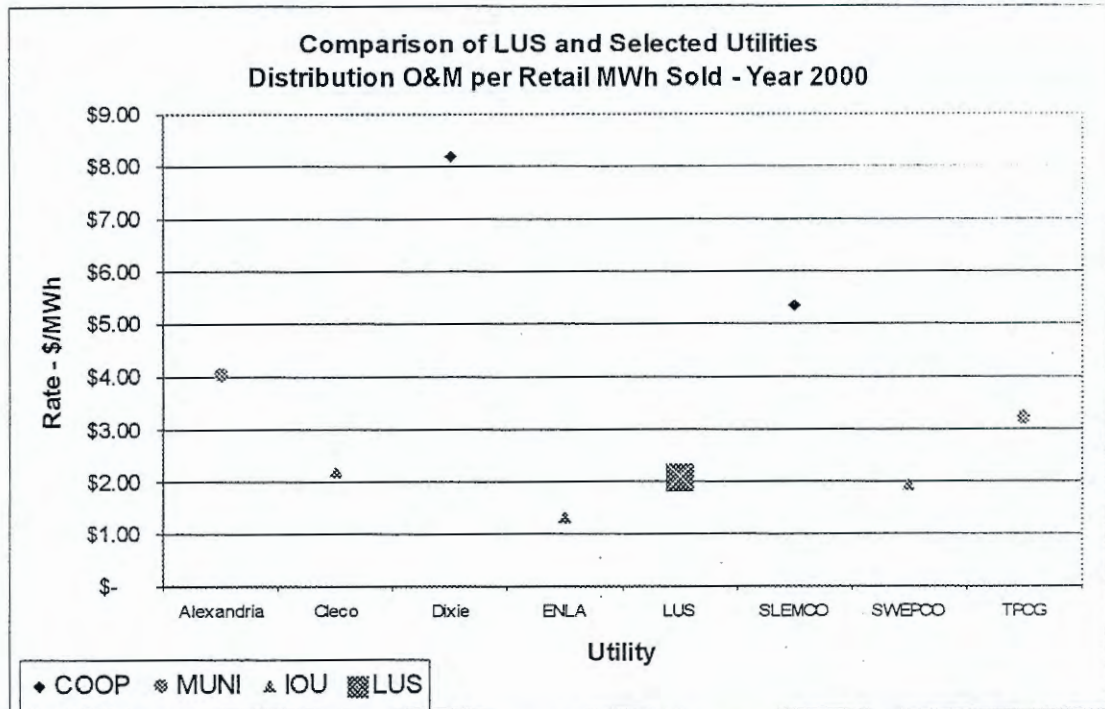


Figure 4-8: Comparison of LUS and Selected Utilities Distribution O&M per Retail MWh Sold - Year 2000

Table 4-5 provides a comparison of LUS' electric system with approximately 431 similar-sized electric power systems nationwide; however, not all ratios are based on 431 electric power systems since some did not have data applicable to each ratio. The 2000 data for these systems was secured from the APPA publication dated April 2002, the data is included for comparison.

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**Table 4-5
Financial & Operating Ratios - Public Power Systems, 2000
Median Values by Size Class and Region Compared with LUS**

Ratio ⁽¹⁾⁽²⁾	20,000 to 50,000 Customer ⁽¹⁾	50,000 to 100,000 Customer ⁽¹⁾	Southwest ⁽²⁾	LUS Fiscal Year 2000
1. Revenue per kWh of Retail Customers	\$0.062	\$0.068	\$0.058	\$0.062
2. Debt to Total Assets	0.252	0.362	0.263	0.091
3. Operating Ratio (Electric)	0.840	0.798	0.823	0.791
4. Current Ratio	2.30	3.66	2.87	1.769
5a. Times Interest Earned	4.74	3.16	2.63	26.4
5b. Debt Service Coverage	4.87	5.16	5.16	5.80
6. Net Income per Revenue Dollar	\$0.064	\$0.078	\$0.900	\$0.099
7. Uncollectible Accounts per Revenue Dollar	\$0.0025	\$0.0033	\$0.0039	\$0.004
8. Retail Customers per Non-Power-Generation Employee	347	322	367	423
9. Total O&M Expenses per kWh Sold	\$0.054	\$0.054	\$0.047	\$0.062
10. Total O&M Expense (Excluding Power Supply Exp.) per Retail Customer ⁽⁴⁾	\$223	\$299	\$274	\$277
11. Total Power Supply Expense per kWh Sold	\$0.046	\$0.044	\$0.040	\$0.039
12. Purchased Power Cost per kWh	\$0.044	\$0.043	\$0.035	\$0.032
13. Retail Customers per Meter Reader	5,047	8,239	3,947	N/A
14. Distribution O&M Expense per Retail Customer	\$94	\$106	\$108	\$66
15. Distribution O&M Expense per Circuit Mile	\$4,185	\$4,962	\$4,243	\$4,085
16. Customer Accounting, Service and Sales Expense per Retail Customer	\$43	\$52	\$35	\$37
17. Administrative and General Expense per Retail Customer	\$72	\$107	\$100	\$99

(1) Ratios from April 2002 APPA Selected Financial and Operating Ratios of Public Power Systems, 2000 publication.

(2) Southwest Region = Southwest Power Pool and ERCOT.

(3) For comments on the ratios, see notes A- C below.

(4) Calculation assumes one-half of both the engineering staff and the utilities support staff are associated with water and wastewater operations, representing 145 employees.

Note A (regarding lines 2, 5a, and 5b): The three ratios referenced here pertain to the general financial position of LUS. The financial ratios include: debt to total asset, times interest earned, and debt service coverage. All of these ratios indicate that LUS has a comparatively low debt level and high-retained earnings. Times interest earned is notably high because the debt is mature, resulting in a lower interest component of the debt service. Utility managers, in general, struggle with the problem of the optimum mix of capital sources (debt or retained earnings in LUS' case).

Note B (regarding line 6): LUS earned 13.7 cents on every dollar of revenue. This strong financial result provides for a major part of the capital needed for the Five-year Capital Budget, as well as significant financial transfers to the General Fund of the LCG.

Note C (regarding line 11): The LUS power supply costs per kWh are approximately 31 and 23 percent lower than the average for the two national categories (20,000 to 50,000 customers and 50,000 to 100,000 customers respectively). This appears to be a competitive benefit.

Source: Selected Financial and Operating Ratios of Public Power Systems, 2000. LCG Financial and Operating Statement, October 2001, 5/02.

General Observations

General observations will be developed for the final report. Based on the data reviewed for this draft report, LUS appears to have exhibited solid financial performance for FY 2001.

Balance Sheet

To determine the extent and character of the changes in assets and liabilities for 2001, a Comparative Balance Sheet is shown on Exhibit 4-4. The comparison shows no significant areas of major change.

Audit

Revenue bond covenants relative to the Consulting Engineer's responsibility regarding accounting, financial reporting and budgeting matters are as follows:

"The Issuer will cause such books to be audited annually by an independent certified public accountant or firm of accountants and will annually, within sixty days after the close of each sinking fund year, file with the Depository, the Consulting Engineer and the original purchasers of the Bonds, copies of said report accompanied by a certificate by said accountant or firm of accountants showing, in reasonable detail, the revenues and expenditures of the Utilities System for such year and the amounts in the hands of the Depository. A summary of such statement shall be published in a newspaper having general circulation in the Issuer. Said statement shall be available at any reasonable time to the holders of any of the Bonds or any consumer of the services rendered by the Utilities System. Within twenty (20) days after the close of each month, a statement of the revenues and expenses of the Utilities System for such month, and a balance sheet certified by the manager or superintendent of the Utilities System and the Mayor of the Issuer, shall be prepared and filed with the Depository, the Consulting Engineer and the original purchasers of the Bonds."

Accordingly, the Firm of Broussard, Poché, Lewis & Breaux, Certified Public Accountants of Lafayette, Louisiana, was chosen by LCG to audit the books of accounts and records of the Utilities System for the Sinking Fund Year ended October 31, 2001. The Certified Public Accountant's audit of the books of accounts and records of the Utilities System is filed by LCG with the Depository, the Consulting Engineer and the original purchasers of the bonds.

Operating Budget

The Operating Budget ("Budget") for the Sinking Fund Year ended October 31, 2001 was adopted by Council. Included in the Ordinance is the five-year capital plan beginning in 2001. The Operating Budget was approved by the Consulting Engineer both as to content and form in accordance with requirements of the Bond Resolution.

A comparison of the project operations in the Amended Budget with actual operating results is shown below.

Table 4-6
Comparison of Actual Combined System
Operating Results to the 2000-2001 Amended Budget

	Actual	Budget	Difference	Percent Difference (%)
Revenues	\$163,174,159	\$171,021,963	(\$7,847,804)	-4.6%
O&M	126,565,672	129,357,051	(2,791,379)	-2.2%
Balance after O&M	36,608,487	41,664,912	(5,056,425)	-12.1%
Debt Service	7,403,252	8,977,474	(1,574,222)	-17.5%
Balance after D.S	29,205,235	32,687,438	(3,482,203)	-10.7%
Capital Expenditures	18,345,104	16,659,527	1,685,577	10.1%
In-lieu-of Tax	14,200,000	14,200,000	\$0	0.0%
Balance of Revenues	(5,031,265)	1,827,911	(6,859,176)	-375.2%

Source: LCG Financial and Operating Statement, October 2001, 5/02.

The comparisons shown in Table 4-6 are on a cash basis and therefore will not necessarily agree with audited amounts that are on an accrual basis.

Under Section 9 of the 1963 Bond Resolution and Section 6.6 of the 1993 Revenue Refunding Bond Resolution, the City covenants cause the manager or superintendent to prepare and submit a "proposed budget" to the City not less than 75 days prior to the beginning of each Sinking Fund Year. With regard to the annual operating budget, the Bond Resolution states:

"...covering the anticipated revenues and balances in various funds and accounts including surpluses and anticipated expenditures of such revenues, funds, accounts and surpluses for all purposes including operation, maintenance, rehabilitation, renewals, replacements, construction and purchase of materials, supplies and equipment and the hiring of employees and services for the ensuing year, said proposed budget to be prepared in the form prescribed by the Consulting Engineer and to bear the approval or recommendation of the Consulting Engineer as to content as well as form before same is submitted to this Governing Authority. Simultaneously with submitting such budget to this Governing Authority a copy of said budget shall be filed by the Mayor or the manager or superintendent with the original purchasers of the bonds and a copy shall be mailed to any holder of revenue bonds who may have so requested in writing..."

The LCG's 2002 budget (November 1, 2001 through October 31, 2002), including LUS' budget, was submitted by the President to the Council and approved by the Council by Ordinance No. 0-189-2001. LUS' budget for the fiscal year ending October 31, 2002 as adopted by the LCG and approved by the Consulting Engineer is as summarized in Table 4-7.

**Table 4-7
Utilities System Budget
November 2001 - October 31, 2002**

Estimated Fund Balances as of November 1, 2001		\$27,815,968
Proposed Receipts:		
Retail Electric, Water & Wastewater Revenues	\$141,552,335	
Interdepartmental Sales	930,000	
Wholesale Electric Revenues	18,882,785	
Telecommunications	1,000,000	
Interest – Operating Funds	5,283,000	
Contributions in Aid of Construction	5,000	
Accounts Receivable & Other	1,250,000	
Miscellaneous Operating Fees	575,000	
Total Receipts		<u>\$169,478,120</u>
Total Proposed Revenues & Fund Balance		<u>\$197,294,088</u>
Operating & Maintenance (O&M)		
Fuel Costs (Gas)	\$19,500,000	
Purchase Power (LPPA)	\$48,000,000	
Purchased Power Other	\$19,500,000	
Transmission Charge	\$5,093,832	
Other O&M	\$35,727,493	
Total Operation and Maintenance		\$127,821,325
Interest & Principal Amounts		
Existing Debt	\$7,471,474	
Proposed New Debt	\$1,491,000	
Total Principal and Interest Payments		\$8,962,474
Capital Renewals and Replacements		
Normal Renewals and Replacements	\$9,379,500	
Special Equipment	\$2,019,525	
Expenditures from Retained Earnings	\$4,289,364	
Special Capital	\$0	
Total Capital Expenditures		\$15,688,389
In-Lieu-of tax Payments		\$14,834,958
Total Expenditures		<u>\$167,307,146</u>
Revenue Less Expenditures		<u>\$2,170,974</u>
Fund Balances as of 10/31/02		<u>\$29,986,942</u>

Source: LCG Annual Budget Document 2001-2002, 2/7/02

The above balance of all Utilities System Funds (\$29,986,942) anticipates the specific fund balances presented in Table 4-8.

Table 4-8
Projected Utilities System Fund Balances
As of October 31, 2001

Receipts Fund	\$0
Operating and Maintenance Fund Balance	\$4,000,000
Bond and Interest Redemption Fund	\$0
Fund Balance and Interest to be Transferred next Year	
Bond Reserve and Capital Additions Fund:	
Bond Reserve fund	\$8,970,782
Provisions for ILOT Payment	\$17,016,160
Total Bond Reserve and Future Capital Additions	\$25,986,942
Fund Balances as of October 31, 2002	\$29,986,912

Source: LCG Annual Budget Document 2001-2002, 2/7/02

The above operating budget anticipates an increase of approximately \$2,170,974 in cash balances during the 2001-2002 period. LUS continues to review and adjust the current budgeting system to increase financial and accounting controls and meet changing operating requirements.

Summary: Utilities System Capital Program

The combined estimated requirements for improvements to the electric, water and wastewater departments through October 31, 2006 are summarized in Table 4-9. Each year, as the City revises its five-year CIP for the Utilities System and 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 4-9
Summary Budget - System Capital Resources & Requirements
Budget Document 2001 - 2002 (\$000)

	2002	2003	2004	2005	2006	Total
Beginning Balance	\$14,000	\$145	\$497	\$176	\$14,731	\$14,000
Revenues						
From Retained Earnings	4,500	4,000	6,000	21,000	17,000	52,500
Bond Proceeds	20,000	20,000	15,000	0	0	55,000
Total	38,500	24,145	21,497	21,176	31,731	121,500
Appropriations						
Electric	14,040	6,548	2,686	1,430	1,130	25,834
Water	4,240	3,535	975	1,010	500	10,260
Wastewater	17,975	12,750	17,150	3,600	3,000	54,475
Telecommunications	2,100	815	510	405	0	3,830
Total	38,355	23,648	21,321	6,445	4,630	94,399
Ending Balance	\$145	\$497	\$176	\$14,731	\$27,101	\$27,101

Source: LCG Annual Budget Document 2001-2002.

Capital Improvement Program

The current capital budgeting 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 the 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 ten years) with clearly identified and costed projects and contain detailed plans/schedules and costs for the short-term?
 - Is it formulated and reviewed participatively, 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"?

Table 4-10 shows that many of the planned capital projects have not been accomplished within the scheduled time frame. LUS needs to 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

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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 4-10
Comparison of Budgeted and Actual Capital
Expenditures for 1997-2001 (\$000)

Year		Electric ⁽¹⁾	Water	Wastewater	Total
FY 2001	Budgeted	\$16,563	\$6,350	\$23,829	\$46,742
	Actual	10,530	2,642	5,173	18,345
	Unspent	(898)	(1,269)	(3,188)	(3,558)
	Unspent Percentage	-9.0%	-49%	-80%	-22%
FY 2000	Budgeted	\$9,929	\$5,125	\$17,135	\$32,189
	Actual	19,213	2,510	4,176	25,899
	Unspent	(9,284)	2,615	12,959	6,290
	Unspent Percentage	-94%	51%	76%	20%
FY 1999	Budgeted	\$21,098	\$4,182	\$11,594	\$36,874
	Actual	10,023	3,882	7,494	21,389
	Unspent	11,075	300	4,110	15,485
	Unspent Percentage	52%	7%	35%	42%
FY 1998	Budgeted	\$28,308	\$5,807	\$11,119	\$45,234
	Actual	11,114	3,404	12,622	27,139
	Unspent	19,240	5,913	5,347	30,501
	Unspent Percentage	63%	63%	30%	53%
FY 1997	Budgeted	\$19,995	\$6,781	\$10,304	\$37,080
	Actual	9,766	7,243	12,293	29,302
	Unspent	18,512	170	3,796	22,478
	Unspent Percentage	65%	2%	24%	43%

(1) Includes fiber.

Source: LUS Adopted Budget.

Over the above five-year period, the total budget expenditures amounted to approximately \$195 million compared with actual expenditures amounting to approximately \$124 million. Historically, approximately 63 percent of the budget is actually spent. This lack of precision influences the accuracy of financial projection and decisions. Financial areas that are influenced include service rates, bond financing and cash management. 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 project. The CIP should indicate if the engineering will be accomplished by LUS engineering or if it will be outsourced.

Fund Balances

The Utilities System will likely experience a reduction in retained earnings over the next several years if competition is implemented in Louisiana and if subsidization by the electric utility portion of the Utilities System to other utilities continues. Budgeting of monthly fund balances should be included in the Utilities System's budget process to anticipate the impact of monthly cash balance volatility in the future. This monthly cash budget could be readily adopted from the actual Utilities Systems Funds Flow statement now being prepared.

Accounting

The City covenants and agrees under the respective bond resolutions that so long as any of the bonds remain outstanding and unpaid as to either principal or interest:

"The City will cause to be kept proper books of record and account covering the operation of the Utilities System. As to the electric division such books shall be kept in accordance with the laws of the State of Louisiana and the Uniform System of Accounts prescribed by the Federal Power Commission, and as to the water and sewer division, such books shall be kept in accordance with the procedure prescribed by the Uniform System of Accounts for Water Utilities, Classes A and B, as prescribed by the National Association of Railroad and Utilities Commissioners..."

The Charter, Section 7-16, Utility System Financing, states: "The finances, bonded debt, receipts and disbursements of the City's Utilities shall be subject to the provisions of the bond resolution of the City adopted March 12, 1963, as amended or revised." These provisions under the bond resolution have been adhered to and Utilities System funds have been accounted for in a manner consistent with these provisions.

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 25th day of the month following the period of reporting.

However, the above exception extends from the first several monthly financial statements following the close of a fiscal year. These statements in final form for the new fiscal year are not 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 May in the following year.

We are particularly concerned about the delay in the availability of important and often critical financial information necessary for informed management of the Utility business. 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 electric industry.

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The Consulting Engineer is of the opinion that the basic accounting principles and requirements with respect to the Utilities System, as contained under the respective bond resolutions, have been complied with by the City for the period ended October 31, 2001.

Restricted Asset Transactions and Balances

The Bond Resolution contains certain provisions and covenants pertaining to the separation and maintenance of funds as follows:

“... Said income and revenues be and they (sic) are hereby irrevocably and irreparably pledged in an amount sufficient for the payment of the bonds herein authorized in principal and interest. Said income and revenues shall be set aside in separate funds and shall be and remain so pledged for the security and payment of said bonds and interest, and for all of the other payments and purposes provided for in the resolutions until said bonds have been fully paid and discharged...”

The Bond Ordinance established the following funds: (i) Receipts Fund; (ii) Operation and Maintenance Fund; (iii) Bond and Interest Fund; and (iv) Bond Reserve and Capital Additions Fund. Transactions in the latter two funds for the current reporting year are analyzed below.

Bond and Interest Fund

The Bond and Interest Fund transactions during the fiscal year are presented in Table 4-11.

**Table 4-11
Bonds and Interest Fund
Fiscal Year 2001**

CASH BALANCE as of November 1, 2000	\$0
RECEIPTS during the Period:	
Transferred from Receipts Fund	\$7,437,699
Interest Earned on Fund	249,730
Investments matured (net of purchases)	0
Transfer from Capital Additions Fund	0
Total Receipts	<u>\$7,687,428</u>
Total Receipts and Cash Balance	\$7,687,428
DISBURSEMENTS during the Period:	
Principal and Interest Payment	\$7,418,425
Interest Earnings Transferred to Receipts	249,730
Other Transfers	19,273
Total Disbursements	<u>\$7,687,428</u>
CASH BALANCE as of October 31, 2001	0
Plus Investments (at face value)	0
FUND BALANCE as of October 31, 2001	<u>\$0</u>

Source: Prepared by City Manager of Accounting 2/7/02.

Bond Reserve and Capital Additions Fund

In compliance with the requirements of the Bond Resolution concerning receipts and disbursements of the Bond Reserve and Capital Additions Fund, the transactions during the fiscal year are presented in Table 4-12. Required transfers of principal and interest were made in a timely fashion to the City's paying agent.

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Table 4-12
Bond Reserve and Capital Additions Fund
Fiscal Year 2001

CASH BALANCE as of November 1, 2000	\$ 73,949,586
RECEIPTS during the Period:	
Transferred from Receipts Fund	\$ 38,300,000
Transfer from Construction Fund	0
Interest Earned on Fund Investments	3,798,426
Miscellaneous (Contributions in Aid and Salvage and Other Transfers)	<u>2,749,283</u>
Total Receipts	<u>\$ 44,847,709</u>
Total Receipts and Cash Balance	\$118,797,295
DISBURSEMENTS during the Period:	
Transfer to Bond and Interest Fund	\$ 0
Payment of In-Lieu-of Taxes	14,200,000
Total Capital	15,819,296
Interest Transferred to Receipts Fund	<u>3,798,426</u>
Total Disbursements	<u>\$ 33,817,721</u>
CASH BALANCE as of October 31, 2001	0
Plus Investments (at face value)	\$ 84,979,573
FUND BALANCE as of October 31, 2001	<u>\$ 84,979,573</u>
The above balance is available for the 2000-2001 fiscal year requirements	
Payment of In-Lieu-of Tax	14,834,958
Fund Balance not Specifically Committed ⁽¹⁾	<u>70,144,615</u>
BALANCE in Fund as of October 31, 2001	<u>\$ 84,979,573</u>

(1) Excludes both bond and principal and interest due 11/01/ 2001 of \$6,740,737.

Source: Prepared by Client (PBC's) 2/7/02.

Construction Fund

The following Construction Fund identified in Table 4-13, was established in August of 1996 for purposes of financing major wastewater construction projects. Bonds for these projects were sold to the LDEQ and 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. Drawdowns through October 31, 2001 total \$18,053,277.87. For this period, the Construction Fund has a zero balance since the drawdowns requested were all expended by the end of their reporting period.

**Table 4-13
Construction Fund
Fiscal Year 2001**

CASH BALANCE as of November 1, 2000	\$0
RECEIPTS during the Period:	
Reimbursement from DEQ	\$0
Interest Earned on Fund	0
Miscellaneous	0
Total Receipts	<u>\$0</u>
Total Receipts and Cash Balance	<u>\$0</u>
DISBURSEMENTS during the Period:	
Transfer to Capital Additions Fund	\$0
Other Transfers	0
Total Disbursements	<u>\$0</u>
CASH BALANCE as of October 31, 2001	0
Plus Investments (at face value)	0
FUND BALANCE as of October 31, 2001	<u>\$0</u>

Source: PBC's.

Recommendations

We view the recent periods of growth and solid financial results as a benefit to the customers and to the City's financial needs. As planned many years ago, the electric demand has risen to approximate the electric production capacity. This matching of demand and capacity maximizes the use of generation and reduces the influence of fixed costs. Current electric rates reflect these benefits as they are some of the lowest in the State. However, competition is influencing the customer's awareness of electric service prices. Quality of electric service is more essential than ever before. Accordingly, skilled technical labor is essential to acquire and retain. The current pay scales of LUS are currently not sufficient to attract and maintain skilled employees. Wastewater rates are not adequate and will require substantial subsidization if rates are not increased. The five-year capital program totals approximately \$94 million and does not consider the possible need for new electric generation. Given these considerations, the LUS seems to be at the point of making some important financial decisions. Consistent with this, the following recommendations and their status are provided in Table 4-14 below. We have indicated the priority of the recommendation as highest, high or normal.

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**Table 4-14
Recommendations**

Finance and Accounting	Priority	Status
We recommend LUS increase the sewer rates as soon as possible.	Highest	New Recommendation
We recommend LUS focus more resources on financial planning because of the need for potential generation capacity.	Highest	New Recommendation
We recommend that LCG identify methods or procedures that shorten the purchasing and procurement process. The time interval needed to obtain services or equipment is critical to reliable services to both wholesale and retail utility customers who may shop elsewhere if not satisfied.	Highest	New Recommendation
We recommend LUS continue to explore ways of improving financial reporting.	High	Investigating
We recommend LUS continue to improve the five-year capital budgetary process (cash-needs capital budget).	High	Investigating

**Disposition of Revenues
Fiscal Year 2001**

	2001	2000	Percent Change
OPERATING REVENUE AND OTHER INCOME			
<i>Electric:</i>			
Sale of Electrical Energy	\$113,588,781	\$105,716,568	7.4%
Sale of Electricity to Other Utilities ⁽¹⁾	24,696,671	26,597,737	-7.1%
Miscellaneous Electric Revenue	<u>1,323,180</u>	<u>1,021,378</u>	29.5%
Total Electric Operating Revenues	\$139,608,632	\$133,335,683	4.7%
<i>Water:</i>			
Sale of Water - Retail	9,721,795	10,204,238	-4.7%
Sale of Water - Contracts	1,169,232	1,167,668	0.1%
Miscellaneous Water Revenues	<u>158,856</u>	<u>150,863</u>	5.3%
Total Water Operating Revenues	\$ 11,049,883	\$ 11,522,769	-4.1%
<i>Wastewater:</i>			
Wastewater Service	12,377,542	11,558,992	7.1%
Miscellaneous Sewer Revenues	<u>137,352</u>	<u>149,862</u>	-8.3%
Total Wastewater Operating Revenues	\$ 12,514,894	\$ 11,708,854	6.9%
<i>Fiber</i>			
Revenues	<u>750</u>	<u>900</u>	16.7%
Total Operating Revenues	\$163,174,159	\$156,568,206	4.2%
OPERATING AND MAINTENANCE EXPENSES:			
<i>Operating Expenses:</i>			
Electric - Fuel (gas)	\$ 25,387,948	\$ 29,262,723	-13.2%
Electric - Purchased Power - LPPA	43,171,190	44,151,647	-2.2%
Electric - Purchased Power - Other	24,666,165	13,193,079	87.0%
Electric - Other	<u>14,605,943</u>	<u>15,002,701</u>	4.8%
Subtotal Electric	\$107,831,246	\$101,610,150	6.1%
Water	4,889,916	4,991,051	-2.0%
Wastewater	7,461,224	6,817,137	9.4%
Fiber	<u>55,182</u>	<u>0</u>	
Total Operating Expenses	\$120,237,568	\$113,418,338	6.0%
<i>Maintenance Expenses:</i>			
Electric	4,256,143	3,838,419	10.9%
Water	879,604	815,534	7.9%
Wastewater	1,192,357	1,162,427	2.6%
Fiber	<u>0</u>	<u>0</u>	
Total Maintenance Expenses	\$ 6,328,104	\$ 5,816,380	8.8%
Total Operating and Maintenance Expenses (Before Depreciation)	\$126,565,672	\$119,234,718	6.1%
Net Operating Revenues	36,608,487	37,333,488	-1.9%
Other Income and Expense	140,765,672	133,425,592	5.5%
Interest Revenues	5,116,677	5,549,196	-7.8%
Water Tapping Fees	182,248	130,065	40.1%
Miscellaneous Non-Operating Revenue	113,889	448,829	-74.6%
Interest On Customer Deposits	(42,997)	(99,285)	-56.7%
Misc. Non-Operating Expense	<u>1,091</u>	<u>(2,230)</u>	-148.9%
Total Other Income	\$ 5,370,908	\$ 6,026,575	-10.9%
Net Revenue	\$ 41,979,395	\$ 43,360,063	-3.2%

(1) Includes "Miscellaneous Wholesale Revenue" from page 4 of the LUS Financial and Operating Statement 2001.

Source: LCG Financial and Operating Statement October 2001, 5/02.

**Disposition of Revenues
Fiscal Year 2001**

	2001	2000	Percent Change
Net Revenues (Brought Forward)	\$40,858,933	\$43,360,063	-5.8%
Debt Service:			
Interest	1,423,425	1,730,574	-17.7%
Principal	<u>5,995,000</u>	<u>5,760,000</u>	4.1%
Total Debt Service	<u>7,418,425</u>	<u>7,490,574</u>	-1.0%
Balance after Debt Service	33,440,508	35,869,489	-6.8%
Plus: Depreciation on Trans. Equipment	622,138	885,568	-29.7%
Less: Interest on Customer Deposits	<u>42,997</u>	<u>99,285</u>	-56.7%
Balance Available for Capital Expenditures, In-Lieu-of Taxes, Reserves and Other Lawful Purposes	<u>33,397,511</u>	<u>35,770,204</u>	-6.6%
Less: Expenditures for Normal Additions to Plant Considered Payable from Operating Revenues	<u>6,543,698</u>	<u>8,806,536</u>	-25.7%
Increase in Cash Due to Operations	26,853,813	26,963,668	-0.4%
Less: In-Lieu-of Tax Payment	14,200,000	14,190,874	0.1%
Changes in Balance Sheet Accounts Affecting Cash	<u>(63,137)</u>	<u>(21,320,974)</u>	-99.7%
Resulting Change in "Unpledged Cash"	\$12,590,676	\$ (8,548,180)	-247.1%

Source: LCG Financial and Operating Statement October 2000 and October 2001 - 5/02

Source: City of Lafayette Utilities System Status of Construction Work Orders - October 2001

**Reconciliation to Actual Change in "Unpledged Cash"
Fiscal Year 2001**

	2001	2000	1999
Change in Receipts Fund	\$ (44,610)	\$ 51,834	\$ 0
Change in Operation and Maintenance Fund	(813,478)	(867,353)	924,289
Change in Bond and Interest Redemption Fund	0	0	0
Change in Cash On Deposit With Paying Agent	105,849	103,775	(37,605)
Change In Bond Reserve Fund	(10,228)	33,706	4,877
Change in Capital Additions Fund	11,206,039	(6,245,044)	5,658,381
Change in Security Deposit Fund	335,431	(806,343)	186,002
Change in Risk Management Fund	1,812,074	(818,754)	313,029
Change in Cashier's Change	<u>(400)</u>	<u>0</u>	<u>0</u>
Actual Change in "Unpledged Cash"	\$12,590,676	(\$8,548,180)	\$7,048,972

Source: LCG Financial and Operating Statement October 2000 and October 2001. 5/02

**Details of Comparative Utility Operating Revenues
Fiscal Year 2001**

	2001	2000	Percent Change
OPERATING REVENUES			
<i>Electric:</i>			
Residential	\$ 23,816,045	\$ 26,060,189	-8.6%
Commercial	29,409,960	28,557,495	3.0%
Private Security Lighting	304,893	335,871	-9.2%
Municipality - Street & Traffic Lighting	710,629	705,116	0.8%
Schools and Churches	1,460,269	1,453,791	0.4%
Municipality - Other	658,480	792,351	-16.9%
UL	1,431,783	1,402,173	2.1%
Interdepartmental Sales	<u>395,028</u>	<u>806,231</u>	-51.0%
Subtotal Retail Sales	\$ 58,187,086	\$ 60,113,217	-3.2%
Fuel Adjustment Clause	55,401,695	45,603,350	21.5%
Total Retail Sales	<u>\$113,588,781</u>	<u>\$105,716,568</u>	7.4%
Sales to Other Utilities	24,474,911	26,597,737	-8.0%
Total Sales	<u>\$138,063,692</u>	<u>\$132,314,305</u>	4.3%
Other Electric Revenues	1,545,690	1,022,278	51.2%
Total Electric Operating Revenues	<u>\$139,609,382</u>	<u>\$133,336,583</u>	4.7%
<i>Water:</i>			
General Consumers	9,363,977	9,828,043	-4.7%
Public Authorities	3,079	1,935	59.1%
Public Fire Protection	15,478	11,361	36.2%
Municipality - Other	77,491	84,030	-7.8%
Interdepartmental	<u>37,755</u>	<u>48,720</u>	-22.5%
Subtotal Retail Sales	\$ 9,497,779	\$ 9,974,089	-4.8%
Town of Broussard	96,279	87,862	9.6%
Town of Scott	335,506	326,310	2.8%
Water District North	680,289	706,213	-3.7%
Longbridge	0	5,091	-100.0%
Water District South	<u>281,174</u>	<u>272,342</u>	3.2%
Subtotal Wholesale Sales	1,393,248	1,397,817	-0.3%
Total Sales	\$ 10,891,026	\$ 11,371,906	-4.2%
Miscellaneous	158,856	150,863	5.3%
Total Water Operating Revenues	<u>\$ 11,049,883</u>	<u>\$ 11,522,769</u>	-4.1%
<i>Wastewater:</i>			
Residential Inside	6,546,046	7,321,719	-10.6%
Commercial Inside	5,102,163	3,712,001	37.5%
Schools, Churchs and Other Public Auth.	490,585	434,600	12.9%
Retail Service Outside City	<u>238,748</u>	<u>90,670</u>	163.3%
Total Sales	\$ 12,377,542	\$ 11,558,991	7.1%
Miscellaneous	<u>137,352</u>	<u>149,862</u>	-8.3%
Total Wastewater Operating Revenues	<u>\$ 12,514,894</u>	<u>\$ 11,708,854</u>	6.9%
Total Operating Revenues	<u>\$163,174,159</u>	<u>\$156,568,206</u>	4.2%
Total Without Off-System Sales	<u>\$138,699,248</u>	<u>\$129,970,468</u>	6.7%

Numbers may not add due to rounding.

Source: LCG Financial and Operating Statement October 2000 and October 2001

**Details of Comparative Utility Operating Revenues
Fiscal Year 2001**

	2001	2000	Percent Change
OPERATING EXPENSES			
<i>Electric:</i>			
Production			
Operation-Fuel	\$ 25,387,948	\$ 29,262,723	-13.2%
Operation-Other	1,337,506	1,747,619	-23.5%
Maintenance	1,886,779	1,872,153	0.8%
Purchased Power	67,837,355	57,344,725	18.3%
Transmission			
Operation	4,512,961	4,037,923	11.8%
Maintenance	102,608	30,863	232.5%
Distribution			
Operation	1,768,805	1,724,977	2.5%
Maintenance	<u>2,243,715</u>	<u>1,931,059</u>	16.2%
Subtotal Electric	<u>\$105,077,677</u>	<u>\$ 97,952,042</u>	7.3%
<i>Water</i>			
Source of Supply			
Operation	0	141	-100.0%
Maintenance	8,225	1,083	659.6%
Power and Pumping			
Operation	682,725	564,702	20.9%
Maintenance	0	0	0.0%
Purification			
Operation	1,485,130	1,577,664	-5.9%
Maintenance	364,779	345,139	5.7%
Distribution			
Operation	620,437	578,403	7.3%
Maintenance	<u>506,600</u>	<u>469,312</u>	7.9%
Subtotal Water	<u>\$ 3,667,896</u>	<u>\$ 3,536,444</u>	3.7%
<i>Wastewater</i>			
Collection System			
Operation	957,876	737,940	29.8%
Maintenance	1,068,892	1,052,931	1.5%
Treatment			
Operation	3,682,737	3,116,709	18.2%
Maintenance	<u>123,465</u>	<u>109,496</u>	12.8%
Subtotal Wastewater	<u>\$ 5,832,970</u>	<u>\$ 5,017,076</u>	16.3%
<i>Fiber</i>			
Operation	<u>55,182</u>	<u>0</u>	
Subtotal Fiber	\$55,182	\$ 0	
Customer Accounting and Collecting	3,907,323	3,177,406	23.0%
Sales Promotion & Customer Service	169,609	134,809	0.0%
Administrative and General	<u>7,855,015</u>	<u>9,416,941</u>	-16.6%
Total Operating and Maint. Expenses	<u>\$126,565,672</u>	<u>\$119,234,718</u>	6.1%

Source: LCG Financial and Operating Statement October 2000 and October 2001

**Comparative Power Costs
Fiscal Year 2001**

	2001	2000	Percent Change
<i>Annual Costs</i>			
<i>Self-Generation</i>			
Fuel	\$25,387,948	\$29,262,723	-13.2%
Other	<u>3,154,262</u>	<u>3,360,422</u>	-6.1%
Total Self-Generation	\$28,542,210	\$32,623,145	-12.5%
<i>Purchases</i>			
LPPA	43,171,190	44,151,647	-2.2%
Other	<u>24,666,165</u>	<u>13,193,079</u>	87.0%
Total Purchases	<u>\$67,837,355</u>	<u>\$57,344,725</u>	18.3%
Total Supply	<u>\$96,379,565</u>	<u>\$89,967,871</u>	7.1%
 <i>Energy (MWh)</i>			
<i>Self-Generation:</i>			
	471,991	642,004	-26.5%
<i>Purchases</i>			
LPPA	1,342,947	1,483,244	-9.5%
Other	<u>502,935</u>	<u>309,674</u>	62.4%
Total Purchases	<u>\$ 1,845,882</u>	<u>\$ 1,792,918</u>	3.0%
Total Supply	<u>\$ 2,317,873</u>	<u>\$ 2,434,422</u>	-4.8%
 <i>Average Costs (Mills/kWh)</i>			
<i>Self-Generation</i>			
Fuel	53.79	45.58	18.0%
Other	<u>6.68</u>	<u>5.23</u>	27.7%
Total	\$60.47	\$50.81	19.0%
<i>Purchases</i>			
LPPA	32.15	29.77	8.0%
Other	<u>49.04</u>	<u>42.60</u>	15.0%
Total Purchases	<u>36.75</u>	<u>31.98</u>	14.9%
Total Supply	\$41.58	\$36.95	12.5%

Source: LCG Financial and Operating Statement October 2000 and October 2001. 5/02

**Comparative Balance Sheet
Fiscal Year 2001**

	2001	2000	Change	Percent Change
<u>ASSETS AND OTHER DEBITS</u>				
UTILITY PLANT				
Plant In Service	\$514,280,623	\$496,937,330	17,343,293	3.5%
Less Accumulated Provision for Depreciation and Amortization	(192,749,803)	(181,970,062)	10,779,741	5.9%
Net Plant In Service	321,530,820	314,967,268	(6,563,552)	2.1%
Construction Work In Progress	<u>1,258,329</u>	<u>241,329</u>	1,017,000)	421.4%
Total Utility Plant	<u>\$322,789,149</u>	<u>\$315,208,597</u>	<u>(7,580,552)</u>	2.4%
CURRENT ASSETS				
Receipts Fund	7,223	51,833	44,610	-86.1%
Operating and Maintenance Fund (Cash & Temp. Cash Investment)	3,465,094	4,278,362	813,268	-19.0%
Revolving Cashier's Fund and Water District Operating Fund (Cash)	7,740	8,350	610	-7.3%
Accounts Receivable:				
Utility Consumers (less Customer Uncollectibles of \$474,8281 in 2000)	11,420,027	21,232,876	9,812,849	-46.2%
Other Utilities	1,395,065	2,389,493	994,429	-41.6%
Municipal. & Other Receivables (less Reserve for Uncollectible Misc. AR of \$564,331.63 in 2000)	<u>1,863,864</u>	<u>2,364,399</u>	500,535	-21.2%
Total Accounts Receivable				
Inventories - Fuel Oil for Electric Generation	698,678	698,678	0	0.0%
Inventories - Other (less Reserves for Obsolete Materials of \$131,488.12 in 2000)	2,175,001	2,059,981	(115,021)	5.6%
Interest Receivable less Unamort Premiums	692,207	636,174	(56,034)	8.8%
Prepayments	<u>120,453</u>	<u>129,698</u>	9,245	-7.1%
Total Current Assets	<u>21,845,352</u>	<u>33,849,844</u>	12,004,492	-35.5%
RESTRICTED ASSETS				
Capital Additions Fund	85,155,625	73,949,586	(11,206,039)	15.2%
Bond Reserve	7,487,328	7,497,556	10,228	-0.1%
Allowance for Market Value Adjustment	1,205,812	(28,682)	(1,234,494)	-4,304.1%
Security Deposits Fund Investments	4,061,027	3,725,596	(335,431)	9.0%
Investment in Risk Management Fund	2,700,778	888,705	(1,812,074)	203.9%
1996 Construction Fund - Cash	0	0	0	0.0%
Cash on Deposit With Paying Agent	<u>5,784,162</u>	<u>5,678,313</u>	(105,849)	1.9%
Total Restricted Assets	<u>\$106,394,733</u>	<u>\$ 91,711,075</u>	(14,683,658)	16.0%
DEFERRED DEBITS				
Unamortized Debt Discount and Expense	98,561	158,816	60,255	-37.9%
Unamortized Loss on Refunded Debt	442,695	717,031	274,336	-38.3%
1997 Tornado Clean-up	37,298	37,298	0	0.0%
Clearing Accounts and other	(515)	103,637	104,152	-100.5%
Miscellaneous	<u>30,119</u>	<u>0</u>	(30,119)	
Total Deferred Debts	<u>608,158</u>	<u>1,016,782</u>	408,624	-40.2%
TOTAL ASSETS AND OTHER DEBITS	<u>\$451,637,392</u>	<u>\$441,786,297</u>	(9,851,094)	2.2%

Comparative Balance Sheet⁽¹⁾
Fiscal Year 2001

	2001	2000	Change	Percent Change
LIABILITIES AND OTHER CREDITS				
Revenue Bonds (inclusive of current maturities)	\$ 37,168,278	\$ 40,334,933	(3,166,655)	-7.9%
CURRENT LIABILITIES (Payable from Current Assets)				
Accounts Payable (Fuel)	0	3,065,203	(3,065,203)	-100.0%
Accounts Payable (O&M Fund)	1,720,004	1,551,763	168,241	10.8%
Accounts Payable (Payroll)	605,438	571,264	34,174	6.0%
Accounts Payable (Miscellaneous)	3,984,630	3,979,158	5,473	0.1%
Accounts Payable- Purchased Power (LPPA)	(483,175)	(11,320)	(471,855)	4168.3%
Accounts Payable- Purchased Power (Other)	435,586	204,460	231,125	113.0%
Accounts Payable-Environmental Clean up "Grant Street"	1,750,000	1,750,000	0	0.0%
Miscellaneous Current and Accrued Liabilities	1,207,803	1,162,687	45,116	3.9%
Accrued Interest on Security Deposits	76,456	44,742	31,714	70.9%
A/P Water District North	<u>263,616</u>	<u>403,714</u>	(140,098)	-34.7%
Total Current Liabilities Payable from Current Assets	\$ 9,560,358	\$ 12,721,670	(3,161,313)	-24.8%
OTHER LIABILITIES (Payable from Restricted Assets)				
Interest Accrued on Bonds (Due November 1)	514,162	623,313	(109,151)	-17.5%
Interest Accrued on Security Deposits WDN	554	1,004	(450)	-44.8%
Customer Deposits	<u>4,178,641</u>	<u>3,797,023</u>	381,618	10.1%
Total Other Liabilities Payable from Restricted Assets	\$ 4,693,357	\$ 4,421,340	272,017	6.2%
RESERVES				
Reserve for Revenue Bond Debt Service ⁽²⁾	7,487,328	7,497,556	(10,228)	-0.1%
Reserve for Capital Additions ⁽²⁾	1,205,812	(28,682)	1,234,494	-4,304.1%
Reserve for Risk Management	<u>1,707,459</u>	<u>1,707,459</u>	0	0.0%
Total Reserves	\$ 10,400,599	\$ 9,176,333	1,224,266	13.3%
CONTRIBUTIONS				
From Municipality	5,317,627	5,317,627	(0)	0.0%
From Others	<u>32,694,236</u>	<u>32,579,228</u>	115,008	0.4%
Total Contributions	\$ 38,011,863	\$ 37,896,855	115,008	0.3%
RETAINED EARNINGS	<u>351,802,937</u>	<u>337,235,167</u>	14,567,771	4.3%
TOTAL LIABILITIES AND OTHER CREDITS	\$451,637,391	\$441,786,298	9,851,093	2.2%

(1) The amounts used in preparation of this balance sheet were obtained from the City's internal financial report.

(2) Bond Debt Service Reserves and Capital Additions Reserve are accounted for jointly in a single fund but are separated above for presentation purposes. The amounts shown as available for capital additions are also available for payment of in-lieu-of tax within certain Bond Resolution limitations.

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*.

Revenue per kWh (Line 1)

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

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, 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.

Operating Ratio (Line 3)

The ratio of total electric operation and maintenance 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 operation and maintenance costs associated with producing and selling electricity.

Operation and maintenance 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 5a)

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 5b)

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 6)

The ratio of net electric utility income to total electric operating revenues measures the amount of income remaining—after accounting for operation and maintenance 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 7)

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.

Retail Consumers per Non-power Generation Employee (Line 8)

The ratio of the average number of retail consumers from all classes to the total number of full-time, part-time and contract employees not involved in the generation of power measures the average number of consumers served by each non-generation employee.

The ratio may be influenced by the mix of consumers and by population density. It will be influenced by the extent that employees shared with other (non-electric) departments are not properly prorated, or that employees involved in resale transactions are included. Part-time employees are assumed to work half-time (i.e., two part-time employees are counted as one full-time employee). To the extent that this assumption is violated, the ratio will be biased. Contract employees include only those individuals performing regular utility work on an ongoing basis.

Total Operation and Maintenance Expense per Kilowatt-Hour Sold (Line 9)

The ratio of total electric utility operation and maintenance expenses, including the cost of generated and purchased power, to total kilowatt-hour sales to ultimate and resale consumers measures average total operation and maintenance expenses associated with each kilowatt-hour of electricity sold, either for resale or to ultimate consumers.

Included in operation and maintenance 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 operation and maintenance 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 10)

The ratio of total electric utility operation and maintenance expenses, excluding all costs of power supply, to the total number of ultimate consumers is the total operation and maintenance expense per retail customer.

Operation and maintenance 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) are excluded from the ratio. This ratio may be affected by population density and the mix of consumers between various classes (residential, commercial, industrial or other).

Also, the extent that a utility services a large number of resale consumers will influence the ratio.

Total Power Supply Expense per Kilowatt-hour Sold (Line 11)

The ratio of the total costs of power supply to total sales to both ultimate and resale consumers 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 operation and maintenance costs arising from all generation types, including steam, nuclear, hydraulic and other types of generation. Operation and maintenance 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 12)

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 consumers. 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.

Production Expense per Net Kilowatt-hour (Line 13)

The ratio of total production expenses to net generation measures the power production component of power supply costs.

The ratio includes operation and maintenance costs and net generation for large steam-electric generating plants. Large plants are defined as 25,000 kilowatts or greater of nameplate capacity. Gas-turbine and internal combustion plants of 10,000 kilowatts or greater are also included in this category. Nuclear plants are excluded from this Report, as are all plants operating at less than 5 percent capacity. Joint action agencies and power wholesalers are included for this ratio. The 70 plants used here represent 46 utilities, as several utilities reported more than one plant.

The ratio may be influenced by plant type, fuel type and plant age.

Retail Customers per Meter Reader (Line 14)

The ratio of retail customers to the number of meter readers employed by the utility. This 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 15)

The ratio of total distribution operation and maintenance expenses to the total number of retail consumers 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 16)

The ratio of total distribution operation and maintenance 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 consumers.

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 affected by population density, the mix of customer classes served by the utility, the dispersion of consumers 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 17)

The ratio of total customer accounting, service, and sales expenses to the total number of retail consumers measures the average expenses incurred by the utility in handling each customer's account. This includes the costs of obtaining and servicing all retail consumers. 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 18)

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

Administrative and general expenses are those electric operation and maintenance 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.

**Actual Receipts and Expenditures
Compared to Adopted Budget for Fiscal Year 2001**

	Actual	Adopted Budget	Over/Under Budget	Percent Change
FUND BALANCES AS OF 11/1/01	\$ 85,644,790	\$ 25,690,011	59,954,779	233.4%
Receipts				
Retail Electric, Water and Sewer Revenues	147,243,816	138,217,718	9,026,098	6.5%
Interdepartmental Sales	437,470	950,000	(512,530)	-54.0%
Wholesale Electric Revenues	25,174,329	25,140,745	33,584	0.1%
Interest - Operating Funds	5,106,437	5,063,500	42,937	0.8%
Contributions In Aid of Construction	0	75,000	(75,000)	-100.0%
Accounts Receivable and Other	1,717,732	1,000,000	717,732	71.8%
Sales Tax (Collections over Payments)	(104,653)	0	(104,653)	NA
Transfers In (Street Lighting Assessment)	4,392	0	0	0
Bond Proceeds - Sewer Construction	2,734,663	0	2,734,663	
Miscellaneous Operating Fees	<u>1,467,402</u>	<u>575,000</u>	892,402	155.2%
Total Receipts	<u>\$183,781,588</u>	<u>\$171,021,963</u>	12,759,625	7.5%
Operating and Maintenance (O&M)				
Fuel Costs (Gas)	25,387,948	24,015,110	1,372,838	5.7%
Purchase Power (LPPA)	43,232,717	42,500,000	732,717	1.7%
Purchased Power Other	24,666,166	24,015,110	651,056	2.7%
Transmission Charges	4,615,569	4,265,592	349,977	8.2%
Other O&M	<u>35,893,423</u>	<u>34,561,239</u>	1,332,184	3.9%
Total Operation and Maintenance	<u>\$133,795,823</u>	<u>\$129,357,051</u>	4,438,772	3.4%
Interest & Principal Payments				
Existing Debt	7,418,425	8,977,474	(1,559,049)	-17.4%
Proposed New Debt	<u>0</u>	<u>0</u>	0	
Total Principal and Interest Payments	<u>7,418,425</u>	<u>8,977,474</u>	(1,559,049)	-17.4%
Operating Revenue After Principal and Interest	\$ 42,567,340	\$ 32,687,438	9,879,902	30.2%
Capital Renewals and Replacements				
Normal Capital	4,693,001	8,462,000	(3,768,999)	-44.5%
Special Capital	1,513,523	3,103,401	(1,589,878)	-51.2%
Retained Earnings	11,809,368	5,094,126	6,715,242	131.8%
Total Capital Expenditures	18,015,892	16,659,527	1,356,365	8.1%
In-Lieu-of Tax Payments	14,200,000	14,200,000	0	0%
Total Expenditures	<u>\$173,430,140</u>	<u>\$169,194,052</u>	4,236,088	2.5%
Revenues Less Expenditures	\$ 10,351,448	\$ 1,827,911	8,523,537	466.3%
Fund Balances as of 10/31/01	\$ 95,996,238	\$ 27,517,922	68,478,316	248.8%

Fund Balances
Compared to Adopted Budget for Fiscal Year 2001

	Actual	Adopted Budget	Over/Under Budget
INDIVIDUAL FUND BALANCES			
Receipts Fund	\$ 11,299	\$ 0	11,299
Operation and Maintenance Fund	3,391,114	4,000,000	(608,886)
Bond & Interest Redemption Fund	0	0	0
Bond Reserve and Capital Additions Fund	7,482,497	8,981,010	(1,498,513)
Capital Additions Fund			
In-Lieu-of Tax Payment for 2002	17,293,176	14,536,912	2,756,264
Unappropriated Cash for Future Capital	<u>64,415,739</u>	<u>0</u>	64,415,739
Total Capital Additions Fund	\$85,111,328	\$14,536,912	70,574,416
FUND BALANCES AS OF 10/31/01	\$95,996,238	\$27,517,922	68,478,316

Section 5 ELECTRIC UTILITY

Existing Utilities System

This section of the Report sets forth the changes which have occurred to the properties of LUS during fiscal year 2001. A description and discussion of existing facilities and resources, and summaries of historical service requirements, are presented in the following pages of this section.

From February 5-7, 2002, 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' plant facilities.

Additions to Plant

Table 5-1 provides the fixed plant and equipment made during fiscal year 2001. 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 5-1
Capital Workorder Expenditures for Fiscal Year 2001

Source of Funds	Electric
Normal Capital	\$4,594,468
Special Capital	0
Retained Earnings	<u>5,204,709</u>
TOTAL	\$9,799,177

Source: "Status of Construction Workorders" by Acct. Dept.
Joan Parish, LUS, 6/25/02.

System Maintenance Expenditures

Historical maintenance expenditures from 1989 are shown in Table 5-2. The average annual percentage growth in the maintenance for the utility after leveling the variations between years (using a linear regression function) is 5.65 percent annually for the electric system during the 1989-2001 period. However, the expense for 1998 shown below (\$5,788,172) includes a certain amount of extraordinary maintenance. If this were normalized to approximately \$3,000,000, the resulting average annual

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increase would be approximately 3.36 percent. Both the amount of investment in facilities and inflation influence the amount of maintenance expense incurred. The amounts expended for maintenance of the electric system for the fiscal years ended 1989 through 2001 are provided in Table 5-2.

Table 5-2
Annual System Maintenance Expense – Electric System

Year Ended October 31	Amount	% Change
1989	\$2,361,025	20.2%
1990	\$2,286,374	-3.2%
1991	\$2,675,271	17.0%
1992	\$2,857,068	6.8%
1993	\$3,389,012	18.6%
1994	\$2,982,171	-12.0%
1995	\$2,485,217	-16.7%
1996	\$2,771,051	11.5%
1997	\$2,711,881	-2.1%
1998	\$5,788,172	113.4%
1999	\$3,500,362	-39.5%
2000	\$3,838,419	9.7%
2001	\$4,256,143	10.9%

Source: LCG Financial and Operating Statement October 2001 and previous CER Reports.

Suggestions are included in the following pages concerning adopting a predictive and/or preventative maintenance program for specific utility functions such as the power generation. Such suggestions may not be made for each function, but is a recommended activity to be initiated at all levels of LUS facility operations.

LUS does not have an integrated resource plan for electric power supply in place for this reporting period, however, a plan is currently being developed. The need for this planning has become even greater because of the governmental consolidation.

Existing Electric Utility System

The following discussions summarize the findings of the Consulting Engineer with respect to the general condition of the properties based upon discussions with utility supervisory personnel and information supplied by LUS' personnel.

Electric System Power Supply

Gas-fired Generation: Facilities Description

The gas-fired generating facilities which supply a portion of the demand and energy requirements of LUS include the Louis "Doc" Bonin Electric Generating Station ("Bonin Plant") and, in the past, included the Curtis A. Rodemacher Electric Generating Station, both located within the City. The Rodemacher Station has not operated since 1994 and LUS is in the process of determining the use of the space the station occupies. Gross operating parameters for each of the Bonin units are listed below:

Table 5-3
LUS Gas-Fired Generation

Unit	Gross Capacity (MW) ⁽³⁾	Fuel	Boiler Manufacturer	Turbine Manufacturer
Bonin Unit 1 ⁽²⁾	45	Gas/Oil ⁽¹⁾	Babcock and Wilcox	Westinghouse
Bonin Unit 2	80	Gas/Oil ⁽¹⁾	Combustion Engineering	General Electric
Bonin Unit 3	170	Gas/Oil ⁽¹⁾	Babcock and Wilcox	General Electric
TOTAL	295			

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

(2) The Bonin Unit No. 1 was inoperative from January 1995 until March 1999 due to extended repair and improvements to the boiler and cooling tower.

(3) Summer rating with AGC.

Source: Jamie Broussard, LUS, 2/7/02.

Gas-Fired Generation: Condition of the Property

The electric power production facilities at the Bonin Station are generally being well maintained. In January 1995, the Bonin Unit 1 boiler was severely damaged due to a boiler explosion. A contract was awarded to Babcock and Wilcox to repair the damaged components due to the explosion and other age-related damage. The repairs to the boiler were nearly complete when, in November 1997, a tornado touched down at the plant site and completely destroyed the Unit 1 cooling tower. A contract was issued for the replacement of the cooling tower and the unit was operational again in March 1999.

During the period of the cited repairs on Unit 1, other work was accomplished, including the replacement of boiler controls with a Foxboro IA distributed control system, performance of a five-year major turbine inspection, and the retrofit of the turbine exciter to a static excitation system. In conjunction with the upgrade in boiler controls, a majority of field instrumentation was replaced and a combustion analyzer, which monitors boiler flue gas, was integrated into Unit 1's furnace supervisory and protection system.

LUS has continued to make capital improvements to the Bonin plant, and in 2000, LUS replaced Unit 3's turbine and boiler control systems and Unit 2's economizer and primary superheater. In 2001, LUS completed condenser tube replacement on Unit 3, and for 2002, LUS is planning to replace Unit 2's turbine control system during the spring outage scheduled for March.

The Comprehensive Engineering Report for the Fiscal Year 1996 reported significant surface corrosion on the external boiler surfaces and structural steel. Painting of Unit No. 1 was accomplished in conjunction with the boiler repair contract. Plant personnel indicated that plans are in place to repaint the external facilities of Bonin Unit Nos. 2 and 3, but such work has not been initiated due to scheduling and manpower constraints. We recommend proceeding with the plans to repaint the affected areas as soon as possible to prevent further degradation. The areas inside the facility are clean and well kept and the yard areas of the facility were generally neat and well maintained.

Gas-Fired Generation: Operations and Maintenance

Operations at the Bonin Plant are accomplished through the use of written operational procedures. The Bonin Plant 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, and the weekly functional test of the 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. LUS plans on buying new testing equipment in 2002 to upgrade the existing program for vibration monitoring.

Both predictive and preventative maintenance tasks are implemented into 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. LUS personnel have assembled the available spare parts and consumables in the maintenance shop storage area. However, the spare parts have not yet been incorporated in the MP2 inventory system.

In 2001, major repair/inspection work included the following:

- LUS utilized MDA, an outside contractor, to supervise a turbine control valve inspection of Unit 2;
- Expansion joint repairs were made to Unit 1 and 3's cooling tower;
- Unit 2 generator's circuit breaker oil was filtered;
- Unit 3's "A" forced draft fan motor failed in April 2001. LUS reported that the motor's winding shorted to ground when it was impacted by loose internal air baffling of the motor. LUS believes the loose internal air baffling should have been detected by a motor repair shop that reconditioned the motor a few months before the failure. The forced draft fan motor failure resulted in the unit being derated for approximately one month. While the motor was being repaired, LUS replaced the fan/motor coupling via a new supplier having greater availability of parts and accessibility of service;
- In 2001, LUS contracted with Hydrochem to perform a chemical cleaning of the generator hydrogen coolers for Units 2 and 3. LUS is planning to do this work annually as a preventative maintenance before the summer peak due to the realized operational benefits (i.e., lower generator winding temperatures);
- LUS reported some operational failures of the Forney flame detector system for Unit 1 and 2's burner supervisory. The flame detector failures cause the spurious trips of unit burners, resulting in a derate of the respective unit until the burners can be restored to service. LUS is presently engineering a replacement for the Forney flame detector system for Units 1 and 2 to eliminate this reliability concern; and
- In June 2001, LUS lost use of well pump No. 2 which caused some limit to production. LUS believes the well pump failure was a result of pump shaft misalignment.

Major turbine maintenance work in the past years has included five-year overhauls on Unit 1 in 1997 and Units 2 and 3 in 1998. LUS is considering scheduling Units 2 and 3 five-year turbine overhauls in 2003. The present plan is to first overhaul Unit 3 based on recommendations from MDA to re-evaluate the generators' stator winding looseness and field winding integrity.

Day-to-day operational challenges include coordination of dispatch and generation requirements. The long-term challenge facing LUS Bonin Plant operations is a shortage of qualified 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. During previous years, the shortage of labor increased plant personnel overtime. For 2001, LUS experienced lower demand for Bonin generation and hired contract employees to supplement operations, which as a result, decreased the average overtime from approximately 11 hours per week to 5 hours per week. To manage operations and maintenance with these shortages, LUS continues to utilize contract labor to perform the duties of the plant engineer and instrument/control/electric technician positions.

Section 5

Gas-Fired Generation: Operating Statistics

LUS personnel reported the following significant operating statistics for the units shown below.

Table 5-4
LUS Gas Fired Electric Generation
Operating Statistics

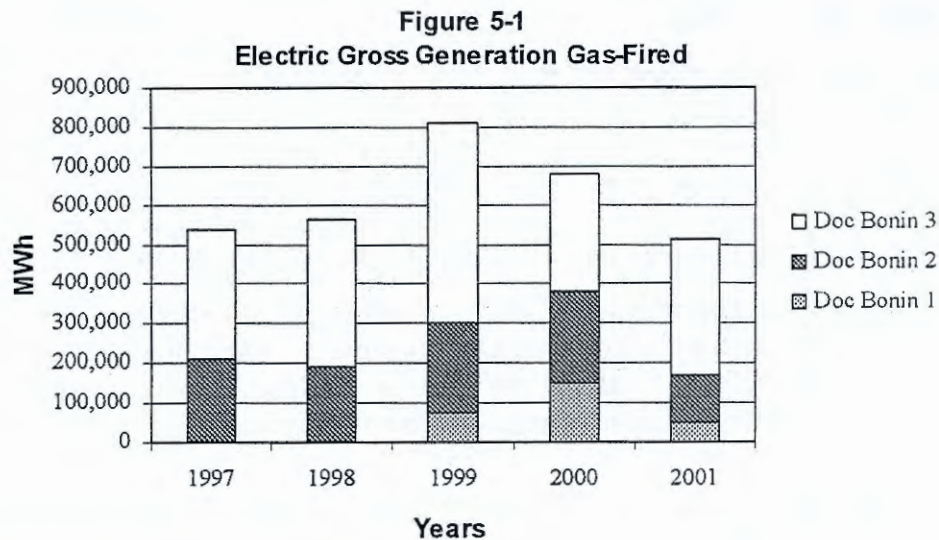
	1997	1998	1999	2000	2001	5-Year Average ⁽¹⁾
Doc Bonin – 1						
Gross Generation, MWh	NA	NA	77,252	149,668	49,737	92,219
Availability Factor	NA	NA	75%	100%	84%	86%
Forced Outage Rate	NA	NA	0.10%	0.20%	0.19%	0.16%
Number of Starts	NA	NA	11	9	7	9
Gross Capacity Factor	NA	NA	17%	33%	11%	20%
Service Factor	NA	NA	39%	68%	29%	45%
Doc Bonin – 2						
Gross Generation, MWh	210,980	189,262	222,001	233,378	119,384	195,001
Availability Factor	94%	61%	88%	85%	92%	84%
Forced Outage Rate	3%	0%	2%	3%	1%	2%
Number of Starts	0	9	10	10	12	8.2
Gross Capacity Factor	27%	24%	28%	30%	15%	25%
Service Factor	62%	55%	64%	61%	42%	57%
Doc Bonin – 3						
Gross Generation, MWh	326,524	373,907	509,229	296,934	344,299	370,179
Availability Factor	71%	80%	97%	63%	81%	78%
Forced Outage Rate	1.30%	0.60%	2.70%	3.70%	0.09%	1.68%
Number of Starts	0	3	5	8	4	4
Gross Capacity Factor	20%	23%	31%	18%	21%	23%
Service Factor	45%	45%	65%	42%	56%	51%
Total Gross Gas						
Generation, MWh	537,504	563,169	808,482	679,980	513,420	620,511
Total Net Gas Generation, MWh	495,738	524,498	754,269	629,259	470,652	574,883
Total Gas Consumption, MMBtu	5,767,016	6,113,660	8,738,260	7,461,158	5,606,380	6,737,295
Net Heat Rate, Btu/kWh	11,633	11,656	11,585	11,857	11,912	11,719

(1) The average for Bonin 1 reflects a three-year average.

- Availability Factor reflects the percent of the time the unit was capable of providing service.
- Gross Capacity Factor is the actual electric generation divided by the maximum the unit is capable of generating.
- Forced Outage Rate reflects the % of time the unit was removed from service due to an unplanned failure.
- Service Factor reflect the percent of time the unit was electrically connected to the transmission system.

Source: Jamie Broussard/Jeff Stewart, LUS 2/6/02.

Figure 5-1 below shows the total generation from the gas-fired facilities and illustrates the amount contributed by each of the units.



Source: Jamie Broussard/Jeff Stewart, LUS 2/6/02

Historically, only one of the three active gas-fired generating units at Bonin was operated at one time. In this mode of operation, there were essentially “spare” generating units to ensure system reliability. Based on the trend of increasing power costs experienced during peak load periods, LUS anticipates it will be profitable to operate two or, eventually, three units and sell excess electricity to the market. The availability for the Doc Bonin Plant, Unit Nos. 1-3, was 84 percent, 92 percent and 81 percent, respectively. It is noted that scheduled outages, as opposed to forced outages, had the biggest impact on availability for each Bonin unit in 2001. The Units are within the range of expected values for availability at gas-fired power plants of similar size and technology.

Utility Deregulation Issues

As provisions in the Energy Policy Act of 1992 are implemented by the FERC Orders 888 and 889, LUS will face new challenges resulting from increased competition. The Bonin generating facility will essentially become a commodity that competes for a market share. These changes will put pressure on LUS to alter certain practices to enable utility management personnel to make timely business decisions regarding operation and maintenance of the plant, purchasing power, selling power, pricing power, plant capital improvements, plant upgrades, etc. There may be significant opportunities for LUS to take advantage of the 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.

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, Rodemacher Unit No. 2 (the Unit), located in northwest Rapides Parish near Boyce, Louisiana, approximately 100 miles northwest of Lafayette. The Unit, which is operated by CLECO, consists of a General Electric nominal 510,828-kW, reheat steam turbine generator and a Foster-Wheeler steam generator.

The Unit burns coal as its primary fuel and is capable of burning oil and natural gas. Provisions were made in the design of the Unit to allow the addition of the equipment needed for burning lignite. Coal for the Unit is purchased from Kennecot Coal Corporation and is transported from Campbell County, Wyoming by railroad. LPPA owns two unit trains that are operated by CLECO in coordination with CLECO's unit trains to bring LPPA's coal to the generation site.

The Unit is equipped with a hot electrostatic precipitator for fly ash removal at approximately 99.5 percent design efficiency when burning coal. The Unit is connected into CLECO's 230-kV transmission system. Transmission service for LPPA's portion of the power output from the Unit is provided pursuant to a transmission service agreement between CLECO and LCG.

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 are included as indicators of plant performance. These performance measurements are provided in Table 5-5.

**Table 5-5
LPPA Electric Generation Operating Statistics
Rodemacher Unit No. 2**

	1997	1998	1999	2000	2001	5-Year Average
Gross Generation (MWh)	3,405,472	3,614,002	3,288,805	3,570,060	3,047,186	3,385,105
Station Service (MWh)	221,772	228,919	214,974	233,070	198,831	219,513
Net Generation (MWh)	3,183,700	3,385,083	3,073,831	3,336,990	2,848,355	3,165,592
Station Service (%)	6.5%	6.3%	6.5%	6.5%	6.5%	6.5%
Net Capacity Factor (%)	69.5%	73.9%	67.1%	72.6%	62.2%	69.1%
Hours Available	7,925	8,090	7,498	7,965	6,863	7,668
Net Unit Heat Rate (Btu/kWh)	10,574	10,571	10,437	10,736	10,869	10,637
Availability Factor (%)	90.5%	92.4%	85.6%	90.7%	78.0%	87.4%
Forced Outage Factor (%)	3.2%	2.6%	2.3%	2.4%	4.6%	3.0%
Scheduled Outage Factor (%)	6.3%	5.0%	12.1%	6.9%	17.4%	9.5%

Availability Factor reflects the percent of the time the unit was capable of providing service

Capacity Factor is the actual electric generation divided by the maximum the unit is capable of generating

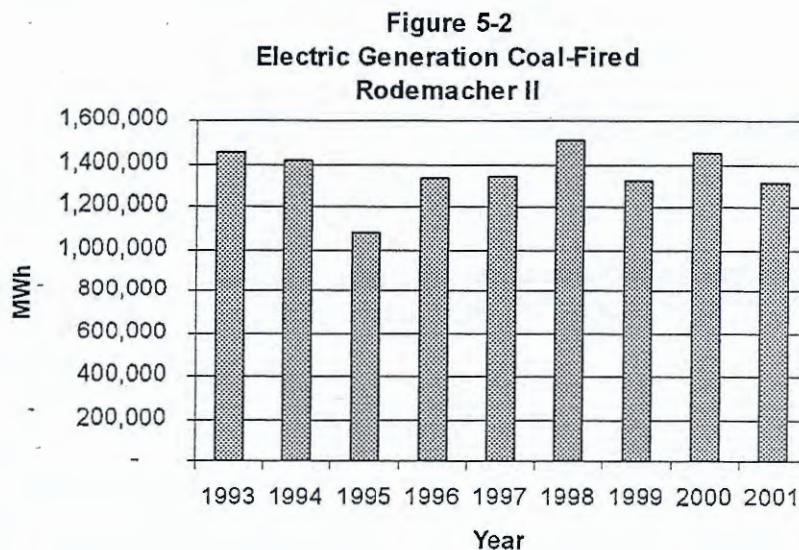
The generation statistics shown above are for the entire Unit, not just LPPA's 50 percent ownership.

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

Source: Steve Derouen/Jeff Stewart, LUS 2/6/02.

The generation statistics shown above are for the entire Unit, not just LPPA's 50 percent ownership.

Figure 5-2 shows the MWh delivered to LUS annually from the unit.



Source: Frank Ledoux/Jeff Stewart, LUS 2/6/02.

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.

Electricity Dispatching Function

LUS dispatches electric power and energy from its dispatching control center to several neighboring municipalities and other off-system sales customers. In its dispatch function, LUS provides the following services:

- Production scheduling and costing;
- Off-system power sales billing;
- Fuel adjustment calculation;
- Financial planning and budgeting;
- Load analysis and forecasting;
- Data reporting for regulatory agencies; and
- Monitoring inadvertent power interchanges.

As discussed later in this section, The Energy Authority ("TEA") is utilized by LUS to negotiate and coordinate wholesale power transactions.

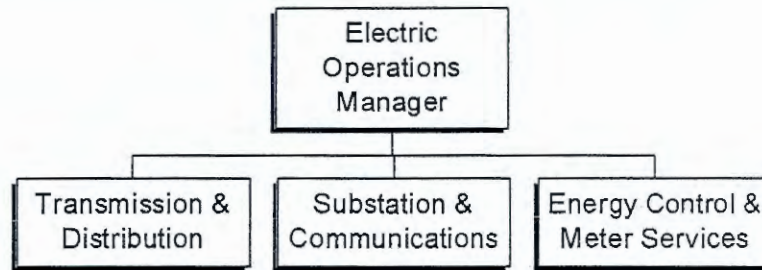
Electric Operations

The Electric Operations Division of the LUS is responsible for the transmission, distribution, metering, and accounting of electrical power to consumers. 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) and the operation of the System Control and Data Acquisition ("SCADA") system. The SCADA system provides direct control of the electric transmission and distribution system, as well as control and monitoring of certain water and wastewater facilities and equipment.

Organization

The Electric Operations Division consists of three discrete operating sections: Transmission and Distribution, Substation and Communications, and ECS and Meter Services.

The Electric Operations Division is currently organized as follows:



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

System Characteristics

LCG's electric transmission system includes 230 kV transmission facilities and a 69 kV loop. Step-down transformation from the 230 kV and 69 kV systems to the 13.8 kV distribution service is located at 13 substations. Nearly all 2400 V facilities have been converted to 13.8 kV. The system still has a small amount of 2400 V service at Doc Bonin Plant and a small amount of customer owned, primary metered 2400 V facilities. The service area covers approximately 40 square miles and is primarily residential and commercial customers.

Key Issues, Goals and Achievements

The following are some of the challenges or key issues that LUS has identified:

- The increasingly competitive labor market for skills within the Electric Operations Division and the ability to retain experienced personnel;
- Continuing to improve the capabilities and utilization of the SCADA system;
- Developing and maintaining relationships with power marketers and other utilities in addition to LUS' traditional business associates in the wholesale power market;
- Reducing tree-related outages; and
- Improving the communication and coordination between the Bonin Plant operations staff and the ECS operations staff and others.

The Electric Operations Division continues working toward meeting these challenges by setting the following goals:

- Continue focusing on operational issues;
- Provide training to personnel as needed;
- Maintain adequate staffing and experience levels; and
- Continue monitoring of statistical operational data.

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The Electric Operations Division during the past year achieved the following accomplishments:

- Continued with significant system improvements and upgrades consistent with the five-year capital improvement budget;
- Operated the system in a manner consistent with prudent utility practice; and
- Began planning and implementation of a new SCADA system to replace the current 10 year old system.

Reliability and Performance

The electric operations manager monitors outages and categorizes them by three primary groups: tree-related, animal-related, and equipment-failure-related. No significant outages were reported other than isolated storm or equipment-related problems. An increase in tree-related outages was reported. Tree trimming activities through the use of outside contractors has been constant. System failures due to animal and equipment failure are again reported to be higher than previous years. Based on conversations between LUS staff and the Consulting Engineer, it appears that reliability continues to be acceptable and that LUS staff is committed to continuing existing tracking and prevention procedures.

Continuous recording of outage data allow staff to quickly identify changes in reliability. Recent historical indices for LUS are summarized in Table 5-6. Table 5-7 list the values for energy providers supplying similar services in Louisiana during the year 2001.

Table 5-6
LUS Reliability Index Summary

12 Months Ended October 31	System Average Interruption Duration Index Minutes/Customer	System Average Interruption Frequency Index Interruptions/Customer
1996	119.5	1.85
1997	153.9	2.34
1998	106.2	2.16
1999	102.9	2.52
2000	65.9	1.42
2001	86.1	2.10

Source: Ron Landry, LUS 2/6/02.

Table 5-7
2001 Reliability Index Summary Comparison

Energy Provider	System Average Interruption Duration Index Minutes/Customer	System Average Interruption Frequency Index Interruptions/Customer
Cleco Power	144.0	1.82
Entergy	142.1	1.91
South Louisiana Electric Cooperative Association	114.8	1.55
Southwest Louisiana Electric Membership Corporation	169.2	2.73
Valley Electric Cooperative	225.6	2.16
Concordia Electric Cooperative	302.7	4.14
LUS	86.1	2.10

Source: Cynthia Thompson, Louisiana Public Service Commission, 3/20/02.

In addition to the above reliability indices, LUS also monitors crew response time, trouble-shooter response time and average outage time. LUS staff reports that average outage time has slightly increased over recent history.

Predictive and Preventative Maintenance

Predictive and preventative maintenance on the system, in connection with feeder, substation and equipment (as well as the full operation of the energy control center), continue to improve the reliability of the electric system.

LUS has demonstrated a high level of system reliability due to their commitment to equipment monitoring. Infrared scanning, formal testing programs, and visual inspection enhance the reliability of the electric system.

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

- Distribution feeders over 13.8 kV;
- Substation breakers;
- Substation bus;
- Substation transformer bushings; and
- Switches.

In previous years, several hot spots have been discovered in substations. In the 2001 infrared survey, only one hot spot was found. The problem was a 13.8 kV breaker disconnect switch, which was isolated and repaired immediately. No problems were found on the transmission system. The distribution system was not surveyed due to a shortage of manpower. Since 1999, the priority for conducting infrared surveys has been in the areas of transmission and substations. Each discovery reflects a case where an electric system outage may have been prevented.

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

breakers include oil filtering, oil dielectric tests, contact resistance tests, motion analysis, operational tests and protective relaying tests. Bi-annual maintenance on transmission breakers entails the same testing as distribution equipment with additional maintenance and checks done on hydraulic pneumatic and SF6 systems. Transformers 2500 kVA and above are tested on a bi-annual basis and include TTR, Doble, oil analysis, and sudden pressure relay testing.

In 2001, the 138/230 kV CLECO tie transformer T5 was opened and inspected. It was found that the core had some of the laminations shifted. Repairs were made to the visible areas and oil/gas monitoring continues on a quarterly basis. The maintenance and equipment schedule is provided in Table 5-8.

**Table 5-8
Maintenance and Equipment Schedule**

	Frequency
Distribution Breakers	Annually
Transmission Breakers	2 Years
Power Transformers	2 Years
Transformer Oil Analysis	Annually
Distribution Relays	Annually
Transmission Relays	18 Months
Batteries	Annually

Source: Ron Landry, LUS, 2/6/02.

Another type of reliability test is the visual inspection of all substations. LUS field crews visually inspect all substations on a monthly basis. This includes visual analyses of transformer bushings, the general substation environment, feeder voltages, battery water levels, alarms, and nitrogen bottle levels.

It is our opinion that the reliability related inspections discussed above are important and aid in controlling equipment failure and customer outages.

Electric Operations Division

The following summaries contain information pertaining to each of the operating sections within the Electric Operations Division. Each summary includes highlights and concerns for each of the sections as well as pertinent comments.

Transmission and Distribution

The Transmission and Distribution Section ("T&D") dispatches all electric, water and wastewater field crews and performs operations and maintenance activities for the electric system. The total staffing level in this section is 48, including the section Supervisor. Operation and maintenance activities include but are not limited to new line construction, line rebuilds, relocation projects, trouble-shooting, equipment installation and maintenance, and tree trimming. The T&D line crews are comprised of four overhead line crews, one underground crew, two streetlight crews, and one

service crew. The T&D crews are currently not staffed at full capacity due to manpower shortages.

LUS staff report that the distribution system has been prudently planned and designed. The capacity of the transmission system is routinely analyzed and reported on in LUS' Five-Year Planning Report and One-Year Contingency Report. These reports conclude that there is sufficient capacity in the system to meet existing loads. A new 69 kV substation will be needed in 2004. The distribution system also undergoes an annual analysis of loads and capacities. According to LUS staff, continuing studies find no inadequacies in the distribution system. LUS has continued their efforts in standardizing construction, material specifications, and contract documents, along with close supervision of construction, to ensure that the distribution system operates in accordance with prudent industry practices.

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

Historically, LUS utilized a significant number of mercury vapor streetlights. Nearly all mercury vapor streetlights have since been converted to more efficient, high-pressure sodium lighting. These will be converted as work loads permit or as these fixtures fail over time. LUS currently replaces all failed mercury vapor streetlights with high-pressure sodium lights. Street lighting maintenance crews respond during normal business hours to street and private light outages and are generally able to replace reported light failures within three working days. This rapid response rate provides a visible indication to customers that LUS is committed to high quality service.

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. Approximately 2,000 wood poles have been identified for replacement. Of these, 1,000 poles having been replaced. A significant number of these poles came from a single supplier. LUS is participating in a class action suit against that supplier. Replacing these deteriorated wood poles is expected to continue in future years. LUS continues to use an ultra-sound tester to facilitate this effort.

Energy Control System and Meter Services

Energy Control System

The Energy Control System ("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. However, these sales are now coordinated through TEA. TEA performs the wholesale power negotiations and transactions. ECS basically provides TEA with hourly/daily capacity and load requirement data.

A staff of five operators working 12-hour shifts operates the ECS. In addition, ECS includes an engineer responsible for hardware systems, an engineer responsible for software systems, two technicians, and one supervisor. The ECS/Meter Services Supervisor oversees the ECS and the Meter Services Sections. Four of the five operators have received Southwest Power Pool ("SPP") operator training and are SPP

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certified. Additionally, four of the five operators are NERC certified. This commitment to training is highly advantageous and will assist LUS in positioning itself in a future environment of electric deregulation.

SCADA System

The SCADA system became operational in fiscal year 1992. In 1999, the system continued to mature as additional data-gathering points for water and wastewater systems came on line. Additionally, some progress for the Bonin Plant has been made toward completion of fuel monitoring systems and are expected to provide better economic information for making informed operating decisions. Efforts in this area are continuing.

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 staff.

In 2000, LUS began the pre-planning process to replace the SCADA system with a full-graphics system. LUS is preparing to engage the services of an EMS/SCADA consultant. It is anticipated that a new EMS/SCADA system will be designed, purchased, installed and fully operational by mid-2003. In order to better optimize efficiencies and increase LUS' understanding of operating costs, Economic Dispatch and Unit Commitment programs will be requirements of the new system. Implementation of this new system will assist both the 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. It will also help in the refinement and verification of O&M costs, start-up costs, and real-time fuel monitoring data.

Reducing power production costs can also be achieved through improved participation in the regional market for electricity. LUS had made important steps in this regard by joining the SPP in mid-1998. The SPP market for electricity operates through frequent telephone contacts that share price signals between prospective buyers and sellers. This approach does not include computerized matching of buyers and sellers and does not openly publish clearing prices. LUS reports that since joining SPP, they have significantly increased the amount of electricity that they buy and sell. They are now interacting with a broader set of sources through TEA. However, due to forthcoming changes in the governance in the SPP, LUS has issued notice to the SPP that they are terminating membership in that power pool in favor of joining SeTrans Regional Transmission Organization. Details of this move will become available in the near future. Based on verbal reports from LUS, we believe that their recent participation in such markets is very useful to their economic future and should continue to receive high priority.

One attribute of participating in markets for electricity is the acceptance of risk. Under certain circumstances, non-traditional contracts for electricity have the potential to be unprofitable or operate at a loss.

The ECS system collects data from fourteen electric substations, thirteen locations in the water system and 36 lift stations in the wastewater system. LUS intends to eventually install RTUs at all 116 lift stations. Implementation is based on priority, budget, and schedule. Additional RTU's are scheduled to be installed in the water system to monitor system pressure and wholesale water sales.

In addition to providing system information and control, SCADA system software also maintains a listing of customer locations where life support systems are in place. When electric outages affect those locations, SCADA operators contact the customer via telephone and convey information regarding the status of the outage and expected system restoration. When service is restored, customers are contacted again to verify that their service is on. This pro-active and service-oriented customer focus is representative of LUS' mission statement, strategic plan, goals and policy, and is to be commended.

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. Capacitors are operated on seasonal settings with voltage and time of day over-rides to control power factors.

Expansion of the operational capabilities of the SCADA computer/control and processing equipment is in progress. ECS personnel continue to monitor the state of the industry in this regard so that prudent equipment upgrades can be made in the future. LUS also continues to upgrade the software to improve system graphics and improve its interface capability with the Lafayette Utilities Management Information System ("LUMIS"). The current focus of this effort is on updating databases. Information pertaining to the primary distribution system is 100 percent complete. Databases for the secondary distribution and transmission systems are 50 percent and 90 percent complete, respectively. Databases for the water and wastewater systems are 50 percent and 100 percent complete, respectively.

Meter Services

The Meter Services Section is responsible for meter reading, replacement, testing and repair, and customer connects and disconnects. The supervision of this section has been combined with the ECS supervisor. The Meter Services Section is comprised of 31 staff members. The automatic meter reading and on-site meter reading (AMR/OMR) Pilot Project continued through 2001.

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

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The Meter Services Section continues to compile 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. Due to changes resulting from the new CIS, statistics have now been narrowed to tracking "skips". Tracking the number of "skips" reflects the overall efficiency of a meter reader, of a crew, and of Meter Services in general.

In 2001, the Meter Services section was required to re-read approximately 19,000 meters. The new CIS was implemented in September 2000 causing a change in "skip" tracking at that time. From the information available, it appeared that the number of "skips" handled in 2000 was approximately 18,200. The slight increase could be attributed to several factors: getting behind on read schedules due to the CIS implementation, additional meters in the system and several vacant positions in Meter Services.

LUS continues to explore opportunities for improving meter reading efficiency. LUS no longer utilizes an outside consultant to investigate automatic meter reading technologies. LUS' pilot test has advanced sufficiently to where one of their meter reading employees, with guidance from one of their in-house engineers, has been installing radio-read technology at numerous meter sites for the purpose of downloading readings. At the time of this report, 845 meters were converted to this technology. Other technologies are being explored as well to help with commercial and industrial accounts who may need hourly profiling data or other value added services available from LUS through the meter.

The Meter Services Meter Shop maintains high accuracy levels through a formal testing program. The program tests all electric 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;
- The meter shop checks all active accounts with little or no electric consumption, and
- Meters are tested whenever customers express concern about the accuracy of their bills.

In addition to these scenarios, LUS has in the past conducted random testing of residential meters to determine whether the program should be extended to residential meters. The testing 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 re-calibrated and re-furbished for future use. If necessary, the customer's bill is adjusted based on the findings of the meter test report and historical electrical consumption. Meter Services issues a monthly report of the top commercial and industrial users. This list aids the

identification of meters that require testing. We agree with the progress in meter testing and recommend its continued focus and expansion.

Substation and Communications

The Substation and Communications Section includes eight employees responsible for 14 electric transmission / distribution substations. The LUS distribution system is tied to the electrical grid through 69 kV, 138 kV and 230 kV transmission ties. LUS management reported that system reliability during 2001 was high, indicated by substation breaker/reclosers having proper operation 96 percent of the time. The substation and communication section has highly trained personnel which has contributed to the achieved reliability.

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

- Installation of ABB DPU (Distribution Protection Unit) relays in distribution breakers for higher reliability;
- Mall Substation upgrade (completion expected in 2002); and
- Flanders Substation upgrade (completion expected in 2003).

Currently, substation loads are well within maximum capabilities. During 2001, LUS reported no substation was loaded above 80 percent of its rated capacity. As a result, no further significant substation upgrades are currently planned to meet existing loads. However, to meet future growth substation additions may be planned.

Spill prevention plans and a formal spill procedure are in place for all substations. Some substations have berm walls for oil spill containment and all larger substations have oil spill cleanup materials on site (see Section 8).

A new fiber optic based communications system is currently being implemented to link all substations and replace the aging microwave system. In 2001, the T1 equipment utilized for substation communications was completed. The SCADA communications channels have all been transferred and all but two permissive channels have been converted to the new equipment. In March 2001, the T1 rings connecting all LUS substations were completed. Additionally, at that time the OC48 gear was operational. In August 2001, the OC12 equipment was operational. Replacement of the microwave system with a new fiber optic system will allow LUS to keep pace with the increasing communication requirements of a sophisticated protection system. These improvements are recommended and consistent with the high level of customer service commitment made by LUS. The fiber communications system will also provide opportunities for LUS to provide other kinds of communication services using excess capacity in the system. The system is based on approximately 60 miles of fiber and will reach all electric substations, water plants, wastewater plants, city hall, and municipal facilities (refer to Section 1 for a discussion of *The LUS Powered Network*).

Historical Utility Requirements

The electric facility of LUS has met customer demands for service, and provided its customers with adequate and reliable utility services during the period reported herein.

Electric System Requirements

The historical net power and energy requirements for the past ten years are presented in Figure 5-3 and Table 5-9. To calculate a more stable or normalized growth rate for the period, a linear regression line was included for the period 1990 through 2001.

Figure 5-3
Total Annual Electric Retail Sales
(MWh)

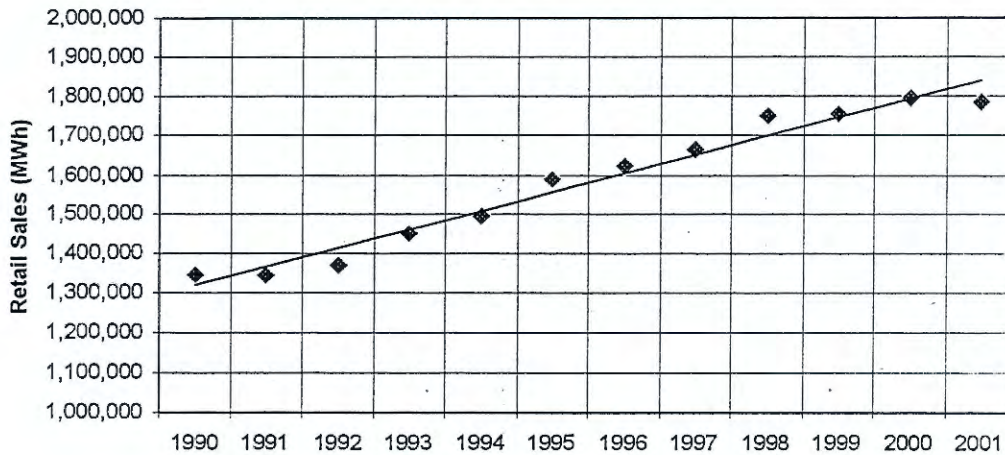


Table 5-9
Electric System
Historical Power And Energy Requirements⁽¹⁾

Fiscal Year	Number of Customers	Peak Demand MW	Energy Requirements MWh	Annual Change in Energy Requirements %	Annual Load Factor %
1990	45,343	316	1,344,540	7.3%	48.6%
1991	46,719	310	1,345,521	0.1%	49.5%
1992	48,009	318	1,371,271	1.9%	49.1%
1993	48,931	339	1,450,791	5.8%	48.9%
1994	50,107	350	1,499,424	3.4%	48.9%
1995	51,197	368	1,587,590	5.9%	49.2%
1996	52,366	358	1,623,350	2.3%	51.6%
1997	53,048	368	1,661,996	2.4%	51.6%
1998	54,154	391	1,749,782	5.3%	51.1%
1999	54,657	401	1,753,844	0.2%	49.9%
2000	55,027	428	1,794,268	2.3%	47.9%
2001	55,268	388	1,783,450	-0.6%	52.5%

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

Source: LUS Financial and Operating Statement, 2/7/02

Retail electric service has grown significantly and steadily over the period shown above. Customer growth has averaged 1.7 percent per year while usage per average customer has grown at 0.7 percent per year. These two influences have resulted in annual energy growth of approximately 2.4 percent. Energy sales in 2001 were nearly 33 percent higher than those in 1990.

LUS, through interconnection arrangements with other utilities, has also marketed surplus power and energy. For fiscal year 2001, LUS sold surplus power and energy to 16 wholesale customers. For the 12 months ended October 31, 2001, surplus power and energy sales totaled 616,338 MWh, and provided \$17.8 million of gross revenues.

Contracts and Agreements

LCG has many contracts and agreements in connection with the business of the Utilities System. Only principal contracts and agreements are summarized in the following paragraphs.

Purchased Power and Energy Agreements

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

Lafayette Public Power Authority

LCG, through LPPA, acquired a 50-percent ownership interest in the Rodemacher Unit No. 2 ("Unit"). The primary fuel supply to the Unit is low-sulfur Wyoming coal and the output is sold by LPPA to LCG in accordance with a long-term power sales contract. LCG is obligated to make all payments required in connection with its 50-

percent share of costs for operation and maintenance of, and renewals and replacements to the Unit, as well as for debt service, debt service reserves, and such other amounts which LPPA is required to pay or set aside into any other fund or account established by the Ordinance adopted by LCG (LPPA Bond Ordinance). LPPA's 50-percent ownership interest in the Unit, together with its 50-percent ownership of coal cars acquired by LPPA for transportation of fuel to the Unit are referred to in this report as the "Project."

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. Currently, the demand and energy cost of this power is approximately 24.03 mills per kWh. The total annual energy under this contract represents approximately two percent of LUS' total annual energy requirement. The contract terminates December 31, 2003.

SPA will have a limited quantity of peaking capacity available for sale as a number of firm and peaking power sales contracts terminate in the future, and as new hydro capacity from two multipurpose projects under construction become operable.

Power and Energy Sales Agreements

As a result of LUS' marketing efforts for the sale of surplus power and energy, the following are principal agreements for sales to other entities.

City of Natchitoches

LCG and the City of Natchitoches ("Natchitoches") operate under an agreement whereby LUS provides the full load requirements of Natchitoches plus normal load growth. Natchitoches agrees to maintain and make available all of its generating plant capacity for LUS' use when such use is desirable and necessary. LUS acts as Natchitoches' scheduling agent for its total power supply, including Natchitoches' SPA hydroelectric power and energy allocation. The agreement was amended in 1995 to include the establishment of a new incremental demand class for high peak demand and high annual load factor customers serviced by the Natchitoches. The term of this agreement extends through December of 2001 and provides for service to Natchitoches directly from LUS or through the Louisiana Energy and Power Authority ("LEPA").

Louisiana Energy and Power Authority

The State of Louisiana enacted legislation (Act No. 772 adding Chapter 10-A, Section 33:4545.1 et seq., to the Louisiana Revised Statutes of 1950) in 1979 to create LEPA as a political subdivision of the State of Louisiana to provide for joint ownership and cooperation in electric generation and transmission facilities. Such joint ownership may occur between such authority and municipally owned entities, investor-owned electric power companies and electric power cooperative associations or corporations within the State of Louisiana.

LEPA subsequently acquired a 20 percent undivided ownership interest from CLECO in the electric power generation facility called Rodemacher Unit No. 2. This is the same facility in which LPPA has a 50-percent ownership interest. LCG is a member of LEPA and contractually sells power and energy to LEPA, as discussed below.

On December 20, 2000, the City and LEPA entered into an Agreement for Purchase of Power and Energy and Coordination of Operations ("Agreement"). The Agreement stipulates the amounts of power and energy to be delivered by LCG during future time periods, and also provides for the sale to LEPA of additional capacity and energy above the contract amounts if required by LEPA and available from LCG. In addition, provisions for reserves and the sale of secondary energy are covered in the Agreement. The Agreement also contains provisions for LCG to sell supplemental, replacement, economy and emergency energy to LEPA. This Agreement is for a capacity of 61 MW plus losses, reduced rates, and is effective through December 2005. There is a provision to reduce the purchased capacity further if certain member cities do not extend their contracts with LEPA.

Electric Interconnection, Interchange, and Transmission Access Agreements

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, Central Louisiana Electric Company ("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.

Interconnection and Transmission Agreements

Entergy Gulf States

The City signed a long-term (31 years) Interconnection Agreement ("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 Unit's 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

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applicable between the parties, or which may be negotiated and entered into by the parties in the future. Under the 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 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; and
- Identification of the following power delivery points and associated capacity effective with agreement modifications as of March of 1996 as presented in Table 5-10.

Table 5-10
Power Delivery Points

138 kV and Above	Contract Demand - MW
Lafayette	169
Natchitoches	52
LEPA	25

Source: R. W. Beck, Previous CER.

Interchange Agreements

LUS has entered into interchange agreements with Louisiana Generating, SWEPCO, Entergy Louisiana, and the SPA. The termination of each of these agreements is provided in Table 5-11.

Table 5-11
Interchange Agreements

Entity	Termination
Louisiana Generating	Any date after May 23, 1993 with three-(3) 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	December 31, 2003.

Source: R. W. Beck, Previous CER.

Joint Ownership/Use Agreements

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

Other Agreements

Southern Louisiana Energy Membership Co-op

In 1987, LUS entered into a non-competitive agreement with Southern Louisiana Energy Membership Co-op ("SLEMCO") for certain electric customers outside of the City limits. This agreement expired in 2001 and LUS has been competing head to head with SLEMCO for customers. To date, LUS has been successful and has not lost any material load.

Coal for Rodemacher Unit No. 2

The principal fuel for LPPA's Rodemacher Plant is coal, which is supplied to the Project by the Kennecott Energy Company and mined in Campbell County, Wyoming. As operator of the Unit, 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, the most recent of which was signed in February 1998. Pursuant to the fifth contract modification, the next opportunity for renegotiations of the contract is scheduled after December 2001.

Louisiana Intrastate Gas Corporation

Louisiana Interstate Gas ("LIG") is the supplier of natural gas for generation of electricity. The contract with this supplier has a one-year term with the option of automatic renewal. The contract is due to expire March 31, 2002. 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 requirement to actually take at least 75 percent of the nominated volumes prior to purchasing off-system electricity. However, we understand that there are no contractual consequences when actual volumes fall below 75 percent of nominated volumes.

Gas Pipeline

LUS owns one ten mile, 10-inch gas pipeline which connects to Texas Gas and Columbia Gulf pipeline systems. The LUS owned gas pipeline also crosses two other gas pipelines, Florida Gas and Koch Gas. The LUS-owned gas pipeline offers an alternative means of supplying gas to the Bonin plant in lieu of the above gas supply contract with LIG.

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A summary of the contracts and agreements is provided in Table 5-12.

Table 5-12
Contracts and Agreements

Contracts and Agreements between	Date Signed/Renewed	Termination Date	Provisions
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, 1994	December 31, 2003	
LCG Natchitoches	February 1, 1995	December 31, 2001	LUS provides wholesale electric service to Natchitoches.
LCG LEPA	June 28, 1985	December 31, 2005	LUS sells power and energy to LEPA.
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.
LPPA CLECO, LEPA	November 1, 1982	end of useful life	Joint ownership of Rodemacher Unit 2.
CLECO Kennecott Coal	February, 1998	June 30, 2002	Purchase of coal for Rodemacher Unit 2.
LUS LIG	July 1, 1999	March 31, 2002	Supply of natural gas for Bonin Units.

Source: R. W. Beck, Previous CER. Ron Gary, LUS 2/7/02.

Load Forecasts

Load forecasts for the electric system for the five-year period of 2002 through 2006 are presented below. The forecasts reflect the current assessment of expected load growth for the period. The actual electric quantities for fiscal year 2001 and the forecasts of system, off-system and total electric power and energy requirements for 2002 through 2006 are shown in Tables 5-13 and 5-14 below.

**Table 5-13
Electric System
Projected Energy Requirements**

Fiscal Year Ending October 31	Total Retail Requirements⁽¹⁾ (MWh)	Total Wholesale Sales ⁽²⁾ (MWh)	Total Requirements (MWh)
2001 (Actual)	1,770,388	508,041	2,278,429
2002	1,910,195	267,180	2,177,375
2003	1,957,526	267,180	2,224,706
2004	2,004,980	267,180	2,272,160
2005	2,052,611	267,180	2,319,791
2006	2,100,359	267,180	2,367,539

(1) Wholesale sale projections based on previous CER values.

(2) Based on wholesale contract requirements.

Source: FcstValues.xls, Steven Derouen, LUS 2/6/02

**Table 5-14
Electric System
Projected Peak Power Requirements**

Fiscal Year Ending October 31	LUS System (MW)	Off System^{(1),(2)} (MW)	Total (MW)
2001 (Actual)	388	124	512
2002	431	61	492
2003	442	61	503
2004	453	61	514
2005	464	61	525
2006	475	61	536

(1) Off-System sale projections based on previous CER values.

(2) Based on wholesale contract requirements.

Table 5-15 provides a comparison of electric loads versus resources, expressed in megawatts, for LUS. This reflects the demand requirements of retail sales, sales for resale, and a reserve requirement equal to 18 percent of demand.

Table 5-15
Electric System Comparison
Total Demands and Resources (MW)

Year Ending October 31	REQUIREMENTS		RESOURCES ⁽³⁾					Surplus/ Deficit ⁽²⁾
	Total Demand	Demand Plus Reserves ⁽¹⁾	Gas-Fired Generation	Coal-Fired Generation	Natchitoches Generation	SPA Peaking	Total	
2001 (Actual)	512	604	302	246	35	18	601	(3)
2002	492	581	302	246	0	18	566	(15)
2003	503	594	302	246	0	18	566	(28)
2004	514	607	302	246	0	18	566	(41)
2005	525	620	302	246	0	18	566	(54)
2006	536	632	302	246	0	18	566	(66)

(1) Reserves are 18 percent of the demand.

(2) Capacity deficits are offset with purchased power as required.

(3) Resource projections based on previous CER values.

Source: FcstValues.xls, Steven Derouen. LUS 2/6/02

The above table indicates that projected electric requirements exceeded demand plus reserves in 2001 and this will continue in future years. Based on the electric integrated resource plan, LUS is formulating actions to address this and similar issues relating to capacity and energy production capabilities. LUS has indicated capacity deficits will be offset with purchased power. We recommend that LUS investigate new power supply additions for the future.

System Improvement Program

LUS established a system improvement program called Capital 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 annual capital budget requirement amounts are shown in Table 5-16 and were obtained from LUS' capital budget dated July 31, 2001.

Future improvements to the electric distribution system include upgrading of circuit protection, replacing poles, line extensions, re-conductoring, and construction of new circuits, feeders and ring buses.

Substation improvement projects include the installation of a second transformer at Flanders, and a ring bus substation. A new 69kV transmission loop is planned for Bonin/St. George. Re-conductoring and rehabilitation of transmission lines on Pinhook Road is also planned.

Capital improvements to the Bonin electric production facilities include painting the Unit 2 and 3 areas, electrical retrofit of Unit 3 cooling tower, flame system safety upgrade for Units 1 and 2, generator rewind for Unit 3, and replacement of Unit 1 turbine supervisory instrumentation.

The estimated requirements for improvements to the electric department through October 31, 2006 are summarized in the following table. 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 that which are more manageable, and therefore, budget planning becomes an accurate reflection of reality.

Table 5-16
Estimated Annual Capital Requirement Appropriations
Electric System Improvements (\$000)

Year Ending October 31	Production	Transmission	Substation/ Distribution	Distribution	Customer Acquisitions	General	Subtotal	Telecom	Total
2002	\$1,825	\$930	\$5,850	\$3,910	\$0	\$1,525	\$14,040	\$2,100	\$16,140
2003	\$680	\$743	\$2,015	\$2,860	\$0	\$250	\$6,548	\$815	\$7,363
2004	\$80	\$580	\$621	\$1,305	\$0	\$100	\$2,686	\$510	\$3,196
2005	\$30	\$100	\$100	\$450	\$0	\$750	\$1,430	\$405	\$1,835
2006	\$30	\$100	\$100	\$150	\$0	\$750	\$1,130	\$0	\$1,130
Total	\$2,645	\$2,453	\$8,686	\$8,675	\$0	\$3,375	\$25,834	\$3,830	\$29,664

Source: LUS Capital Budget 2002.

Recommendations

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

Table 5-17
Recommendations

Electric Utility	Priority	Status
We suggest that LUS continue transmission and distribution personnel training and retention efforts.	Normal	New Recommendation
LUS should continue use of microprocessor relays in lieu of electromechanical relays.	Normal	New Recommendation
LUS should investigate the need to test generator and other equipment electro-mechanical protective relays at the Bonin plant through coordination between plant personnel and the LUS transmission and distribution section personnel.	Normal	New Recommendation
We recommend LUS reevaluate plant-staffing levels. Interim needs have been met with contract personnel, but a long-term permanent	Highest	Investigating

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Electric Utility	Priority	Status
staffing plan should be evaluated and compensation plan developed which will allow success in recruiting and retaining these individuals.		
We recommend LUS continue its efforts to investigate new power supply additions for the future.	High	Investigating
Previous reports identified a need for a comprehensive operator training program, which has been initiated. Additional training and ongoing re-qualification training is recommended.	High	Investigating
We suggest LUS consider the implementation and maintenance of a spare parts and inventory control system.	Normal	Investigating
LUS should continue its implementation and expansion of the preventative and predictive maintenance programs currently in place.	Normal	Investigating
We recommend implementation and maintenance of a unit-performance monitoring program to continuously monitor individual unit heat rates and execute appropriate heat rate improvement programs.	Normal	Investigating
We recommend LUS determine the actual heat rate versus output relationship for each unit. The Bonin Plant reports that progress was made in 2001 on the project to install energy metering/upgraded gas yard controls of the incoming gas supply. Further start-up/commissioning efforts of this system are expected in the summer of 2002. This metering and controls, which is connected to input signals from unit specific fuel flow and generation signals, will provide the actual heat rate versus output relationships forming the basis for economic dispatch and allow the on-line measurement of individual unit heat rates.	Normal	Investigating
LUS should demonstrate plant operation on No. 2 fuel oil to verify its emergency use at the Bonin Plant. LUS reports that in 2001, a fuel oil start-up of Unit 3 was attempted, but the effort was unsuccessful. LUS indicates progress is expected in 2002, given the availability to perform such operation via dispatch.	Normal	Investigating
LUS should proceed with plans to repaint the externals of the Bonin Plant Units 2-3.	Normal	Investigating
We recommend LUS continue frequent monitoring of the 138/230-kV CLECO tie transformer T5, which is exhibiting high dissolved gases.	Normal	Investigating
LUS should continue progress made in the area of meter testing and implementation of automatic meter reading systems.	Normal	Investigating
We recommend that in the transmission and distribution functions, LUS should continue to review OSHA requirements and or APPA safety guidelines and pursue ongoing training programs for linemen and foremen.	Normal	Investigating

Section 6 WATER UTILITY

Water Utility System

This section of the Report sets forth the changes that have occurred to the water system of LUS during fiscal year 2001. A description and discussion of existing facilities and resources, and summaries of historical service requirements, are presented in the following pages of this section.

From February 5–7, 2002, 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.

Additions to Plant

The expenditures for fixed plant and equipment made during fiscal year 2001 are presented in Table 6-1. 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 6-1
Capital Workorder Expenditures
For Fiscal Year 2001

Source of Funds	Water
Normal Capital	\$1,035,774
Special Capital	0
Retained Earnings	<u>1,606,263</u>
TOTAL	<u>\$2,642,037</u>

Source: "Status of Construction Workorders" by Acct. Dept.
Joan Parish, LUS 6/25/02

The following table, Table 6-2, lists the additions and capital improvements that have been budgeted in 2001.

**Table 6-2
Water System Improvements For Fiscal Year 2001**

	Project	Amount
Water Distribution		
WD93-06	Line Pressure Point Monitoring	\$10,000
WD93-11	Water Storage Facility – Phase I	\$100,000
WD96-U1	Bertrand Dr. Improvements	\$80,000
WD97-U1	FY 96/97 S. Water Loop – Kal. Saloom to Verot	\$260,000
WD98-01	W. Martial Avenue Extension	\$70,000
WD98-02	Downtown Street Improvements – Phase II	\$620,000
WD99-01	S. Water Loop – Verot School Rd. to LA 89	\$1,885,000
WD2000-04	Pigging/Cleaning of Distribution Mains	\$350,000
WD2001-01	Gloria Switch (moss St. to Nottingham)	\$125,000
WD2001-02	Holiday Gardens Annexation	\$1,000,000
WD_-01	Relocations for Public Works Projects (Annual)	\$400,000
WD_-U	Unidentified Distribution Projects	<u>\$200,000</u>
	Subtotal Water Distribution	<u>\$5,100,000</u>
Water Production		
WP93-07	N. Plant Repaint 3MG Ground Storage Tank	\$25,000
WP98-01	North Plant Water Well #23	\$425,000
WP99-01	N/S Plant Process Modifications	\$250,000
WP2000-01	Pigging/Cleaning of Plant Water Lines	\$400,000
WP_-U1	Unidentified Production Projects	<u>\$150,000</u>
	Subtotal Water Production	<u>\$1,250,000</u>

Source: 2001 Adopted Budget 5-year CIP.

System Maintenance Expenditures

Historical annual maintenance expenditures from 1992 are shown in Table 6-3. The average annual percentage growth in maintenance expense after leveling the variations between years (using a linear regression function) is 4.3 percent during the 1992-2001 period. Both the amount of investment in facilities and inflation influence the amount of maintenance expense incurred.

Table 6-3
Annual Water System Maintenance Expense

Year Ended October 31	Amount	Change
1992	\$602,833	4.2%
1993	\$642,666	6.6%
1994	\$658,408	2.4%
1995	\$780,350	18.5%
1996	\$850,581	9.0%
1997	\$772,946	-9.1%
1998	\$716,663	-7.3%
1990	\$779,141	8.7%
2000	\$815,534	4.7%
2001	\$879,604	7.9%

Source: Don Broussard, Financial and Operating Reports, 1992 through 2001. 2/7/02.

Water System

The following discussion summarizes the findings of the Consulting Engineer with respect to the general condition of the property based upon discussions with utility supervisory personnel and information supplied by LUS' personnel.

The Chicot underground aquifer is the sole source of water supply for LUS. The LUS Water Operations Division has joined with the Louisiana Department of Environmental Quality ("LDEQ") to implement a wellhead protection program for the City's water supply. The LUS Water Operations Division completed the necessary data gathering to identify potential contamination sources within the wellhead protection areas and to allow the LDEQ to take appropriate action to assure contamination is prevented.

The Water System includes 16 wells serving the system with a combined production capacity of 46.2 million gallons per day (mgd). In addition, the water system includes two water treatment facilities (the North Plant and the South Plant) which provide for removal of iron and manganese by coagulation, sedimentation and filtration; hardness reduction by a lime-softening process; and chlorination. The present treatment capacities of both plants are shown below in Table 6-4. Although the two plants are each capable of producing over 20 mgd of treated water, the total amount of water they can effectively deliver to customers is constrained by the capability of the distribution system to deliver the water to customers at an acceptable pressure. At 90 psi, the total effective production capability is estimated by LUS to be 26.7 mgd.

**Table 6-4
Plant Treatment Capacity**

	(mgd)
North Plant	21.5
South Plant	24.0
Total Effective Production Capability	26.7 mgd at 90 psi

Source: Don Broussard, LUS 3/7/01.

Treated water storage totals approximately 12.2 million gallons (mg); this includes 4.3 mg of elevated storage and 7.9 mg of ground storage, including pumping station wet wells.

LUS' water distribution system consists of 934 miles of pipe, most of which is in the 6-inch to 12-inch diameter range. This represents an increase in total miles of pipe of 0.4 percent above the year 2000 amount. The distribution system includes 17,954 valves and 5,545 fire hydrants. LUS reports that they have completed the installation of pressure meters at nine locations throughout the water distribution system in order to monitor system operating pressure. Readings from these meters are recorded electronically and are available for analysis by the staff. They report that the measurements have enabled them to identify areas in the system where pressures are, at times, below the desired level. The new south loop and addition of booster wells is expected to reduce the problem of low system pressure.

LUS has increased the security of its water system by stationing armed, uniformed Sheriff's Department personnel at each water plant 24 hours per day, 7 days per week. Fencing around each water treatment plant will be upgraded to provide 8-foot high chain link fence with outriggers. Security cameras with recorders will be 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.

Wholesale Water Sales

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. LUS also provides wholesale water service to several water districts and municipalities within the Parish. During 2001, water delivered to these users amounted to 15.5 percent of the water sold by LUS and 14.6 percent of the revenue. Table 6-5 shows wholesale water sales by year for the last 5 years.

**Table 6-5
Wholesale Water Sales Volumes (mg)**

	1997	1998	1999	2000	2001
Town of Scott	215,101	230,546	260,797	255,737	283,278
Water District North	307,376	341,637	290,168	307,054	330,563
Town of Broussard	29,383	43,584	51,754	66,090	89,482
Longbridge	5,698	5,169	5,499	3,603	-
Water District South	78,647	144,738	160,386	226,881	227,199
Milton Water System			9,935	5,742	99,313
Water District North – Wholesale				1,563	64,257
Total Wholesale Water Sales	636,205	765,674	778,539	866,670	1,094,092
Total Water Sales (Wholesale and Retail)	5,979,024	6,549,226	6,563,358	7,110,008	7,054,947
% of Total Water Sales from Wholesale Sales	11%	12%	12%	12%	16%

Source: LCG Operating and Financial Statement, October 1, 2001.

Unbilled Water Volumes

During the past ten years, LUS' operating results have at times shown a significant amount of unaccounted-for water. Data for the period 1992 through 2001 are summarized in Table 6-6.

**Table 6-6
Unbilled Water Volumes**

Year	Percent Unaccounted-For
1992	12
1993	10
1994	8
1995	12
1996	16
1997	7
1998	2
1999	2
2000	2
2001	2

Source: Don Broussard, LUS 2/5/02

LUS' operating statistics show that unaccounted-for water since 1998 has been 2 percent annually which is well below the average for similar water systems.

Drinking Water Quality

LUS, in response to the requirements of the Safe Drinking Water Quality Act, must prepare and distribute an annual water quality report to its customers. The Water Quality Report includes results of periodic monitoring of the quality of water distributed to LUS customers. The following Table 6-7 summarizes monitoring results for the year 2000, which was the most recent report available at the time of this Report.

As shown on the table, all monitoring results show LUS water quality to be well 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 6-7
Water Quality Results**

Monitored At Customer's Tap				
Substance	EPA Designated Action Level (requires treatment) at 90th Percentile		LUS results at 90th Percentile Testing	
Lead	15 parts per billion (ppb)		1.0 ppb or less	
Copper	1.3 parts per million (ppm)		0.1 ppm or less	
Monitored in the Water Distribution System				
Substance	Maximum Contaminant Level	Maximum Contaminant Level Goal	LUS Average	LUS Range
Total Organic Halides	Not regulated	---	Less than detection limit	Not Detected to .86 micrograms of chlorine per liter
Total Chlorine Residual	Not regulated	---	1.09 ppm	0.07 ppm to 1.39 ppm
Total Trihalomethanes	100 ppb	N/A	9.96 ppb	1.1 to 22 ppb
Haloacetic Acids	Not regulated	---	1.11 ppb	Not detected to 5.7 ppb
Haloacetonitriles	Not regulated	---	1.21 ppb	Not detected to 2.4 ppb
Monitored Before Any Treatment				
Substance	EPA Designated Contaminant Level	EPA Designated Max. Contaminant Level Goal	LUS Average	LUS Range Minimum to Maximum
Fluoride	4.0 ppm	4.0 ppm	0.221 ppm	0.2 to 0.3 ppm
Cadmium	5.0 ppm	5.0 ppb	Less than detection limit	Not detected to 3 ppb
Gross Alpha Activity	15 picocuries per liter	0	2.20 picocuries per liter	Not detected to 3 picocuries per liter
Gross Beta Activity	50 picocuries per liter	0	2.85 picocuries per liter	Not detected to 3 picocuries per liter
Arsenic	50 ppb	N/A	Less than detection limit	Not detected to 20 ppb
Chromium	100 ppb	100 ppb	Less than detection limit	Not detected to 10 ppb
Mercury	2 ppb	2 ppb	Less than detection limit	Not detected to 1 ppb

Source: Water Quality Report 2000, LUS.

A Water System Master Plan was prepared for LUS in 2001 that included a calibrated computer model of the hydraulics of the distribution system and a long-range analysis of the water supply and distribution system interaction with District North. This resource will be a valuable tool for LUS to analyze future requirements and plan additions and improvements to the system. Recommendations for immediate action included construction of booster wells in the northwest and south areas of the system to reduce low-pressure problems. LUS has implemented purchase of land and engineering design of the necessary facilities. It is noted that LUS and the North Water District plan to revise the arrangement for serving the Northwest area of Lafayette Parish within the North Water District service area whereby the North Water District will no longer provide service to that area. After this change, and until the northwest booster well is in service, this area is likely to experience low water pressures.

Historical Water Utility Requirements

LUS' water utility has met customer demands for service, and provided its customers with adequate and reliable utility service during the reporting period. The historical water production and growth is presented below in Table 6-8.

Water System Production

The annual growth rate of annual water production has been approximately 2.4 percent while growth in the number of customers was 2.2 percent. In addition to annual requirements, peak day production requirements are also provided in Table 6-8.

**Table 6-8
Water System Historical Production**

Fiscal Year Ended October 31	Number of Customers	PRODUCTION		
		Annual (million)	Annual (mgd)	Peak Day
1992	35,908	6,008	16.4	19.6
1993	36,908	6,043	16.6	21.6
1994	38,110	6,039	16.5	21.2
1995	39,293	6,698	18.4	24.9
1996	40,327	7,103	19.4	25.1
1997	41,016	6,536	17.9	26.2
1998	41,886	6,761	18.5	24.1
1999	42,673	6,754	18.5	25.1
2000	44,220	7,294	19.9	26.5
2001	44,339	7,159	19.6	23.2

Source: LUS Financial and Operating Statements and LUS Water Production Division - 1992-2001.

Total water production is shown in Figure 6-1.

Other Wholesale Water Contracts

LCG has also entered into contracts to provide wholesale water service to the following entities.

- 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 through a 4,000-foot, 12-inch main; constructed and operated by LUS. This line also provides service along U.S. Highway 90. Water sales to the City of Scott represent approximately 3.1 percent of total LUS water sales revenues for the reporting period.
- LCG may sell water to the Town of Youngsville, Louisiana for distribution and resale under the provisions of a contract effective on December 24, 1998 with a term of 40 years. No direct water sales from LCG to Youngsville have been made as of October 31, 2001.
- LCG and the Town of Broussard, Louisiana signed a forty-year water supply contract, which expires on March 5, 2038. Water sales to the Town of Broussard represent approximately one percent of the total LUS water sales revenues for the reporting period.
- LCG serves the Town of Milton, Louisiana under a 40-year contract signed April 28, 1997. Water sales to the Town of Milton during 2001 represent approximately one percent of the total LUS water sales revenues for the reporting period.

A summary of the contracts and agreements for the water utility is provided in Table 6-10 below.

**Table 6-10
Contracts and Agreements**

Contracts and Agreements between	Date Signed/Renewed	Termination Date
Water District North Phases 1,2 and 3 ⁽¹⁾	February 6, 1985	February 6, 2025
Water District North Phase 4 (Scott) ⁽¹⁾	April 28, 1997	April 28, 2017
Water District North Phase 4 (NE and NW) ⁽¹⁾	October 12, 1998	October 12, 2038
Water District North ⁽²⁾	Pending	Pending
Water District South ⁽¹⁾	August 21, 1997	August 21, 2035
City of Scott ⁽¹⁾	May 27, 1997	May 27, 2022
Town of Milton ⁽¹⁾	April 28, 1997	April 28, 2037
Town of Broussard ⁽¹⁾	March 5, 1998	March 5, 2038
Town of Youngsville ⁽¹⁾	December 24, 1998	December 24, 2038

(1) Wholesale sale of water by LUS.

(2) Operation and maintenance.

Source: Ron Gary. LUS, 2/6/02

Forecasts

Forecasts of water use for the water system for the five-year period of 2002 through 2006 is 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**

Fiscal Year Ending October 31	PRODUCTION REQUIREMENTS ⁽¹⁾	
	Daily mgd	Peak mgd
2001 (Actual)	19.8	24.7
2002	20.0	27.4
2003	20.4	27.8
2004	20.7	28.3
2005	21.1	28.7
2006	21.4	29.2

(1) Includes unaccounted-for volumes.

Source: R.W. Beck.

LUS has completed a System Development Plan that is intended to provide a basis for long term planning of the water utility system.

Although system growth is projected to proceed incrementally experience has shown that a block of new customers can be added to the system with little or no notice, resulting in a sudden increase in demand. This occurred recently when the Holiday Garden area was added to the LUS system following bankruptcy of the water system operator that was established by the real estate developer. There is a possibility that similar circumstances can occur in the future with similar results.

LCG has adopted a water conservation ordinance to assist in reducing occurrence of low pressure in the water distribution system. The ordinance is directed at reducing lawn watering by restricting it to the hours between midnight and 2 p.m. every other day. 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 midnight to 2 p.m. time period. This ordinance is in effect from May 1 to September 30 of each year.

Future Regulatory Requirements

The Safe Drinking Water Act ("SDWA"), passed in 1974 and amended in 1986 and 1996, gives the United States Environmental Protection Agency ("EPA") the authority to set standards to protect drinking water. EPA has delegated responsibility for implementing drinking water standards to the Louisiana Department of Health and Hospitals.

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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 guideline 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, EPA's Administrator or a state may allow this period to be extended up to two additional years.

New primary standards, listed below in Table 6-12, are in various stages of development and publication.

**Table 6-12
Primary Standards**

Parameter	Primary Standard Status	Date
Microbials, Disinfectants, Byproducts	Stronger control of microbial pathogens, including Cryptosporidium, as well as disinfectants and disinfection byproducts.	Draft regulations have been proposed, public comments to be received in 2002
Radon	EPA has proposed a new standard	Proposed regulation issued Nov 2, 1999 Effective date can be as early as 3 years from when final regulation issued
Radionuclides (non-Radon)	Final new primary standard for Radionuclides becomes effective 3 years from date regulation issued	Final Rule issued Dec 7, 2000
Ground Water	Measures identified to protect ground water from microbial contamination	Proposed rule issued May 10, 2000 Public comment period is now open
Arsenic	Existing standard for arsenic revised	Draft implementation guidance issued for comment March 2002

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 EPA 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". Since then, the State of Louisiana has been working to implement these guidelines and has recently published a draft of changes to the Louisiana Administrative Code Title 48; Chapter 73 entitled "Certification". It appears that when they become effective in the future the proposed changes will require LUS to upgrade the qualifications of its water treatment plant operators. This could result in higher wages for operators although the magnitude of any increase is

not known at this time. We recommend that LUS consider developing an operator certification (and re-certification) program.

System Improvement Program

LUS established a system improvement program called Capital Improvement Program (CIP) in 1989. The program is a five-year "look ahead," which is revised annually and is a means to plan for and manage the major capital projects for all utility divisions, including water.

The estimated annual capital budget requirement amounts are presented in Table 6-13 and were obtained from LUS' Capital Improvement Plan dated December 2001.

Major improvements and additions to the water system for the next five-year period include:

- North Plant Filter Modifications;
- New Booster Water Wells No. 23;
- Additional South Plant Water Wells No. 8 and 9;
- Completion of the south water distribution loop; and
- Water Storage Phases I and II.

The addition of the south water distribution loop and associated storage tanks and installation of additional wells are intended to improve distribution of water into the system and reduce occurrences of low system pressure. Significant engineering work on the south water distribution loop was completed during the period of this Report. Completion of this project is expected in the spring of 2003.

Table 6-13
Estimated Annual Capital Requirement Appropriations
Water System Improvements (\$000)

Year Ending October 31	Water Production Improvements	Water Distribution Improvements	Totals
2002	\$1,150	\$3,090	\$4,240
2003	\$625	\$2,910	\$3,535
2004	\$525	\$450	\$975
2005	\$100	\$910	\$1,010
2006	\$100	\$400	\$500
Total	\$2,500	\$7,760	\$10,260

Source: LUS Budget Document 2001-2002

Recommendations

Recommendations and their status are provided in Table 6-14 below. We have indicated the priority of the recommendation as either highest, high or normal.

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**Table 6-14
Recommendations**

Water Utility	Priority	Status
We recommend LUS give priority to construction booster wells in northwest and south areas of system to improve system pressure.	Highest	New Recommendation
We recommend LUS continue to develop in-house expertise with use of water system model.	Highest	New Recommendation
LUS should consider developing an operator certification (and re-certification) program.	Normal	New Recommendation
We recommend LUS Complete the south water loop and associated new water storage tanks.	Highest	In Progress

Section 7 WASTEWATER UTILITY

Wastewater Utility System

This section of this Report sets forth the changes that have occurred to the wastewater system of LUS during fiscal year 2001. A description and discussion of existing facilities and resources, and summaries of historical service requirements, are presented in the following pages of this section.

From February 5-7, 2002, 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 facilities.

Additions to Plant

Table 7-1 provides expenditures, for fixed plant and equipment were made during fiscal year 2001. LUS accounts for such expenditures by using a capital work order system. All extensions or improvements made to the wastewater system are considered economically sound or otherwise necessary for the profitable operation of LUS.

**Table 7-1
Capital Workorder Expenditures for Fiscal Year 2001**

Source of Funds	Wastewater
Normal Capital	\$ 902,822
Special Capital	(21,414)
Retained Earning	<u>4,291,813</u>
Total	\$5,173,220

Source: "Status of Construction Workorders" by Acct. Dept.
Joan Parish, LUS, 6/25/02

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The following table, Table 7-2 lists the additions and improvements that were budgeted in 2001.

Table 7-2
Wastewater System Improvements For Fiscal Year 2001

	Project	Amount
Wastewater Treatment		
WWT93-01	Operational Process Control Upgrade	\$ 75,000
WWT93-04	Back Up Power (ACP, East, South Plants)	70,000
WWT93-05	Biosolids Stockpile Building	200,000
WWT93-08	ACP Final Clarifiers and Equalization Basin	9,900,000
WWT97-02	Property Purchase for Future Expansion	700,000
WWT99-01	Plant Odor Control	1,800,000
WWT99-02	South Plant Sludge Handling & Treatment	250,000
WWT_-U	Unidentified Treatment Improvements	<u>100,000</u>
	Subtotal Wastewater Treatment	\$13,095,000
Wastewater Collection		
WWC92-03	Consolidated Sewerage Dist – Project VIII	\$ 804,000
WWC93-05	EPA/AO Infil/Infil Elimination Program	100,000
WWC98-01	Consolidated Sewerage Dist. – Project X	2,250,000
WWC98-03	Downtown Street Improvements – Phase II	530,000
WWC99-01	Old Maurice Lift Station Upgrade	1,500,000
WWC99-02	Consolidated Sewerage Dist. – Project XI	1,100,000
WWC99-03	South Plant Trunk Line Replacement	1,000,000
WWC99-U2	Coulee Mine Debris Removal	50,000
WWC2000-01	Farrell Road Lift Station Upgrade	600,000
WWC_-6	Relocations for Public Works Projects (Annual)	400,000
WWC2001-01	Verot School Road Improvements	300,000
WWC_-A	Collection System Repairs (Annual)	2,000,000
WWC_-U	Unidentified Collection Projects	<u>100,000</u>
	Subtotal Wastewater Collection	\$10,734,000

Source: 2001 Adopted Budget 5-year CIP.

System Maintenance Expenditures

Historical maintenance expenditures from 1992 through 2001 are shown on Table 7-3. The average annual percentage growth in maintenance expense after leveling the variations between years (using a linear regression function) is 5.3 percent for

wastewater during the 1992-2001 period. Both the amount of investment in facilities and inflation influence the amount of maintenance expense incurred.

Table 7-3
Annual System Maintenance Expense - Wastewater System

Year Ended October 31	Amount	Percent Change
1992	\$793,123	9.4%
1993	\$834,038	5.2%
1994	\$862,196	3.4%
1995	\$859,165	-0.4%
1996	\$1,011,153	17.7%
1997	\$1,005,728	-0.5%
1998	\$931,480	-7.4%
1999	\$1,036,312	11.3%
2000	\$1,162,426	12.2%
2001	\$1,192,357	2.6%

Source: Craig Gautreaux, LUS. Financial and Operating Statement October 2001

Wastewater System

The following discussions summarize the findings of the Consulting Engineer with respect to the general condition of the properties based upon discussions with utility supervisory personnel and information supplied by LUS personnel.

The four principal wastewater treatment facilities are the South Plant, the East Plant, the Ambassador Caffery Parkway Plant, and the Northeast Plant. The four treatment plants, the type of treatment, the permitted capacity, and the estimated capacity for each facility are shown in Table 7-4.

Table 7-4
Wastewater Treatment Plants

Facility	Treatment Facilities Type	Permitted Capability (mgd)
South Plant	Activated Sludge	7.0 ⁽¹⁾
East Plant	Trickling Filter and Oxidation Ditch	4.0
Ambassador Caffery Plant	Rotating Biological Contractor (RBC) and Oxidation Ditch	6.0
Northeast Plant	Oxidation Ditch	1.5
TOTAL		18.5

(1) Will increase to 9.0 mgd after upgrades and improvements.

Source: Craig Gautreaux, LUS 2/6/02.

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The wastewater collection system consists of gravity sewers, interceptors, manholes, pumping stations and force mains, as tabulated in Table 7-5.

**Table 7-5
Collection System**

Total miles of pipe	651
Manholes	9,918
Pumping Stations	120

Source: Craig Gautreaux, LUS 2/6/02.

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 attributed to infiltration and inflow of surface and groundwater into the wastewater collection system during and after rainfall. These incidents occurred at various locations in the collection systems serving all four wastewater plants. LUS reported these incidents to the EPA as required by its wastewater discharge National Pollution Discharge Elimination System ("NPDES") permits. As a result of these reports, the EPA issued administrative orders requiring LUS to take immediate action to stop the overflows and to prepare a report identifying corrective action to prevent additional occurrences. The administrative orders by the EPA require LUS to submit quarterly progress reports as the corrective infiltration and inflow plan proceeds. LUS has completed the majority of treatment plant upgrades and expansions required by the administrative orders. Therefore the NPDES permits for the South Plant, East Plant and Northeast Plant have been transferred from EPA to LDEQ for normal administrative control. Administration of the NPDES permit for the Ambassador Caffery Plant remains with EPA however, LUS will request the administration of the permit be transferred LDEQ along with a request to extend the compliance schedule for Ambassador Caffery Plant. The compliance schedule has been delayed pending action by LDEQ to revise the wastewater effluent standards for the Ambassador Caffery Plant. LUS chose to delay work in connection with final improvements so that the work could be coordinated with possible changes in treatment requirements. LDEQ has advised that present limits will not be changed and LUS is now proceeding with final improvements.

LUS reports that the wastewater treatment plants are in material compliance with their NPDES permit conditions. There are times during or shortly after periods of heavy rainfall when they exceed their permit limits for suspended solids and occasionally biochemical oxygen demand and ammonia. These occurrences are reported to the regulatory agencies by LUS, as required by their permit conditions, thereby keeping LUS in compliance. The action required by the EPA administrative orders described above for infiltration and inflow programs is intended to reduce flow throughout the system, thereby reducing overflows and bypasses and exceedances. However, there is no assurance the EPA may not issue future notices of violation in connection with these exceedances.

LUS reports that the landfarming program continues to provide disposal of all LUS sewage and water plant sludge. LUS contracts with privately owned farms for use of their farmland for sludge disposal. Auditing of the program, as required by state and federal regulations, has met all applicable standards. LUS staff has noted that land use trends and future changes in land ownership are likely to make continued use by LUS of private farmland more difficult in the future.

LUS has initiated an engineering planning study of the collection system that will produce an engineering model that will be available for use by LUS engineering staff. It is anticipated to provide much needed capability to analyze the impacts of changes in the collection system, addition of new service areas and changes in pumping configuration.

Historical Wastewater Utility Requirements

The wastewater facility 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 loads and load growth as served by the wastewater system is presented in Table 7-6.

Table 7-6
Wastewater System Historical Hydraulic Loads

Fiscal Year Ending October 31	AVERAGE DAY HYDRAULIC LOADS (mgd) ⁽¹⁾				
	South Plant	East Plant	Ambassador Caffery Plant	Northeast Plant	Totals
1992	5.3	2.5	5.2	1.0	14.0
1993	5.3	2.6	5.4	0.9	14.2
1994	5.4	2.5	5.4	0.9	14.2
1995	5.3	2.2	5.1	0.9	13.5
1996	6.6	2.9	4.9	1.0	15.4
1997	6.8	3.1	5.2	1.1	16.2
1998	6.7	2.8	5.6	1.2	16.3
1999	6.4	2.3	5.5	1.1	15.3
2000	5.6	2.5	5.2	1.1	14.3
2001	<u>6.9</u>	<u>3.2</u>	<u>5.5</u>	<u>1.2</u>	<u>16.8</u>
Permitted Capacity	7.0	4.0	6.0	1.5	18.5

(1) Average day hydraulic loads are not adjusted to dry weather conditions and therefore include infiltration.

Source: Craig Gautreaux, LUS 2/5/02.

Each year LUS must prepare a municipal water pollution prevention audit report for each wastewater plant. The report is submitted to the Parish Council and the LDEQ. The report compares the design hydraulic and biological treatment capacity of each plant with the actual conditions. (See Table 7-7.)

**Table 7-7
Wastewater Load vs. Design**

Plant	Number of Months During Which an Exceedance of Design Occurred							
	Flow				Biological Loading			
	1998	1999	2000	2001	1998	1999	2000	2001
South Plant	3	3	2	3	1	1	1	1
East Plant	0	0	0	3	0	0	0	1
Northeast Plant	1	0	0	0	0	0	0	0
Ambassador Caffery Plant	2	1	1	4	3	8	2	1

Source: Craig Gautreaux, LUS 2/7/02.

It is apparent that the South Plant and the Ambassador Caffery Plant are at or very near their design limits. As described below, both are being upgraded.

The South Plant has been upgraded to accept 9 mgd of influent but permitted capacity is limited to 7 mgd due to sludge digesting and processing limitations. LUS has purchased 18 acres of land adjacent to the South Plant that is available for future expansion and to maintain a buffer between the plant and nearby residences. LUS has also initiated engineering design of improvements to sludge processing to increase total capacity to 9 mgd. The Ambassador Caffery Plant is also nearing its design capacity. LUS has begun engineering studies to determine what actions are needed to provide adequate future treatment capacity along with engineering design of additional storage capacity and replacement of the rotating biological contactors with sequential batch reactors.

Historical information describing the wastewater collection system is summarized in Table 7-8.

Table 7-8
Wastewater Collection System

Fiscal Year Ended October 31	Number of Customers	COLLECTION	
		Total Miles of Pipe ⁽¹⁾	Total Number of Lift Stations
1992	32,467	610.6	107
1993	32,896	619.3	106
1994	33,476	624.8	106
1995	33,955	628.5	106
1996	34,475	633.0	106
1997	34,835	621.7	112
1998	35,261	636.8	115
1999	35,695	640.4	116
2000	35,902	647.3	118
2001	35,914	650.9	120

(1) Not including service lines.

Source: Craig Gautreaux, LUS and LCG Financial and Operating Statement – October 2001, 2/6/02.

The above statistics show that the total pipe in the wastewater collection system has increased at the same rate as the number of customers, while the number of lift stations has increased at a significantly greater rate. The flat topography of the service area means that additional lift stations will be needed as the system expands unless major interceptors are constructed.

The wastewater collection division recorded the number and type of overflows that have occurred in the system since 1993. The information is summarized in Table 7-9. LUS staff reports that the efforts to collect data on overflows were increased beginning in 1995 when wastewater collection personnel began to actively seek rain-related problems during periods of rainfall when normal work assignments were interrupted. Prior to 1995, incidents were recorded when reported but were not actively sought out.

**Table 7-9
Wastewater Collection System Overflows**

Fiscal Year Ended October 31	Rain Related	Lift Station Equipment Failure	Main Line Stoppage	Broken Pipe	Total	Total Annual Precipitation
1993	58	19	15	3	95	81
1994	59	26	6	0	91	62
1995	70	43	21	4	138	77
1996	51	25	19	5	100	67
1997	69	21	10	4	104	52
1998	60	16	44	6	126	73
1999	34	13	44	11	102	53
2000	6	14	36	9	65	44
2001	39	12	16	2	69	94

Source: Craig Gautreaux, LUS 2/6/02.

In compliance with regulations and administrative orders by EPA, 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 which would very likely be considerably more expensive than discharging to LUS' sewer system. LUS has established a rate for industrial users to recover a portion of program costs. The remaining costs are recovered through wastewater revenues.

Contracts and Agreements

Principal contracts and agreements for wastewater services are summarized in the following paragraphs and are listed in Table 7-10.

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 terms 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 forty-year agreement expires in August, 2035.

**Table 7-10
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 2/7/02.

Load Forecasts

Load forecasts for the wastewater utility system for the five-year period of 2001 through 2005 are presented below. The forecasts reflect the current assessment of expected load growth for the period. The five-year projection of average-day inflow to the wastewater treatment plants is represented in Table 7-11.

**Table 7-11
Wastewater System
Projected Hydraulic Loads**

Fiscal Year Ending October 31	AVERAGE DAY HYDRAULIC LOADS (mgd)				Totals
	South Plant	East Plant	Ambassador Caffery Plant	Northeast Plant	
2001(Actual)	6.9	3.2	5.5	1.2	16.8
2002	7.0	3.2	5.6	1.2	17.0
2003	7.0	3.4	5.7	1.2	17.3
2004	7.0	3.5	5.7	1.2	17.5
2005	7.0	3.7	5.8	1.3	17.7
2006	7.0	3.8	5.9	1.3	17.9
Permitted Capacity	7.0	4.0	6.0	1.5	18.5

Source: Craig Gautreaux, 02/07/02, LUS.

The above forecast of wastewater treatment inflows is based upon recent historical trends for each wastewater plant and taking into account the capability to shift inflow 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 that there are a number of small package type treatment plants scattered throughout the Parish that serve a total of 2,500 to 3,000 customers. These systems could, if emergency circumstances dictate, be quickly connected to the LUS system, as was the case with the Holiday Gardens development. A sudden increase in wastewater inflow could result. The projections shown herein should be used with prudence and frequently updated based on results of the infiltration and inflow program and additions to the system.

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 EPA the authority to implement pollution control programs such as setting wastewater discharge standards and water quality standards for all contaminants in surface waters. It 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 EPA that directly affect municipal systems include;

- 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; and
- Administration of the Clean Water State Revolving Fund (“CWSRF”).

The EPA has delegated responsibility for implementing NPDES Permits and setting water quality standards to the LDEQ.

New and existing regulations that may have a future impact on LUS’ wastewater treatment plants and related operations are discussed below.

Sanitary Sewer Overflow Control Policy

In May through October of 1999, EPA issued five draft documents on sanitary sewer overflows that outlined proposed regulations. The EPA is currently working with Office of Management and Budget on the preamble language and guidance related to the capacity, management, operations, and maintenance requirements of the proposal. The EPA plans to have a final rule completed 2 years after publication of the proposal. The EPA, in a letter to the regions states that

“...the Office of Regulatory Enforcement, Water Enforcement Division will continue to work with the Regions and NPDES States to address sanitary sewer overflow problems at major publicly owned treatment works. Success in this effort will depend in part on ensuring that publicly owned treatment works have adequate hydraulic capacity, as well as an effective program for management, operation and maintenance of the sanitary sewer systems they own or over which they have operational control. The Regions should be mindful that under the 2000/2001 guidance, Regions should identify the universe of sanitary sewer overflow discharge violations and ensure that 20% (or the percentage negotiated individually with each Region through the MOA approval process) of the priority systems will be addressed each year. Special emphasis should be placed on sanitary sewer overflows in priority watersheds or in areas where the receiving

waters are impaired (e.g. shellfish bed closures, beach closures, fish advisories, or drinking water sources), and/or in environmental justice areas, as well as other sensitive areas."

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 Loads 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 future 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 Loads that were established for the Vermilion watershed after the initial water quality monitoring that occurred in 1999. The next round of monitoring is scheduled for 2003. Any requirements to establish more strict wastewater discharge limits would not occur until after results of the monitoring were analyzed.

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.

System Improvement Program

LUS established a system improvement program called CIP in 1989. The program is a five-year "look ahead," which is revised annually and is a means to plan for and manage the major capital projects for all utility divisions including wastewater.

The estimated annual capital budget requirement amounts are shown in Table 7-12 and were obtained from LUS' Five Year Capital Improvement Program dated December 2001.

Table 7-12
Estimated Annual Capital Budget Requirements
(\$000)

	Collection	Treatment	Total
2002	\$ 7,975	\$10,000	\$17,975
2003	7,300	5,450	12,750
2004	5,600	11,550	17,150
2005	2,900	700	3,600
2006	<u>2,900</u>	<u>100</u>	<u>3,000</u>
Total	\$26,675	\$27,800	\$54,475

Source: LUS Budget Document 2001-2002.

Wastewater System

The wastewater program has seen the greatest growth in the total cost of CIP projects. This is driven by EPA mandates to eliminate overflows and bypass of wastewater and to reduce inflow and infiltration. Projects planned for the next five years are summarized as follows.

- Rehabilitation of manholes, lift stations, and mainline sewers;
- Television inspection and repair of sewer lines;
- Extension of sewer service;
- Addition of equalization basins and treatment modifications at Ambassador Caffery Plant; and
- Improvements to South Plant sludge handling and treatment.

Two of the existing treatment plants, the South Plant and the Ambassador Caffery Plant, are both near capacity even with the planned upgrades and additions. LUS has begun evaluating options for providing additional capacity including expanding the South Plant or constructing a new plant or some combination. In addition to the CIP projects, we recommend that LUS implement a certification (and re-certification) training program for its wastewater utility employees.

Recommendations

Recommendations and their status are provided in Table 7-13 below. We have indicated the priority of the recommendation as either highest, high or normal.

**Table 7-13
Recommendations**

Wastewater Utility	Priority	Status
LUS should continue to give high priority to future expansion of South Plant.	High	New Recommendation
LUS should continue to develop the wastewater hydraulic model of the system.	Highest	New Recommendation
We recommend LUS develop a certification (and re-certification) program for wastewater utility employees.	Normal	New Recommendation
We recommend LUS give high priority to upgrades to Ambassador Caffery Plant to reduce risk of violating administrative orders.	High	Investigating

Section 8

ENVIRONMENTAL ISSUES

Introduction

LUS' electric, water and wastewater utilities are subject to numerous environmental laws and regulations. This section provides a discussion of the current status of major environmental permits for the Utilities System. This section is not meant to provide a comprehensive compliance audit of the system and addresses only the major laws that affect the electric, water and wastewater systems including: the Clean Air Act Amendments of 1990 ("CAAA"), the Clean Water Act, and the Safe Drinking Water Act ("SDWA"). Requirements of the CAAA are administered through a permit program administered by LDEQ and EPA. Requirements of the Clean Water Act are administered through a permit process whereby any discharge into surface waters requires a NPDES permit. The SDWA establishes standards for public water systems, whereby tap water must meet certain quality standards for different chemicals as established by the EPA.

LUS facilities, operations and associated activities are subject to regulations that cover the following areas: storage and disposal of hazardous waste, superfund liability, used oil, pesticides, wastewater discharges, PCBs, underground tanks, oil spills, asbestos, wood poles, emergency planning and community right-to-know, stormwater discharges, air emissions, solid waste disposal, waterways permitting, federal lands, groundwater, and emergency notification.

Environmental Compliance

The Environmental Compliance Division is managed by the Environmental Compliance Manager, whom reports directly to the Director of Utilities. The Environmental Compliance Manager is Ms. Allyson Chaumont. The Environmental Compliance Division supports the Utilities System in the following areas:

- Regulatory compliance for electric production/distribution;
- Industrial pretreatment;
- Wastewater analysis and land-farming; and
- Water analysis.

Electric Production

LUS operates one natural gas electric generating facility, the Doc Bonin Plant located in the City. Another LUS facility, the Curtis Rodemacher Station, is no longer in operation.

Bonin Plant Unit Nos. 1 and 2 boilers were constructed before 1969, and therefore do not require a LDEQ air emissions operating permit. Bonin Unit No. 3 was either constructed or modified after 1969 and, therefore, has an air emissions certificate for operation. The LDEQ issued a variance that allows LUS to burn diesel fuel (or No. 2 fuel oil) in Boiler No. 3 for up to four days per year. The purpose of this variance is to allow LUS to burn fuel oil if their natural gas supply is temporarily interrupted.

The Bonin Plant includes four fuel storage tanks, which are dedicated to Fuel Oil No. 6 and diesel fuel, as provided in Table 8-1 below.

Table 8-1
Fuel Oil Storage Tanks

Tank	Type	Capacity	Gallons
Tank No. 1	Diesel Fuel	440,000	326,808
Tank No. 2	Diesel Fuel	1,443,000	781,488
Tank No. 3	Fuel Oil No. 6	2,538,000	107,216
Tank No. 4	Fuel Oil No. 6	2,538,000	84,366

Source: George Stelly, LUS 2/5/02.

Since LUS does not have a permit to burn No. 6 fuel oil in any of its facilities, the contents of Tank Nos. 3 and 4 were sold in 1999. LUS is preparing to have the remaining sludge removed from these tanks. After removal of this sludge, Tanks 3 and 4 will be cleaned and filled with the diesel fuel currently in Tanks 1 and 2. Tanks 1 and 2 will be assessed for future use.

The Oil Pollution Control Act requires that oil spill response plans be prepared for facilities that exceed certain requirements. Briefly, if the facility's total oil storage capacity is greater than or equal to 1,000,000 gallons, an oil spill response plan must be prepared. LUS reports that they have prepared an oil spill response plan that meets the requirements of the regulation, and are currently updating that plan.

LUS installed continuous emission monitors ("CEMs") at the Bonin Plant prior to January 1, 1996 as required by CAAA regulations issued by EPA (40 CFR75). Combustion gas flow, NO_x emissions, and CO₂ emissions are monitored and reported quarterly to the State and EPA. SO₂ emissions are monitored through gas fuel flow monitoring and low sulfur content in the gas fuel. LUS did not experience any exceedances of its permitted emissions from the Bonin Plant in 2001.

The CAAA requires LUS to obtain new air emissions operating permits for the Bonin Plant. Application for this new "Title V" operating permit was submitted on October 15, 1996, to the LDEQ. The LDEQ issued a letter of completeness dated

December 17, 1996, which extends the effective date of all operating permits until the Title V permit is issued. The timing for the issuance of the final permit is unknown at the time of this report.

The Bonin Plant operates under an NPDES wastewater discharge permit issued by the LDEQ (Permit #LA 0005711). The current permit provides for the discharge of cooling tower blowdown and plant site stormwater drainage. No violations of this permit were issued in 2001, however, exceedances of iron concentrations in water discharge were reported. These exceedances are currently being investigated by LUS staff.

Spill Prevention Control and Countermeasure Plan

Electric substations that are located where oil from a spill could reach navigable waters and have more than 660 gallons in any single container, must have a Spill Prevention Control and Countermeasure ("SPCC") Plan in accordance with 40 CFR 112. LUS reports that they have 16 such substations and have prepared SPCC plans for all of them. SPCC plans must be updated every three years, LUS indicated that these plans are currently being updated. No reportable spills occurred in 2001.

Other Environmental Plans

Other environmental plans required by LUS include the Emergency Response Plan (also Risk Management Plan) and Stormwater Pollution Prevention Plan. LUS indicated they were in compliance with the requirements for these plans.

PCB Transformers

LUS reports that they manage PCB-containing equipment as required by federal and state law and regulations. LUS has PCB-containing equipment in service and they also store, inspect and keep records of all PCB-containing equipment and fluids before sending them off-site for disposal. LUS indicated that there were no PCB transformers (>500 ppm) in its inventory. Additionally, LUS has a program in which they systematically remove transformers with any concentrations of PCBs (>51ppm) as time permits. These transformers are replaced with PCB-free transformers.

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.

Subsequent investigations at the site revealed petroleum contamination in the groundwater at the site, under the adjoining property owners' sites and at the nearby Grant Street Substation No. 1. In 2000, LUS submitted a Risk Evaluation Corrective Action Plan ("RECAP") to LDEQ. In 2001, LUS received comments on its RECAP

from LDEQ as well as continued its annual sampling efforts. LUS is working with LDEQ to address outstanding issues at this site.

Curtis Rodemacher Decommissioning

As mentioned in Section 5 of this report, the Curtis Rodemacher Plant has been retired and the site is in the process of decommissioning this site. In 2001, LUS implemented procedures to address lead and asbestos contamination at the site. These proceedings included remediation and continued its practice of limiting access to the site. Additionally, LUS began a quarter monitoring of air samples. Additional remediation activities will depend on future site use decisions.

Beadle Road Substation

In 2000, LUS began preparing an existing site for a new substation located at Beadle Road. During this process, evidence of subsurface contamination was discovered. LUS removed the sources of contamination from the site and submitted a RECAP to LDEQ in September 2000. LUS received comments on the RECAP and initiated additional soil sampling at the site in 2001. LUS is currently working with LDEQ to address outstanding issues at the site. Cost estimates to complete this work are not expected to be significant.

West End Water Tower

In 2000, LUS removed an obsolete drinking water tower at its West End site. Soil borings suggested higher than normal lead concentrations. In 2001, LUS conducted a site investigation and developed a subsequent RECAP for the site. The RECAP has been approved by LDEQ and site remediation efforts are planned for 2002. Cost estimates to complete this work are not expected to be significant.

Industrial Pretreatment

The Industrial Pretreatment program is mandated by the EPA through the NPDES permits issued to the wastewater treatment plants. The Pretreatment Program protects the integrity of the wastewater treatment plants by fulfilling four objectives:

- Preventing 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;
- Preventing the introduction of pollutants into the POTW which will pass through the treatment works and enter stream waters;
- Reducing the risk of exposure of workers to chemical hazards; and
- 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.

Pretreatment community outreach efforts have included dissemination of environmental information during Public Power Week activities, Household Hazardous Waste bill stuffers to commercial and residential customers and participation in Career Day activities at elementary schools.

The Pretreatment Program is currently in the process of recalculating technically based local limits for the wastewater treatment plants and updating the Pretreatment Procedures Manual. The Pretreatment Program has identified six significant industrial users that discharge to the treatment plants, three categorical industrial users and three noncategorical significant industrial users. There are 12 other regulated nonsignificant industrial users.

The LDEQ conducted a three day audit of the pretreatment program for 2001 and found the program well run and progressive. No deficiencies or recommendations were noted and the program was considered by LDEQ as one of the top programs in the state. LUS will be hosting the pretreatment conference in Lafayette in June of 2002.

Wastewater Collection and Treatment

Each of the four wastewater treatment plants have NPDES permits that specify the operating and performance conditions for the wastewater system. The NPDES permits for each of the four wastewater treatment plants expired on October 31, 1999. LUS reports that they have submitted renewal applications for all four plants, however, they are waiting for a response from LDEQ. The existing permits although expired, remain in effect since renewal applications have been submitted. The permit conditions require LUS to regularly test for compliance with permit conditions, and report any violations or exceeds of permit limits, including bypass or overflow of wastewater. During 2001, notices of overflows were reported to the LDEQ, however no violations were issued.

LUS has responded to reported bypasses with the development of a long-term program of corrective actions to eliminate overflows and bypasses and to reduce infiltration and inflow. The corrective action includes repairs and modifications to pumping stations, construction of retention basins, flow metering, sewer system evaluation, repair and rehabilitation of manholes, service connections, and sewer pipes throughout the system. LUS and EPA agreed to a compliance schedule that identifies the corrective actions to be taken by LUS to eliminate the causes of overflows and bypasses. During 2001, EPA closed its Administrative Order related to the East and South treatment plants. The Ambassador Caffery Treatment Plant is still under an EPA Administrative Order to address issues related to unpermitted discharges.

Additional planned work for control of infiltration and inflow is identified in Section 7 of this Report.

The LDEQ is studying the Vermilion River for possible changes in water quality standards that could affect LUS' wastewater treatment plants. LUS has been involved in various meetings and conferences regarding this issue.

Wastewater Analysis and Land Farming

LUS currently utilizes a land farming program to dispose of its biosolids that are a result of its wastewater operations. This program is operated under a permit from the LDEQ. In early 2000, LUS identified increases in the molybdenum concentrations of its biosolid waste. The source of this increase was not determined, however, in April 2001, the molybdenum concentrations in the biosolid waste had reduced to background levels. Due to effective mixing of wastes, no exceedances of LUS' land farming permit occurred in 2001. LDEQ recognized LUS land farming operations as being in full compliance for 2001.

As the land continues to increase in size, use of current land application sites may become limited. LUS is currently working with the US Army Corps of Engineers to develop additional land application sites.

Water Production and Distribution System

LUS reports that the water production facilities are currently complying with their operating permits, and they report that they currently meet all applicable drinking water standards of the Safe Drinking Water Act.

Recommendations

Recommendations and their status are provided in Table 8-2 below. We have indicated the priority of the recommendation as either highest, high or normal.

**Table 8-2
Recommendations**

Environmental Issues	Priority	Status
LUS should evaluate purchase of farmland to assure low cost long-term sludge disposal option.	Highest	New Recommendation
LUS should complete a cost-benefit assessment of the Inflow and Infiltration (I&I) expenditures to determine the amount of I&I reduction relating to the amount of I&I remediation expenditures.	Highest	Investigating
LUS should continue to update its environmental plans, including its SPCC plan, to ensure that they include the latest information concerning its operations.	High	Investigating