STATEMENT OF WORK

RFP No. 050110-CCG-EM

FOR

ENERGY MANAGEMENT SERVICES
FOR THE
STATE COUNCIL ON COMPETITIVE
GOVERNMENT

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FINAL
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STATEMENT OF WORK ABBREVIATIONS
ACH Automated Clearing House
DDA Direct Deposit Account
CDA Control Disbursement Account
CPA Comptroller of Public Accounts
CCG Council for Competitive Government
CSC Customer Service Center
DEA Detailed Energy Audit
EDI Electronic Data Interchange
ECA Energy Conservation Activities
ECRM Energy Cost Reduction Measures
ESPC Energy Savings Performance Contract
ESCO Energy Service Company
HUB Historically Underutilized Business
IT Information Technology
LPB LPB Energy Consulting
LAN Local Area Network
M&V Measurement & Verification
PSA Participating State Agency
REP Resource Efficiency Plan
SECO State Energy Conservation Office
SMR Save More Resources
SOW Statement of Work
USAS Uniform Statewide Accounting System
UM The Utility Manager™
Introduction

Purpose and Objectives
The Council for Competitive Government (CCG) determined the State of Texas (State) can achieve significant reductions in energy costs through the combination of information management, energy procurement and energy conservation projects. Merging these activities into a successful statewide energy management solution requires specialized knowledge of information technology, retail electric markets and cutting edge engineering technologies. With this understanding, the State has four primary objectives:

1) Construct an energy information management system that captures consumption data as well as accounting data from energy accounts from multiple vendors for various Participating State Agency (PSA) locations.

2) Thoroughly analyze (historical, ongoing) the state’s energy bills to ensure that they are error free, that the state is paying the correct rates or tariffs and is processing its bills in the most efficient manner.

3) Obtain consulting services on procuring energy at the lowest possible rates and terms.

4) Obtain assistance in conserving the State’s energy resources by having the primary contractor act on behalf of the PSAs as the owner representative for Energy Savings Performance Contract (ESPC) projects.

This Statement of Work (SOW) provides a description of a comprehensive energy management solution designed to achieve the objectives outlined above by the CCG. The individual components (Primary Activities) of this solution are proven and well established; however, the State’s vision for the relationship between these components presents a new and exciting management approach. This new management approach is being implemented by a very small percentage of the most progressive organizations (both public and private sectors).

As with any project, the responsibility for success rests largely upon the people performing the work. The State has selected LPB Energy Consulting (LPB) as the successful respondent to the CCG’s RFP #050110-CCG-EM. In responding to the RFP, LPB has assembled an experienced team of subcontractors (first and second tier) to deliver this comprehensive and complex solution.

The remainder of this Introduction is divided among three primary subject areas: Project Scope Statements, The Project Team, and The Primary Activities. The nature of energy management is broad and complex. Therefore, it is important to understand all components of the proposed solution, as the long-term foundation for the State’s energy management success.

Project Scope Statements
The State’s energy management goals will be achieved with a project designed to accommodate the following concepts and requirements:
1) Project activities are entirely self-funded through Realized Savings by reducing the State’s current and future energy costs. All the financial risk for this project lies with LPB, as LPB will only receive compensation after savings are realized.

2) The terms energy and energy management as used in the context of this document refer to all utility charges associated with the use of electricity, natural gas, steam, chilled water, alternative heating fuels, water, irrigation, waste-water and storm water services.

3) Cooperation and synchronization with the State are critical to the success of this project. In this regard, the State has assigned the contract management function to the State Energy Conservation Office (SECO), with the authority required to effectively administer this project. SECO has in turn assigned a Contract Administrator to assume responsibility for all project management, communication, and synchronization with LPB.

4) LPB is the exclusive provider for all PSAs for the services required to achieve the significant energy savings that are required to finance the project. These include energy bill processing and payment, auditing/analysis of energy bills, and procurement of energy. Both parties understand that existing contracts for these services will be allowed to complete their term, but will not be renewed by the State or any PSA. In addition, if the existing contract provides the PSA the opportunity to terminate the contract early, LPB and the PSA will jointly decide on how to execute the termination clause.

5) This energy management solution will be constructed, deployed, maintained and refined over a period of 4-years beginning with a transition period and transferring to a work period:
   - Transition Period: Design, construction and first phase deployment of each energy management component (approximate time period 14-18 months).
   - Work Period: Daily maintenance and continuous refinement of each energy management component (approximate time period is 3.5 years).

   *Note: The Transition Period and the Work Period overlap. There will be components of the Transition Period that will continue during the first 12 months of the Work Period.*

6) The energy management components described in this SOW will be constructed, deployed, maintained and refined on parallel paths and rarely will these components follow the same sequential order.

7) LPB will be in position to transfer the program, at the end of the 4-year term to the State at the CCG’s choosing. Furthermore, from the beginning and throughout the term of this project, the State will own all primary software/hardware systems and all information contained in these systems.

8) The CCG is leading the State in this new direction for energy management with the intention that this solution will become the operating standard for most, if not all State funded agencies.
9) LPB will provide Texas-licensed Professional Engineers to support PSAs in energy conservation projects by acting as an owner representative on selected ESPC projects.

10) Development of this Statement of Work utilized LPB’s Original Proposal and the Best and Final Offer. Numerous changes were made to more specifically address the State’s needs starting with the labeling/naming and sequence of the primary sections. Throughout the documentation of the Statement of Work, the Work Plan and the Energy Savings, Cost and Compensation Plan, where appropriate, comments will be made referencing the changes to the Original Proposal and Best and Final Offer.

The Project Team
LPB has assembled a diverse team of specialists to achieve the objectives of the project. The team members can be divided into three general categories as described below: Primary Contractor, First-Tier Subcontractors and Second-Tier Subcontractors.

Primary Contractor: Contracted directly by the State, the primary contractor is ultimately responsible for all aspects of the project and serves as the point-of-contact for the State’s Contract Administrator.

LPB Energy Consulting: Dallas, Texas-based energy consulting firm specializing in energy procurement. In addition to fulfilling the role of Primary Contractor, LPB will assume direct responsibility for all activities related to energy procurement.

First-Tier Subcontractors: These Subcontractors are contracted directly by LPB for the duration of the project. Each of these organizations was a full participant in each step of the RFP process, including all written and oral presentations.

New Energy Technology (NET): A firm specializing in the design, construction, implementation and leadership of advanced energy information systems. NET’s, President Charley Haupt is the Project Director with other key NET personnel providing project administration, communication and creative solutions to support the success of the project.

Save More Resources (SMR): The market leader in energy accounting software is based in Grand Junction, Colorado. SMR will provide the primary software solution, The Utility Manager™ (UM) for all energy/utility bill information, bill audit, bill processing/payment and energy reporting.

Floyd-Thomas (Historically Underutilized Business HUB): Austin, Texas-based software and hardware service provider. Floyd-Thomas will provide the information technology support for the installation and configuration of computer hardware and the UM software systems. In addition, Floyd-Thomas and LPB will provide the UM software training throughout the term of the project.

Marvin Groves Electric (HUB): Wichita Falls, Texas-based electrical and mechanical contractor with a focus on projects for energy efficiency. Marvin Groves Electric will
provide project management by acting as the State’s owner representative on selected ESPC projects.

**Second-Tier Subcontractors:** Depending on specific project requirements, this subcontractor may be contracted directly by either LPB or by one of its First-Tier Subcontractors.

Newcomb & Boyd: A world class engineering firm with over 150 employees. Newcomb & Boyd will be the primary support to Marvin Groves Electric in acting as the owner representative for selected ESPC projects. Newcomb & Boyd’s Texas-licensed professional engineers will be performing most of the tasks associated with this owner’s representative role.

**The Primary Activities**
The following Sections describe each Primary Activity of this SOW:

**Section 1 - Project Management:** The key to the success of any project lies with the people leading the charge and the people doing the work. This section outlines the organizational structure of companies brought together to construct and deliver this exciting new energy management solution.

**Section 2 - Information Technology Infrastructure:** “You can’t manage what you can’t measure.” This project will utilize the most advanced and user friendly energy accounting software on the market, The Utility Manager (UM). This section describes how this software will be deployed to create and maintain a comprehensive database of energy information.

**Section 3 - Energy Information Management System:** Effective energy management requires a clear understanding of past performance. It is critical to establish a ‘baseline’ by collecting and recording accurate historical energy cost and consumption, as well as other variables that impact energy efficiency (weather, hours of operation, occupancy percentage, etc.). This data will be stored in the UM database of energy information. This section describes the historical data collection and database construction process.

**Section 4 - Utility Bill Processing and Payment:** Maintaining an accurate energy accounting database is accomplished through the daily processing and payment of utility bills. This section describes the procedures for data accuracy and completeness associated with bill payment.

**Section 5 - Program Reporting Requirements:** Effective use of good information is at the heart of every good management program. This project requires a wide range of quality reporting ranging from project status to ESPC project performance. This section describes the major reporting requirements and how the reports will serve the diverse participants, users and audiences associated with this project.
**Section 6 - Energy Bill and Software Training:** To ensure that energy information is used effectively, training materials and workshops will be developed and deployed to support the needs for three distinct audiences: the site-based user, the accounting and management user, and the energy engineer. This section describes in detail the types of training that will be made available to all PSAs.

**Section 7 - Utility Bill Audit:** Once the energy/utility information is organized, a thorough utility bill Audit will be performed on all viable accounts served by regulated and non regulated energy providers. The section describes all aspects associated with a comprehensive Audit.

**Section 8 - Procurement of Energy:** The opportunity for purchasing energy at a better price is dependent on good and timely energy information. The UM software and database effectively supports the efforts required to enter the deregulated energy market and to monitor the subsequent performance of contract purchases. This section describes the steps each PSA participates in, as new energy procurement opportunities become available.

**Section 9 - Energy Conservation:** Engaging in energy efficiency requires commitment, capital and dedicated people; therefore, the value of having an owner representative for ESPC projects is substantial. This section describes the various activities associated with this role and its responsibilities.

**Section 10 – Program Deliverables and Transition:** At the end of the term of the Contract, the State will receive a high-value energy management system designed to support all State Agencies. The original intent of LPB’s offer and the State’s RFP was to create a system that is ultimately owned and controlled by the State. To that end, this section provides a high-level description of what the State will receive and the fundamental steps required to transition either the entire system or selected Primary Activities to one or more new providers at the State’s discretion.

**In Summary:** At the conclusion of the project, the State will have a highly effective energy management information infrastructure in full operation and will be in an excellent position to grow its energy management program to meet both current and future requirements.
Section 1 - Project Management

1.1 Overview

The LPB Project Team responsible for the construction, operation and delivery of this comprehensive energy management solution is large and is comprised of diverse skill sets that include, but are not limited to: Software Developers, Certified Public Accountants, Certified Energy Managers, Professional Engineers, Lawyers, Graphic Designers, Professional Educators, and Professional Energy Bill Auditors. This team has the experience and skill to address any and all issues of this complex project. Furthermore, LPB has the ability to quickly adjust staffing levels to ensure each component of the energy management solution is properly supported.

The successful management of this very large and complex project depends on communication and synchronization between all parties. LPB will establish a Customer Service Center (CSC) that will be the receiving point for all questions, concerns, requests, issues, ideas, etc. initiated from each PSA and its personnel participating in the project:

![Customer Service Center Diagram]

All inquiries received at the CSC will be logged into a central database, issued a Quality Control Ticket (Ticket) and assigned to a Customer Service Representative (CSR). The CSR is the person who is responsible for bringing that Ticket to the appropriate resolution within 48 hours (additional time for extended requests). This system of identification and accountability ensures quality throughout the entire process. The CSR will coordinate with the appropriate project departments and people to facilitate a resolution. Upon providing the correct resolution to the PSA customer, the CSR will close the Ticket with written confirmation from the PSA customer.
Simply stated, the goal of our Project Team is to provide the highest quality customer service to each PSA. This quality will be measured in every aspect of the project and appropriate metrics will be established with the Contract Administrator, monitored and refined throughout the term of the project. A cornerstone of the CSC is the project website. The following screenshot is an example of what the website will look like. Along with all aspects of the CSC operation, this website will be refined through interactive participation with the PSAs.

In addition to the LPB Project Team, each PSA should designate a representative who becomes an active member of the Project Team. This comprehensive energy management solution will become a valuable resource for each PSA’s Resource Efficiency Plan (REP).

1.2 The Project Team

1.2.1 Primary Contractor

LPB Energy Consulting (LPB): A leading supply-side energy consulting firm. Based in Dallas, Texas, LPB’s energy professionals have years of experience negotiating
energy contracts and are accomplished at obtaining the best pricing and contract terms for their clients. LPB offers sophisticated risk management products as well as non-traditional structured products. In addition to being responsible for all deliverables and aspects of this project, LPB is also the primary provider and/or key participant in delivering the following components:

- Utility Bill Audit
- Procurement of Energy

### 1.2.2 First-Tier Subcontractors

Organizations directly contracted with LPB for products and services to be provided to the State. There are four first-tier subcontractors:

**New Energy Technology (NET):** This firm specializing in the design, construction, implementation and leadership of advanced energy information systems and will be responsible and accountable for ultimate success of the project. NET will participate in designing and delivering the following components:

- Project Management
- Energy Information Management System
- Utility Bill Processing and Payment
- Project and Energy Management Reporting
- Energy Bill and Software Training
- Utility Bill Auditing

**Save More Resources (SMR):** The market leader in energy accounting software. Its core product, The Utility Manager™ serves the largest private and public organizations in the country. The SMR organization is a critical player on the team and will participate in delivering the following components:

- Information Technology Infrastructure (software components)
- Energy Information Management System
- Utility Bill Processing and Payment
- Energy Bill and Software Training

**Floyd-Thomas:** An Austin, Texas-based Historically Underutilized Business (HUB) with 4 years of experience in providing hardware and software services to the State of Texas. Floyd-Thomas will be a key local connection and will participate in delivering the following components:

- Information Technology Infrastructure (hardware components)
- Energy Bill and Software Training

**Marvin Groves Electric:** Marvin Groves Electric is an electrical and mechanical contracting firm established in 1974. They hold HUB and 8(a) certifications and are based in Wichita Falls, Texas. Marvin Groves’ extensive experience in managing energy efficiency projects will serve the State of Texas well. This firm is the lead player in supporting the State’s ESPC projects.
1.2.3 Second-Tier Subcontractors
Organizations not directly contracted with LPB for work on the State of Texas project; however, they are approved to contract with a first-tier contractor.

Newcomb & Boyd: Founded in 1923, Newcomb & Boyd is a world class engineering firm with over 150 employees (including Texas-licensed engineers). Newcomb & Boyd will be the primary support to Marvin Groves Electric in acting as the owner representative for selected ESPC projects. Newcomb & Boyd’s Texas-licensed professional engineers, as required in the RFP will be performing most of the tasks associated with this owner’s representative role in the designated ESPC projects.
Section 2 - Information Technology Infrastructure

An integrated system of computer software and hardware is a vital component of the project. This system will be deployed and integrated with the State’s existing Information Technology (IT) infrastructure.

2.1 Software

The Utility Manager™ (UM) suite of software applications from SMR will directly support nearly every facet of the project, including utility invoice payment, energy procurement and efficiency initiatives, and measurement and verification of savings. The UM software and database provide a flexible, secure, and proven platform suitable for the State’s technology environment.

2.1.1 The Utility Manager™ Server

The primary software component is The Utility Manager Server (UM Server). This client server application includes the core functionality required to construct and maintain the centralized database of energy information. The database will reside on the industry standard Microsoft SQL Server platform and will contain a complete inventory of State facilities, energy vendors, utility accounts, as well as a complete history of energy consumption and cost. The flow diagram below provides a simple overview of how this software application is structured, starting with utility bills.

LPB will receive, process and prepare payment of utility bills on behalf of each PSA, and will assume primary responsibility for maintaining current and accurate
The UM Server software application will support the bill payment process with functions for manual entry of invoice data, electronic receipt and payment via EDI, routine transfer of accounting data to State financial systems, and digital scanning of each bill to provide efficient access to invoice images.

2.1.2 UM Online
The UM Online web site will provide secure, password-protected access to the UM Server database from any PC with a connection to the Internet and a standard web browser. UM Online provides real-time access to raw billing information and invoice images, as well as a robust collection of reports and graphs that support data analysis, evaluation of facility efficiency, and energy procurement activities. Report output can be easily exported to spreadsheets or PDF files, and emailed to others.

2.1.3 UM Cost Avoidance
The UM Server includes a module that supports the calculation and tracking of cost avoidance. The software provides a comprehensive set of functions designed to accurately determine the savings that result from energy conservation efforts and other initiatives designed to reduce energy and utility costs. The analysis takes a variety of factors into account, including changes in floor area, weather (heating and cooling degree days), and other conditions that affect energy use from one year to the next. The results of the analysis are presented in a variety of report formats designed to meet the needs of energy and facility engineers, financial analysts, and executive management.

2.1.4 UM Contract Administrator
UM Contract Administrator is a web-based application designed to facilitate management of energy procurement contracts. The software provides a timely and accurate tracking mechanism for the key information items that define energy purchases in a deregulated environment. It supports effective monitoring of key contract milestones and deadlines, including effective dates, expiration dates, and individual site switch dates. Because UM Contract Administrator has access to the invoice history in the UM Server database, the software also allows comparison of billed usage to purchase obligations (bandwidth), and of actual costs to contract prices.

2.1.5 UM Profiler
UM Profiler is a web-based application designed to capture and report on 15-minute interval data energy measurements. The software has the ability to receive data from the existing energy provider or independent sub-meters installed, as well as energy management systems or direct digital control systems if available. The initial phase of this project does not directly call for the use of this Utility Manger module; however, through several of the primary deliverables (Procurement of Energy and Energy Conservation), this software module may be introduced to increase accountability for energy consumption and cost savings measures and/or enhance the measurement and
verification of energy consumption and cost saving investments, equipment and activities.

2.2 Hardware
As described below, LPB will provide the State with the computer server hardware required to fully implement the UM suite of software applications. In turn, the State will equip designated staff with client workstations as required to access and operate the software.

2.2.1 SQL Server for UM Server
During project startup, LPB will provide the State with the computer server hardware required to house a copy of the live UM Server database. With technical assistance from LPB, State IT staff will install the server on a designated local area network. The hardware provided by LPB will meet or exceed the specifications required to provide a high performance database server platform. As of the writing of this document, these specifications include dual Intel processors running at 3.0 GHz, 2 GB of RAM, Gigabit network interface card, and 60 GB of disk storage configured in a RAID array. The server will be loaded with the Microsoft Windows Server 2003 operating system, and Microsoft SQL Server 2000.

2.2.2 Client Workstations for UM Server
The State will equip designated staff with client workstations as required to run the UM Server application. These workstations will meet the following minimum specifications: Intel Pentium processor or equivalent @2.0 GHz, 256 Mb of RAM, 500 Mb of free disk space, Windows 2000 or Windows XP operating system, and Internet Explorer version 5.5 or higher. The workstations will require a 100 Mbps connection to the local area network to which the SQL Server is attached.

2.2.3 Web Server for UM Online
The vast majority of users within State government will access the energy and utility information via the UM Online web site hosted by LPB or the State (at the State’s discretion), as LPB will provide the required web server hardware. As of the writing of this document, the specifications for such a server include dual Intel processors running at 3.0 GHz, 1 GB of RAM, Gigabit network interface card, and 30 GB of disk storage configured in a RAID array. The server will be loaded with the Microsoft Windows Server 2003 operating system.

2.2.4 Client Workstations for UM Online
In order to connect to the UM Online web site, designated users will require access to a workstation with a broadband connection to the Internet (256 Kbps or greater). The minimum requirements for workstation hardware and software include a processor equivalent to an Intel Pentium @ 1 GHz, 128 Mb of RAM, and a web browser compatible with Internet Explorer version 5.5 or higher.
2.3 Overview of System Architecture
The diagram below provides an illustration of the system architecture after full deployment of the UM suite of software applications for the State. A copy of the live UM Server database will be transferred on a regular basis to a designated SQL Server that resides on a local area network (LAN) operated and maintained by the State. LPB will provide the State with a perpetual software license to operate the UM Server software so that designated state staff will have direct access to the software and the copy of the UM Server database housed on the LAN.

The same data security measures utilized by Costco, Intel, Kroger, Walgreen’s, Wal-Mart, JC Penney and many others will be part of our standard offering to the State of Texas.
Section 3 - Energy Information Management System

3.1 Background
The energy information database is the cornerstone of success. The fundamental truth that the credibility of this entire energy management solution rests on the quality of the data in the database is fully understood and embraced by our database construction team.

Beyond energy bills, the type of additional information needed to support the successful efforts of energy management and the accounting functions are listed here (representative list only, not all inclusive):

- Site Information (7,000 sites) - square footage, weather station, retro-fits, site leadership
- Hierarchical structure - sites, departments, districts, divisions, sections, etc.
- Line-item detail on each energy bill (approximately 892,000 historical bills)
- Energy providers – rates, types of service offered, late payment policy, etc.
- Energy contracts – terms and conditions, penalties, unit cost, etc.
- Financial codes – connecting with and feeding the State’s general ledger system(s)

All the following activities depend on the data for performance throughout the term of the project:

- Bill Processing and Payment
- Project and Energy Management Reporting
- Energy Bill and Software Training
- Energy Bill Auditing/Analysis
- Procurement of Energy
- Energy Conservation

With a good information system in place, better decisions can be made, which in turn drives better results.

To effectively manage this enormous task, the team will split the work into two different areas of focus: Database Structure and Database Billing History.

3.2 Database Structure
Working with such a diverse and complex organization like the State of Texas mandates following the current structure the State operates under, thus each PSA will be its own operating entity within the entire State database. This means that each PSA will have access to its own information and can utilize this software application as if it were the only user on the system. The following software screen shots and associated steps are designed to provide an overview of how the system will be constructed for the State.

The first step in establishing the database is setting up the State as the organization through the software’s Company Information Set-Up Screen (see below): This screen
contains the name of the database, database start date, financial calendar information, general ledger codes, weather stations, production units and energy services tracked.

The following screen provides an example-only of fictitious financial codes that feed general ledger accounts within the State’s financial system.

There are 64 national weather stations in Texas that are set up in this main screen:
The next step in construction is establishing the PSAs and their respective structures. This is achieved through the following screen shots of setting up Groups and Subgroups:

Groups and Subgroups organize the site information to properly reflect the reality of how the PSA is structured with its respective labeling (departments, divisions, districts, zones, regions, areas, agency code, etc.). There are an unlimited number of groups and subgroups to serve the diverse users of the system.
Following how energy providers view their customers, the next set-up step is construction of all the sites and their relevant information, which is located in the Site Information Screen: Site ID and name, financial code(s), production units, weather station (if applicable), floor area, address and contact information, energy accounts, groups/subgroups, savings calculations and memos.

Additional Site Information: Once constructed, this will be maintained monthly to ensure the most current physical information (facility closings, facility openings, square footage adjustment, upgraded lighting systems, upgraded EMS or DDC control systems, etc.) is available for all users of the system.

Production Data: Where appropriate current production data (hours of operation, type of building activity, number of employees, etc.) will be maintained on a monthly basis. Production data can be used as another indicator of energy performance (e.g., BTUs/hr of operation, energy cost per # of employees).

Weather: A seamless downloadable process for bringing weather data (either monthly heating or cooling degree totals or daily average temperatures) from 64 national weather service stations located throughout Texas.

Example for Energy Management – Use of Site Memos: Site-specific memo fields for tracking and recording important information regarding site changes that may affect energy usage will be populated with available data. As a tool for energy management, this feature provides continuity (important information is not lost with the transition of
new personnel) and the ability to record necessary milestones for tracking avoided cost related to energy efficiency projects.

The next step is setting up the energy vendors in the Utility Companies set-up screen: This is information pertaining to the various energy companies serving the State of Texas. This screen contains the name of the vendor, the State-specific vendor codes, and the energy services each vendor provides. From the Energy Companies window it is also possible to setup the specific billing usage and/or cost line items which will be tracked on the invoice.
Energy Account/Rate and Meter Information: Tracking this important information is an integral part of the UM database. Each energy account references a particular site and an energy vendor. The account financial code will be used to link the account to financial/general ledger systems. Including meter information is of great value since it can produce an important reference point should a vendor account number change. Meter numbers help to verify your bills because they identify a physical aspect of your accounts.
3.3 Historical Billing History

Once the database structure is complete, data entry templates will be created for each account for which historical data will be manually entered. Creating these templates will ensure that all relevant billing information will be consistently entered by data entry staff. To the extent that historical billing data is available from the vendor in an electronic format, this data will be imported into the database. The following screen shot is the billing data entry screen of UM and provides an example of the types of data fields that will be captured:

In the case of manual data entry, the construction of data entry templates starts at the account level. One bill for each account is needed to set-up the correct line items in the order they appear on the original invoice. If the line-items of a bill change, a new template will be established to properly reflect the billing components.

When an energy provider can provide “bill-grade” data in an electronic format, we utilize one of many data import formats to construct the appropriate electronic bridge. Though an energy provider may represent it can provide historical bills electronically, many times the details of the bills do not meet the established quality standards so they are not used.
Database Review and Cleanup

Throughout the database construction, the data in the software goes through an intense and constant review. This review process starts with each bill entered and carries all the way through the energy management reporting component.

The first audit performed utilizes this Billing Audit Options screen in setting the parameters for checking the billing information as it is entered into the program. Following this screen is an example of an audit report.

![Billing Audit Options Screen](image)

**Batch Billing Audit**

Audit period: Determined by individual bills for Batch ID#: 937

**CAMINO REAL MARKETPLACE, Account # 19736-8, 474 - Goleta**
- **Error Condition**: # of days between bill date and due date (49) exceeds expected maximum of 42 days
- **Date of Bill**: 03/17/2004
- Usage of Water exceeds expected maximum of 1,000 CCF (or equivalent)
- The service period for the current bill is 13 days longer than the previous bill
  - **Date of Bill**: 03/17/2004

**RELIANT ENERGY SOLUTIONS, Account # 1 530 930-5, 675 - Willowbrook**
- **Error Condition**: # of days between bill date and due date (132) exceeds expected maximum of 42 days
- **Date of Bill**: 01/22/2004

**RELIANT ENERGY SOLUTIONS, Account # 1 530 930-5, 675 - Willowbrook**
- **Error Condition**: # of days between bill date and due date (70) exceeds expected maximum of 42 days
- **Date of Bill**: 02/23/2004

**RELIANT ENERGY SOLUTIONS, Account # 1 530 930-5, 675 - Willowbrook**
- **Error Condition**: # of days between bill date and due date (348) exceeds expected maximum of 42 days
- **Date of Bill**: 05/22/2003
- Bill amount for Electricity is lower than previous bill by 89%
- Unit Cost of Electricity ($2.007/kWh) is below expected minimum of $0.0200/kWh
- The service period for at least one line item does not match the bill date
  - **Date of Bill**: 05/23/2003
It is important to note that the Billing Audit Options is used to ensure the input of quality data into the database. This is not the same as an extensive Utility Bill Audit.

Some examples of the next tools used to ensure the database is complete are the Missing Bills and Billing Gaps reports:

**In Summary**: The quality of the database is paramount to the success of the project. The Team assembled, using the proven management methods and software application, will deliver a high quality database.
Section 4 - Utility Bill Processing and Payment

4.1 Overview
LPB’s Utility Bill Processing & Payment service is a critical component serving two primary functions: 1) Ensure the appropriate energy charges on each bill are accurate and properly paid. 2) Daily, weekly and monthly maintenance of the high quality energy information database.

Developed and perfected over many years through working with some of the largest organizations in the country, our bill processing procedures (flow diagram below) ensure accurate and prompt payment, while maintaining the database.

The Standard Service the State will receive includes:
- Bill Imaging – images available on line
- Invoice review – examination of due dates, abnormal usage, service period overlaps, and meter changes before the bill is paid
- EDI (Electronic Data Interchange) – Electronic billing where available
- Follow-up with vendors to resolve billing anomalies, missing bills and estimated readings
- Validation and posting for bill payment
- Downloading to the State’s Uniform Statewide Accounting System (USAS)
- Database hosted and maintained on the Web with access for authorized users via the UM Online web-based application
4.2 Utility Bill Processing

All bills received are organized into groups called batches and they are scanned the same day they are received. The due date is checked to verify that enough time is available to meet that date; otherwise the bill is pulled for expedited processing (problem solving or special handling). The scanned image of each invoice is stored as a standard PDF file and is permanently referenced to the database record created for the invoice. This image may be viewed, downloaded, or printed by authorized users and is easily accessible by date, utility account, vendor, or site.

Through our batch process, each bill is then entered into the database at the bill line item level of detail using the pre-established templates for each account. Any bill with a credit balance, debit balance, or late fee is pulled for immediate investigation. Bills that do not get pulled because of the need for expedited payment or other anomalies are processed for payment no later than three days after receipt. If the due date is less than 10 business days from the current date, it is pulled for expedited treatment. A second person verifies the input accuracy of each entry.

In addition to receiving utility bills through the mail, LPB will seek to establish an electronic billing relationship with Utility Providers that have the capability to bill electronically. The term for this is EDI (Electronic Data Interchange) and several of the larger energy providers in Texas currently provide it. It is important to note: regardless if a bill is received through the traditional method or electronically, the same level of scrutiny is applied to ensure only the proper amount is paid.

Once a batch is complete and balanced against control totals, an audit of the batch is performed. This audit looks for anomalies such as excessive or low usage or cost, abnormally high or low unit cost changes, unusual billing periods and overlapping service periods. The following screenshot of the audit screen showcases the options:
If a bill passes this final phase, it is considered acceptable and approved for payment and posting. If a bill doesn’t pass this final phase, it is pulled and investigated.

A utility bill requiring additional investigation goes through an extensive process with our most experienced personnel to resolve the issue(s). During this process, we closely track each bill to ensure due dates are not jeopardized. Once the issue(s) is resolved, notes are recorded in the UM Server master database and the bill is approved for payment and posting. In concert with UM Server, these issues, the steps towards resolution and the actual resolution will be reported through the Utility Bill Audit Reporting Center (see section 5.3.1.1 Daily Bill Auditing Process for further details).

4.3 Utility Bill Payment
Once utility bills are processed and approved for payment, two basic functions take place:

1) The utility payment must be posted/recorded in the General Ledger.
2) The utility payment must be issued and sent to the Utility Provider.

An interface with the existing USAS will be constructed to transmit accounts payable transactions (utility invoices) as well as general ledger transactions (expense entries for utility payments). The accounting system conversion process generally comprises the following steps, based on a project plan developed jointly with the State:

a) Determine general USAS/PSA requirements and obtain financial calendar
b) Determine file format required to send utility expense transactions to the State
c) Determine telecommunications requirements for secure transmission of accounting data between LPB and the State
d) Create documentation for data files, telecommunications procedures, and test plans
e) Review documentation and test plan with USAS/PSA
f) Configure UM Server software as required to support interface requirements
g) Provide USAS/PSA with test files
h) Test data telecommunications between LPB and the State
i) Go live with the system

The next step in the process is getting the actual bills paid and receiving assurance that the financial transactions with the providers are complete.

4.3.1 Bill Payment Options
There are two options for the actual payment of the State’s utility bills:

A) **Option A:** State elects LPB to execute the payment transaction through US Bank (State owns bank account and relationship with the bank) and LPB feeds USAS.
B) Option B: State elects to continue cutting its own checks and LPB provides a daily feed of utility transactions to the USAS.

The software and service infrastructure will easily support either option or some combination of the two. Either option will provide the appropriate financial reports back to the PSA via UM Online (see Payment History Report below):

<table>
<thead>
<tr>
<th>Site</th>
<th>Vendor code</th>
<th>Vendor name</th>
<th>Invoice Amount</th>
<th>Invoice Date</th>
<th>Due Date</th>
<th>Issue Date</th>
<th>Settled Date</th>
<th>Payment Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1954-Austin</td>
<td>226</td>
<td>City of Austin, TX</td>
<td>$20,854.54</td>
<td>12/14/2004</td>
<td>01/11/2005</td>
<td>12/30/2004</td>
<td>02/11/2005</td>
<td>Check</td>
</tr>
<tr>
<td>1954-Austin</td>
<td>226</td>
<td>City of Austin, TX</td>
<td>$21,561.60</td>
<td>01/16/2005</td>
<td>03/14/2005</td>
<td>01/31/2005</td>
<td>02/01/2005</td>
<td>Check</td>
</tr>
<tr>
<td>1954-Austin</td>
<td>226</td>
<td>City of Austin, TX</td>
<td>$20,456.38</td>
<td>02/14/2005</td>
<td>03/14/2005</td>
<td>02/05/2005</td>
<td>03/05/2005</td>
<td>Check</td>
</tr>
<tr>
<td>1954-Austin</td>
<td>226</td>
<td>City of Austin, TX</td>
<td>$20,767.61</td>
<td>03/16/2005</td>
<td>04/13/2005</td>
<td>03/29/2005</td>
<td>04/05/2005</td>
<td>Check</td>
</tr>
<tr>
<td>1954-Austin</td>
<td>226</td>
<td>City of Austin, TX</td>
<td>$21,437.78</td>
<td>04/15/2005</td>
<td>05/10/2005</td>
<td>04/30/2005</td>
<td>05/11/2005</td>
<td>Check</td>
</tr>
<tr>
<td>1954-Austin</td>
<td>226</td>
<td>City of Austin, TX</td>
<td>$22,423.18</td>
<td>05/15/2005</td>
<td>06/10/2005</td>
<td>05/31/2005</td>
<td>06/05/2005</td>
<td>Check</td>
</tr>
<tr>
<td>1954-Austin</td>
<td>226</td>
<td>City of Austin, TX</td>
<td>$23,719.74</td>
<td>06/16/2005</td>
<td>07/13/2005</td>
<td>06/28/2005</td>
<td>07/12/2005</td>
<td>Check</td>
</tr>
<tr>
<td>1954-Austin</td>
<td>226</td>
<td>City of Austin, TX</td>
<td>$25,243.59</td>
<td>07/18/2005</td>
<td>08/12/2005</td>
<td>07/29/2005</td>
<td>08/10/2005</td>
<td>Check</td>
</tr>
<tr>
<td>1954-Austin</td>
<td>226</td>
<td>City of Austin, TX</td>
<td>$24,174.42</td>
<td>08/17/2005</td>
<td>09/13/2005</td>
<td>08/30/2005</td>
<td>09/10/2005</td>
<td>Check</td>
</tr>
<tr>
<td>2040-Austin</td>
<td>226</td>
<td>City of Austin, TX</td>
<td>$18,182.93</td>
<td>12/06/2004</td>
<td>01/03/2005</td>
<td>12/20/2004</td>
<td>12/31/2004</td>
<td>Check</td>
</tr>
<tr>
<td>2040-Austin</td>
<td>226</td>
<td>City of Austin, TX</td>
<td>$18,421.30</td>
<td>01/06/2005</td>
<td>02/02/2005</td>
<td>01/20/2005</td>
<td>02/01/2005</td>
<td>Check</td>
</tr>
<tr>
<td>2040-Austin</td>
<td>226</td>
<td>City of Austin, TX</td>
<td>$15,199.78</td>
<td>02/03/2005</td>
<td>03/03/2005</td>
<td>02/15/2005</td>
<td>03/13/2005</td>
<td>Check</td>
</tr>
</tbody>
</table>

4.3.1.1 Option A – LPB Full-Service Bill Payment
LPB provides a complete payment service to the State of Texas. US Bank “cuts the check” for the utility payments and the State funds the bank account. This is a State owned account and LPB manages the account on behalf of the State.

Utility Bill Payment Transaction Flow
Key benefits Option A provides to the State:

- **No Late Fees:** When the State agrees to this standard processing and bill payment procedure, LPB is responsible for late fees regardless of minimum and maximum processing periods. Should a bill be paid after the due date, and therefore incur any late fees, LPB is responsible for the cost of these fees through a deduction on the State’s monthly invoice. The only exception to this is if the State fails to provide to LPB information on utility service changes or new sites.

- **Cash Flow Maximization:** As a part of the standard offering, LPB uniquely employs “Just-In-Time” utility bill payment. This practice of fund disbursement optimizes the State’s cash position and results in ‘no-float’ for LPB. Just-In-Time consists of two components:
  1) Paying utility bills on the last day possible
  2) Disbursing funds from a zero balance account

In the first component, LPB determines how late they can pay a utility bill without incurring a late charge. LPB monitors each utility to establish historical patterns on the time between the disbursement of funds and the settlement of payment. LPB also monitors and tracks the practices of utilities in issuing bills on time and their policies on late fees. From this information, LPB is able to establish mailing days for vendors that maximize the float available to the State.

In the second component, LPB utilizes ‘no-float’ disbursement. The process begins through the transmission of a daily disbursement file to the bank containing all of the processed bills to be paid and the related remittance data for the vendor. Payments are identified as ACH or manual checks. The bank warehouses these payments and issues payment on the specified dates. The funding is due on the day ACH payments are made, or upon the settlement of manual checks enabling the customer to maximize their float.

An option is available to fund the payments via a client-controlled checking, direct deposit account (DDA) or controlled disbursement account (CDA). Positive Pay processes are available to reduce the potential check fraud – this is offered by US Bank for an additional banking fee. Again, the bank account is owned by the State; and all transactions disbursed or settled are available via a protected web site. Settlement and funding requirements are posted daily for State retrieval.
4.3.1.2 Option B – File Transfer / State USAS Bill Payment
LPB provides a daily feed of utility transactions to the USAS and the State continues paying the Utility Providers as it always has. As the financial transactions associated with bill payments are recorded in USAS, a file transfer of these transactions feeds back to UM Server for payment history reporting to the appropriate personnel in each PSA.

**Utility Bill Payment Transaction Flow**

Key benefits Option B provides to the State:

- **Utilize Existing Agency Interface:** This solution will utilize the existing accounting interface each agency presently has with the USAS system without need for a customized vendor interface with each agency accounting and general ledger system. The only difference from the existing process will be that USAS will debit and update each agency’s accounting system with the journal entries once utility payments have been executed by the Comptroller of Public Accounts (CPA).

- **Reduced Implementation Time / Cost:** The amount of time for implementation for this solution will be reduced compared to Option A since only one (1) accounting system interface will be required. Agencies can be brought online with the new system quicker than if multiple interfaces needed to be constructed.

- **Eliminates Additional Banking Relationship / Fees:** By utilizing CPA’s existing accounts payable system there is no need for another outside financial institution; therefore, any additional maintenance fees (Option A) are eliminated.
• **Aggregated Payments:** Utility payments can be aggregated according to existing CPA utility vendor profiles and bill due dates.

• **Increased Electronic (EFT) Payments:** Electronic transfer of funds can be utilized to increase fund management and interest amounts. Electronic fund transfer also increases security and reduces the likelihood of fraud.

• **Dual Visibility:** Utility payments can be tracked through either the existing USAS system or the vendor system depending upon an agency’s preference.

4.4 **Optional Enhanced Accounting Services**

There are two enhanced accounting services available to the State. Both are optional services and may or may not be appropriate for the State.

1) **Accruals:** UM Server tracks the unbilled usage for each account so at the close of each accounting period, an estimate is available. The estimate is based upon the number of days since the last meter reading through the end of the period and the average daily rate of the last bill paid. The accruals are provided in a file formatted for entry into the General Ledger. The details can be provided at the account level or rolled up to any grouping preferred by the customer.

The standard accrual process provides all of the components needed to determine the true period expense for each utility account. Accruals are billed on a per account basis. Any modifications to the standard accrual process would need to be reviewed and could result in custom programming charges. The standard components of period expense include:

• Checks that have been issued but not yet settled
• Bills received but have not had a check issued
• An estimate of period usage that has yet to be billed by the utility

2) **Allocations:** UM Server enables accurate and efficient distribution of cost and usage across multiple facilities or across multiple customers within a single facility when a fixed allocation is used. Custom allocations could result in manual data input resulting in additional bills being created to reflect the allocation. Allocation can take place across multiple general ledger accounts with invoice data being exported to A/P systems.
Section 5 - Program Reporting Requirements

5.1 Overview
The complexity and size of this project demands quality and consistent reporting. To deliver a viable solution for this need, LPB is building a Reporting Center charged with the responsibility of coordinating and providing all reporting for the project. The personnel of the Reporting Center will be comprised of energy engineers, technical writers and data quality experts.

As all inquiries are directed to the Customer Service Center (CSC), all report inquiries and requests will flow through the CSC before being passed onto the Reporting Center. The Reporting Center will provide confirmation of receipt with a Ticket, which begins the process of addressing the request. If further clarification is needed with the PSA customer, the CSC will facilitate communication between the Reporting Center and the PSA customer. The work flow diagram below represents how the reporting requests initiated by the PSA customer will be handled and how the Reporting Center is an integral part of the technical support process.

The primary form of communication to and from the Reporting Center will be written, thus creating a permanent record of the events. As the diagram below represents, the Reporting Center will work in concert with all the individual primary delivery components of the project having its keen eye focused on data quality. This oversight provides another layer of quality control by assuring the accuracy of the reporting.
The Reporting Center’s responsibility is to provide an accurate, consistent and reliable accounting of the project activities, events and results for:

a) Program Management Reporting
b) Accounting/Financial Reporting
   • Bill Process and Payment Reporting
   • Forecasting and Budgeting Reporting
   • Utility Bill Audit Reporting
c) Energy Management Reporting
   • Procurement of Energy Reporting
   • Energy Conservation Reporting
   • Use/Cost Avoidance Reporting
d) Ad-Hoc Reporting

This professional level of detail, quality control and over all scrutiny will ensure all aspects of the project are properly recorded, auditable, traceable and reconcilable. All the reporting requirements specified in the RFP for all sections including, B.9.1 and B.9.2 are addressed in its respective reporting category.

Design and Construction of the Reporting Center

Construction of the Reporting Center will start month one of the project and focus on building the necessary infrastructure, connecting with the customers it is designed to serve, construction of processes and documentation to support and streamline primary deliverables, establish the standard reporting requirements needed for each primary deliverable. This list provides a brief overview of the types of activities this construction team will be engaged in (illustration only, not intended to be all inclusive):

1. Identification of current and future audiences
2. Interviews with each primary audience and/or respective participants
3. Design and development of all communication systems for each primary deliverable between themselves and with the Reporting Center
4. Design and development of a Program website supporting all communication
5. Design and development of all Program Management Reports
6. Design and development of Accounting/Financial Reports
7. Design and development of Utility Bill Audit Reports
8. Design and development of general Energy Management Reports
9. Design and development of advanced Energy Management Reports, such as Cost Avoidance tracking energy consumption reduction and benchmarking against the Energy Star Portfolio Manager.
10. Design and development of Procurement of Energy Reports
11. Design and development of efficiency documents, such as RFQ’s, RFP’s and prequalification of Energy Service Providers for Energy Conservation
12. Design and development of standard Energy Conservation Reports
13. Design and development of each Primary Deliverable Savings Report and the Program’s Global Savings Report
5.2 Program Management Reporting

Program Management Reporting spans all the deliverables associated with the design, construction, implementation and constant refinement of this energy management solution. As stated in the Introduction, these initiatives will not be performed in sequential order. Therefore, the organization and accurate tracking of multiple initiatives must be closely monitored and managed. The type of program management reports and management system(s) this complex project requires will evolve and adapt with the project. The following is a representative list of our target audiences and the program reports that will be provided:

Target Audiences for Project Management Reporting:
- Council for Competitive Government (CCG)
- State Energy Conservation Office (SECO)
- Participating State Agencies (PSAs)
- State Legislators
- LPB Team Members

Monthly Status Report:

a) Usage and Cost Savings report
   - Bill Audit/Analysis refunds and savings
   - Energy Procurement contracts, actual savings and estimated future savings
   - Energy Conservation projects in design, under construction and complete

b) Progress report on each major deliverable (overall and for each PSA)

c) Timetable – milestones achieved and timetable adjustments

d) Major issues – significant problems and how we are working through them

e) PSA Engagement with the CSC
   - PSA Customer Ideas – suggestions on how the systems can be improved
   - PSA Satisfaction of Performance – Develop a customer comment section
   - Note Worthy Performance of PSAs and top performing individuals

f) Volume-Traffic-Activity at the CSC: Types of calls, number of issues/requests, number of resolutions

g) Energy Cost and Consumption totals (overall and for each PSA)

h) Total volume of invoices processed and paid (overall and for each PSA)
   - Problem bills and issues resolved

i) Education and Training – number of users trained (both basic and advanced)

Annual Status Report – Summarize monthly reports and provide a year-end report

5.3 Accounting/Financial Reporting

The accounting and financial reporting focuses on all the financial transactions associated with energy bills and payments. This area is divided into three separate functions that work closely together, yet serve completely different requirements. These functions are:
Utility Bill Process and Payment Reporting, Forecasting and Budgeting Reporting, and Historical Utility Bill Audit Reporting. One specific area to note is utility bill auditing. There are two separate auditing procedures taking place simultaneously: historical bill audit and daily bill audit.

5.3.1 Utility Bill Process and Payment Reporting
In addition to efficiently processing and paying the State’s utility bills, LPB focuses on ensuring the right amount is paid. As described in Section 4.2 Utility Bill Processing and Payment, each bill goes through an extensive verification and auditing process. The reporting associated with the daily operation of processing and paying utility bills provides a detailed overview of the events and results. The following list with several examples showcases the type of information available to each PSA and the State’s Accounting Department:

5.3.1.1 Daily Bill Auditing Process
The following two descriptions and associated screenshots are examples of how the daily bill auditing process will identify problems, so the audit team can begin the process of correcting these problems and securing an appropriate resolution. These issues and resolutions are then reported through the Reporting Center.

- Unusual high usage, Maximum days exceeded, Unusually low unit cost, Service period doesn’t match bill date: The following screenshots is an example of how these items are “flagged” before the billing information is allowed to be incorporated into the master database.

![Batch Billing Audit](image)

Unusually High Usage

Exceeds maximum allowed days between bill and due dates

Unusually Low Unit Cost

Service period doesn’t match the bill date
• **Missing Bills:** It is important to closely monitor the arrival and processing of utility bills to avoid any unnecessary charges. The screenshot below is how users of the system will be able to quickly determine the status of missing utility bills:

![Missing Bills](image.png)

5.3.1.2 **The Status and Posting of Utility Payments**

The following three descriptions and associated screenshots are examples of how the status and posting of utility payments are addressed and reported.

• **Payment History:** Provides an organized historical record of all payments made to utility providers, as illustrated by the screenshot below:

![Payment History](image.png)
• **Outstanding Checks:** The screenshot below is the front-end filter used to pin-point information regarding outstanding checks:

![Outstanding Checks Screenshot]

- **General Ledger Posting:** There are two potential posting procedures:

  A. Based upon payment Option A, LPB shall create and issue journal entries according to USAS format specifications based upon the payment file transmitted to US Bank. The journal entries are used to update and debit each PSA’s general ledger accounting system electronically for the amount of utility services paid on behalf of the PSA.

  B. Under payment Option B, the State shall create and issue journal entries based upon a payment file received from LPB in USAS format. Once payments have been issued, USAS shall update and debit each PSA’s general ledger accounting system electronically for the amount of utility services paid on behalf of the PSA.

Regardless of payment option, LPB will create a report delineating payments approved / posted to the database and transmitted to CPA each day by PSA identifier.

**5.3.2 Forecasting and Budgeting Reporting**

In today’s world of volatile energy prices, forecasting and budgeting energy costs is a real challenge. LPB will work directly with each PSA to properly address its forecasting and budgeting procedures. Based on the following four (4) components,
UM Server provides a comprehensive set of functions to help anticipate and manage future utility costs.

a) **Actual Costs**: The actual costs for utility services based on the utility bills processed during a specified period of time.

b) **Forecast Costs**: Projected costs for the upcoming year. The program creates a forecast that predicts costs for each service utility category. The prediction is based on historical cost data and user-specified factors for anticipated rate changes.

c) **Budgeted Costs**: The program creates a budget by simply copying the forecast. At the beginning of the year, the budget and forecast are identical. As the year progresses and unanticipated utility rate changes or changes in utility usage patterns become apparent, LPB will work with the PSA and edit the forecast to reflect these changes; however, the budget remains fixed.

d) **Import Forecast and Budget**: For PSAs that have their own forecasting and budgeting process and do not want to change, we simply import their data into UM Server for tracking and reporting purposes.

However each PSA chooses to utilize this powerful reporting feature, the flexible options are available to match each PSAs specific requirement. One of the most beneficial features of this reporting is appreciated toward the end of each fiscal year, as each PSA will know exactly where its utility budget is.

5.3.3 **Historical Utility Bill Audit Reporting**

This bill audit focuses on all the historical energy billings for a minimum of the past three (3) years. A comprehensive reporting and communication system is developed with each PSA to manage the level of activity this process generates. Even though the Bill Auditing Team has full authorization to work with utility providers on behalf of the PSA, it is very important that the PSAs contact has a complete understanding and full view of the auditing process and its activities.

The type of monthly information reported includes, but is not limited to:
• Description of billing errors identified and corrected including the total credit or refund and an estimate of yearly savings.

• Notification of accounts billed in error resulting in a potential liability owed to the utility provider, including an estimate of the current amount owed.

• Monthly summary of total credits, refunds, and estimated yearly savings for the entire project, or by other grouping specified by the PSA.

• Discussion of rate changes recommended and processed including an estimate of yearly savings (see below).

<table>
<thead>
<tr>
<th>Facility Number:</th>
<th>1037 - Modesto</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utility Provider:</td>
<td>Modesto Irrigation District</td>
</tr>
<tr>
<td>Account Number:</td>
<td>2238255001</td>
</tr>
<tr>
<td>Present Rate:</td>
<td>GS-2 General Service Demand</td>
</tr>
<tr>
<td>Recommended Rate:</td>
<td>GS-TOU General Service Commercial</td>
</tr>
<tr>
<td>Estimated Annual Savings:</td>
<td>$1,000.00</td>
</tr>
<tr>
<td>Special Instructions:</td>
<td>This account exceeds 500 kW in demand and should be on the GS-TOU rate. MID is unlikely to change it unless the TOU statistics show a savings from changing rates. The Audit Team will contact Bob Hondeville at 209-526-7310 to inquire about a TOU study before requesting the rate change.</td>
</tr>
</tbody>
</table>

• Monthly summary of actual savings achieved in each account with future savings potential.

• Monthly summary of energy contracts and performance that includes a detail review of all charges, contract compliance and any penalties.

• Annual summary report for all utility bill audit savings realized each year of the project by account, by site, by PSA and for the entire State.

With the overall potential for problem accounts being in the hundreds if not thousands, accurate record keeping and efficient reporting is essential.

5.4 Energy Management Reporting

The energy management reporting focuses on all energy consumption and cost elements associated with the purchasing and use of energy. There are four main sections starting with the PSA Site Energy Use/Cost Reporting, Procurement of Energy Reporting, Energy Conservation Reporting and Use/Cost Avoidance Reporting.

5.4.1 PSA Site Energy Use/Cost Reporting

LPB’s energy management reporting serves a wide audience with the unique ability to specifically address each audiences needs. The entire UM suite of products are
utilized in providing the energy management reporting requirements of the State and each PSA.

Most of the accounting and financial needs are fulfilled with the energy bill information; however, this is not the case for the needs of energy management. The following is a representative list of the type of additional information the Reporting Center will be responsible for constructing and maintaining within the UM Server database. This additional information is vital to the success of the State’s energy conservation efforts.

- Site/Facility Personnel – building operators, building support personnel, building decision makers, etc.
- Site/Facility Information – use of building, type of insulation, hours of operation, number of employees, weather (heating and cooling degree days), square-footage, acres of irrigation, etc.
- Site/Physical Retrofits – past energy efficiency projects implemented, past energy efficiency operation measures implemented, current energy efficiency projects being implemented, future energy efficiency projects to be implemented, etc.
- Site/Facility Energy Efficiency – benchmarks for energy consumption and cost performance at each site will be established utilizing the standard and ad-hoc UM reporting features.
- Site/Facility Cost Avoidance – establish a base year for each viable site that includes proper adjustments for changes in: weather, cost per energy unit, facility size, hours of operation, type of use, amount of equipment, type of equipment, etc. This powerful reporting capability of UM provides consumption and cost savings.

For most PSA Users, the web-based application UM Online module provides all of the reporting and analysis needed in a convenient, user-friendly format. UM Online provides secure, real time access to raw billing information and invoice images, as well as a robust collection of reports and graphs that support data analysis and evaluation of facility efficiency. All of the data provided in the reports and graphs on UM Online may be downloaded to the user’s own workstation. File formats include Adobe PDF, Microsoft Excel and text (CSV). Data can be extracted easily for analysis by other software products or for incorporation into other documents.

The following screenshots of UM Online provide a high level overview of the tremendous reporting capabilities that are conveniently available to each PSA.

**Energy — Historical Reports and Graphs**

These reports and graphs portray historical energy use and cost, either for the entire organization, groups of sites, or a single site.
Energy — Ranking Reports and Graphs
These reports and graphs compare energy use and cost across various sites. As the screenshot illustrates there are several types of ranking reports and graphs:
Combined Utilities — Historical Reports and Graphs
These reports and graphs portray historical use and cost for all types of utilities, both energy-related and non-energy-related.

Combined Utilities — Ranking Reports and Graphs
These reports and graphs compare utility use and cost, ranking sites according to particular aspects of utility use or cost.
Site Based User Interface

Providing the right data to the right people quickly is the purpose of the site-based user interface. UM Online drives specific data to the people who can have the greatest impact on energy efficiency: people at the site.

If users of the system want to review the actual utility bill, they can easily access the electronic image.
5.4.2 Procurement of Energy Reporting

The primary reporting tool used for Procurement of Energy reporting is UM Contract Administrator. This application includes all its generic reports, plus the three RFP required reports below. All reports will be available online no later than the fifteenth (15) calendar day of each month.

State of Texas Energy Efficiency Initiative
Monthly Status Report to Contract Administrator
June, 2005

Pending Energy Procurement Contract Expirations

<table>
<thead>
<tr>
<th>ESP Name</th>
<th>Contract Number</th>
<th>Energy Type</th>
<th>Expiration Date</th>
<th>Days Ahead</th>
<th>Affected Agencies</th>
<th>Number of Facilities</th>
<th>Annual Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trueline Energy Services</td>
<td>235-00291</td>
<td>Electricity</td>
<td>8/3/05</td>
<td>57</td>
<td>014 TEXAS WILDLIFE DAMAGE MGMT; 302 OFFICE OF THE ATTORNEY GENERAL; 308 STATE AUDITOR; 202 STATE BAR OF TEXAS</td>
<td>4</td>
<td>640,000 kWh</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gas</td>
<td>9/30/05</td>
<td>87</td>
<td>301 OFFICE OF THE GOVERNOR; 302 OFFICE OF THE ATTORNEY GENERAL; 308 STATE AUDITOR</td>
<td>7</td>
<td>272,000 CCF</td>
</tr>
<tr>
<td>OPL Retail Energy</td>
<td>235-00228</td>
<td>Electricity</td>
<td>8/3/05</td>
<td>57</td>
<td>203 BOARD OF LAW EXAMINERS; 204 COURT REPORTER CERTIFICATION BD; 211 COURT OF CRIMINAL APPEALS</td>
<td>3</td>
<td>300,000 kWh</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gas</td>
<td>7/3/05</td>
<td>26</td>
<td>329 REAL ESTATE COMMISSION; 515 BOARD OF PHARMACY; 313 DEPT OF INFORMATION RESOURCES; 382 TEXAS LOTTERY COMMISSION</td>
<td>2</td>
<td>280,060 CCF</td>
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State of Texas Energy Efficiency Initiative
Monthly Status Report to Contract Administrator
June, 2005

Facilities Under Review for Load Aggregation Opportunities

<table>
<thead>
<tr>
<th>Agency # / Name</th>
<th>Facility # / Name</th>
<th>Energy Type</th>
<th>Annual Load</th>
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</tr>
<tr>
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<td>513,500 kWh</td>
</tr>
<tr>
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<tr>
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<tr>
<td>204</td>
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<td>Austin Testing Center</td>
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<td>385,400 kWh</td>
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<td>State Courthouse</td>
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</tr>
<tr>
<td>211</td>
<td>Court of Criminal Appeals</td>
<td>Main Office</td>
<td>285,000 kWh</td>
</tr>
<tr>
<td>211</td>
<td>Court of Criminal Appeals</td>
<td>Support Facility</td>
<td>645,000 kWh</td>
</tr>
<tr>
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<td>Office of the Governor</td>
<td>State Capitol</td>
<td>102,000 CCF</td>
</tr>
<tr>
<td>301</td>
<td>Office of the Governor</td>
<td>Governor's Satellite Office</td>
<td>32,000 CCF</td>
</tr>
<tr>
<td>302</td>
<td>Office of the Attorney General</td>
<td>Austin Office</td>
<td>20,000 CCF</td>
</tr>
<tr>
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<td>Office of the Attorney General</td>
<td>Houston Office</td>
<td>15,000 CCF</td>
</tr>
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<td>302</td>
<td>Office of the Attorney General</td>
<td>Dallas Office</td>
<td>22,000 CCF</td>
</tr>
<tr>
<td>308</td>
<td>State Auditor</td>
<td>Headquarters Office</td>
<td>25,000 CCF</td>
</tr>
<tr>
<td>308</td>
<td>State Auditor</td>
<td>Project Support Office</td>
<td>18,000 CCF</td>
</tr>
</tbody>
</table>

**Totals**
- Electricity (27 Agencies, 110 Facilities): 18,200,000 kWh
- Natural Gas (18 Agencies, 67 Facilities): 804,960 CCF
5.4.3 Energy Conservation Reporting

The focus of Energy Conservation Reporting will be two fold: 1) Assist in identifying the best energy efficiency projects available for upgrading the State buildings by targeting the right facilities. 2) Assist in tracking the performance of the energy efficiency upgrades as the projects are complete and the equipment comes on line. Section 6.3.4 Use/Cost Avoidance best describes the module of UM to support this initiative.

With an estimated 7,000 sites, the scope of this endeavor is enormous and demands that LPB’s Energy Conservation Activities (ECA) Team initially focuses on the top energy consuming facilities in support of their Energy Saving Performance Contractors. This involves providing necessary data, record keeping, user-adjustments and monitoring to the ECA Team.

The reports include graphs and tabular listings that display usage and cost statistics. The following two screenshots represent the type of reports that will provide support for these initiatives:
Included in Energy Conservation, but also reaching well beyond the work performed by ESPCs, when the right energy management data is available to the right people, the State can affect change in its operations and produce a significant impact upon energy efficiency and cost reductions in their agencies. The wide array of energy management reports facilitates information exchange between facility personnel and executive management to support agency energy and utility management activities. This in turn supports the process of identifying and prioritizing facility improvements, and further reduces energy consumption.

5.4.4 Use/Cost Avoidance Reporting
The Utility Manager includes extensive support for calculating and tracking cost avoidance. The software provides a complete set of functions designed to accurately
determine the savings that result from energy conservation efforts and other initiatives designed to reduce energy and utility costs. The information is presented in a variety of report formats designed to meet the needs of energy and facility engineers, financial analysts, and executive management.

UM Use/Cost Avoidance includes the following features:

- Tracks the effects of capital projects, procurement initiatives, and conservation programs
- Calculates and reports avoided cost savings from energy management initiatives
- Serves as a tool to help manage energy-saving programs
- Includes flexible calculation methods that may vary from one facility to another
- Provides a choice of calculation methods within each utility service category
- Gives multiple options for specifying the unit cost for each energy or utility service
- Presents various options for selection and calculation of base year data for performance comparisons
- Provides standard regression analysis to account for the variables that may affect consumption, including weather and user-defined production units
- Includes weather factors such as heating degree days, cooling degree days, and humidity
- Allows selection of a custom balance point for each facility based on daily average temperatures
- Incorporates calculated variables that take into account changes in facility operations such as additional computer equipment, floor area expansion, etc.

UM calculates savings on a monthly basis for each site. The savings for all sites can then be accumulated to display Statewide totals. The avoided cost reports calculate monthly and year-to-date totals. The precise calculation that UM uses to determine savings depends on the settings that you assign when you set up your avoided cost parameters. There are two general methods: use/cost reduction and use/cost avoidance.

1. **Use/Cost Reduction**: This method calculates the difference in use/cost between the current month and the same month of the base year. This is the easiest method to understand and the most straightforward to calculate. Just
subtract this month’s cost from the cost for the same month of the base year. The result is the amount saved, or if the result is negative, the amount costs have increased.

2. Use/Cost Avoidance: This method calculates the amount of savings based on reductions in usage of a particular energy service. Using the cost avoidance method has numerous distinct advantages over simple cost reduction as it:
   
   a) Adjusts for rate changes
   b) Adjusts for weather impact
   c) Adjusts for facility changes (square footage, hours of operation, etc.)
   d) Adjusts for equipment changes

Therefore, this method attempts to properly credit improvements for consumption reduction. The Use/Cost Avoidance method is obviously more complicated than Use/Cost Reduction.

The cornerstone for implementing the Cost Avoidance method is to develop a Base Year. This process includes a site-by-site, service-by service analysis of utilities (kWh, kW, Therms, CF, CCF, etc.) related to factors listed above.

The following three screenshots address defining a site’s Base Year for energy services, facility adjustments and accurate reporting.
5.5 Ad-Hoc Reporting

Nearly every report and graph offered by UM provides some level of ad hoc query capability. The following list represents several ways the user and the Reporting Center can specify characteristics:

- **Report Level** – State, PSA, PSA Subgroup (region, division, etc.), Site, Account or Meter
- **Time Period** – one-year, two-year, three-year, quarter, month (or fiscal period), or user-defined period
- **Data Accumulation Method** – prorated according to from and to dates (when resource was actually used), or apportioned to month or financial period based on invoice date, budget period, or date processed
• Site Filter – include only sites that meet specified query criteria, including square footage, annual usage or cost, and location (state and/or city)

• Utility Service – design reports for utility services and/or specific line items contained within each utility bill (taxes, demand charges, service charges, etc.)
• Custom Use and Cost History – design reports that meet specific requirements related to either energy/utility consumption or cost or both

• Custom Use and Cost Ranking – design specific reports to compare the performance of facilities based on different utility services and/or different variables that impact the consumption and/or cost of the utility services
Custom Data List for Sites, Accounts, Vendors and Services - create reports that depict information regarding services provided:

- Utility account number
- Meter number
- Account open date
- Account close date
- Billing cycle
- Rate description
- Service address
- Utility company name
- Utility company address
- Utility company contact
- Contact phone, email
- Site ID
- Site name
- Site financial codes
- Site address, city, state, zip
- Site contact name
- Contact, phone, email
- Site open date
- Site close date
- Weather station name

In Summary: The power and flexibility of UM allows the Reporting Center to provide almost any type of energy and utility report imaginable.
Section 6 - Energy Bill and Software Training

6.1 Overview
As demonstrated throughout this document, the UM software solution has tremendous reporting capabilities. In order to receive the full value this powerful system has to offer, users of the system must be properly trained and supported in its use. The objective of the LPB Training Team is to drive the knowledge and effective use of the software to each user, which in turn drives improvements in energy efficiency performance.

Training users on the system is a two step process:

- **Energy Bills and Basic Software Training:** All users of the system must have a basic understanding of utility charges, units of measure and the basic foundation of the UM software solution.

- **Advanced Users of the UM Software:** Just as there are different modules to the UM software solution, there will be different training modules for different types of end users (e.g. energy procurement, accounting, energy engineer, head custodian, building manager, PSA Director, etc.)

This comprehensive training initiative will span the entire term of the project and will evolve with user participation. Multiple avenues of training will be utilized to reach and support as many users as possible. For training over such a vast geographic area we are anticipating a combination of conference calls, web-casts, workshops and large site visits to ensure that all users of the system receive appropriate training. This program is designed to provide continuous training for the users.

6.2 Energy Bills and Basic Software Training
This Basic Training starts with understanding utility bills, line-item charges, units of measure, conversion of billing units into a common unit for analysis, weather information and how the information from the utility bill applies to use of the resources at the State
facility. The following three bullets are samples of the terminology all users will need to know:

- **Electric Demand**: The amount of electricity needed by a utility customer at any one moment in time in order to meet its energy needs.

- **Degree Day (Cooling)**: A unit of measurement representing a one degree rise from 65 degrees Fahrenheit in the mean outdoor temperature for one day.

- **Btu (British Thermal Unit)**: The Btu is the standard unit of measurement for heat. A Btu is defined as the amount of energy needed to raise the temperature of one pound (one pint) of water one degree Fahrenheit from 58.5 to 59.5 degrees under standard pressure of 30 inches of mercury. One cubic foot of Pipeline Quality Natural Gas contains approximately 1,000 Btu.

Basic Training is hands-on, as the users will be working through a series of exercises starting with their utility bills and building into the hierarchical structure and labeling of their facilities. The objective is to properly convey to the user a solid understanding of how their particular database was constructed and the hierarchical structure set-up that generates meaningful reports.

Once this basic foundation is in place, Basic Training finishes with the general reporting features of the UM software solution. This report training utilizes UM Online and covers a very broad range of reporting capabilities.

The Basic Training course is a 3-hour session ideally delivered in a workshop setting; however, it can be adapted for alternative training venues.
6.3  Advanced Users of the UM Software
Advanced Training spreads into the various components of the State’s energy management solution and the UM modules that support these components. The following provides a brief overview of each UM module and the type of audience/user it serves.

6.3.1  UM Server
The primary software component of The Utility Manager™ (UM) Software Solution is UM Server. This client server application is the core application that drives the operation of all the UM Modules.

Type of Users: As the core software component, UM Server will have a select group of qualified individuals as its primary users, receiving highly specialized training. UM Server is not the typical interface that most PSA users will have access to or be utilizing.

6.3.2  UM Online
The UM Online web site provides secure, password-protected access to the UM Server database from any PC with a connection to the Internet and a standard web browser. UM Online provides real time access to raw billing information and invoice images, as well as a robust collection of over 200 standard reports and graphs that support data analysis, evaluation of facility efficiency, and energy procurement activities. Report output can be easily exported to spreadsheets or PDF files, and emailed to others.
Type of Users: As the primary reporting application, all participants in the project will utilize UM Online.

6.3.3 UM Energy Report Card

The UM Energy Report Card is a small component of UM Online providing a quick snapshot of the energy cost and performance of a single facility. When a site-based user logs onto UM Online, the Energy Report Card, a performance snap-shot of their facility appears. If the user wishes to drill down beyond this front page, it provides a wealth of additional reports and graphs for their specific facility. This module quickly provides the right data to the right people in a convenient, easy to understand format.

Type of Users: Facility Managers, Head Custodians, Building Managers and various building support personnel will utilize UM Energy Report Card.
### 6.3.4 UM Use/Cost Avoidance

The UM Server includes a module which supports the calculation and tracking of consumption and cost avoidance. The software provides a comprehensive set of functions designed to accurately determine the savings that result from energy conservation efforts and other initiatives designed to reduce energy and utility consumption and costs. The analysis takes a variety of factors into account, including changes in floor area, weather (heating and cooling degree days), and other conditions that affect energy use from one year to the next.

#### State of Texas

**Utility Cost and Usage Savings Report for Year Ending 06/2005**

<table>
<thead>
<tr>
<th>Service</th>
<th>Units</th>
<th>Current Usage</th>
<th>Predicted Usage</th>
<th>Usage Savings</th>
<th>% Chg</th>
<th>Current Cost</th>
<th>Predicted Cost</th>
<th>Cost Savings</th>
<th>% Chg</th>
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<tbody>
<tr>
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<td>$53,528</td>
<td>$15,418</td>
<td>$38,110</td>
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</table>

**TOTALS**

$1,706,756 $2,949,516 $1,152,876 -39.1

#### Type of Users: Energy Engineers and limited Facility Managers will utilize UM Cost Avoidance

### 6.3.5 UM Contract Administrator

UM Contract Administrator is a web-based module designed to facilitate management of energy procurement contracts. The software provides a timely and accurate tracking mechanism for the key information items that define energy purchases in a deregulated environment. It supports effective monitoring of key contract milestones and deadlines, including effective dates, expiration dates, and individual site switch dates. Because UM Contract Administrator has access to the invoice history in the UM Server database, the software also allows comparison of billed usage to purchase obligations (bandwidth), and of actual costs to contract prices.
Type of Users: Procurement Agents, PSA Directors, Building Managers, Energy Engineers and various support personnel will utilize UM Contract Administrator.

In Summary

This program needs to align with current PSA efforts in energy conservation, better building management and conservation awareness campaigns. The fundamental key ingredient to connecting with current PSA programs and activities is first understanding each PSAs efforts and operation. Once this is clearly understood, we will work to integrate this program into the PSA’s operation. Success in accomplishing this task lies in our preparation, our design and ability to meet the State personnel right where they are.

To ensure we accomplish this vital task, we are dedicating resources for the first 14 months of the project. This role will be the Conservation Design Specialist (CDS) and be charged to work directly with each PSA and its personnel in designing, constructing, implementing and refining the PSA’s own training and internal user support network.
Section 7 - Utility Bill Audit

7.1 Overview
The professional Utility Bill Audit will produce significant savings for the State and the PSAs. The Utility Bill Audit will be delivered in two phases; first the historical utility bill audit and then the on-going monthly audits. The auditing team will focus on all viable utility accounts served by all utility providers (electricity, natural gas, alternative fuels, water, waste-water, storm water).

The utility bill auditing team will fully utilize the UM database to filter through the thousands of utility accounts and hundreds of thousands of historical utility records in search of savings opportunities. Both the historical and monthly on-going phases share two categories of audit opportunities:

1. **Refunds**: An error resulting in a refund of utility payments going back in time as far as the local and state laws allow. An example of this is a water leak that took place at a State facility and was repaired. No one disputes that the water was used and should be paid for; however, the sewer fees associated with the water consumption should be recovered, as the water did not go down the drain.

2. **Future Savings**: A correction of an error resulting in a reduction of charges for future utility bills. An example of this is an account that is on the wrong rate. Once the rate change is made, cost savings take place for all future bills, but no refunds are available due to the fact that it is the customer’s responsibility to know if they are on the right rate.

**Note**: A refund can also become a future saving. An example of this is the following screenshot – Taxes charged on a public agency account. In this case, a refund of three years is secured for past taxes and each future bill will no longer have the tax charges.
The CCG will provide a Letter of Authorization to open a channel of communication between the auditing team and the applicable utility to investigate issues identified and negotiate resolutions. When requesting money back from a utility provider, superior data and professional courtesy go a long way. Therefore, our professional team focuses on establishing a high-level of rapport that fosters healthy communication with each participating provider.

It is essential that the appropriate changes are properly captured and reflected within the UM Server master database. The utility bill audit team will coordinate with the bill processing and payment team, the energy procurement team and the Reporting Center to ensure this is accomplished.

7.2 Historical Utility Bill Audit
Activities include, but are not limited to:

- Review a copy of the billing to confirm the: utility provider, service address, services provided, meter information, rate information, billing units, and application of taxes.
- Review the three-year account history (where available) of consumption and cost investigating abnormalities for potential billing errors and service delivery issues.
- Perform audit to confirm that the rates assigned to the accounts are being applied correctly and whether alternate rates that could lower costs are available.
- Contract compliance of all electric and natural gas contracts securing refunds and ensuring appropriate future charges are correct.
- Verification that the billings accurately reflect the services delivered.
- Negotiate credit adjustments or refunds, and future cost reductions with the utility providers for billing errors that are confirmed.
- Request rate changes or other changes to the services delivered with the utility providers, including confirming that requests are acted upon. Note: rate changes requiring new meter installations that will require a capital expenditure will be submitted to PSA for approval prior to requesting the rate change from the utility.
- For select accounts, perform the on-site work necessary to verify the meter serial numbers, multipliers, ownership and active status for the meter assigned to the accounts at appropriate sites.
- Work with the “flat rate schedules” specified in the RFP, to “work with energy providers” to mitigate them.

7.3 On-Going Monthly Billing Audits
Activities include, but are not limited:

- Coordinate all monthly bill audit activities with the bill processing and payment team, utilizing the built-in auditing features of UM:
- Assign grouping for the Billing Audit Reports for the purpose of combining “like” facilities in order to better capture billing errors and usage abnormalities.

- Confirm the accuracy of the charges billed each month based on the usage from the meter.

- Investigate usage abnormalities to confirm whether or not they are erroneous and when appropriate, take action.

- Request rate changes for meters that have either increased or decreased load conditions that would qualify for a rate other than what is currently assigned.

- Negotiate credit adjustments or refunds, and future cost reductions with the utility providers for billing errors that are confirmed.

- Exclude report findings which are not confirmed to be billing errors so that they are not included on future Billing Audits.
Section 8 - Procurement of Energy

8.1 Overview
LPB’s integrated solutions will help the State and each PSA maximize cost-savings opportunities and manage energy risks in this deregulated energy environment. Each PSA can expect its energy purchasing strategy to be approached and implemented through this successful five step process.

1. The process is to determine whether or not the PSA wants to use financial tools to protect against a precipitous increase in natural gas prices during the contracting process. LPB will offer various financial instruments that can fully/partially protect the customer from rising gas prices (over 80% of Texas electricity generators are natural gas fired) during the negotiation period. These hedges are somewhat akin to insurance in that the customer can choose to fully/partially protect themselves against price increases of various magnitudes.

2. Determine what issues are important to the PSA by meeting in person and going through our “spreadsheet” that rates eight different suppliers on thirty different criteria (Suitability Analysis). Many of the criteria consist of the supplier’s positions on a particular contract term. For example, LPB rates each supplier’s contract provisions dealing with assignment, payment terms, credit requirements, interest and late fees, remedies upon breach, etc. (LPB has many pre-negotiated contracts with each supplier we work with that already contain terms more favorable to the buyer than the standard contracts offered. These pre-negotiated contracts are the basis for the information in the spreadsheet.)

Each supplier is also rated on more esoteric criteria such as financial strength, customer service, and billing practices. The PSA will assign an “importance rating” to each criterion, which allows LPB to customize the profile for the PSA. For example, if a PSA anticipates selling a building during the term of the contract, the assignment criterion will get the highest importance rating. Similarly, if a PSA has no problem paying its bills within 10 days, the criterion for payment terms will receive a low importance rating. At the end of this process (which usually takes about 2 hours) LPB multiplies the PSA’s importance rating by the relative rating of each supplier to obtain a “score” for each supplier. This enables LPB to identify which suppliers are the “frontrunners” for the PSA based on the PSA’s individual risk tolerance and business profile.

3. Obtain indicative pricing and get the PSA through the credit process of each supplier, regardless of score. LPB generally seeks pricing for a 1 year fixed price contract for comparison purposes and also invites suppliers to provide even better pricing by offering innovative products. For example, some suppliers offer a pricing plan that allows the customer to lock in a fixed price for an initial term of the client’s choosing, and to allow the price for the remainder of the term to float with natural gas prices. The customer has the option to “lock in” the price for the remainder at any time. This product allows customers to sign when gas prices are at historical highs and still
benefit from a subsequent drop in the price of natural gas. This is just one example of how suppliers are continually innovating to develop new ways to price their power. LPB urges them to compete with their own offerings as well as those of their competitors.

4. Once the pre-work is complete, LPB meets with the PSA to discuss pricing and products with a focus on the risk tolerance of the PSA. In energy contracting as with any endeavor, accepting certain calculated risks can yield significant rewards. LPB discusses risks and rewards in detail to ensure that the PSA makes an informed decision including financial tools available to mitigate some of the risks.

5. Once the PSA is ready to make a decision, LPB gets final pricing and walks the PSA through the contract execution. Prices are usually firm for 6-24 hours depending on the supplier. Having already worked out and negotiated any contract issues, LPB walks/assists the PSA through executing the necessary documents before there is any market movement that could affect the final price.

The combination of UM Server, Utility Bill Processing and Payment and UM Contract Administrator will greatly enhance the day-to-day and month-to-month activities involved with the pro-active management of complex deregulated energy contracts.

<table>
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<th>SUM Energy Resources RA</th>
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<table>
<thead>
<tr>
<th>Special Terms:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sites covered by contract</td>
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<tr>
<td>--------------------------</td>
</tr>
<tr>
<td>Site ID</td>
</tr>
<tr>
<td>---------</td>
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<tr>
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<tr>
<td>0530</td>
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</tbody>
</table>

Having this energy information available in this timely and convenient form, LPB will be in an excellent position to ensure each PSA is paying the lowest possible price for the energy it consumes. In addition, this highly organized approach will place each PSA in a strong pro-active position for managing its future energy purchases.
If the State or PSA needs to go through a formal RFP process, LPB will assist with everything from the drafting of the RFP to the final execution of the contract. Each PSA will have different needs and requirements, and LPB has the flexibility to meet the needs of all the individual parties involved in a particular procurement initiative. LPB’s support in leading the RFP and procurement process ensures the financial and energy needs of the PSA are properly evaluated and achieved.
Section 9 - Energy Conservation Activities

The Energy Conservation Activities (ECA) Team will act as the owner representative for viable Energy Savings Performance Contract (ESPC) projects. It is understood that the actual work on ESPCs will be performed by the selected Energy Service Companies (ESCOs) and the ECA Team will investigate, advise and audit projects on behalf of the PSA; therefore, it is understood by all parties that the estimated savings achieved through energy conservation measures of $43,512,909 is based on industry standards is only an estimate. Furthermore, it is equally understood that LPB will not share in any of these types of savings and LPB is in no way responsible or accountable for the achievement of these savings.

The nature of this work is highly complex and specialized. To best describe the type of work being performed under this deliverable, this section follows and addresses the nine (9) items specified in the original RFP.

1. Assist PSAs in overall management of ESPC projects: The ECA Team will provide standard oversight tools and the personnel to assist in the creation of any non-standard tools. These tools will consist of standard formats for data collection, data presentation, comparison and evaluation methods.

2. Provide technical review and oversight of all work planned and performed by ESCO on PSA premises: The ECA Team will provide experienced personnel and licensed Professional Engineers to perform sight reviews of projects. These reviews will evaluate each site and proposed projects for each site. For approved projects, the team will perform site visits during construction to inspect the projects for quality and accuracy, as well as perform tests for each system to evaluate functionality and efficiency.

3. Review list of Energy Cost Reduction Measures (ECRM) for each PSA location prior to detailed analysis: The ECA Team has over 33 years experience in ESPC projects and will provide a detailed cost and return on investment analysis of each measure to validate its value to the PSA.

4. Provide consultation regarding inputs to the analysis models and review of the results as required: The ECA Team will provided knowledgeable guidance on the most important aspects of a proposed model. They will also evaluate the results of the modeling process – both for the actual output and for the adequacy and applicability of the modeling process being used.

5. Perform a savings review of the proposed ECRMs: The ECA Team will provide significant expertise in the development of accurate, useful energy models and savings projections for proposed projects.
6. **Review overall project scope and Detailed Energy Audit (DEA):** The ECA Team will evaluate each SOW for its energy impact, review the DEA and when necessary, conduct a detailed audit of any proposed project.

7. **Work with ESCO and PSA to determine a cost-effective Measurement & Verification (M&V) plan for the various ECRM’s proposed at PSA locations:** The ECA Team will establish a cost effective measurement and verification capacity for any given project.

8. **Review and comment on the final M&V plan submitted by the ESCO:** The ECA Team will thoroughly review each M&V plan for accuracy, practicality and effectiveness.

9. **Provide oversight and recommendations to the PSAs regarding selection of a 3rd party independent reviewer:** The ECA Team will assist the PSAs in selecting and managing a qualified independent reviewer.
Section 10 – Program Deliverables and Transition

This Primary Activity is divided into two main sections. The first section provides a high-level summary of the deliverables and benefits the State of Texas will receive at the end of the Contract. The second section focuses on the activities, strategies, tasks and sub-tasks associated with the transition of this multi-faceted solution to another provider or a combination of providers.

10.1 Deliverables and Benefits

This project and LPB’s proposal is designed to:

1. **Be Self Funded**: The entire system is funded entirely through Realized Savings
2. **Be Reasonably Priced**: Based upon current estimates, approximately 30% of the projected realized savings will pay for this comprehensive solution with a total LPB earnings cap not to exceed $36,000,000 for the current scope and duration of the project (Earnings Cap can only be increased or decreased if the size and scope deviates from the original projections, as described in the Energy Savings, Cost and Compensation Plan). Any amounts received by LPB from institutions of higher education, state university systems and local governments (as such term is defined by Texas Government Code Section 2162.001(2)) that voluntarily elect to participate in the Contract shall not be included when determining if the total Earning Cap has been met.
3. **Be Sustainable**: Once the solution is fully operational, it will produce an estimated $50,000,000 per year in energy and other utility cost reductions. These savings are based on better information and management practices that will ensure long-term sustainability for the State of Texas, as a whole and for each participating State Agency.
4. **Be Owned and Controlled by the State**: The system will be owned, controlled and potentially operated by the State of Texas (at its discretion).
5. **Be Transferable**: The entire system or individual Primary Activities will be transferred at the term of the Contract to the State or whomever it designates.

Upon the Contract’s intended termination date, all the following Primary Activities will be delivered to and owned by the State of Texas.

**Project Web-Site and Customer Service Center**: Developed as a critical communication and promotional tool, the State of Texas will have a fully paid, non-exclusive perpetual software license that permits web site access to an unlimited number of users. The web site will comprise the most up-to-date software functionality that includes support for a wide range of activities, including, but not, limited to: project reporting, project promotion, customer service support, project management, software training tools, energy conservation training tools and tips.
The Utility Manager Software Solution: As defined in Contract, The Utility Manager Software License Agreement and The Utility Manager Annual Maintenance Agreement provide the State of Texas with a fully paid, perpetual, unlimited number of users, up-to-date/most recent upgraded working application of the software and all of its specified modules.

Computer and Communication Hardware: All of the required and specified computer hardware detailed in Section #2 of this Statement of Work will become the property of the State. This hardware will be used to house and operate a system in parallel to LPB inside the State’s firewall. As described in Section #2, the exact hardware will not be known until that Primary Activity of the project is started and implemented.

Comprehensive Utility Bill Database and Energy Information: All information throughout every step of the process is the property of the State of Texas. The objective is to obtain (if possible) seven (7) years of detailed historical energy / utility line-item billing information by the term of the Contract consisting of three (3) years of historical billing data and four (4) years of current and future billing data obtained through monthly bill processing and payment. In addition to billing data, the collective databases will include but not be limited to: information on every State energy procurement contract, information on every State utility provider, information on all utility bill audit activities, and all available relevant information on participating Energy Conservation Activities.

Efficient and Effective Energy / Utility Bill Process and Payment System: It is estimated at the term of the Contract, LPB will be processing approximately 22,000 bills per month. The management process constructed to accommodate this volume of transactions will be transferred to the State and/or its chosen third party vendor. This management process productively utilizes The Utility Manager Software Solution and will help to ensure that quality energy information management practices are maintained and preserved.

Energy Management Reporting: A fundamental cornerstone of success in any management program is credible information, timely feedback and understandable reporting information. This system delivers all this and more to the State Energy Conservation Office (SECO) and to every PSA. With valid energy information at its fingertips, SECO is in a position to truly support State Agencies in new and exciting ways.

Training and Empowerment: The comprehensive training program to teach State employees about energy, energy bills and how they can effectively participate in the energy management program at their facility has the potential to produce enormous savings. When people are properly educated and empowered, they generally want to do the right thing and conserving energy is the right thing. This system has the potential to impact tens of thousands of State employees who can choose to participate and utilize the easy to use, convenient web reporting system.

Comprehensive Utility Bill Audit: An important project deliverable is to ensure that every sizable utility bill paid by the State is audited to verify that the amount is correct.
and reasonable. Utilizing a consistent and complete historical database of energy and utility cost and consumption empowers the State to efficiently and effectively audit all future charges. This combination of quality data and a robust auditing software tool puts the State in a powerful proactive position to ensure future charges are accurate.

**Procurement of Energy:** The analytical and contractual tools developed during the project will work in combination with new processes and procedures and the education program to position the State and PSAs to participate proactively in the changing and highly volatile deregulated energy market.

**Energy Conservation:** Hundreds of millions of dollars, if not billions of dollars will be invested over the next 20 years in State buildings targeting energy efficient equipment. The energy management information system, its quality data and high powered reporting capabilities will guide the initial investment, as well as track the energy efficiency and cost performance of these investments.

### 10.2 Transition

The transition of the system must be flexible and adaptable according to the State’s requirements at the term of the Contract. The State will have numerous options on how the project and its individual Primary Activities will transfer to either a State Agency, multiple State Agencies, a third party vendor, multiple third party vendors, or some combination thereof.

At the onset of this project, it is impossible to predict where, when, how and who will be involved in the future of this high-value system. Therefore, this section focuses on describing the fundamental requirements needed to effectively transfer the entire system or subsequent portions of the system. No later than 90 days prior to the termination of the contract, a detailed transition plan will be implemented to transfer control and operation of the following Primary Activities to either the State, another third-party provider or some combination thereof.

- The Customer Service Center for the State’s Energy Management Program
- The Utility Manager Software Solution and Monthly Technical Support
- The Daily Processing and Payment of Energy Bills
- The Program Reporting Requirements
- The Training of and Monthly Promotion of Using the Software System
- The Daily/Weekly/Monthly Auditing of Utility Bills
- The Procurement of Energy
- The Energy Conservation Activities

In either case, the first steps of the transition will be the same:

1. Outline deliverables according to each process/structure
2. Explain key team functions and support duties
3. Outline team communication / coordination dependencies
4. Explain / address current IT data transmission protocols
5. Develop contact list for LPB / State coordination issues

**Transition to the State**

Should the State elect to perform any of the Primary Activities listed above on its own behalf, the following activities would be required to effect the transition from LPB and its subcontractors, subject to the approval by the Contract Administrator and the CCG.

- Assign / relate current LPB key functions to the State team
- Determine timelines for transition of LPB team functions to the State.
- Transfer knowledge to the State team through a series of formal training sessions.
- Develop contract language as necessary to formalize procedures for ongoing software maintenance and technical support from LPB subcontractors.
- Redirect LPB data / information inputs to State assigned points of reference.
- Redirect all information systems from the processing / payment of utility bills to the customer service center to the State on a mutually-agreeable schedule.
- Conduct parallel testing of the State’s operation of each Primary Activity and system with the LPB operation of each Primary Activity and system to ensure proper operation is performed by the State.
- “Go Live” – The State system assumes operation and full responsibility for all Primary Activities and systems that are planned and designed to be operated by the State. Once transition is complete, LPB ceases operation appropriate Primary Activities and systems.

It is important to note that the State may choose to retain LPB to perform certain specialized services in support of a Primary Activity or some portion of a Primary Activity. Contract language will be developed and agreed upon as necessary to facilitate these requirements.

**Transition to a Third-Party Provider**

In the event that the State chooses to assign responsibility for any or all of the Primary Activities to a new third-party provider, the following steps would be required to implement the transition from LPB and its subcontractors, subject to the approval of the Contract Administrator and the CCG.

- Assign / relate current LPB key functions to the new provider
- Determine timelines for transition of LPB team functions to the new provider
- Transfer knowledge to the new provider team through a series of formal training sessions.
• Develop contract language as necessary to formalize procedures for ongoing software maintenance and technical support from LPB subcontractors.

• Redirect LPB data / information inputs to new provider assigned points of reference.

• Redirect all information systems from the processing / payment of utility bills to the customer service center to the new provider on a mutually-agreeable schedule.

• Conduct parallel testing of the State’s operation of each Primary Activity and system with the LPB operation of each Primary Activity and system to ensure proper operation is performed by the new provider.

• “Go Live” – The new provider’s system assumes operation and full responsibility for all Primary Activities and systems that are planned and designed to be operated by the new provider. Once transition is complete, LPB ceases operation of the appropriate Primary Activities and systems.