Focused Management and Operations Audit of Kentucky Utilities Company and Louisville Gas and Electric Company

Final Report

Presented to:

The Kentucky Public Service Commission

By:

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September 12, 2011

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I. Introduction

A. Background

During the course of rate proceedings in Case Nos. 2009-00548 and 2009-00549 KU and LG&E customers filed with the Kentucky Public Service Commission (Commission or KPSC)numerous complaints raising issues related to the Companies' billing and collection practices and procedures. In April 2009, the Companies brought on-line a new computerized system, known as its Customer Care System (CCS), to handle multiple customer related functions, including customer billing. The CCS system was under design and installation for a number of years prior to its implementation.

The scope of the CCS project included the replacement of the LG&E and KU legacy Customer Information Systems, the meter reading system, auto dispatch for Field Services, and Customer Self-Serve. The major elements or processes addressed included: Customer Relationship Management for front-office, an enhanced Customer Self-Service platform, meter reading, mobile field services, utility billing, revenue accounting, credit and collections, Business Intelligence (reporting and analytics), energy data management for real-time pricing capability, service-order and meter management, interfaces to the IVRU (Integrated Voice Response Unit), Distribution Operations work and outage management systems, payment vendors, banks, collection agencies, and low-income agencies.

A Commission Order dated September 30, 2010 (in Case No. 2010-00204, The Joint Application of PPL Corporation, E.ON AG, EON US Investments Corp., E.ON US LLC, Louisville Gas and Electric Company, Kentucky Utilities Company For Approval Of An Acquisition of Ownership and Control Of Utilities), approved the merger of PPL Corporation and E.ON US LLC, LG&E and KU. PPL committed to maintaining the LG&E and KU track record for superior service quality. Moreover, the Chief Executive Officer of LG&E and KU focused his commitment to high levels of customer service and the opportunity to learn best practices from PPL.

Based on the customer complaints presented to the Commission in the above-referenced rate proceedings, the Commission found that, pursuant to KRS 278.255, a focused management audit of the efficiency and effectiveness of LGE-KU's customer service functions and all related supporting and operational functions that impact retail customers should be performed. The scope of the management audit was to include, but not be limited to, a review of all customer service-related functions including meter reading, customer-related accounting functions, customer information systems, billing and collections, call center functions, service installations, and disconnect and reconnect practices.

B. Scope and Objectives

The primary objectives of this audit were to identify those areas where the Companies are performing effectively and efficiently, and to determine what improvements, if any, can be made in the management and operation of the Companies' customer service and related functions. The ultimate purpose of this audit is to ensure that ratepayers are receiving efficient and effective provision of service consistent with industry best practices.

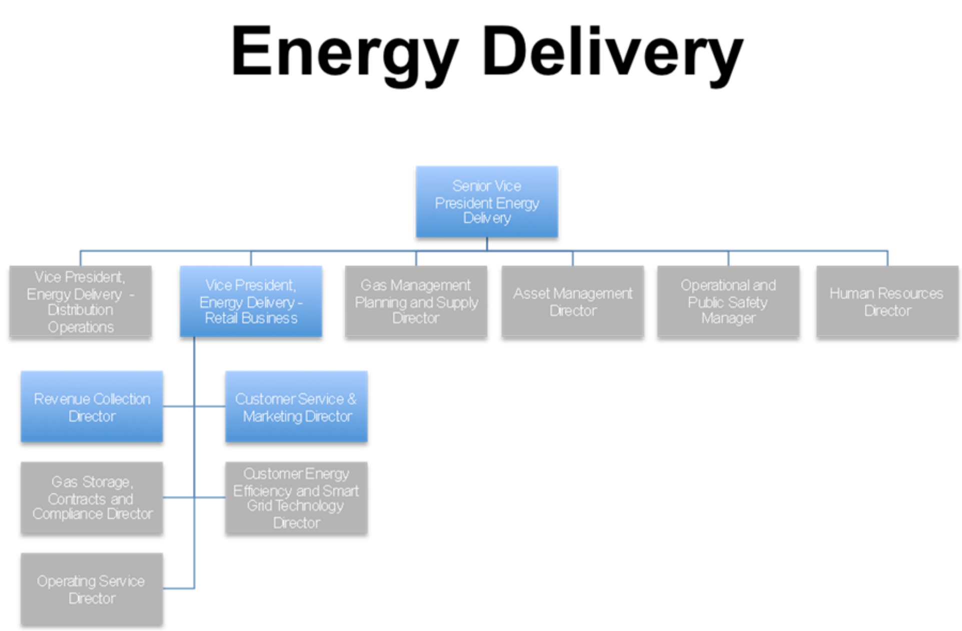
The Commission did not seek a full and comprehensive audit, but rather a focused management audit addressing the Companies' customer service related functions. The scope of this focused management audit included a review of all customer service related functions, including: meter reading, customer-related accounting functions, customer information systems, billing and collections, call center functions, marketing functions, service installations, and disconnect and reconnect practices.

Liberty also reviewed Operations and Maintenance expenditures, Capital Budgeting and Spending, and Strategic Planning as they concerned customer-service related functions. Liberty evaluated all aspects and functions of the recently implemented Customer Care System (CCS) system, and how the system supports Customer Operations activities and functions.

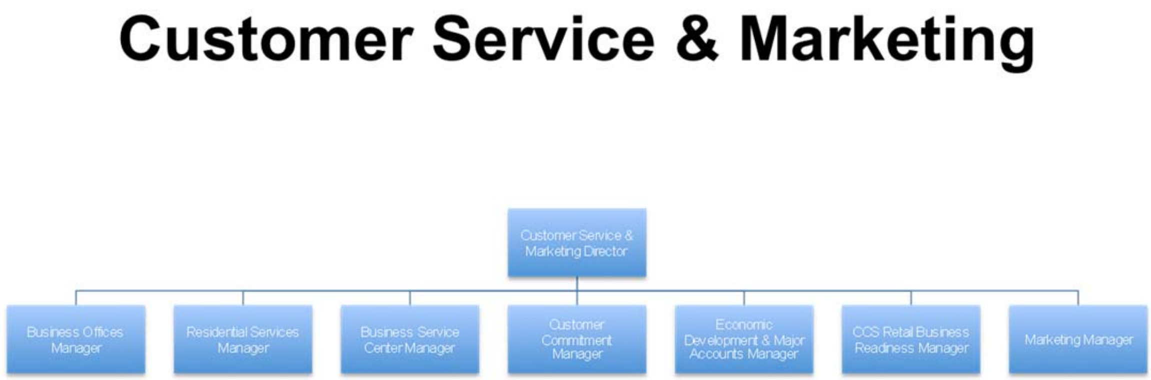
C. The Companies' Customer Service Organizations

LG&E has about 395,500 electric customers in 9 counties in and around the Louisville area and 319,900 natural gas customers in 21 counties. KU has 514,700 customers in 77 Kentucky counties. LGE-KU's customers account annually for more than 2.7 million customer calls, 2.95 million walk-in transactions, and more than 10.7 million customer payments. LGE-KU provides customer service through phone, field, and face-to-face services provided by LGE-KU employees and contractors.

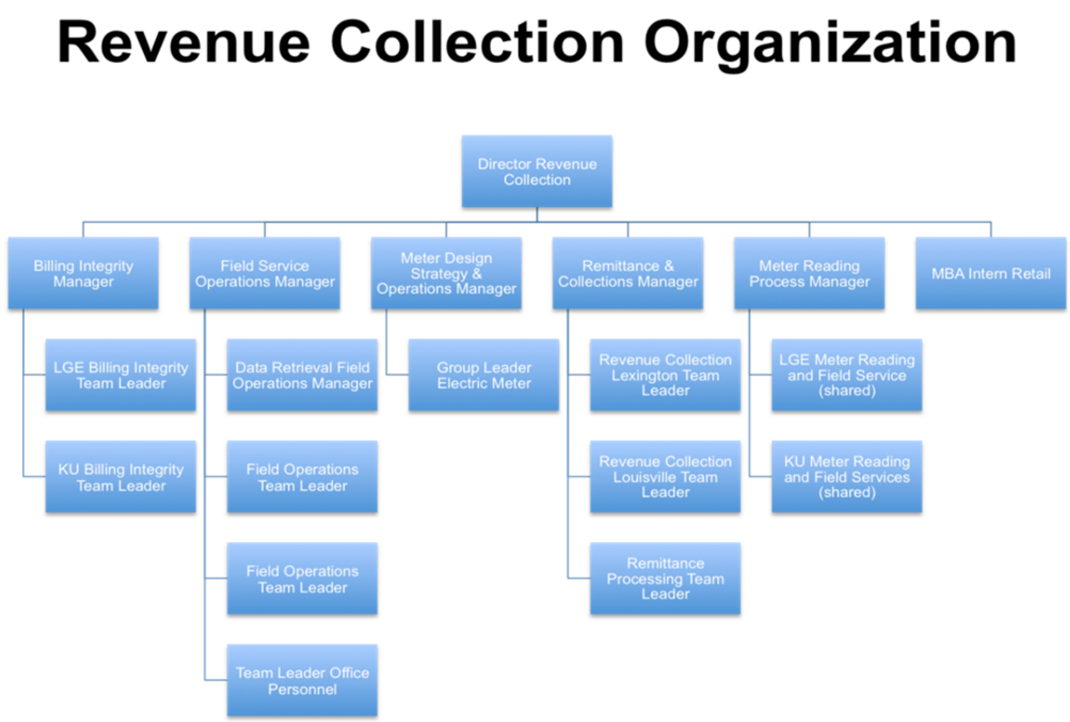
LG&E and KU Energy's Customer Service responsibilities fall within the Energy Delivery organization, which also serves Old Dominion Power Company (ODP). LGE-KU's retail organization has wide ranging responsibilities for the "customer relationship," including metering, customer call centers, marketing, revenue collection, economic development, and regional business offices, as the chart below shows in blue.



LGE-KU's Customer Service & Marketing organization, seen in the chart below, provides the following services: Call Center for customer inquiries, full-service Business Offices walk-in customers, key account management, economic development, customer satisfaction measurement, customer complaint response, customer advocacy, quality assurance, and customer service training.



LGE-KU's Revenue Collection organization, shown in the chart below, provides the following services: Meter reading; customer bill printing, stuffing and mailing; remittance processing, credit and collections support and analysis, field services, and revenue protection.



Members of various LGE-KU departments have worked collaboratively over the last three years on a number of projects to improve Customer Service processes and policies, including:

- Retail IT Prioritization Committee (primarily relating to CCS enhancements)
- Weekly PGLS meetings ("post go-live session")

- "Average Handle Time" team and project
- "Customer Self-Serve" enhancement team and project
- Energy Efficiency automation team and project
- "Landlord Portal" team and project
- "Agency portal" team and project for low-income pledges
- Meter reading window (5 to 3 days) team and project
- Inbound Contact Analysis (RSC)
- Unauthorized Reconnect Process
- Green Energy Program Development and Execution
- Customer Experience Strategy
- Rate Validation & Verification Project
- Critical Customers/Key Account identification and tracking for outages
- Emergency Operations Center Response team
- Alternate payment and billing options for fixed and limited income customers
- Bill presentment team
- Returned Mail team
- General Ledger Reconciliation team
- Mobile Tablet Deployment team
- Business Office Transfer team
- Outage Maps team and project
- Texting team and project
- IVR effectiveness study
- IVR selection and implementation team and project
- Spanish version team for website and IVR
- Visually-impaired team for website.

II. Customer Service Functions

Liberty organized its review of customer-service functions and activities into eight tasks:

A. Billing and Customer Care System
B. Credit and Collections
C. Customer Complaints and Resolution
D. Customer Satisfaction Measurement
E. Marketing and Key Accounts
F. Call Center & Retail Office Operations
G. Meter Reading
H. Field Services.

A. Billing and Customer Care System

1. Background

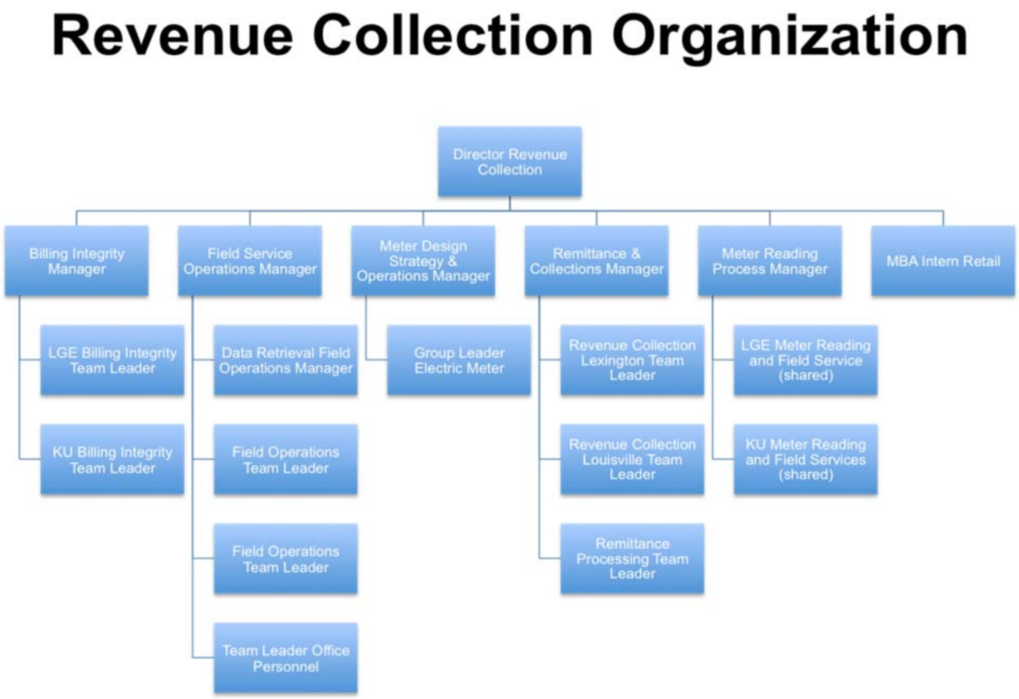
Accurate and timely customer accounting is, like meter reading, a fundamental element of the utility/customer relationship. Timeliness is an important contributor to minimizing the billing and payment cycle and to supporting systems of communication with and about customers. Efficiency is critical to handling billing-support functions cost-effectively, recognizing the advances that technological improvements have made possible. Accuracy promotes full and proper revenue collections, while minimizing customer disputes and their associated time, cost, and customer-confidence impacts.

Liberty assessed LGE-KU's billing practices and procedures, payment receipt, account-crediting practices, and other customer-accounting procedures to determine if they are sufficiently efficient and effective. Specifically, Liberty reviewed the LGE-KU billing processes to determine if bills were issued to customers accurately and in a timely manner. The review examined the capabilities and functionality of the Customer Care System (CCS), which was implemented on April 1, 2009. Additionally, Liberty examined staffing levels to determine if adequate and capable personnel are assigned to the billing process.

2. Findings

LGE and KU operated with two distinct legacy Customer Information Systems prior to 2009. The CCS "go live" in April 2009 created an opportunity to merge and harmonize back office operating procedures within some Revenue Collections functions, such as Billing Integrity, Collections, and Meter Assets. The main focus of these organizations since go-live has been CCS stabilization; however, in early 2011 Revenue Collections began an objective to harmonize and standardize the operating procedures within these areas.

The Billing Integrity group conducts customer billing and accounting activities, working from two locations; *i.e.*, Louisville for LG&E and Lexington for KU. Billing Integrity operates within the Revenue Collection organization of Energy Delivery, which the next chart illustrates.



LGE-KU assigns customers to 1 of 20 different billing cycles or portions. LGE-KU uses cycle billing, preparing monthly bills for some customers on each working day of the month and mailing them to each customer in that day's cycle. A nightly CCS batch procedure reviews all accounts, calculates billing charges, and generates alerts for any accounts that may require additional review or additional information. This activity ensures that customers' accounts contain the necessary information to render accurate bills. Billing Integrity representatives review and address daily any resulting alerts, which LGE-KU term Business Process Exception Management (BPEMs). Hundreds of BPEMs typically occur daily. Billing exceptions that require initial reading verification or meter condition investigations are sent to Meter Reading. Field responses are recorded and returned to Billing Integrity so that bills can be issued correctly.

B. Credit and Collections

1. Background

Statutory and regulatory requirements typically govern utility credit and collections practices. LGE-KU operates under the terms and conditions of tariff and rate schedules on file with the KPSC. Their requirements stipulate the timing and details of credit and collections policy and actions. A major focus of Liberty in this area was to determine whether LGE-KU is employing effective credit-and-collection practices and abiding by its tariffs in day-to-day operations.

2. Findings

The Remittance & Collections organization conducts credit and collections activities from two locations: *i.e.*, Louisville for LG&E and Lexington for KU. The Revenue Collection organization of Energy Delivery (see organization chart on the prior page) contains the Remittance & Collections group.

LGE-KU requires a security deposit from all residential customers applying for service in cases where applicants do not satisfy credit requirements. The required deposits amount to $135 for residential customers with one service and $250 for customers with electric and gas service. General-service customers must pay a $220 deposit. All other commercial customers must pay two times the actual/estimated monthly bill, or secure the account with a bond or guarantee. LGE-KU may require customers failing to maintain a satisfactory payment or credit record, or otherwise determined to be a new or greater credit risk, to pay a new or additional deposit. The Companies apply deposits to residential customers' accounts after 12 months of good payment history, or refund them when a customer leaves the service territory. Commercial deposits are maintained for the life of the account.

LGE and KU customer bills are due for payment within 12 calendar days from the date of issuance. If full payment is not received within 3 calendar days after the due date, a late payment charge (5 percent) is assessed on the current month's charges for residential and general service accounts and 1.0 percent for other commercial and industrial accounts. An exception applies to residential customers who receive a pledge for or notice of low-income energy assistance from an authorized agency. At 15 days past the due date, LGE-KU evaluates accounts that are past due on the current invoice for eligibility of issuance of a disconnect notice (also referred to as a "brown bill"). This notice advises customers that the account will be "subject to termination" in 10 days if a payment is not received. Following implementation of CCS, however, LGE-KU has, in almost all cases, only been able to initiate dunning collection actions (demand for payment) based on the delinquency of the current month's bill.

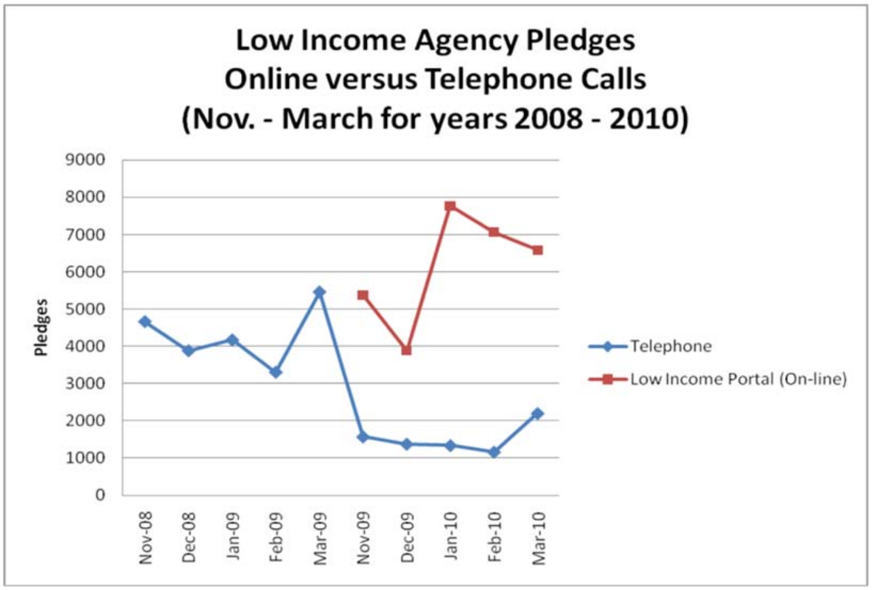
LGE-KU initiates an automated call prior to expiration of the disconnect notice, in order to provide another reminder for accounts eligible for disconnection. The call advises customers of the need to contact the Company concerning overdue balances, and provides an option to pay the bill.

Accounts are selected for discontinuation of service based on the current balance due and prior payment history (disconnected no sooner than 27 days after the mailing date of the original bill). LGE-KU will not terminate residential customers that have an installment plan in place to pay any arrears. LGE-KU also will not terminate service for non-payment when the National Weather Service (NWS) predicts a daily high temperature below 32 degrees for a 24 hour period or on the last work day of the week when the weekend forecast calls for temperatures to fall below 32 degrees.

Once disconnected, the Companies change the account status to "final" if service is not reconnected within 15 calendar days. Accounts with outstanding balances greater than $25 generally get turned over to an outside collection agency for final collections within 30 to 45 days. LGE-KU writes off final accounts after 120 days of no activity, crediting any subsequent payments received back to the write-off.

LGE-KU's Customer Commitment group coordinates the Companies low-income assistance efforts by managing Company participation in low-income matching programs such as Winter Help/Winter Care and Metro Match. Other efforts include training with agencies for the upcoming LIHEAP seasons, providing direct phone lines for the agency representatives to call for priority service, and establishment of an online web portal for electronic pledges.

LGE-KU developed the Low-Income Agency Portal in November 2009 in order to facilitate communications with the many agencies providing low-income assistance to customers. Ministries and other organizations can log-in and enter pledges for customers, and track and reconcile account activity. The next chart demonstrates the dramatic reduction in agency calls to the call center following the introduction of the Low-Income Agency Portal.



The Companies also established a low income Customer Commitment Advisory Forum. This forum provides low-income agencies with a process to meet regularly with LGE-KU to discuss low-income customer issues and needs for electric and gas service.

C. Customer Complaints and Resolution

1. Background

When utility customers feel that they must complain, companies have to have ready processes to resolve such problems quickly, while keeping regulators duly informed of the disposition of such problems. Commissioners and staffs often judge the customer-service performance of the companies they regulate by the level and tenor of complaints they receive, and how they are ultimately resolved.

During the course of the recent rate proceedings, customers of both KU and LG&E filed many complaints with the KYPSC that raised issues related to the Companies' current billing and collection practices and procedures. KYPSC concerns regarding these complaints resulted in the order of focused management audit of KU and LG&E customer service functions.

To guide our investigatory steps during the review, Liberty reviewed consumer-complaints data collected by the Companies and the KYPSC to identify apparent problem areas. Liberty also reviewed LGE-KU's programs and systems for responding to customer inquiries and resolving concerns or complaints about service reliability, safety, and billing.

2. Findings

Customers with complaints about a bill, hardship-status determination, or payment arrangement contact customer-service representatives at the phone center. If a customer service representative cannot resolve a call, it is transferred to the Escalation team in the RSC or a BSC specialist. Calls can be referred to any available supervisor or manager when required.

LGE-KU's Customer Commitment department has the responsibility for resolving regulatory, executive, and complaints escalated from Customer Service. The Customer Commitment department forms part of the Customer Service & Marketing organization (shown in an organization chart above).

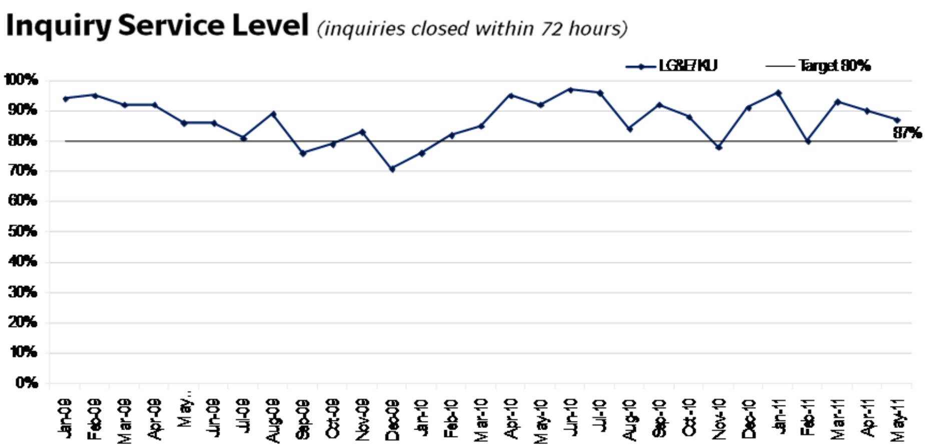
The Customer Commitment department receives complaints or inquiries from the following: Kentucky Public Service Commission, Virginia State Corporation Commission, Better Business Bureau, Office of Attorney General, Company executives, Retail manager referrals, and customer letters to the department. Customer relation's specialists pursue the following process upon receipt of an inquiry or complaint:

1. Contact customer verifying receipt of complaint/inquiry
2. Review the complaint/inquiry to determine the responsible department
3. Enter basic customer information into the company's Complaint Tracking System
    a. A special alert is added to the customer account in CCS
    b. If the inquiry is related to disputed billings, a disputed monies alert is added to the account to ensure service continues for the customer until the dispute is resolved
    c. Data such as customer name, phone number, etc. is automatically populated in the Complaint Tracking System from CCS
    d. Documents pertaining to the issues are scanned and saved
4. Forward the complaint/inquiry to the proper manager or department for investigation
5. Monitor the status of outstanding complaints/inquiries
6. After sufficient research is completed, contact (or request that the appropriate party contact)the customer to gain resolution
7. Notify the regulatory agency, or other initiator of the resolution
8. Close the complaint/inquiry in the Complaint Tracking System, and remove any alerts from the customer's account.

The Complaint Tracking System logs / categorizes all incoming complaints. LGE-KU's Customer Commitment Group has responsibility for the receipt, resolution, customer follow-up, and formal response to the KYPSC. Complaint data is accumulated and reported to LGE-KU management on a monthly basis.

Similarly, any written or verbal complaints to senior management are also logged, researched, and pursued to resolution. The resolution of these complaints are documented and sent to senior management.

Customer Commitment has a goal of resolving 80 percent of complaints within 72 hours. The next chart illustrates that LGE-KU met its service level in 19 of the 24 months of 2009 and 2010. The Customer Relations Specialist sends a follow-up letter, when applicable, when closing the complaint/inquiry in the Complaint Tracking System.



D. Customer Satisfaction Measurement

1. Background

LGE-KU began measuring Customer Satisfaction in the early 1990s, using its Residential Competitive Customer Satisfaction study. This survey has measured common service characteristics, such as power quality, pricing, billing and payment services, communications, and corporate responsibility. Such research assists in gaining a better understanding of customer expectations and the customer experience.

2. Findings

LGE-KU has instituted a bonus program tied to Residential Competitive Customer Satisfaction results. This telephone-based survey administered by a third party compares LGE and KU's customer satisfaction to a competitive group of utilities; *i.e.*, Duke Energy–Midwest, Duke Energy–Carolinas, AEP–Midwest, Georgia Power, South Carolina Electric & Gas, and MidAmerican Energy. An overall satisfaction measure, as compared to the performance of the peer group, drives the bonus calculation. LGE-KU earns points for meeting or exceeding peer group performance.

LG&E began measuring recent contact experience through the Residential Service Center telephone-based survey study in 1998. This tool measures customer satisfaction specific to a recent customer initiated telephone inquiry. The survey has asked customers about their experience and satisfaction with hold time, agent performance, and overall call resolution. KU began using this survey in 1999. The Companies expanded the survey to include Business customers in 2000.

Most recently, LGE-KU expanded the recent contact study to measure the contact experience of customers transacting in person at Company customer service business offices. LGE-KU plans to expand the survey soon to other less traditional areas of the company; *e.g.*, tree-trimming and new construction. Other customer experience surveys planned include:

- Multivariate analysis of proposed products, services, communications, advertising, and marketing materials via custom online panel
- Performance, functionality, and design of website and IVR Customer Self-Service applications via transaction-based surveys
- Accuracy of electric outage estimated restoration times via automated callbacks
- Outdoor light restoration via automated callbacks
- End-to-end new construction process via transaction-based surveys
- Accuracy of scheduling and personnel performance for field service orders via transaction-based surveys.

LGE-KU introduced a web portal for management in January 2010 to provide easy access to customer satisfaction results. The portal facilitates ad-hoc reporting, agent-level reporting, and year-to-date results. LGE-KU also participates in the annual J.D. Power and Associates customer satisfaction measurement studies for both Residential and Business customers.

E. Marketing and Key Accounts

1. Background

For many utilities, the top one percent of customers—the key accounts—are responsible for as much as 40 percent to 60 percent of total energy sales. For obvious reasons, key accounts are critically important to a utility's core business. High-consumption, high-revenue customers provide a valuable base load, contributing to a utility's bulk buying power and cash flow.

Key accounts require special handling. A Key Accounts group is generally charged to provide personalized service for these most important customers. They are high-volume, high-revenue customers with complex metering processes and varied-rate billing based on time-correlated buckets. Key accounts generally require more information and more options to manage their loads and energy costs than do mass market accounts. Because of this, Liberty reviewed LG&E and KU's key account and economic development group. Particular emphasis was placed on the communications and customer services provided to these customers.

2. Findings

The LGE-KU Major Accounts group has responsibility for developing and maintaining relationships with key constituent groups and key accounts. The Major Accounts department resides within the Customer Service & Marketing organization (see an earlier organization chart). LGE-KU assigns account managers to major accounts based on industry. Each account manager typically has responsibility for 30 accounts. A National Accounts manager has responsibility for major accounts located nationally or globally. LGE-KU Key Account managers have long tenures in their positions.

Economic Development (in the Customer Service & Marketing organization) coordinates and supports local and state Economic Development agencies, such as the Kentucky Cabinet for

Economic Development (KCED), Commerce Lexington, and Greater Louisville, Inc. Economic Development managers establish and maintain strategic relationships with planners, developers, and site consultants, in order to enhance the involvement of the Companies in the business expansion and retention process.

The Economic Development group also develops and maintains relationships with elected officials, business leaders, and economic development professionals of each community. They seek to determine specific needs and concerns and to elevate internal awareness of economic development activities.

F. Call Center & Retail Office Operations

1. Background

Well-managed utilities place particular emphasis on providing responsive customer service through the whole chain of contact, from the setting up through the closing of an account. Important features include providing self-service options after normal working hours, situating business offices in convenient locations, ensuring that customer service representatives are well-trained and supported so that accurate information can be retrieved quickly, and providing policy guidance so that representatives can readily solve customer problems. Sufficient numbers of experienced supervisory personnel must be available to manage the customer-service centers. They must have the capability to deal with more difficult customer problems.

The labor of customer-service representatives comprises the major component of operating cost in performing these activities. Controlling labor costs while providing the service that customers expect requires the employment of systems and equipment that ensure the high utilization of personnel. Sophisticated automatic call distributors (ACDs) move calls, and hence work, among representatives, work groups, and offices. Using ACD technology to balance call volume between groups also helps to reduce the time that customers have to hold before calls get answered. Liberty reviewed LGE-KU's application of technology and telecommunications to manage incoming call volume.

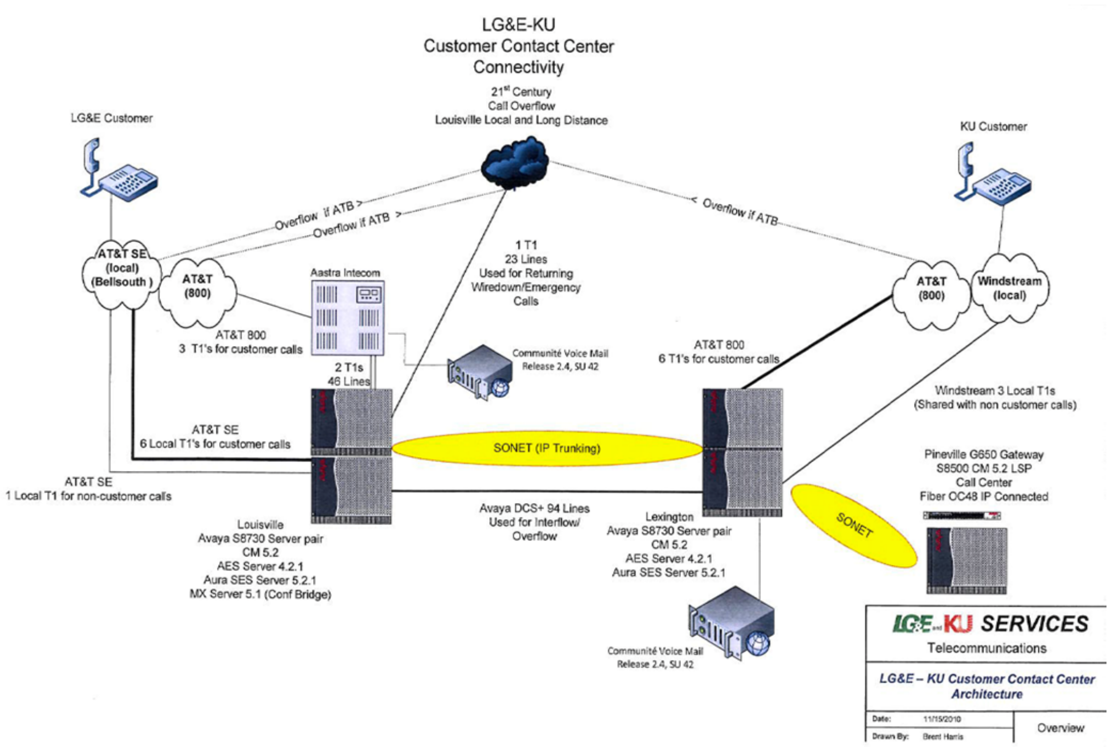
Liberty also assessed how LGE-KU ensures that customer calls are answered quickly and in a competent and courteous manner, if business offices meet customers' needs without causing excess costs to be incurred (and ultimately borne by others), and how LGE-KU keeps up with other utilities and companies in other industries in adapting innovative approaches to serving customers better.

Liberty also evaluated LGE-KU's customer service goals and objectives to determine their reasonableness, actual performance and progress on achieving the goals, and whether LGE-KU has sufficient resources in place to achieve these goals.

Liberty explored how LGE-KU monitors and measures the quality of contact between customers and company representatives. In addition, Liberty also reviewed the employee-evaluation process, employee development, and training and their roles in helping employees comply with company policies and commission rules, and dealing with the public.

2. Findings

The Residential Service and Business Service Centers reside within the Customer Service &Marketing organization (see the earlier organization chart). Residential customers can call LGE-KU's Residential Services Center (RSC) between the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday. Business customers can contact LGE-KU's Business Service Center (BSC) between the hours of 7:00 a.m. and 6:00 p.m., Monday through Friday. The RSC is available 24 hours a day, 7 days a week, for handling emergency calls. LGE-KU's automated telephone services and web services also stand available at all hours. Customers contact the RSC or BSC for issues related to new-service connections, service disconnection, gas leaks, billing-related issues, credit- or collection-related issues, or general customer-relations questions.



Source: LGE-KU Telecommunications Services

LGE and KU each have an Avaya ACD (Automatic Call Distributor) that routes customer calls from the public telephone network (see the preceding chart). LG&E's ACD is located in Louisville and KU's ACD is located in Lexington. The Pineville Call Center group is served via a gateway off the Lexington ACD. IP phones are located in all of the KU Business Offices served from the Lexington ACD. They are staffed during emergencies and as time permits on a day-to-day basis.

The Louisville-based ACD connects to the outside world primarily through AT&T Southeast (formerly Bellsouth). Over 90 percent of calls presented to this call center location are "local" calls. The primary route operates through a trunk group consisting of 94 trunks delivered on 6 T1 lines to the Louisville location. A 7th T1 serves as a backdoor for emergency calls coming back in to the Louisville location from LGE-KU's off-site overflow vendor Twenty-First Century

Communications (TFCC). AT&T Southeast provides local telephone service; AT&T provides long-distance service.

It is cost prohibitive to configure an in-house IVR (Integrated Voice Response) system large enough to handle the largest spike in call volume that can occur during a large storm or outage. A more economical approach is to outsource or offload overflow to a third-party IVR, like TFCC, when call volumes exceed internal capacity. This approach amounts effectively to renting capacity as needed. Overflow service providers like TFCC are equipped to handle thousands of simultaneous calls and thereby avoid presenting busy signals to customers.

The Lexington-based ACD connects to the outside world through 6 T1 lines (138 trunks) for more than 90 percent of the calls received. Windstream provides local telephone service; AT&T provides long-distance service.

Calls to the Kentucky Utilities numbers initially get answered on the Lexington switch, with immediate transfer to the IVR. Calls to the LG&E numbers initially get answered on the Louisville switch, with immediate transfer to the IVR (if trunk lines are available).

The caller has the option to self-serve within the IVR for any of the following matters:

- Account Information
  - Current Balance/Due Date
  - Last Payment Amount/Date
  - Next Scheduled Meter Reading Window
  - Contact will be placed on account in CCS so representative will know information given to customer
- Authorized Pay Locations
  - Business Office Locations/Hours
  - Global Express Locations/Hours/Phone Number
  - Regulus mailing address
  - Online payment information
- Outage Information
  - Report an outage
  - Receive outage updates; estimated restoration, cause of outage
- Broadcast Messages
  - High level outage detail
  - Pre-recorded customer service messages
- Re-direct callers to Bill Matrix for payments (no longer hang up/dial another number)
- Re-direct customer to Energy Efficiency – customers no longer have to listen to recorded program information or speak to call center representative to get to the Energy Efficiency group
- Full Spanish script with same functionality as English version.

Approximately 10 to 12 percent of calls received are completely handled, without agent assistance, in LGE-KU's IVR. Since the December 2010 investment in an upgraded IVR system, 25 to 30 percent of calls are now being completed without agent assistance.

Customers who need to speak with a representative have their calls routed using Avaya Best Service Routing (BSR) and Business Advocate. BSR determines the best resource to service a call by examining Predicted Wait Time (PWT); *i.e.*, a call selection method that predicts the best route based on the total wait time of all incoming call types and the availability of agents.

BSR checks both ACDs to determine the location where the call will be handled with the shortest wait time. If representatives are available, the call is routed immediately. If representatives are not available, the call will remain in queue for the next available agent. While in queue, Avaya's Enhanced Look Ahead Interflow (ELAI) continues to check the alternate location for an available agent along with the IP phone agents in the Business Offices. If an agent does become available, the caller is sent immediately to the alternate location to be answered. If a customer tries to reach a CSR for a non-emergency call outside of the customer service business hours, they are played a message advising them that the office is currently closed.

Since the implementation of CCS, all agents in all call center locations are retrained to handle both LG&E and KU customer service and emergency calls, 911 agencies, gas emergencies, and customers reporting hazardous conditions (such as a wire down) receive a 'high' priority, and are placed ahead of all callers to be answered. All other call types get a 'medium' priority. Business Advocate assigns different service objectives to these skills.

If all trunks are busy on either switch, AT&T routes calls to TwentyFirst Century Communications (TFCC); *i.e.*, a third-party IVR overflow service. TFCC's IVRs are programmed to accept electric outage reports and provide outage status. If callers require a live agent, calls are re-directed by separate toll free lines back to the originating switch. All Customer Service related calls redirected to TFCC receive the following "courteous disconnect" message:

> *We are experiencing extremely high call volumes. We recognize that your issue is important but also that your time is valuable. Rather than have you remain on the line for an extended period of time, we ask that you please try your call again later. You may want to check our website at www.lge-ku.com to see if your issue can be resolved without a call. We have automated many of our standard customer service issues and can now handle these electronically on our website. Please accept our apology for any inconvenience.*

LGE-KU's overall service level goal in responding to customer inquiries is to answer 80 percent of calls within 30 seconds, which is a typical service level goal within the utility industry. LGE/KU has service objectives based on call types:

Outage/Emergency	Answer 90% of calls within 5 seconds
Credit	Answer 75% of calls within 120 seconds
Bill Inquiry	Answer 80% of calls within 30 seconds
Move Service	Answer 80% of calls within 20 seconds
Community Action Agency	Answer 80% of calls within 20 seconds

Customers with complaints about a bill, hardship-status determination, or payment arrangement contact customer-service representatives at the phone center. If a customer service representative cannot resolve a call, it is transferred to the Escalation team in the RSC or a BSC specialist. Calls can be referred to any available supervisor or manager when required.

Formal complaints (KPSC complaints) are communicated to LGE-KU through the Customer Commitment Group. The Complaint Tracking System logs categorize all incoming complaints. LGE-KU's Customer Commitment Group has responsibility for the receipt, resolution, customer follow-up, and formal response to the KYPSC. Complaint data is accumulated and reported to LGE-KU management on a monthly basis.

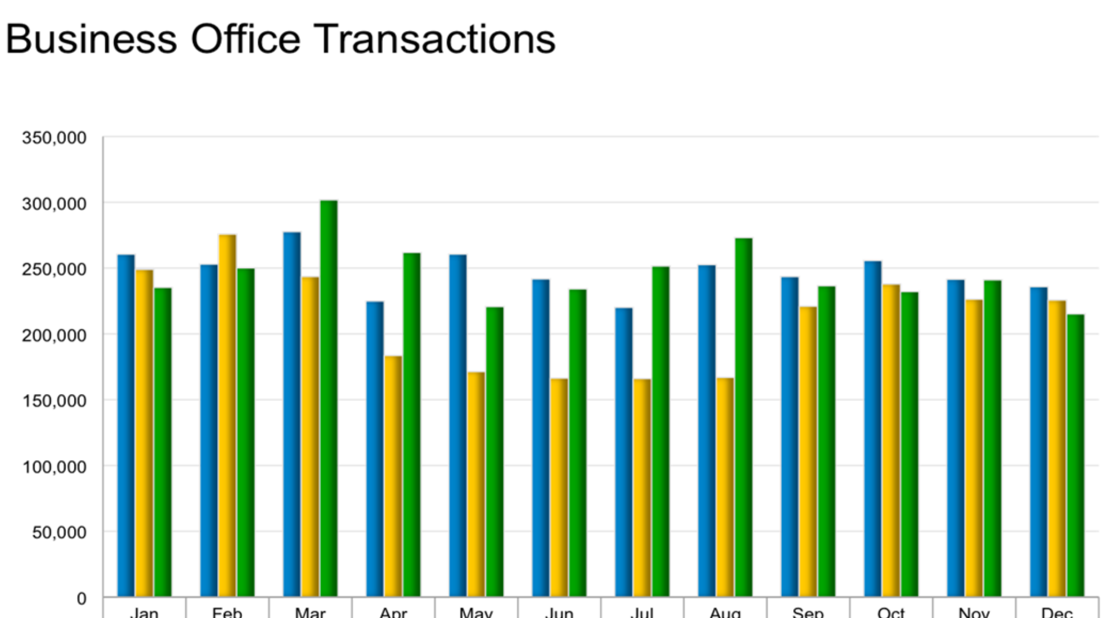
Similarly, any written or verbal complaints to senior management are also logged, researched, and pursued to resolution. The resolution of these complaints are documented and sent to senior management.

a. Retail Office Operations

Customers can walk-in to any of 24 LGE-KU full-service Business Offices located across Kentucky to conduct business face-to-face. Additionally, customers can pay bills at any of nearly 100 third-party (Global Express) pay station locations located across the Commonwealth.

LGE-KU customers can pay in cash, by check, with a credit or debit card, or through a check draft (ACH payment). Payments may come by mail, by phone, by Internet, or in-person. Customers may pay by credit or debit card by phone or web (with a convenience fee) through a third-party, Fiserv BillMatrix.

LGE-KU receives a high volume of walk-in traffic in its 24Kentucky Business Offices. Fourteen percent of billed revenue was collected through LGE or KU Business Offices in 2010. On average, LGE-KU Business Offices receive more than 165,000 payments per month. Business office monthly transaction volume for 2010 is depicted in the following chart.

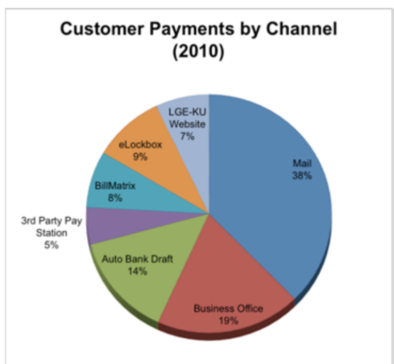


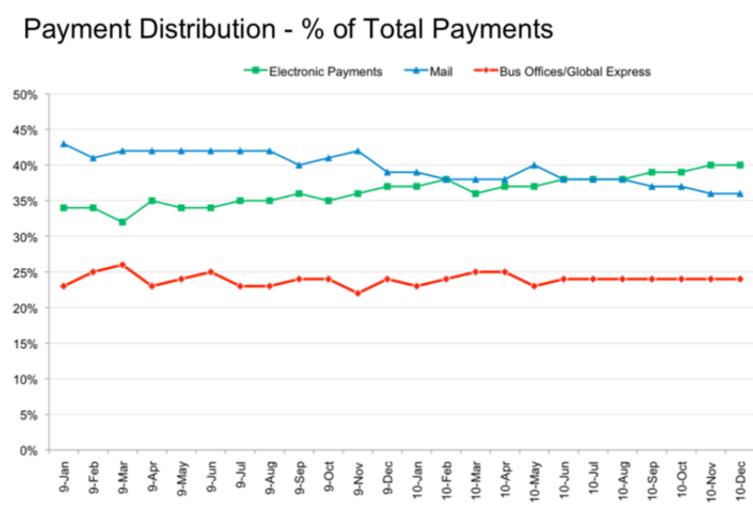
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2008	260,615	253,046	277,692	224,986	260,642	241,845	220,160	252,641	243,592	255,765	241,501	235,826
2009	249,014	275,883	243,618	183,597	171,360	166,419	166,064	166,921	221,033	237,920	226,406	225,740
2010	235,357	250,129	301,869	261,903	220,792	234,244	251,609	273,156	236,581	232,205	241,128	215,237

LGE-KU is updating the facilities in its Business Offices. Capital plans for years 2011 through 2013 include $320,000 each year for the renovation of four business offices per year. Plans include the construction and installation of custom cabinetry for customer counters, minor demo/construction and painting, enhancements to lighting, new voice and data wiring, increased security, seating for customers, and ergonomic seating for employees. Needs of each facility are evaluated prior to the development of a scope of work and obtaining estimates. Each year Retail Management provides the Facility Services Department with a prioritized list of facilities requiring renovation.

b. Remittance Operations

At the start of 2010, LGE-KU received 38 percent of payments via mail and 38 percent electronically (Auto Bank Draft, BillMatrix, LGE-KU Website, and eLockbox). Twenty-four percent of payments are received in-person, either at a LGE-KU Business Office or a 3rd party pay station location. LGE-KU's mail payments are processed through a third-party lockbox service (Regulus). In November 2009, LGE-KU began using image cash letter deposit process between its third-party lockbox and its depository bank, which results in images of checks being sent rather than the physical checks. As of the end of 2010, electronic payments are outpacing mailed payments at LGE-KU. Paperless billing enrollments have also increased by 40 percent.





G. Meter Reading

1. Background

Meter reading is the critical first-step in the utility revenue collection process, and for many utilities, still a very labor-intensive activity. While the use of automated meter reading technologies (AMR) and advanced metering infrastructure (AMI) is increasing, the majority of electric, natural gas, and water companies still read meters manually, on a monthly basis.

Utilities, now more than ever, are faced with growing need for more timely access to energy usage information—to support real-time pricing initiatives, load forecasting, demand-side management, load control, competition, and customer demand. Additionally, status and usage information is needed on an event basis to improve reliability, power quality, and to identify outages. These more complex data requirements are driving the need for advanced metering infrastructures, smart metering, and system-wide automation.

Clearly the meter reading organization continues to evolve with the introduction of automation. The diversity of metering and AMR equipment, complexity of accounts and billing, the challenges of service territory, and the needs of different customer classes dictate different solutions for different companies. In this transition to automation and the quest for reduced operating expenses, most utilities are focusing on three basic approaches to meter reading improvement:

- Automated meter reading–large-scale implementation as well as strategies to pinpoint "high read cost" meters, unsafe meter locations, and high-turnover premises.
- Contract meter reading to reduce overhead, tackle seasonal peaks, and as a strategy to transition to automation.
- Reducing costs of manual reads through contract negotiations, rerouting, more sophisticated hand-held equipment and meters, productivity improvement, and lowering overhead.

To better understand how LG&E and KU are dealing with the challenges facing the meter reading function and its day-to-day operations, Liberty reviewed LG&E and KU meter reading performance and practices, including any efforts to automate meter reading or streamline operations.

2. Findings

LGE has approximately 397,000 electric and 321,000 gas meters in service. KU has approximately 522,000 electric meters in service. LGE-KU has a small population (65,000) of automated meter reading devices scattered throughout its service territory, primarily to address chronic access or safety issues. Each customer meter is assigned to a meter reading route and each route is assigned to a revenue cycle.

Meter route information is exported from CCS into a hand held device (Neptune DAP CE5320X) used by meter readers (employees and contractors) to read and to record the current kWh and CCF readings. These hand held devices take manual reads and are also equipped with a radio device to receive AMR reads. Once the meter readers have completed the cycle readings for the day, the meter reading information is exported from the Neptune FieldNet system to CCS. Any incomplete meter reading routes are reassigned the next day or estimated by CCS. After each billing cycle closes, Neptune FieldNet reports confirm the number of meters read, the percent of routes completed, and the number of missed readings.

The responsibility for meter reading falls within the Revenue Collection organization of Energy Delivery (see the prior organization chart). LGE-KU has been using contract meter readers since 2001. Contract meter reading service providers read most meters. LGE uses Accuread; KU uses Tru Check. The current contracts run from June 1, 2009 through May 31, 2012.Contract amendments with an effective date of January 1, 2011 accommodate changing from a 5-day read window to a 3-day window. Contracts are managed on a performance basis, with incentives for safety, accuracy, and customer satisfaction.

H. Field Services

1. Background

Utilities rely on field service employees to connect and disconnect customers to and from electric and gas service lines and pipes. Field forces, through service order requests, work in close cooperation with frontline customer service representatives in the call center and walk-in locations to start or stop utility service on request. Customers expect these service requests to be completed in a timely manner.

Field service employees also play a critical role in the billing process, when the meter reading process fails to deliver a viable determination of the amount of electric/gas service used by a customer. In these cases, a field representative will visit the customer premise to investigate the meter and to determine usage. These field visits must be made promptly to ensure that an accurate bill is delivered to customers on-time. Delays in completing field investigations delay bill delivery or cause an estimated bill to be generated by the billing system. Delayed or estimated bills generate customer inquiries, complaints and dissatisfaction.

In this area, Liberty reviewed procedures for creating, assigning, and completing field service orders to support the connect/disconnection of service and the proper billing of customers. Liberty also paid particular attention to the ability of the field and the call center/back office groups to work cooperatively to serve customers.

2. Findings

LGE-KU Field Service Operations has responsibility for system and customer generated service orders, such as: on/offs, transfer of service, shut-off for non-payment, high bill investigations, off-cycle reads, crossed meters, and unauthorized reconnects. Field Service Operations resides in the Revenue Collection organization of Energy Delivery (see an earlier organization chart). LGE-KU Field Service Operations completes more than 650,000 orders annually.

Company and contract field-service technicians combine to provide the functions and activities encompassed by LGE-KU Field Service. All field service workers have been assigned mobile data tablets and are connected to LGE-KU's Ventyx Service Suite (mobile data system). Orders are downloaded from CCS nightly to the mobile system, and then routed to the appropriate work queues by dispatchers, with some limited auto-routing. Some KU field technicians start work directly from home with the mobile tablets.

All field employees are instructed to report stolen meters, current diversion, or bypass situations to supervisors. A field employee or supervisor will then be assigned to investigate and document reported incidents, prior to correcting the service connection.

LGE-KU's Meter shop contracts with three outside contractors to provide services: Energy Economics, Ops Plus, and Tru Check. Energy Economics provides administrative and field technicians in the Gas Meter Shop. The Electric Meter Shop has a contract with Ops Plus covering two Meter Technicians, two Planners and a Field Supervisor. Tru Check, as part of the contract with LGE-KU Field Services, provides two Meter Technicians, two General Laborers, and a part time truck driver to the Meter Shop in Danville and Lexington.

LGE-KU's Meter Shops purchase, test, and maintain LGE-KU's electric and gas meters. Kentucky Commission rules require the company to test meters for accuracy on a regular basis. An annual statistical sample test procedure was adopted for residential meters. Meter sampling takes place by manufacturer type and randomly to determine accuracy. The Companies deem that meters having tested outside standards as defective; they adjust customer accounts accordingly.

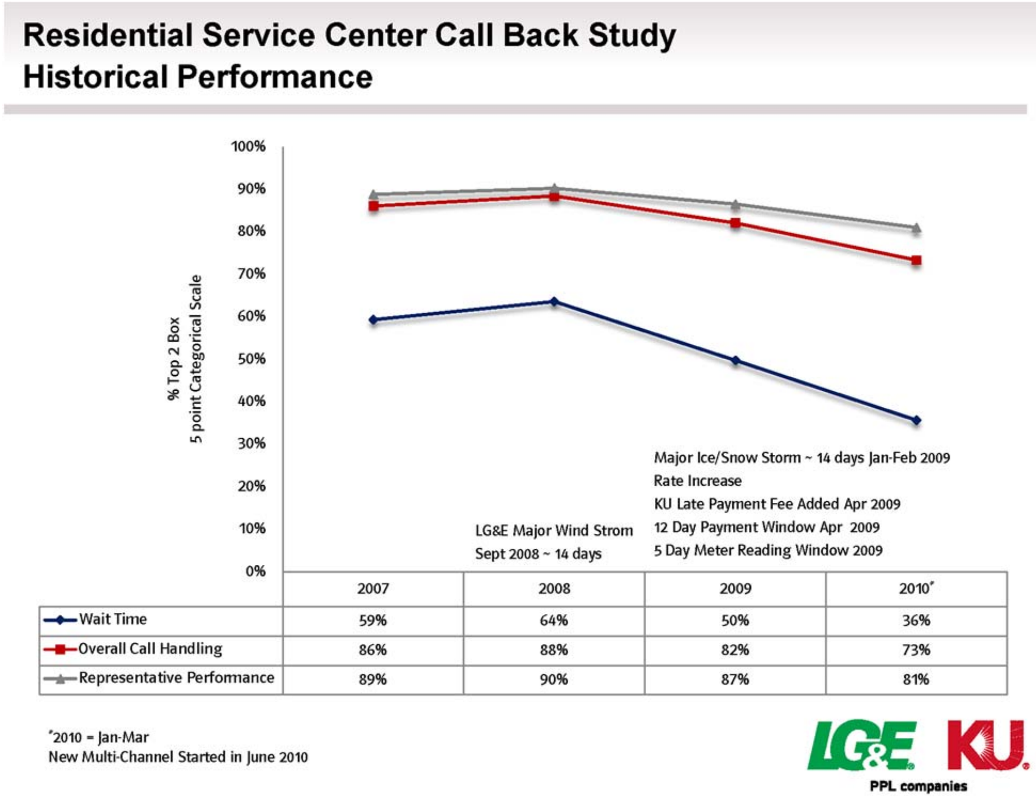
I. Conclusions

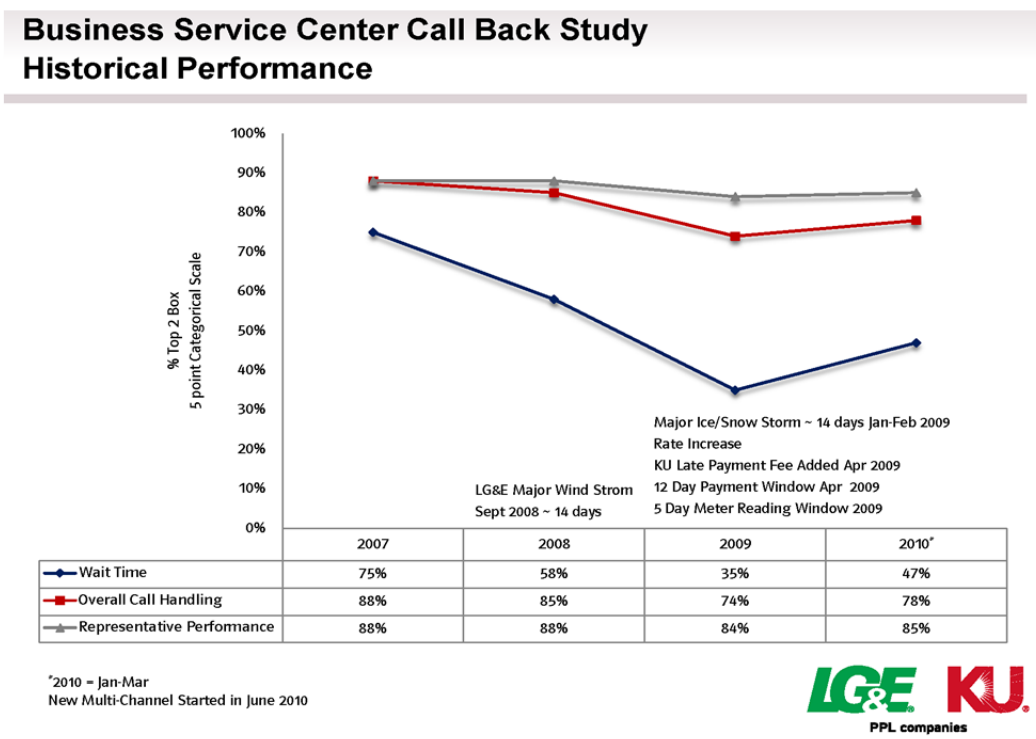
1. LGE-KU's customer satisfaction has declined significantly since 2008. *(All Recommendations)*

LGE-KU measures recent contact experience through the Residential and Business Service Center callback studies. Customers who have had recent interaction with the Residential or Business Service Center receive calls intended to measure satisfaction with such things as hold time, agent performance, overall call resolution, and to gauge the "customer experience."

Residential and Business Center call handling customer satisfaction has declined dramatically since 2008, as the following charts demonstrate. Residential customer satisfaction with wait time dropped 23 points from 2007 to 2010. Similarly, Business customer satisfaction with wait time dropped 30 points from 2007 to 2009 (75 percent to 35 percent), but has rebounded slightly in 2010 (to 47 percent).

Residential call handling satisfaction also dropped 13 points from 2007 to 2010; Business customer satisfaction with call handling dropped 10 points during the same period. Satisfaction with customer service representative performance dropped slightly, by 2 and 3 points for Residential and Business Centers, respectively.

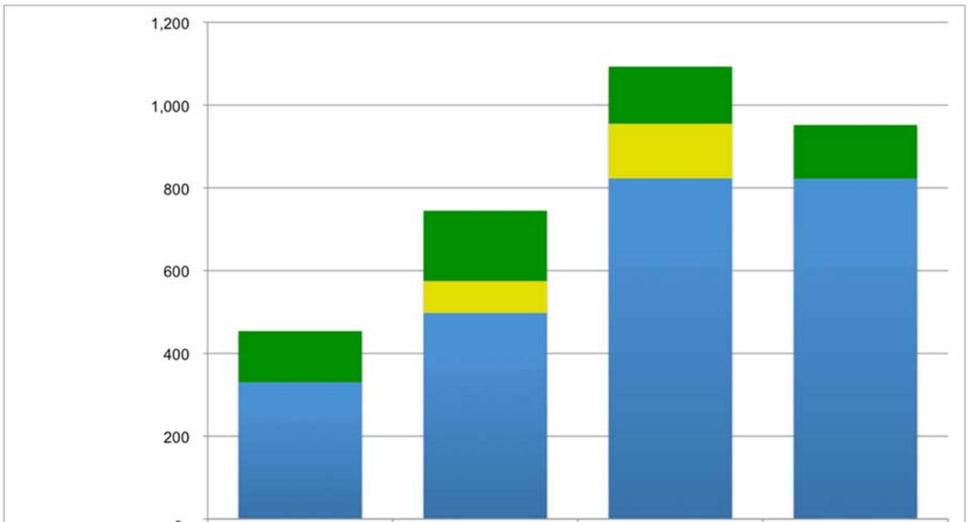




2. Customer complaints nearly doubled from 2007 to 2008, and peaked in 2009. *(All Recommendations)*

The Customer Commitment department receives complaints or inquiries from the Kentucky Public Service Commission, Virginia State Corporation Commission, Better Business Bureau, Office of Attorney General, Company Executives, Retail Manager referrals, and customer letters to department. Complaints increased substantially (64 percent exclusive of major storm events) from 2007 to 2008, and increased another 50 percent from 2008 to 2009. Customer complaints have decreased from 2009 to 2011; nevertheless, complaint levels remain high and still well above 2007 levels, as the following chart demonstrates.

Customer Complaints 2007 – 2011 Year to Date

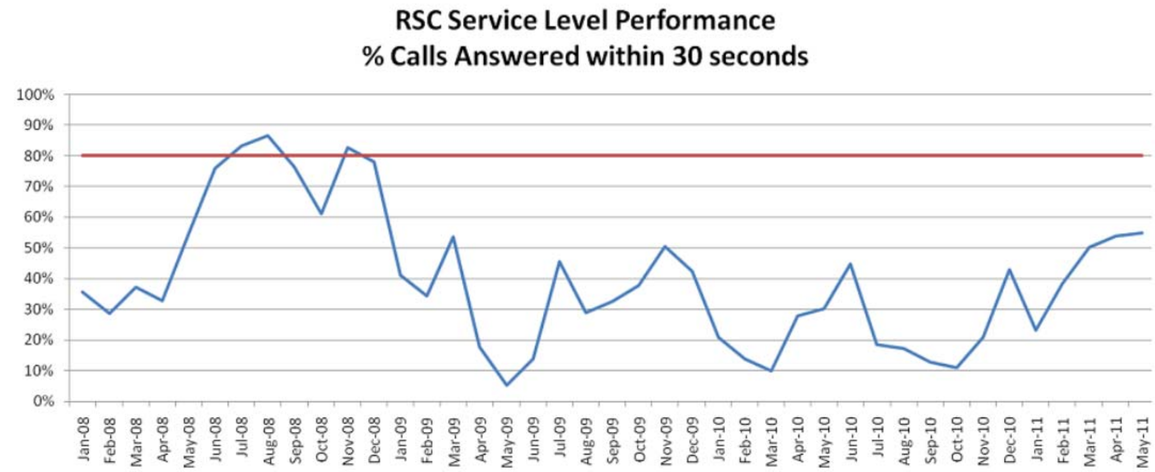


	2007	2008	2009	2010
General	124	170	138	130
KYPSC - Major Storms		77	132	
KYPSC	330	498	823	822

3. **Contact center performance has deteriorated since 2007.** *(Recommendations #1 through #6)*

The Residential Service Center (RSC) currently consists of three call centers located in Louisville, Lexington, and Pineville, Kentucky. The centers collectively have the capacity to seat 127 agents and to train 36 agents at one time. The customer experience falls well below targeted performance standards at the current capacity.

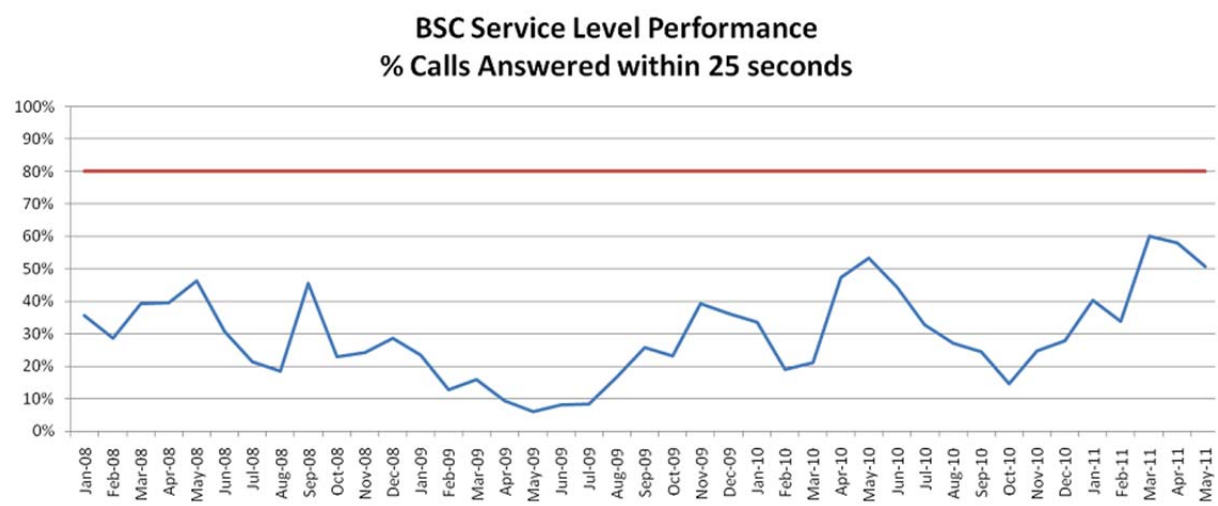
Neither LGE-KU's RSC nor BSC have met call center service level goals for a long time. The following charts demonstrate the gaps in service level goals and actual performance; service-level performance has fallen well below goals. The gap is 3 to 75 percent below goals from 2008 through 2011 year-to-date.



The LGE-KU Workforce Planning Update 2010-2013 stated in March 2010 that:

> *Superior business customer service is currently defined by being able to reach a highly trained Representative in a short amount of time that is measured by a high service level (goal of 80% calls answered in 25 seconds) and low Average Speed of Answer (ASA).*

The Business Service Center has also not met its service level goal in a long time. BSC service-level performance has been well below goal; *i.e.*, 25 to 75 percent below goal from 2008 through 2011 year-to-date.

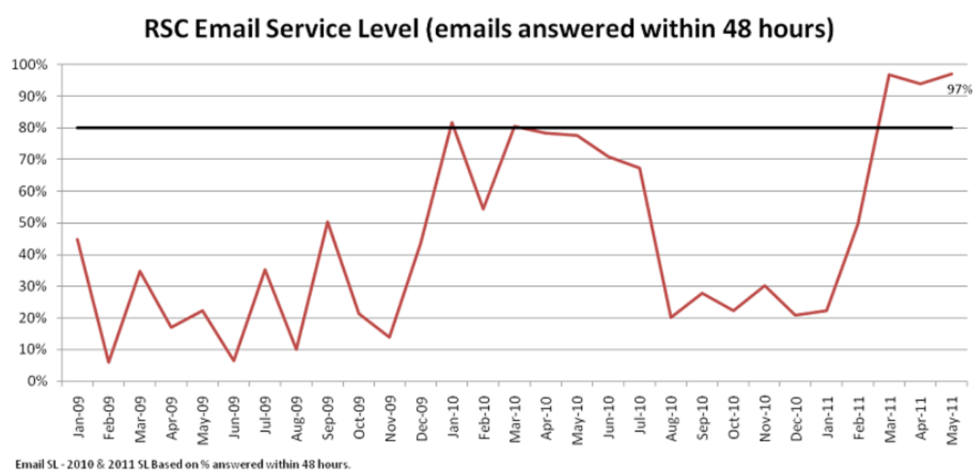


Business Center Specialists responsibilities include proactive business account management and reactive account activity as needed due to Company or customer requests. Specialists also assist in the office with technical skills, take overflow inbound calls, assist reps with escalated supervisor calls, address matters for unassigned major accounts, and process email inquiries. Increased call volumes, however, now cause specialists to spend 80 to 90 percent of their time in the office assisting with inbound customer calls and taking escalated supervisor calls. Historical levels of such activity were much lower; *i.e.*, 30 to 40 percent.

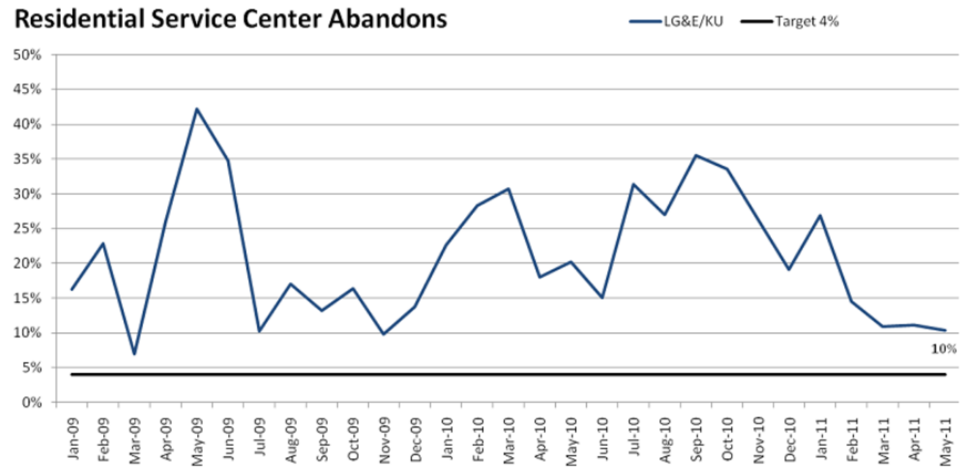
LGE-KU Business Service Center management voiced its concern with failing performance in the Workforce Planning Update 2010-2013:

> *If the Business Service Center ("BSC") is to provide excellent customer service and meet its goals and targets, changes are necessary as the department is at a crossroads in how the 120,000 non-residential customers are to be served. Customer contact volume, representative efficiency, and human capital all must be examined to enable the department to meet the expectations of providing superior customer service as measured by third-party customer feedback surveys. These factors are preventing staff from handling customer calls in a timely manner and from heading off declining customer satisfaction among the Company's business customers.*

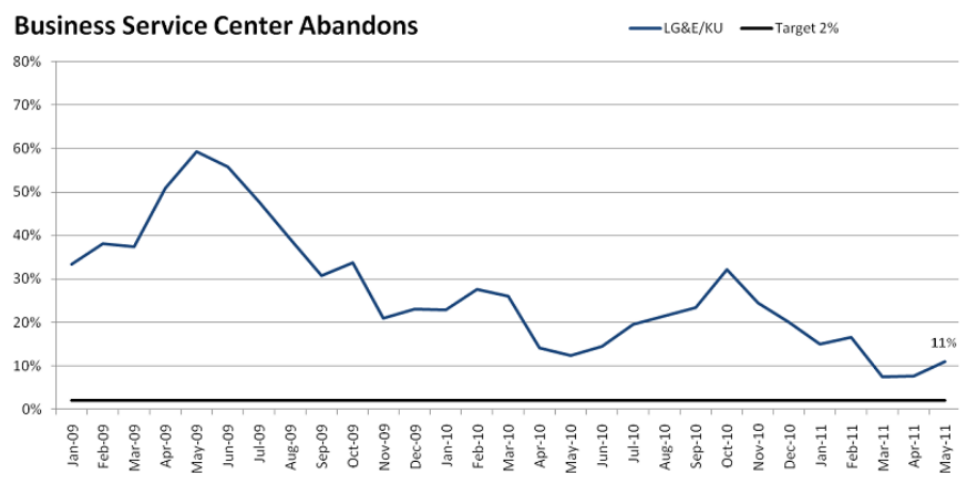
LGE-KU also has not met service-level targets for email response, as the next chart shows. LGE-KU was well below (30 percent to 75 percent below) its service level goal of handling 80 percent of emails within 24 hours in 2009. The goal changed in January 2010 to lengthen the response period from 24 hours to 48 hours. LGE-KU met target in January and March 2010, but performance thereafter deteriorated through the remainder of the year. LGE-KU achieved only 21 percent emails answered within 48 hours by year-end.



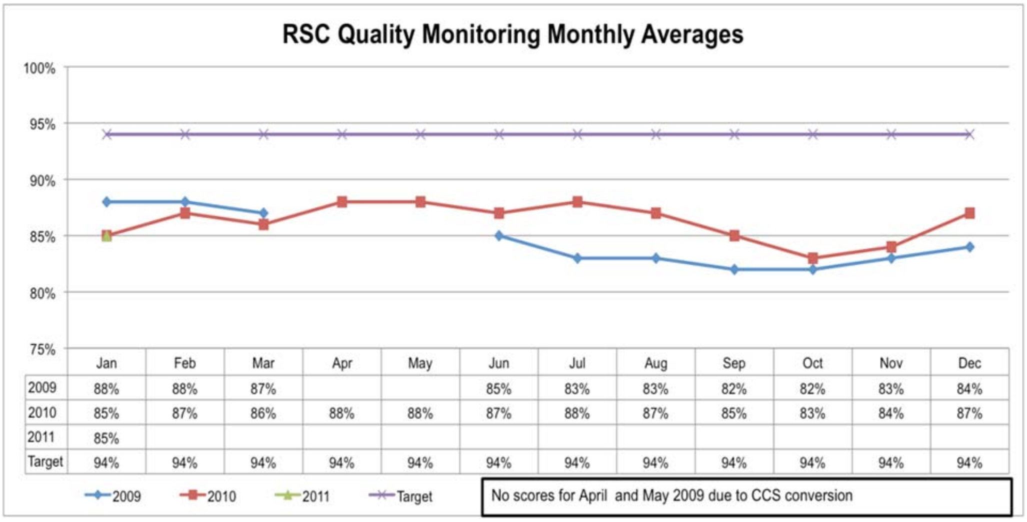
LGE-KU has also not met its goals for minimizing abandoned calls. The chart below shows that abandonment levels within the RSC have ranged as high as 43 percent over the past two years; *i.e.*, well above the 4 percent goal.



LGE-KU also has not met goals for minimizing BSC abandoned calls. The next chart shows that abandonment levels have ranged as high as 60 percent over the past two years, which falls well above the 2 percent goal.



RSC has also not met its call quality standards for some time (in fact not once during the last 2 years).



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2009	88%	88%	87%			85%	83%	83%	82%	82%	83%	84%
2010	85%	87%	86%	88%	88%	87%	88%	87%	85%	83%	84%	87%
2011	85%											
Target	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%

Companies that adopt and effectively use call-quality programs typically realize significant improvement in call quality, customer satisfaction, employee performance, and overall call center performance. Call quality monitoring often proves one of the most effective methods for improving the quality of service provided to customers. Measuring the customer experience serves as the primary purpose of a call quality monitoring process.

However, many quality programs fail to truly improve the customer experience, primarily because measuring call quality is a challenging process. Call quality measurement must be credible and consistent in order to improve the quality of service provided. Calibration is essential to ensure consistency and build confidence in call monitoring results. The best way to gain consensus on a call is to design the proper review criteria and then test it repeatedly. Group discussions comparing and discussing results help to focus and clarify the difficult task of judging performance, and they also build confidence and consistency. The goal is to calibrate until all members conform to standard to make sure everyone is on the same page and providing consistent evaluation and guidance to representatives. Routine calibration and calibration sessions that include frontline supervision are the top two drivers of Quality Assurance (QA) credibility.

The RSC conducted only two call quality monitoring calibration sessions in 2010—not nearly enough to achieve the consistency needed to gain buy-in from the frontline. The BSC did not conduct any calibration sessions at all. Overall, quality-monitoring efforts for the BSC have been ad-hoc, primarily due to resource limitations. The RSC recently increased the frequency of calibration sessions to once a month for 2011. Calibration-session invitees include the Quality Monitoring Group, RSC Coaches, RSC Training Staff, RSC Operations Managers, and Manager, Residential Services.

Examining LGE-KU's call center benchmarking performance reveals that LGE-KU was ranked in the bottom-quartile in the 2010 study (2009 data):

- "Customer Experience Time" – wait time + talk time
- Average speed of answer
- Abandoned calls

- Service level performance.

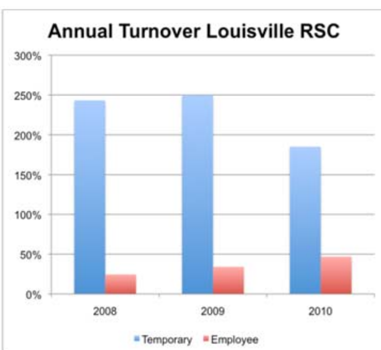
LGE-KU ranked in the bottom quartile in service level performance and average speed of answer in the 2008 and 2009 benchmarking studies (2007 and 2008 data) as well.

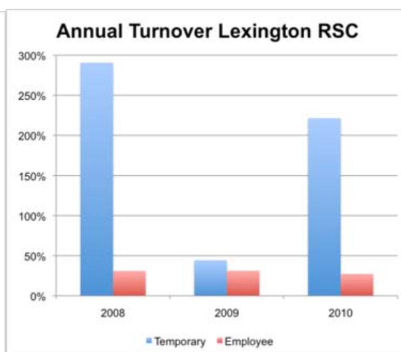
While LGE-KU benchmarked poorly in service, it ranked in the 1st quartile in cost performance (cost per call handled).

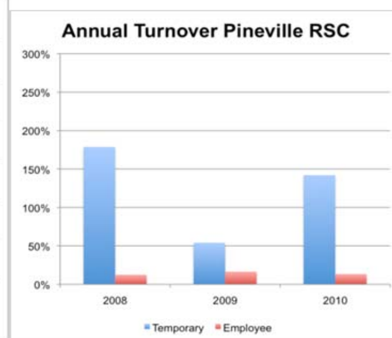
4. Turnover has been a major issue in the Louisville and Lexington Residential Call Centers, especially among temporary employees. *(Recommendation #4)*

In 2004, the RSC began the practice of utilizing third party temporary agencies to handle the staffing responsibilities for the RSC CSR positions. The temporary-to-hire concept envisioned that temporary workers would work through the agency for a period of up to six months, and then be hired by the Company, as needed and if satisfactory performance was demonstrated. The majority of CSR turnover occurs within the first six months; therefore, successful application of this approach would reduce labor costs during their first six months.

Turnover unfortunately has remained very high over the past few years, as the next charts show. The company has used nine different temporary agencies over the past seven years in an attempt to improve the quality of hires coming into the RSC. The RSC averaged 76 percent turnover in 2010 (190 percent among the temporary pool and 32 percent among employees).LGE-KU turnover rates are four to five times industry norms.







LGE-KU moved to agent specialization when it shifted to the temp-to-hire staffing model in 2004. Previously, LG&E and KU had hired full-time employees and provided full-service training such that any employee could handle any type of call (no specialization). Since 2004, LG&E and KU have provided modular training to new RSC call center representatives, focusing on one call skill type at a time, typically reconnects. Additional training modules (credit, moves, and billing) are offered to representatives based on call center staffing needs.

However, LGE-KU's high turnover has challenged the RSC's training group, requiring nearly continuous new-hire training classes, so much so that it's been difficult to offer additional training modules to develop skills in other call types (credit, moves, and billing). This limits the knowledge and capabilities of representatives and causes frustration for customers (and repeat calls) when they are transferred to other work groups because the agent is not trained or authorized to handle their request.

5. LGE-KU's rate increase, policy changes, and CCS implementation have generated increased customer inquiries and call volume. *(Recommendations #1 through #3)*

The 2009 year brought significant change for LGE-KU customers. A rate increase approved in 2008, the first in many years, went into effect on April 1, 2009, at the same time as the new CCS. Either of these events individually would increase customer calls; the combination of these two events further magnified customer impacts.

The move to one customer system for LGE and KU forced "process harmonization," and also changed billing and collection policies for many customers. However, the rate increase also incorporated several key credit and collection tariff changes; they changed the customer relationship for many long-time customers. The changes affected customer budgeting and payment habits. Policy changes introduced at CCS "go-live" included:

- New late payment charge for KU customers
- Payment due date changes (reduced from 15 days to 12 days for LG&E customers and increased from 10 days to 12 days for KU customers)
- Discontinuance of Extendicare and Select Due Date programs, affecting approximately 7,600 customers (primarily customers on fixed incomes)
- More consistent Deposit Requirements, especially for customers whose service has been interrupted for non-payment.

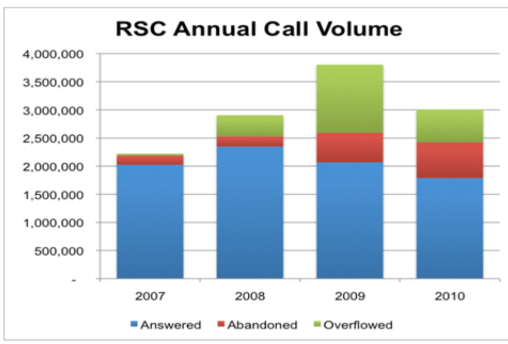
Changes to internal processes also affected the customer experience. These changes included meter reading route changes and a variable meter read cycle "window" introduced with CCS. Many customers were assigned to different billing portions or cycles which changed their bill issuance and bill due dates. Additionally, CCS's approach to bill issuance introduced a variable read-window. This change meant that a customer's meter could be read at any point from day 28 to day 32 after the last reading date (within a 5 day window). This change caused more variable bills to arrive at slightly different times from month to month, and increased usage variance noticeably. The result was that many customers called to question the accuracy of their bills.

Additionally, many system and operational bumps associated with the CCS implementation created more customer confusion and inquiries:

- Many customers previously on the Select Due Date and Extendicare programs incurred late fees because they were unable to pay their bill by the new due date. LGE-KU issued a mass refund of late payment charges to refund these customers.
- Beginning with the first mailing of CCS customer invoices on April 1, some customer invoices were inadvertently sent to the incorrect customers by being included in another customer's billing envelope.
- Customers were not billed consistently; some customers did not receive bills for two or more months.
- Duplicate pledge payments were credited to some accounts.

- Mass reversal of all open pledge credits prior to 7/1/09. These were pledges that were not fulfilled by the agency or that were fulfilled, but pledge processing did not create the pledge debit and clear the pledge credit.
- Multiple "brown bills" were delivered to the same account during the same month. Some accounts had 2 dunning notices mailed back to back (April 2009).
- Approximately 12,000 KU Disconnect Notices were issued for $0.00 (May 2009).
- Disconnect notices generated on Feb 21, 2011 omitted the Late Payment Charge (LPC) as part of the past due amount, meaning some customers were eligible for disconnection even if they paid the entire amount shown on the Brown Bill by the disconnect due date. However, for a customer to have been disconnected as a result of this issue, the LPC omitted from their bill would have had to exceed the threshold for disconnection.

As a result of these policy changes and CCS implementation issues, total incoming call volume increased significantly in 2009.As a result, the percentage of calls answered has declined substantially since 2008, while the percentage of abandoned and "politely disconnected" or overflowed calls have increased. The next chart illustrates this phenomenon.



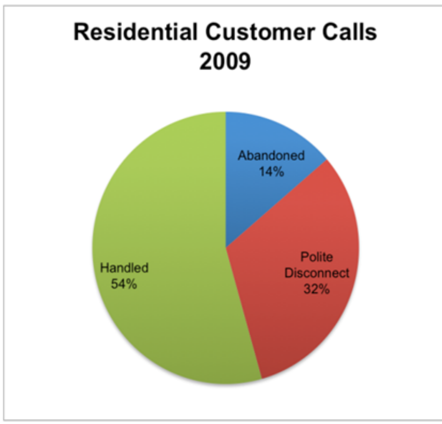
6. Insufficient staffing levels and failure to meet service level goals has resulted in a sub-standard "customer experience." *(Recommendations #1 through 5 and 10)*

LGE-KU customers encountered significant access difficulties prior to and subsequent to the CCS implementation, and continue to experience the same access difficulty today.

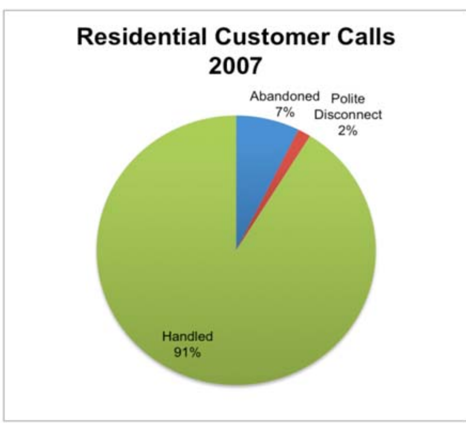
- LGE-KU was not staffed appropriately to handle the influx of calls associated with the CCS implementation and the changes in policy.
- Many callers are abandoning due to extremely long wait times (see the previous abandoned call charts).
- In 2009 and 2010, many calls are overflowing to Twenty-First Century Communications (3rd party IVR service) because LGE-KU trunks are full. Non-outage callers receive the "polite disconnect" message (see the earlier "courteous disconnect" message).However, overflows have been significantly reduced due to lower call volume, implementation of new IVR and lower CSR handle time in 2011.
- Overall declining contact center performance (as discussed in Conclusion #3).
- LGE-KU has not added sufficient resources to resolve the access issues and performance continues to be substandard. This has resulted in a substandard "customer experience."

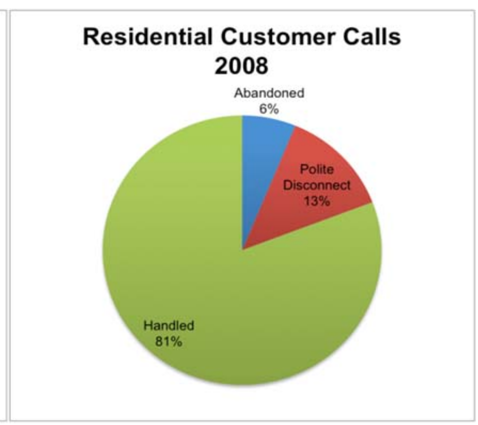
Third-party overflow services, such as those provided by TFCC, are designed for use during large storms and other emergency situations, when a utility's call center capacity is exceeded. It is highly atypical for a utility to rely on third-party overflow services to manage its day-to-day call volumes. However, due to insufficient staffing level, LGE-KU has been overflowing calls to TFCC and providing a "courteous disconnect" messages (in lieu of a busy signal) to callers quite often over the past two years.

During 2009, residential customers calling the RSC were highly likely to encounter long wait times, or to receive the "courteous disconnect." LGE-KU handled slightly more than half of the calls offered on average during 2009; 14 percent of callers abandoned and another 32 percent were "courteously disconnected," because LGE-KU's call center trunks were full and overflowing to its third-party IVR, Twenty-First Century Communications. Problems continued into 2010. Abandoned calls (see the following charts) averaged 21 percent and "courteous disconnects" averaged 19 percent.



LGE-KU customers had already been experiencing similar issues in 2007 and 2008, although at more moderate levels than encountered after implementation of the new rates, policies, and customer-information system. Abandoned calls averaged 7 percent in 2007 and 6 percent in 2008. "Courteous disconnects" climbed during 2008, from an average of 2 percent in 2007 to an average of 13 percent in 2008.





The Companies did anticipate a significant increase in call volume and longer handle times; they addressed this likelihood in the CCS Business Case. However, management did not add the recommended staff to the call centers. It therefore continued to miss service level goals, thereby creating longer wait times, higher abandons, and overflowing call center trunks.

Instead of increasing, Residential Service Center staffing levels have actually declined since 2008, as the next chart demonstrates. The RSC remains understaffed today. Continually high turnover in the RSC only exacerbates this situation (see Conclusion #4).

Residential Service Center			
Year	Employees	Contractors	Total
2008	114	48	162
2009	117	43	160
2010	108	43	151

LGE-KU's Business Case to support the selection and implementation of CCS recommended adding 15 to 25 Full Time Equivalents in the call centers, to accommodate for the steep learning curve and longer handle times. However, management chose not to add the recommended staff prior to the CCS implementation. RSC tried to fill the gap without adding employees. Measures taken included:

- Mandatory overtime for all representatives
- High occupancy expectations (percent of time CSRs are actually on the phone)
- Borrowing staffing from other areas—business offices and Customer Commitment
- Asked supervisors and QA analysts to take calls.

Several self-service technology initiatives were implemented with a goal of reducing incoming call volume, and reducing customer wait times and abandons:

- Landlord Portal (late 2010)
- Low Income Portal (September 2010)
- Enhanced IVR self-service (November 2010).

Management did approve an initiative to add staff in a call center in Western Kentucky in the October 2009 Mid-term Strategic Plan. However, it dropped this plan in early 2010. Management revived the plan to add staff in Western Kentucky late last year. LGE-KU is now building a fourth call center in Morganfield, Kentucky. The new location will replace the current Morganfield Business office and storeroom with a new cross-functional facility. The new facility will include an additional RSC location. The center will increase overall capacity by 50 seats once its operational (planned for October 2011).

LGE-KU has created a temporary call center (20 seats) in the existing Morganfield business office to function until completion of the new center. Management has hired and is in the process of training the first 10 CSRs. A second group of 10 CSRs will be hired and trained in June 2011. These 20 new CSRs at the Morganfield call center will not, however, prove sufficient to handle current call volumes. Additional resources are needed to meet service level goals. Staffing scenarios created in November 2010 projected a staffing addition of 44 CSRs to meet LGE-KU's 80 percent of calls answered within 30 seconds service level goal.

The Morganfield Call Center Business Case speaks to staffing to service level goal:

> *Call center labor assessment will be completed annually to determine the customer adoption of technology channels and the staffing requirements to meet top quartile industry performance metrics.*

7. LGE-KU is not monitoring local and long-distance traffic. *(Recommendation #3)*

The LG&E Outage line (502-589-3500) was deflected during the latter part of 2009 and through the fall of 2010 to TFCC (the call overflow vendor) on a full time basis. The goal was to ensure outage reports and status update processing in a timely fashion. This allocation of trunk space allowed for additional availability to incoming customer service calls during that time.

Following the inception of overflow-call routing to TFCC on a fulltime basis, "busy signals" are no longer delivered to customers in all-trunks-full conditions. Customers calling for a Customer Service matter under these conditions receive the previously described "courteous disconnect" message.

There are several points at which callers could be experiencing all-trunks-full conditions, and at which LGE-KU should be watching its call traffic; *e.g.*, calls coming into the ACDs, calls routed to TFCC, and calls routed from TFCC back to LGE-KU's ACDs.

LGE-KU has not, however, requested, and does not receive any trunk usage/traffic reports from its telecom vendors (AT&T Southeast, AT&T, and Windstream). LGE-KU instead relies on its Avaya CMS Supervisor and on reporting from its overflow vendor, Twenty First Century Communications (TFCC), to evaluate trunk usage. This approach fails to guarantee that LGE-KU customers are not receiving busy signals. In fact, callers on the local POTS (Plain Old Telephone Service) network in Louisville could indeed be receiving busy signals if the capacity is exceeded at any central office facilities (AT&T). LGE-KU's failure to request any traffic reports from its vendors, leave it uncertain whether blockage is occurring.

8. CCS usability is poor for customer service representatives. *(Recommendation #5)*

The transition and implementation to any major, new system can challenge the best organizations. The customer-information system serves as one of the most critical for a utility, and touches on many organizations and functions across the company. The primary users of the system, however, reside in the Customer Service organization. Customer service representatives (CSRs) comprise the bulk of those users. They converse with many customers daily to assist with reporting power outages and gas emergencies, start and stop electric and gas service, handle questions about bills, and negotiate payment arrangements.

The transition to CCS at LGE-KU has proven challenging for both employees and management equally. The Companies went to great lengths to test the new system and prepare employees for the change-over. Efforts included 36,000 hours of training, 5 mock conversions, 2 dress rehearsals, cutover-plan practices, and several "read-only" practices sessions. The change nevertheless was traumatic for the Customer Service organization. We would expect such a reaction at any company undergoing a customer system replacement. Very tenured customer service employees and prior billing-system gurus suddenly became novices at "go-live" on April 1, 2009.

The CCS project included development and testing of the integration of LGE-KU's existing Computer Telephony Integration (CTI) application to CRM. Management decided at that time not to implement the "screen pop" feature. It chose to implement a separate color-coded informational box with information from which the CSR could copy and paste information into CCS. This "workaround" approach seemed to present the essence of a screen pop for CSRs to cut/paste; however, it did not eliminate the need to search CCS to find the appropriate customer record.

CTI technology can serve to collect customer information with an IVR and it can automatically populate CSR screens (screen pop) with the pertinent information when the call is delivered. For example, a customer enters the account number or phone number in the IVR to identify him or herself; then the CSR's screen is automatically populated with that account information. This capability totally eliminates the need for a CSR to search for a customer record. CTI "screen pops" have become an industry norm; they improve data accuracy, while shortening agent talk time. Reps typically save 15 to 30 seconds on a call, thus reducing cost and increasing efficiency. LGE-KU's CCS "workaround" does not, however, automatically populate CCS screens with incoming call data. CSRs must therefore manually search and pull up the customer's record.

It is very difficult to search CCS to find an account using the address. The reasons include lack of standardization in creating addresses and multiple accounts residing on the same street, especially in dense metropolitan locations. It can take several minutes to scroll through all the addresses to identify the correct account. Liberty observed some CSRs searching through another system, the Trouble Order Entry system (TOE), to find account numbers by street address, and then to enter them manually into CCS to pull up the appropriate record. It is much easier to search by street address in the TOE system than in CCS. This approach, however, takes additional time; CSRs ends up cutting-and-pasting or re-entering the account number in CCS to ultimately pull up the appropriate account.

Management has therefore encouraged CSRs to expedite this process by asking customers to provide their full social security numbers in order to pull up their account information. CSRs are trained and coached to ask customers for their social security numbers. Documentation of the June 3, 2010 Calibration Session contained the following guidance:

> *REMINDER: Always attempt to obtain the callers full social security number before asking for account number and the last 4 digits and if you ask for the full social security number and the customer gives you the account number you would still want to ask for their social security number in full before simply asking for the last 4 digits.*

Management relayed this guidance to RSC CSRs in a July 2010 tailgate reminder:

> *More clarification and hopefully this will get us on the same page, in the same book*
>
> *Greeting: "Good Morning this is ____________ how may I help you?" is NOT an acceptable greeting.*

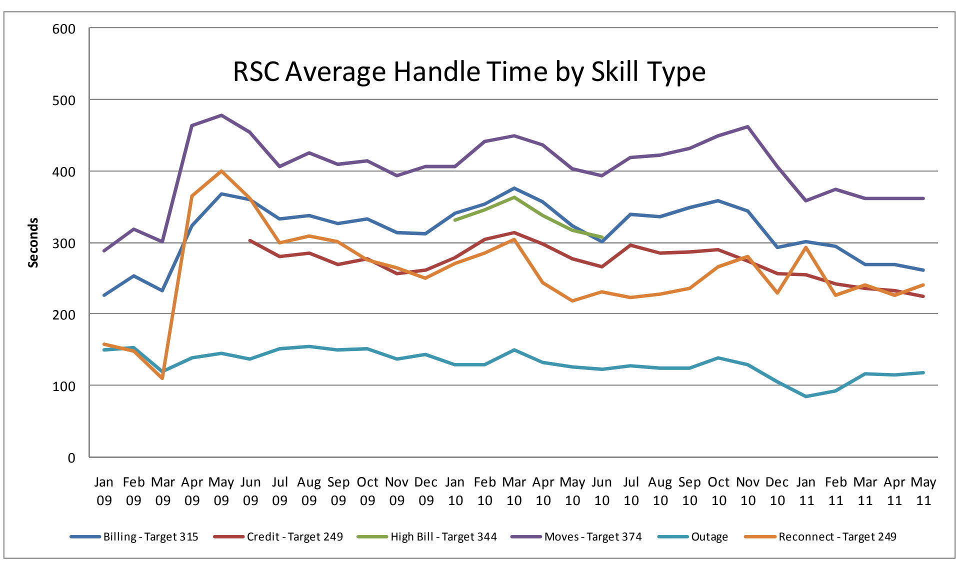
We want to take the lead by obtaining the SSN#, name, or address (SSN does not need to come first). We prefer that you use the SSN#, this will allow you to pull up the account and start looking over it while getting the callers "issue". Moves calls may be where the name is what we would want to ask for as we do not know if they have an account or service with us yet. For Outage calls we prefer the phone number for the address they are reporting. If we obtain the correct information in the beginning of the call this would help in lowering your AHT.

Example: Good Morning this is _____________ May I please have your SSN#

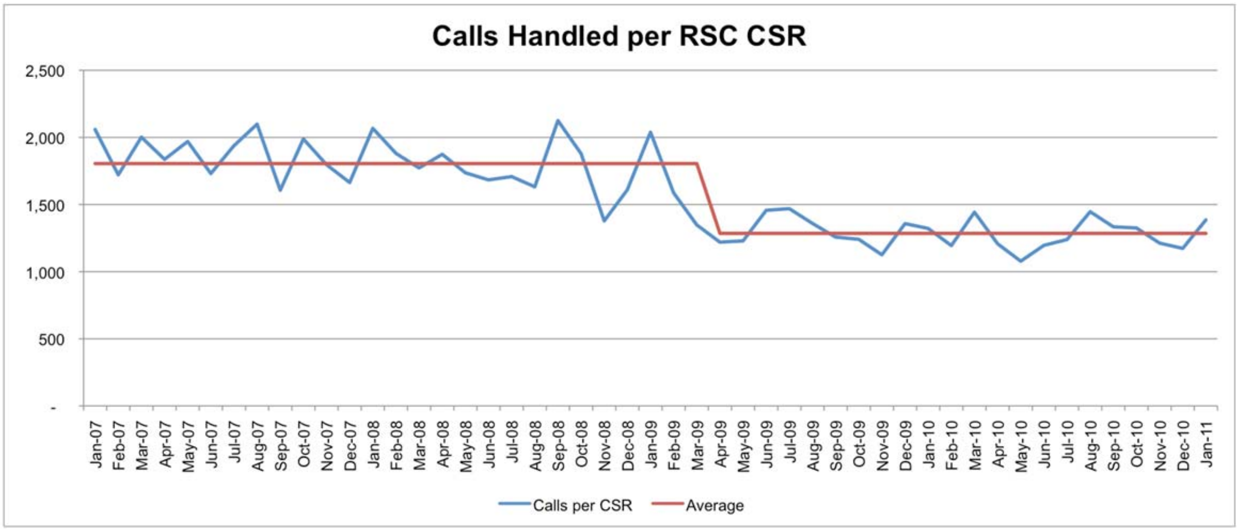
Social Security numbers (SSNs) have become the de facto national identifier. They often serve as an authenticator to confirm individual identities. The use of SSNs as both an identifier and an authenticator makes these numbers highly desirable to criminals, such as identity thieves. Most states have no law preventing businesses from requesting a SSN and few business restrictions exist to limit the practice. There is, however, growing sensitivity to providing social security numbers, largely due to the increase in identify theft crimes.

The Social Security Administration cautions citizens to be careful when sharing their social security numbers with anyone, even when businesses ask for them. An SSN can be used to confirm customer identity, especially when applying for new service, but it must not be misused. Encouraging CSRs to ask callers routinely for their full social security number, simply because it expedites record retrieval, is a poor procedure.

CCS is challenging to use in other ways, which contributes to longer talk time and longer after-call work for CSRs, increases opportunity for errors, and lengthens training. LGE-KU has modified its training program accordingly, and has worked to bring average handle times (AHT) down, including establishing an AHT study team to identify CCS enhancements. RSC Handle times have come down slightly since go-live, but are still well above pre-CCS levels, as the following chart shows.



Longer talk and after-call work times reduce agent productivity, as the next chart shows. RSC agent productivity, as defined by calls handled per CSR per month, took a steep drop (about 40 percent) in April 2009 at CCS go-live. Productivity has yet to return to pre-CCS levels.

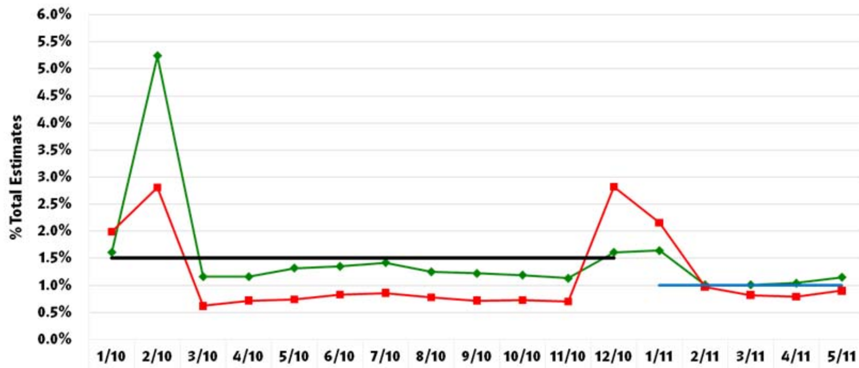


9. Meter Reading accuracy is below targeted levels. *(Recommendation #6)*

Contract meter reading providers (Accuread for LGE and Tru Check for KU) perform most reads. LGE-KU has been using contract meter readers since 2001. The contracts contain performance clauses that provide incentives for safety, accuracy, and customer satisfaction. The reduction of the meter reading window (from 5 to 3) created the need for additional resources for LGE and KU meter reading contractors, which was address by contract modifications.

LGE-KU's Meter Reading read rate (percent of meters read) has generally proven good, with the exception of some challenges in getting readings in the winter months due to weather. The following chart details the percent of estimated meter readings each month from January 2010 through May 2011. Beginning in 2011, LGE-KU reduced the target for meter read rate from 1.5% to 1.0%.

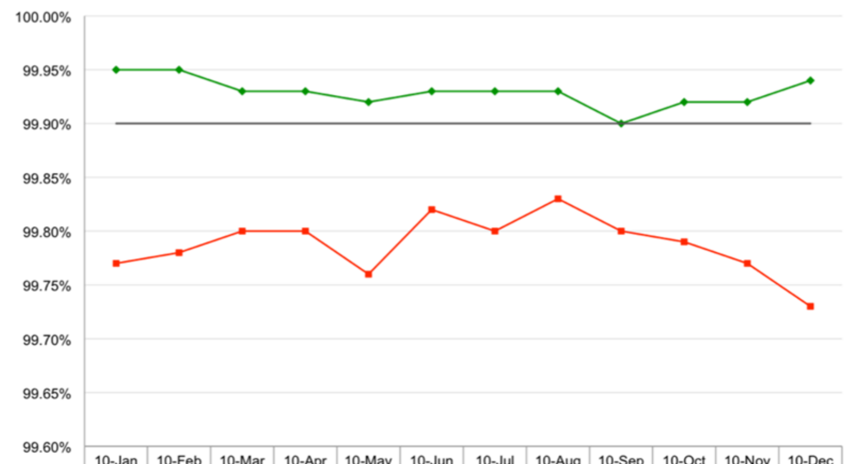
Percentage Meter Reading Estimates Jan 2010 – May 2011



	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	10/10	11/10	12/10	1/11	2/11	3/11	4/11	5/11
LG&E	1.61%	5.24%	1.16%	1.16%	1.32%	1.35%	1.42%	1.25%	1.22%	1.19%	1.13%	1.61%	1.64%	1.01%	1.01%	1.04%	1.15%
KU	1.99%	2.81%	0.62%	0.72%	0.74%	0.83%	0.86%	0.78%	0.72%	0.73%	0.70%	2.82%	2.16%	0.97%	0.82%	0.79%	0.90%
Target 2010	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%					
Target 2011													1.0%	1.0%	1.0%	1.0%	1.0%

Tru Check, operating for KU, however, has only met its Meter Reading accuracy targets in 2 months across the last 4 years. The following chart details the percent of meter reading errors detected in 2010. KU also benchmarked poorly in meter reading accuracy (bottom quartile in two studies).

2010 Meter Reading Accuracy



	10-Jan	10-Feb	10-Mar	10-Apr	10-May	10-Jun	10-Jul	10-Aug	10-Sep	10-Oct	10-Nov	10-Dec
LG&E	99.95%	99.95%	99.93%	99.93%	99.92%	99.93%	99.93%	99.93%	99.90%	99.92%	99.92%	99.94%
KU	99.77%	99.78%	99.80%	99.80%	99.76%	99.82%	99.80%	99.83%	99.80%	99.79%	99.77%	99.73%
Target 99.90%	99.90%	99.90%	99.90%	99.90%	99.90%	99.90%	99.90%	99.90%	99.90%	99.90%	99.90%	99.90%

10. Field Service is not meeting order completion targets. *(Recommendation #7)*

Field Services has also been challenged to stabilize its operation since implementation of CCS. It has been challenged to complete service orders timely, thus causing negative impacts on customer billing. Significant progress has occurred in reducing the size of the service order backlog, but important work still remains.

LGE and KU have now fully deployed a mobile data system. This technology has eliminated manual entry and tracking of service orders, eliminated lost paper orders, and minimized errors from multiple handling of order completion data.

The following chart details the percent of field service orders completed in 2010 for KU and LG&E, as compared to its service level goal of 98 percent order completion (2010 target). However, in 2009, LGE-KU had a more aggressive service order completion target of 99.9 percent.

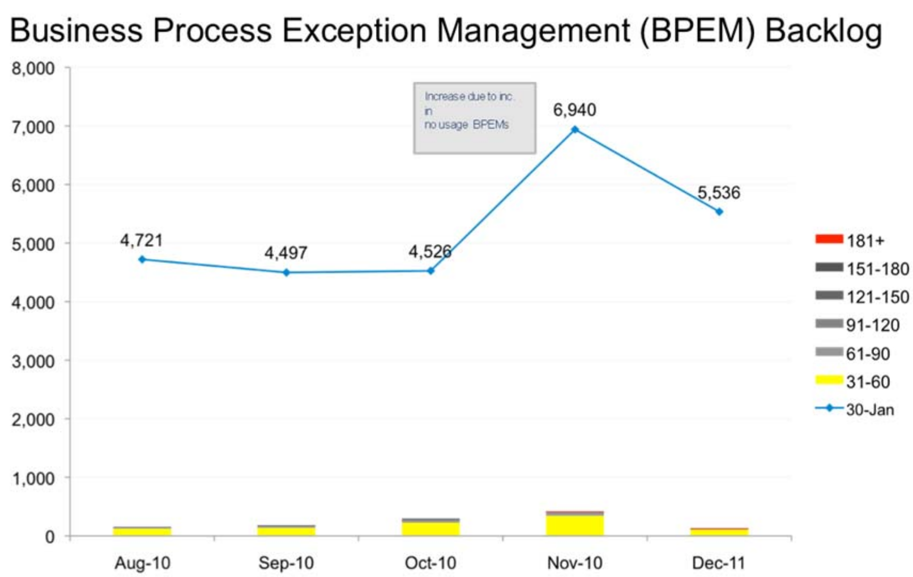
11. Since "go-live," Billing Integrity has been challenged with backlog. *(Recommendation #8)*

Billing Integrity experienced the elimination of three vacant billing analyst positions in February 2009, as part of the budgetary re-forecasting process. These eliminated positions formed part of the additional CCS headcount allocated to Retail in the 2008 Mid-Term Plan to address the increased workload forecasted as part of CCS implementation. This re-forecasting caused the Billing Integrity organization to enter CCS implementation short-staffed.

Billing Integrity has struggled since CCS implementation to determine its steady state of operation. Billing Integrity has faced a very large backlog of billing exceptions since "go-live." Billing-exceptions backlogs were not new to Billing Integrity; however, the initial numbers observed under CCS proved significantly higher than seen previously. Three factors impaired Billing Integrity's ability to work these larger than expected numbers of exceptions: Billing Integrity's inexperience with CCS, more complex methods to resolve exceptions in CCS (as compared to the prior CIS system), and under staffing.

LGE-KU's legacy CIS systems produced paper reports each morning listing the accounts to be reviewed (the exceptions). Billing Integrity representatives would then scan the list of accounts to determine those that required correction, follow-up and investigation. CCS instead creates an electronic backlog of BPEMs for each account with a billing exception. The Billing Integrity Department is responsible for reviewing all billing related BPEMs on a daily basis. A determination is made to release the bill to the customer, make the necessary corrections, or to forward the account to another department for further action (such as the field for a meter reading).

Billing Integrity addressed the large number of billing cases by implementing mandatory overtime for most of its staff over the past year. Overtime increased by 713 percent in 2009, as compared to 2008 levels. Billing Integrity has also worked closely with Information Technology CSS support to detect system errors (incidents), request system improvements (enhancements), and identify more effective workflow processes. The Billing Integrity staff cannot continue to work large amounts of overtime to sustain the current backlog numbers.



The CCS billing system provides the ability to define the conditions that determine if an account is billed correctly. These conditions represent a series of ranges, or tolerances, that are acceptable. For example, there are tolerances defined for an acceptable range of usage, based on previous usage history. Any such deviation from the expected result (tolerance levels) will produce a BPEM.

LGE-KU's efforts to reduce the number of billing exceptions (since "go live") included changes to the tolerance levels in CCS. While relaxing the tolerance ranges reduced the number of exceptions it also increased the number of bills issued with problems. Instead of LGE-KU detecting the errors before the bills were mailed to customers, they instead sent the bills out.
The intention of a billing exception is to catch obvious errors and also to force a manual review of the "gray areas"— those situations that look erroneous but are correct.

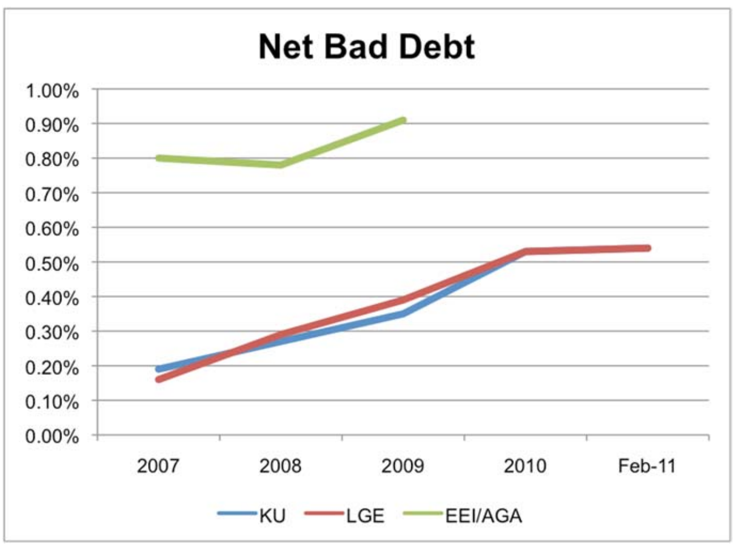
These tolerances require review; they will likely require a return to pre-CCS service levels. The resetting of tolerances will both permit identification of defective meters sooner, and produce an increase in the number of billing exceptions that Billing Integrity must address.

Working high volumes of overtime, correcting incidents, implementing enhancements, and instituting better-defined work processes have caused Billing Integrity performance metrics for pending work backlog to begin a return to pre-CCS levels.

Billing Integrity's long-term strategy seeks to capitalize on the increase volumes and quantity of data available from CCS. Management expects that more areas needing Billing Integrity assistance will be identified. The return mail project offers an example of an area that may require additional assistance from Billing Integrity soon. Billing Integrity also requires information analysis to manage and track trends, provide root cause analysis for identified problems, and address areas of concern and opportunities for improvement. Billing Integrity has only started to understand the data it has; the group does not have the personnel necessary to devote to effective analysis of that data.

12. Issues resulting from the implementation of the SAP Customer Service System, the recession and high unemployment in Kentucky have negatively affected collections performance since 2009. *(Recommendations #9)*

LGE-KU's net write-off performance (net write-offs, as a percentage of total revenue) has historically been, and continues to be, well below industry average as seen in the chart below. However, LGE-KU's write-offs have nearly tripled from 2007 to 2010.



Three major issues have occurred since the implementation of CCS that has had a negative impact on LGE-KU's collection performance, including:

- Recession and high unemployment in Kentucky
- Design decision to implement current-bill dunning rather than full-balance dunning
- Mass recall of all accounts turned over to LGE-KU's collections agency since go-live

The recession and subsequent sluggish economy has resulted in high unemployment in Kentucky. This in turn has made it difficult for many LGE-KU customers to make ends meet.

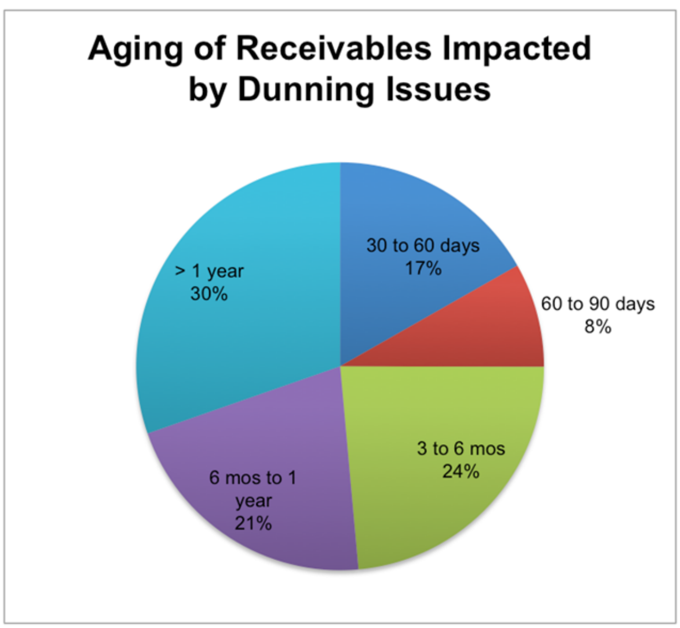
As a result, collection performance at LGE-KU has declined as it has across the industry.

Prior to CCS, LG&E and KU, like other utility companies, initiated collection actions (dunning) based on account aging and the total outstanding balance. However, since CCS go-live LGE-KU has, in almost all cases, only been able to initiate dunning (demand for payment) based on the delinquency of the *current* month's bill, defaulted payment arrangements of unauthorized reconnection of services.

At 15 days past the due date, LGE-KU evaluates accounts that are past due on the current invoice for eligibility of issuance of a disconnect notice (also referred to as a "brown bill"). This notice advises customers that the account will be "subject to termination" in 10 days if a payment is not received. However, customers owing less than a certain dollar amount do not receive a brown bill. Since CCS bases dunning actions exclusively on the current balance, monthly past due balances accrue if payment is not received and the current bill due continues to fall below the set dollar threshold. Additionally, customers cannot set up an installment plan with LG&E or KU to pay off delinquencies without first receiving a brown bill.

The current-bill dunning (disconnect) process has sent mixed signals to customers, and resulted in large active delinquent balances. Before CCS, customers received a brown bill whenever there was a past due balance. Many customers wait for the brown bill to make their payment or ask for an installment plan—the disconnect notices trigger action. However, without a disconnect notice, many customers, especially those struggling to make ends meet, do not make payments (and a payment arrangement was not an option). This has been confusing for customers—the rules have changed and it is not clear what conditions trigger a brown bill.

As a result of the current dunning process more than 18,000 accounts have been affected, resulting in more than $3.7 million in past-due receivables.



LGE-KU is now ready to deploy the system changes necessary to enable full account balance dunning. Customers who have not received a "brown bill" in the past (because their monthly bill is less than the set dollar threshold) will now receive a brown bill in a much more timely fashion, and for the entire past due balance (not just the current bill). However, many of the 18,000 plus customers in this situation may need some assistance to pay balances that have been allowed to accrue for many months, in some cases, for more than two years. The deployment of full-balance dunning will increase call volumes into the RSC as well as the number of disconnect orders issued to the field. It's critical that LGE_KU closely manage the cutover to control the impact on its operations; but it will prove equally important to manage the impacts on customers.

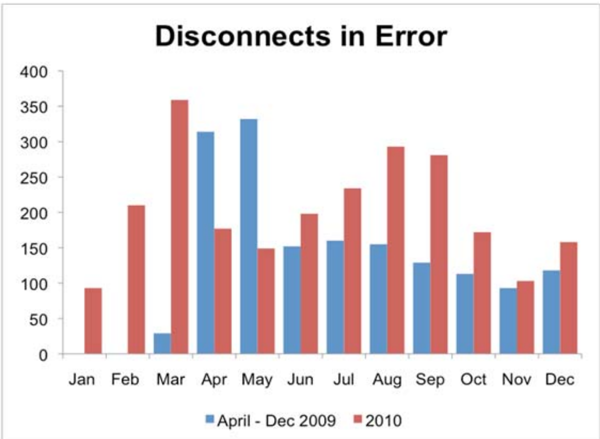
Largely as a result of the economy, LGE-KU has delivered increasing levels of disconnect notices (brown bills) since CCS was installed. (The disconnect process was discussed previously on Page 7.) They range from 1.3 million in 2007 to 1.7 million in 2010. The number of brown bills issued annually has increased by 26 percent from 2009 to 2010, and by 31 percent since 2007.

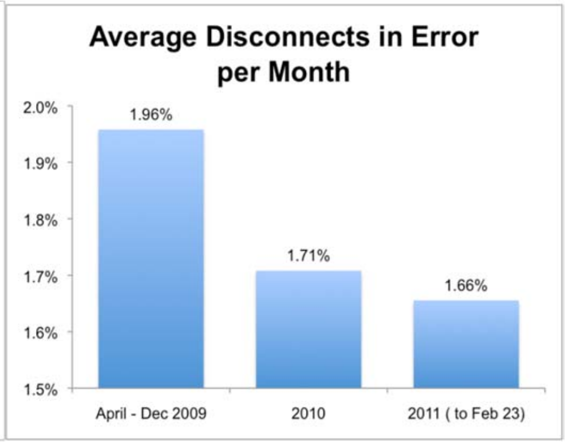
	Brown Bills	% Disconnected
2007	1,286,742	10%
2008	1,411,402	9%
2009	1,347,003	6%
2010	1,691,926	8%

However, disconnects in error have also increased since the CCS implementation, indicating that LGE-KU is not necessarily disconnecting the right accounts for non-payment. Customers disconnected in-error often ending up lodging formal complaints with the Kentucky Public Service Commission.

LGE-KU began tracking disconnects in error with the implementation of CCS. Prior to the new system, LGE-KU was unable to track disconnects in error. A "high priority" turn-on is requested whenever the Company has incorrectly disconnected a customer's gas or electric service due to system or human error (programming routine, technician, or data entry).

LGE-KU disconnects in error an average of 150 to 200 accounts each month. Disconnects in error have averaged 1.7 to 2 percent of disconnects worked since "go-live." It's troubling that LGE-KU has disconnected so many accounts in error. Not only is this costly rework for field crews (and taking them away from other work), it has a very negative impact on customer satisfaction.





A combination of errors after go-live resulted in some inaccurate customer account balance data being submitted to LGE-KU's outside collection agency. Approximately 40,000accounts representing $12.2 million of unpaid finaled accounts were impacted by these errors. Errors were due to CCS issues and user-errors such that:

- Incorrect balances of amounts owed on some closed accounts were turned over for collection
- Individual account balances previously submitted for collection were altered without notification or update to the agency.

These problems were initially identified in January 2010, and work began immediately to correct them. After extensive research and analysis, LGE-KU determined the most prudent and customer beneficial approach was to recall all accounts that had been submitted for collection to ensure all account balances were correct and that customers' credit was not negatively impacted in error. The recall occurred on June 9, 2010 along with the purging of associated derogatories from the three national credit bureau files. LGE-KU stopped its write-off process (description of write-off process on page 7) in June 2010 for a month, while work was underway. These accounts were corrected and finally resubmitted to the agency in October 2010.The curtailment of submission of new accounts to the agency along with the recall and correction of prior submissions delayed collection action on these accounts for this ten month period which diminished LGE-KU's collection effectiveness.

The effect of the mass recall on bad debts cannot be quantified with any degree of certainty, due to all the factors that affect bad debts (*e.g.*, economy, increase in bills due to cold/hot weather).However, total recoveries in 2010 were roughly half what they have been in previous years.

13. LGE-KU has many industry-leading technical tools and systems in place to support customer service.

LGE-KU has many enabling technologies in place within the Customer Service organization, including:

- New Customer Information System
- Call center workforce forecasting and management tools

- Mobile workforce system which is fully integrated with company's Customer Information System
- A new meter reading system that is fully integrated with our customer information system
- Near real-time payment information / automated order cancellation
- Outage maps on website
- A new interactive voice response system
- Enhanced web self-service
  - Created a low-income portal for agencies (and conducted training sessions for many of the larger agencies)
  - Added landlord portal (and conducted training sessions for many of the larger landlord accounts)
  - Added Spanish menus/scripts
  - Added visually-impaired options
  - Improved overall flow/navigation
- Implemented management portal to view customer satisfaction survey information in near real-time
- Text alerts for outage notification (coming soon)
- Exploring IVR self-service options for payment arrangements.

J. Recommendations

1. Fully staff Residential and Business Customer Service Centers to meet and sustain service level goals. *(Conclusions #1 through #6)*

Long-term, poor service level performance becomes a vicious cycle. As service levels slip, more and more callers complain to agents about how long they waited before their call was answered. Agents then spend time apologizing to callers, further lengthening the call and decreasing agent productivity, which further degrades performance. High agent occupancy (percent of time on the phone) usually accompanies poor service levels, and can extend handle times even more as agents try to work in a little breathing room in between calls. Continued over a long period of time, morale drops, quality suffers, and agents eventually "burn-out."

Service-level management provides the necessary technique to link service expectations to required staffing. Management, however, has to provide the required level of resources necessary to meet service level goals to be successful over time. Employing the proper number of skilled representatives and customer-facing technology ensures that companies are positioned to manage "all" customer contacts, while ensuring positive customer experiences, high levels of customer satisfaction and long term, respectful relationships.

During the course of this audit, LGE-KU took a number of steps that should increase RSC call staffing and service level performance:

- Constructed a temporary call center within the Morganfield Business Office to accommodate 20 RSC customer service representatives
- Hired 20 Customer Service Representatives and 4 management personnel to staff the temporary Morganfield RSC Call Center

- Began the construction of the permanent 50-seat call center in Morganfield, Kentucky.
- Currently hiring ten (10) Customer Service Representatives to fill vacant seats within the other three RSC Call Center locations.

The Companies have committed to aggressively staff the Morganfield Call Center (both temporary and permanent facility), while filling available seats in existing Call Center locations to meet and sustain service levels goals for Residential and Business Service Centers. Management has promised to hire the appropriate level of staffing, such that LGE-KU meets and sustains RSC service level goals of answering 80 percent of calls within 30 seconds.

In addition to the commitment to fully staff the RSC locations, LGE-KU should also commit to staffing the BSC to permit it also to meet and sustain its service level goals. In addition, LGE-KU should manage its call center operations going forward using service levels and report service level performance against goal, for Residential and Business Service Centers, on a monthly basis to the Kentucky Public Service Commission.

LGE-KU should also focus the use of Twenty-First Century Communications (third-party provider) overflow services for its intended purpose of outage management and discontinue delivering “polite disconnects” to customer service callers.

2. Equip the Resource Planning and Management group to be able to manage RSC and BSC call centers by service level in real-time. *(Conclusions #1 through7)*

Providing innovative customer service to a base of over one million customers necessitates a call-center organization with a high utilization of technology and on-going calculations of needed staffing levels. The process to forecast incoming call volumes and to determine the required staffing to handle those calls comprises one of the most important functions in the call center operation. The majority of operating costs are related to personnel; therefore, getting the right number in place is critical in terms of service and cost.

A workforce management system, which LGE-KU has in place, automates the process of forecasting workload, calculating staffing requirements, creating schedules, and tracking daily staffing and service. Real-time management uses a workforce management system to monitor developments and trends and match changes in call volume with intra-day staffing adjustments.

During the audit investigation period, LGE-KU committed to a number of additional steps that should position LGE-KU to manage to service level in real-time:

1. Hire permanent replacement for the Call Center Analyst role
2. Provide additional training for the Resource Planning and Management (RPM) group for active service level monitoring and management
3. Further define roles, processes, and communications to support forecasting, scheduling and intra-day adjustments to maintain service levels
4. Continue the use of forecasts and schedules to align staffing with service level goals for Residential and Business Service Center, inclusive of fax and email customer contacts
5. Incorporate service level accountability in Energy Delivery Management Performance Management Process

6. Evaluate / upgrade call center software to allow for balancing between virtual call centers and to support queue-level forecasting / schedule / service level management.

Real-time management is a continuous process that only works optimally when everyone understands service level objectives, forecasts are relatively accurate, the required level of resources are scheduled at the right times, and the processes and communication are in place to allow intra-day adjustment.

However, a perfect forecast of aggregate call load has only limited value to a center that routes calls to specialized agent groups. Since LGE-KU has defined several specialized agent groups (*e.g.*, reconnects, credit, billing, moves) it is critical that forecasts and schedules be defined at the agent group level to realistically manage and achieve service level goals. Therefore, LGE-KU's RPM group should have the resources and training it needs to support queue-level forecasting, scheduling, and real-time service level management.

3. Institute a process with associated accountability to track telecom network activity and review busy studies on a regular basis to monitor telecom capacity. *(Conclusions #7)*

During this audit, LGE-KU had already reported progress on several initiatives that address RSC and BSC telecommunications network activity and capacity. The 2010 implementation of a new interactive voice response (IVR) system doubled port capacity, thereby increasing the number of inbound calls that can be handled by LGE-KU. LGE-KU and PPL have also kicked-off "best practice" workshops to establish common understanding and strategies for telecom network management.

As a result of the three-party roundtable discussions at the end of fieldwork on this audit, LGE-KU committed to a number of additional steps to better manage its telecom network:

1. LGE-KU's IT Telecom team in conjunction with the Retail Resource Planning and Management (RPM) group will review monthly trunk utilization to implement necessary changes to support changing business needs and ensure that adequate "trunking" capacity is available to customers.
2. LGE-KU will request routine reporting from telecom vendors to track traffic on local and long distance services.
3. Develop post-storm reporting to better understand impact of storms on internal and external telecom networks.
4. Ensure there is spare capacity as well as use carrier tools to route calls to 3rd party providers during major unplanned events.
5. Develop annual process to assess and report on telecom network capacity and performance. Incorporate findings / needs into annual corporate planning.
6. Evaluate high-volume "stress" testing telephony to ensure adequate sizing and performance in high volume conditions.
7. Evaluate / implement "Virtual hold" once call metrics are sustainable and only then will it be used as a method to provide levels of support during call volume peaks.

In addition to the above commitments, LGE-KU should also report call handling statistics, including the level of abandons and call overflow (to TFCC), for Residential and Business Service Centers, on a monthly basis to the Kentucky Public Service Commission.

4. Improve customer service hiring practices and working environment to facilitate higher Residential Service Center agent retention. *(Conclusions #4)*

Assembling the right mix of resources to ensure high-quality, cost-effective customer care offers a constantly evolving challenge. Labor represents 80 to 90 percent of a customer service budget; therefore, retention proves critical. The key to higher retention is not only finding individuals that can do the job, but also finding individuals that want to do the job and will fit into a company.

The turn in the world economy and rising unemployment has left many companies facing new challenges; *e.g.*, finding the right candidates in an expanding talent pool. Identifying candidates that will perform well and stay as long as you need them can be a challenge, but finding the right individual among thousands of other applicants can be a daunting task.

Pre-hire testing can save substantial time and money, significantly cutting the time to hire by narrowing the applicant pool to those who demonstrate specific skills. Simulation and role-play can further qualify job applicants prior to interview, thus giving candidates a chance to experience the job prior to hiring. Behavioral testing takes it one step further, identifying applicants who are more likely to like the job and want to do well.

Customer Service Representatives serve as a direct point of contact for customers about their utility service. Because issues related to utility service can be complex topics to customers, it is imperative to have skilled agents. Recognizing it takes considerable time to learn the extensive subject matter required of an agent, the recruitment and retention of qualified agents for this important front-line position is a high priority.

During the course of this audit, LGE-KU made a number of changes to its new-hire practices that should have a very positive impact on agent retention and ultimately customer satisfaction:

- Enhanced the recruiting, hiring and on-boarding process of new Call Center employees:
  - Drafted new job advertisements
  - Implemented behavior-based assessment tools and interviewing techniques
  - Instituted the use of job shadowing, peer interviews and call simulations to better convey job expectations to candidates
- Shifted primary hiring method to direct hire, rather than temp-to-hire
- Launched and funded on-going reward and recognition activities for Call Center staff
- Designed and implemented "real-time coaching" training for call center support and management staff.

LGE-KU has thus embarked on a number of measures to improve agent retention; however, further efforts are required that will help LGE-KU identify the right candidates for hire as well as create a working environment in which agents will strive to excel and develop. Specifically, LGE-KU should pursue the following recommendations:

1. Continue enhancement of recruiting, hiring and on-boarding of new employees by surveying new hires to better understand how to continually refine the process and minimize new-hire surprise.
2. Recruit for the position and the schedule. Effective call center organizations use a combination of part-time, temporary, and full-time labor. Be sure to recruit for each type of labor separately as the schedule might dictate a different pool of interested candidates.
3. Promote employee referrals as a source of eligible candidates. By tapping into them as a source for open positions, organizations achieve greater loyalty, lower turnover, improved productivity and profits.
4. Enhance retention of employees by further defining career progression paths (paths leading to supervision, Quality Assurance, training, and RPM) and providing additional training opportunities.
5. Measure the impact of frontline recruitment efforts—specifically, quality of hire. Identify the factors that increase the quality of hire, determining the difference between average and quality hires, and identifying sources that produce high quality hires.
6. Enhance working environment by reducing consistent mandatory overtime requirements, lowering occupancy targets, and providing off-call activities for agents.

These additional initiatives, combined with LGE-KU's accomplishments to-date should improve agent retention. LGE-KU should also report Residential and Business Service Centers actual staffing levels (employee and temporary) and turnover statistics on a monthly basis so the Kentucky Public Service Commission can monitor the Company's commitment to improve employee retention.

5. Enhance Customer Information System Usability. *(Conclusion #8)*

The Companies need to complete an assessment of the customer information system "ease-of-use" for customer service representatives, inclusive of: improved customer search functionality, prevention of errors, reduction of time needed for training, and reduction in transaction time.

During the audit, LGE-KU undertook several initiatives that address CCS usability, including:

- Internal review of CSR Average Handle Time (AHT) improvement initiatives in 2010.Approximately 30 enhancements were completed from June through November 2010.This resulted in recognized time savings per call. The company also continues to explore additional technologies to improve the display of summarized customer account exceptions in the Customer Information System.
- Discussions have been held with SAP and Genesys, LG&E-KU's Computer Telephony Integration (CTI) vendor, to review the known technical and processes challenges to implement CTI with its' SAP Customer Relationship Management. SAP provided LG&E-KU us the latest copies of their Integrated Communication Interface documentation. Possible resolutions to the Companies' issues were provided.
- The Companies continue to engage SAP in conversations related to usability, participate in America's SAP Users Group groups designed to provide feedback to SAP regarding enhancements and improvements to their applications, and attend conferences to provide networking opportunities with other utilities on sharing best practices.

As a result of the three-party roundtable discussions, LGE-KU committed to a number of additional steps to improve CCS usability:

1. Re-engineer the CSR interfaces. The Company is currently working with Gartner and SAP to review existing user interface to determine if any changes can be made to enhance the user experience. The goal is to obtain better flow, fewer screens/clicks, make system interaction more conversational and scripted.
2. Integrate CTI technology to enable "screen pops" in CCS. The Company is currently working with Genesys to use its SAP connector product to produce real time screen pops for both CCS and TOE (Trouble Order Entry)
3. Evaluate and improve the customer search functionality
4. Network with other utilities to maximize CCS / SAP usability.

These efforts are expected to improve handle time, reduce errors, and to lower new hire training time and complexity. Additionally, LGE-KU should discontinue the practice of asking customers to provide social security numbers in order to pull up accounts in CCS.

6. Implement actions to ensure that meter reading accuracy meets or exceeds targets. *(Conclusions #9)*

LG&E meter reading currently meets or exceeds the Company's established goals; however KU meter reading business partners have historically lagged expectations. Contract meter reading can be a very effective meter reading approach, especially as utilities transition to automated meter reading and smart meters. However, utilities need to manage contractors just as they manage employees, to ensure that they receive the quality and quantity of work that they expect. This entails ensuring that company supervisors of contractors have well-defined responsibilities and processes, and supporting tools, to make monitoring more effective in securing the value the company deserves. It is important that LGE-KU develop and implement processes and procedures to ensure the accuracy of meter reads.

To date, LGE-KU has completed several initiatives aimed at improving meter reading accuracy and performance:

- Implemented a new meter reading system, fully integrated with CCS
- Fostered solid working relationships with meter reading contract partners
- Established Performance Scorecard with "at risk" incentives tied to meter reading accuracy, meter read completion, and customer satisfaction
- Conduct quarterly performance reviews with contract partners.

As a result of the three-party roundtable discussions, LGE-KU committed to a number of additional steps to further address meter reading accuracy issues:

1. Conduct "all hands" meeting with all employees involved in the meter reading function along with the executives from contract partners to communicate LGE-KU's new vision and commitment to improve meter reading performance.
2. Work directly with the KU meter reading contractor to develop and implement improvements to ensure accuracy targets are met or exceeded on a sustained basis.
3. Utilize benchmarking data to identify utilities that excel in meter reading accuracy and compare their processes and procedures to seek improvement opportunities.

4. Partner with internal customers to conduct comprehensive review of current processes and procedures to identify gaps and develop and implement corrective actions.
5. Institute field quality audit to spot check for meter read accuracy, condition of facilities, etc. and establish targets for appropriate company personnel and include in Performance Management Plans.
6. Tighten the meter reading parameters contained in the meter reading system to reduce the tolerances for increase/decrease in monthly meter reads.
7. Re-evaluate the Performance Scorecard to determine if any business partner contractual changes are warranted.
8. Enhance communications with meter reading employees regarding performance
    a. Review performance results monthly
    b. Create a "How are We Doing" bulletin board to post monthly and YTD performance.

These efforts should improve the meter reading contractor's focus on meter reading accuracy and result in improved accuracy. LGE-KU should also report meter reading performance, including route completion and accuracy statistics, on a monthly basis to the Kentucky Public Service Commission.

7. Develop and implement Service Order business processes consistent with effective workforce management planning, service order prioritization, and a high level of schedule adherence. *(Conclusion #10)*

The Companies need to conduct analysis of current service order processes to identify opportunities that enable achievement of Company's goal to improve the customer experience, maximize resource utilization and minimize backlogs. The analysis will include review of existing benchmark information, discussions with Mobile Software Vendor, and process improvement techniques.

To date, LGE-KU has completed several initiatives aimed at improving field service order performance:

- Implemented mobile workforce system that is fully integrated with company's Customer Information System.
- Established key performance metrics for service order completion and tied to key employee's performance management plan.
- Implemented a performance tracking software that allows more granular analysis of employee and departmental performance along with ability to create a real time performance dashboard.
- Developed solid working relationships with company contract partners who provide field services.
- Established Performance Scorecard with "at risk" incentives tied to field service order completion, schedule adherence, and customer satisfaction.
- Conduct quarterly performance reviews with contract partners.

As a result of the three-party roundtable discussions, LGE-KU committed to a number of additional steps to further address field service order effectiveness:

1. Conduct "all hands" meeting with all employees involved with the service order function along with the companies' contract partners to communicate the new vision and commitment to improve service order performance.
2. Enhance communications with all service order employees to inform them on performance.
   a. Review performance results monthly
   b. Create a "How are We Doing" bulletin board to post monthly and YTD performance.
3. Utilize benchmarking data to identify utilities that provide superior customer service in field services and evaluate their processes and procedures to seek improvement opportunities.
4. Partner with internal customers to conduct comprehensive review of current processes and procedures to identify gaps and develop and implement corrective actions.
5. Institute field quality audit to spot check the customer experience and service order completion accuracy. Establish targets for appropriate company personnel and include in their Performance Management Plan.
6. The companies will create specific service level goals for customer-requested orders, enhanced tracking and metrics of service level goals, establish processes to complete priority work orders within reduced timeframes, and identify opportunities to reduce the number of field visits.

These efforts should improve field service performance and enable LGE-KU to meet service order completion targets. LGE-KU should also report field service performance, including service order completion rates, on a monthly basis to the Kentucky Public Service Commission.

8. Standardize Billing Integrity business processes; review and address staffing levels, while establishing an environment of continuous improvement. *(Conclusion #11)*

Customers expect accurate and timely bills. For the majority of customers, their bill is the only contact they have with the companies. Billing Integrity must continue to enhance employee knowledge and understanding of CCS to reduce the period of time between the creation of an exception and issuance of the associated bill or billing corrections. Billing Integrity must also continue to identify opportunities for and implementations of continuous improvement initiatives.

To date, LGE-KU has completed several initiatives aimed at improving customer billing performance:

- Implemented new, integrated customer information and billing system to replace two company-specific legacy systems.
- Reduced the backlog of billing exceptions from a high of 24,000 in 2009 to the current level of 5000.
- Conducting monthly meetings with Billing Integrity leadership team to identify processes improvement needs and encourage standardization between companies.
- Identified new Key Performance Indicators to better track departmental performance.
- Included performance and quality metrics in the employees' 2011 PEPs.
- Developed an organizational restructuring to address BI deficiencies in tariff and rate expertise and in metrics management.

- Established a Strategic and Operational Performance Group to assist with process documentation, metric tracking, and root cause analysis.
- Moved Billing Integrity employees to the Shared Services Company to allow for better utilization of all resources across all companies.

As a result of the three-party roundtable discussions, LGE-KU committed to a number of additional steps to further address billing effectiveness:

1. Continue to pursue process standardization and continuous improvement between companies, including the adequate documentation of all routine processes in an effort to drive and improve employee accountability and quality of work.
2. Training and Quality Assurance:
    a. Develop a training and change management program overseen by dedicated full time staff to ensure all Billing Integrity employees have the knowledge necessary to resolve assigned billing exception cases.
    b. Monitor the performance quality of the employees, addressing identified deficiencies and departmental adherence to internal controls.
3. Measures and Targets:
    a. Establish a permanent group responsible for identifying and implementing effective measures and targets to track departmental performance and effectiveness, to quickly identify variances, and to determine root cause for identified variances.
    b. Develop a method to track and differentiate pre-invoicing errors from post-invoicing errors.
    c. Monitor system and departmental processes to identify improvement opportunities and coordination of cross-functional process enhancements.
4. Staff the newly created Billing Integrity specialists group that will be responsible for
    a. Coordinating the meter to bill process to ensure billing adherence to approved tariffs
    b. Providing expertise in identifying customer impact of proposed tariff changes
    c. Testing of all billing system changes to ensure correct billing.
5. Add enhanced billing knowledge to research and resolve customer complaints and perform root cause analysis to identify necessary training, system, and process improvement opportunities.
6. Enhance hiring process to include aptitude based component, tariff training to increase understanding of tariffs and rate application, and increased educational requirements for certain positions.
7. Reduce Billing Exception resolution period:
    a. Re-examine current system tolerances in an effort to identify tighter tolerance levels that result in quicker identification of customer data anomalies.
    b. Identity a method to track the period of time from billing exception creation to billing exception resolution and set goals with the intent of reducing the time necessary to resolve.
8. Address current requests to add more complex meters capable of capturing consumption over multiple time periods, support internal need for more detailed load utilization across entire service territory for enhanced forecasting capability, and prepare for future rate structure changes which will likely include more complex metering and billing structures.

These efforts should improve billing performance and help address billing backlog issues. LGE-KU should also report billing performance, including billing completion and accuracy statistics, on a monthly basis to the Kentucky Public Service Commission.

9. Carefully plan and deploy full-balance dunning changes in a manner that is sympathetic to customer need. *(Conclusion #12)*

This change will allow the full account balance to be considered for dunning. Once implemented, the full account balance dunning will conduct a review of a customer's past due account balance and recommend the appropriate dunning action to align with the Customer Experience Strategy Respectful Relationships.

Since the audit began, LGE-KU has accomplished the following actions:

- Coding for full account balance dunning has been underway since late Q3, 2010.
- 95 percent of testing has been completed.
- Implementation Team formed in April 2011.
- Initial identification of accounts subject to full account balance dunning completed in April 2011.Detail provided by customer name, account number, billing portion, total account balance, age of arrears.

As a result of the three-party roundtable discussions, LGE-KU committed to the following steps to deploy full-balance dunning:

1. Complete testing of proposed system changes by end of second quarter 2011.
2. Prepare Call Centers, Business Offices and Field Services for implementation by the end of second quarter 2011:
    a. Develop talking points for use by front office employees in discussions with customers.
    b. Determine phase-in levels in order to minimize volume impacts to front office and Field Service.
    c. Establish processes for addressing customers who need payment assistance and to ensure customers are not harmed due to this process change.
3. Develop customer communication plan.
4. Senior management review and approval of implementation plans**.**
5. Request informal conference with KYPSC to review communication and implementation plans.
6. Begin implementation during third quarter**.**
7. Ongoing monitoring of dunning change effectiveness and customer impact, and modification of plan as deemed necessary to minimize customer impact.

It is critical that LGE-KU work closely with the KYPSC as full-balance dunning is rolled out to customers. LGE-KU should also report collections performance, including dunning statistics, the % 30, 60, and 90 day arrears (and number of accounts), and net write-off levels, on a monthly basis to the Kentucky Public Service Commission so that it can monitor the Company's progress. Additionally, LGE-KU should report the number and percentage of accounts disconnected in error on a monthly basis.

10. Improve the focus on Quality. *(All Conclusions)*

Corporate customer service decision-making and execution must include a focus on quality and therefore the company must consider the customer needs before, during and after each contact to ensure a high level of quality service.

During the audit investigation period, LGE-KU implemented the Customer Impact Assessment to support business planning and decision framework. While this is an important step in helping employees and management recognize the importance of the "customer experience," more should be done to emphasize the importance of service quality.

As a result of the three-party roundtable discussions, LGE-KU committed to a number of additional steps to the Companies' commitment to quality service:

1. Evaluate efficiency (Average Handle Time) in relation to effectiveness (quality and first contact resolution) in completing customer calls. Develop metrics that reflect this balance.
2. Re-evaluate policies and practices in call centers to minimize the transfer of customers.
3. Implement "Soft Skills" training for management team and then deploy across the customer service organization inclusive of all front office and field personnel.
4. Expand "Quality Monitoring" by implementing additional transactional surveys.

In addition to the above commitments, LGE-KU should include quality assurance activities in every function of Customer Service. This would include setting up:

- Random transactional monitoring/review of billing transactions
- Route audits / field spot checks of meter readings and field orders
- Side-by-side quality monitoring of Business Office transactions
- Random transactional monitoring of collections activities
- Monitoring calls that have been surveyed for customer satisfaction

The emphasis of these efforts should be to focus employees and management on the effectiveness of the customer interaction as viewed by the customer. In addition to the above commitments, LGE-KU should also report quality performance (for Billing Integrity, Meter Reading, Field Service, Business Offices, Collections, and Call Centers) on a monthly basis to the Kentucky Public Service Commission.

III. Customer Information Systems Support

Customer information systems comprise a key component of modern utility operations. They support a wide variety of customer service functions, including billing, collections, customer call center operations, customer communications, field operations, and others. Well-managed utilities recognize that close attention to the proper development, testing, deployment, and maintenance of customer information systems is crucial to the effectiveness and efficiency of these systems. Liberty organized its review of LGE-KU's customer information systems support into two main areas:

1. System Development and Testing
2. System Support and Maintenance.

A. System Development and Testing

1. Background

Utilities often reach a point where it is necessary to introduce a major system upgrade or even deploy a completely new system in order to maintain effective and efficient customer information systems applications. LGE-KU's recent implementation of CCS exemplified this situation. Care must be taken with the design, development, testing, and deployment planning to assure customer service levels are properly maintained when such system changes are introduced, and that the systems operate accurately and effectively after introduction.

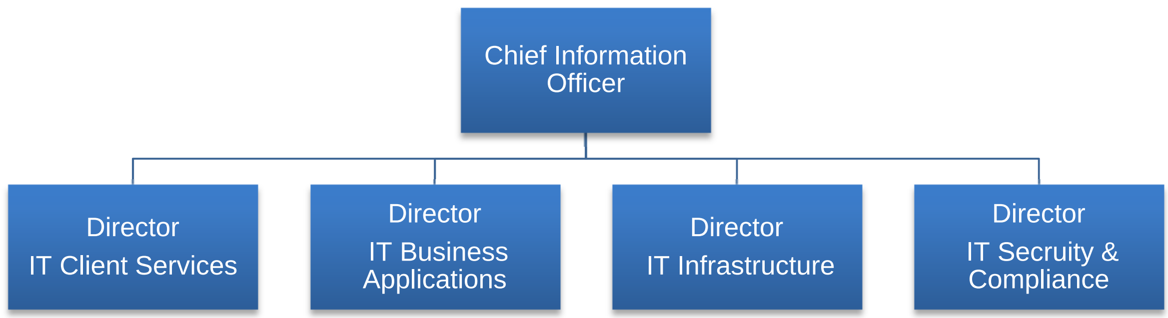
Liberty examined LGE-KU's system development and deployment process in general, but focused principally on the CCS system development and implementation. This work represented a major recent implementation that has had significant impact on customer service operations, as highlighted in Chapter II, Customer Service Functions. Liberty examined the process the Company has used for designing and developing customer service applications, including:

- System design
- The balance between using in-house resources and consultants or contractors
- The balance between use of off-the-shelf software applications and internally developed software
- Design and execution of system tests
- Planning and execution of the cutover to new systems
- Transfer of customer data into the new systems
- New systems training of employees.

2. Findings

The Information Technology organization provides information-systems support to various LG&E and KU Energy organizations, including those responsible for customer service. The Chief Information Officer (CIO) heads Information Technology. The current CIO joined the Company in late 2010, and recently realigned the organization somewhat with the stated intention of taking advantage of synergies to support the business applications. The next chart illustrates the current organizational configuration.

Information Technology Organization



The basic structure of most organizations involved in application design, design, development, and support did not change significantly as part of this realignment, despite organizational name changes and resorting of some responsibilities among the director-level organizations.

a. General Design, Development, and Implementation Process

The IT organization engages in various levels of application development on an on-going basis, most commonly for system enhancements but also for special projects, such as CCS and the recent IVR implementation. Projects and enhancements are initiated either by requests from a client organization or to resolve a problem that has been identified. The typical development life cycle comprises the following four steps:

- Needs Assessment: request from the business clients and initial high-level analysis
- Planning: including determination of project effort and costs
- Build and Configure: development, testing, and cutover
- Implementation: including evaluation of the project for accuracy and completeness.

A Change Management Process, which specifies the required documentation and approvals for changes, governs the application systems implementations. Exceptions to the Change Management procedures apply for certain emergency changes. Requests for new applications and software enhancements and other changes require formal Requests for Change (RFC), which are documented, logged, and tracked. The Company uses a tool for RFC submission and tracking; it also tracks incidents and implementations. The tool also automatically contacts the appropriate IT support team for analysis and prioritization of requests. A project manager is assigned to gather requirements from business clients and other IT groups and to assemble a team to analyze, document, and plan the activities necessary to meet a request. A high-level assessment of effort and costs involved to complete a request is prepared and submitted to the business client organization for approval. The IT group uses a Project Success Method process to assure that user needs are met. This involves planning sessions between IT and the business clients leading to:

- A project charter
- A detailed project plan
- A project budget

- Reviews by a contract management group in IT Client Services of contracts with existing vendors or initiation of contract negotiations with new vendors, if outside resources are required
- Identification and documentation of IT Support requirements
- Documentation and tracking of changes to the existing production environment through the Change Management Process.

At the conclusion of this step, further approvals must occur for a project to proceed. They include approvals from both the IT and business client organizations. If the project requires capital investment, financial approval is needed, including review of a formal investment proposal by the Investment Committee.

The project manager has responsibility to ensure that the project is completed on time and on budget. Project teams vary significantly in size, depending on the nature of the project, ranging from a single developer, who acts also as project manager, to very large teams, as with CCS. The project manager reports to an IT manager or a manager from the business client organization, maintains a formal project plan to monitor the project, and holds control meetings on a regular basis for team members to report status and raise any issues and concerns. Larger projects are monitored by quality assurance review and/or steering committees. The project manager is also responsible for creating a communications plan to affected users prior to implementation.

The Company engages vendors if external resources are needed to supplement the level of internal resources with appropriate skill sets for an application. These resources operate in the following primary ways: as integration partners, through awarded scopes of work, for staff augmentation, and for primary and secondary support responsibility. For example, the Company has engaged systems integrators to help plan and manage particularly large projects, such as CCS. Larger projects can require use of some supplementary outside resources, including resources to help with software development and testing. The Company often awards scopes of work to an application vendor or one of its partners, mainly for development and implementation of very proprietary applications. When application support requires assistance from the vendor, the Company sometimes uses vendor personnel to supplement the IT personnel assigned to application support.

A software library management tool controls and monitors software updates, including recording software changes and providing authorization to access production code and to move modified code into production. Software testing is subject to test plan standards and testing procedures to ensure comprehensive software testing and approval. The testing procedures include the availability of an environment for user acceptance testing by the business client organizations. IT and business client approvals are both generally required prior to software implementation.

The business clients are required to complete a set of tests to validate that the applications or enhancements function as required. If satisfied, the client must approve the related RFC and submit the RFC to IT for movement of the application to production. When submitting approval, the client can indicate that the approval was based on successful completion of the tests, and also has the option of noting that the required testing was impossible or impracticable but is aware of the risks and nevertheless approves the move into the production environment. The latter circumstance typically occurs for smaller or lower impact projects or where equipment is required for the testing that has not yet been installed.

If an application requires IT or user training, a training plan and schedule is developed and implemented as part of the development process. The IT Training group or personnel from the business client organization conduct the training. Documentation for the business client, IT support, and disaster recovery is assembled with the cooperation of both IT groups and the users, as appropriate, as part of new application or systems development. The documentation includes application and user documentation, training materials and job aids, Project Success Method documents, and such IT procedures as recovery and backup procedures and security controls.

The process can involve the project manager's performing a review after implementation is complete to verify the application and system changes meet the business needs and followed standard procedures.

b. CCS Design, Development, and Implementation

Prior to the implementation of the CCS system, the Company used two legacy mainframe-based Customer Information Systems (CIS), one from LG&E and the other from KU. These legacy systems were 15 to 20 years old, and contained limited applications, with back office support in a separate system. The Company initiated in late 2005 a study with the assistance of a large consulting firm with expertise in systems integration projects to examine processes that might benefit from new system implementations. This review led to a mid-2006 proposal to implement the SAP CCS system. The proposed project involved the replacement not only of the CIS, but also the meter reading system, auto-dispatch for Field Services, and the customer self-service platform. The business case was developed, reviewed, and approved during the period from fall 2006 into early 2007. After approval, the same system integration firm that had assisted with the original study was engaged to assist with the CCS system design, development, and implementation.

The Company has noted a number of advantages of CCS over the systems replaced. The LG&E and KU operations now draw support from the same system; moreover, CCS is a state-of-the-art system, implemented with state-of-the-art hardware. It provides improved scalability and modularity. CCS also provides a number of features that provide more functionality to help manage customer operations, such as data warehousing, enhanced reporting and business intelligence capabilities, business process exception management, an enhanced customer self-service platform, and additional customer operations functionality.

The CCS project steering committee contained high-level executives and managers from the client business organizations, in addition to the principal IT personnel involved in the project. The client representatives included the Energy Delivery Senior Vice President, the Retail Vice President, the Controller, the Regulatory Vice President, the Energy Delivery Human Resources Director, and key retail directors.

Work on CCS implementation began in May 2007, after initial planning and start up. The CCS implementation project was structured into the following phases:

- Mobilization (March – May 2007) – initial planning and start up, including internal SAP training
- Blueprint (May – September 2007) – analysis and documentation of detailed business processes and migration plan
- Design (September 2007 – January 2008) – detailed design of the system layout
- Build (February – August 2008) – system configuration and development
- Test (July – December 2008) – validation of programs, data, and processes
- Deploy (December 2008 – March 2009) – application rollout, including operational readiness testing, training, and mock conversions
- "Go-live" and Initial Production Support (April – June 2009)
- CIS Archive Database System (June – September 2009).

The Blueprint phase of the project included workshops with IT personnel and subject matter experts from different parts of the business to create Business Process Design templates. Activities during the Design phase included incorporating the Business Process Design templates into a series of Solution Design Documents grouping similar functions.

Testing took place in multiple phases: unit, functional, assembly, product (end-to-end testing using converted data), and operational readiness testing (ORT). Business clients embedded in the testing teams helped to develop the test scripts. The ORT included testing of the batch processing of bills. For two months CCS was run in parallel with the old CIS using data from meter reads to produce bills and compare them for accuracy.

Employee training included initial general exposure to CCS, including demonstrations sent to individual desktops and "road shows" during 2008. Classroom training, led primarily by Retail employees who had also served as testers on the project prior, took place during the first quarter of 2009. Opportunities were also provided for additional practice before "go-live," including manager shadowing of project team counterparts.

The Company established 49 "go-live" criteria in readiness areas owned by various steering committee members. The steering committee agreed to start the cutover after determining that 47 of the readiness criteria were in "green" status, and that the risk level of that for the remaining two was deemed acceptable.

Five mock data conversions and two cutover "dress rehearsals" occurred. The cutover process took five days (three business days) concluding on April 1, 2009. During this period, the Company held orders to be keyed into the system after "go-live." The team conducted the manual data conversions in the two days before "go-live" and validated the data load through testing. There was no bill suspension during the cutover; instead, the company adjusted the billing schedules.

The Company monitored the impact of the conversion after "go-live" using a series of "CCS Health Metrics" in additional to other detailed measurements tracked during the transition to the new system. The CCS Health Metrics were shared with the Steering Committee and Retail management. There were daily calls with the affected organizations to monitor progress for about two months after the cutover. After that, the call frequency dropped to twice or three times per week and then weekly for several months.

B. Systems Support and Maintenance

1. Background

The IT organization assures that the systems are properly maintained and updated after they have been deployed and are operating. Customer service organizations within the company rely on IT support to solve hardware and software problems that arise. The IT organization must effectively interface with these organizations to assure that the systems continue to allow them to provide good service to the customers, by introducing appropriate updates and enhancements to the systems. Modern IT organizations also are responsible for assuring security of customer data and providing efficient data communications and other telecommunications links.

In examining systems support and maintenance, Liberty reviewed:

- The organizational approach to IT
- Internal user help-desk and other system support operations
- Security procedures
- The approach to disaster recovery
- The methods used to learn user needs and plan to meet their requirements
- How IT support is evaluated and tracked
- Hardware deployment
- System change control processes
- Internal data communications and other telecommunications operations
- Disaster recovery programs.

2. Findings

All four of the Information Technology director-level organizations have some responsibility for general support of customer service functions:

- IT Business Applications, previously known as IT Service Delivery, has primary responsibility for the support of applications for the vertical business organizations, including those applications such as CCS that are devoted exclusively to customer service functions. The organization includes a group of business analysts, who act as liaisons between IT and the business clients.
- IT Client Services, previously known as IT Strategy & Client Support, now provides support of applications for shared services (finance, human resources, *etc*.) along with other client support services.
- IT Infrastructure has responsibility for data center management and for network, hardware and basic software infrastructure. It contains two new groups that consolidate previously dispersed functions: a communications group, combining telecommunications and data communications support, and an infrastructure architecture group.
- IT Security & Compliance has responsibility for security methods and procedures and such IT compliance matters as those related to Sarbanes-Oxley requirements.

C. Conclusions

1. LGE-KU has an effective process for system design and development.

LGE-KU uses a structured approach to system design and development, with explicit process staging and controls to assure adequate performance, sufficient testing, and necessary documentation. The controls include approvals at various steps in the process through final acceptance by client organizations. The process has sufficient flexibility to apply both to major systems implementations (like CCS) and to small application enhancements. The process provides the appropriate level of discipline and control for major projects without requiring excessive process burdens for minor changes. The process is appropriately client-focused, involving the internal business organizations at all steps of the process from design specifications through testing and acceptance.

Project leadership is generally shared between an IT lead and a person designated by the business client. The customer service organizations include groups that specialize in IT application issues, and act as business analysts to help with business requirements and identify new business functions addressed through applications. The IT organization generally links a manager to these groups. The CIO reports good relationships between these organizations and the IT organization.

The Company's approach to choosing hardware and software is sound. The basic IT strategy is to use commercially available software and systems, rather than build its own from scratch. This strategy can be an efficient and cost effective approach and provide greater flexibility and easier maintenance of and enhancements to applications.

The IT organization appropriately balances the use of internal and external resources. The organization sometimes uses contractors for staff augmentation and support functions, and engages consulting firms and system integrators for larger projects, like CCS. When outside services are used, the IT organization tries to pair employees with contractors or consultants to help provide a skilled employee group that can carry on effectively after the outside resources depart. The Company limits the use of integration partners, reserving them primarily for larger projects. When such resources are required, the Company tries to leverage strategic vendor relationships at the corporate level to help contain costs.

The IT organization uses a structured testing approach commonly employed in large scale system implementation. The approach provides progressive testing from individual isolated pieces of code to the end-to-end system. Testing also includes user acceptance tests before final deployment. Business subject matter experts and other client personnel are involved in testing design and execution.

A frequent pitfall of the implementation of large system replacements is the inadequacy of data conversion from the older systems. The CCS project illustrates that the Company can take a disciplined approach to data conversion during large implementation projects.

The Company's design, development, and implementation process also includes steps to appropriately document and communicate the changes to affected users. The Company has provided extensive training for large scale implementations, such as that for CCS.

2. The CCS design and development process was appropriately structured, including adequate attention to complete and comprehensive system testing, customer data transfer, and employee training.

The Company carefully considered the decision to replace the existing systems with the SAP CCS solution. The advantages of moving to a state-of-the art system with enhanced features and flexibility and greater ease of maintenance and upgrading were appropriately judged to outweigh the risks. Alternative solutions were researched, including surveying industry peers. The decision also involved the appropriate level of internal attention and approval.

The project was well organized and managed, with extensive involvement of personnel from the customer service personnel in the steering committee, development of system specifications, test design and execution, and employee training. The project used an approximately equal mix of internal and external personnel, which is appropriate for a project of this size and complexity requiring specialized skills. The development and implementation was phased with decision points established to assure approval by the most affected organizations before proceeding; this included a structured approach to the "go-live" decision that involved steering committee review of the status of 49 readiness criteria. The cutover was carefully planned and prepared through mock data conversions and dry runs.

The development and implementation included a large-scale, graduated testing process, beginning with unit testing of small pieces of code and culminating in product or end-to-end testing, followed by user acceptance testing by the customer service organizations. The end-to-end testing process took about six months. The end-to-end testing, which was based on data converted from the legacy systems, lasted 12 weeks, involved 20,000 hours of effort, and comprised 400 end-to-end business processes and nearly 6,900 scripts. Before cutover, billing was tested using actual meter readings from the field and compared to legacy system bills; however, this did not include mimicking on-line activity that would affect bills (for example, no new customers were added). During the cutover period, the team ran a partial batch billing of about 30 percent of the accounts.

The Company provided extensive employee training for CCS. This included classroom training at 17 locations across the state by 37 trainers primarily from the Retail organization who had participated in the testing phase of the project, supplemented by other opportunities to train and gain knowledge about the system outside the classroom. The Company delivered over 36,000 hours of training through more than 100 courses to over 550 attendees. System access by employees required meeting proficiency targets that had been established.

The cutover appears to have gone relatively smoothly, although there was a one-day delay in the first bills to resolve a data issue. After cutover, there was a significant degradation in call center performance that lasted for several months. This is not completely unexpected for such a major system change, and was to some extent anticipated by the CCS development team. However, the extent and duration of the performance degradation suggests that the Company should have proceeded more cautiously with the CCS implementation and prepared better for the necessarily disrupted effects of such a transition. As noted in Conclusion 8 in Chapter II, transitions of this type are necessarily traumatic for the employees, particularly the more experienced ones. In retrospect, it might have been advisable for the Company to include some additional training for more complex transactions and more opportunity for the employees to hone skills with the new system.

However, training in an artificial environment can only go so far to prepare employees. It is natural for employee performance to be degraded initially on a new system. The Company was also well aware that certain processes are inherently more complex and slower for employees to complete on CCS but concluded that the many advantages of the new system outweighed these disadvantages. The Company has noted that other circumstances occurring during the period around the cutover that provided additional stresses on the call center by adding to increased call volumes; these included:

- Some billing and collection policy changes that were scheduled to coincide with cutover, including changes in the billing cycle changes, bill due dates, and new late payment charges for KU customers, as noted in Chapter II, Conclusion 5
- The end of a planned moratorium on disconnects
- Recent weather incidents, including ice and snow storms earlier in 2009
- Restarting of the dunning clock, leading to a record number of disconnects by the end of April 2009.

Conclusion 5 in Chapter II notes some other operational problems that occurred after cutover. As a result of these factors, the Company should have expected significant increases in call volume initially and in call handle time both temporarily and permanently, which the Company did anticipate to some extent. Nevertheless, the evidence is that the customer service organizations failed to staff the call centers sufficiently, as discussed in Conclusion 6 in Chapter II.

A large number of change requests (RFCs) came after cutover. This result is also not surprising for such a project; the overall number and length of time to resolve them does not appear to be excessive for an implementation of this magnitude. The implementation team made the decision to fix errors but not make any enhancement changes during the first several months to allow the users to learn the system. This is a sensible approach; it is appropriate to wait until there has been sufficient experience with a new system to distinguish problems due to unfamiliarity with the system from those truly requiring system enhancements to resolve.

3. **Although the CCS design and development process was well structured, some design decisions adversely affected the usability of CCS when it was placed in operation.** *(Chapter II, Recommendation #5)*

Despite the problems noted in the previous conclusion, the CCS implementation process itself was sound and appropriately executed. No process can guarantee that the correct decisions will always be made. Furthermore, the correctness of decisions is much easier to determine in retrospect than during the uncertainty of the development and implementation process.

Nevertheless, there are continuing issues experienced with use of the CCS system as noted in Conclusions 11 and 12 in Chapter II. These issues include:

- Awkward manual procedures that are required to transfer data into CCS from the CTI system that collects customer data from an IVR; this issue was explicitly identified during system testing but no acceptable workarounds were identified that would address the issue completely.
- Searching for customer information can be difficult.
- Implementation of a current-bill dunning process that has negatively affected collections performance; the Company is in the process of implementing a solution to the dunning process that is scheduled to be implemented in May 2011.
- Disconnects in error have increased.
- Bad data has been sent to collection agencies, which resulted in part from the CCS design.

The Company performed sufficient research during the process of selecting the CCS application for implementation to know that some processes are inherently more complicated for call center representatives in this system than in the old CIS systems. The design team chose to maintain a bias toward maintaining the basic CCS configuration rather than introducing much customization, since this would allow a more sustainability for the application and make it easier to change and upgrade in the future. The team did attempt to provide some customization to the customer service module for the call center representatives and have continued to enhance it since "go-live."

4. The LGE-KU IT organization's structure and processes have been designed and they operate in a manner to provide adequate support of the Company's customer service functions.

The new CIO has introduced a vision statement and 2011 performance objectives for his organization that reflect a client service orientation. The CIO has monthly meetings with his officer peers and includes the IT directors in the meetings; he has developed a set of score cards tailored for each line of business. Key projects are tagged as in red, yellow, or green status. The score cards are published monthly and are discussed with the officers and their direct reports in the monthly meetings. IT tracks various statistics that measure how well the organization addresses client problems, and has generally performed well against targets.

The staffing levels have been stable over the last four years. There is low staff turnover and significant longevity among the employees. Jobs are posted both internally and externally; recently the organization has been hiring more external candidates, as the need for more current skill sets has grown. Some positions have been newly created for 2011 with the goal of augmenting the current skill sets.

IT maintains a service desk as a single point of contact for end-users to report information systems problems. These issues are addressed by the service desk personnel or forwarded to Level 2 support in the application or infrastructure support groups for resolution. The Company's intranet also contains online help and training for customer service representatives. IT tracks trouble tickets counts and trouble resolution statistics to monitor performance. The IT organization also does formal surveys of a random sample of internal customers about the quality of service desk support. They track trouble tickets by severity and service level; the performance statistics are compiled monthly by line of business and total Company for comparison purposes.

IT has documented security procedures to protect the confidentiality, availability, and integrity of the applications that support customer service functions, including CCS. These procedures are designed to prevent unauthorized access to the systems and data through various controls, including password management and processes for reviewing, approving, and removing authorization for access to applications and data. There are additional procedures designed to protect sensitive customer data.

The Company has documented disaster recovery plans. CCS is classified as a Priority-1 application. As such, there is a secondary data center in Louisville at which the key application servers and databases in the primary data center in Simpsonville are replicated. If there is a loss of the primary data center, database administrators would work to recover the databases secondary center, after which the replicated application servers would be brought up and the SAP application started. Thereafter, additional servers would be provisioned to achieve normal capacity.

D. Recommendations

Liberty has no recommendations specifically related to LGE-KU customer information systems development and support processes. However, Recommendation #5 in Chapter II of this report relates to enhancements the Company has committed to make to the CCS system to address some of the issues noted in Conclusion 3 above.

IV. Strategic Planning and Management

A. Background

Any operational audit, of necessity, must primarily focus on the effectiveness of the physical tasks conducted by the subject organization. Tangible results will flow to the extent that meaningful recommendations applicable to those physical tasks can be made. It is therefore the auditor's obligation to seek such concrete results. This audit has met that burden, and offered many constructive recommendations for enhanced customer service. The approach adopted as part of the roundtable discussions has made LGE/KU an important, if not the most important, contributor to specific actions to be taken to address Liberty's conclusions about performance improvement needs.

Nevertheless, in analyzing performance, one must recognize that physical gaps can be affected by broader management issues, including strategic planning, corporate funding and governance. Such a connection makes these broader issues appropriate areas of examination, as they influence customer service. The work plan for this audit grouped these topics in three categories: strategic planning, operating budgets and capital budgets. This chapter addresses the work performed in these areas as part of an integrated review of Strategic Planning and Management.

Our intent here is to gauge the Company's commitment to customer service goals and objectives by determining how those commitments are reflected in strategic plans, organizational priorities, accountability for results, funding and other vehicles through which management makes its vision a reality. A general commitment in the form of words gains vitality when supported by solid evidence of that commitment. One should assume that all companies, utilities or otherwise, profess a commitment to customer service. Our audit sought to identify plans, resources, and actions that supported commitments sufficiently. Good audit practices and simple common sense demand far more than listening for the right words.

It is not often the case that differences between one's actions and words arise from dishonesty or intent to mislead. Rather, most organizations do indeed want to do the right thing, but it becomes difficult to do so when balancing many competing priorities. How that balance is struck is revealing about what are the highest among those priorities. An examination here of how those decisions have been made in the Company is therefore appropriate to understanding the depth and priority of customer-service commitments.

B. Findings

1. Gauging the Significance of LGE/KU Commitments to Change

The preceding chapters of this report address the significant issues that LGE/KU has experienced in recent years. The conclusions and recommendations of those chapters also reflect that the Company has responded strongly to address those problems at the operating level. Key elements of those responses began before this audit began. The persistence of the problems, however, raises the important question of whether the commitments made at that level, and emphasized to us by top LGE/KU management will prove sufficient to reverse a demonstrably negative course.

Important indications give confidence in the sufficiency of the commitments to produce significant and lasting, positive change. The people we have worked with at LGE/KU appear to fully understand the issues, and seem committed to fixing them. The elements of the improvement plans they have shared with us are responsive. Liberty believes that the Company has done a good job of recognizing and attacking the issues at the operations level.

Other factors, however, temper this confidence:

- The problems addressed in this audit have lingered for many years.
- The data make clear that the shortcomings were transparent and visible to all levels of management, yet there was no effective response before this audit.
- The Company has changed hands several times and the degree of commitment to customer service by its owners during that time is by no means clear; in particular, our review has suggested that the “bottom line” focus by distant owners superseded consideration of operational performance.
- One would expect that gaps in the resource levels being applied to customer service goals would take several years to become apparent in the form of visible, declining results, thus masking for a time the impacts on operations. This phenomenon is indicated by circumstances at LGE/KU.

We believe it is fair to conclude that the genesis of the Company’s customer-service performance problems lies primarily under the tenure of the prior parents. The more important issue for the future, however, is the degree to which the underlying management approaches, values, and practices will change. The specific matter of primary concern at this level is whether, when, and for how long customer service will return to importance as a primary corporate priority. Internalizing and sticking with such a priority at the Kentucky corporate and parent levels comprises a primary foundation for assuring the organization, resources, and support needed to implement the Company’s plans initially and to continue to perform suitably thereafter. Assuring that this foundation is laid and maintained form the focus of this report chapter.

We acknowledge and respect the sincerity of the commitment expressed by the customer service organization, and specifically the Energy Delivery business unit. One should expect the groups responsible for customer service to place a high priority on their areas of responsibility and accountability. Our focus here is on confirming that this commitment be much more clear than has appeared recently to be the case at the Kentucky corporate and parent level.

We underscore the importance of the LGE/KU efforts to address the issues at the operational level. Liberty does not wish to detract from the importance of the mechanical fixes. We observe, however, that the failure of a climate fully supportive of customer service objectives to take hold will inevitably lead to a failure to dedicate resources and attention, and consequently will cause even the best of plans to fail to make substantial improvement. Executive management needs to follow up its expressed commitment to change by addressing fundamental culture and resource issues in order for the proposed fixes to have credibility and likelihood of success.

LGE/KU has pointed to many actions being taken to improve operations and results as strong evidence of its commitment. Its reliance upon those actions reflects the belief that actions should speak louder than words in expressing commitment. Liberty respects this notion, but a deeper issue merits consideration. It is illustrated by the fact that our roundtable discussions with the Company and Staff failed to generate substantial dialogue on one major issue we slated for discussion. The issue related directly to the degree of corporate commitment to customer service. The issue that we had slated for discussion was that the Kentucky utilities seemed to function as an investment from the customer-service perspective, with customer-service commitments being constrained by an overriding corporate focus on the bottom line.

It certainly bears mention that we ended with this as the only open question; from a strict numbers perspective, it suggests both a cooperative and, we hope, successful audit effort. On the other hand, that open question comprises a most critical one; it gets to the root cause of many of the issues that the audit identified.

We note that new parent PPL has made a formal commitment to the PSC to "maintain superior quality utility service" and stresses its commitment to "providing unparalleled customer service." PPL also emphasizes that it will take "an active and ongoing role in managing and operating" LGE/KU. These are clearly positive developments. PPL, a recent buyer, deserves time to prove its commitment. We do not challenge the absence of "instant" results. We do, however, have concern about what the form of expression of that commitment suggests. The commitment to "maintain" superior service risks missing the point. Superior service has been lost; it therefore cannot be maintained. Instead it needs to be "regained."

We believe this distinction is more than a semantic one. Establishing maintenance as the target implies, if it does not actually accept explicitly, the suitability of current levels of performance. We believe that progress at the cultural level we are addressing here requires clear recognition by top management that current performance is not acceptable and that the process of moving to a higher plane begins with explicit acknowledgement and communication of the fact that change is needed, planned, required, and critical. Thus, while we do not expect instant results, we do believe that immediate efforts to demonstrate top management commitment are fundamental to instituting significant and lasting change with sufficient dispatch. We acknowledge that LG&E and KU have begun the process of regaining this commitment, with the recent adoption of the Customer Experience strategy and initiatives.

2. Organization and Management Approach

The utility industry has been undergoing consolidation for an extended period, with perhaps a brief time-out pending recovery from the financial meltdown of 2008. Recent major acquisitions (which included but are not limited to LGE/KU) suggest that the time out has ended and that the trend will continue. Consolidation has contributed to changes in management structure and approach throughout the industry, as executives seek to optimize the value produced by their new assets. No single solution or preferred method has arisen, but one common outcome has been the introduction of increasingly distant oversight and management. That outcome adds materially to the risk that public-service responsibilities will not be met as effectively, or that they will be redefined in a manner that will allow them to be met despite reductions in what customers actually get, see, and experience.

There seem to be several reasons for this phenomenon. First, new owners are often literally "distant," often from different countries and even continents. Oversight of far-flung operations becomes more difficult. Second, physical distance can translate into cultural "distance" as well, when owners have different backgrounds, experiences, and perceptions on service and regulation. A critical driver is how the parent perceives the subsidiary. Consider the two extremes:

- **As an investment.** The parent is focused on financial return and delegates fully to local management. The burden of balancing operational priorities is fully on the subsidiary. Operating matters like customer service are of interest to the parent only when a crisis arises, and there would be no operational experts in areas such as customer service in a parental role. In such acquisitions, the acquired company is a package asset, and that package specifically includes the management team. The subsidiary will function with a great deal of autonomy with the result that few if any synergies will be available.

- **As an integrated operating unit.** The subsidiaries are generally centrally managed and often staffed directly from a corporate services unit. Operational policies are developed and managed at the parent level. Balancing of priorities takes place at the parent level. Synergies tend to be maximized in this arrangement since the use of centralized services is a key feature.

The negative effects of "distant management" appear more likely in the "investment" scenario. Financial factors are likely to dominate parental oversight in the investment scenario while operational priorities are likely to get far more attention in the integrated operating unit alternative. There is, at least theoretically, a continuous spectrum between these two extremes, and positive and negative points along the way. Nevertheless, the fundamental attributes appear clear. The investment scenario spawns a management approach in which operating management is largely measured by their conformance to the bottom line and not their achievement of operational goals. In fact, operational performance becomes a parameter to be varied in order to control costs. The ultimate frustration in such an organization is that the local managers hear and speak about priorities and commitments, but they know that the top priority is conformance to a budget target, which may or may not represent good business when stakeholder and regulator interests and expectations are considered.

Liberty believes that the investment scenario, coupled with the management approach it spawns, represents that model in place at LGE/KU for some time; it may or may not continue under PPL ownership. The existence of this approach makes proper a concern about demonstrating the firmness and persistence of commitments that have been made and the ability of the organization to work to make substantial, long-term progress.

With that said, and not forgetting the need to "be from Missouri" when it comes to bare expressions of commitment, the commitments made by PPL in its testimony to the Kentucky Commission nevertheless should stand as positive indicators of the hope of real improvement. PPL's CEO stated:

> *PPL has committed in Regulatory Commitment No. 10 to take an active and ongoing role in managing and operating LG&E and KU in the interests of their customers, their employees and the Commonwealth of Kentucky. PPL's preference is for the management of PPL Kentucky to maintain its oversight of LG&E and KU, and for each of LG&E and KU to maintain operational*

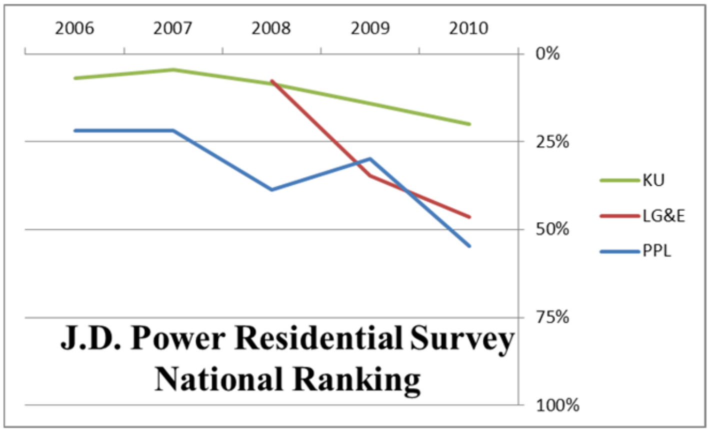
> *administration of their respective companies as set forth in Regulatory Commitment No. 9 and subject to PPL's obligation under Sarbanes-Oxley . . .*

Our interviews with PPL management indicated that they viewed the existing LGE/KU management team as a critical component of the asset purchased. This apparent commitment to a reasonable degree of autonomy is consistent with Mr. Miller's testimony. It raises questions, however, as to the meaning of "active and ongoing role in managing and operating LG&E and KU."

The PPL COO said in his testimony:

> *Dedication to customer service is among PPL's highest priorities. PPL's track record of customer satisfaction is evidenced by PPL Electric earning eight top J.D. Power & Associates awards for satisfied business customers. Likewise, PPL Electric has received the top J.D. Power award for satisfied residential customers in the eastern region of the U.S. eight times since 1999. With respect to its operations in the United Kingdom, covering approximately 2.6 million end-users over 10,000 square miles, PPL is the only company in the UK to have held the Charter Mark award for outstanding customer service.*

Addressing Regulatory Commitment No. 31, the COO indicated PPL's intent to "maintain superior quality utility service." The CEO also testified that PPL's vision was one of superior service at reasonable and competitive rates, and PPL executing this vision by "providing unparalleled customer service."



The award winning performance of the Company, coupled with commitments to "superior" and "unparalleled" customer service, surely creates an encouraging vision and reason for optimism. Similar language, however, has been used to describe the Kentucky experience. That language may have been appropriate in the past but is not so today. Interestingly, according to J.D. Power, PPL's recent performance has declined even more so than the Kentucky utilities, with all three firms tracing a negative path. The accompanying chart shows that:

- In only three years, PPL has dropped from the top quartile to the third quartile and is now below the national average, a position difficult to reconcile with "superior" and "unparalleled."
- In only two years, LG&E has dropped from the top of the first quartile to the bottom of the second quartile.

These declines are large, but nonetheless still do not fully indicate the real drop in customer satisfaction. We emphasize that satisfaction for most utilities was dropping in this period.

Accordingly, any utility whose level of satisfaction simply stayed the same would have risen in the ranking.

When using J.D. Power as a yardstick, it is not fair to compare a large eastern utility with a mid-size mid-western utility. Moreover, changes can result from extraneous factors, such as recent rate cases and major weather events. We believe, however, that there is meaning in comparing trends and relative changes over time. This data paints a less-than-encouraging picture when examined this way.

3. Strategic Planning

LGE/KU recently began a new planning cycle; we cannot yet know how PPL policies and practices will influence that cycle. The centerpiece of the planning process is a five year rolling plan (previously 3 years under E.On), known as the mid-term plan (MTP). We sought to review the recent MTPs at two levels: the MTPs prepared by Energy Delivery (ED) and the higher level MTPs that apply to LGE/KU as a whole.

a. Energy Delivery MTP

The ED MTP was far richer in terms of customer service content, as one would expect. The plan indicates that customer service has a high priority; it is second only to safety. This message is consistent, and was also reflected by managers in interviews. We do not question the intent and people appeared to understand that intent. Liberty views those two attributes (clarity and "buy-in") as key to the effectiveness of a plan. The ED plan qualifies well in these two aspects.

Management's vision should serve as the guiding light for strategic plans, and a statement of that vision is indeed prominent in each annual MTP. The vision as it applies to customer service has, however, varied from year to year, suggesting some level of questioning as to just how far to go in describing the customer service commitment. Liberty did not find reason for significant concern, however, as the changes have not caused the vision to become especially compromised. It is indeed less ambitious, but not to an extent that merits criticism.

Of greater concern regarding recent ED strategic plans are the continued reliance on technology solutions to rectify recent performance trends. These actions have only proven to be partially effective. The preceding chapters of this report make clear that there have been no shortage of indicators of declining levels of customer service. The rise to prominence of several major problems adds a qualitative element to the quantitative indicators available to management. The historic strategic plans nevertheless have remained largely silent, year after year, on the failure to meet performance goals, to define corrective actions, or to set clear, meaningful targets for improvement.

In terms of matching statements of commitment and actions, we saw this silence as material. We could not reconcile the LGE/KU approach to strategic planning with an organization that viewed customer service as a high priority and was committed to "superior" and "unparalleled" service. Clearly, forces have been at work to prevent ED from living up to its commitments. Chapter II of this report identifies a number of external factors that have contributed to the challenges at issue, but they cannot be said to explain those forces entirely. LGE/KU has committed to important changes as a result of the roundtable step in this audit. Making real and lasting progress will require: (a) clear acknowledgement of the level and causes of past weaknesses in future objectives and plans, (b) top-management reinforcement of the importance of them, and (c) continuous, comprehensive monitoring of plan execution and of results being achieved. The roundtable discussions produced encouraging statements in these respects, as did subsequent expressions of commitment from top management. It will be important for LGE/KU to demonstrate these commitments through continuing attention and dedication to the process of change.

We did note that there is an ED IT MTP that supports the ED MTP. The creation of such a plan, that fully meets all of ED's objectives, reflects good practice. It is the overall objective of the IT plan that appeared to be unusual. The plan stated that, "The objective of the [IT] plan is to enhance the customer experience through exceptional service." Such an objective might be appropriate at some level, but it is difficult to see how it can help guide the expectations for the IT organization at a reasonably detailed level.

b. Corporate (LGE/KU) MTP

We have noted that the ED approach to the strategic plan is richer in its customer-service focus, yet not responsive to all the issues. The corporate MTP is even less responsive. It contains limited discussion of customer service. Moreover, what little is there simply talks about the good performance of the past. There is no discussion of goals or objectives, no recognition of trends, and no emphasis that customer service really is a high corporate priority.

A strategic plan is key to gauging corporate priorities. What it led us to observe was that customer service did not appear to have the place in the hierarchy of priorities that the Company suggests. The commitments made as part of the roundtable process give encouraging signs of change. Assuring that those commitments remain a fundamental top-level corporate priority will be necessary. Demonstrating forceful action and results measurement regarding them offers the ultimate test of whether LGE/KU have sufficiently changed priorities.

4. Budgeting

a. The Process

Budgets should flow from and exhibit consistency with the strategic plan. The strategic plan says what is important and what should be accomplished; the budgeting process assures that resources are allocated accordingly.

The budgeting processes in place at LGE/KU are strong from a management and control perspective. Resource Allocation Committees (RACs) exist at both the ED and corporate levels. They provide key managers the opportunity to balance priorities. An Investment Committee also provides executive oversight. Procedures and policies are well documented.

Liberty sampled major capital expenditures, and found the justifications and management process to be appropriate. Justifications include good analysis, supporting statistics, staffing impacts, benefits, risks and alternatives.

As might be expected from our discussion of strategic planning above, the issues in customer service did not produce a corresponding funding response. We note that this concept is not foreign to ED or the Company. In recent years, declining distribution reliability was seen to be a problem. A response became a strategic imperative and funding was included in subsequent budgets for more aggressive programs relating to worst circuits and hazard trees. The reality that the Company knows how to react to priority issues reinforces that customer satisfaction is not as high a priority as one should expect.

A further examination of budgeting provides an understanding of the nexus of strategic planning and management approach, each as discussed in the sections above. Budgets are set from the top down; *i.e.*, the business units are told of their funding limits in advance and are expected to build "bottoms up" budgets that comply. These top-down targets are usually some approximation of the prior year's budget. It appears that there is some degree of flexibility in rearranging funding within, or even among, business units, but total funding remains firm. Interviewees used words like "tight," "rigid," and "frugal" to describe the process.

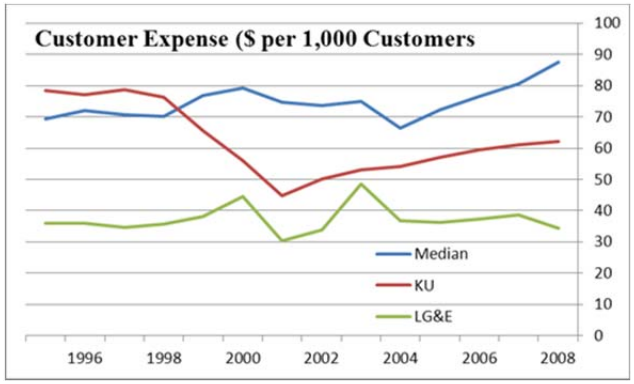
We believe these observations bring clarity to the question of commitment. Budgets have come from above, with insufficient regard for operating realities and no flexibility in which to substantially increase spending in order to address emerging operational problems. In such an environment, cost becomes too much an overriding priority, with budget compliance the predominant focus. This approach produces an intense competition for resources in which even high priority endeavors (like customer service) can become short-changed.

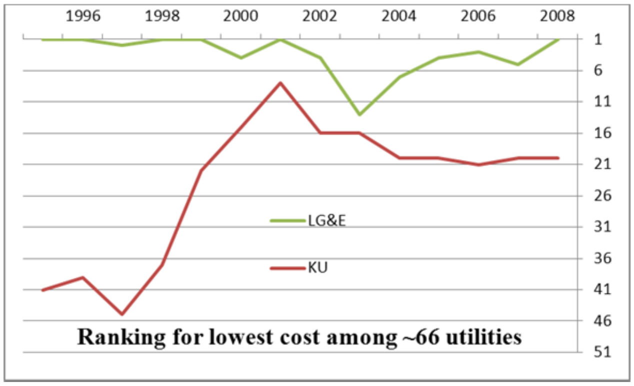
b. Planning and Analysis

We found the funding processes to be dominated by the financial organizations. This approach tends to produce two major problems. First, an operational voice and influence is lacking. Second, there is no analytical capability present to balance priorities in an effective way. With respect to capital spending, consider that the RACs have no independent, dedicated analytical support. They are provided data from financial and requesting organizations, but there is no dedicated analytical support to sift this data and produce a professional product. So the basis by which decisions are made by the RACs is not clear.

This analytical gap is especially clear in the case of customer service. If either RAC were presented reasonable analyses linking funding and achievement of strategic goals, they would most likely have addressed the customer service issues and allocated at least some resources. The reliance on budget data only, without clear linkage to operational goals and results, therefore represents a substantial process flaw.

c. Spending





The terms we heard above (tight, rigid, frugal) are not necessarily bad, especially when applied to financial management. Before being too critical, one needs the perspective of how the Company's spending fits in with the rest of the industry. The accompanying chart illustrates that both KU and LG&E expenditures for customer expense, as reported in FERC Form 1, are considerably below the industry median and have been for quite some time. In terms of ranking, LG&E is the lowest cost utility of 66 in the sample and KU is 20th.

This cost performance represents a significant accomplishment in terms of controlling costs that customers ultimately must pay. Certainly, cost control comprises a central element of producing customer satisfaction, when balanced with other goals. We cannot conclude that the spending trend is evidence of our "cost as the top priority" hypothesis. There seems to be suitable margin in the Company's cost superiority to permit both continued strong cost performance and support for customer service improvements.

If any concern is appropriate, it might flow, not from the Company's cost superiority, but from its widening of that performance gap. KU and LG&E costs have actually gone down during the 13 year span of our study (1995-2008)[1] compared to industry growth in this period of 1.8 percent per year. Maintaining a superior position is one thing, but how long one can continue to widen the gap with industry without impacting service levels becomes the concern.

5. Customer Experience Strategy

The "Customer Experience Strategy" (CES) is a planning initiative launched in 2010 and designed to reinvigorate the Company's customer service. The Company has stated that "the ultimate goal will be for LG&E and KU to regain and exceed the companies' 2002 competitive position." The CES can and should serve as the foundation for future improvements. It represents a strong initiative and one with considerable promise, in that it seems to begin the formal recognition that there is a problem. The notion of "regaining" position here is, we believe, a notable shift in strategy and an appropriate one.

We address how Liberty's analysis, as depicted so far, squares with the CES. The CES acknowledges a problem, contrary to our comments on strategy. The CES places a high priority

[1] The 2009 FERC Form 1 data contains anomalies and hence was not used.

on customer service, contrary to our observations on commitment. However despite its many positive features and good intentions; the CES is not today positioned to produce lasting results, for reasons that will be detailed later. This is far from an irremediable flaw; in fact, Liberty concurs that the exceptional thinking behind the CES will indeed represent the impetus and path to eventual success.

6. Team Incentive Award

The Team Incentive Award (TIA) is the Company's program for rewarding employees for strong corporate performance. It is perhaps the most visible communication to employees of what is important, and it has the most tangible impact on them.

The TIA customer-service measure is based on quarterly survey results of KU and LG&E versus six other regional utilities. The average score of the six utilities and the standard error around the average are calculated to define the range shown on the accompanying illustration. Points are awarded if LGE/KU's results are in the range and more points come if they are above the range. Still more points are awarded if the Company's overall rank is first or second.

This approach does not seem particularly aggressive and suggests that half or full payouts are possible with far less than "superior" service:

- A 50 percent award is possible (3 points per quarter) simply by falling within the range, which includes, by definition, the possibility of below average performance. The 50 percent award is what was in fact earned in 2010.
- Based on actual data, near-median performance would generally be sufficient to earn more than enough points for a 100% payout (except for 2009). The accompanying table demonstrates this fact.

Rank Needed to Exceed Range (for 6 points per quarter)				
	2007	2008	2009	2010
1st Quarter	4 of 8	3 of 7	3 of 7	4 of 7
2nd Quarter	3	4	3	4
3rd Quarter	4	4	2	3
4th Quarter	4	3	2	4

- There is nothing remarkable about the service levels of the six utilities. Of 121 J.D. Power utilities, the average ranking of the six is 52nd. KU and LG&E average 42nd. The six therefore are, on balance, worse performers, yet there are substantial payouts for performing near the median or below.

C. Conclusions

Organization and Management

1. The current level of performance is not consistent with the Company's past standards and its present commitments.

The Company has a strong history of superior customer service. Further, both it and the new parent have committed to a superior level of service going forward. The recent level of performance, however, is at odds with both the history of the Company and the commitments for the future.

2. **The former, positive customer service culture has lost much of its vitality in recent years; a failure to fully restore it will have a significant resulting impact on the ability to overcome today's performance issues.***(Recommendation #1)*

The shortcomings discussed in this report should be of special concern to the Company because of the unique features of those shortcomings:

- The Company's performance relative to other utilities has dropped considerably in recent years
- The performance deviations versus the Company's goals have continued over a period of years
- The deviations are of a large magnitude
- Performance levels are far lower than "superior" and "unparalleled."

The degree of deterioration suggests that the issues arise from more than mere mechanical failures. Contained performance issues, experienced over a limited period of time, are neither unusual nor necessarily difficult to repair. However, when problems are both substantial and sustained over time, other forces come into play.

A healthy organizational culture, in customer service or any other area, takes time to create. Kentucky customers have enjoyed the benefits of such a culture for some time. Once substantially impaired, however, it similarly takes time to rebuild, and we believe that is the current situation. The absence of a sufficiently supportive culture in the future will call into question the effectiveness of even fairly straightforward corrective actions. We therefore look for more than ED's commitment to the mechanical fixes proposed and accepted by the Company. Those fixes must be accompanied by strong efforts to address cultural issues and resulting organizational restraints.

3. **Corporate oversight and influence of customer service strategies and performance are not substantive.** *(Recommendation #2)*

The Company has been managed by its parent as a financial investment for many years without apparent parental oversight or interest in operational matters such as customer service. As a direct result, the mechanisms do not exist at the corporate level to facilitate significant changes in business unit performance. With a primarily bottom line focus, and an inadequate focus on operating performance, corporate oversight and management of operations becomes difficult. The features present at the Company that suggest such is the case are:

- A top down budgetary approach featuring limited budget targets characterized as tight, frugal and rigid
- Lack of financial linkages to performance
- Lack of Key Performance Indicator (KPI) accountability
- A competition for resources in which customer service is not competitive.

4. **PPL's customer service commitments as applied to the Kentucky utilities must prove strong and fully supportive to overcome observed problems; it is too soon to judge its validity and effectiveness in this regard.***(Recommendation #3)*

Liberty is familiar with PPL and believes the parent can be of substantial help in bringing about the necessary improvements in Kentucky. This is by no means automatic, as PPL's structure includes some of the same characteristics that contributed to the problems of past owners. There is, however, reason for optimism:

- Strong commitment to "superior" service in its filing
- Strong track record of customer service in Pennsylvania and elsewhere
- Customer culture seems embedded and genuine
- Commitment to "active" management
- Not PPL's first acquisition.

A substantive effort will be needed by LGE/KU, and that will not happen without the support of the parent.

5. The use of Key Performance Indicators (KPIs) has not been effective in the management of customer service. *(Recommendation #4)*

KPIs are one way of communicating what is important to the organization in terms of performance. Management singles out these parameters as the few activities that have special meaning, and which should receive the greatest attention. Failing to meet the KPIs should obviously be viewed as a shortcoming. Missing them by a large amount should be considered a major performance failure. Sustaining that failure over a period of years should be considered unacceptable.

There are only four customer service KPIs included in the monthly balanced scorecard:

- Residential call handling customer satisfaction
- Business call handling customer satisfaction
- Residential service level
- Business service level.

Management has defined these four parameters as the most worthy of attention. As we have explained earlier in this report, however, the Company has failed to meet the targets, and by a wide margin, and for a long time. This issue has been discussed elsewhere in this report.

The declines in the most important KPIs makes it unsurprising that lower-level KPIs, as reported in the monthly retail report, have also lagged. These include residential calls abandoned in the queue (5 times the target), business calls abandoned in the queue (10 times the target) and residential e-mails answered within 48 hours (less than half the target). Most importantly, the KPIs should be a key weapon in management's arsenal.

Strategic Planning

6. The priority of customer service has not been sufficiently emphasized in recent strategic plans. *(Recommendation #5)*

This conclusion holds particularly true at the corporate level, where the MTP has no discussion of customer service goals or priorities and only a brief reference to past successes. While the ED MTP is more focused on customer service, it has not adequately addressed the recurring issues in terms of improvement goals or allocation of resources. As noted above, the roundtable process has produced encouraging signs, but it will take time to verify that the commitments made have sufficient support to become effective.

7. The Company's stated commitment to customer service has not been fully supported by adequately funded, specific initiatives. *(Recommendation #5)*

We have noted that one can only measure fully the level of commitment by actions – supportive language is to be expected but is not enough if not backed up with tangible actions. LGE/KU has had ample opportunity to demonstrate commitment. At times it has done so through tangible actions, such as its investment in the Customer Care System and restoration of service issues. Declining performance, however, in other key areas has been very visible, but as noted throughout this report, responses had not been forthcoming. The failure to apply adequate resources effectively and to take a more aggressive stance for certain other improvements does not match the kind of commitments the Company has professed or its vision for customer service.

Please see the section below on the CES for further discussions of strategy.

Budgeting

8. The Company's cost performance in the customer expense accounts has been and continues to be superior to the industry.

The Company's characterization of itself as a low cost provider is accurate. An excellent job has been done through the years in keeping customer-related costs competitive and generally superior to most other utilities. For much of that time, the Company has also maintained an excellent record of customer satisfaction.

9. The widening gap between the Company's customer expenses and those of the industry raises the question of how long such a trend can be maintained without negatively affecting operations. *(Recommendation #6)*

This conclusion is not meant as criticism; the Company deserves praise for its cost performance, particularly as it did not detract from customer service for many years. Maintaining such a track record into the future would be an enviable accomplishment. We note, however, that the Company is actually doing even more than maintaining that track record; it is improving upon it (from a cost perspective). Again, that is a solid accomplishment, but it is also one that cannot be sustained forever. It would be appropriate to carefully analyze spending trends and determine what, if any, negative impacts they may be causing for operations in general and customer service in particular.

10. The manner in which the budgeting process is managed implies that cost overrides customer service as a priority. *(Recommendation #6)*

Managers consistently report that their two top priorities are safety and customer service. There is clearly buy-in to these prioritizations and we have no doubt that managers reflect this in their day-to-day tasks.

However, we have also seen that the reality of financial constraints has overridden the priority of customer service. A tight ceiling is set from the start, and there seems to be no flexibility to get the resources necessary when things go wrong, as they have for several years. The unmistakable message is that the organization is on its own in meeting the customer service priority because cost constraints have an even higher priority.

To some extent, it is unfair to argue which attribute has a higher priority. It is management's job to balance all priorities, and to not make decisions on a black and white basis. Nevertheless, customer service does not seem to be getting a fair shake in this balancing act.

11. The budgeting process lacks meaningful linkage to operating priorities. *(Recommendation #7)*

In our discussions with management, we asked a similar question at each level of ED, the Company and the parent; *i.e.* how operating needs and priorities are applied in budgeting and resource allocation. The answers indicated a lack of effective linkage.

Such an analytical process is not only required, but must be supported with an effective planning environment. If targets are rigid, there is little room for flexibility and aggressively responding to operational needs. The Company seems to have made good provisions for reallocations within the tight budgets by using the RAC process at both the ED and corporate levels. However, as we have previously discussed, neither of the RACs, nor the organization as a whole, has provided for a separate analytical capability to support either the RAC or the budgeting processes. . It is therefore not clear how the RAC members can prioritize and balance in the absence of such analysis.

12. The budgeting process has not effectively allocated resources to address customer service deficiencies.*(Recommendations offered in previous chapters of this report)*

This conclusion is the logical and inevitable result of the previous conclusions regarding management, strategic planning and budgeting. Management's attempts to deal with its issues by enhancing technology without adding people represented a good starting point. There is no need for apologies in trying to manage staffing levels. The need for more resources soon became apparent, but prompt and suitable actions did not follow. This issue is discussed in more detail in the earlier chapters of this report.

The Customer Experience Strategy

13. The CES represents a laudatory initiative with many positive features that should serve as the impetus and foundation for future customer service improvements.

The construction of the CES in 2010 represents a major step forward. It is a quality initiative with many positive features. Liberty was particularly impressed with:

- The advanced level of thinking (perhaps even too advanced as suggested below)
- The holistic approach taken across the organization
- Cost linkages for each initiative
- The aggressive nature of the program
- Clearly stated accountabilities for each initiative
- Recognition of performance issues
- The goal to regain, as opposed to maintain, a superior position.

The CES effort was both timely and appropriate, but did not gain the necessary traction in a timely manner. The CES provides the bedrock for the Company's improvement initiatives.

14. The CES has not been suitably integrated into the annual planning and budgeting process.*(Recommendation #8)*

The CES has yet to generate the full traction it deserves. Considering the scope and breadth of the initiative, we found it odd that so few people mentioned it in our discussions, including suggesting it as at least a partial solution to the Company's problems. We noted elsewhere that mechanical solutions are unlikely to be successful without the supporting culture and management commitment. Perhaps the CES is, at least so far, ample testimony to this principle. Without visible commitment, in the form of funding and a strong place in the strategic plan, even a positive initiative such as the CES can stumble. The Company has acknowledged and accepted Liberty's recommended improvements to CES, which represents a significant first step.

15. Important weaknesses in the CES that will weaken its effectiveness if not corrected.*(Recommendation #9)*

We noted that the CES can and should be the foundation for a better future. As an initial effort, it is an excellent product, and one that should be expected to evolve. In that spirit, we observe the following opportunities for potential improvement:

- With regard to funding, many items were classified as "implementation follows normal business model of cost benefit justification and potential reallocation of existing budgets." This may reflect a "business as usual" approach, indicating lack of sufficient funds dedication to CES implementation, and, in turn, reduced chances of effective of implementation.
- While the CES recognizes problems, it may not fully reflect the gravity and urgency of those problems.
- While the program represents a sophisticated approach, it may not adequately address the basics. Many of the performance issues are rather simple (*e.g.*, answering the telephone) and they should be addressed as such.
- The overall goal of the CES is well stated; however, the individual initiatives are lacking in specific performance goals and are silent on the notion of superior or exceptional service.
- The CES needs to emphasize commitment and execution, as opposed to just planning. It is commitment and execution that have been the issues, not necessarily planning.

Team Incentive Awards

16. The customer service performance basis for the TIA program is not consistent with a superior, or even above average, vision. *(Recommendation #10)*

There is no question that incentives do have an influence on an organization. They communicate what management thinks is important. They involve the workforce in the success or failure of the firm. They also offer employees a scorecard for how the team is doing on important issues.

In this endeavor, the goals must of course be achievable. This can create a problem when management truly is trying to do something better than average. How does one balance the desire to be “superior” without burdening employees with intermediate goals that can be considered a stretch? This becomes a legitimate dilemma for management.

The ultimate answer is difficult to define, and reasonable people may differ. It appears, however, that the current TIA customer service goals are not sufficiently challenging. Perhaps goals consistent with superior or unparalleled service are unfair at this time, but more aggressive goals that at least start along that path would seem appropriate.

D. Recommendations

Organization and Management

1. **Take a holistic view and address the cultural and management aspects of customer service, recognizing that mechanical fixes are no longer likely to be sufficient.** *(Conclusion #2)*

Discussions with management suggested a belief that a healthier culture will emerge simply from the many improvements to which the Company has already committed. Liberty believes there is some merit to this argument, but we reiterate that the promised mechanical fixes are not likely to be successful without other, supporting actions at high levels.

The Company is encouraged to realize that, from an outsider’s perspective, it has been functioning for many years in an environment in which meeting the customer service challenge has been difficult. Priorities have been effectively re-set, with customer service lower than before. Spending limits have been tightened, with funding as difficult as ever to attain. Performance standards have been relaxed, with important targets missed by extremes for extended periods. Commitments to customer service improvement have diminished credibility within the Company. It would appear to Liberty that a cultural shift, and not for the better, has taken place and that it is likely to restrain progress unless directly addressed.

What specifically, beyond the mechanical fixes discussed earlier, can be done to change the customer service culture? There is one overriding prerequisite: leadership that really believes the “superior service” message and acts to confirm it in clear, convincing ways. We have offered examples of strategies and actions not consistent with the vision, so the enthusiastic buy-in that is needed may not be in place yet, particularly at the corporate and parent levels. Follow-up to expressed support from the top leadership of the organization is required if the desired culture change is to materialize. We also offer below thoughts that will facilitate culture change. They too will require top leadership support and commitment up and down, as well as across, the organization.

2. **Give customer-service operational performance greater visibility and oversight at the corporate and parent levels.** *(Conclusion #3)*

There appears to be limited attention paid, and little priority given, to customer-service operational matters at the corporate and parent levels. If this were not the case, it is difficult to see how KPI results could deviate by so much for so long. As the industry continues to consolidate, this may perhaps be an inevitable consequence, with leadership necessarily becoming more distant from the operational elements of the business. Also, with the structure chosen by many firms, there are limited operational capabilities outside the largely autonomous operating units.

The lack of visibility and oversight leads directly to a lessened ability of the operating companies to get the resources they need to deal with problems. Accordingly, Liberty recommends that the customer-service operational performance measures should be on leadership's radar screen, should be factored into resource allocations, and should be treated with a suitable priority.

3. **Take actions at the parental level to reinforce PPL's commitment to superior service.** *(Conclusion #4)*

PPL has made numerous commitments that are encouraging. The recent Kentucky performance is not consistent with the spirit of those commitments. While PPL is still relatively new on the scene, it is not necessarily too soon to get involved with the customer service issues. Although there is some dialog underway on "best practices", there is no indication that PPL is active, or even aware, of LGE/KU's current customer service issues. Consistent with its commitment to active involvement and unparalleled customer service, the time seems right for help and support from the parent.

4. **Reevaluate KPIs in customer service, set realistic targets consistent with its vision and reestablish the credibility of the KPI program.** *(Conclusion #5)*

With such large deviations for such a prolonged period, the KPI program has presumably lost its credibility, at least with respect to customer service. Management should not consider that as acceptable. Significant steps are required to regain credibility, including communication of intent, establishment of credible goals, accountability for performance against those goals and immediate and visible action when KPIs are in trouble.

Strategic Planning

5. **Directly reflect a high priority for customer service in strategic plans and in the planning and budgeting process.** *(Conclusion #7)*

This is particularly true at the corporate level, where the MTP has no discussion of customer service goals or priorities and only a brief reference to past successes. Strategic plans should include clear definition of tangible goals and objectives reflective of superior customer service. The vision is essential but not sufficient in the absence of specific actions designed to make the vision a reality. The commitments made in the roundtable process need to be incorporated into ED's current strategic planning and budgeting processes.

Budgeting

6. **Examine, in a formal quantified way, the long-term strategy for minimizing customer expenses to assure that the vision for superior customer service is not compromised.** *(Conclusion #9)*

There is evidence that the quest for low rates may be contributing to the decline in customer service. An analysis that seeks to balance costs and service, and to lead to a strategy that preserves the Company's competitive position while elevating service to prior levels, would be appropriate.

7. Directly tie the budgeting process and the resulting allocation of resources to operational goals and objectives. *(Conclusion #11)*

This is a rather fundamental principle that requires (1) some degree of flexibility in the funding process, (2) a clear understanding of priorities and (3) analytical capabilities to aid in the balancing process. The Company's management of customer service (and of operational decisions in general) will benefit from improvement in all three categories.

The Customer Experience Strategy

8. Fully integrate the CES, when revised as desired, into the planning and budgeting process. *(Conclusion #14)*

At the present time, the CES is detached from the normal planning and budgeting process. As such, there is no allocation of resources to it or commitment to its objectives. Subjecting the CES to competing priorities for funding means that it is not a strategy or plan after all, but simply another idea that must sink or swim on its own.

9. Make a number of specific changes to the CES to reinforce its effectiveness.*(Conclusion #15)*

a. The final CES should be accompanied by approved funding sufficient to fully implement the strategy.

b. The CES should evidence a greater sense of urgency and a greater commitment to each of its initiatives, including specific goals and committed timetables.

c. The CES should include correction of the basic performance shortcomings described herein and as already acknowledged by the Company.

d. Specific, quantified goals should be included as opposed to broad concepts.

Team Incentive Awards

10. Introduce into the TIA more aggressive, yet achievable, goals consistent with a much improved level of customer service. *(Conclusion #16)*

The intention here is to strike a reasonable balance between realistic goals and the "superior" level to which the Company aspires. In that context, the current goals are not suitably aggressive.

LG&E KU
PPL companies

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September 13, 2011

John A. Rogness, III, Ph.D.
Director Financial Analysis Division
Kentucky Public Service Commission
211 Sower Boulevard
Frankfort, KY 40602-0615

RE: Focused Management and Operations Audit of LG&E and KU

Dear Dr. Rogness:

On behalf of Louisville Gas and Electric Company and Kentucky Utilities Company we are pleased to provide comments on the management review of the companies' customer service-related functions conducted by the Kentucky Public Service Commission staff and The Liberty Consulting Group. We approached this process as an opportunity to identify opportunities for improvement and innovative new ways to enhance our customers' experiences with us. The independent analysis conducted by Liberty Consulting has validated a number of initiatives the companies have successfully implemented, are currently implementing, and plan to initiate in the near future.

We hope Liberty's review has given the Commission staff a sense of the direction LG&E and KU have taken and will continue to pursue to improve each interaction we have with our customers. We are pleased the review confirmed that LG&E and KU have long histories of providing award-winning customer service and genuine concern for customers, while working hard to keep rates among the lowest in the country. Customer satisfaction is a core value at LG&E and KU. We strive to provide safe, reliable, and low cost service to all our customers, enhancing the quality of life in the areas we serve.

While we are eager to address the recommendations of the consultant regarding customer service-related functions at LG&E and KU, we disagree with observations in the strategic section of the audit report. Specifically, we take issue with Liberty Consulting's suggestion that customer service is not a corporate priority. This conclusion was reached despite the Companies' history of nationally-recognized customer service and the fact that customer satisfaction has long been an established corporate value. These facts confirm that our customers have always been and remain a priority for us. It is also difficult to square this criticism with other parts of the report which comment very favorably about our customer facing strategies and the aggressive actions in our operating plans to increase customer service. In addition, the report takes issue with the strategic planning and budgeting process as it relates to customer service.

Over the last several years we have invested significantly in technology and processes designed to improve service to our customers, while at the same time investing record amounts in system reliability, and we continue to invest in solutions that provide options to address customers' wants and needs

Liberty understands and agrees that: "Certainly, cost control comprises a central element of producing customer satisfaction, when balanced with other goals." (Audit Report, p. 74). LG&E and KU have been reluctant to turn too quickly to the "spending option" to address customer service challenges because such spending adds to customer bills. Rather, the companies during this period were working aggressively to hold down cost while managing through new customer care systems, severe weather events and tariff changes affecting customer satisfaction. Liberty concludes the company should have been willing to spend more, faster, and the companies are now following those recommendations.

We take pride in being an industry leader and believe our obligation to serve goes far beyond regulatory accountability. We focus on treating our customers with respect and seeking their input to better serve them. Commitment to customers is reflected in our business processes, systems, organizational structures, decision-making, and, most of all, in our core values and the behaviors of our employees.

We look forward to continuing our excellent relationship with the Commission and its staff as we assess and implement the audit recommendations. We remain committed to enhancing our relationship with our customers by delivering positive experiences that create value and build trust.

Very truly yours,

Victor A Staffieri