Exhibit No.:
Issue: Affordability, Energy Efficiency, and Demand Response Programs; Critical-Peak Pricing; Credit and Debit Card Payments
Witness: Susan K. Nathan
Type of Exhibit: Direct Testimony
Sponsoring Party: Kansas City Power & Light Company
Case No.: ER-2006-____
Date Testimony Prepared: January 27, 2006

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. ER-2006-____

DIRECT TESTIMONY

OF

SUSAN K. NATHAN

ON BEHALF OF

KANSAS CITY POWER & LIGHT COMPANY

Kansas City, Missouri
January 2006

DIRECT TESTIMONY

OF

SUSAN K. NATHAN

Case No. ER-2006-____

Q: Please state your name and business address.

A: My name is Susan K. Nathan. My business address is 1201 Walnut Street, Kansas City, Missouri 64106-2124.

Q: By whom and in what capacity are you employed?

A: I am employed by Kansas City Power & Light Company ("KCPL") as Manager, Marketing and Product Management.

Q: What are your responsibilities?

A: My responsibilities include providing leadership and direction to the Product Management Team, including the development of overall marketing programs and the coordination and execution of promotional strategies and programs to efficiently and effectively promote and implement KCPL's products and services. My duties include initiating and bringing to market new products, as well as improvements and innovations to existing products and services. My duties also include the development, implementation and evaluation of affordability, energy efficiency, and demand response programs.

Q: Please describe your education, experience and employment history.

A: I graduated from Metropolitan State University in Minneapolis with a Bachelor of Arts degree in 1985. I graduated from the University of St. Thomas in 1990 with a Master in Business Administration degree. I was first employed at KCPL in 2003 as the Manager, Product Management. In this capacity, I perform all marketing functions for KCPL. Prior to my employment at KCPL, I worked at Aquila from 1997 to 2002 in Retail Operations and Marketing. Prior to moving to Kansas City to work for Aquila, I worked at Minnegasco (now CenterPoint Energy) in Minneapolis from 1981 through 1996. During that time, all but one year was spent implementing and managing energy efficiency programs.

Q: **Have you previously testified in a proceeding at the Missouri Public Service Commission or before any other utility regulatory agency?**

A: I testified before the Missouri Public Service Commission ("MPSC") and the Kansas Corporation Commission ("KCC") concerning KCPL's Regulatory Plan. I have also testified before the Minnesota Public Utilities Commission on behalf of Minnegasco on matters concerning Minnegasco's demand-side management programs.

Q: **What is the purpose of your testimony?**

A: The purpose of my testimony is threefold:

1. To provide a progress report on the development and implementation of the Affordability, Energy Efficiency, and Demand Response programs and the work that has been accomplished through the Customer Program Advisory Group ("CPAG"). For these programs, I will discuss the applicable provisions of the Stipulation and Agreement that the MPSC approved in Case No. EO-2005-0329 concerning KCPL's regulatory plan ("Regulatory Plan Stipulation and Agreement" or "Agreement") and provide an update explaining what steps KCPL has taken thus far with respect to these initiatives.
2. I will introduce our interest in critical-peak pricing.

3. I will also discuss KCPL's proposal to begin accepting credit and debit card payments from its customers.

I. Affordability, Energy Efficiency and Demand Response Programs

Q: Were KCPL's proposed Affordability, Energy Efficiency and Demand Response programs addressed in the Regulatory Plan Stipulation and Agreement?

A: Yes, the portfolio of proposed programs was attached to the Regulatory Plan Stipulation and Agreement as Appendix C. The programs were also discussed in the text of the Agreement.

Q: What were those programs?

A: There were two proposed Affordability programs, ten proposed Energy Efficiency programs, two proposed Demand Response programs, and two proposed additional funding areas. Specifically, the proposed programs are as follows:

<u>Affordability</u>

- Affordable New Homes (New Construction)
- Low Income Weatherization

<u>Energy Efficiency</u>

- Residential:
    - Online Energy Information and Analysis
    - Home Performance with Energy Star (Training)
    - Change a Light, Change the World
    - Cool Homes Program (High Efficiency Cooling Rebates)
    - Energy Star Homes (New Construction)
- Commercial/Industrial

- Online Energy Information and Analysis
- C&I Energy Audits
- C&I Custom Rebates – Retrofit
- C&I Custom Rebates – New Construction
- Building Operator Certification (Training)

Demand Response

- Air Conditioning Cycling (Residential and Small Commercial)
- The Alliance, an Energy Partnership (Commercial & Industrial Curtailment)

Funding Areas

The two funding areas are for a pay-as-you-save ("PAYS") program (which has yet to be developed) and for research.

Q: How were the Affordability, Energy Efficiency and Demand Response programs initially developed?

A: Initially, we researched programs being implemented by other utilities by looking up sites such as the American Council for an Energy Efficient Economy or an utility web-site, sometimes followed up by a call to that utility. We spoke with experts in the field, including Rocky Mountain Institute and Applied Energy Group, to inquire about their opinions on programs. Wherever possible, we tried to obtain information on the evaluation of the programs. In addition to our research, we received inputs from other organizations, such as the City of Kansas City, Missouri, and the Missouri Department of Natural Resources.

Upon completing the initial research, we hired Applied Energy Group to work with us in developing a portfolio of programs and completing an initial screening. This information was further discussed and refined and submitted as a proposed portfolio in the Regulatory Plan Stipulation and Agreement.

Q: What did the Regulatory Plan Stipulation and Agreement provide concerning KCPL's Affordability, Energy Efficiency and Demand Response programs?

A: The Regulatory Plan Stipulation and Agreement provided a listing of the proposed programs and an estimated cost, kW and kWh savings associated with each Affordability, Energy Efficiency and Demand Response program for the five (5) year period. The cost of $29 million (Missouri) was detailed on Appendix C of the Agreement. The budgeted expenditures for the five (5) year period for Missouri are $2.5 million for Affordability programs, $12.7 million for Energy Efficiency programs, and $13.8 million for Demand Response programs.

Q: What were the objectives for CPAG?

A: CPAG had two key objectives:

1. Perform pre-implementation evaluation of energy efficiency programs; and
2. Review design, implementation plans, and evaluation plans for all programs.

Q: Were these two objectives completed?

A: CPAG was successful in completing most of the objectives stated. A full report of CPAG's accomplishments through the first four months is attached as Schedule SKN-1. Briefly, for objective 1, the following was accomplished:

- KCPL revised the definitions and subsequently the numerical inputs for the benefit/cost screening tool, added the Total Resource Cost ("TRC") test to the benefit/cost model and re-ran all the programs through this screening tool.

- KCPL obtained hourly load impacts for all energy efficiency programs, merged them into 3 groupings (affordability only, residential energy efficiency only, and commercial/industrial energy efficiency only) and re-ran MIDAS™ with 20 years of programming and 20 years of benefits. KCPL ran three scenarios of this MIDAS™ run – one with no environmental externalities, one with low environmental externalities and one with high environmental externalities.
- KCPL has agreed to complete one more MIDAS™ run, similar to the run mentioned directly above but with only five years of programming to simulate the benefits of the five-year pilot.

For objective 2, we reviewed design and implementation plans for a number of programs. Of those reviewed, some tariffs have been filed and approved. Another has been filed and is awaiting approval and yet others will be filed in the near future. Specifically, the following has been achieved:

- Tariffs have been filed and approved for the following programs and these programs have been implemented:
    - Low Income Weatherization;
    - Residential Online Energy Information and Analysis – now called Home Energy Analyzer;
    - Change a Light, Change the World;
    - A/C Cycling – now called Energy Optimizer.
- A tariff has been filed and we are awaiting approval on the following program:
    - Commercial Online Energy Information and Analysis – now called Business Energy Analyzer.

- Tariffs will soon be filed on the following programs:
    - C&I Audit
    - C&I Custom Rebate-Retrofit
    - C&I Custom Rebate-New Construction - these three programs (Audit, Custom Rebate-Retrofit, and Custom Rebate-New Construction) have been combined and are now called C&I Rebate Program.
    - The Alliance, an Energy Partnership (C&I Curtailment) — now called MPower.

Evaluation Plan: The Regulatory Plan Stipulation and Agreement also required KCPL to review the Evaluation Plan for each program with CPAG. A high-level evaluation plan was provided in the Regulatory Plan Stipulation and Agreement, Appendix C. KCPL felt it was important to select a vendor to be our evaluation partner as early as possible in the program design process. The evaluation partner could then assure that the program design reflected the desired outcomes and that data collection was properly implemented to facilitate verification and measurement activities. With CPAG's interest in this process, KCPL issued a Request for Qualifications/Request for Information ("RFQ") for an Evaluation Partner. Nine responses were received and four were placed on the short list. Two of those on the short list consolidated into one team, leaving three vendors on the short list. A conference call was held to discuss expanding their RFQ responses and turning them into Request for Proposal ("RFP") responses. These were received on December 19, 2005. On-site presentations were made in January 2006. Once the Evaluation Partner is on board, a full evaluation plan will be developed for each program being implemented, costs for both impact and process evaluations will be determined, and the revised plan will be submitted to CPAG and the MPSC.

Q: Has the list of proposed programs changed since the MPSC approved the Regulatory Plan Stipulation and Agreement, and if so, how?

A: The list of programs has not changed since the MPSC approved the Regulatory Plan Stipulation and Agreement. As mentioned above and in Schedule SKN-1, CPAG discussed some program design issues, KCPL reviewed those concerns and, where appropriate, adjusted program design. We have also adjusted the rollout schedule.

Q: Why has KCPL not worked on all of the programs?

A: Several programs have been placed on hold until KCPL has a clearer understanding of the direction desired by the KCC and its support of direct impact energy efficiency programs. Due to administrative and marketing costs, it may not be cost effective to implement the entire portfolio of programs without Kansas on board. Therefore, should the KCC choose not to support these programs, CPAG would need to review the portfolio and provide input on which of the remaining programs should be selected for implementation. KCPL would propose to roll in the budget for those programs that were not selected into the budget for those that were selected.

Q: What are the current expected costs of the programs?

A: At this time, we are maintaining the estimated cost provided in the Regulatory Plan Stipulation and Agreement as our expected costs. Those costs were estimated based on staffing and implementation costs in a maintenance mode, rather than a start-up mode. Therefore, actual costs may be a little higher during the start-up year. Also, as we gain experience in actually implementing the programs, we will have a better basis on which to estimate future costs.

Q. What drives these costs?

A: The major cost areas of the programs are as follows. The predominant cost area of a program will depend on the program itself.

- Implementation costs – Costs incurred in implementing the program, which may include costs for vendors and training. These costs are primarily external costs.
- Administrative costs – Costs associated with internal KCPL labor for program planning and oversight.
- Marketing costs – Costs associated with promoting the programs and developing collateral materials.
- Customer incentive costs – Costs paid to the customer. Customers in this sense can be the end-use customer or a trade ally, such as a builder.
- Evaluation costs – Costs we expect to incur when we evaluate the programs.

The total costs, and the proposed allocation by State, are also detailed in Regulatory Plan Stipulation and Agreement Appendix C.

Q: Are those costs consistent with the initial cost projects set forth in the Regulatory Plan Stipulation and Agreement?

A: Yes, they are.

Q: How do you intend to track the costs associated with these proposed programs?

A: We have created specific program codes for each of the proposed Demand Response, Energy Efficiency and Affordability programs, and all expenses associated with a program will use its specific program code. Other codes will be used to designate the nature of the expenses. All expenses coded to these proposed programs will be captured in regulatory asset accounts.

Q: **What benefits are expected to be realized through the implementation of these programs?**

A: The benefits of the program include:

- Increased customer knowledge of how to use energy wisely;
- Energy savings and demand savings; and
- Other societal benefits such as reduced environmental emissions, increased local jobs, and increased disposable income by participants that could contribute to the local economy.

Q: **What costs has KCPL already incurred in these efforts?**

A: For September and October 2005, KCPL has spent $16,176 for Missouri. All but approximately $2,000 is for KCPL labor.

Q: **How does KCPL intend to recover these costs?**

A: KCPL is accumulating the Demand Response, Efficiency and Affordability program costs in regulatory asset accounts as the costs are incurred. Beginning with the instant rate filing, KCPL proposes to begin amortizing the accumulated costs over a ten (10) year period. KCPL will continue to place the Demand Response, Energy Efficiency and Affordability program costs in the regulatory asset accounts, and costs for each vintage subsequent to this rate filing will be amortized over a ten (10) year period. The amounts accumulated in these regulatory asset accounts shall be allowed to earn a return not greater than KCPL's AFUDC rate. The class allocation of the costs will be determined when the amortizations are approved.

Q: When will the evaluations be completed?

A: For programs that have an evaluation plan, we will complete the evaluation of the initial two years of each program within six months of the end of each program's second year. We may, especially for large budget programs, perform evaluations earlier to ensure we are being as efficient and as effective as possible.

Q: How will the results of the evaluations be used?

A: We intend to share the results of the evaluations with the CPAG and, with their input, use the results of the evaluations to select and design future programs. These actions would include improving the existing program, canceling the existing program, or developing new programs.

Q: Is KCPL on track to meet the goals for these programs, as set forth in the Regulatory Plan Stipulation and Agreement?

A: Yes, KCPL is on track to meet the goals for these programs as each program is approved and implemented.

Q: Is CPAG aware of all the issues associated with each program's design and projected implementation timeline?

A: Yes, KCPL has kept CPAG advised and CPAG members are knowledgeable about all the issues associated with program rollout, cost effectiveness analysis, evaluation, etc. CPAG has been an excellent collaborative team with thoughtful participation by all.

Q: What other issues have CPAG discussed?

A: CPAG has discussed a variety of other issues, including impacts of the Energy Policy Act; definition of year 1, year 2, etc.; the actual timing of the 5-year pilot considering the fact that not all programs start at the same time; leveraging other funding, and what

KCPL intends to do with approved annual program funding that is not spent in that year. The discussions on these issues are detailed in Schedule SKN-1.

Q: What has the participation been in the programs that have been implemented?

A: As of December 31, 2005:

- For the Low Income Weatherization program, most contracts were signed in December for start up in January 2006.
- For the Change A Light, Change the World program, we expect to receive a report from the Midwest Energy Efficiency Alliance in April 2006. We have been told we have met our goals and, in one store, exceeded goal.
- For the Energy Analyzer, in one month, we had 150 users for the Home Energy Analyzer and 76 users for the Business Energy Analyzer.
- For the Energy Optimizer (A/C Cycling) program, approximately 150 thermostats were installed. Approximately 350 additional thermostats are scheduled for installation. These installations are all Missouri customers.

II. Critical-Peak Pricing Program

Q: What does KCPL propose for the Critical-Peak Pricing program?

A: KCPL is interested in reviewing its time of use ("TOU") and real-time pricing ("RTP") programs and potentially revising them as well as expanding them to include a Critical-Peak Pricing program. There are many Critical-Peak Pricing program design options. Because CPAG has been so beneficial, KCPL is proposing to establish a similar working group consisting of parties in this proceeding to help KCPL develop and review options for a Critical-Peak Pricing program.

III. Credit and Debit Card Payment Program

Q: Why does KCPL want to offer credit and debit cards as an additional payment option for retail customers?

A: KCPL would like to offer credit and debit cards as a payment option for two reasons:

(1) This is one of the payment options most frequently requested by KCPL customers. Most other types of service providers currently provide a credit card payment option and therefore more consumers are using this as their primary method of paying recurring bills.

(2) Making this additional payment method available could help customers avoid service cut-off for non-payment or re-establish service sooner if they do not have other funds available. This would also help KCPL in the collections area.

Q. Will KCPL's customers who choose this payment option be assessed an additional cost for doing so?

A: No. In keeping with a philosophy of providing payment options for no fee whenever possible, KCPL will internalize the transaction costs associated with accepting credit and debit card payments. Consumers are not accustomed to paying convenience fees for using a credit card.

Q: What types of costs will KCPL bear?

A: There are two types:

(1) Set-up fees, which are one-time expenses associated with establishing the service, and

(2) Transaction fees, which are priced on a per payment basis.

Q: **How much will set-up cost?**

A: We estimate set-up costs to be about $200,000. This will cover changes to modify our automated telephone response system and to create interfaces within our customer information system to accept recurring and Web-based payments.

Q: **What will transactions cost on average?**

A: Transaction fees charged to KCPL will vary between different credit card providers. Visa currently has a special rate for utilities. MasterCard has not yet offered such a special rate.

Q: **What will Visa transactions cost KCPL?**

A: Visa transactions, assuming an average payment amount of $150, would cost about $0.68 per transaction.

Q: **What will MasterCard transactions cost?**

A: Assuming an average payment amount of $150, MasterCard payments would cost about $1.92 per transaction.

Q: **Why is there such a difference between the costs for Visa and MasterCard transactions?**

A: Visa is offering a special rate to utilities in order to increase the acceptance of Visa cards for payment of utility bills. MasterCard has not yet introduced any type of similar incentive program.

Q: Does Visa have any special stipulations for participation in their incentive rate?

A: Yes. Other than classification as a utility (which KCPL satisfies), Visa also requires that customers not be assessed any convenience charge for paying with their Visa credit or debit card. If the utility charges a convenience fee, then Visa would assess its standard rate, which would amount to about $2.40 for a $150 payment.

Q: Will this payment option be available to all customer classes?

A: No. It will only be offered to residential customers. The major part of the fee is being offered at a fixed fee, rather than a percentage, by Visa. This fixed fee is based on a typical residential utility customer. Therefore, it is necessary to keep the average payment amount close to the average residential bill payment amount. If large businesses were permitted to pay by credit card at the fixed fee, it would eventually raise the cost for all transactions.

Q: How do these transaction costs compare to other payment methods that KCPL currently accepts?

A: The per transaction fees ($0.68 for Visa and $1.92 for MasterCard) are higher than the payment processing costs for other payment methods, except for Pay Station payments.

Q: What are the fees and costs for Pay Station payments?

A: This differs by state, according to the agreement KCPL has in place with American Payment Systems (a unit of CheckFree Corp.). In Missouri, the total cost per payment is $1.19, of which $1.00 is paid by the customer as a convenience fee and $0.19 is paid by KCPL. KCPL recommends discontinuing the collection of this fee from the customer. If this recommendation is approved by the Commission, KCPL would negotiate a fee, hopefully similar to the fee we pay in Kansas. In Kansas, the customer pays no fee, but KCPL pays $0.69.

Q: What sort of adoption or use of the card payment option does KCPL expect?

A: We estimate about 10% of our customers will choose to pay by card if offered as described above. The adoption number could be affected, of course, in either direction according to program restrictions, customer awareness, etc.

Q. What does KCPL estimate the ongoing expenses will be from transaction costs?

A: Under the assumption of 10% adoption and provision of both Visa and MasterCard options at current costs, transaction expenses would be approximately $500,000 per year. This adjustment is listed as Adj-56 on the summary of adjustments, which is attached to the direct testimony of KCPL witness Don A. Frerking as Schedule DAF-2. This assumed adoption rate and cost are for residential customers in both states.

Q: Does that conclude your testimony?

A: Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Application of Kansas City Power & Light Company to Modify Its Tariffs to Begin the Implementation of Its Regulatory Plan	)))	Case No. ER-2006-____

AFFIDAVIT OF SUSAN K. NATHAN

STATE OF MISSOURI)
) ss
COUNTY OF JACKSON)

Susan K. Nathan, being first duly sworn on her oath, states:

1. My name is Susan K. Nathan. I work in Kansas City, Missouri, and I am employed by Kansas City Power & Light Company as Manager, Marketing and Product Management.

2. Attached hereto and made a part hereof for all purposes is my Direct Testimony on behalf of Kansas City Power & Light Company consisting of sixteen (16) pages and Schedule SKN-1, all of which having been prepared in written form for introduction into evidence in the above-captioned docket.

3. I have knowledge of the matters set forth therein. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded, including any attachments thereto, are true and accurate to the best of my knowledge, information and belief.

Susan K Nathan
Susan K. Nathan

Subscribed and sworn before me this 25th day of January 2006.

Carol Sivils
Notary Public

My commission expires: ______

CAROL SIVILS
Notary Public - Notary Seal
STATE OF MISSOURI
Clay County
My Commission Expires: June 15, 2007

MO Customer Program Advisory Group (CPAG)
Report on the First Four Months
January 23, 2006

The MO CPAG for Kansas City Power & Light (KCP&L) met on August 10 and 24; September 7, 14, 21, and 28; October 6; November 9 and 30; and December 8. Attendees for the various meetings consisted of the following:

Sue Nathan, George Phillips, Laura Becker	KCP&L
Lena Mantle, Henry Warren	MPSC
Ryan Kind	OPC
Brenda Wilbers, Anita Randolph	MDNR
Sherry McCormack, Kelly Walters	Empire
Bob Keller	KCMO
Stu Conrad (representing Praxair)	FCP

In addition, for a short period of time, an Affordability subcommittee was formed and met on September 7, 21 and October 12. Members consisted of:

Sue Nathan, George Phillips, Laura Becker	KCP&L
Henry Warren, Anne Ross	MPSC
Ryan Kind	OPC
Ron Wyse	MDNR
Bob Jackson	KCMO

CPAG Report

Membership/Meetings
Membership was limited to official signatory parties to the Stipulation and Agreement. Meetings were held on the above dates, mostly in Jefferson City. CPAG was an advisory group; consequently no decisions were made. CPAG members merely provided opinions and recommendations. KCP&L provided a 1-800 number for members to call in on.

An Affordability Sub-committee looked at possible programs to implement. Review of the Stipulation and Agreement, however, identified a specific use for the funding for the City of Kansas City, MO, and the remainder of the funding was not large enough to pursue any ideas. The subcommittee was disbanded after 3 meetings.

Objectives
CPAG had two key objectives:
1. Perform pre-implementation evaluation of energy efficiency programs
2. Review program design, implementation plans, and evaluation plans for all programs.

Objective 1. Pre-Implementation Evaluation of Energy Efficiency Programs

Benefit Cost Model: The benefit cost model is a screening tool that provides a snapshot of the benefits versus the costs on an annualized basis. It annualizes savings and costs by assuming all participants begin their participation at the beginning of the year, all costs are expended at the beginning of the year and all benefits accrue from the beginning of the year.

The model used for the Stipulation and Agreement provided four results. The model itself was amended to provide the Total Resource Cost test, making this model provide five results:

1. Total Resource Cost Test
2. Societal Test
3. Participant Test
4. Ratepayer Impact Measure Test
5. Utility Cost Test

While the MO IRP rule looks to the benefit cost model as a screening tool and looks at the TRC and Utility tests to move forward to the integrated model, it is not always the least cost that is sought out but a balance of the model and other factors/perspectives/issues. MO also looks to minimize PVRR through the MIDAS model.

Inputs: The first task was to define and obtain recommendations from CPAG on the inputs into the benefit cost model. The inputs, as much as possible, mirrored those used in the MIDAS analysis. They were customized for each program and include:

Retail Rate	Retail Rate Escalation
Commodity Cost	Commodity Cost Escalation
Demand Cost	Demand Cost Escalation
Variable O&M	Variable O&M Escalation
Externalities Factor	Environmental Externalities Escalation
Participant Discount Rate	Utility Discount Rate
Societal Discount Rate	General Input Data Year
Project Analysis Year	Utility Costs (excluding Incentives)
Incentive Costs	Direct Participant Costs
Project Life	Average Demand Savings/Participant
Coincident Factor	Average Energy Savings/Participant
Number of Participants	

Several key factors drove the definitions and the numbers.

1. Retail Rate

   a. Since most programs saved energy under summer and winter rates, a retail rate was calculated for each program to reflect the average rate at which the energy was saved.
   b. Rate escalation was based on expected near-term and long-term rate increases.
   c. All rates were calculated for 20 years to match the IRP.
2. Commodity Cost
   a. Commodity cost was based on expected wholesale market price.
   b. Commodity costs were determined for various times of the year, day of the week and time of day.
   c. The commodity cost for each program was calculated to reflect the time period in which the energy was saved.
   d. Commodity escalation was based on MIDAS output.
   e. All commodity calculations were made over 20 years to match the IRP.
3. Demand Cost was based on gas combustion turbine costs.
4. Externalities Factor was calculated at three levels.
   a. Zero was used for known environmental regulation.
   b. $.0025 per kWh was used to reflect the costs for environmental regulation that is likely to change over the 20-year plan.
   c. $.00125 was used to reflect a high cost scenario of environmental requirements.

Once the definitions and numbers were finalized, KCP&L revised and re-ran the benefit cost model.

MIDAS Model: The MIDAS model is an integrated resource planning model that utilizes projected impacts of programs and merges them into the overall corporate forecasting. KCP&L obtained hourly impacts for each direct impact program. These impacts were then merged into the following groupings:
1. Base case plus both affordability programs
2. Base case plus residential energy efficiency programs
3. Base case plus C&I energy efficiency programs.

Demand response programs had been accomplished satisfactorily for the Stipulation and Agreement; therefore, it was not necessary to repeat them.

KCP&L ran MIDAS with the 3 groupings above and 3 scenarios for each:
1. No externalities
2. Low externalities ($.0025/kWh)
3. High externalities ($.0125/kWh)

The analysis assumed the programs ran for 20 years and provided a maximum of a 20-year stream of benefits. Some measures only provided a 5 or 7-year stream of benefits, such as lighting. For others, 20 years was the maximum used even though it is accepted that the efficiencies continue for longer (e.g. insulation). Benefits after the end of the 20-year program were not considered.

One other analysis was requested – one that will assume the programs run for 5 years and provide a maximum of a 20-year stream of benefits. This will allow us to isolate the pilot and the benefits projected from the pilot. KCP&L will perform that analysis by mid-February. Once this analysis is done, the final step for Objective 1, a white-paper/report on the benefit cost models, will be written by the end of February. The white-paper/report will also include a discussion of the various MIDAS runs and their results, and the conclusion that the AFF/EE/DR programs implementation will have no impact on the required in-service date or capacity requirement of Iatan 2.

Objective 2. Review program design, implementation plans, and evaluation plans for all programs.

As an introduction to the narrative, the table below summarizes the accomplishments by program. A narrative providing insight to some of the discussion follows the table.

Program	Program Design Reviewed	Plan Reviewed	Tariff Filed	Proj. Tariff Filing	Implementation Date
Affordability Programs					
Aff. New Homes	Briefly	No	No	Feb 2006	Mar 2006
L/I Weatherization	Yes	Yes	Yes		Dec 2005
Residential Energy Efficiency					
Home En. Analysis	Yes	Yes	Yes		Dec 2005
Home Perf w/ En. Star	No	No	No	See Below	
Change a Light	Yes	Yes	Yes		Oct 2005
Cool Homes	Briefly	No	No	See Below	
Energy Star Homes	Briefly	No	No	See Below	
PAYs type Program	No	No	No	2007	2007
C&I Energy Efficiency					
Business Energy Analysis	Yes	Yes	Yes		Dec 2005
C&I Audit	Yes	Yes	No	Feb 2006	Mar 2006
C&I Custom Rebate - Retrofit	Yes	Yes	No	Feb 2006	Mar 2006
C&I Custom Rebate – New Construction	Yes	Yes	No	Feb 2006	Mar 2006
Bldg Operator Certification	No	No	No	See Below	
DSM Research	N/a	N/a	N/a	N/a	N/a
Demand Response					
Energy Optimizer (A/C Cycling)	Yes	Yes	Yes		Oct 2005
MPower	Yes	Yes	No	Jan 2006	Feb 2006

Program Discussion

Coordination with Kansas

Early on, the need for coordination with Kansas was discussed. Kansas does not have a requirement for a collaborative; however, the Kansas Stipulation and Agreement does mention the need to review programs with the 'parties.' While KCP&L has been ready to meet with Kansas 'parties,' because of regulatory schedules, few meetings have been held to discuss these programs. Consequently, tariff filings and implementation in Kansas have been delayed.

Affordability Programs

Affordable New Homes: The New Construction program for low income housing will be implemented through existing channels such as Local Initiatives Support Corporation (LISC), an organization that coordinates local initiatives such as Community Development and Habitat for Humanity. As this is a fairly straightforward program, it is not anticipated that there will be issues associated with implementation. KCP&L has requested a meeting with LISC and their constituents and, based on the discussion, will bring the implementation plan and draft tariff to CPAG for input.

Low Income Weatherization: Bob Jackson provided information on non-energy benefits. The Stipulation and Agreement specified that the majority of the funding is for weatherization in the City of Kansas City, MO. KCP&L contacted all the CAP agencies on the list provided by DNR and found that some do not have KCP&L customers. The remaining CAP agencies were interested in receiving funding. KCP&L did an initial allocation of the funding based on projected KCP&L low-income customers. For agencies that served a very small portion of the KCP&L service territory, the funding was so minimal it would not have allowed any weatherization to be done. For those agencies, KCP&L allocated a higher amount to allow each agency to weatherize 2-3 homes.

The Low Income Weatherization tariff was filed in November and approved December 2005. Contracts were signed with the City of Kansas City, MO, and the Missouri Valley Communication Action Program. Contracts have been proposed to the other CAP agencies and the program implementation will begin in December 2005. Copies of all contracts will be provided to MPSC, OPC and DNR.

Residential Energy Efficiency Programs

Home Energy Analyzer (Online Energy Information and Analysis): A demonstration of this software was provided to those CPAG members who were not familiar with the software. In anticipation of high energy costs this heating season, this program's implementation was expedited. This program has two components – the Bill Prizm and the Home Energy Center. The Home Energy

Center was implemented on December 1. The Bill Prizm module will be implemented March 2006. CPAG was provided the implementation and promotional plan for review. The tariff was filed Nov 2005.

Change a Light, Change the World: KPC&L was informed at the first CPAG meeting that, if we were interested in implementing Change a Light, Change the World in 2005, we would need to file the tariff within 3 weeks. KCP&L used the other utilities' tariffs as a model and filed the program. The tariff was approved and the program implemented by the Midwest Energy Efficiency Alliance (MEEA). Three circumstances led to difficulty in implementing the program:

1. It was the first year that Home Depot and Ace Hardware stores in KCP&L service territory implemented this program. There are always growing pains implementing a program such as this. Therefore, for the first month and a half, the point-of-purchase materials were not visible and rebates at the check out counters were not provided. This has been corrected.
2. Home Depot was implementing their own nation-wide lighting promotion. This clashed with our CFL promotion.
3. Due to the last-minute timing of our decision, MEEA did not have enough time to sign up stores in our service territory and train all employees. Being committed to the success of this program, they came to Kansas City for a second time and implemented point of purchase promotional materials printed by KCP&L. They also retrained store personnel.

We have had reports of high volumes of sales for CFLs as a result of this program at one Ace Hardware store. The results of the program will be shared with CPAG when we receive the report from MEEA in Spring 2006.

Home Performance with Energy Star: This program is a training program, designed to train remodeling contractors and HVAC dealers to look at the whole house as a system. The reason CPAG did not discuss this program is detailed below in the section titled "Projected Rollout."

Cool Homes Program: This program was originally designed to provide rebates for replacement cooling equipment in existing homes. The savings were based on two improvements – an efficiency improvement by requiring a high minimum SEER and an efficiency improvement by requiring a heat loss calculation and properly sizing the A/C or Heat Pump.

There is discussion in the industry at this time about what components provide the most savings:

- SEER
- EER
- Duct sealing
- Proper sizing
- Air flow balancing within the home
- Proper air flow over evaporator coils
- Proper refrigerant charging

- Ensuring the coil and compressor match

It was thought that this might be a good research project. Further discussions with people in the industry have identified several research and implementation organizations that have performed impact evaluations on a variety of programs and can prove effectiveness of some of the above areas. Therefore, KCP&L decided to send an RFP to implementation organizations allowing them to propose a program.

Another reason to delay implementation of this program is that HVAC dealers and distributors do not have a good feel for pricing cooling equipment once they run out of SEER 12 or below equipment. They project there will be a period of price wars, where each distributor will adjust their price based on competitors' prices. It would be very difficult for KCP&L to set a rebate amount during this price volatility.

Also, another reason CPAG did not discuss this program further is detailed below in the section titled "Projected Rollout."

<u>Energy Star Homes:</u> This residential new construction program is designed to encourage an Energy Star approved level of efficiency through a Building Option Package (BOP) designed for our weather.

The main reason CPAG did not discuss this program is detailed below in the section titled "Projected Rollout."

<u>PAYS Type Program:</u> In Vermont's "Pay as You Save" program, the utility provides financing for homeowners who wish to implement energy efficiency improvements in their homes. A calculation is made that requires the homeowner to pay the loan using 75% of the energy savings. It is a tariff; therefore, the homeowner can be disconnected for non-payment.

KCP&L recognizes that there are other program designs available and is interested in researching other ways to remove the market barrier without becoming a bank. KCP&L will research ideas in 2006.

<u>C&I Energy Efficiency Programs</u>

<u>Business Energy Analyzer (Online Energy Information and Analysis):</u> In anticipation of high energy costs this heating season, this program's implementation was expedited. This program has two components – the Bill Prizm and the Business Energy Center. The Business Energy Center was implemented on December 1. The Bill Prizm module will be implemented June 2006.

<u>C&I Audit, C&I Custom Rebate-Retrofit, and C&I Custom Rebate-New Construction:</u> Rather than roll out the New Construction program in Year 1 and the Audit and Retrofit programs year 2, it was suggested that the programs should be rolled out in a suite in Year 1. Applied Energy Group was awarded

implementation of this program. The program implementation in other states and a demonstration of the tracking method was provided to CPAG. The implementation and promotion plan is currently being developed and will be shared with CPAG in January 2006. The tariff should be filed January or February 2006.

Much discussion was held on how we could manage this program in a manner that would not allow one customer to use up all the funding, as funding will be offered on a first come, first served basis. As a precursor to developing a solution to this potential problem, we developed the objectives of the program as:

- *Fund the program fairly and equitably for customers.* To this end, KCP&L will try to qualify as many customers as possible and will perform as broad an outreach as possible.
- *Test the market in all customer size categories.* For each of the 3 categories (audit, retrofit rebate, and new construction rebate), the budget will be divided into 3 buckets based on revenue contributions of small, medium and large C&I customers for at least the initial allocation during the program year.
- *Get efficiency projects done.*
- *Identify barriers to energy efficiency implementation.*

Based on the above, the funding is divided into 3 buckets for small general service (0-25 kW), medium general service (25-200kW), and large general service/large power service (over 200 kW), as defined by existing tariffs, and based on the contribution of that C&I customer class to overall C&I revenues. For the first pass (first 6 months of a program year), funding from each bucket will be determined with a cap per customer of 10%, 10% and 25% respectively. In the second pass (the second 6 months of a program year), other proposals from the same customer that puts them above the cap for the year can be considered but the funding must stay within the appropriate bucket. Also, CPAG cautioned that 6 months may not be soon enough for some projects to be completed, therefore KCPL will not have any requirement for completion date. KCPL will require receiving demonstration of an earnest commitment for the funding to be reserved.

<u>Building Operator Certification:</u> This program is designed to train facility operators in maintaining systems to maximize energy efficiency. The main reason CPAG did not discuss this program is detailed below in the section titled "Projected Rollout."

<u>Demand Response Programs</u>

<u>Energy Optimizer (A/C Cycling):</u> This residential demand response program provides free setback thermostats to residential customers for the right to curtail them during the hottest summer months by either cycling their compressor or adjusting their thermostat settings. Curtailments occur for no more than 4 hours, and can occur Monday through Friday during May through September. While the

key goal of this program is demand reduction, another goal is to identify the balance between meeting demand reduction needs and maintaining customer satisfaction and participation in the program. This program was reviewed in detail, CPAG was provided with the implementation/marketing plan, the tariff was filed in September 2005 and the program was approved October 2005. Implementation began immediately following approval.

<u>MPower:</u> This C&I demand response program was originally designed as a suite of 3 programs – a curtailment, a lighting curtailment and a HVAC curtailment program. As a result of looking into the program design a little more thoroughly, it became apparent that KCP&L was not concerned about how the customer curtailed, as long as they did curtail. MPower is an expansion of the existing PLCC program. It offers the customer options for the length of the contract, curtailment pre-notification period, number of curtailments per season, and the length of the season. The more value provided to KCP&L, the more of the value KCP&L shares with the customer. This program was reviewed by CPAG, the implementation/promotion plan was provided, and the tariff will be filed in January 2006.

Projected Rollout

Several programs have been placed on hold until KCP&L has a better feel for the direction desired by KCC and their support of direct impact energy efficiency programs. Due to administrative and marketing costs, it most probably is not cost effective to implement all programs with half the incentive budget. The ratio of administrative and marketing costs would be higher than acceptable. Therefore, should the KCC choose not to support these programs, CPAG would need to review the portfolio and provide input on which of the remaining programs should be selected for implementation. KCP&L would propose to roll in the budget for those programs that were not selected into the budget for those that were selected.

Evaluation Plan

The Stipulation and Agreement also required KCP&L to review the Evaluation Plan for each program with CPAG. A high-level evaluation plan was provided as Appendix C in the Stipulation and Agreement.

KCP&L felt it was in the best interest of the energy efficiency programs to select a vendor to be our evaluation partner as early as possible in the program design process. The evaluation partner could then assure that the program design reflected the desired outcomes and that data collection was properly implemented to facilitate V&M activities. With CPAG's interest in this process, KCP&L issued a Request for Qualifications/Request for Information for an Evaluation Partner. Nine responses were received and 4 were placed on the short list. Two of those on the short list have since consolidated into one team, leaving 3 vendors on the short list. A conference call was held to discuss expanding on their RFQ responses and turning them into an RFP response. These were received on December 19. On site presentations will be made in January 2006.

Once the Evaluation Partner is on board, a full evaluation plan will be developed for each program being implemented and will be submitted to CPAG and the Commission.

Other Issues

Research Approval: KCP&L requested guidance on how to proceed on receiving Commission approval on these types of programs. Since CPAG does not have authority to give "approval," KCP&L would need to assume risk on research projects.

Non-Direct Impact Program Approval: Non-direct impact programs will need a tariff that references the case number and give a program description. Tariffs should be filed in the Promotional Practices section. Except for the S&A order number, no additional promotional practices support information is needed.

Timing of Tariff Filings: It was determined that it was acceptable to file a tariff even if the program would not be implemented for several months.

Energy Policy Act: KCP&L will take into consideration incentives available as a result of the Energy Policy Act when designing programs, especially rebates.

Leveraging: KCP&L will make concerted efforts to leverage funding from other organizations, including other utilities, in implementing these programs. A program that is not cost-effective for KPC&L alone could become cost effective when leveraging other funding.

Definition of Year 1, Year 2, etc. CPAG members discussed the definition of Year 1, Year 2, etc. It could be from the date of tariff approval, or it could be on a calendar year basis. We requested legal opinion from both the Commission and KPC&L but did not receive an agreed upon definition. Therefore, we will at this time consider year 1 to start as of the date of the tariff approval. After the evaluation plans are completed, KCP&L will file partial year budgets for approval that will transition all programs to a calendar year basis. This will facilitate administration and reporting of the programs' achievements.

Definition of 5-year Pilot: Because all programs do not start year 1, and because year 1 for all programs will not be consistent, the 5-year pilot for some programs will start in 2005, others will start in 2006, and still others in 2007. Therefore, the 5-year pilots for all the programs will run for approximately 8 calendar years, from 2005 through 2012. KCP&L reinforced commitment to these energy efficiency programs and to complete them as intended.

Unspent (Excess) Funds: Low income weatherization program funding that does not get spent in one year will be carried over to future weatherization or affordability programs. In addition, KCP&L agreed in the Stipulation and Agreement that any research dollars that are not spent would be rolled into program funding.