Duquesne Light
Our Energy...Your Power

411 Seventh Avenue
16th Floor
Pittsburgh, PA 15219

Tel 412-393-1541
Fax 412-393-1418
gjack@duqlight.com

Gary A. Jack
Assistant General Counsel

December 28, 2009

VIA ELECTRONIC FILING

James J. McNulty, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building, 2nd Floor
400 North Street
Harrisburg, PA 17120

RE: Duquesne Light Company
Petition for Approval of a Time-of-Use Plan
Docket No. _____

Dear Secretary McNulty:

Enclosed for filing is the Petition of Duquesne Light Company for Approval of a Time-of-Use and Real Time Pricing Plan together with the proposed Plan. Please do not hesitate to contact us if you have any questions.

Sincerely yours,

Gary A. Jack
Assistant General Counsel

Enclosures

c: Sonny Popowsky- Office of Consumer Advocate
Tanya McCloskey - Office of Consumer Advocate
William Lloyd - Office of Small Business Advocate
Pamela Polacek, Esq. --McNees, Wallace & Nurick LLC
John Simms - Office of Trial Staff
Paul Diskin - Bureau of Fixed Utility Services
Elaine McDonald - Bureau of Fixed Utility Services

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Duquesne Light Company	:	
Approval of a Time-of-Use Plan	:	Docket No.

PETITION FOR APPROVAL OF TIME-OF-USE PLAN

TO THE PENNSYLVANIA PUBLIC UTILITY COMMISSION:

Duquesne Light Company ("Duquesne" or "Company") hereby files this Petition, pursuant to 66 Pa. C.S. 2807(f)(5), seeking approval of its Time-of-Use Rate and Real-Time Pricing Plan ("TOU Plan" or "Plan"). In support of this Petition, Duquesne states as follows:

Background

1. Duquesne is a public utility as that term is defined under Section 102 of the Public Utility Code, 66 Pa. C.S. § 102. Duquesne is certified by the Pennsylvania Public Utility Commission ("Commission") and provides electric service to approximately 579,000 customers in the City of Pittsburgh, and in Allegheny and Beaver Counties, Pennsylvania.

2. In the fall of 2008, the Pennsylvania Legislature passed Act 129 of 2008, which took effect on November 14, 2008 and, *inter alia*, required electric distribution companies ("EDCs") with at least 100,000 customers to file a time-of-use ("TOU") and real-time pricing plan by January 1, 2010, or at the expiration of a cap on generation rates, whichever is later. 66 Pa. C.S. §2807(f)(5).

3. Under Act 129, default service providers must offer the time-of-use rates and real-time pricing plans to all customers that have been provided with smart meter technology. 66 Pa.C.S. § 2807(f)(5). Real-time pricing is defined as "a rate that directly reflects the different cost of energy during each hour." 66 Pa.C.S. § 2806.1(m). A time-of-use rate is defined as "a rate that reflects the costs of serving customers during different time periods, including off-peak and on-peak periods, but not as frequently as each hour." *Id.*

4. The Commission adopted its Smart Meter Implementation Order on June 18, 2009, outlining its guidance for EDC's Smart Meter Procurement and Installation program pursuant to Act 129. The Implementation Order directed that an EDC's smart meter technology must support several capabilities; one such capability was supporting TOU rates and real-time pricing programs. Smart Meter Implementation Order at 16.

5. Duquesne filed its Smart Meter Procurement and Implementation Plan ("Smart Meter Plan") on August 13, 2009. Duquesne's Smart Meter Plan proposes analysis, design and construction of the infrastructure necessary to support smart meters during the Grace Period ending October 31, 2012 and then deployment of smart meters over a six year period beginning in 2013[1]. After hearing, Duquesne's Smart Meter Plan is before the Commission now for its consideration and action.

6. As part of its current POLR plan offering, Duquesne offers day ahead hourly price service to its large commercial and industrial ("C & I") customers with monthly metered demand greater than 300 kW. This day ahead hourly priced service offering has been in effect since January 2008. The Company has proposed to continue this offering for these

[1] The Grace Period as filed by the Company is projected to end October 31, 2012 and is subject to change depending on final Commission order in that proceeding.

customers in its new POLR plan now pending before the Commission for service beginning January 1, 2011 through May 31, 2013. The approximate 900 large C & I customers have interval meters that permit hourly priced service to be offered. Since the prices change hourly, this is a real time price offering and rate Duquesne has in place, which has already received approval from the Commission, and is a part of this Plan.

7. Duquesne's current residential meters and their back end systems are not capable of supporting TOU rates. While the meters and infrastructure can provide daily reads, it cannot provide, store, or bill a comprehensive TOU offering. Development and installation of new smart meters and infrastructure, however, will change those capabilities. Per the Smart Meter Plan pending before the Commission, Duquesne is utilizing the Grace Period (April 2010 to October 2012) to assess, analyze, design and decide the appropriate smart meter technology and infrastructure for the Company and for its customers. The roll-out of smart meters will begin in 2013. A comprehensive TOU plan will necessarily have to await the new smart meters and infrastructure. Duquesne's TOU Plan is designed to be integrated with and complement its Smart Meter Plan.

Proposed TOU Plan

8. Attachment A for Commission approval is Duquesne's formal TOU Plan at this stage. The Plan details much of the research and analysis conducted to date. The Plan includes an analysis of Duquesne's system load, analysis of PJM locational marginal prices in the Duquesne zone, and the implications of this load and pricing in TOU rate design. The conclusions from this research and analyses in Attachment A are essential to

ensure future TOU rate design achieves desired goals and aligns with other Company energy efficiency initiatives and market information.

9. Duquesne's TOU Plan involves four phases over the 2010-2013 period to implement TOU programs and rates that will transition customers to new pricing alternatives and integrate this new pricing into practice and complement the Energy Efficiency and Conservation and Demand Response Plan of Duquesne Light as well as the Smart Meter Plan. This transition plan will ensure TOU rates are offered after thorough analysis is complete and the smart meters and infrastructure necessary to implement TOU rates are in place. The phases can be summarized as follows: (1) conduct market analysis in 2010 and obtain PUC approval for the proposed pilot projects and schedule described herein as part of this Petition; (2) establish base line consumption and demand data during 2011 for two residential pilot programs and continue and expand customer research and enroll participants; (3) implement two residential pilot programs in 2012; and (4) implement a more robust TOU pricing program for smart meter customers beginning with smart meter rollout in 2013. The Company proposes to submit additional filings to the Commission as it proceeds with each of these phases over the 2010 to 2013 period.

10. Duquesne is proposing a TOU Plan based on the following principles derived from this research and analysis:

a. On- and off-peak hours must align with peak hours of Company load determined in the research and analysis.
b. On- and off-peak hours should be practical to the consumer.
c. Default service requirements must be considered in establishing TOU rates.
d. The consumer must take action to reduce their monthly bill.
e. Participation in a TOU or RTP pricing product should be voluntary.
f. Pricing should be simple to understand.
g. A meaningful price signal must be offered for behavioral change.

h. Overall rate design should result in revenue neutrality to the Company.

11. Duquesne's first step is to conduct market research to understand customer interest in pricing and preferences. Duquesne will study further the appropriate on-peak and off-peak price differences and will evaluate level of market prices, customer consumption, customer hardship, and opportunities for customer savings.

12. Despite the sizeable obstacles in offering TOU rates prior to implementation and installation of its Smart Meter Plan, Duquesne is proposing three TOU pilot programs in this filing as helpful transition steps to offering TOU rates for all customers and customer classes once smart meters are fully deployed. Duquesne has sought and obtained stakeholder input with regard to these proposed pilot programs.

FIRST TOU PILOT PROGRAM

13. The first TOU pilot program Duquesne proposes for PUC approval to proceed is a time of week pilot plan designed around the limited capabilities of the existing meter reading system. It is based on an enrolled residential customer reducing their weather-normalized weekday usage during the months of July and August from baseline consumption during those months from the preceding year. If a residential customer can reduce their baseline consumption by a predetermined percentage, e.g. 10%, weekdays during the months of July and August, they will not only receive a lower bill due to lower consumption but will also receive a financial incentive from the Company (i.e., rebate or credit) on their total bill as a reward for curtailing usage during those high peak months. The customer would need to be a POLR customer and would need to have historical consumption data for those summer months. Since this project does not require hourly

usage data, Duquesne's existing meter reading system could be modified and configured to handle up to 1,000 enrolled customers.

This program is conceptual, at this point in time, and after further research is conducted in 2010, Duquesne will submit refinements, details, and clarification on the final parameters of the program. The conceptual framework is one Duquesne believes is worthwhile, by focusing on peak consumption months, and is capable of being accommodated within the limitations of Duquesne's present meter and meter reading system.

SECOND TOU PILOT PROGRAM

14. The second TOU pilot program is a time of day TOU rate plan designed to encourage residential customers to move usage during the June to August weekday period from on-peak hours to off-peak hours. Two different rates will be charged to participating customers during the summer weekdays beginning 2012. During on peak hours of 1:00 p.m. to 7:00 p.m. weekdays in June through August[2], the supply rate would be much higher to reflect higher hourly market prices as load builds during the day. As research and analysis demonstrates in Attachment A, Duquesne experiences its system peak load during those summer weekday afternoons and early evenings. For off-peak hours (all hours other than 1:00 p.m. to 7:00 p.m. weekdays) during the summer months, the rate will be lower in order to encourage load shifting to those off peak hours. The rate differential is expected to be meaningful to try to encourage customer behavioral change. As the analysis in Attachment A demonstrates, Duquesne, at this point, would propose a 1.5 to 2.5 on-peak to off-peak rate differential in energy pricing as a starting

[2] Exact times and months are under review for maximum impact.

point to present to customers in the market research phase to evaluate behavioral change at these price points. The actual rates and differential will be presented in a subsequent Duquesne filing in 2011 for Commission approval so that actual rates, and further refinements and clarifications to the program, could be incorporated. The customer would need to be a POLR customer since this is a supply program to shift power consumption away from peak power pricing periods. Since Duquesne has neither the meters in place nor the infrastructure to bill this type of program, Duquesne needs to limit the program to 100 participants. Special meters would need to be installed on the participants' home and bills would need to be manually generated. This pilot would enable Duquesne to gather worthwhile information and allow some of the customer base to participate. All participation would be voluntary. Like the first TOU plan, this plan is conceptual in nature at this point, and Duquesne will submit clarifications, details, rates and perhaps changes to the program for Commission approval prior to implementation. The customer research to be conducted along with this pilot program will help assess the upcoming parameters to the full scale TOU plan.

THIRD TOU PILOT PROGRAM

15. The third TOU pilot program is one set to coincide with the full deployment of smart meters. This plan would be a more robust TOU plan based on the information learned from the other two pilot programs previously described, market research, experience from other programs and rate offerings in Pennsylvania, and other factors that will be helpful to formulate a more wide-scale TOU offering. This pilot will be offered voluntarily to customers who have smart meters in place by 2013. Duquesne commits to submitting an additional TOU filing proposing the details of this third TOU plan.

Duquesne will have the benefit of the initial results of the first two TOU programs, which it will utilize in developing this third TOU program.

16. The TOU Plan proposes supplemental filings as the Company transitions to full smart meter deployment. Parties will have the opportunity to comment on these filings as results are submitted and programs are implemented. Once full smart meter deployment begins in 2014 and TOU, RTP and other pricing products are evaluated and designed, the Company would propose submitting annual reports to the Commission required by the Act.

17. Customer Education will be an important aspect of any TOU plan. Duquesne will provide educational materials to customers about Time of Use rates, the proposed pilot programs, and eventual rollout of a larger TOU program. Those materials will be developed in 2010 and 2011 for the proposed roll-out of the pilot in 2012 in conjunction with smart meters.

18. Duquesne is currently not proposing actual rates or detailed criteria in the attached TOU Plan but commits to submitting such details in proposed supplemental filings at a time closer to implementation and in conjunction with the effective dates of the pilots.

19. Duquesne requests permission to collect and recover its costs associated with developing and implementing this TOU Plan. Duquesne is not requesting approval of a new surcharge to recover its costs associated with this TOU Plan at this time. Duquesne proposes instead to utilize its existing Consumer Education Surcharge as an appropriate mechanism to recover costs associated with the market research, development and implementation of the TOU Plan. The existing Consumer Education Surcharge is designed to educate customers about energy efficiency, conservation, and load shifting,

and the customer market research and TOU pilot programs align closely with the principles and goals of the existing Consumer Education Program. Duquesne proposes to recover all TOU costs related to metering and meter reading infrastructure to implement the first two TOU pilot programs in the Smart Meter Surcharge to be implemented in 2010, which are expected to be minimal and primarily related to the costs associated with the second pilot.

WHEREFORE, Duquesne Light Company requests approval of its Time-of-Use Rate and Real-Time Pricing Plan described in Attachment A, including the three Time-of-Use pilot programs proposed herein, the proposed timeline for the TOU Plan in Attachment A, authorization to collect and recover the costs associated with the TOU Plan in its Consumer Education Surcharge, or for meter related costs associated with the pilot programs in the TOU Plan in the Smart Meter Surcharge, and such other relief as the Commission deems appropriate.

Respectfully submitted,
Duquesne Light Company

William V. Pfrommer

Gary A. Jack
Kelly L. Geer
411 Seventh Avenue
Pittsburgh, PA 15219
Tel 412.393.1541
Fax 412.393.1418
gjack@duqlight.com
kgeer@duqlight.com
Counsel for Duquesne Light
December 23, 2009

Attachment A

Duquesne Light Company Time-of-Use and Real Time Pricing Plan

Executive Summary

As an Electric Distribution Company serving over 579,000 customers in the Commonwealth of Pennsylvania, Duquesne's Time-of-Use and Real Time Pricing Plan ("Plan") is designed to meet the requirements set forth in Act 129 of 2008 ("Act" or "Act 129") Legislation. This document describes the process and transition plan by which the Company will evaluate data, assess customer needs and implement TOU pilot programs that complement the Company's commitments to comply with other requirements of the Act. The Plan establishes baseline data and requirements; assesses the Company's system load; describes a series of TOU pilot programs for residential customers; and describes the evaluation and implementation plans in the period prior to full deployment of smart meters.

Duquesne's current Day-Ahead Hourly Price Service, which is the default service option for large C&I customers and available to 45% of Duquesne's system load, satisfies the requirements of Act 129 in regard to the real time pricing requirement. Similarly, the Plan also explains why the current rates for lighting service customers are an appropriate TOU option.

An analysis of the Company's current system load and market information establishes the following parameters and baseline data to consider in designing TOU rates:

- A summer TOU rate should reduce the most frequent hour of peak load which is between 4:00 PM and 5:00 PM.
- A TOU rate with an on-peak period between 1:00 PM to 7:00 PM June through August should provide a focused and meaningful reduction in peak system load in the Duquesne zone.
- A Critical Peak Price ("CPP") could be designed around the latter half of July and the first three weeks of August.
- PJM LMP prices increase dramatically after the Company's system load reaches 2700 MWH. Noticeable CPP rates could be designed around this load point.
- The average LMP on-peak to off-peak ratio is about 2:1 for the proposed June through August, 1:00 PM to 7:00 PM, summer peak period.

Duquesne's approach to TOU rates is a four step plan that will integrate TOU rates into practice and complement the Company's Energy Efficiency and Conservation and Demand Response Plans as well as the Smart Meter Implementation Plan.

> Step 1 - (2010) Conduct Market Analysis
> Step 2 - (2011) Implement Residential Pilot Program Infrastructure
> Step 3 - (2012) Implement Residential Pilot Programs
> Step 4 - (2013) Implement TOU Pricing Programs to Smart Meter Customers

Duquesne's current meter reading system and infrastructure can not support TOU rates other than for large C&I customers over 300 kW demand. Duquesne proposes to offer three residential pilot programs beginning in 2011 until full smart meter deployment begins in 2014. These programs will measure customer response and benefits to different pricing products and

Executive Summary – (Continued)

options and serve as the basis for TOU rates after full smart meter deployment. The Time of Week pilot builds on Duquesne's existing automated meter reading system and is intended to reduce energy consumption during peak summer months by enrolling up to 1,000 customers. The Time of Day pilot will be a TOU rate offered to approximately 100 customers. The Smart Meter pilot will be offered in early 2013 and will be available to as many as 8,000 customers with smart meters. The third pilot will build on the market analysis and experience gained in the previous pilots. Through customer surveys and focus groups, and these three pilot programs, Duquesne will analyze the customer motivators and work off of those findings in order to derive its TOU rates that will coincide with the full implementation of smart meters.

Duquesne Light Company Time-of-Use and Real Time Pricing Plan

Introduction

Pursuant to the Pennsylvania General Assembly's Act 129 of 2008 ("Act" or "Act 129") directive that Electric Distribution Companies ("EDCs") with more than 100,000 customers file a Time-of-Use ("TOU") and Real Time Pricing ("RTP") Plan ("TOU Plan" or "Plan"), 66 Pa.C.S. § 2807(f)(5), by January 1, 2010, Duquesne Light Company ("Duquesne" or "Company") herein submits its Plan.

Duquesne has had experience with TOU pricing plans with its largest commercial and industrial ("C&I") customers which are those customers with peak monthly metered billing demand greater than 300 kW. Since January 2005, the Company has offered, for various periods, TOU rates with on-peak and off-peak pricing, real time hourly price service and day-ahead hourly price service. Duquesne provided numerous informational and educational sessions to customers about these products. The Company was able to provide these price options in part because the metering and infrastructure required to collect and process the data was already in place, though billing continues to be done through off-system processes.

Based on this experience, the Company recognizes the detail, complexity and infrastructure beyond the meter required to implement TOU and RTP products. Duquesne currently does not have the meter reading system and necessary infrastructure to implement TOU and RTP products for customers other than large C&I customers. Only when smart meters are installed and the infrastructure in place to support smart meters does it make sense to implement TOU and RTP products to all customers. However, the Company recognizes the importance of TOU and RTP products in combination with other energy efficiency and load management initiatives, and recognizes that waiting until smart meters are available to all customers to develop plans for TOU and RTP is not a preferred option that is beneficial to the Company or the customer.

Duquesne's Plan described herein, proposed for Pennsylvania Public Utility Commission ("PaPUC" or "Commission") approval, defines the implementation steps appropriate for the Company's zone and for customers, and complements all aspects of the Act to transition from current rates to TOU rates and smart meters. The Plan first establishes baseline criteria from which to build TOU and RTP rates for all customer classes. An analysis of data on the Company's side of the meter is necessary to determine the appropriate parameters for TOU rate design. This analysis is provided in this document because it is essential to ensure TOU rate design achieves desired goals and aligns with other Company energy efficiency initiatives and market information. The Plan then describes the steps the Company proposes to take to implement TOU rates on the customer side of the meter. This methodical approach to transition from traditional rates to time varying rates and smart meters is intended to ensure programs are designed in the customer interest and align with smart meter deployment. While the Plan describes TOU pilot programs for residential customers, other customer segments are not ignored. The market research and customer assessment aspects of the Plan include analysis of the small and medium C&I customer segment as well as the residential segment. In the long term, this market research and customer assessment will help to determine TOU options appropriate for each segment.

Introduction – (Continued)

This dynamic pricing plan proceeds in four distinct steps starting in 2010 and continuing through 2013. The timeframe also corresponds with Act 129 requirements for implementing programs in energy efficiency and demand response as well as smart meter implementation. The four key steps for the dynamic pricing plan are:

Step 1: Conduct customer and market research and analysis to identify likely participants, effective rate structures, metering and other resource needs, implementation costs and estimated impacts on demand and energy. Obtain PUC approval of the proposed schedule and pilot programs. This step will be conducted in 2010.

Step 2: Establish two residential pilot programs. Establish a time-of-week pilot by enrolling up to 1,000 customers in a conservation-oriented program wherein customers are given an incentive for reducing consumption below a predetermined, customer-specific, baseline level. Establish a second time-of-day pilot program by enrolling up to 100 participating homeowners, installing interval metering and related equipment, and collecting baseline data for comparative bills. This step will be conducted in 2011.

Step 3: Operate the residential pilot programs under TOU rates and evaluate the results, particularly for the summer months. This step will be conducted in 2012.

Step 4: Implement a larger scale TOU program by installing smart metering and related equipment for 8,000 customers and offering them a TOU program based on information gathered from the first two TOU pilot projects. This step will be conducted in 2013.

The proposed plan for the dynamic pricing program should benefit from the energy efficiency and demand response programs implemented under Act 129 and vice versa. Specifically, participants in the energy efficiency and demand response programs may be more likely to participate in the pricing programs. Also participants in dynamic pricing programs may be more likely to join direct load control programs.

The remainder of this Plan focuses on the dynamic pricing programs. However, it is useful to keep in mind there will be several areas of compatibility, which can be more clearly defined and specified as the dynamic pricing plan moves forward.

For these reasons, it is imperative to proceed with an approach that considers all of these factors, customer response to products and technologies, and to ensure TOU and RTP are implemented in an effective manner.

Introduction – (Continued)

Duquesne's Plan is organized as follows:

- **Baseline Analysis**
  - Act 129 Requirements and Compliance Plans
  - Guiding Principles
  - Retail Tariff Rate Structures

- **System Analysis**
  - Duquesne Light Company Zone Load
  - Duquesne Light Company Zone Relative to PJM Pricing
  - Consumption Data
  - Average LMP Analysis

- **Market Evaluation**

- **Implementation Plan**
  - Step 1 (2010) Conduct Market Analysis
    - > Customer Input
    - > Impact on RFP for Default Service
    - > Establish Internal Processes and Accountability
  - Step 2 (2011) Implement Residential Pilot Program Infrastructure
    - > Install Infrastructure
    - > Solicit Customer Participation
    - > Supplemental Filing – Plans for 2012
    - > Gather baseline data for conservation TOU program
  - Step 3 (2012) Implement Residential Pilot Programs
    - > Consumer Education
    - > Evaluate Results and Participation
    - > Supplemental Filing – Pilot Results and Plans for 2013
    - > Implement two TOU pilot programs
  - Step 4 (2013) Implement TOU Pricing Program to Smart Meter Customers
    - > Implement TOU for Smart Meter Customers
    - > Conduct Robust TOU Plan
    - > Customer Surveys
    - > Selection
    - > Post Implementation Evaluation
    - > Supplemental Filing – Pilot Results and Plans for 2014 Smart Meter Full Deployment

- **TOU Implementation Schedule**

Baseline Analysis
Act 129 Requirements and Compliance Plans

Act 129 of 2008 ("Act" or "Act 129") required electric distribution companies ("EDCs") with at least 100,000 customers to create and adopt plans to enable customers to manage their electricity usage. In 2009, the Company will have submitted four plans that relate to or are requirements of Act 129.

The Company submitted its Energy Efficiency and Conservation and Demand Response ("EEC&DR") Plan on July 1, 2009, at Docket No. M-2009-2093217. The EEC&DR Plan proposes energy efficiency measures and demand response products for customers to reduce and control their electricity consumption. The Commission issued an Order on the Company's EEC&DR Plan on October 27, 2009.

The Company submitted its second plan, the Smart Meter Procurement and Installation ("SMIP") Plan on August 14, 2009, at Docket No. M-2009-2123948. In its SMIP Plan, the Company defined the process and methodology to evaluate meter technologies and required infrastructure and to implement smart meter technology for all customers[1]. A recommendation from the Administrative Law Judge on the Plan is expected in January 2010.

The Company submitted its default service plan (POLR V), on October 8, 2009, seeking approval for new rates effective from January 1, 2011, to May 31, 2013. The Company's generation rate cap period expired in 2002 and 2003 for nearly all rate classes. This fifth default service plan builds on the success of prior default service plans and proposes default service rates that balance the preferences of customer groups, EDC's and other stakeholders. A final order from the Commission on this filing is expected in the second quarter of 2010.

The fourth and final filing contained herein is the Company's Plan to evaluate and implement TOU and RTP rate plans as an option for customers to manage their electricity costs. With respect to TOU and RTP plans, the Act states:

> **2807(f)(5)** By January 1, 2010, or at the end of the applicable generation rate cap period, whichever is later, a default service provider shall submit to the commission one or more proposed time-of-use rates and real-time price plans. The commission shall approve or modify the time-of-use rates and real-time price plan within six months of submittal. The default service provider shall offer the time-of-use rates and real-time price plan to all customers that have been provided with smart meter technology under paragraph (2)(iii). Residential or commercial customers may elect to participate in time-of-use rates or real-time pricing. The default service provider shall submit an annual report to the price programs and the efficacy of the programs in affecting energy demand and consumption and the effect on wholesale market prices.

The Company will describe its plans to comply with this requirement of the Act and how this TOU and RTP Plan complements the other Act 129 filings submitted to the Commission.

[1] Smart meter deployment time frames referenced in this document are based on the Smart Meter Implementation Plan as filed and may change depending on the Commission's order in that proceeding.

Baseline Analysis
Guiding Principles

Flat retail electric prices do not adequately reflect the exact cost to serve customers since the cost varies throughout the day. Except for the Company's largest customers already on TOU rates, the current supply rates offer no incentive for customers to reduce electricity usage during peak periods of electric load, even though it is most expensive to supply the customer during those periods. The primary objective of TOU and RTP rates is to offer more accurate price signals as a way to stimulate the reduction of the electric load of the Company at peak periods. Such time sensitive pricing encourages customers to shift usage away from "on-peak" periods to periods of lower load or "off-peak" periods. Reducing on-peak load benefits the Company by reducing the need for generating facilities to supply this load that typically occurs for only a few hours throughout the year. Customers participating in dynamic pricing can benefit by reducing and shifting peak loads in a way to save on their monthly electric bills.

TOU pricing defines a period of time, typically a select block of hours during weekdays, as the on-peak period. The PJM Interconnection on-peak hours, defined as weekdays, excluding holidays, from 7:00 AM to 11:00 PM, is an example of a TOU pricing period.

Dynamic pricing options for electricity supply, including TOU and RTP, are a form of TOU rates that in general, provide customers with more specific price signals to change their behavior and provide the opportunity to lower their electric bill. RTP is the purest form of dynamic pricing that provides customers with hourly prices available in the market.

Critical peak pricing ("CPP") in its simplest form is a version of TOU pricing wherein the critical peak hours are the few hours (e.g. less than 100 hours) during which the utility's highest percentage peak load typically occurs. CPP pricing may be extremely high for those few hours to reflect market prices, or the utility may offer a rebate version of the rate wherein the customer is paid to reduce usage below a baseline level during those hours. Regardless of the name, TOU and RTP price options provide customers with different prices at different times of the day, providing an opportunity for the customer to reduce their electric costs.

Peak time rebate ("PTR") programs offer the customer the opportunity to reduce their consumption during specified periods and in return receive a rebate from the EDC. The customer is commonly on a traditional flat retail rate. Customers are rewarded by reducing their consumption below a baseline usage level that is established for each participating customer.

Act 129 established opportunities to reduce electricity requirements in the Commonwealth of Pennsylvania. In addition to TOU and RTP rate options, Act 129 established energy efficiency and demand reduction targets; criteria for implementation of smart meter technology for all customers in the Commonwealth and guidelines for default service supply. The results of these initiatives should not only reduce electricity consumption and electricity demand, but, in theory, reduce the cost of electricity supplied to the consumer. The key to success for these initiatives is the consumer. TOU and RTP products must be embraced by the consumer; therefore, input from the customer is essential as the programs are designed and implemented. In aggregate, each

Baseline Analysis
Guiding Principles – (Continued)

initiative must complement each other, and careful evaluation is needed to ensure an aspect of one plan does not compromise another.

The Company has established the following guiding principles to follow as it assesses the expected benefits of each party:

Guiding Principles

> On- and off-peak hours must align with peak hours of Company load.
> On- and off-peak hours should be practical to the consumer.
> Implementation of TOU rates should align with the Company's EEC&DR Plan.
> Implementation of TOU rates should complement the Company's Smart Meter Plan.
> Default service provisions must be considered in establishing TOU rates.
> Consumer education and feedback is essential.
> The consumer must take action to reduce their monthly bill.
> Participation in a TOU or RTP product should be voluntary.
> Pricing should be simple to understand and communicated in a simple to understand message.
> A meaningful price signal should be offered to affect behavioral change.
> Tariff structure and pricing should create opportunities for meaningful reductions in the customers' monthly bill.
> Overall rate design should result in revenue neutrality.

Baseline Analysis
Retail Tariff Rate Structures

Consideration must be given to the design and structure of existing tariff rates and their relation to potential TOU and RTP rates. Table 1 summarizes the base distribution and transmission rates for customer classes and rate schedules in the Company's tariff. The default service rates shown are those rates effective January 1, 2010, and the default service rates proposed in the Company's POLR V filing to become effective January 1, 2011.

Table 1. Duquesne Light Retail Tariff - 2010 and Proposed 2011 Rates

Rate Class	Billing Unit Description	Billing Unit	Distribution (1)	Transmission (2)	2010 Default Service (POLR IV)	Proposed 2011 Default Service (POLR V) (3)
Residential						
RS	Fixed Charge	$/Month	$7.00			
	All kWh	¢/kWh	4.2313	1.3767	7.156	7.860
RH	Fixed Charge	$/Month	$7.00			
	May thru October	¢/kWh	4.2313	0.672	6.895	7.860
	First 500 kWh (Nov-Apr)	¢/kWh	4.2313	0.672	6.895	7.860
	Additional kWh (Nov-Apr)	¢/kWh	2.1912	0.672	6.895	7.860
RA	Fixed Charge	$/Month	$7.00			
	May thru October	¢/kWh	2.8953	1.3544	7.156	7.860
	First 500 kWh (Nov-Apr)	¢/kWh	2.8953	1.3544	7.156	7.860
	Additional kWh (Nov-Apr)	¢/kWh	1.4994	1.3544	7.156	7.860
General Service Small and Medimum Commercial and Industrial						
GS	Fixed Charge	$/Month	$7.00			
	All kWh	¢/kWh	4.2313	0.958	7.272	RFP
GM	Fixed Charge	$/Month	$30.00			
<25 kW	Demand first 5 kW	$/kW/mo.	No Charge	$0.90		
	Demand additional kW	$/kW/mo.	$4.84	$0.90		
	First 1300 kWh	¢/kWh	0.8323	0.6559	7.272	RFP
	Additional kWh	¢/kWh	0.8323	0.6559	7.272	
GM	Fixed Charge	$/Month	$30.00			
>25 kW	Demand first 5 kW	$/kW/mo.	No Charge	$1.11		
	Demand additional kW	$/kW/mo.	$4.84	$1.11		
	All kWh	¢/kWh	0.8323	0.8059	RFP	RFP
GMH	Fixed Charge	$/Month	$30.00			
<25 kW	Demand first 5 kW (1)	$/kW/mo.	No Charge	$1.92		
	Demand additional kW (1)	$/kW/mo.	$4.84	$1.92		
	All kWh (Jun-Sep)	¢/kWh	0.8323	0.3880	7.272	RFP
	First block kWh (Oct-May)	¢/kWh	3.0313	0.3880	7.272	
	Additional kWh (Oct-May)	¢/kWh	0.8323	0.3880	7.272	
GMH	Fixed Charge	$/Month	$30.00			
>25 kW	Demand first 5 kW (1)	$/kW/mo.	No Charge	$2.76		
	Demand additional kW (1)	$/kW/mo.	$4.84	$2.76		
	All kWh (Jun-Sep)	¢/kWh	0.8323	0.6237	RFP	RFP
	First block kWh (Oct-May)	¢/kWh	3.0313	0.6237		
	Additional kWh (Oct-May)	¢/kWh	0.8323	0.6237		
General Service Large Commercial and Industrial						
GL	Demand first 300 kW	$/Month	$2,121.00			
	Demand additional kW	$/kW/mo.	$6.45	$2.60		
	All kWh	¢/kWh	0.1236		DA HPS (4)	DA HPS (4)
GLH	Fixed Charge	$/Month	$30.00			
	Demand first 300 kW (Jun-Sep)	$/Month	$2,121.00			
	Additional kW (Jun-Sep)	$/kW/mo.	$6.45	$2.72		
	All kWh (Jun-Sep)	¢/kWh	0.1236		DA HPS (4)	DA HPS (4)
	First block kWh (Oct-May)	¢/kWh	3.7110			
	Additional kWh (Oct-May)	¢/kWh	0.1236			
L	Demand first 5,000 kW	$/Month	$30,555.00			
	Next 10,000 kW	$/kW	$6.04	$2.58		
	Additional kW	$/kW	$5.89	$2.58		
	All kWh	¢/kWh	0.1100		DA HPS (4)	DA HPS (4)
HVPS	Demand first 30,000 kW	$/Month	$9,114.90			
	Additional kW	$/kW/mo.	$0.11	$2.58		
	All kWh	¢/kWh	0.00		DA HPS (4)	DA HPS (4)
Unmetered and Lighting						
AL	All kW of Demand	$/kW	1.400			
	All kWh	¢/kWh	0.1991	0.458	5.923	5.840
SE	Charge per Lamp	$/Month	3.17			
	All kWh	¢/kWh		0.4387	5.923	5.840
UMS	Fixed Charge	$/Month	$10.00			
	All kW of Demand	$kW		2.62		
	All kWh	¢/kWh	2.5602	0.4158	6.718	7.027
SM, SH, PAL	Charge per Unit	$/Month	Fixed	Fixed	5.923	5.840

1/ Base tariff distribution charges shown excluding rider adjustments for Consumer Education Surcharge and pending Act 129 surcharges..
2/ Transmission rates as defined in Appendix A of the Company's tariff, updated June 1 of each year.
3/ Proposed rates in the Company's proposed default service plan for January 1, 2011, through May 31, 2013, submitted October 8, 2009.
4/ Day-ahead hourly price service defined in Rider 9 of the Company's tariff.

Baseline Analysis
Retail Tariff Rate Structures – (Continued)

The following observations and conclusions may be made based on the tariff rates and Table 1:

- TOU rates must be designed as a pricing option applicable only to default service rates. The distribution and transmission rates are designed to recover the Company's investment and expenses in its delivery business. Distribution rates were determined in the Company's most recent proceeding at Docket No. R-00061346. Transmission rates are updated annually effective June 1 of each year in accordance with the Transmission Service Charge defined in Appendix A of the Company's retail tariff. It is not appropriate in this filing to design TOU or RTP rates that would change the nature of recovery of these costs.

- Day ahead hourly price service ("DA HPS") satisfies the requirements of the Act. DA HPS is the default service option for large C&I customers. The Company implemented real time hourly price service ("RT HPS") for its large C&I customers as part of the stakeholder process in its third Provider of Last Resort ("POLR") POLR III filing effective January 1, 2005. The Company implemented DA HPS effective January 1, 2008, in its POLR IV filing, again in response to input from stakeholders, and has also proposed DA HPS as the RTP option in its most recent default service filing.

- A TOU rate option is not necessary for lighting customers. First, usage by these customers is not metered. The usage for lighting customers is determined based on lamp wattage and established dusk to dawn hours of operation. Second, the fixtures are automatically controlled by light sensors requiring no action on the part of the customer and no response to an alternative price. Third, these customers are billed a fixed default service rate per fixture that is determined based on a default service rate that already reflects the off-peak nature of lamp operation.

- A TOU rate option is not necessary for unmetered service customers. This rate class includes municipal traffic signals and service to customers where the usage is pre-determined for the particular type of equipment. The nature of the load is that the equipment is required to operate 24 hours per day and therefore, there is no opportunity for the customer to shift load. Similar to the default service rate design for lighting customers, the default service rates in Table 1 already reflect the nature of the load. For these reasons, a TOU rate will not be proposed for these customers.

- Declining block, seasonal rates should not be a consideration for TOU rates. Rate schedules RH, RA, GMH and GLH were designed to encourage customers to install electric space heating when the Company was vertically integrated. The declining block nature of these rate schedules, now only reflected in the respective distribution charges, is not appropriate to achieve the objectives of the Act. Through stakeholder participation in the Company's POLR proceedings, customers have not shown interest in declining block seasonal rates and because of the nature of the request for proposal ("RFP") process in the current POLR rates, declining block seasonal default service rates are eliminated January 1, 2010. For these reasons, the Company is not considering this structure as a TOU option.

Baseline Analysis
Retail Tariff Rate Structures – (Continued)

- The implications of offering TOU rates to customers wherein default service rates are obtained through an RFP process should be evaluated. Default service pricing for medium C&I customers 25 kW to 300 kW will be obtained through an RFP in 2010. In 2011, the Duquesne proposed POLR V plan expands the RFP process such that default service pricing for C&I customers with billing demand less than 300 kW will be obtained through an RFP. Use of an RFP raises questions with respect to TOU rate design and TOU offerings. A separate process will be established for small and medium C&I customers when smart meters are deployed.

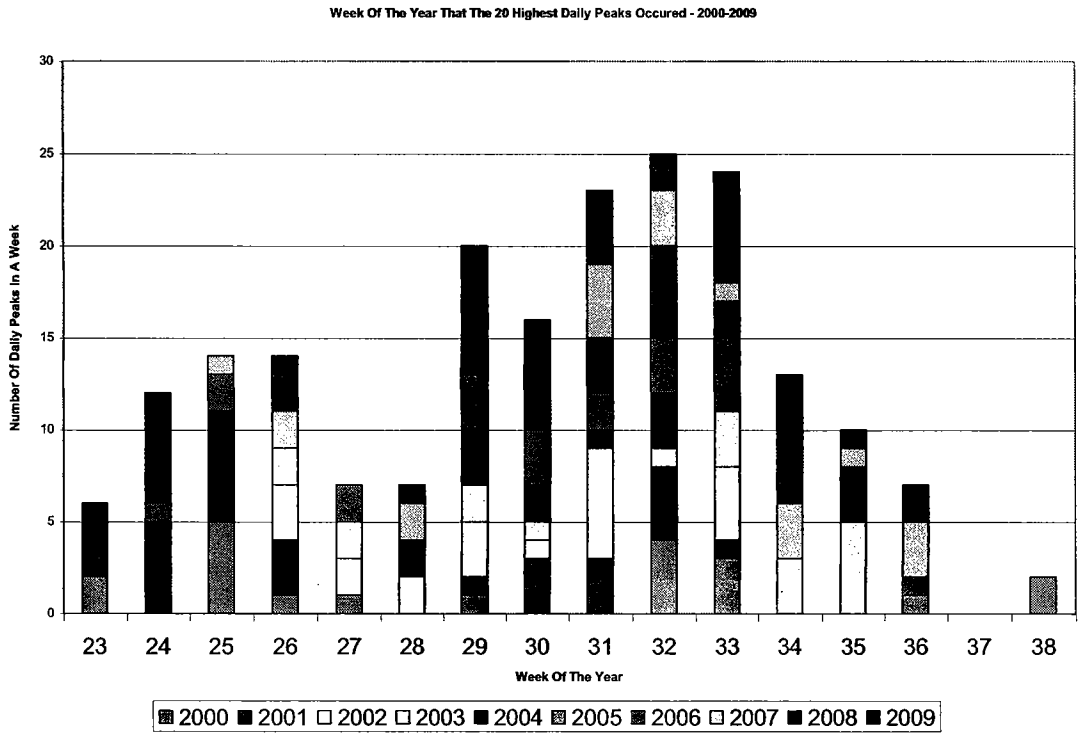
System Analysis
Duquesne Light Company Zone Load

A meaningful objective of TOU rate plans is to reduce the Company's peak system load. Therefore, an analysis of the Company's system hourly load data is required to determine the periods of peak load prior to designing rates. This analysis must also consider the load relative to the locational marginal prices ("LMP") in PJM, and define the time periods during which the Company should seek meaningful reductions in customer load.

This section presents a series of figures that will serve as the basis to define the periods of the Company's system peak load. An analysis of the Duquesne Zone load over the last 10 years verifies that the peak load occurs during a week day. This is due to the nature of load in the service area, largely a function of weekday load in the City of Pittsburgh. Accordingly, the figures in this section reflect analyses of the Company's system weekday and seasonal load data and serves as the basis to design TOU rates.

System Analysis
Duquesne Light Company Zone Load – (Continued)

Figure 1



																		Totals
2009	0	1	0	3	0	0	1	0	1	1	6	6	1	0	0	0	20
2008	2	5	0	0	0	1	4	1	3	1	0	1	0	2	0	0	20
2007	0	0	1	2	0	2	0	0	4	3	1	3	1	3	0	0	20
2006	2	0	0	0	0	0	2	5	3	5	2	0	0	1	0	0	20
2005	0	1	2	0	2	0	3	3	2	3	4	0	0	0	0	0	20
2004	0	2	4	0	0	2	3	2	1	3	0	0	3	0	0	0	20
2003	0	0	0	2	2	2	2	1	0	0	3	3	5	0	0	0	20
2002	0	0	0	3	2	0	3	1	6	1	4	0	0	0	0	0	20
2001	0	3	2	3	0	0	1	3	3	4	1	0	0	0	0	0	20
2000	2	0	5	1	1	0	1	0	0	4	3	0	0	1	0	2	20
Totals	6	12	14	14	7	7	20	16	23	25	24	13	10	7	0	2	200

Figure 1 identifies the week of the year during which the twenty (20) highest daily peaks occurred from 2000 to 2009. Week 23 is the week during which June 1 occurs and week 38 is the week during which September 30 occurs. These results are consistent with the Company's previous rate designs. Historically, when the Company was vertically integrated, seasonal rates for electric space heating customers were designed around winter months defined as October through May, with June through September considered the summer months. Similarly, these peak weeks are consistent with PJM's definition of June through September as the summer period and, therefore, should generally be consistent with the highest LMP prices.

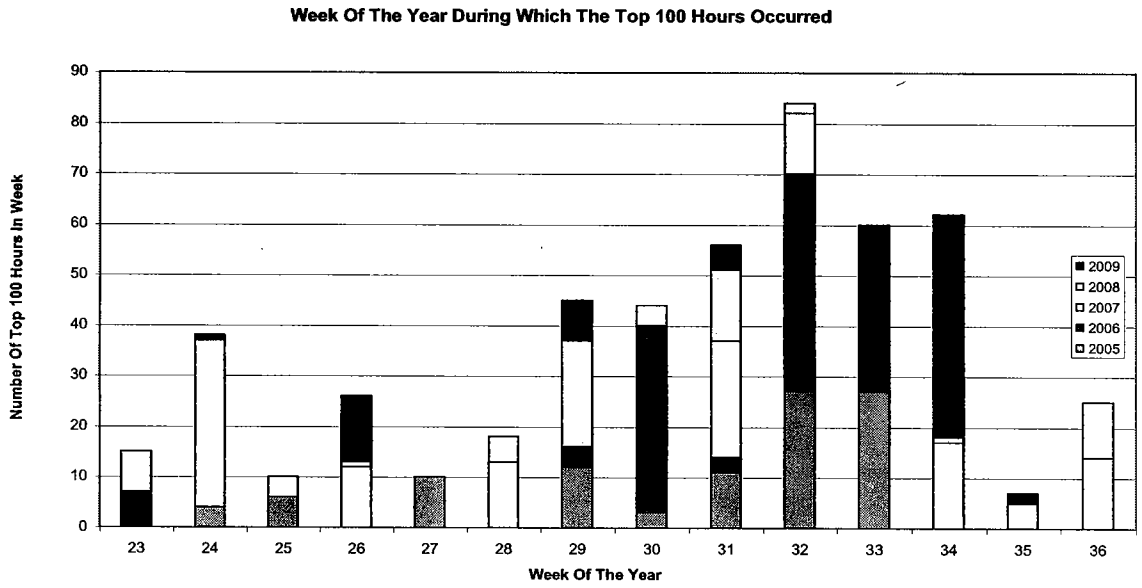
System Analysis
Duquesne Light Company Zone Load – (Continued)

Act 129 requires EDCs to reduce their system peak load as follows:

2806(1)(d) Peak demand – The plans adopted under subsection (b) shall reduce electric demand as follows:

> By May 31, 2013, the weather normalized demand of the retail customers of each electric distribution company shall be reduced by a minimum of 4.5% of annual system peak demand in the 100 hours of highest demand. The reduction shall be measured against the electric distribution company's peak demand for June 1, 2007, through May 31, 2008.[2]

Figure 2



	23	24	25	26	27	28	29	30	31	32	33	34	35	36	Totals
2009		1		13			8		5		27	44	2		100
2008	8	33		1		5	21	4	14	2		1		11	100
2007			4	12		13			23	12		17	5	14	100
2006	7						4	37	3	43	6				100
2005		4	6		10		12	3	11	27	27				100
Totals	15	38	10	26	10	18	45	44	56	84	60	62	7	25	500

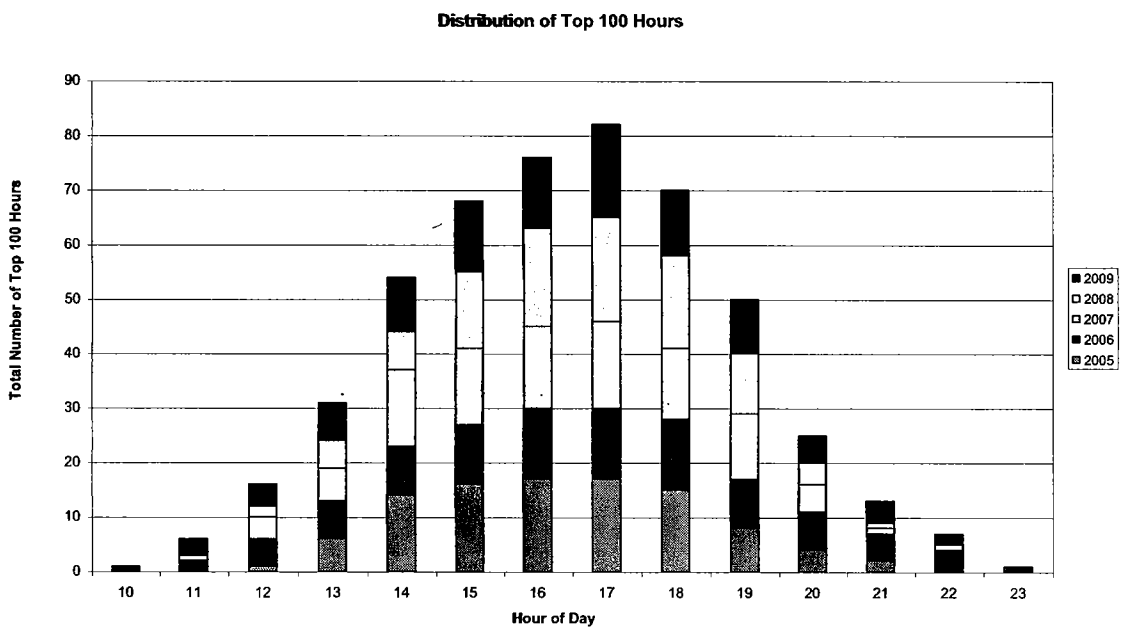
Figure 2 expands the data from Figure 1 to identify the week of the year in which the top 100 hours of system load occurred for the last five (5) years as specified in the Act.

[2] It was later determined by the PaPUC that the demand shall be measured against the hundred highest hours between June 1 and September 30, 2007.

System Analysis
Duquesne Light Company Zone Load – (Continued)

> None of the top 100 system load hours occurred in the last two weeks of September.
> Only 5% of the peak hours occur in September.
> 75% of the top 100 hours occur in July and August.
> 52% of the top 100 hours occur between the last week of July and the third week of August.
> 29% of the top 100 hours occur in the first two weeks of August.

Figure 3



															Totals
	2009		3	4	7	10	13	13	17	12	10	5	4	2		100
	2008		1	2	5	7	14	18	19	17	11	4	1	1		100
	2007			4	6	14	14	15	16	13	12	5	1			100
	2006	1	2	5	7	9	11	13	13	13	9	7	5	4	1	100
	2005			1	6	14	16	17	17	15	8	4	2			100
	Totals	1	6	16	31	54	68	76	82	70	50	25	13	7	1	500

Figure 3 is the hour ending for the top 100 hours that occurred over the last five (5) years[3].

> The system load peak hour most frequently occurs during hour ending 17 (between 4:00 PM and 5:00 PM).
> 16% of the top 100 hours over the last 5 years occurred between 4:00 PM and 5:00 PM (during hour ending 17).
> 80% of the top 100 hours over the last 5 years are between 1:00 PM and 7:00 PM.
> 70% of the top 100 hours over the last 5 years are between 1:00 PM and 6:00 PM.
> 56% of the top 100 hours over the last 5 years are between 1:00 PM and 5:00 PM.

[3] A peak load hour that would be part of the top 100 hours is not expected to occur during the remaining days in 2009.

System Analysis
Duquesne Light Company Zone Load – (Continued)

Figure 4

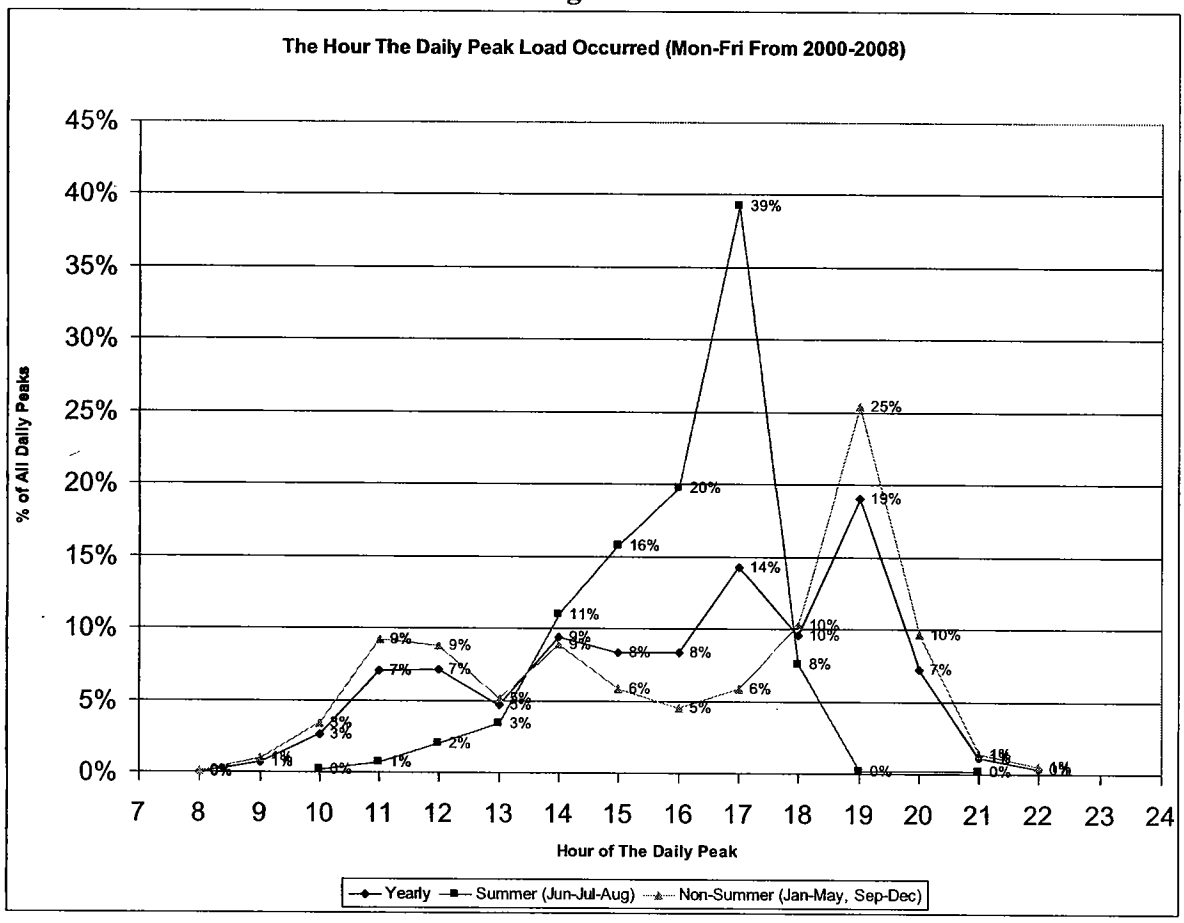


Figure 4 is a broader view of the time of day when Duquesne's peak load occurs, with each hour representing the hour ending period. Figure 4 analyzes system peak load for a narrower June through September summer period.

> Summer system peak load occurs 39% of the time between 4:00 PM and 5:00 PM (during hour ending 17).
> Summer system peak load occurs 59% of the time between 3:00PM and 5:00 PM.
> Summer system peak load occurs 94% of the time between 1:00 PM to 7:00 PM.
> The non-summer system peak load occurs 25% of the time between 6:00 PM and 7:00 PM (hour ending 19).
> The year-round system peak load most frequently occurs between 6:00 PM and 7:00 PM (hour ending 19).

System Analysis
Duquesne Light Company Zone

The following observations and conclusions about TOU rate design may be made based on the data in Figures 1-4:

- A TOU rate should be in place June through August based on the data in Figure 2. Although the summer period is typically considered June through September, historic data suggests the peak hours occur during June through August over 95% of the time. Offering a TOU rate during the month of September would not result in a meaningful load reduction in Duquesne's service territory.

- A CPP could be designed around the latter half of July and the first three weeks of August. The data in Figure 2 suggests these weeks are when the peak system load most often occurs.

- A summer TOU rate should reduce the most frequent hour of peak load. Hour ending 17, or between 4:00 PM and 5:00 PM, is the hour of most frequent peak load as shown in Figure 4. A TOU rate should be designed around this hour since the peak hour is not known in advance.

- A TOU rate with an on-peak period between 1:00 PM to 7:00 PM (between hour ending 14 and hour ending 19), June through August, should provide a focused and meaningful reduction in peak system load in the Duquesne zone. The data in Figures 3 and 4 indicate these are the most frequent hours of system peak load.

System Analysis
Duquesne Light Company Zone Relative to PJM Pricing

Duquesne analyzed PJM day-ahead ("DA") and real time ("RT") LMP market prices relative to the Company's zone load. The purpose of this analysis was to determine what, if any, correlation exists between the market price and the Company's system load.

Figure 5

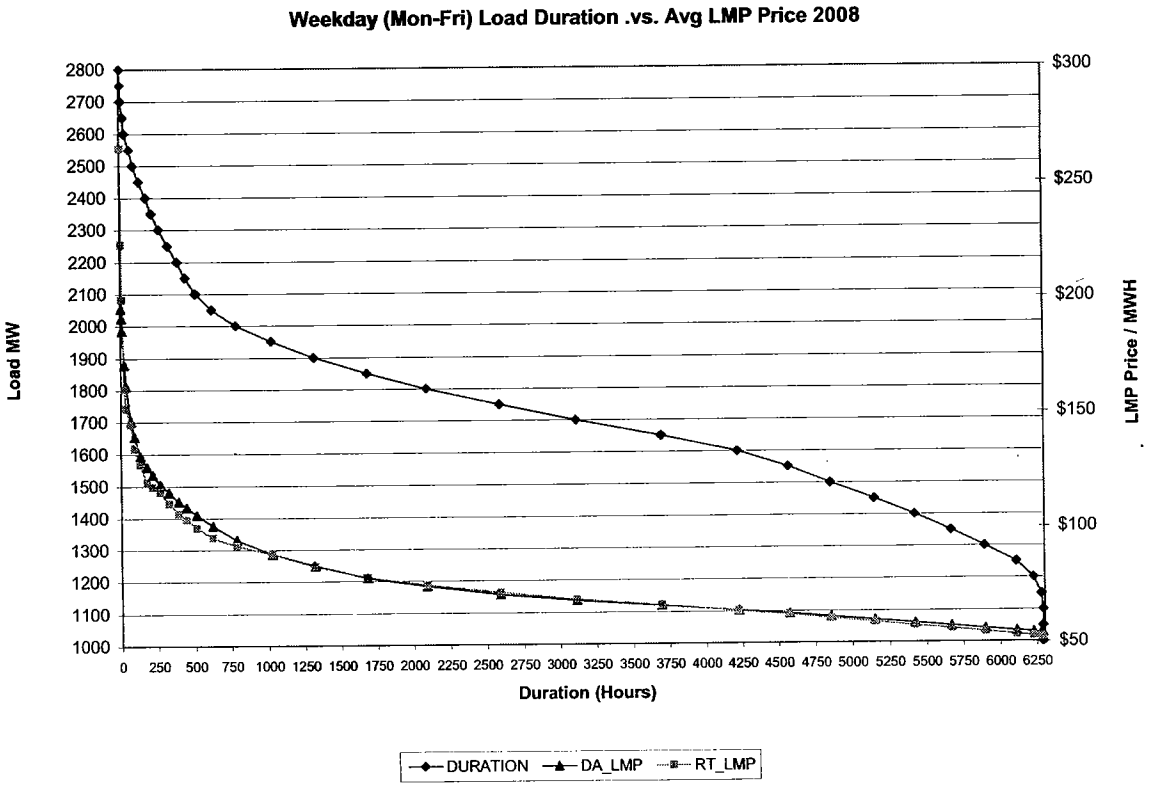


Figure 5 is the Company's system load duration compared to the corresponding PJM prices in 2008 at the time of the load. The Y-axis is the weekday load and the X-axis is the duration in hours that the system load was at that particular value for all weekday hours. For example, the system load was 1,800 MW or greater for 2,100 hours in 2008. Another way to understand the analysis is in terms of LMPs and hours. For example, the LMP was $100/MWH and higher for about 625 hours in the year. The LMP was $150/MWH or higher for only about 100 hours in the year.

The system peak load exceeded 2,100 MW for about 500 hours in the year. The Company's annual system peak is typically between 2,700 MW to 2,900 MW. Consistent with the data in Figures 1-3, the top 100 hours of system load represent the steepest portion of the graph, and occur for a relatively short time throughout the year. The LMP price follows the load, and as expected, the LMP prices increase significantly as the Company's system peak increases.

System Analysis
Duquesne Light Company Zone Relative to PJM Pricing – (Continued)

Figure 6

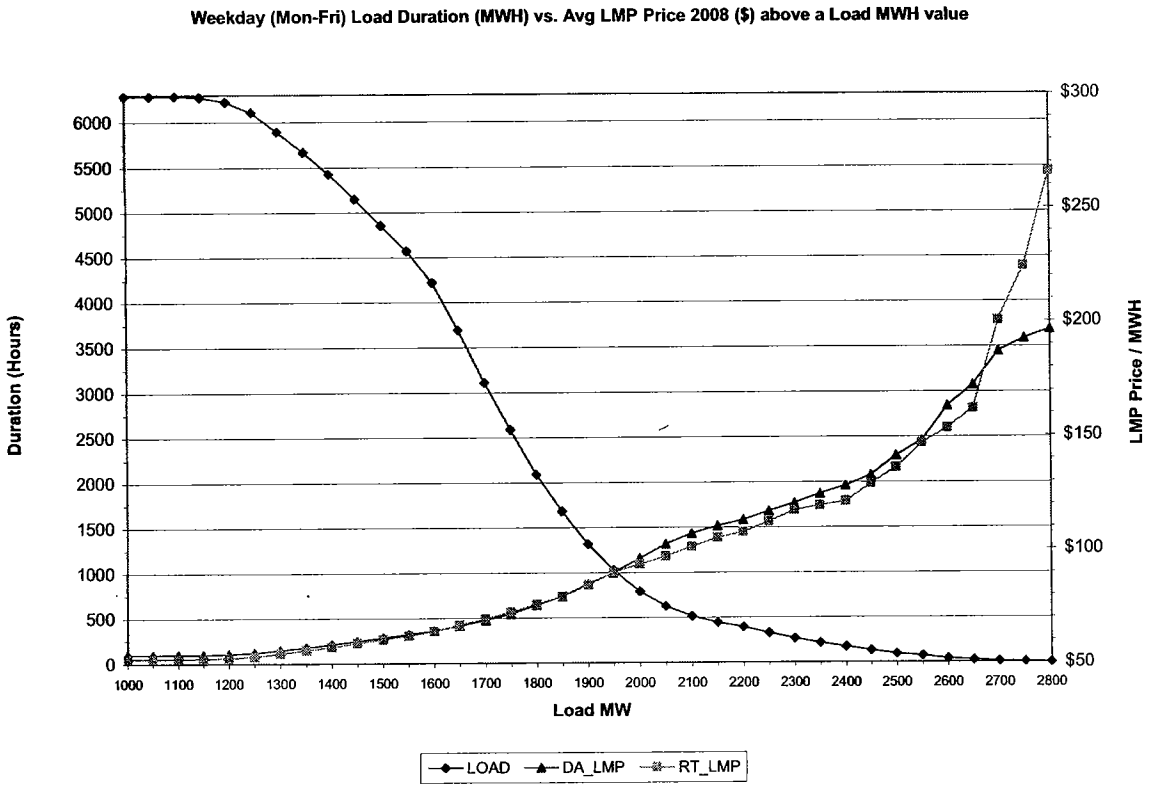


Figure 6 is a different perspective of the Company's system load versus average LMP price compared to Figure 5. The Y-axis and X-axis are transposed compared to in Figure 5. The declining line for load shows the hours that the system was at that load or greater, and price curves show the average price of the PJM LMP for that load and greater. Consistent with Figure 5, LMP prices increase dramatically after the Company's system load exceeds 2,600 MW to 2,700 MW.

System Analysis
Duquesne Light Company Zone Relative to PJM Pricing – (Continued)

Figure 7

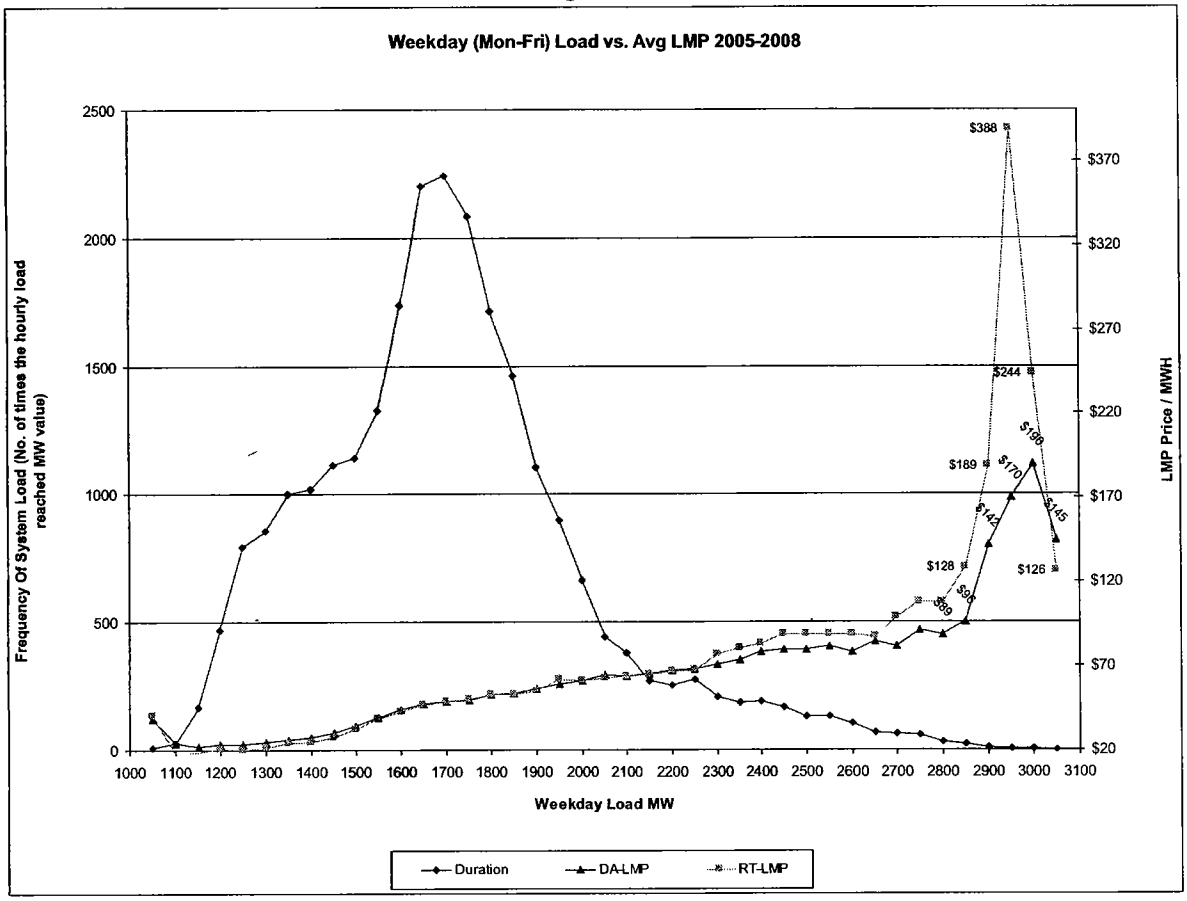


Figure 7 is an analysis of the average system load for the four year period 2005-2008 versus the DA and RT LMP for those years. The Y-axis indicates the number of times the system load reached a particular value. For example, the system load reached a load of approximately 1,350 MW for 1,000 hours during that time period. The peak of the duration curve indicates the system load was at approximately 1,700 MW most often over that four year period, approximately 2,250 times. Thus, the system load was most often between 1,400 MW and 1,900 MW during this four year period, and the LMP was about $30-$50/MWh at this system load.

The LMP prices are relatively flat until the system load reaches approximately 2,700 MW, the beginning of the system load annual peak load. LMP increases dramatically once this load is exceeded. Also worth noting is the difference in DA and RT LMP prices that occurs after the system load reaches 2,700 MW. Therefore, the system load of 2,700 MW is a reasonable indicator in designing TOU rates or dynamic pricing such as CPP, as well as load control programs.

System Analysis
Duquesne Light Company Zone Relative to PJM Pricing – (Continued)

The following observations and conclusions regarding system load relative to historic PJM LMP should be considered in designing TOU rates based on the data in Figures 5-7.

- The Company's peak system load and LMP price move together as shown in Figure 5.

- PJM LMP prices increase dramatically once the Company's system load reaches about 2,700 MW. Noticeable price differentials occur above this point (Figures 6 and 7). CPP rates could be designed around this load point in program design.

System Analysis
Consumption Data

An analysis of sales by customer class is necessary for several reasons. First, the level of sales by customer class will provide an understanding of expected results. Second, the level of sales provided through default service supply versus sales to those customers who have elected to obtain their electricity requirements from a third party electric generation supplier ("EGS") may provide an understanding of expected customer participation. Third, the time of day when these sales occur will provide an understanding of potential benefits from the total population of customers. Finally, an assessment of customers supplied with default service supply through RFP's will provide an understanding of the implications of TOU and RTP rate design of third party wholesale suppliers who provide default service supply.

Table 2. Control Area and POLR Sales (12 mos. Ending October 2009)

	a	b	c	d	e	f
	Control Area Customers	Control Area Sales (MWh)	Share of Control Area Sales	Avg kWh/ Customer/ Month	POLR Sales (MWh)	Percent POLR Sales (col. e /col. b)
Residential	524,138	3,968,671	30%	631	3,121,464	79%
Commercial Non-Demand Meter	22,028	82,973	1%	314	71,621	86%
Small C&I (< 25 kW)	22,197	714,035	5%	2,681	597,283	84%
Medium C&I (25-300 kW)	10,153	2,373,825	18%	19,483	1,519,510	64%
Large C&I (>300 kW)	913	5,970,503	45%	544,853	234,968	4%
Lighting	7,487	82,891	1%	923	78,646	95%
Total	586,916	13,192,897	100%		5,623,492	

Table 2 sets forth the control area sales and POLR sales by customer class for the twelve months ending October 2009. The residential customer class is second to large C&I customers in share of total control area sales. From Table 2, the residential class presents the greatest opportunity for TOU rates other than large C&I customers greater than 300 kW who are on DA HPS if a POLR customer. Worth noting is 21% of residential sales are supplied by an EGS. This may affect residential customer class participation in TOU pricing options offered by the Company.

Commercial non-demand metered customers average 314 kWh per month and comprise only 1% of total control area and POLR sales. Meaningful impact on system load and changes in customer behavior due to TOU rates can not be expected from these customers.

Small and medium C&I customers represent 23% of control area sales, with about 69% of sales supplied through POLR supply. Many of these customers are shopping with an EGS which may affect customer participation in TOU price options, similar to the residential class. As a practical matter, most businesses operate during the Company's peak hours of system load. An analysis of the MWh's consumed during the peak hours for this customer segment is necessary to understand potential affects of TOU rates.

System Analysis
Consumption Data – (Continued)

The current POLR price for medium C&I customers is through an RFP updated twice annually. The Company has proposed to expand the RFP process to small and medium C&I customers in its October 8, 2009, default service filing. Consideration must be given to the implications of offering TOU rates as an option to the RFP as discussed earlier. Adding TOU as a pricing option may have an impact on the RFP bid price for non-TOU rates. This issue must be addressed in subsequent default proceedings in 2013 and as smart meters are deployed. For these reasons, the Company proposes to further investigate the implications of TOU rates for default supply obtained through RFP's.

The Company's automated meter reading system obtains daily meter readings and collects daily consumption information. The Company assigns this information to rate class based on historic load profile data to provide an estimate of the hourly load by rate class.

Table 3 identifies the control area sales by time of day for residential and small and medium C&I customer classes based on 12 months of 2008 data. Table 3 compares on- and off-peak usage for weekdays versus weekends; for the PJM-defined on-peak and off-peak hours; and for the on-peak period 1:00 PM to 7:00 PM previously determined in this document. The weekday period has a total of 5 X 24 = 120 on-peak hours; the PJM period has a total of 5 X 16 = 80 on-peak hours; and the DLCo. period has a total of 5 X 6 = 30 on-peak hours.

Table 3. 2008 Annual Sales by Time of Day

Weekday On-Peak Hours	On-Peak MWh	Off-Peak MWh	Annual MWh	On-Peak Share of kWh
Residential				
All Weekdays	2,972,379	1,396,243	4,368,622	68%
PJM 7:00AM - 11:00 PM	2,088,758	2,279,864	4,368,622	48%
DLCo. 1:00PM-7:00PM	757,758	3,610,863	4,368,622	17%
Small C&I (< 25 kW)				
Weekday	689,531	240,778	930,309	74%
PJM 7:00AM - 11:00 PM	533,582	396,726	930,309	57%
DLCo. 1:00PM-7:00PM	224,178	706,130	930,309	24%
Medium C&I (25 - 300 kW)				
Weekday	1,851,168	652,337	2,503,505	74%
PJM 7:00AM - 11:00 PM	1,426,381	1,077,124	2,503,505	57%
DLCo. 1:00PM-7:00PM	597,427	1,906,078	2,503,505	24%

As expected, on-peak consumption declines as the number of on-peak hours declines. Small and medium C&I on-peak consumption is proportionately greater than residential on-peak consumption which likely reflects the hours of business operation. The 1:00 PM to 7:00 PM time period represents about 18% of the hours in the year. The slightly higher percentage (24%) for the small and medium C&I customer classes for this period suggests kWh are consumed on average during these hours which is consistent with when businesses typically operate.

System Analysis
Consumption Data – (Continued)

Table 4 shows the consumption data for the same weekday on-peak time periods as Table 3, but for the months of June through August. The on-peak share of kWh for the DLCo. 1:00 PM to 7:00 PM option is slightly higher than the 12 month data in Table 3, likely reflecting air conditioning load during these hours. Table 4 reflects an order of magnitude of the MWH that could be shifted from on-peak periods to off-peak periods for each of the customer classes. For the residential class, the June through August on-peak consumption is approximately 6% of the total annual residential consumption in Table 3.

Table 4. 2008 Sales by Time of Day (June through August)

Weekday On-Peak Hours	On-Peak MWh	Off-Peak MWh	Jun-Aug MWh	On-Peak Share of Jun-Aug MWh
Residential				
All Weekdays	872,657	421,327	1,293,984	67%
PJM 7:00AM - 11:00 PM	620,552	673,432	1,293,984	48%
DLCo. 1:00PM-7:00PM	244,123	1,049,861	1,293,984	19%
Small C&I (< 25 kW)				
Weekday	190,514	67,998	258,511	74%
PJM 7:00AM - 11:00 PM	150,070	108,441	258,511	58%
DLCo. 1:00PM-7:00PM	65,940	192,571	258,511	26%
Medium C&I (25 - 300 kW)				
Weekday	506,115	183,618	689,733	73%
PJM 7:00AM - 11:00 PM	396,945	292,789	689,733	58%
DLCo. 1:00PM-7:00PM	173,837	515,897	689,733	25%

The following observations and conclusions may be made about the data in Tables 2-4.

- Commercial non-demand metered customers average only 314 kWh per month. It is unlikely meaningful bill reductions and reduction to on-peak consumption will be obtainable through TOU rates for these 22,028 customers. These customers should not be considered as participants for pilot TOU programs if offered (Table 2).
- 21% of residential sales and 31% of small and medium C&I sales are supplied through an EGS. 96% of large C&I sales are supplied through an EGS rather than DA HPS as the only default service option (Table 2). This suggests market research is needed to understand customer perception of pricing alternatives, in particular if TOU rates are the only default service supply option.
- A relatively small amount of usage occurs during the 1:00 PM to 7:00 PM, June through August, on-peak period (Table 4). While the smaller period of time may be less burden on the customer for behavioral change, less impact on shifting usage to off-peak periods relative to total system consumption should be expected.

System Analysis
Average LMP Analysis

Dynamic pricing other than hourly priced rates does not reflect the actual cost of supply. TOU rate design is intended to reflect higher on-peak prices though it commonly a flat price per kWh for the specified period not necessarily reflective of the actual costs for that period. A starting point for designing TOU rates is to understand LMP prices in PJM.

Table 5. 2008 Average LMP Prices

If the on-peak period is:	All Weekday Hours	PJM 7:00 AM to 11:00 PM	Weekdays 1:00 PM to 7:00 PM	Weekdays 3:00 PM to 5:00 PM
The average LMP price would be:				
Average on-peak price ($/MWh)	$54.36	$65.22	$69.19	$67.47
Average off-peak price ($/MWh)	$42.93	$38.43	$47.05	$49.90
On-peak to off-peak ratio	1.27	1.70	1.47	1.35

The average day-ahead PJM LMP price for the Duquesne Zone in 2008 was $51.47/MWh. Table 5 is an analysis of the day-ahead PJM LMP prices for the on-peak and off-peak periods identified in Table 4 as well as a fourth option for weekdays 3:00 PM to 5:00 PM. This data assumes the on-peak period is in effect for the entire calendar year. The ratio is an indication of the difference in on-peak and off-peak rates if a TOU rate were designed around the defined hours. A higher ratio suggests rate differences that might provide a greater opportunity for the customer to reduce their electric bill. Practical on-peak and off-peak periods defined as a guiding principle must be considered.

System Analysis
Average LMP Analysis – (continued)

Table 6 uses the same data used to create Table 5, except the ratios are calculated for two different seasons in the calendar year. The first calculation is shown for the June to August period and the second calculation is shown for the September to May period. In three of the four options, the on- to off-peak ratio for the June to August period is greater than the results in Table 5. The highest ratio is 2.02 for the 1:00 PM to 7:00 PM option and June to August period, suggesting a TOU rate where the on-peak rate is about twice the off-peak rate as an appropriate ration to reflect an average of on-peak and off-peak differences in the market.

Also worth noting in Table 6 is that the average on-peak price ($/MWh) increases as the on-peak period narrows. This is appropriate because the selected on-peak hours are during the summer months which are typically the highest hours of on-peak load and therefore typically higher LMP prices. This is consistent with the data provided in Figures 5-7.

Table 6. 2008 Average LMP Prices June through August

If the on-peak period is:	All Weekday Hours	PJM 7:00 AM to 11:00 PM	Weekdays 1:00 PM to 7:00 PM	Weekdays 3:00 PM to 5:00 PM
The average Jun-Aug price would be:				
Average on-peak price ($/MWh)	$68.11	$85.78	$108.26	$115.30
Average off-peak price ($/MWh)	$51.67	$43.49	$53.60	$59.90
On-peak to off-peak ratio	1.32	1.97	2.02	1.93
The average Sep-May price would be:				
Average on-peak price ($/MWh)	$49.77	$58.37	$56.16	$51.53
Average off-peak price ($/MWh)	$39.95	$36.72	$44.85	$46.54
On-peak to off-peak ratio	1.25	1.59	1.25	1.11

The following conclusions and observations can be made about LMP can be made from the data in Tables 5 and 6:

- The analysis of the PJM LMP price data suggests an on-peak to off-peak ratio of 2:1 as a starting point for TOU rate design (Table 6).
- The data in Table 5 and Table 6 illustrate mathematically price ratios and confirm several of the conclusions from Figures 5-7. A TOU rate could be designed based on this data, though customer acceptance to determine if this price difference is sufficient to change customer behavior requires further investigation. A higher ratio may be necessary to create a meaningful incentive for the customer to reduce and/or shift load.
- The increase in the average on-peak LMP prices as the on-peak period narrows (Table 6) is consistent with the timing of the Company's system peak load as described throughout the evaluation of Figures 1-7. This suggests the 3:00 PM to 5:00 PM period may be a starting point for CPP rate design.

Market Evaluation

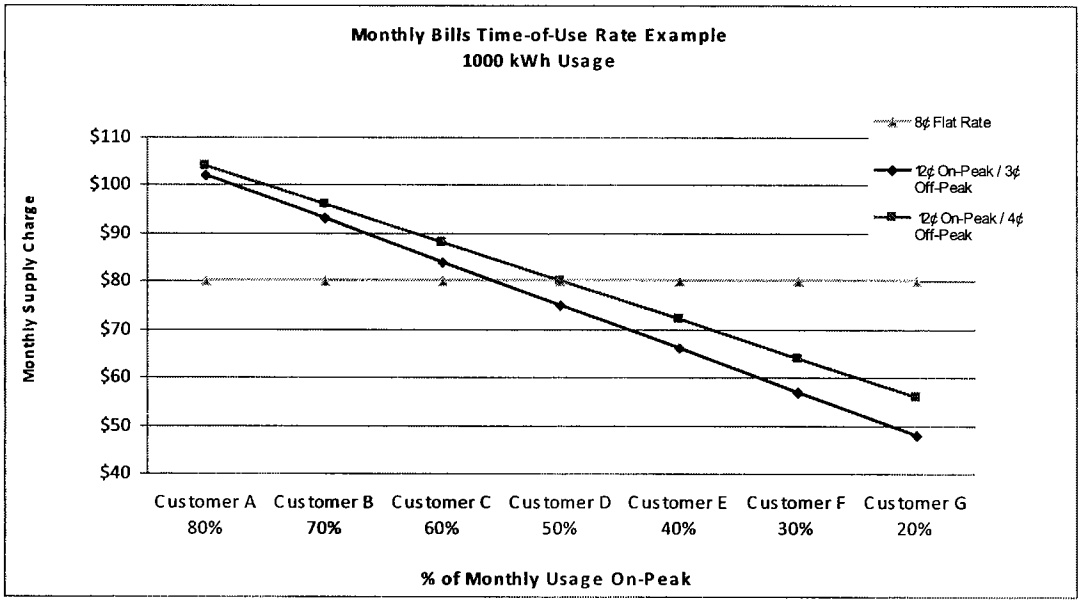
The preceding sections have defined parameters from which TOU rates could be designed using Company data and PJM market information. These sections have also identified issues that require further investigation prior to implementing TOU rates. In summary:

> The TOU Plan must complement the Company's EEC&DR and Smart Meter plans submitted in compliance with Act 129.
> Additional analysis is required to understand the implications of TOU rates in the RFP process for affected customers.
> A TOU rate with an on-peak period of 1:00 PM to 7:00 PM, June through August, should provide a meaningful reduction in peak system load.
> A CPP could be designed around the month of July and the first two weeks of August.
> LMP prices increase dramatically once the Company's system load reaches 2,700 MWH.
> Customer market research is needed to understand the demographics of on-peak usage.
> LMP price differentials suggest a 2:1 on-peak to off-peak price ratio as a starting point in rate TOU rate design.

Customer Bill Impact

Consideration must be given to the customer's bill impact and the implications of intended customer behavior. Figure 8 is an illustrative example that depicts the implications on TOU rate design. Assume for analysis purposes there are seven customers, each consuming 1,000 kWh per month, but each with unique on-peak and off-peak consumption. The graph shows a customer's monthly supply charges assuming 1,000 kWh consumption at three different supply rate options.

Figure 8



Market Evaluation – (Continued)

The "8¢ Flat Rate" line represents the supply charges of a flat energy charge at 8 cents/kWh. Each customer would pay $80 regardless of when electricity was consumed. Total revenue would be $560 for the month (7 customers * $80/customer).

The "12¢ On-Peak / 3¢ Off-Peak" line shows each customer's monthly bill at different levels of on-peak consumption assuming the customer takes no action in response to the prices. For example, the monthly bill for the customer who consumes 70% of electricity on-peak would increase by $13 to $93 assuming the customer took no action (700 kWh * $0.12/kWh + 300 kWh * $0.03/kWh). The customer would need to shift 144 kWh from on-peak to off-peak to break even in the month. This is calculated by dividing the increase in monthly bill by the difference between the on- and off-peak prices ($13 / ($0.12/kWh - $0.03/kWh)). A customer may not switch to a TOU rate in this example unless a meaningful incentive was available, such as a reduced flat rate during non-summer months.

The total revenue from the seven customers in the "12¢ On-Peak / 3¢ Off-Peak" example would be $525, $35 less than under the "8¢ Flat Rate" example. One of the guiding principles is to maintain revenue neutrality. If the on-peak rate is 12 cents/kWh, the off-peak rate can be calculated by subtracting the total on-peak revenue at 12 cents/kWh from all customers from the total desired revenue, and dividing the result by the total off-peak kWh. The off-peak rate to achieve revenue neutrality would be 4 cents/kWh.

The "12¢ On-Peak / 4¢ Off-Peak" line reflects a revenue neutral rate for these seven customers. The line has shifted to the right reflecting an increase in each customers bill, and also a change in the break-even point for on-peak and off-peak consumption.

The overall analysis demonstrates that there are competing interests between the customer and the Company that require evaluation as TOU rates are designed. This suggests the need for market research and possibly a pilot program (s).

Customer Information Needs are Growing

Only a small percentage of the Company's 579,000 customers currently have the ability to respond to price signals, and the infrastructure to support those who can respond to hourly price service is reaching capacity. Act 129 initiatives in the Commonwealth to enhance consumer education and implement energy efficiency and demand response programs have increased customer awareness and interest in energy efficiency and in reducing their electric bill. While Duquesne's Smart Meter Implementation Plan takes a significant step toward meeting these needs, a fully functional smart meter system is mandatory to implement TOU rates.

Market Evaluation – (Continued)

Customer Education is Essential

Full roll-out of the Company's EEC&DR programs began in December 2009. An effective consumer education and awareness campaign will be the key to achieve successful usage and load reductions to achieve the Company's mandated goals. The Company intends to leverage the education and awareness initiative from the EEC&DR programs and to also educate consumers regarding the capabilities of smart meters. The natural extension of the Plan is to inform and educate customers of the opportunities of TOU products. Consumer education activities may include: (1) marketing efforts to inform customers about TOU and explain tariff provisions; (2) customer education about the fundamentals of electricity markets; (3) technical assistance to help customers identify, analyze and implement load management strategies; (4) technical assistance and informational material to educate customers about enabling technologies; and (5) marketing to existing customers that are expanding their operations. Given technical constraints and the importance of customer education, the Company proposes to proceed with a phased approach to TOU rates to minimize customer confusion and permit the necessary upgrades in the Company billing systems to permit this sizeable change.

TOU Pilot Programs Make Sense

Phase 1 of the SMIP will place in service systems to support smart meter deployment and establish the fundamental mechanism to enable customers access to consumption information pricing products. Selective deployment of smart meters is planned to begin in the fourth quarter of 2012, primarily for customers who request a smart meter and in new construction. Full deployment of smart meters is scheduled to begin in 2014[4].

While three (3) years away, the Company believes valuable customer information can be gathered prior to the deployment of smart meters. The Company proposes to implement three TOU pilot programs for residential customers prior to the start of full deployment of smart meters. The primary objective of these TOU pilots will be to gather customer information about their awareness in energy consumptions and conservation; determine customer reaction to price signals; and establish effective pricing plans and multiple pricing products prior to full smart meter deployment in Phase 2 of the Smart Meter Implementation Project.

Time of Week Pilot

The Company's current AMR system collects daily reads with the ability to store the consumption data (kWh usage) for each day. The current AMR system cannot support TOU or RTP rates. However, because the system captures daily consumption, there is a potential opportunity to evaluate customer response to conservation by responding to information about their electricity consumption. The Company proposes to implement an energy conservation type program to encourage customers to reduce usage during peak summer months.

[4] As proposed in the Company SMIP filing, assuming Commission approval of filing in first quarter 2010.

Market Evaluation – (Continued)

Based on conclusions in the preceding sections of this document, the Company proposes to investigate customer acceptance of a pilot program wherein participating customers would be encouraged to reduce electricity consumption during weekdays in July and August by a prescribed percentage. The TOU pilot program would be time of week sensitive rather than time of day sensitive. The pilot would be designed to encourage customers to reduce weekday consumption.

Up to 1,000 residential customers who are on default service rates could be solicited to participate in the pilot. Normalized, baseline weekday consumption would be established for each participating customer account. Customers who reduce their weekday July and August consumption (kWh) 10% below the baseline year data, for example, would receive a 10% reduction to their total electric bill. The incentive payment would be reflected as a credit on their bill, made in the subsequent month for the applicable days of July and August since meter reading cycles typically cross calendar months. The customer would save not only from the incentive payment but also save on their monthly bill due to reduced consumption. The consumption of the participating customers would not be adjusted to reflect their participation in EEC&DR programs.

The Company would test and evaluate various communication channels with the customer in this pilot as well as changes to weekday and weekend usage. Currently the Company provides daily usage consumption through the Company's website to customers who enroll their account on the website.

Time of Day Pilot

The Time of Day Pilot is a form of traditional TOU rates. This pilot will evaluate customer response to prices that vary by time of day during weekdays from June through August. This pilot is limited to 100 residential participants because of the limited infrastructure currently in place. This pilot should provide valuable information to the Company just as the information gained from implementing RTP in 2005 was valuable to understand customer response to real time price signals.

Similar to the Time of Week Pilot, normalized baseline consumption would be established for each participating customer account. The pricing in the program would be designed around the observations and conclusions determined earlier in this document and from customer input from research conducted prior the start of the program.

Smart Meter Pilot

The information gained from results and analysis of the two pilots will be used to establish the baseline parameters of the Smart Meter Pilot. Approximately 8000 smart meters will be installed late in 2012 and in 2013 for new construction, upon customer request, and as part of the roll-out of the Company's filed Smart Meter Implementation Plan.

Market Evaluation – (Continued)

The first two pilots will be in effect at the same time. The Company will evaluate continuation of these pilots as smart meters are initially installed and existing meters are removed.

Interaction with EEC&DR Programs

The EEC&DR Plan will have been in effect for nearly three years once the Smart Meter Pilot begins. A major benefit may come from the direct load control program for residential air conditioners and water heaters. Under this program, customers will volunteer to have a switch installed that allows Duquesne Light to reduce air conditioning and water heater operations for selected peak hours in the summer. The participants in the residential direct load control program are likely candidates for the eventual dynamic pricing programs. In addition to economic motivations, participants in the residential load cycling program are likely to be community minded and early adopters of new technologies. These characteristics may assist in recruiting participants for the dynamic pricing programs.

In the summer of 2012, as the dynamic pricing program expands into 2013 and beyond, it should encourage and support continued participation in demand response programs. Thus the demand response programs and the dynamic pricing programs should be mutually beneficial.

Duquesne Light Company Time-of-Use and Real Time Pricing Plan

Implementation Plan

The Company proposes the following scope of work for evaluation of pricing products during the transition to full smart meter deployment specific to the service area. The process defined in this scope of work transitions the Company and customers to TOU rates in a manner that coincides with and complements the Smart Meter Implementation Plan.

Step 1 (2010) Conduct Market Analysis

Customer Input

> Measure customer attitude and perception about electricity and conservation.
> Assess customer reaction to TOU products.
> Conduct customer market research.
> Implement consumer education programs integrated with EEC&DR and smart meter consumer education programs messages.
> Research which communication tools (e.g. web, email, call-in, etc.) the customer utilizes the most to gain access to their data.
> Estimate potential demand and energy impacts.
> Determine customer perception to enabling technologies for future implementation (2013 and beyond) as they are evaluated as part of the Smart Meter Implementation Plan (e.g. in home displays, smart thermostats, end use specific).
> Establish pricing framework for TOU pilot program.

Research Impact of Pricing Programs on Default Service RFP Process

> As applicable to small and medium C&I customers.
> As applicable in POLR V.
> In other default service provider offerings.
> Evaluate need for separate RFP for TOU default service rates.

Establish Internal Processes and Accountability

> Prepare cost analysis for pilots (e.g., metering, IT, billing changes, website design).
> Establish accounting requirements and means for cost recovery.
> Assess potential impact on other tariff rules, charges and procedures.
> Establish meter reading process and data storage.
> Develop process to respond to customer request for data.
> Establish Company interface with customers.
> Develop customer service representative training assessment.
> Establish dedicated prompt on phone system for TOU.
> Establish "prominently displayed" and/or "dedicated space on web site."

Implementation Plan – (Continued)

Implement Baseline Customer Communication and Education

> Develop literature describing fundamental concepts of TOU rates and customer benefits.
> Assess benefit of displaying graphics of customers' bill showing how much and at what time usage occurs and means to measure reductions.
> Design and test appropriate communication messages for customer response and determine most effective medium for communication.

Establish Participation Criteria for Pilot Programs

> Solicitation communication medium (e.g. web, bill insert, direct mail).
> Enrollment criteria.
> Program messages and potential customer benefits.
> Create program literature and communications plan (e.g. brochures, web location, seminars, bill calculator).
> Determine input from and need for participation by community based organizations.

Establish Pilot Program Guiding Principles

> Establish on-peak time period that is attractive to customers and consistent with Company goals (load data suggests on peak, weekdays, 1:00 PM - 7:00 PM).
> June to August time-of-use; flat rate remaining months.
> Meaningful on-peak price (to be determined).
    > Determine if PJM on peak pricing and LMP analysis is appropriate relationship to use.
> Rate design to be revenue neutral to flat rates.
> Define customer participation relative to market alternative.
    > Switching criteria.
    > Minimum stay criteria on TOU rate.

Submit pilot program description and pricing for Commission approval.

Implementation Plan – (Continued)

Step 2 (2011) Implement Residential Pilot Program Infrastructure

Objectives

> Reduce system load during peak periods.
> Achieve expected goal from 2010 analysis (kW and kWh shift) during on-peak period.
> Define shift per customer and correlation to demographics.
> Assess ability to apply results to entire population.
> Determine correlation if any to existing meter reading abilities.
> Validate original pilot program design assumptions or define modifications.
> Measure utility and customer cost savings.
> Determine how savings from TOU and RTP can support EEC&DR savings goals.
> Gather statistically significant, measurable and meaningful information.
> Increase customer satisfaction.
> Measure customer acceptance of new retail pricing plan(s).

Pilot Program Participation (Market Research)

> Target participating customers who have the ability to respond.
> Focus on customers with meaningful usage (e.g. customer must have minimum usage to be eligible, e.g. 1000 kWh/mo. average usage, June-September).
> All residential customers eligible except Customer Assistance Program ("CAP") customers.
> Customer must have permanent A/C or heat pump to be eligible.
> One hundred (100) participants; voluntarily enrolled though solicitation process.
> Highest 100 users selected.
> Minimum one year stay on rate – cannot switch to base rate RS or to an EGS.
> Interval meter provided by DLC at no cost to customer.
> Rate design to prevent gaming by electric space heating (Rate RH) customers.

Install Infrastructure

> Install process and data storage requirements for Time of Week pilot.
> Install interval meters and required communication system for Time of Day pilot.
> Implement pilot program effective prior to the summer of 2011 to gain baseline data.
> Assess progress of implementation of enabling technologies for future implementation.

Submit Program for Commission Approval Effective 2012

> Status of infrastructure and baseline data.
> Proposed pricing and structure.
> Program participation guidelines.

Implementation Plan – (Continued)

Step 3 (2012) Implement Pilot TOU Pricing Program

By early 2012, the Company will draw conclusions about the impacts of effective pricing, energy education and awareness, and efficiency products that create the most impact to customer behavioral change about electricity. This will align with Phase 1 of the SMIP Project and initial smart meter deployment.

First Quarter
> New TOU rates effective for participating customers first quarter.
> Expand consumer education to participating customers.

Second Quarter
> Implement TOU pricing (by June 1).

Third Quarter
> Evaluate pilot program results and alignment with program goals.
> Evaluate pricing options for small and medium C&I customers.

Fourth Quarter
> Assess impact of TOU requirements associated with default service plan effective June 2013.
  > Determine impact on procurement plans (e.g. RFP's).
  > Determine if need for separate RFP for TOU supply to assign costs to TOU participants.
  > Determine impact on RFP if any on customer switching. A customer switching from an EGS to TOU may increase the RFP price absent switching restrictions.
  > Assess impact on reconciliation process with RFP supplier.

Submit Program for Commission Approval Effective 2013 with Smart Meters
> Results of program participation.
> Proposed pricing and structure.
> Enhancements to existing program.
> Recommendations for customer participation.
> Describe plans to integrate with smart meter deployment and default service plans.
> Describe TOU options for small and medium C&I customers.

Implementation Plan – (Continued)

Step 4 (2013) Implement TOU Pricing Programs to Smart Meter Customers

Approximately 8,000 smart meters will be installed through 2013. The results of the 2011-2012 pilot and market research will be used to implement a robust pilot with the initial roll-out of smart meters. This robust pilot will be the cornerstone for full scale TOU once full smart meter deployment begins in 2014.

Implement TOU Pilot for Customers with Smart Meters

> Expand and implement pricing programs prior to the summer of 2013.
> Adjust for customer feedback from the 2011-2012 pilots.
> Expand to full scale consumer education program.
> Expand to include robust analysis and pricing signals.
> Explore new price options (e.g. reductions below base line, rebates).
> Determine pricing alternatives (TOU, Critical Peak Pricing ("CPP"), Seasonal or Year-Round TOU).
> Consider CPP as a TOU rate option added to realize more shift when there is a CPP component.
  > Define CPP time period (typically within or overlapping the on-peak period).
  > Define event criteria for CPP.
  > Determine internal processes and accountability for communicating CPP announcement.
> Determine need for immediate feedback to customers in regard to their savings by shifting usage.
> Implement small and medium C&I pilot pricing programs (10/1/2012-2013).
> Submit pricing plans for commission approval (2014).

Smart Meter Pilot Program

1. System Evaluation and Selection
   > Assess geographical areas in the service area with a blend of meter types.
   > Select an area where load management through dynamic pricing could have a meaningful benefit on capacity and deferral of distribution system expansion.
   > Select an area with various electric generation suppliers:
     - Default service customers on smart meters.
     - Default service customers on existing automatic metering system.
     - Customers who have switched to an electric generation supplier.

2. Pre-Trial Survey
   - Demographic survey.
   - Energy awareness survey.
   - Determination of participation in then-current EEC&DR programs.

Implementation Plan – (Continued)

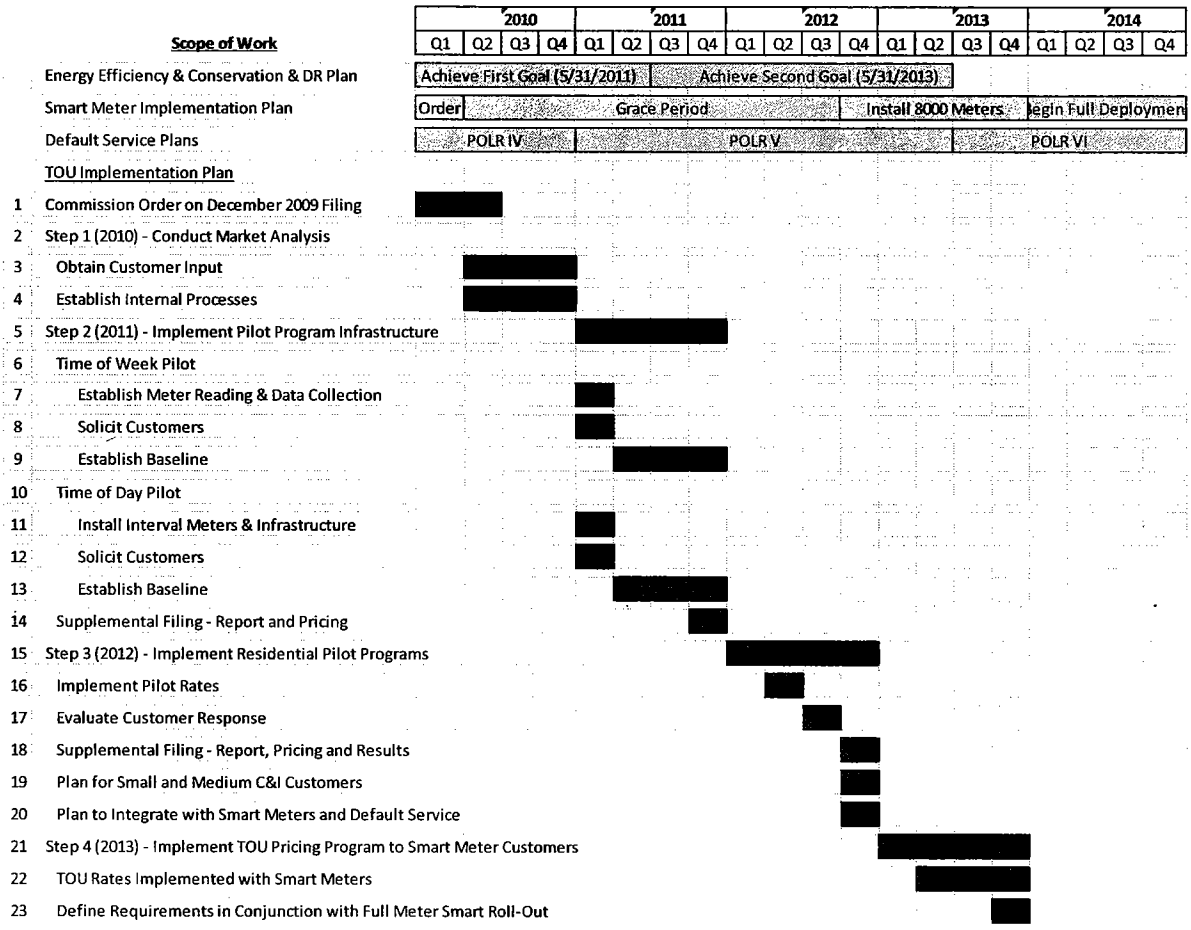
3. Implementation
   - Increase pricing awareness to a subset of the selected population.
   - Introduce pricing without an enabling technology to assess customer behavior.
   - Evaluate available options for utilizing the Smart Meter's two-way communication capabilities in conjunction with enabling technology and support from third party providers:
     - Smart thermostat.
     - Home Area Network (HAN) to the extent they are a viable business option.

4. Post Implementation Evaluation
   - Seek customer feedback on design of in-home interface design (if implemented).
     - Evaluate effects of enabling technology to allow customers to react to the price before they consume the electricity.
     - Compare usage with and without enabling technology to previous year daily consumption or baseline data.
     - Evaluate effectiveness of technology alternatives.
   - Translate energy reduction / or energy shifting to a capacity reduction.
   - Evaluate impact on customer switching to and from competitive electric generation suppliers.
   - Evaluate changes to internal processes, for example, educate customer service representatives, expand bill calculation processes to include hourly data calculations, establish process to declare and announce critical peak period within power supply group, link distribution grid performance to smart meter pricing or vice versa.
   - TOU participants will be able to access records of their energy use online. As a future enhancement, customers will log onto to the Company web site and see how much they saved the previous day.
   - Response to price
     - Response to dynamic and critical price.
     - Response with and without education.
     - Response to enabling technology.
     - Ways to enhance customer response to price.

5. Modify Product Plan and Rates
   - Based on evaluation of results from implementation, develop and obtain regulatory approval for modifications to plan products to more fully capture achievable benefits and savings and meet customer preferences.
   - Identify reasons that motivated customers to shift load.

Table 6

TOU Implementation Schedule



VERIFICATION

I, William V. Pfrommer, state that I am authorized to make this Verification on behalf of Duquesne Light Company, being a Manager, Rates and Tariff Services for the Company, and that the facts set forth above are true and correct to the best of my knowledge, information and belief, and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to penalties relating to unsworn falsification.

12/28/09
Date:

William V. Pfrommer