

**ATTACHMENT A: Ameren Illinois Utilities Load Forecast for Five Year Planning Period, June 2010 through May 2015**

# **Ameren Illinois Utilities**

## **Load Forecast for the period June 1, 2010 – May 31, 2015**

### **Purpose and Summary**

The development of the load forecast is an essential step in the development of the Utilities' procurement plan. The load forecast provides the basis for subsequent analysis resulting in a projected system supply requirement. The load forecast process includes a multi-year historical analysis of loads, analysis of switching trends, and competitive retail markets by customer class, known and projected changes affecting load, customer class specific growth forecasts and an impact analysis of statutory programs related to demand response, energy efficiency and renewable energy. The results of this analysis and modeling include a 5 year summary analysis of the projected system supply requirements.

### **Load Forecast Methodology**

#### **Energy Forecast**

The models developed for the June 1, 2010 – May 31, 2015 load forecast use both econometric and the statistically adjusted end use (SAE) approaches. The traditional approach to forecasting monthly sales is to develop an econometric model that relates monthly sales to weather, seasonal variables, and economic conditions. The strength of econometric models is that they are well suited to identify historical trends and to project these trends into the future. In contrast, the strength of the end-use modeling approach is the ability to identify the end use factors that are driving energy use. By incorporating an end-use structure into an econometric model, the statistically adjusted end-use modeling framework exploits the strengths of both approaches. This SAE approach was used for all residential and AmerenIP commercial classes, while traditional econometric models were developed for the remaining commercial, industrial and public authority classes. Lighting sales were forecasted by exponential smoothing models. Models were developed using revenue month sales data spanning from January 1995 (data for some models start later than 1995) to September/October 2007. Economic variables were obtained from Moody's Economy.com. Saturation and efficiency data were obtained from EIA. Revenue month weather data was created using billing cycles and weighting daily average temperatures according to the billing cycles. After revenue month sales models were created, the models were simulated with calendar month weather (and calendar month days where applicable) to obtain the calendar month sales forecast.

Since the rate structure changed in 2007 and it was not possible to reclassify the historical data according to the new rates; therefore, modeling was done on each revenue class, i.e., residential, commercial, industrial, public authority and lighting. After the initial forecast was complete, estimated energy efficiency reductions were taken out of the forecast. Next step in the energy forecast was to allocate the sales forecast into the new delivery service rates. DS1 class is equivalent to residential class, and lighting sales are equivalent to DS5. Commercial, industrial and public authority sales were separated into

the DS2, DS3A, DS3B and DS4 classes after calculating the shares of each delivery service class within a revenue class.

### **Residential SAE Model<sup>29</sup>**

The SAE modeling framework defines energy use in residential sector ( $USE_{y,m}$ ) in year (y) and month (m) as the sum of energy used by heating equipment ( $Heat_{y,m}$ ), cooling equipment ( $Cool_{y,m}$ ) and other equipment ( $Other_{y,m}$ ). The equation for this is as follows:

$$Use_{y,m} = Heat_{y,m} + Cool_{y,m} + Other_{y,m} \quad (1)$$

Although monthly sales are measured for individual customers, the end-use components are not. Substituting estimates for the end-use elements gives Equation 2,

$$Use_{y,m} = a + b_1 \times XHeat_{y,m} + b_2 \times XCool_{y,m} + b_3 \times XOther_{y,m} + \varepsilon_{y,m} \quad (2)$$

where  $XHeat_{y,m}$ ,  $XCool_{y,m}$ , and  $XOther_{y,m}$  are explanatory variables constructed from end-use information, weather data, and market data. As shown below, the equations used to construct these X variables are simplified end-use models, and the X variables are the estimated usage levels for each of the major end use based on these models. The estimated model can then be thought of as a statistically adjusted end-use model, where the estimated slopes are the adjustment factors.

### **Constructing XHeat- Electric**

Energy use by space heating systems depends on heating degree days, heating equipment share levels, heating equipment operating efficiencies, billing days, average household size, household income, and energy price. The heating variable is represented as the product of an annual equipment index and a monthly usage multiplier. That is,

$$XHeat_{y,m} = HeatIndex_y \times HeatUse_{y,m} \quad (3)$$

where  $XHeat_{y,m}$  is estimated heating energy use in year (y) and month (m),  $HeatIndex_y$  is the annual index of heating equipment, and  $HeatUse_{y,m}$  is the monthly usage multiplier.

The  $HeatIndex$  is defined as a weighted average across equipment saturation levels normalized by operating efficiency levels. Given a set of fixed weights, the index will change over time with changes in equipment saturations (Sat) and operating efficiencies (Eff). Formally, the equipment index is defined as:

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<sup>29</sup> Commercial indices for AmerenIP are constructed using similar approaches; however, non-manufacturing employment and GDP were used instead of households and personal income variables in estimating the indices.

$$HeatIndex_y = StructuralIndex_y \times \sum_{Type} Weight^{Type} \times \frac{\left( \frac{Sat_y^{Type}}{Efficiency_y^{Type}} \right)}{\left( \frac{Sat_{05}^{Type}}{Efficiency_{05}^{Type}} \right)} \quad (4)$$

In the above expression, 2005 is used as a base year for normalizing the index. The ratio is equal to 1 in 2005. In other years, it will be greater than 1 if equipment saturation levels are above their 2005 level. This will be counteracted by higher efficiency levels, which will drive the index downward. The weights are defined as follows.

(5)

Energy<sub>05</sub><sup>Type</sup> is the unit energy consumption of each end-use in 2005 according to EIA data adjusted for each service territory. HeatShare<sub>05</sub><sup>Type</sup> is the saturation levels for each heating end-use in 2005 multiplied by a structural index with base year 2005, which is a function of surface area and building shell efficiency.

$$HeatShare_{05}^{Type} = Saturation_{05}^{Type} \times Structural Index_{05} \quad (6)$$

where

$$Structural Index_y = (Building Shell Efficiency_y \times Surface Area_y) / (Building Shell Efficiency_{05} \times Surface Area_{05}) \quad (7)$$

where

$$Surface Area = 892 + 1.44 \times House Size \quad (8)$$

The end-use saturation and efficiency trends are developed from Energy Information Administration (EIA)'s regional projections.

Heating system usage levels are impacted on a monthly basis by several factors, including weather, household size, income levels, prices and billing days. Since the revenue month heating degree days are used in the SAE index, HDD is not used as a separate variable in the model. The estimates for space heating equipment usage levels are computed as follows:

$$HeatUse_{y,m} = \left( \frac{BDay_{y,m}}{AvgBDay} \right) \times \left( \frac{WgtHDD_{y,m}}{HDD_{05}} \right) \times \left( \frac{Income_{y,m}}{Income_{05}} \right)^{0.20} \times \left( \frac{HHSiz_{y,m}}{HHSiz_{05}} \right)^{0.25} \times \left( \frac{ElecPrice_{y,m}}{ElecPrice_{05,7}} \right) \times \left( \frac{GasPrice_{y,m}}{GasPrice_{05,7}} \right) \quad (9)$$

where Price<sub>y,m</sub> is the average residential real price of electricity in year (y) and month (m), Price<sub>05</sub> is the average residential real price of electricity in 2005, HHIncome<sub>y,m</sub> is the average real income per household in a year (y) and month (m), HHIncome<sub>05</sub> is the average real income per household in 2005, HHSiz<sub>y,m</sub> is the average household size in a year (y) and month (m), HHSiz<sub>05</sub> is the average household size in 2005, HDD<sub>y,m</sub> is the

revenue month heating degree days in year (y) and month (m), and HDD<sub>05</sub> is the annual heating degree days for 2005.

### **Constructing XCool- Electric**

To construct XCool index, the same procedures as in XHeat index are followed; the only difference is that cooling degree days are used instead of heating degree days.

### **Constructing XOther- Electric**

Monthly estimates of non-weather sensitive sales can be derived in a similar fashion to space heating and cooling. Based on end-use concepts, other sales are driven by appliance and equipment saturation levels, appliance efficiency levels, average household size, real income, real prices, and billing days. The explanatory variable for other uses is defined as follows:

$$XOther_{y,m} = OtherIndex_y \times OtherUse_{y,m} \quad (10)$$

The methodology for constructing OtherIndex is the same as heating and cooling indices except for the fact that there is no weather variable used in this index.

## **Peak Forecast**

The peak forecast for the Utilities' eligible customer retail load was performed at the operating company level. For each company (AmerenIP, AmerenCIPS, and AmerenCILCO), historical hourly data was collected. The data for each company was gathered for the longest period of time available that was consistent with the current load. This ranged by company from about 5 to 6 years. From this hourly data, daily peak loads were determined. The daily peak loads were the basis for the peak load model. The loads were at transmission level and excluded wholesale load.

## **The Daily Peak Model**

Daily peak loads were modeled using regression within the MetrixND software package. Daily peak load was the dependent variable, and the independent variables included temperature based variables, seasonal variables, day-type variables, and energy growth trend variables. Average daily temperature, defined as the arithmetic mean of the day's high and low temperatures, is the basis for all of the weather variable constructions. Temperature splines are then created from the average daily temperature variable to allow load to respond to temperature in a non-linear fashion. These temperature splines are also interacted with seasonal and weekend variables to allow the temperature response of load to change with respect to these variables (i.e. Load will respond more to an 80 degree day in July than in October, and more on a weekday than a weekend).

Lagged weather variables are also employed in the model. Multiple days of lags of each temperature spline are included, as well as a Rolling HDD and CDD variable. This captures the build-up effect observed in peak load. When there are multiple very hot days in a row, buildings tend to hold more heat and require more air conditioning, which in turn results in higher loads.

The daily peak model also includes independent binary variables representing each day of the week, each month of the year, and major holidays. This captures the change in load that is not due to weather variation, such as load reductions due to industrial customers and businesses that may not operate on weekends.

Finally, each model contains some variables to capture load growth. Where available, weather normalized 12-month rolling average sales were used to capture growth. This modeling technique is based on the assumption that increased energy usage drives the peak load. In essence it assumes that load factor is relatively stable over time. The sales are weather normalized and averaged over 12 months because actual weather and seasonal variation are already accounted for within the model by other independent variables. This specification allows for peak load growth to be driven by true load additions that are experienced because of customer growth or usage per customer increases that are not influenced by weather. Again the actual weather impacts are already accounted for through the weather variables described above.

In the absence of sufficient history of weather normalized sales, a trend variable is used that, in essence, attributes peak load growth to the passage of time. Under positive economic conditions with normal load growth, this is a reasonable approach to capture the normal increases that are known to take place in the peak load.

Statistical tests verify that the models fit the data quite well. The R-Squared statistic, which indicates the amount of variation in the dependent variable (load) that is explained by the model, ranges from 87.9% to 91.9%. The Mean Absolute Percent Error (MAPE) of the models range from 3.31% to 4.54%, indicating that over all of the years of the analysis, the average day has an absolute error within this range.

### **Forecasting Normal Weather Conditions for the Daily Peak Model**

The AmerenIL utilities define normal for a weather element as the arithmetic mean of that weather element computed over the 10 year period from 1999-2008. Because daily average temperature is the weather variable of interest for the peak forecast, the daily average temperature for each date must be averaged over the 10 year period.

Unfortunately, averaging temperatures by date (i.e. all January 1<sup>st</sup> values averaged, then all January 2<sup>nd</sup> values and so on) creates a series of normal temperatures that is relatively smooth (i.e. no extreme values) and therefore devoid of peak load making weather conditions. To ameliorate this situation, a routine known as the “rank and average” method is used. In this method, all 10 years of historical weather data are collected. For each summer and non-summer of each year, the respective degree day data is sorted from the highest value to the lowest. Then the sorted data is averaged across the 10 years, with all of the hottest days in each summer averaged with each other. Likewise, all of the coldest days in each non-summer season are averaged, while the mild days are averaged together.

After the weather has been averaged by the degree day rank, the days are “mapped” back to the actual weather from each year for the historical period. For the forecast period, an average weather shape is used to map the degree days. This way, the “normal” degree days follow a realistic contour. The normal temperature series is run through the daily peak forecast model to produce a normal peak load forecast.

### **Final Forecast Steps**

The MetrixLT software develops the hourly load by delivery service class by combining the monthly sales forecast by class, hourly load shapes by class from load research, and distribution loss factors. The software calibrates the delivery service classes to the total system peak forecast developed with the daily peak model. The hourly forecast for each company is combined to develop the Ameren Illinois hourly load forecast.

## **Switching Trends and Competitive Retail Market Analysis**

It is important to note in any discussion of retail switching the inherent difficulty in projecting future activity. The Utilities necessarily must make some assumption of such future switching levels given that 16-111.5(b) of the PUA requires a five year analysis of the projected balance of supply and demand. In making these assumptions, the Utilities have utilized an extension of existing trends and their best judgment to arrive at the expected values. This was accomplished by first establishing the current trend line utilizing actual switching data by customer class for the post rate freeze period (January 2007 through June 2009). The Utilities then reviewed these trends and using their qualitative judgment made adjustments such that the end result is a forecast characterized by increasing switching, although at a slowing rate over time. Given the difficulties inherent with projecting switching, it is expected that subsequent switching projections for future planning periods will likely differ substantially, and thus will have a like effect upon the projection of the Utilities’ combined power supply requirements for eligible retail customers.

### **Residential**

As of June 1, 2009, there were four Alternative Retail Electric Suppliers (ARES) registered with both the ICC and the Utilities to serve residential customers in the Utilities’ territories, as compared to eleven so registered to serve non-residential customers in the Utilities territories. However, as of the date this plan was prepared, less than 0.1% of residential customers of the Utilities have exercised their right to choose an ARES (switching is slightly less than 0.60% when RTP is considered) and significant switching is not expected in the near term.

Future retail switching may be dampened in part by the rate credits resulting from Public Act 095-481. These credits will provide payment to residential customers over several years and are affected if the customer leaves utility service. After these credits expire (starting in 2010), it is reasonable to expect some increase in residential switching and such assumptions have been imbedded in the forecast.

Residential switching could be positively influenced by an increase in the number of ARES willing to serve residential customers, aggressive marketing campaigns or the development of value added products and services. It is worth noting that the amount of ARES approved to serve residential customers has increased from two to four in the last twelve months. More so, significant reductions in market prices or changes in the regulations regarding switching rules (i.e. “wet” signature requirements) would reasonably be expected to have an impact upon residential switching rates.

In addition to the ARES options, residential customers may opt for real time pricing through a program administered for the Utilities by CNT Energy. Since program inception in 2007, participation in the program has been approximately 0.5% of available customers.

The Utilities estimate that the combination of residential switching to ARES and real time pricing will be approximately 10% by the end of the five year planning period.

### **0-149 kW Non-Residential**

This customer class has seen approximately 22% switching since January 1, 2007. Future switching patterns are difficult to predict due to limited historical data. The transition from frozen rates to the prices arising from the Illinois Auction did result in increased switching among this class.

It is reasonable to believe that ARES will focus their attention on larger industrial and commercial customers first, and as switching in those classes reaches saturation, such focus will switch to smaller customer classes. In addition, customers in this class have the option of real time pricing.

The Utilities estimate that switching in this class will be approximately 44% by the end of the five year planning period.

### **150-399 kW Non-Residential**

This customer class has seen approximately 55% switching since January 1, 2007. Future switching patterns are difficult to predict due to limited historical data. The transition from frozen rates to the prices arising from the Illinois Auction did result in increased switching among this class.

It is reasonable to believe that ARES will focus their attention on larger industrial and commercial customers first, and as switching in those classes reaches saturation, such focus will switch to smaller customer classes.



The Utilities estimate that switching in this class will be approximately 77% by the end of the five year planning period. In addition, customers in this class have the option of real time pricing.

#### **400-999 kW Non-Residential**

This customer class has seen approximately 76% switching since January 1, 2007. Section 16-113 (f) of the PUA declares this class to be competitive as of the effective date of Public Act 095-0461. The effect of this declaration is that those customers taking service from an ARES, or who subsequently switch to an ARES, shall no longer be eligible to take fixed price service under tariffs offered by the Utilities. Further, those customers who choose to remain with their applicable utility shall be defaulted to the host utilities' Real Time Price tariff if they do not choose to take service from an ARES by June 1, 2010.

Accordingly, the Utilities have assumed a continuation of the trend until December, 2009, when switching is expected to be approximately 85%. At that time, the switching rate is expected to accelerate in the months immediately preceding May 31, 2010 (the last date upon which a customer in this class is eligible to take service under fixed price tariffs.). After that date, the switching assumption is 100% and therefore will not be included in the portfolio assumptions beginning June 1, 2010.

#### **1,000 kW and Greater Non-Residential**

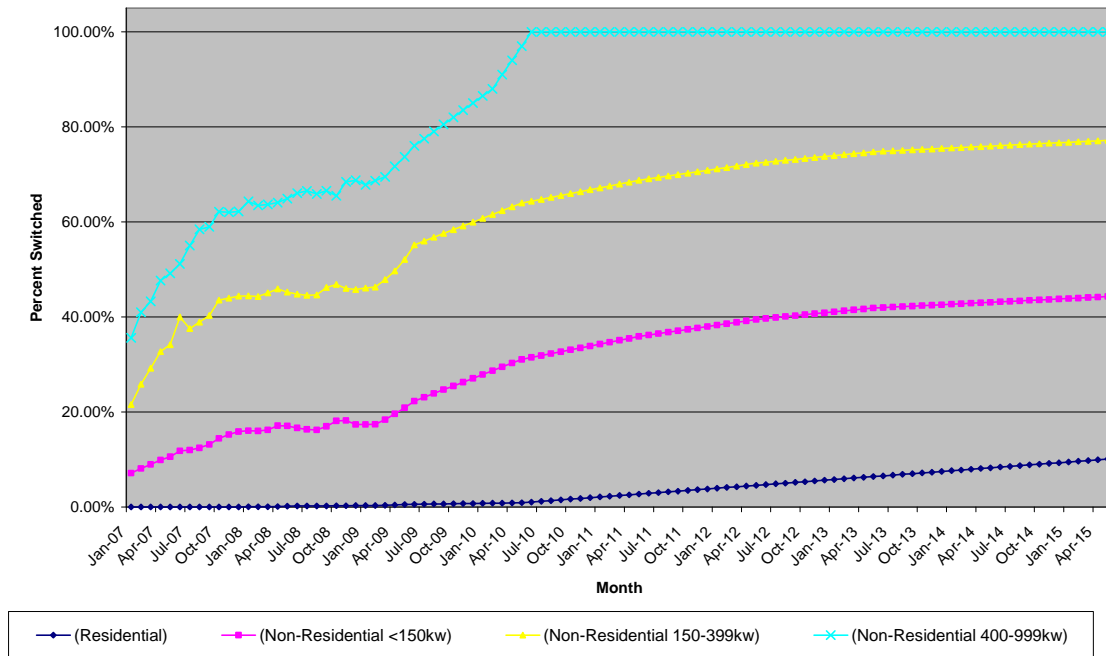
This customer class is declared competitive and therefore these customers can no longer take the fixed price service after May 31, 2008 and is therefore not included in the portfolio assumptions.

#### **Switching Patterns**

As noted previously, it is reasonable to expect further switching among residential and small commercial customer classes to either real time pricing or ARES as such suppliers begin to focus on smaller customer classes, market prices change or switching rules are modified. However, switching will at some point approach saturation (the point at which all of those customers willing to switch and acceptable to ARES have done so), thus eventually resulting in a slow down of customer switching rates.

The current assumption within the Plan is that switching will continue, although a decreasing rate over time. Expected values through May 31, 2015 are included in the graph below:

**Expected Switching Forecast (Actual thru June 2009)**



**Known or Projected Changes to Future Loads**

Known or projected changes to future loads include:

- 1) Customer Switching behavior, as discussed in Section II.B.(2).
- 2) Demand Response Program Initiatives, as discussed in Section II.c.(1)
- 3) Energy Efficiency Initiatives, as discussed in Section II.c.(3)

**Growth Forecasts by Customer Class**

For the residential customer class, the Utilities currently project a 5-year Compound Annual Growth rate of 0.1%. Commercial growth rates for the Utilities are projected to be 2.4%.

**Analysis of the Impact of Any Demand Side Initiatives**

**Demand Response Programs**

Section 12-103 of Public Act 095-0481 establishes specific requirements for Demand Response Programs to reduce peak demand of eligible retail customers. The effective reduction in the Utilities’ aggregate supply requirements to be acquired through the RFP process (net of customer switching) is projected to be:

2010 4 MW

2011	13 MW
2012	17 MW
2013	21 MW
2014	24 MW

The Utilities shall review the cost effectiveness of these programs as specified by statute and shall modify the program design accordingly if needed.

### **Energy Efficiency Programs**

Section 12-103 (b) of Public Act 095-0481 establishes specific requirements for Energy Efficiency Programs that reduce energy consumption of delivery services customers. The effective reduction in the Utilities' supply requirements to be acquired through the RFP process (net of customer switching) is projected to be

2010	103,928 MWh
2011	132,308 MWh
2012	161,469 MWh
2013	220,458 MWh
2014	274,572 MWh

(Please note that the above values only reflect the impact upon the amount of energy that the Utilities have to acquire to serve the eligible retail customer loads, after consideration of switching).

**ATTACHMENT B: Ameren Illinois Utilities Monthly Volume Projections per Rate Class for Five Year Planning Period, June 2010 through May 2015**

**Ameren Illinois Utilities Monthly Volume Projections per Rate Class for Five Year Planning Period,  
June 2010 through May 2015**

Contract Month	Ameren Projected Monthly Volume Requirements				
	DS1 (MWH)	DS2 (MWH)	DS3a (MWH)	DS5 (MWH)	Total (MWH)
June-10	1,008,660	347,505	77,523	26,486	1,460,174
July-10	1,406,031	371,276	82,040	26,072	1,885,420
August-10	1,397,256	360,261	79,361	27,051	1,863,930
September-10	988,751	335,257	73,744	28,776	1,426,528
October-10	831,061	317,239	69,476	30,463	1,248,240
November-10	872,701	308,655	67,153	31,707	1,280,217
December-10	1,194,509	329,882	71,032	33,681	1,629,104
January-11	1,275,491	359,851	73,282	34,965	1,743,589
February-11	1,039,906	326,514	66,888	32,916	1,466,224
March-11	952,611	313,819	63,980	30,593	1,361,003
April-11	739,411	289,056	59,668	29,846	1,117,980
May-11	767,063	298,121	62,625	27,102	1,154,910
June-11	1,004,384	330,070	68,630	26,486	1,429,570
July-11	1,397,941	352,801	72,696	26,072	1,849,511
August-11	1,388,064	343,084	70,502	27,051	1,828,700
September-11	980,975	320,229	65,732	28,776	1,395,712
October-11	822,296	303,837	62,122	30,463	1,218,718
November-11	861,033	296,238	60,203	31,707	1,249,182
December-11	1,175,550	316,593	63,716	33,681	1,589,540
January-12	1,253,895	345,611	65,827	34,965	1,700,298
February-12	1,016,640	304,814	58,332	31,831	1,411,617
March-12	943,735	304,471	58,020	30,746	1,336,972
April-12	727,612	280,112	54,218	29,838	1,091,780
May-12	739,561	288,480	57,150	27,202	1,112,392
June-12	995,606	319,793	61,951	26,442	1,403,793
July-12	1,352,009	340,409	66,229	26,081	1,784,727
August-12	1,364,665	333,170	64,388	27,004	1,789,226
September-12	986,551	312,775	60,130	28,687	1,388,142
October-12	808,097	296,251	57,187	30,446	1,191,981
November-12	835,167	290,143	55,985	31,650	1,212,946
December-12	1,147,246	308,051	58,392	33,680	1,547,369
January-13	1,220,634	335,366	60,440	34,956	1,651,396
February-13	1,040,944	320,125	58,092	34,013	1,453,174
March-13	913,538	297,581	53,834	30,593	1,295,545
April-13	709,784	275,517	50,557	29,846	1,065,703
May-13	738,099	284,256	53,203	27,102	1,102,660
June-13	969,326	314,050	58,354	26,486	1,368,216
July-13	1,348,553	335,558	61,968	26,072	1,772,151
August-13	1,338,148	327,462	60,471	27,051	1,753,132
September-13	944,799	307,203	56,816	28,776	1,337,595
October-13	788,691	292,737	54,080	30,463	1,165,971
November-13	822,516	286,301	52,728	31,707	1,193,252
December-13	1,119,930	305,731	55,942	33,681	1,515,284
January-14	1,191,532	334,159	58,032	34,965	1,618,687
February-14	969,161	305,943	53,637	32,916	1,361,658

Contract Month	Ameren Projected Monthly Volume Requirements				
	DS1 (MWH)	DS2 (MWH)	DS3a (MWH)	DS5 (MWH)	Total (MWH)
March-14	886,311	295,921	51,799	30,593	1,264,624
April-14	689,245	274,461	48,831	29,846	1,042,383
May-14	718,192	283,251	51,521	27,102	1,080,066
June-15	943,009	312,302	56,391	26,486	1,338,188
July-14	1,313,432	333,264	59,802	26,072	1,732,570
August-14	1,302,760	325,270	58,352	27,051	1,713,434
September-14	918,177	305,395	54,855	28,776	1,307,203
October-14	764,273	291,210	52,237	30,463	1,138,183
November-14	793,827	284,891	50,936	31,707	1,161,361
December-14	1,078,779	303,889	53,977	33,681	1,470,326
January-15	1,147,163	332,013	55,954	34,965	1,570,095
February-15	934,070	304,280	51,752	32,916	1,323,019
March-15	855,342	294,437	49,983	30,593	1,230,355
April-15	666,775	273,219	47,135	29,846	1,016,976
May-15	697,356	281,730	49,691	27,102	1,055,879

**ATTACHMENT C: Commonwealth Edison Load Forecast for Five Year Planning Period, June 2010 through May 2015**

COMMONWEALTH EDISON COMPANY

Load Forecast for Five-Year Planning Period  
June 2010 – May 2015

July 15, 2009



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## **I. INTRODUCTION AND SUMMARY**

The Public Utilities Act (“PUA”) provides that beginning in 2008 electric utilities in Illinois shall provide a range of load forecasts to the Illinois Power Agency (“IPA”) by July 15 of each year. The PUA further provides that these load forecasts shall cover the 5-year planning period for the next procurement plan and shall include hourly data representing high-load, low-load and expected-load scenarios for the load of eligible retail customers (“Eligible Retail Customers”). The electric utility is also to provide supporting data and assumptions (220 ILCS 5/16-111.5(d)(2)). This document presents Commonwealth Edison Company’s (“ComEd) load forecast for the planning period of June 2010 through May 2015. ComEd will provide the supporting data and assumptions in a separate package of materials.

ComEd’s 5-year hourly load forecast (“Forecast”) is based on the PUA’s definition of Eligible Retail Customers. Eligible Retail Customers include residential and other customers who are entitled to purchase power and energy from ComEd under fixed-price bundled service (“Blended Service”) tariffs. Because service to certain classes of non-residential customers has been declared competitive either by statute or by the Illinois Commerce Commission (“ICC”), only those non-residential customers below 100 kW in size are eligible for Blended Service beginning in June 2010.<sup>1</sup> While previous forecasts reflected these known changes in Blended Service eligibility, phase-out provisions within these competitive declarations allowed certain customers to continue to obtain Blended Service through May 31, 2010. That phase-out period will have ended prior to this Forecast period and the net result this year will be to consider the switching opportunities for a smaller group of customers eligible for Blended Service.

Finally, the Forecast includes the effects of energy efficiency and demand response programs, as well as the quantity of renewable energy resources that need to be procured over the period of this Forecast. The Forecast anticipates that these programs will be observed in full compliance with the PUA’s requirements, subject to the defined rate impact test.

## **II. LOAD FORECAST**

### **A. Purpose and Summary**

This section of the Forecast provides forecasted energy usage for the Eligible Retail Customers within ComEd’s service territory for the 5-year procurement planning period beginning on June 1, 2010. In accordance with Section 16-111.5(b) of the PUA, the Forecast includes a multi- year historical analysis of hourly loads, a review of switching trends and competitive retail market development, a discussion of known and projected changes to future loads and growth forecasts by customer classes. The impacts, if any, of demand response and energy efficiency programs are also addressed.

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<sup>1</sup> There is one exception to this statement. The common area accounts for the condominium associations are exempted from this competitive declaration (see Section 16-103.1 of the PUA).

## **B. Development of the Five-Year Load Forecast (June 1, 2010 – May 31, 2015)**

The hourly load analysis provides the means to determine the on -peak and off-peak quantities needed in the procurement process. In presenting the Forecast, this document focuses on average usage or load during the 12 monthly on-peak and off-peak periods during a year. For the purposes of this Forecast, the definitions of the on-peak and off-peak periods are consistent with those commonly used in the wholesale power markets, and on trading platforms such as the New York Mercantile Exchange (“NYMEX”) and the Intercontinental Exchange, Inc. (“ICE”). The on-peak period consists of the week day period from 6 a.m. to 10 p.m. CST excluding NERC holidays (this is referred to as the 5X16 peak period). The off-peak period consists of all other hours (this is referred to as the off-peak “wrap”). The Forecast therefore has been summarized as load requirements using the 24 different time periods covered by these standard products. This is the same approach that was presented in past forecasts. The hourly load data is being supplied with the supporting data and assumptions materials.

### **1. Hourly Load Analysis**

#### **a. Multi-year historical analysis of hourly load**

The 2009 multi-year historical analysis of hourly load is very similar to the approach used in the 2008 procurement filing. Essentially, the hourly models that were developed last year were updated with another year of customer data and reviewed for fit. The results this year are similar to the previous filing.

The 2009 multi-year historical analysis of load during the 24 monthly on-peak and off-peak periods is based on hourly profile data for the period from January 2004 to March 2009. The profiles are based on statistically significant samples from ComEd’s residential and small commercial and industrial (“C&I”) customer population. As noted last year, these samples provide the only basis for an analysis of actual historical hourly usage of Eligible Retail Customers because the standard meters currently used for these customers do not record usage on an hourly basis. Further, as discussed in greater detail below, the profiles show clear and stable weather-related usage patterns that are indicative of how residential and small C&I customers use electricity. Thus, the customer load profiles provide reliable information on the historical hourly usage of customers.

Using the hourly load profiles and actual customer aggregate usage, Table II-1 depicts the historical on-peak and off-peak hourly usage of the major customer groups within the Eligible Retail Customers for the period from January 2006 to December 2008.

**Table II-1**  
**Load Forecast Table (Historical Detail 2006-2008)**

<b>ComEd Historical Actual Sales</b>											
<b>Historical Energy Sales in MWh for Eligible Retail Customers (Line Loss Adjusted)</b>											
<b>Year</b>	<b>Month</b>	<b>Residential Load</b>		<b>Watt-hour</b>		<b>Small Load (0 to 100kW)</b>		<b>Street Lighting Load</b>		<b>Total Load (MWh)</b>	
		<b>On-Peak</b>	<b>Off-Peak</b>	<b>On-Peak</b>	<b>Off-Peak</b>	<b>On-Peak</b>	<b>Off-Peak</b>	<b>On-Peak</b>	<b>Off-Peak</b>	<b>On-Peak</b>	<b>Off-Peak</b>
2006	1	1,256,132	1,374,251	84,681	67,709	481,564	391,036	4,463	10,303	1,826,841	1,843,298
2006	2	1,161,366	1,227,567	81,336	62,544	446,830	339,993	3,983	9,865	1,693,515	1,639,969
2006	2	1,246,506	1,170,307	86,979	59,836	511,103	348,217	3,371	10,401	1,847,960	1,588,761
2006	4	883,139	1,049,491	63,376	53,330	442,887	355,126	2,200	9,608	1,391,601	1,467,555
2006	5	1,041,922	1,154,671	74,321	54,697	493,627	354,870	1,249	10,727	1,611,119	1,574,964
2006	6	1,367,943	1,202,345	78,971	52,171	591,188	383,157	1,762	9,911	2,039,863	1,647,583
2006	7	1,849,638	2,187,719	78,633	63,303	570,238	500,836	1,339	10,577	2,499,848	2,762,435
2006	8	1,853,407	1,570,249	79,281	48,641	677,835	441,188	2,189	10,893	2,612,713	2,070,971
2006	9	945,129	1,065,004	73,838	59,665	477,947	389,067	3,073	10,246	1,499,985	1,523,981
2006	10	1,101,961	1,100,271	76,818	55,208	505,606	364,796	3,766	10,832	1,688,151	1,531,107
2006	11	1,163,770	1,205,908	78,308	60,523	474,375	356,398	4,321	10,518	1,720,774	1,633,347
2006	12	1,278,904	1,537,332	54,003	51,049	487,419	446,154	4,835	8,804	1,825,162	2,043,341
<b>Totals</b>		<b>15,149,818</b>	<b>15,845,113</b>	<b>910,544</b>	<b>688,677</b>	<b>6,160,620</b>	<b>4,670,838</b>	<b>36,550</b>	<b>122,683</b>	<b>22,257,532</b>	<b>21,327,312</b>
2007	1	1,457,097	1,468,878	56,674	43,742	583,358	443,717	5,636	13,179	2,102,765	1,969,515
2007	2	1,267,467	1,369,362	36,786	29,412	442,442	345,901	2,778	5,567	1,749,474	1,750,242
2007	2	1,057,784	1,134,928	23,570	18,140	418,035	317,973	2,086	5,513	1,501,476	1,476,554
2007	4	909,275	994,657	19,710	14,900	390,199	297,316	5,324	19,813	1,324,507	1,326,685
2007	5	1,104,862	1,072,495	23,298	16,207	474,806	325,316	3,179	8,800	1,606,145	1,422,818
2007	6	1,440,606	1,435,159	20,885	15,367	502,081	375,267	3,236	8,688	1,966,807	1,834,481
2007	7	1,630,033	1,768,442	28,412	21,906	526,360	418,045	3,520	8,725	2,188,325	2,217,117
2007	8	2,011,503	1,691,894	26,597	16,913	598,902	385,432	3,660	9,379	2,640,661	2,103,618
2007	9	1,244,723	1,497,186	20,857	18,610	457,852	392,067	4,430	8,737	1,727,862	1,916,600
2007	10	1,142,776	1,173,411	21,873	14,996	467,438	312,726	5,506	9,616	1,637,593	1,510,749
2007	11	785,173	844,163	14,842	11,558	291,515	222,695	5,428	9,193	1,096,958	1,087,609
2007	12	1,440,058	1,821,833	27,331	26,082	469,111	439,096	6,848	10,309	1,943,347	2,297,320
<b>Totals</b>		<b>15,491,357</b>	<b>16,272,407</b>	<b>320,836</b>	<b>247,833</b>	<b>5,622,099</b>	<b>4,275,550</b>	<b>51,629</b>	<b>117,517</b>	<b>21,485,920</b>	<b>20,913,307</b>
2008	1	1,411,279	1,483,772	29,148	23,056	466,843	361,907	6,297	10,557	1,913,567	1,879,292
2008	2	1,318,731	1,342,790	26,989	21,401	443,650	337,946	5,615	9,295	1,794,986	1,711,432
2008	3	1,092,187	1,305,371	23,682	21,257	409,987	350,785	4,030	6,004	1,529,885	1,683,417
2008	4	1,011,328	1,006,047	21,714	16,003	427,661	300,578	4,163	8,288	1,464,865	1,330,916
2008	5	886,256	1,047,507	17,377	14,660	392,652	317,448	2,424	3,392	1,298,709	1,383,007
2008	6	1,319,145	1,400,770	21,381	16,263	481,461	364,433	692	7,997	1,822,679	1,789,463
2008	7	1,832,155	1,649,107	24,545	16,852	553,938	391,569	392	2,338	2,411,030	2,059,866
2008	8	1,489,004	1,620,019	23,926	18,615	507,114	406,990	890	4,645	2,020,934	2,050,269
2008	9	1,088,190	1,166,101	19,823	15,684	457,734	341,009	1,268	4,339	1,567,015	1,527,133
2008	10	1,081,333	1,003,909	23,739	16,888	426,681	295,683	1,773	4,603	1,533,526	1,321,083
2008	11	1,021,535	1,335,393	26,766	25,996	381,408	366,260	1,905	4,363	1,431,614	1,732,012
2008	12	1,504,635	1,541,136	31,715	26,073	469,006	382,791	1,848	3,530	2,007,204	1,953,531
<b>Totals</b>		<b>15,055,778</b>	<b>15,901,921</b>	<b>290,805</b>	<b>232,748</b>	<b>5,418,134</b>	<b>4,217,399</b>	<b>31,296</b>	<b>69,352</b>	<b>20,796,014</b>	<b>20,421,420</b>

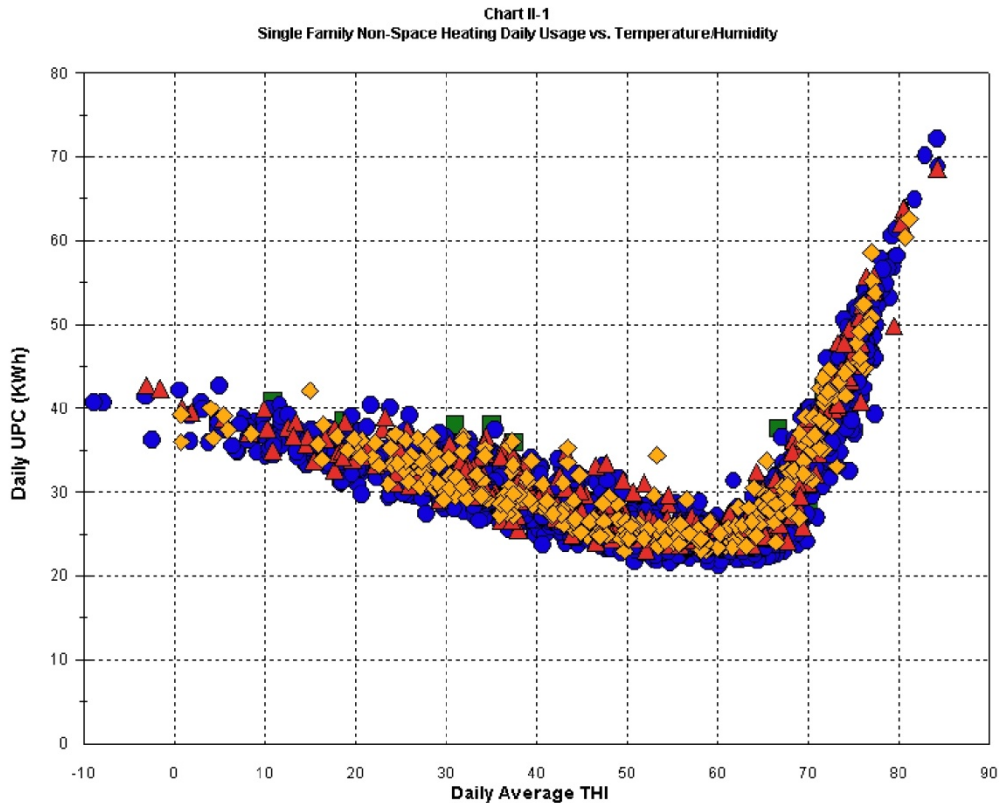
Table II-2 carries forward the total load in MWhs from Table II-1 and then provides the average load for each period in MWs, which is useful in determining the required volume of standard wholesale energy products.

<b>Table II-2</b>					
<b>Load Forecast Table (Historical Summary 2006-2008)</b>					
<b>ComEd Historical Actual Sales Historical Energy Sales for Eligible Retail Customers (Line Loss Adjusted)</b>					
<b>Year</b>	<b>Month</b>	<b>Total Load (MWh)</b>		<b>Average Load (MW)</b>	
		<b>On-Peak</b>	<b>Off-Peak</b>	<b>On-Peak</b>	<b>Off-Peak</b>
2006	1	1,826,841	1,843,298	5,437	4,518
2006	2	1,693,515	1,639,969	5,292	4,659
2006	3	1,847,960	1,588,761	5,022	4,225
2006	4	1,391,601	1,467,555	4,349	3,669
2006	5	1,611,119	1,574,964	4,577	4,018
2006	6	2,039,863	1,647,583	5,795	4,477
2006	7	2,499,848	2,762,435	7,812	6,515
2006	8	2,612,713	2,070,971	7,100	5,508
2006	9	1,499,985	1,523,981	4,687	3,810
2006	10	1,688,151	1,531,107	4,796	3,906
2006	11	1,720,774	1,633,347	5,121	4,254
2006	12	1,825,162	2,043,341	5,704	4,819
<b>Total</b>		<b>22,257,532</b>	<b>21,327,312</b>		
2007	1	2,102,765	1,969,515	5,974	5,024
2007	2	1,749,474	1,750,242	5,467	4,972
2007	3	1,501,476	1,476,554	4,266	3,767
2007	4	1,324,507	1,326,685	3,942	3,455
2007	5	1,606,145	1,422,818	4,563	3,630
2007	6	1,966,807	1,834,481	5,854	4,777
2007	7	2,188,325	2,217,117	6,513	5,434
2007	8	2,640,661	2,103,618	7,176	5,595
2007	9	1,727,862	1,916,600	5,684	4,607
2007	10	1,637,593	1,510,749	4,450	4,018
2007	11	1,096,958	1,087,609	3,265	2,832
2007	12	1,943,347	2,297,320	6,073	5,418
<b>Total</b>		<b>21,485,920</b>	<b>20,913,307</b>		
2008	1	1,913,567	1,879,292	5,436	4,794
2008	2	1,794,986	1,711,432	5,342	4,754
2008	3	1,529,885	1,683,417	4,553	4,126
2008	4	1,464,865	1,330,916	4,162	3,617
2008	5	1,298,709	1,383,007	3,865	3,390
2008	6	1,822,679	1,789,463	5,425	4,660
2008	7	2,411,030	2,059,866	6,850	5,255
2008	8	2,020,934	2,050,269	6,015	5,025
2008	9	1,567,015	1,527,133	4,664	3,977
2008	10	1,533,526	1,321,083	4,167	3,514
2008	11	1,431,614	1,732,012	4,709	4,163
2008	12	2,007,204	1,953,531	5,702	4,983
<b>Totals</b>		<b>20,796,014</b>	<b>20,421,420</b>		

ComEd analyzed the hourly load profiles for all the major customer groups within the Eligible Retail Customers. As a result of that analysis, ComEd developed hourly load models for those major customer groups that determined the average percentage of monthly sales that each customer group used in each hour of that month. Those hourly models were then used to develop the monthly on-peak and off-peak usage percentages for the planning periods. These percentages were applied to ComEd’s forecasted monthly sales to obtain the forecasted procurement quantities that are presented later in this Forecast (see Chart II-7 and the discussion in section IIB(1)(d), below). In the following section, the hourly analysis of the residential single-family non- space heating customer segment is described. This class represents approximately half of the annual sales of the Eligible Retail Customer segment and provides a good example of how the hourly load profile data were analyzed and modeled.

**(i) Residential Single-Family Hourly Load Profile Analysis**

One of the most significant, and easily understood, determinants of residential energy usage is weather. The “scatter plot” shown below (Chart II-1) demonstrates the significant relationship that exists between weather and usage for the single-family non-space heating residential customer segment.



A scatter plot shows the relationship between two variables. Each point represents a single observation (a day in this case). In this chart, the values shown on the vertical or Y-axis are daily usage per customer (“UPC”). The values shown on the horizontal or X-axis

are the daily average temperature-humidity index (“THI”). The graph shows daily UPC based on observations from June 2002 to March 2009 and the average THI on those days. THI, rather than temperature alone, is used because residential usage is sensitive to humidity. Different geometric shapes are used to distinguish points representing weekdays from those depicting Saturday, Sunday or holiday usage.

The scatter plot is very useful in understanding the relationship between customer usage and weather. If there were no relationship between the two, points on the graph would not display a clear pattern. However, it is apparent that there is a clear pattern. The right side of the graph at the high end of the horizontal axis shows the days on which THI was the highest. The points at that end of graph indicate that the highest UPC occurred when THI levels were at their peak -- 80 plus degrees. Moving to the left, the points show UPC declining rapidly as the THI decreases until the 60 degree level is reached at which a base usage appears. From that base level, UPC gradually increases as colder temperatures are experienced.<sup>2</sup>

Hourly models were developed to account for the strong weather relationship shown in the graph and to account for numerous other factors that influence residential usage. The models explicitly account for the differing effects of energy use at various temperatures. Variables are included to allow for seasonal usage patterns in water heating, refrigeration and other seasonal uses. Weekend and holiday variables are included to allow for behavioral differences on those days relative to weekdays. The amount of daylight on each day is included to account for seasonal differences in lighting loads. Weather variables for prior days are included in the model to account for the dynamic effects of temperature buildup. The full list of variables included in the residential single-family model is shown in Appendix A-1.

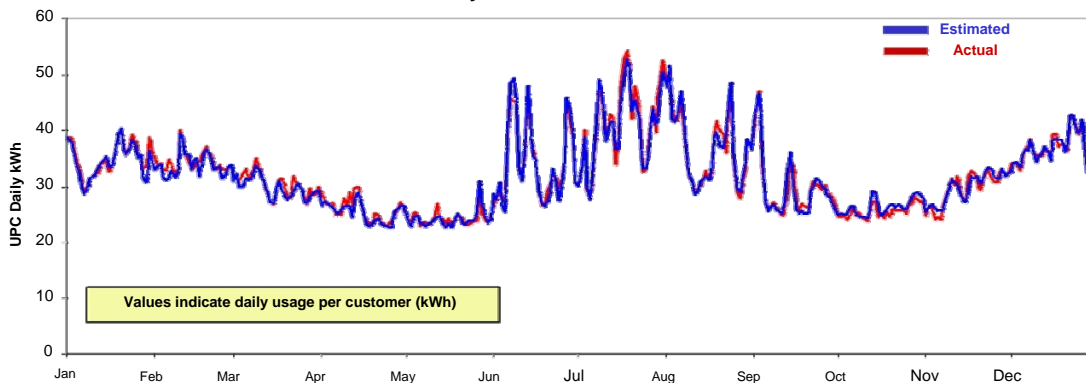
One way to visualize the model’s performance is to look at plots of actual and estimated<sup>3</sup> values for the historical estimation period. The following chart demonstrates the performance of the model over the one-year period from January 2008 through December 2008 at the daily level and zooms in to show the hourly performance in July and August of 2008.

<sup>2</sup> Unlike usage for commercial customers, residential daily usage does not vary significantly between weekdays and weekends. In fact, residential usage on weekends and holidays is typically greater than on week days.

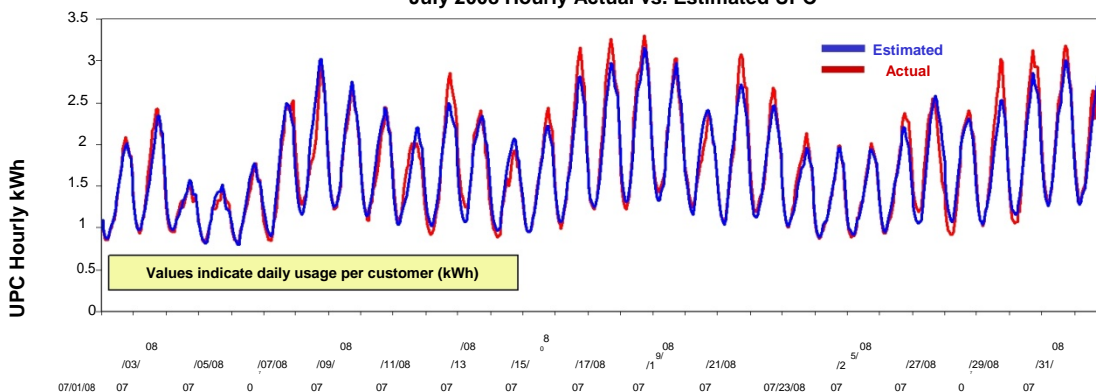
<sup>3</sup> The estimated data in Chart II-2 is based on the actual weather experienced over the relevant period.



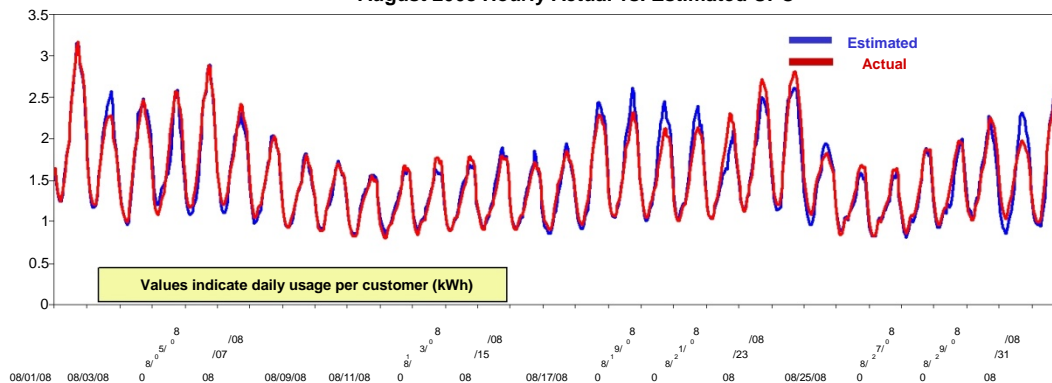
**Chart II-2  
ComEd Single Family Profile: Estimated vs. Actual  
2008 Daily Actual vs. Estimated UPC**



**July 2008 Hourly Actual vs. Estimated UPC**



**August 2008 Hourly Actual vs. Estimated UPC**



In all of the three above graphs in Chart II-2, the red line indicates the “actual” load data and the blue line indicates the model’s estimated values, based on actual weather. In this case, it is important to understand that the actual data are themselves estimates of population loads based on a statistical sample, and are therefore subject to minor variations that occur in the sample. Despite this statistical variation in the actual values, the charts demonstrate that the model’s estimated usage and the actual usage are extremely close. The close alignment of the estimated and actual lines on the charts demonstrates that the model is very effective in determining variations in electrical usage patterns.

## **b. Switching Trends and Competitive Retail Market Analysis**

In determining the expected load requirements for which standard wholesale products will have to be purchased, it is important to provide the best possible forecast of the extent to which Eligible Retail Customers are likely to switch to alternative providers. That issue is considered in the following discussion, which reviews retail development in ComEd's service territory, the entry of alternative suppliers, the rate of customer switching in the past, future trends affecting customer choice and ComEd's 5-year forecast of the percentage of load from various customer segments that will remain to be served with supply procured by ComEd.

### **(i) Introduction and Brief Overview of Retail Development**

There can be no doubt that robust retail markets exist in northern Illinois. In October 1999 the first ComEd customer began taking service from an alternative retail electric supplier ("RES"). In the following ten years there has been a steady movement to RES service. As of May 2009 only 21% of ComEd's entire non-residential sales were being served under Blended Service (the traditional utility fixed rate). By June 2010 that figure is estimated to be below 14% as the over 100 kW customers migrate off of Blended Service and small commercial customers below 100 kW opt for RES service. Thus, the ComEd non-residential market has gone from no retail activity ten years ago to one now approaching 90% of the non-residential sales being served by a RES or Hourly Service.

While customer switching in the commercial and industrial market has been very robust, customer switching in the Residential class has been much slower. There are many factors that contribute to this condition, with acquisition costs, market conditions and modest price changes for residential customers being primary factors. Over the past 12 years the average residential rate is largely unchanged, 11.6 cents/kWh in 2008 versus 11.4 cents/kWh in 1996. Thus, rapid price escalation that might have caused residential customers to seek RES service has not occurred.

In summary, retail choice is a success story in the ComEd service territory. While this phenomena is subject to a variety of factors, especially market conditions, a healthy retail market is anticipated in the near term.

### **(ii) RES Development**

The success of retail market competition is the result of the concerted efforts of ComEd, numerous RESs and policy makers. Today, the retail market development continues in two very meaningful ways. First, RESs continue to enter the ComEd market. Since January 2008 eight new RESs have been certified by the ICC. Five of the eight have been registered by ComEd to serve retail load and the remaining three are in the process. Second, as noted last year, ongoing workshops are occurring related to purchase of receivables ("POR"). The POR topic is addressed in more detail with the "Future Trends" section below.

Just like ComEd's customer base, there is a large and very diverse population of RESs in northern Illinois. These companies differ in many ways. Some have national operations while others operate just regionally. Some are focused on the entire spectrum of customers,

including residential, while others concentrate on just non-residential customers. Some retailers offer other products (e.g., demand response) to assist the customer in managing their electricity usage. This large number of diverse businesses can only be considered a plus to the customers in the ComEd service territory.

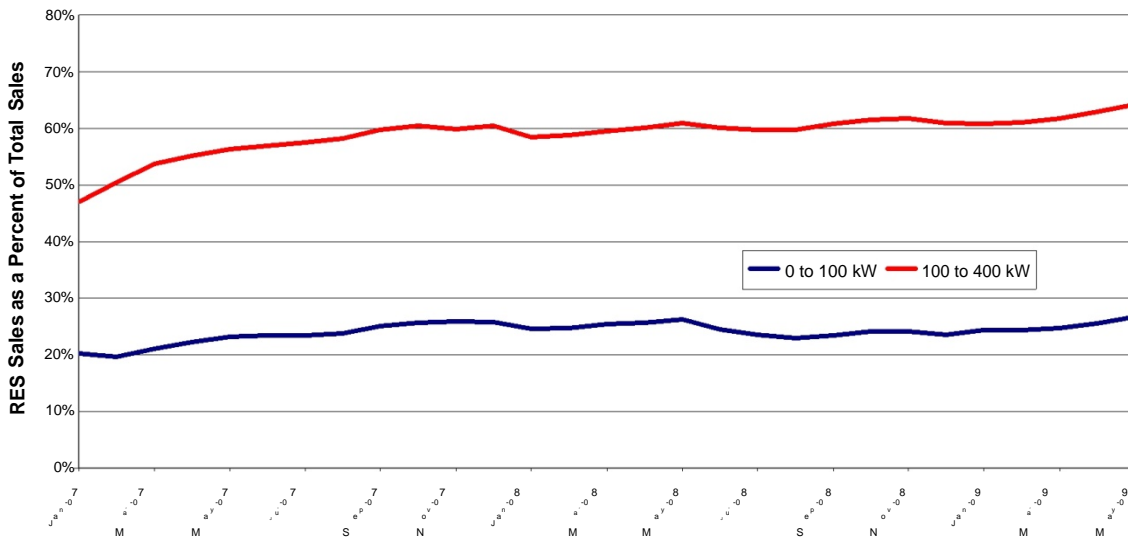
It is interesting to note that during one of the most severe recessions in the country's history there has been only one RES that has left the ComEd market in the past year. Another RES surrendered its ARES certification, although they were not registered with ComEd. On the other hand, one RES in our service territory was recently selected by Crain's Chicago Business as the fastest growing small business in the Chicago area.

**(iii) Future Trends**

RES sales to the 0 to 100 kW customers has been gradually growing over time. Chart II -3 contains monthly RES percentage of sales from January 2007 through May 2009 for the 0 to 100 and 100 to 400 kW customers (though not applicable for this procurement event). The 0 to 100 kW RES sales have been slowly growing over time. RES sales to the 100 to 400 kW group has been increasing at a faster pace than the 0 to 100 kW group. This is understandable given, among other things, the expiration of Blended Service to this group as of June 2010. The view is that movement by the 100 to 400 kW customers will increase migration by some of the 0 to 100 kW customers. Thus, the outlook is for the 0 to 100 kW customers to continually migrate to RES service, but at a slightly faster pace than in the past few years.

**Chart II-3**

**RES Sales Percentage**



In assessing future small C&I and residential RES sales, consideration needs to be given to the potential impact of the ongoing discussion concerning POR. A POR program could result in greater participation by RESs in the residential retail market by lowering a RES' costs.

Discussions are currently underway to address implementation issues, and the programs are expected to become operational in the January to March 2011 time frame.

Another development that has some potential to affect the level of Blended Service sales to residential and Small C&I customers is House Bill 722 (“HB722”). That bill passed both houses of the Illinois General Assembly and is awaiting execution by the Governor. HB722 revises Section 17-800 of the PUA by allowing a municipality to adopt an opt-out aggregation program. These revisions have some potential to lessen Blended Service sales to the residential and small C&I customers, but their effect is too uncertain to be taken into account for purposes of this Forecast.

**(iv) Forecasted Retail Sales**

The forecast percentages of Blended Service sales are shown below, along with some historical perspective.

**Table II-3  
Percentage of Blended Service Sales<sup>4</sup>**

<b>Month</b>	<b>Residential</b>	<b>Wathour</b>	<b>0-100 kW</b>
Jun-04	100.0%	99.4%	87.8%
Jul-05	100.0%	99.4%	87.3%
Jul-06	100.0%	99.6%	90.7%
Jul-07	100.0%	97.4%	76.5%
Jun-08	99.9%	98.0%	75.2%
May-09	99.8%	98.0%	72.1%
Jun-10	99.5%	96.0%	65.1%
Jun-11	98.3%	96.0%	55.4%
Jun-12	98.3%	96.0%	55.4%
Jun-13	98.2%	96.0%	55.4%
Jun-14	98.2%	96.0%	55.4%
Jun-15	98.2%	96.0%	55.4%

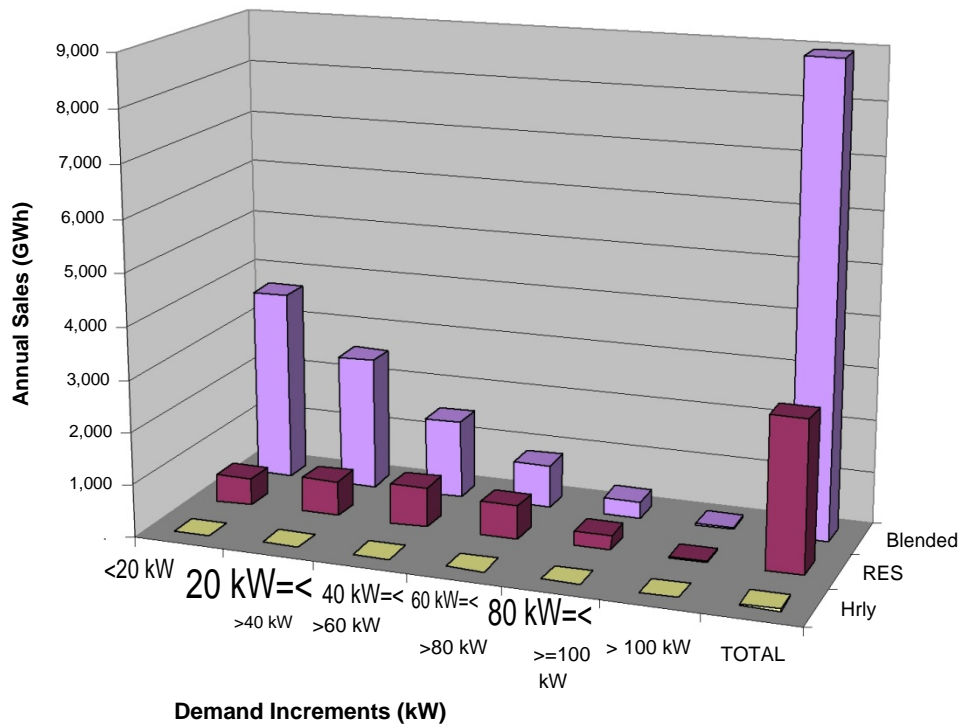
<sup>4</sup> For the 2004 to 2006 data the percentages may include a very minor amount of sales related to customers taking service under ComEd’s hourly service tariffs.

The main drivers of this forecast are:

1. The Blended Service supply cost will reflect certain pre-existing contracts; specifically the financial swap agreement that is in place through May 2013. If market prices continue to be lower than they have been in the last few years, this may produce some “headroom” that provides the opportunity for more RES sales in the 0 to 100 kW customer group or for customers to switch to Hourly Service.
2. In addition, a gradual increase in RES sales to the non-residential customers below 100 kW is assumed as retailers continue to seek new customers. This has been the pattern for the past decade. However, the increase in RES service to the below 100 kW non-residential customers is limited by the fact that many of the customers in this category are rather small in size (i.e., almost “watt-hour like” in size). Below is a chart depicting the allocation of sales (kWh) to the 0 to 100 kW customer group among Blended, RES and Hourly products for the year 2008. The chart breaks down this customer group by 20 kW increments. A large portion of the Blended usage in this class is in the below 40 kW segments. While RES have been able to obtain customers in the below 40 kW segments, their share accounts for only 15% of the total below 40 kW sales. This highlights the difficulty in RESs reaching customers whose electricity bill is relatively small.

**Chart II-4**

**Allocation of 0 to 100 kW Sales by Product**



3. Residential switching is not assumed to occur for the next couple of years, but a small amount is expected in later years as a result of the POR initiative.

The effects of those drivers by customer group are as follows:

1. The RES served portion of the 0 to 100 kW customer load will grow from 27% (as of May 2009) to 34% by June 2010. This movement is helped by the current RES marketing efforts related to the 100 to 400 kW customers. POR efforts, potential for headroom and RESs seeking new customers causes this percentage to increase to 44% by June 2011. The percentage holds at this level thereafter given the smaller customer size of the remaining Blended customers.
2. Wathour customers are similar in behavior to residential customers when viewed from a choice perspective and their participation in customer choice is expected to generally mimic the residential movement. Approximately 98% of the total sales to these customers are for Blended Service and that percentage decreases slightly to 96% during the Forecast period.
3. Active residential customer choice is not assumed to occur until 2011 because of the same Blended Service pricing dynamics noted for the small non-residential customers. Beginning in 2011 a small amount (i.e., 0.2-0.4% of total residential sales) is anticipated as POR initiatives are implemented. However, increasing residential hourly sales are anticipated in the Forecast and addressed in the next section.

### **c. Known or Projected Changes to Future Load**

Typically, when ComEd forecasts future loads, it considers whether there are any known major customer decisions, such as the relocation of part or all of a business, that would impact load. For the Eligible Retail Customers, other than the factors we have discussed elsewhere, e.g. switching, energy efficiency measures, growth, etc., there is only one known or projected change that ComEd is aware of that would affect future loads for this group of customers. This is the residential real-time pricing program (“RRTP”).

In compliance with Section 16-107(b-5) of the PUA, ComEd received ICC approval to implement an RRTP program.<sup>5</sup> ComEd currently has about 7,000 customers on RRTP and is targeting just over 11,000 by the end of 2009. In addition, ComEd expects about 6,000 additional customers will switch to RRTP in 2010. The program could potentially expand beyond 2010, but is subject to ICC review and approval at the end of the year.

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<sup>5</sup> See ICC Order of December 20, 2006, in Docket No. 06-0617.

ComEd is currently seeking approval to implement a smart meter pilot program (ICC Docket no. 09-0263). If approved, ComEd would install 140,000 smart meters by mid-2010. Thus, there is some potential that additional customers could switch to RRTP over the timeframe of this Forecast. However, the number of such customers is small and ComEd does not think it is reasonable to project any additional migration off of Blended Service in this year's Forecast due to the pilot program.

ComEd will also be applying to the Department of Energy (“DOE”) for funding under the Smart Grid Investment Grant Program. Under this program, parties can apply for up to \$200 million to help cover the costs of deploying smart grid facilities. If ComEd is successful, it plans to deploy additional smart meters in the City of Chicago and also plans to deploy home area network equipment in some of these homes that would permit these customers to have greater control over their energy usage. A decision from DOE is expected in October 2009. While DOE approval is uncertain, to prevent over procurement of energy for Blended customers this forecast assumes 25,000 additional homes do utilize RRTP service beginning in the fourth quarter of 2010. This assumption serves as a placeholder that acknowledges the potential for significant increases in future RRTP customers because of this program while also acknowledging the previously described uncertainties. The timing of DOE decision should permit ComEd to include the effect of this decision in the updated forecast that it intends to submit during the procurement proceeding as it did last year.

The table below shows the combined effect of the RRTP program and of the smart grid program on residential usage over the time period of this Forecast.

**Table II-4  
RRTP Enrollments and the Amount of Associated Load**

<b>End of Year</b>	<b>Incremental Enrollments</b>	<b>Total Enrollments</b>	<b>Annual Usage (GWh)</b>
2009	5,100	11,100	107
2010	31,000	42,100	406
2011	0	42,100	406
2012	0	42,100	406
2013	0	42,100	406
2014	0	42,100	406

Customers that switch to RRTP would no longer be considered in the forecasted load of Eligible Retail Customers. The last column in the above chart depicts the estimated annual usage that would be impacted by this level of RRTP participation using the annual usage of a residential single-family non-space heating customer.

**d. Growth Forecast by Customer Class**

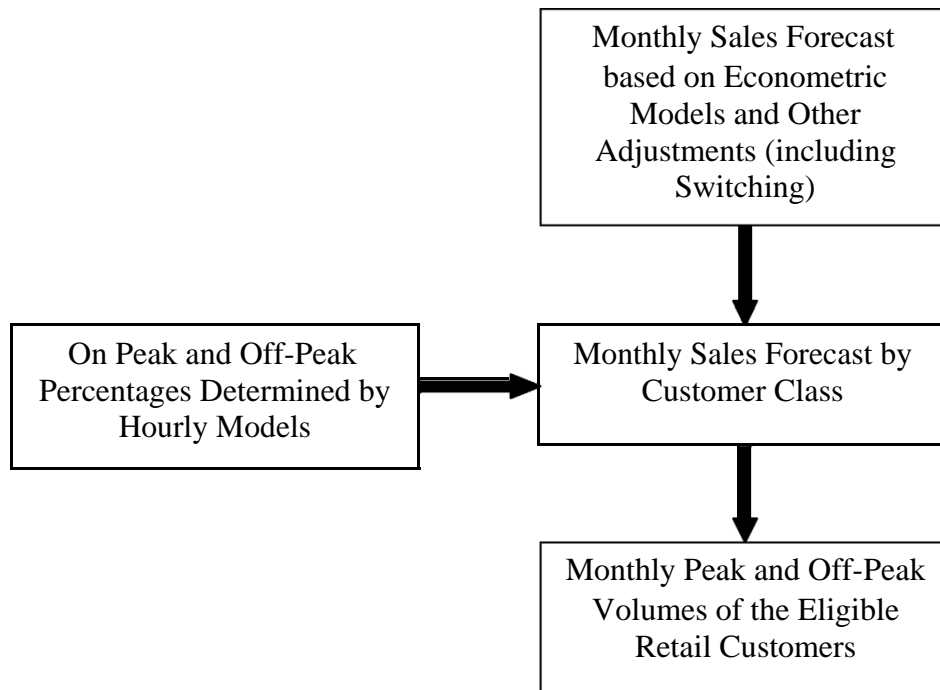
**(i) Introduction**

This section describes ComEd’s growth forecast by customer class for the 5-year procurement planning period beginning on June 1, 2010. Section II(B)(1) discussed the hourly customer load profiles used by ComEd to develop models to present the historical load analysis required by the PUA and to predict average UPC. As indicated in this section, in arriving at a growth forecast by customer class, there are additional models beyond those customer-level hourly models that are used to forecast future customer class sales. These other models play an important role in determining expected load during the 5-year planning period among the Eligible Retail Customer groups.

The following chart illustrates the steps in the ComEd load forecasting process.

**Chart II-5**

**ComEd Energy Sales Forecast Process**



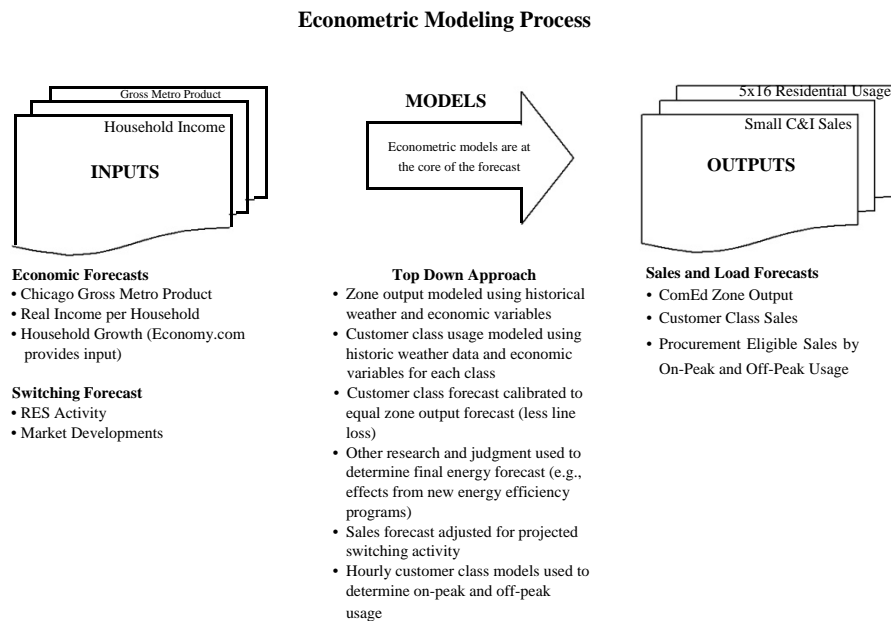
The forecasting process is model based subject to adjustments and judgment. A suite of econometric models is used to produce monthly sales forecasts for ComEd’s revenue customer classes. The two major customer classes applicable to this Forecast are Residential and Small C&I. That monthly forecast is adjusted for other considerations (e.g., switching activity) and allocated to more granular delivery service classes (e.g., the residential customer class is



composed of four delivery services classes). The forecast sales are combined with the input from the hourly models to obtain on-peak and off-peak quantities for each month and delivery service class.

The econometric modeling portion of the process is described in the following chart:

**Chart II-6**



As the chart indicates, ComEd’s forecasts of sales for its service territory are based on a “top-down” approach. The top-down approach provides a forecast of total sales for the entire service territory and allocates the sales to various customer classes using the models specific to each class. The “zone” forecast model takes into account a number of economic variables that affect electric energy use. For example, the gross metropolitan product (“GMP”) for the Chicago and Rockford areas is a good measure of economic activity in ComEd’s service territory. As GMP (which is expressed in billions of dollars) increases, use of electric energy rises as well. Similarly, the zone model considers the total number of residential customers in ComEd’s service territory. As the number of customers increases, total usage is also affected. Section II (B)(1) describes the significant relationship between weather and energy usage, and the zone model contains sophisticated variables to reflect the effects of temperature and humidity, as well as seasonal usage patterns and other factors. The economic assumptions are contained in Table II-5.

**Table II-5**

**Chicago Area Economic Forecasts - Economy.com (March'09)**

<b>Economic Variables</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Gross Metro Product (Billions)	\$ 385	\$ 391	\$ 389	\$ 375	\$ 381	\$ 399	\$ 424	\$ 438	\$ 447	\$ 454
Real Disposable Income (Millions)	\$ 292,201	\$ 298,713	\$ 305,962	\$ 304,214	\$ 304,448	\$ 313,277	\$ 323,276	\$ 336,380	\$ 344,531	\$ 354,701
# of Households (Thousands)	3,321	3,344	3,368	3,389	3,413	3,444	3,484	3,517	3,545	3,568
Real Income/HH	\$ 87,991	\$ 89,328	\$ 90,851	\$ 89,775	\$ 89,211	\$ 90,953	\$ 92,787	\$ 95,638	\$ 97,199	\$ 99,409
Total Employment (Thousands)	4,443	4,480	4,451	4,232	4,222	4,345	4,514	4,639	4,682	4,709
Non-Manufacturing	3,953	3,996	3,980	3,800	3,799	3,915	4,073	4,189	4,234	4,262
Manufacturing	490	484	471	432	423	430	441	449	449	446
<b>Growth Rate</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Gross Metro Product	2.5%	1.6%	(0.5%)	(3.5%)	1.7%	4.6%	6.2%	3.5%	1.9%	1.6%
Real Disposable Income	2.4%	2.2%	2.4%	(0.6%)	0.1%	2.9%	3.2%	4.1%	2.4%	3.0%
# of Households	0.6%	0.7%	0.7%	0.6%	0.7%	0.9%	1.2%	1.0%	0.8%	0.7%
Real Income/HH	1.8%	1.5%	1.7%	(1.2%)	(0.6%)	2.0%	2.0%	3.1%	1.6%	2.3%
Total Employment	1.4%	0.8%	(0.7%)	(4.9%)	(0.2%)	2.9%	3.9%	2.8%	0.9%	0.6%
Non-Manufacturing	1.7%	1.1%	(0.4%)	(4.5%)	(0.0%)	3.0%	4.0%	2.9%	1.1%	0.7%
Manufacturing	(1.0%)	(1.1%)	(2.8%)	(8.2%)	(2.0%)	1.5%	2.6%	1.8%	(0.1%)	(0.6%)

Source: Moody's Economy.com

All of the variables used in each of the models in the forecasting process are identified in Appendix A-4.<sup>6</sup>

The remainder of this section will provide a brief description of the models, starting with the ComEd Monthly Zone energy usage model and proceeding to the three customer-level models for Monthly Residential bill-cycle energy usage, Monthly Small C&I bill-cycle energy usage and Monthly Street Lighting bill-cycle energy usage.

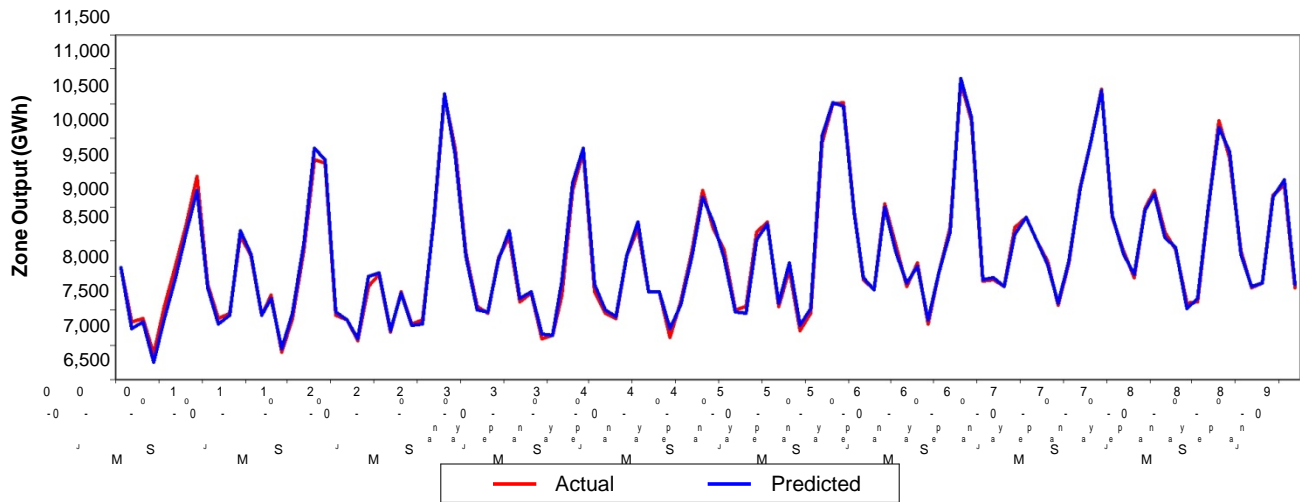
**(ii) ComEd Monthly Zone Model**

The Monthly Zone model forecasts energy usage in gigawatt hours (GWh) for the entire ComEd service territory. The following chart shows the performance of the ComEd Monthly Zone model by comparing actual zone output to the estimates<sup>7</sup> from the model for each calendar month from 2000 through February 2009.

<sup>6</sup> Technical information about the model coefficients and regression statistics are included in Appendix A-2 and A-3.

<sup>7</sup> Once again, for purposes of this Forecast, the estimates used in Charts II-10, II-11 and II-12 are based on actual weather.

**Chart II-7  
ComEd Monthly Zone Model: Estimated vs. Actual**

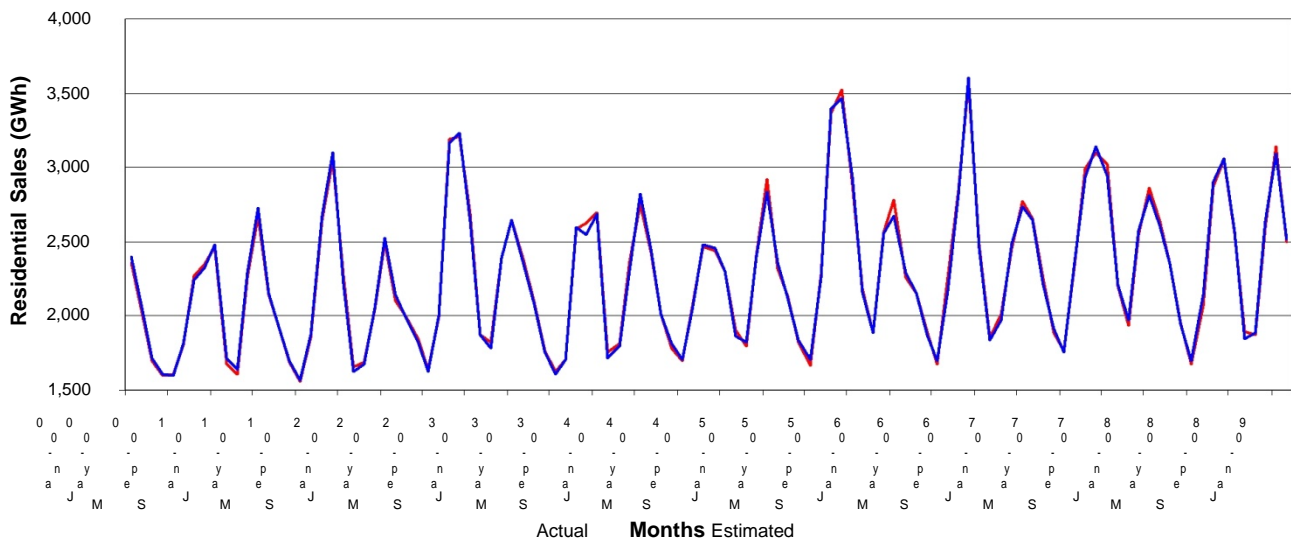


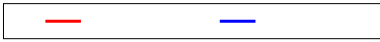
As with customer-level models discussed in Section II(B)(i)(a), the Monthly Zone model is highly useful in understanding energy usage. The graph line depicting the model’s estimated usage (based on actual weather) and the line showing actual usage for the period are nearly identical.

**(iii) ComEd Monthly Residential Model**

The Monthly Residential model forecasts monthly residential bill-cycle sales expressed in kWh per customer per day. The Monthly Residential model is also very useful in understanding energy usage for this customer segment. The following chart compares the monthly energy usage for residential customers estimated by the Monthly Residential model to the actual residential usage for the time period of January 2000 to February 2009.

**Chart II-8  
ComEd Monthly Residential Model: Estimated vs. Actual**



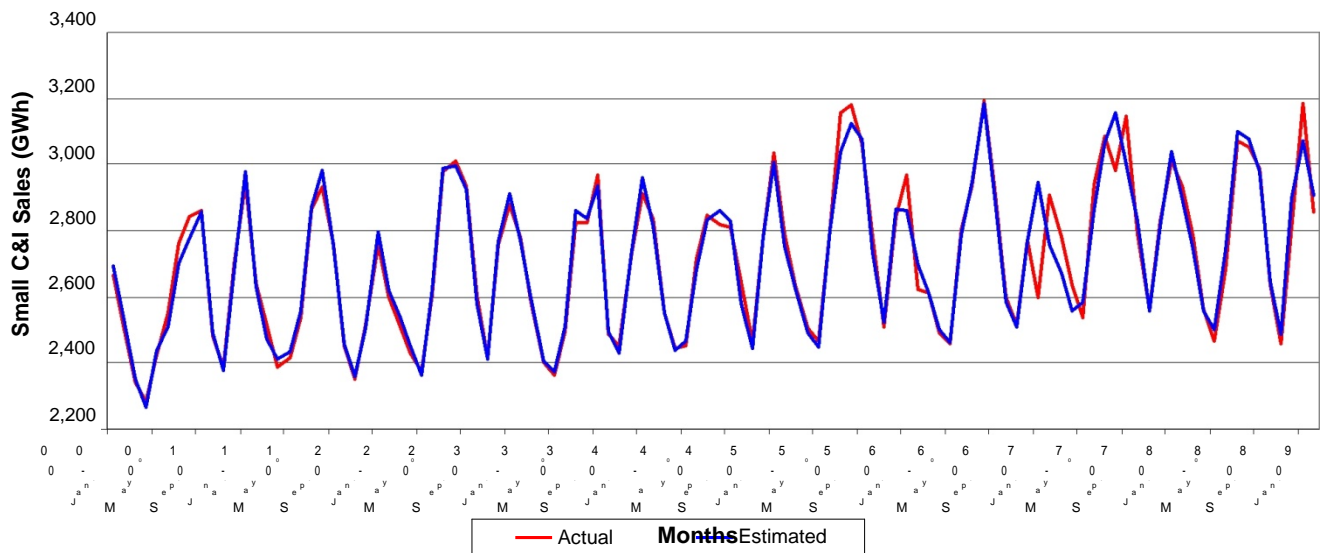


The graph line depicting the model’s estimated usage and the line showing actual usage for the period are highly correlated.

**(iv) ComEd Monthly Small C&I Model**

The Monthly Small C&I model forecasts monthly Small C&I bill-cycle sales. Chart II-9 shows an estimated versus actual comparison demonstrating the model’s effectiveness. The larger than normal variance in the period January 2007 to March 2007 is explained by post-2006 billing implementing issues. The transition to the new rates that took effect on January 2, 2007, caused certain retail billing data to lag the actual billing cycle.

**Chart II-9  
ComEd Monthly Small C&I Model: Estimated vs. Actual**



**(v) ComEd Monthly Street Light Model**

The Monthly Street Lighting model forecasts monthly bill-cycle sales related to street lighting. This final model estimates use per day in GWh.

**(vi) Growth Forecast**

ComEd’s historical and forecasted weather-adjusted energy sales for the residential and small C&I customer classes are shown in Table II-6.

**Table II-6**

ComEd Weather Adjusted Annual Energy Sales				
	Residential		Small C&I	
Year	Sales (GWh)	Percent Growth	Sales (GWh)	Percent Growth
2002	26,162		31,425	
2003	27,079	3.5%	32,885	4.6%
2004	27,905	3.1%	32,733	(0.5%)
2005	28,290	1.4%	33,057	1.0%
2006	28,516	0.8%	32,958	(0.3%)
2007	28,459	(0.2%)	33,508	1.7%
2008	28,599	0.5%	33,392	(0.3%)
2009	28,373	(0.8%)	33,015	(1.1%)
2010	28,439	0.2%	33,264	0.8%
2011	28,809	1.3%	33,732	1.4%
2012	29,219	1.4%	34,346	1.8%
2013	29,349	0.4%	34,541	0.6%
2014	29,416	0.2%	34,624	0.2%

The forecast is consistent with past experience. Residential sales growth has averaged 1.5% per year from 2002 to 2008. The growth in 2009 is (0.5%), after adjusting for 2008 being a leap year. The annual growth rate is lower in the last few years of this Forecast period as the energy efficiency programs that are required by the PUA are implemented. The same is generally true of the Small C&I growth rates. The 2002 to 2008 average growth rate is 1.0% per year. The 2009 growth rate is (0.8%) after adjusting for leap year. Energy efficiency programs also influence future sales in this customer class.

**2. Impact of Demand Side and Energy Efficiency Initiatives**

The PUA sets out annual targets for the implementation of cost-effective demand side and energy efficiency measures. ComEd believes these targets are achievable and plans to meet them in planning year 2010. The demand -side and energy efficiency plans for subsequent years have not yet been developed by ComEd or approved by the ICC. For purposes of this forecast, we assume that the statutory targets will be met, except for the planning years 2013 and 2014. In those years, the rate cap may limit the total amount of the energy efficiency programs. For purposes of this Forecast, the impacts in 2013 and 2014 are shown in Table II-9.

**a. Impact of demand response programs, current and projected**

**(i) Background**

ComEd is a strong supporter of the use of demand response to actively manage peak demands. Use of demand response resources grew in the mid to late 1990s, and ComEd has maintained a large portfolio of demand response resources, with participation from residential, commercial, and industrial customers. ComEd is a nationally recognized leader in the development and management of demand response resources, and will increase participation in appropriate programs to meet the requirements of the PUA.

The current portfolio of ComEd programs include the following:

**Direct Load Control (“DLC”):** ComEd’s residential central air conditioning cycling program (formerly called “Nature First”) is a DLC program with over 60,000 customers with a load reduction potential of 105 MW (ComEd Rider AC7).

**Voluntary Load Reduction (“VLR”) Program:** VLR is an energy based demand response program, providing compensation based on the value of energy as determined by the real -time hourly market run by PJM. This program also provides for transmission and distribution (“T&D”) compensation, based on the local conditions of the T&D network. This portion of the portfolio has roughly 799 MW of potential load reduction (ComEd Rider VLR7).

**Capacity Market Program:** Under this program, customers reduce load to a pre-determined level with compensation based on capacity market values from PJM’s capacity markets. This program has roughly 432 MW of load reduction potential (ComEd Rider CLR7).

**Time-base pricing:** All ComEd’s customers have an option to elect an hourly, market-based rate. The RRTP Program has operated in the past as ComEd Rate RHEP. This program had roughly 2.9 MW of price response potential.

#### (ii) Legislative Requirement

Section 12-103(c) of the PUA establishes a goal to implement demand response measures, providing that:

(c) Electric utilities shall implement cost-effective demand response measures to reduce peak demand by 0.1% over the prior year for eligible retail customers, as defined in Section 16-111.5 of this PUA. This requirement commences June 1, 2008 and continues for 10 years.

Table II-9 shows the estimated annual MWs of demand response measures that will need to be implemented over the Five-year planning period to meet the goals set forth in the PUA:

**Table II-7  
Estimated Annual Level of Demand Response Measures**

<b>Year</b>	<b>Peak Load at Meter (MW)</b>	<b>Annual Goal (MW)</b>	<b>Cumulative Goal (MW)</b>
2010	10,597	10.0	32.8
2011	10,482	10.5	43.3
2012	10,661	10.7	53.9
2013	10,810	10.8	64.8
2014	10,955	11.0	75.7

The cumulative goal includes 11.7 MW for the year 2008 and 11.1 MW for 2009. The 2010 annual goal of 10.0 MW is from the original ICC filing.

The Illinois General Assembly recently passed Senate Bill 2150 (“SB2150”), and that bill is currently waiting to be signed by the Governor. SB2150 revises section 12-103(c) of the PUA to include “customers that elect hourly service from the utility pursuant to Section 16-107 of the PUA, provided those customers have not been declared competitive.” Assuming that bill is signed by the Governor, the actual response measures that would need to be implemented to comply with that law would be determined in the next energy efficiency and demand-response plan, covering the planning years 2011-3, that ComEd would file for approval with the ICC pursuant to Section 12-103(f) of the PUA. Thus, this bill will not impact the level of demand response measures that need to be implemented until 2011. If the bill is signed by the Governor, the numbers in the table above for the 2011-4 planning years would be slightly increased.

**(iii) Implementation of Demand Response Measures**

As required by the PUA (220 ILCS 5/16-103), ComEd filed and received approval for its proposed demand response program for the three-year planning period covering June 2008 through May 2011.<sup>8</sup> The details of that program are provided in the plan that ComEd filed in that docket. ComEd anticipates filing a new plan for the next three-year planning period (i.e., June 2011 through May 2014) sometime in late 2010, as required by the PUA. For purposes of this forecast, ComEd assumes that the statutory targets for demand response programs will be met during the next planning period.

**(iv) Impact of Demand Response Programs**

Demand response programs do not impact ComEd’s load forecasts. Load forecasts are made on a weather normalized, unrestricted basis. Since demand response measures are called on days when the temperature is hotter than “normal”, the avoided capacity and energy associated with these resources is incremental to the weather normal forecast, and thus is not factored into the load forecasts. In fact, when developing forecasts, any impact on

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<sup>8</sup> See Order of February 6, 2008 in docket No. 07-0540.



energy usage from actually implementing a demand response measure in a prior year is added back into that prior year's usage data and then weather normalized before being used to assist in the forecasting process. This assures that the forecast represents a complete picture of the unrestricted demands on the system.

**b. Impact of Energy Efficiency Programs**

The PUA requires ComEd to implement cost-effective energy efficiency measures beginning June 1<sup>st</sup>, 2008. The PUA provides annual kWh targets based on a projection of the upcoming years' energy usage for all delivery service customers. Additionally, there is a spending cap that limits the amount of expenditures on energy efficiency measures in any year. For purposes of the PUA, the energy efficiency year is defined as June through May.

**(i) kWh Targets**

The kWh target for energy efficiency is based on a projection of the amount of energy to be delivered by ComEd to all of its delivery service customers in the upcoming planning year. This percentage increases annually through the year 2015, subject to specified rate impact criteria. The table below shows the target percentages.

**Table II-8  
Target Incremental Percentages to Meet Energy Efficiency Goals**

<b>Year</b>	<b>Annual Percent Reduction in Energy Delivered</b>
2008	0.2%
2009	0.4%
2010	0.6%
2011	0.8%
2012	1.0%
2013	1.4%
2014	1.8%
2015	2.0%

**(ii) Projected Overall Goals**

The annual energy efficiency goals were determined based on the kWh targets and the rate impact criteria, as discussed above. As discussed in greater detail in the energy efficiency/demand response plan filed in Docket No. 07-0540, the rate impact criteria are not expected to impact the energy efficiency targets through the 2010 planning year. The energy efficiency/demand response plan addressed only the 2008-2010 planning years, as required by the PUA. Thereafter, for purposes of this Forecast, it is assumed that the rate impact criteria will not affect the achievement of the targets, except, as noted above, for planning year 2013 and

2014. Also, for purposes of this Forecast only,<sup>9</sup> the allocation of the energy (kWh) targets to the various customer classes (as shown in Table II-6) was based on several years of historical data and judgment.

The above numbers represent the incremental goal to be achieved by the end of each planning year for all delivery services customers. Since the various energy efficiency measures will be implemented and phased in over the course of each planning year and since Eligible Retail Customers are only a subset of delivery services customers, the actual amount of GWh for Eligible Retail Customers that is impacted in each planning year will be somewhat less (as shown in Table II-9, below).

**(iii) Impact on Forecasts**

Energy efficiency measures directly impact the amount of energy used by customers throughout the year. As such, they will directly impact the forecasts of future load. The following chart depicts the cumulative impacts of these measures on the Forecast:

**Table II-9  
Cumulative Impacts of EE on Load Forecast by Customer Type**

<b>Planning Year</b>	<b>Residential Allocation (GWh)</b>	<b>Watt-Hour Allocation (GWh)</b>	<b>0-100 kW Allocation (GWh)</b>
<b>2010</b>	302.1	3.1	42.2
<b>2011</b>	521.9	5.9	72.5
<b>2012</b>	806.7	9.5	116.8
<b>2013</b>	1,128.9	13.5	167.1
<b>2014</b>	1,452.2	17.6	217.4

<sup>9</sup> The PUA does not prescribe how the kWh targets are to be apportioned among the customer classes, and the energy efficiency plan did not set goals on a customer class basis.

### C. Impact of Renewable Energy Resources

Section 1-75(c) of the IPA Act (20 ILCS 3855/1-75(c)) establishes the following goals and cost thresholds for cost effective renewable energy resources:

**Table II-10**

#### Renewable Energy Resource Requirements

<b>Delivery Period</b>	<b>Minimum Percentage</b>	<b>Maximum Cost</b>
2010-2011	5% of June 1, 2008 through May 31, 2009 Eligible Retail Customer load	The greater of an additional 0.5% of the amount paid per kilowatthour by those customers during the year ending May 31, 2009 or 1.5% of the amount paid per kilowatthour by those customers during the year ending May 31, 2007.
2011-2012	6% of June 1, 2009 through May 31, 2010 Eligible Retail Customer load	The greater of an additional 0.5% of the amount paid per kilowatt hour by those customers during the year ending May 31, 2010 or 2% of the amount paid per kilowatt hour by those customers during the year ending May 31, 2007.
2012-2013	7% of June 1, 2010 through May 31, 2011 Eligible Retail Customer load	No more than the greater of 2.015% of the amount paid per kilowatt hour by those customers during the year ending May 31, 2007 or the incremental amount per kilowatt hour paid for these resources in 2011.
2013-2014	8% of June 1, 2011 through May 31, 2012 Eligible Retail Customer load	No more than the greater of 2.015% of the amount paid per kilowatt hour by those customers during the year ending May 31, 2007 or the incremental amount per kilowatt hour paid for these resources in 2011.
2014-2015	9% of June 1, 2012 through May 31, 2013 Eligible Retail Customer load	No more than the greater of 2.015% of the amount paid per kilowatt hour by those customers during the year ending May 31, 2007 or the incremental amount per kilowatt hour paid for these resources in 2011.

Based on the above, Table II-11 shows the amount of renewable energy resources that need to be procured over the upcoming procurement period and the maximum amount that may be spent acquiring such resources:

**Table II-11**

<b>Delivery Period</b>	<b>Targeted REC Purchases (MWh)</b>	<b>REC Budget (\$M)</b>	<b>Maximum ACP Rate (\$/MWh)</b>
2010-2011	1,887,014	58.2	1.598

Since renewable energy resources do not affect demand or consumption, these targets will have no impact on the Forecast.

SB2150, discussed above, also revised the renewable energy provisions of the IPA Act. If enacted into law, beginning June 1, 2010, ComEd must begin collecting from its Hourly Service customers certain Alternative Compliance Payments (“ACP”) that are described in that bill. Beginning in 2011, ComEd must include in its Forecast the amounts collected in the prior year ending May 31. The IPA is then to increase it’s spending for renewable energy resources for the next plan by the amount collected. These changes will also have no impact on this Forecast.

### 3. Five-Year Monthly Load Forecast

Based on all of the factors discussed in this section, ComEd has developed the following forecast of projected energy sales to Eligible Retail Customers for the period from June 1, 2010 through May 31, 2011:

**Table II-12**

<b>ComEd Procurement Period Load Forecast (Expected Load) Projected Energy Sales and Average Demand For Eligible Retail Customers (Weather Normal, Line Loss and DSM Adjusted)</b>					
<b>Year</b>	<b>Month</b>	<b>Total Load (MWh)</b>		<b>Average Load (MW)</b>	
		<b>On-Peak</b>	<b>Off-Peak</b>	<b>On-Peak</b>	<b>Off-Peak</b>
2010	6	1,896,921	1,624,045	5,389	4,413
2010	7	2,231,242	2,197,192	6,641	5,385
2010	8	2,169,255	1,969,226	6,163	5,024
2010	9	1,588,361	1,512,634	4,727	3,939
2010	10	1,357,368	1,415,482	4,040	3,469
2010	11	1,501,640	1,500,691	4,469	3,908
2010	12	1,916,427	1,695,654	5,208	4,510
2011	1	1,752,398	1,886,938	5,215	4,625
2011	2	1,557,990	1,522,786	4,869	4,326
2011	3	1,599,912	1,451,093	4,348	3,859
2011	4	1,301,326	1,311,732	3,873	3,416
2011	5	1,330,118	1,399,860	3,959	3,431
<b>Totals</b>		<b>20,202,958</b>	<b>19,487,333</b>		

The forecast set forth above shows ComEd’s expected load for the 2010 planning year. The PUA requires that the forecast cover a 5- year planning period. The forecast for ComEd’s expected load for the 5-year planning period is set forth in Appendix B-1. The PUA also requires ComEd to provide low-load and high-load scenarios. That information for the 2010 planning year is set forth in Tables II-13 and II-14. The low-load and high-load scenarios for the 5-year planning period are set forth in Appendix B -2 and Appendix B-3, respectively. In all of the forecasted sales tables, “line loss” refers only to distribution losses.

**Table II-13**

<b>ComEd Procurement Period Load Forecast (Low Load)</b>					
<b>Projected Energy Sales and Average Demand For Eligible Retail Customers</b>					
<b>(Line Loss and DSM Adjusted)</b>					
<b>Year</b>	<b>Month</b>	<b>Total Load (MWh)</b>		<b>Average Load (MW)</b>	
		<b>On-Peak</b>	<b>Off-Peak</b>	<b>On-Peak</b>	<b>Off-Peak</b>
2010	6	1,584,668	1,555,100	4,502	4,226
2010	7	1,904,731	1,810,785	5,669	4,438
2010	8	1,728,828	1,641,785	4,911	4,188
2010	9	1,466,876	1,452,475	4,366	3,782
2010	10	1,292,208	1,201,703	3,846	2,945
2010	11	1,298,615	1,370,985	3,865	3,570
2010	12	1,650,192	1,649,663	4,484	4,387
2011	1	1,634,563	1,662,034	4,865	4,074
2011	2	1,378,166	1,372,652	4,307	3,900
2011	3	1,305,459	1,314,545	3,547	3,496
2011	4	1,178,497	1,135,714	3,507	2,958
2011	5	1,191,060	1,246,253	3,545	3,055
<b>Totals</b>		<b>17,613,863</b>	<b>17,413,694</b>		

**Table II-14**

<b>ComEd Procurement Period Load Forecast (High Load)</b>					
<b>Projected Energy Sales and Average Demand For Eligible Retail Customers</b>					
<b>(Line Loss and DSM Adjusted)</b>					
<b>Year</b>	<b>Month</b>	<b>Total Load (MWh)</b>		<b>Average Load (MW)</b>	
		<b>On-Peak</b>	<b>Off-Peak</b>	<b>On-Peak</b>	<b>Off-Peak</b>
2010	6	2,243,061	1,868,006	6,372	5,076
2010	7	2,740,784	2,536,267	8,157	6,216
2010	8	3,042,075	2,598,387	8,642	6,629
2010	9	1,705,314	1,619,059	5,075	4,216
2010	10	1,495,123	1,520,640	4,450	3,727
2010	11	1,753,289	1,751,082	5,218	4,560
2010	12	2,131,819	1,890,020	5,793	5,027
2011	1	1,914,830	2,059,273	5,699	5,047
2011	2	1,765,411	1,762,320	5,517	5,007
2011	3	1,836,725	1,579,487	4,991	4,201
2011	4	1,536,739	1,524,171	4,574	3,969
2011	5	1,483,888	1,518,612	4,416	3,722
<b>Totals</b>		<b>23,649,058</b>	<b>22,227,324</b>		

The low-load and the high-load scenarios are based upon a change to three of the main variables impacting load: weather, switching and load growth.<sup>10</sup>

The low-load scenario assumes that the summer weather is cooler than normal, that load growth occurs at a rate 2% less than is expected as shown in the load growth forecast in Table II-12, and that Hourly service and RES sales increase relative to the expected forecast shown in Table II-12. In this scenario an additional 25,000 residential customers are assumed to opt for RRTP in January 2011. Plus, residential RES sales increase over time related to favorable market conditions for the RES. For example, January 2014 RES sales reach 6% of total single-family sales in this scenario. Likewise, similar dynamics occur for the 0 to 100 kW customer group. June 2011 Blended sales are 54% of total 0 to 100 kW sales in the Forecast, but only 34% in this scenario.

The high-load scenario assumes that the summer weather is much hotter than normal (the scenario uses data from 1995, which is the warmest summer in the last 30 years), that load growth occurs at a rate 2% more than is expected, and that switching decreases. The low switching scenario reflects a reduction of 25,000 RRTP customers as either the Smart Grid Investment Grant Program is not approved or else it is decided to switch these customers to a different type of tariff and no residential switching therefore occurs. Also, the expected movement of the 0 to 100 kW customers to RES service not only does not occur, but some opt for Blended service. June 2011 RES sales are 45% of total 0 to 100 kW customer class sales in the Forecast, but only 20% in this scenario.

The +/- 2% load growth assumption in both scenarios reflects, in part, the economic uncertainty that currently exists. “Despite indications that the worst of the financial crisis and economic downturn is over, conditions remain extraordinary fragile” (Mark Zandi of Moody’s Economy.com)<sup>11</sup>. ComEd’s intention is to keep the IPA informed of significant changes in its forecast during the proceedings.

### III. CONCLUSION

For all of the reasons described here, ComEd believes that its Forecast for the period June 1, 2010 through May 31, 2015 is consistent with the requirements of the PUA and provides an appropriate approach to develop the procurement plan to acquire supply for the applicable retail customers.

<sup>10</sup> In ComEd’s initial procurement plan, the low-load and high-load scenarios were not adjusted for weather. Instead, the impacts of weather on load were considered in the risk analysis section of the procurement plan. Because ComEd will not be developing the procurement plan and risk analysis for the upcoming procurement event, ComEd thought it appropriate to include the weather-related load impacts in these scenarios for purposes of this Forecast.

<sup>11</sup> Mark Zandi, “Expand the Housing Tax Credit” June 16, 2009 article from Moody’s Economy.com

## Appendices

### A. Load Forecast Models

1. Residential Single Family Model (Hour 16)
2. ComEd Model Coefficients
3. ComEd Model Regression Statistics
4. Detailed Description of Variables Used In Forecast Models

### B. Five-Year Load Forecast

1. Expected load
2. Low Load
3. High Load



**Appendix A-1**

<b>Residential Single Family Model (Hour 16)</b>			
<b>Variable</b>	<b>Coefficient</b>	<b>T-Stat</b>	<b>Notes</b>
CONSTANT	1.772	13.387	Constant term
Monday Binary	-0.102	-7.175	
Tuesday Binary	-0.123	-8.728	
Wednesday Binary	-0.137	-9.772	
Thursday Binary	-0.150	-10.616	
Friday Binary	-0.131	-9.296	
Saturday Binary	-0.024	-2.073	
MLK Binary	0.028	0.499	Martin Luther King's Day
PresDay Binary	0.073	1.309	President's Day
GoodFri Binary	0.065	1.044	Good Friday
MemDay Binary	0.170	2.698	Memorial Day
July4th Binary	0.012	0.188	July 4th.
LaborDay Binary	0.284	4.515	Labor Day
Thanks Binary	0.110	1.715	Thanksgiving Day
FriAThanks Binary	0.034	0.550	Friday after Thanksgiving Day
XMasWkB4 Binary	0.146	2.166	Week before Christmas
XMasEve Binary	0.357	4.137	Christmas Eve
XMasDay Binary	0.230	2.840	Christmas Day
XMasWk Binary	0.137	1.962	Christmas Week
NYEve Binary	0.112	1.195	New Year's Eve Day
NYDay Binary	0.179	2.644	New Year's Day
XMasLights Binary	-0.0003	-0.186	Christmas Lights
DLSav Binary	-0.406	-3.888	Day-Light Sayings
Sun.FracDark6	0.393	4.995	Fraction of hour 6 am that is dark
Sun.FracDark7	0.185	3.124	Fraction of hour 7 am that is dark
Sun.FracDark8	0.280	3.214	Fraction of hour ending 8 am that is dark
Sun.FracDark17	0.107	1.690	Fraction of hour ending 5 pm that is dark
Sun.FracDark18	-0.130	-1.881	Fraction of hour ending 6 pm that is dark
Sun.FracDark19	-0.195	-3.118	Fraction of hour ending 7 pm that is dark
Sun.FracDark20	-0.238	-3.615	Fraction of hour ending 8 pm that is dark
Sun.FracDark21	-0.636	-6.011	Fraction of hour ending 9 pm that is dark
Binary Feb	-0.035	-0.694	
Binary Mar	0.029	0.531	
Binary Apr	-0.023	-0.382	
Binary May	0.038	0.559	
Binary Jun	0.158	2.173	
Binary Jul	0.275	3.889	
Binary Aug	0.231	3.718	
Binary Sep	0.220	3.747	

Binary Oct	0.166	2.680	
Binary Nov	0.062	1.154	
Binary Dec	0.112	2.283	
Usage Trend	-0.025	-5.118	
Fall HDD Spline	0.004	1.773	HDD Spline for September and October
November HDD Spline	0.005	3.235	HDD Spline for November
December HDD Spline	0.004	3.585	HDD Spline for December
January HDD Spline	0.006	6.324	HDD Spline for January
February HDD Spline	0.008	6.751	HDD Spline for February
March HDD Spline	0.005	3.967	HDD Spline for March
Spring HDD Spline	0.008	4.816	HDD Spline for April and May
Day lag of HDD Spline	-0.001	-0.731	
Two day lag of HDD Spline	0.0002	0.247	
Weekend HDD Spline	0.001	1.100	
Trend HDD Spline	0.001	4.610	
April THI Spline	0.034	1.146	THI (Temperature Humidity Index) Spline for April
May THI Spline	0.140	20.840	THI (Temperature Humidity Index) Spline for May
June THI Spline	0.155	41.771	THI (Temperature Humidity Index) Spline for June
July THI Spline	0.144	37.844	THI (Temperature Humidity Index) Spline for July
August THI Spline	0.160	40.502	THI (Temperature Humidity Index) Spline for August
September THI Spline	0.184	34.926	THI (Temperature Humidity Index) Spline for September
October THI Spline	0.167	20.103	THI (Temperature Humidity Index) Spline for October
Day lag of THI Spline	0.014	4.809	
Two day lag of THI Spline	0.010	4.419	
Weekend THI Spline	0.009	3.213	
THI Spline for Trend	-0.0003	-0.238	
2007 Plus Dummy	0.074	5.714	An End Shift to describe usage for 2007 and beyond

The coefficients provide the effect that each variable has on the hourly usage for a single hour (Hour 16 which includes the load from 3 p.m. to 4 p.m. in the afternoon). The “T-Stat” provides the statistical significance of the variable, with a value generally greater than +/- two (2) indicating that the coefficient is significantly different from zero.

The hourly model for Hour 16 has an adjusted R-squared of 0.93, which means that 93% of the variance in the hourly data is being explained by the model. At the daily level, the mean average percent error (“MAPE”) for the model is 4.0%. The 4.0% daily MAPE means

that the average percentage difference on a daily basis between the usage predicted by the model and the actual usage for that period was very small. In other words, the model can explain usage with almost a 96% accuracy rate. Such a high accuracy rate is particularly noteworthy because the model is dealing with very short time frames in which many factors may come into play. The high accuracy rate, the low MAPE and the high R-squared indicate that the model captures the vast majority of factors that affect electrical usage.

## Appendix A-2

### ComEd Model Coefficients

ComEd Zone Model			
Variable	Coefficient	StdErr	T-Stat
CONST	1223.349	362.42	3.375
Monthly.GMPDays	7.028	0.724	9.7
Monthly.ResCustDays	1.09	0.167	6.519
CalVars.Jan	-94.384	26.605	-3.548
CalVars.Feb	-240.624	40.01	-6.014
CalVars.Mar	-283.422	31.23	-9.075
CalVars.Apr	-458.748	43.879	-10.46
CalVars.May	-406.946	55.998	-7.267
CalVars.Jun	-265.145	57.203	-4.635
CalVars.Jul	-202.842	67.557	-3.003
CalVars.Aug	-16.883	63.708	-0.265
CalVars.Sep	-127.562	51.94	-2.456
CalVars.Oct	-199.841	49.587	-4.03
CalVars.Nov	-179.604	37.283	-4.817
CalVars.Yr05Plus	152.941	18.81	8.131
CalVars.Apr08Plus	-87.628	21.756	-4.028
CalHDD.HDDSpline	1.895	0.076	24.841
CalHDD.HDDSplineTrend	0.036	0.006	5.656
CalCDD.SpringTDD	12.338	0.982	12.559
CalCDD.SummerTDD	13.973	0.287	48.625
CalCDD.FallTDD	12.762	1.636	7.8
CalCDD.TDDTrend	0.526	0.046	11.325
CalCDD.TDDTrend2000Plus	-0.237	0.091	-2.601
CalCDD.Yr06Plus_TDDShift	-1.275	0.248	-5.142

Residential Customer Class Model			
Variable	Coefficient	StdErr	T-Stat
Monthly.Jan	14.41	1.947	7.402
Monthly.Feb	12.833	1.895	6.774
Monthly.Mar	11.99	1.85	6.479
Monthly.Apr	11.087	1.801	6.156
Monthly.May	10.532	1.788	5.891
Monthly.Jun	11.062	1.892	5.845
Monthly.Jul	12.463	2.068	6.028
Monthly.Aug	12.002	2.085	5.757
Monthly.Sep	11.727	2.019	5.809
Monthly.Oct	11.162	1.813	6.156
Monthly.Nov	11.69	1.803	6.482
Monthly.Dec	13.345	1.885	7.08
Monthly.Yr2004Plus	0.628	0.153	4.096
Monthly.July07Plus	-0.349	0.204	-1.716
CycVars.IncPerHH	0.066	0.018	3.582
CycWthrT.ResHDD	0.195	0.013	15.567
CycWthrT.ResHDDTrend	0.003	0.001	3.105
CycWthrT.ResCDD_Spring	1.346	0.327	4.119
CycWthrT.ResCDD_Jun	2.119	0.143	14.833
CycWthrT.ResCDD_Jul	2.313	0.079	29.386
CycWthrT.ResCDD_Aug	2.507	0.061	41.029
CycWthrT.ResCDD_Sep	2.56	0.105	24.41
CycWthrT.ResCDD_Fall	2.572	0.17	15.099
CycWthrT.ResCDDTrend	0.073	0.006	12.266
CycWthrT.Yr06Plus_ResCDDShift	-0.334	0.054	-6.154
XVars.NewMonthlyBill	-0.028	0.014	-1.986
AR(1)	0.43	0.085	5.074

Small C&I Customer Class Model			
Variable	Coefficient	StdErr	T-Stat
Monthly.Jan	-34.674	7.477	-4.637
Monthly.Feb	-31.392	7.489	-4.192
Monthly.Mar	-32.018	7.429	-4.31
Monthly.Apr	-33.508	7.392	-4.533
Monthly.May	-34.032	7.363	-4.622
Monthly.Jun	-34.41	7.35	-4.682
Monthly.Jul	-34.031	7.355	-4.627
Monthly.Aug	-31.317	7.357	-4.257
Monthly.Sep	-31.509	7.347	-4.289
Monthly.Oct	-30.953	7.353	-4.209
Monthly.Nov	-32.827	7.384	-4.446
Monthly.Dec	-34.646	7.445	-4.653
CycVars.ResCust	0.029	0.003	8.214
Monthly.July06Plus	-1.908	0.569	-3.356
CycWthrT.SCI_HDD	0.424	0.042	10.126
CycWthrT.SCI_HDDTrend	0.008	0.003	2.203
CycWthrT.SCI_CDD	1.967	0.115	17.048
CycWthrT.SCI_CDDTrend	0.041	0.009	4.682
XVars.Emp_NonManuf	0.005	0.002	2.144
AR(1)	0.475	0.071	6.648

StreetLighting Class Model			
Variable	Coefficient	StdErr	T-Stat
Monthly.Jan	-5.84	0.622	-9.387
Monthly.Feb	-5.847	0.623	-9.391
Monthly.Mar	-6.059	0.622	-9.74
Monthly.Apr	-6.163	0.624	-9.878
Monthly.May	-6.302	0.623	-10.11
Monthly.Jun	-6.32	0.623	-10.14
Monthly.Jul	-6.292	0.623	-10.11
Monthly.Aug	-6.236	0.622	-10.02
Monthly.Sep	-6.115	0.623	-9.818
Monthly.Oct	-6.029	0.623	-9.672
Monthly.Nov	-5.933	0.624	-9.502
Monthly.Dec	-5.836	0.623	-9.365
Monthly.Yr2007Plus	-0.076	0.03	-2.513
CycVars.ResCust	0.002	0	12.534

### Appendix A-3

<b>ComEd Model Regression Statistics</b>
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<b>Regression Statistics</b>	<b>ZONE</b>	<b>Residential</b>	<b>Small C&amp;I</b>	<b>StreetLighting</b>
Iterations	1	17	14	1
Adjusted Observations	169	153	150	91
Deg. of Freedom for Error	145	126	130	77
R-Squared	0.994	0.994	0.981	0.911
Adjusted R-Squared	0.993	0.993	0.979	0.897
Durbin-Watson Statistic	1.127	1.964	2.195	1.163
AIC	8.924	-1.91	0.368	-4.996
BIC	9.369	-1.375	0.769	-4.609
F-Statistic	1063.495	811.409	341.433	56.635
Prob (F-Statistic)	0	0	0	0
Log-Likelihood	-964.16	-43.71	-220.43	110.95
Model Sum of Squares	1.61E+08	2768	8719	5
Sum of Squared Errors	955601	16	166	0
Mean Squared Error	6590.35	0.13	1.28	0.01
Std. Error of Regression	81.18	0.36	1.13	0.08
Mean Abs. Dev. (MAD)	58.95	0.26	0.81	0.05
Mean Abs. % Err. (MAPE)	0.75%	1.21%	0.95%	2.82%
Ljung-Box Statistic	106.38	30.96	20.65	29.57
Prob (Ljung-Box)	0	0.1548	0.6593	0.1994

## **Appendix A-4**

### **Detailed Description Of Variables Used In Forecast Models**

The econometric models are statistical multi-variant regressions that determine the correlation between electrical usage (dependent variable) and weather, economic and monthly factors (independent variables). Consistent with its recent delivery services rate case filing, ComEd's weather normals are based on the 30-year time period of 1977 to 2006. The following models are used in producing the energy sales forecast (GWh) for the eligible customers:

- Monthly Zone energy usage for the ComEd zone
- Monthly Residential bill-cycle energy usage
- Monthly Small C&I bill-cycle energy usage
- Monthly Street Lighting bill-cycle energy usage

ComEd's Load Forecasting group with the input of industry experts developed the models. The following sections describe each model and its specifications. Appendices A-2 and A-3 contain the coefficients and other regression statistics for the models.

#### **ComEd's Monthly Zone Model**

The dependent variable in the zone model is monthly zone energy usage for the ComEd service territory. The monthly zone usage is in GWh units. The performance of the model is shown in the Chart II-10 in Section II B 1 d (ii) (estimated<sup>12</sup> vs. actual) for the January 2000 to February 2009 time period.

The independent variables within the model are:

- The monthly binary variables reflect monthly usage patterns. Customer electrical usage is a function of other items besides cooling and heating (e.g., lighting). This other usage is not constant per month and the monthly binary variables are used to account for this variability. December is excluded from the monthly binaries, as the constant term establishes December as the base from which the monthly binary variables are adjusted.
- The GMP variable is the gross metropolitan product for the Chicago metropolitan area and also includes Rockford. This variable measures economic activity for the ComEd service territory. The GMP is adjusted for inflation and is obtained from Moody's Economy.com. Further, the variable is adjusted for the number of weekends (and holidays) and weekdays within a calendar month because overall

<sup>12</sup> As noted in the body of the Forecast, the estimated data used in Charts II-10, II-11 and II-12 is based on actual weather

energy usage for a given month is a function of those daily influences. The variable's units are billions of dollars.

- The Residential Customers variable is the total number of residential customers within the ComEd service territory. This economic variable reflects the effect of a growing customer base on energy sales and is driven by household formations. This variable is also adjusted for the number of weekends, holidays and weekdays within a calendar month.
- The temperature and humidity degree day ("TDD") variables are weather variables designed to capture the effect on usage from cooling equipment. The TDD variable is similar in design to a cooling degree day ("CDD") variable. A CDD weather variable is often used in energy models. The standard CDD measures the difference in the average daily temperature above a specific threshold (typically 65 degrees as that is a common point at which cooling activity begins). The TDD variable provides several enhancements to the typical CDD variable as delineated below:

The average daily temperature is the 24-hour average instead of the average of the maximum and minimum temperatures for the day. This captures frontal movements within the day.

Humidity is included in the TDD variable as humidity does influence electrical usage.

The TDD variable uses multiple degree bases instead of just a 65 degree-base. This captures the change in the rate at which customers use electricity at different temperature levels.

The TDD variable is interacted with seasonal binary variables (i.e., Spring, Summer and Fall) to reflect the seasonal usage pattern related to cooling equipment.

The TDD variable is in degree-day units.

The TDD trend variable is a weather variable that captures the changing relationship of cooling equipment over time. Simply put, the effect of a TDD changes over time as customers' usage patterns change over time. For example, as homes have become larger over time the amount of cooling load associated with a change in temperature will also change.

The TDD trend variable essentially captures the growing influence of cooling equipment over time within the service territory. The TDD trend variable is designed to capture this changing relationship by interacting the TDD variable with a linear time series variable. The TDD trend variable is in degree-day units.

The TDD shift variable is a weather variable akin to the TDD trend variable. This variable is interacted with a binary variable for all years greater than or equal to 2006. The negative sign in the variable's coefficient acknowledges the reduction in long term cooling effect over the past couple of years.

- The HDD Spline variable is a weather variable that measures the relationship on electrical usage from space heating equipment (e.g., natural gas furnace fans and electrical space-heating equipment). The HDD Spline variable is similar in concept to the industry-standard heating degree day ("HDD") weather variable. The HDD Spline provides a couple of enhancements to the HDD weather variable:

The average daily temperature is the 24-hour average instead of the average of the maximum and minimum temperatures for the day. This captures frontal movements within the day.

The HDD Spline uses multiple degree bases instead of just a 65 degree-base. This captures the change in the rate at which customers use electricity at different temperature levels.

The HDD Spline variable is in degree-day units.

The HDD Spline trend variable is a weather variable that reflects the changing relationship of heating equipment over time. This variable is conceptually similar to the TDD trend variable. The HDD spline variable is in degree-day units.

- The Year 2005 and April 2008 Shift Plus variables are binary variables designed to capture very recent usage activity within the model. For example, the 2005 Shift Plus variable is a binary variable with the unit one for all months beginning with January 2005 and thereafter. By forcing all of the residuals to sum to zero for the months January 2005 to present, the variable is causing the model to be closely aligned with recent usage activity. This variable is useful for forecasting purposes as it ensures that the forecasted usage is also closely aligned with the most recent pattern of electrical usage.

The coefficient values and the standard measurements of significance within the model (e.g., t-stats) and the overall model performance (e.g., R-squared and MAPE) are contained in Appendices A- 2 and A-3. Chart II-10 contains a plot of the model's estimated monthly usage vs. actual monthly usage from January 2000 to February 2009. The two curves are tightly aligned, which speaks to the accuracy of the model.



## ComEd Residential Model

The dependent variable is residential use per customer per day and the units are kWh per customer per day. Chart II-2 shows the model's forecast performance (estimated vs. actual monthly sales from January 2006 to February 2009), which reflects a close fit.

The independent variables are noted below. (Because many of the variables follow the same purpose and logic as in the Monthly Zone model, please see the Monthly Zone model description for additional information.)

- The monthly binary variables reflect monthly usage patterns.
- The Real Income per Household variable is the disposable personal income for the Chicago metropolitan area and Rockford (adjusted for inflation) divided by the number of households for the same area. The data is obtained from Moody's Economy.com. This variable captures the rising household incomes within ComEd's service territory and the correlation it has with consumer purchases of electronic equipment and housing stock. The variable is in dollars per household units.
- The Monthly Bill variable is a typical monthly residential electricity bill assuming historical tariff charges and weather normal customer usage for the year 2002 (adjusted for inflation). Specifically, the historical tariff charges for a single-family and multi-family (both non-space heat) were multiplied by the weather adjusted billing units from the year 2002 for both residential groups. The monthly bills for both residential groups were weighted, based on energy sales, to form a single monthly bill. The monthly bill was also adjusted for the Chicago CPI-U. This variable reflects the influence of electricity charges/prices over time related to consumer behavior.
- Weather variables used in the residential model are similar in concept to the weather variables described in the Monthly Zone model section and will not be repeated here.
- The Year 2004 Plus and July 2007 Plus binary variables are similar in concept to the same variables used in the Monthly Zone model.

## ComEd Small C&I Model

The dependent variable is Small C&I use per day and the units are GWh per day. The independent variables within the model are:

- The monthly binary variables, weather variables and shift variables are similar in concept to the Monthly Zone model and will not be repeated here.
- The residential customers variable is the total number of residential customers within the ComEd service territory. This economic variable reflects the influence

of a growing service territory (i.e., residential customers) on Small C&I energy usage. The units are in thousands of customers.

- The Employment variable is an economic variable that measures the total non-manufacturing employment in the Chicago area. Job growth is correlated to Small C&I development and growth.
- The July 2006 Shift Plus binary variable is similar in concept to the Monthly Zone model.

### **ComEd Street Light Model**

The dependent variable is Street Lighting use per day and the units are GWh per day. The independent variables are:

- Monthly binary variables and a shift variable that are similar in concept to the Monthly Zone model.
- The residential customers variable is the total number of residential customers within the ComEd service territory. This economic variable reflects the relationship of a growing service territory (measured by the number of residential customers) and street lighting sales.

### Appendix B-1

<b>ComEd Procurement Period Load Forecast (Expected Load) Projected Energy Sales and Average Demand For Eligible Retail Customers (Weather Normal, Line Loss and DSM Adjusted)</b>					
Year	Month	Total Load (MWh)		Average Load (MW)	
		On-Peak	Off-Peak	On-Peak	Off-Peak
2010	6	1,896,921	1,624,045	5,389	4,413
2010	7	2,231,242	2,197,192	6,641	5,385
2010	8	2,169,255	1,969,226	6,163	5,024
2010	9	1,588,361	1,512,634	4,727	3,939
2010	10	1,357,368	1,415,482	4,040	3,469
2010	11	1,501,640	1,500,691	4,469	3,908
2010	12	1,916,427	1,695,654	5,208	4,510
2011	1	1,752,398	1,886,938	5,215	4,625
2011	2	1,557,990	1,522,786	4,869	4,326
2011	3	1,599,912	1,451,093	4,348	3,859
2011	4	1,301,326	1,311,732	3,873	3,416
2011	5	1,330,118	1,399,860	3,959	3,431
2011	6	1,852,504	1,584,141	5,263	4,305
2011	7	2,076,846	2,250,683	6,490	5,308
2011	8	2,228,803	1,841,624	6,057	4,898
2011	9	1,539,978	1,492,317	4,583	3,886
2011	10	1,330,406	1,395,685	3,960	3,421
2011	11	1,481,279	1,485,288	4,409	3,868
2011	12	1,730,767	1,854,559	5,151	4,545
2012	1	1,748,566	1,900,359	5,204	4,658
2012	2	1,619,830	1,557,231	4,821	4,326
2012	3	1,524,153	1,524,709	4,330	3,890
2012	4	1,308,312	1,317,586	3,894	3,431
2012	5	1,411,591	1,355,879	4,010	3,459
2012	6	1,790,295	1,684,767	5,328	4,387
2012	7	2,217,563	2,192,986	6,600	5,375
2012	8	2,249,829	1,876,983	6,114	4,992
2012	9	1,403,283	1,636,107	4,616	3,933
2012	10	1,480,948	1,297,937	4,024	3,452
2012	11	1,502,099	1,494,665	4,471	3,892
2012	12	1,659,087	1,950,473	5,185	4,600
2013	1	1,848,540	1,846,176	5,252	4,710
2013	2	1,555,071	1,548,806	4,860	4,400
2013	3	1,460,509	1,597,436	4,347	3,915
2013	4	1,381,178	1,270,897	3,924	3,454
2013	5	1,419,397	1,366,098	4,032	3,485

<b>ComEd Procurement Period Load Forecast (Expected Load) Projected Energy Sales and Average Demand For Eligible Retail Customers (Weather Normal, Line Loss and DSM Adjusted)</b>					
<b>Year</b>	<b>Month</b>	<b>Total Load (MWh)</b>		<b>Average Load (MW)</b>	
		<b>On-Peak</b>	<b>Off-Peak</b>	<b>On-Peak</b>	<b>Off-Peak</b>
2013	6	1,706,777	1,780,963	5,334	4,452
2013	7	2,344,057	2,116,293	6,659	5,399
2013	8	2,160,492	1,973,720	6,138	5,035
2013	9	1,487,679	1,568,268	4,649	3,921
2013	10	1,481,418	1,303,568	4,026	3,467
2013	11	1,421,649	1,567,975	4,443	3,920
2013	12	1,745,838	1,887,380	5,196	4,626
2014	1	1,851,420	1,858,493	5,260	4,741
2014	2	1,553,024	1,557,109	4,853	4,424
2014	3	1,456,804	1,606,089	4,336	3,936
2014	4	1,376,102	1,276,207	3,909	3,468
2014	5	1,346,504	1,432,213	4,007	3,510
2014	6	1,799,438	1,717,355	5,355	4,472
2014	7	2,360,789	2,126,231	6,707	5,424
2014	8	2,065,741	2,068,209	6,148	5,069
2014	9	1,568,870	1,496,449	4,669	3,897
2014	10	1,477,930	1,306,305	4,016	3,474
2014	11	1,344,177	1,635,166	4,422	3,931
2014	12	1,834,257	1,824,824	5,211	4,655
2015	1	1,770,149	1,946,892	5,268	4,772
2015	2	1,562,628	1,562,068	4,883	4,438
2015	3	1,536,587	1,553,189	4,365	3,962
2015	4	1,374,992	1,286,587	3,906	3,496
2015	5	1,278,514	1,501,852	3,995	3,542
<b>Totals</b>		<b>99,929,628</b>	<b>98,764,130</b>		

## Appendix B-2

<b>ComEd Procurement Period Load Forecast (Low Load) Projected Energy Sales and Average Demand For Eligible Retail Customers (Line Loss and DSM Adjusted)</b>					
Year	Month	Total Load (MWh)		Average Load (MW)	
		On-Peak	Off-Peak	On-Peak	Off-Peak
2010	6	1,584,668	1,555,100	4,502	4,226
2010	7	1,904,731	1,810,785	5,669	4,438
2010	8	1,728,828	1,641,785	4,911	4,188
2010	9	1,466,876	1,452,475	4,366	3,782
2010	10	1,292,208	1,201,703	3,846	2,945
2010	11	1,298,615	1,370,985	3,865	3,570
2010	12	1,650,192	1,649,663	4,484	4,387
2011	1	1,634,563	1,662,034	4,865	4,074
2011	2	1,378,166	1,372,652	4,307	3,900
2011	3	1,305,459	1,314,545	3,547	3,496
2011	4	1,178,497	1,135,714	3,507	2,958
2011	5	1,191,060	1,246,253	3,545	3,055
2011	6	1,492,593	1,361,566	4,240	3,700
2011	7	1,813,202	1,600,517	5,666	3,775
2011	8	1,600,160	1,529,717	4,348	4,068
2011	9	1,377,006	1,308,935	4,098	3,409
2011	10	1,188,727	1,109,657	3,538	2,720
2011	11	1,162,567	1,328,861	3,460	3,461
2011	12	1,525,367	1,571,504	4,540	3,852
2012	1	1,509,673	1,632,731	4,493	4,002
2012	2	1,324,249	1,364,761	3,941	3,791
2012	3	1,274,306	1,202,563	3,620	3,068
2012	4	1,121,986	1,072,554	3,339	2,793
2012	5	1,136,425	1,207,014	3,228	3,079
2012	6	1,506,496	1,293,310	4,484	3,368
2012	7	1,707,892	1,653,662	5,083	4,053
2012	8	1,650,858	1,400,077	4,486	3,724
2012	9	1,276,582	1,314,934	4,199	3,161
2012	10	1,143,467	1,128,561	3,107	3,001
2012	11	1,205,340	1,215,337	3,587	3,165
2012	12	1,498,438	1,503,958	4,683	3,547
2013	1	1,511,337	1,608,516	4,294	4,103
2013	2	1,277,561	1,274,191	3,992	3,620
2013	3	1,220,346	1,194,726	3,632	2,928
2013	4	1,090,335	1,070,676	3,098	2,909
2013	5	1,153,362	1,142,270	3,277	2,914

<b>ComEd Procurement Period Load Forecast (Low Load) Projected Energy Sales and Average Demand For Eligible Retail Customers (Line Loss and DSM Adjusted)</b>					
<b>Year</b>	<b>Month</b>	<b>Total Load (MWh)</b>		<b>Average Load (MW)</b>	
		<b>On-Peak</b>	<b>Off-Peak</b>	<b>On-Peak</b>	<b>Off-Peak</b>
2013	6	1,449,805	1,276,526	4,531	3,191
2013	7	1,656,206	1,650,445	4,705	4,210
2013	8	1,615,558	1,345,411	4,590	3,432
2013	9	1,262,526	1,265,637	3,945	3,164
2013	10	1,105,313	1,103,305	3,004	2,934
2013	11	1,146,890	1,190,707	3,584	2,977
2013	12	1,400,841	1,536,353	4,169	3,766
2014	1	1,477,702	1,556,998	4,198	3,972
2014	2	1,224,975	1,248,087	3,828	3,546
2014	3	1,167,132	1,164,512	3,474	2,854
2014	4	1,024,635	1,071,034	2,911	2,910
2014	5	1,090,035	1,125,262	3,244	2,758
2014	6	1,382,246	1,257,780	4,114	3,275
2014	7	1,555,932	1,661,665	4,420	4,239
2014	8	1,516,179	1,350,945	4,512	3,311
2014	9	1,213,527	1,245,301	3,612	3,243
2014	10	1,103,698	1,025,208	2,999	2,727
2014	11	1,079,263	1,163,694	3,550	2,797
2014	12	1,352,429	1,522,261	3,842	3,883
2015	1	1,434,828	1,489,951	4,270	3,652
2015	2	1,203,316	1,218,107	3,760	3,461
2015	3	1,131,087	1,150,456	3,213	2,935
2015	4	1,017,982	1,019,480	2,892	2,770
2015	5	1,059,403	1,087,997	3,311	2,566
<b>Totals</b>		<b>81,053,646</b>	<b>80,231,414</b>		

### Appendix B-3

<b>ComEd Procurement Period Load Forecast (High Load) Projected Energy Sales and Average Demand For Eligible Retail Customers (Line Loss and DSM Adjusted)</b>					
Year	Month	Total Load (MWh)		Load (MW)	
		On-Peak	Off-Peak	On-Peak	Off-Peak
2010	6	2,243,061	1,868,006	6,372	5,076
2010	7	2,740,784	2,536,267	8,157	6,216
2010	8	3,042,075	2,598,387	8,642	6,629
2010	9	1,705,314	1,619,059	5,075	4,216
2010	10	1,495,123	1,520,640	4,450	3,727
2010	11	1,753,289	1,751,082	5,218	4,560
2010	12	2,131,819	1,890,020	5,793	5,027
2011	1	1,914,830	2,059,273	5,699	5,047
2011	2	1,765,411	1,762,320	5,517	5,007
2011	3	1,836,725	1,579,487	4,991	4,201
2011	4	1,536,739	1,524,171	4,574	3,969
2011	5	1,483,888	1,518,612	4,416	3,722
2011	6	2,374,774	1,947,758	6,747	5,293
2011	7	2,751,053	2,764,465	8,597	6,520
2011	8	3,282,281	2,640,419	8,919	7,022
2011	9	1,799,559	1,683,414	5,356	4,384
2011	10	1,557,711	1,601,784	4,636	3,926
2011	11	1,841,899	1,831,063	5,482	4,768
2011	12	2,034,007	2,156,317	6,054	5,285
2012	1	1,994,045	2,159,298	5,935	5,292
2012	2	1,927,623	1,861,103	5,737	5,170
2012	3	1,776,857	1,758,935	5,048	4,487
2012	4	1,593,692	1,579,951	4,743	4,114
2012	5	1,621,335	1,499,462	4,606	3,825
2012	6	2,366,160	2,091,889	7,042	5,448
2012	7	2,946,358	2,786,617	8,769	6,830
2012	8	3,381,944	2,749,375	9,190	7,312
2012	9	1,655,678	1,904,457	5,446	4,578
2012	10	1,758,020	1,526,702	4,777	4,060
2012	11	1,893,831	1,896,808	5,636	4,940
2012	12	1,989,919	2,314,760	6,218	5,459
2013	1	2,169,994	2,122,222	6,165	5,414
2013	2	1,934,539	1,841,183	6,045	5,231
2013	3	1,712,260	1,906,957	5,096	4,674
2013	4	1,724,289	1,552,090	4,899	4,218
2013	5	1,657,633	1,549,732	4,709	3,953

<b>ComEd Procurement Period Load Forecast (High Load) Projected Energy Sales and Average Demand For Eligible Retail Customers (Line Loss and DSM Adjusted)</b>					
<b>Year</b>	<b>Month</b>	<b>Total Load (MWh)</b>		<b>Load (MW)</b>	
		<b>On-Peak</b>	<b>Off-Peak</b>	<b>On-Peak</b>	<b>Off-Peak</b>
2013	6	2,308,475	2,263,780	7,214	5,659
2013	7	3,136,294	2,786,984	8,910	7,110
2013	8	3,377,491	2,901,940	9,595	7,403
2013	9	1,827,021	1,829,315	5,709	4,573
2013	10	1,812,624	1,548,872	4,926	4,119
2013	11	1,843,843	2,026,876	5,762	5,067
2013	12	2,142,711	2,284,628	6,377	5,600
2014	1	2,207,278	2,185,376	6,271	5,575
2014	2	1,963,391	1,896,826	6,136	5,389
2014	3	1,740,995	1,954,850	5,182	4,791
2014	4	1,744,254	1,600,887	4,955	4,350
2014	5	1,586,709	1,675,701	4,722	4,107
2014	6	2,450,096	2,252,755	7,292	5,867
2014	7	3,244,753	2,832,204	9,218	7,225
2014	8	3,356,076	3,052,819	9,988	7,482
2014	9	1,924,632	1,816,979	5,728	4,732
2014	10	1,857,384	1,570,439	5,047	4,177
2014	11	1,784,778	2,157,854	5,871	5,187
2014	12	2,283,257	2,265,662	6,487	5,780
2015	1	2,154,300	2,330,210	6,412	5,711
2015	2	1,981,505	1,974,298	6,192	5,609
2015	3	1,900,646	1,898,264	5,400	4,843
2015	4	1,767,369	1,657,983	5,021	4,505
2015	5	1,531,013	1,794,661	4,784	4,233
<b>Totals</b>		<b>125,321,414</b>	<b>120,514,248</b>		



**ATTACHMENT D: Commonwealth Edison Monthly Volume Projections per Rate Class for Five Year Planning Period, June 2009 through May 2014**

**Commonwealth Edison Monthly Volume Projections per Rate Class for Five Year Planning Period,  
June 20010 through May 2015**

Contract Month	ComEd Projected Monthly Volume Requirements									
	SF MW	MF MW	SFSH MW	MFSH MW	WH MW	Small MW	Condo MW	DD MW	GL MW	Total MW
June-10	2,126,944	447,709	42,154	81,949	48,183	742,216	20,065	10,929	818	3,520,966
July-10	2,769,891	586,264	50,588	111,752	53,061	817,390	27,429	11,219	839	4,428,434
August-10	2,537,030	548,696	47,383	106,405	52,795	802,948	30,439	11,896	890	4,138,481
September-10	2,537,030	395,481	40,195	85,003	46,820	704,769	26,956	12,308	921	3,849,482
October-10	1,544,167	336,399	54,049	101,644	44,317	654,882	23,097	13,301	995	2,772,850
November-10	1,671,808	348,202	87,945	173,979	43,398	639,805	22,462	13,707	1,025	3,002,331
December-10	2,003,464	403,471	125,250	282,726	47,906	702,332	30,978	14,844	1,111	3,612,081
January-11	2,007,425	410,134	139,126	270,785	48,908	709,935	37,391	14,545	1,088	3,639,337
February-11	1,680,947	356,638	115,360	206,699	44,039	630,195	33,392	12,565	940	3,080,776
March-11	1,656,897	358,394	99,285	195,766	46,387	648,367	31,923	13,012	974	3,051,006
April-11	1,443,454	318,047	63,882	124,747	42,634	581,735	25,921	11,758	880	2,613,058
May-11	1,561,644	341,718	46,970	93,260	45,148	604,842	23,937	11,593	867	2,729,978
June-11	2,133,497	453,616	41,982	81,198	48,781	645,088	20,305	11,330	848	3,436,645
July-11	2,773,355	592,777	50,278	110,500	53,452	707,108	27,620	11,573	866	4,327,529
August-11	2,552,874	557,463	47,319	105,719	53,557	709,364	30,867	12,341	923	4,070,428
September-11	1,789,001	399,222	39,883	83,914	47,478	631,774	27,328	12,742	953	3,032,295
October-11	1,551,275	339,513	53,619	100,322	45,138	597,881	23,523	13,788	1,032	2,726,090
November-11	1,689,175	351,602	87,289	171,801	44,230	584,319	22,894	14,193	1,062	2,966,566
December-11	2,029,461	406,331	123,988	278,447	48,658	650,531	31,473	15,294	1,144	3,585,326
January-12	2,051,298	415,085	138,544	268,276	49,964	671,214	38,210	15,198	1,137	3,648,925
February-12	1,705,792	358,043	114,311	203,815	44,610	598,128	33,795	13,100	977	3,072,572
March-12	1,682,976	360,767	98,929	193,612	47,447	632,809	32,785	13,588	1,018	3,063,931
April-12	1,468,562	320,401	64,121	124,398	43,262	571,112	26,397	12,384	926	2,631,563
May-12	1,580,929	343,964	47,064	93,027	46,011	605,943	24,550	12,265	917	2,754,670
June-12	2,131,858	450,993	41,474	79,866	49,418	654,061	20,766	11,795	886	3,441,117
July-12	2,831,094	601,008	50,163	109,090	53,916	713,280	27,707	12,143	909	4,399,308
August-12	2,610,839	566,208	47,213	105,013	54,317	718,779	31,157	12,858	962	4,147,346
September-12	1,816,575	402,488	39,152	82,098	48,292	642,872	27,755	13,182	985	3,073,400
October-12	1,583,131	344,506	52,755	98,435	45,837	607,404	24,017	14,470	1,083	2,771,638
November-12	1,703,432	352,141	85,054	166,100	44,792	591,674	23,233	14,730	1,102	2,982,258
December-12	2,048,060	405,268	122,174	270,326	49,282	658,455	31,799	15,794	1,181	3,602,339
January-13	2,079,574	420,468	137,642	270,271	50,727	679,929	38,400	15,779	1,179	3,693,969
February-13	1,785,387	374,162	118,163	211,605	47,121	633,511	35,727	14,065	1,053	3,220,794
March-13	1,682,037	359,881	97,112	190,891	47,481	632,816	32,670	14,009	1,048	3,057,945
April-13	1,476,577	322,301	63,059	122,759	44,154	582,552	26,833	12,878	963	2,652,075
May-13	1,600,065	347,314	46,501	92,045	46,674	614,495	24,736	12,713	951	2,785,494
June-13	2,171,211	458,423	41,327	79,684	49,446	653,942	20,568	12,225	915	3,487,740
July-13	2,871,066	609,381	50,347	110,308	54,664	722,818	28,220	12,603	943	4,460,350
August-13	2,602,298	564,239	46,652	103,909	54,159	717,505	31,184	13,272	993	4,134,212
September-13	1,805,102	399,837	38,909	81,612	48,093	640,042	27,653	13,677	1,023	3,055,947
October-13	1,585,971	344,214	52,952	98,768	46,565	616,185	24,250	14,961	1,119	2,784,986
November-13	1,707,622	351,881	85,094	166,963	44,937	593,634	23,236	15,125	1,132	2,989,624
December-13	2,067,665	409,248	121,641	272,333	49,613	663,133	32,052	16,313	1,220	3,633,218

Contract Month	2,126,944									
	SF MW	MF MW	SFSH MW	MFSH MW	WH MW	Small MW	Condo MW	DD MW	GL MW	Total MW
January-14	2,091,412	421,178	137,429	266,251	51,113	686,109	39,048	16,162	1,209	3,709,913
February-14	1,728,076	361,584	112,504	200,653	45,556	612,279	34,511	13,928	1,042	3,110,133
March-14	1,686,977	360,076	95,950	188,320	47,689	635,601	32,783	14,419	1,079	3,062,893
April-14	1,477,039	321,821	62,178	120,860	44,328	584,893	26,913	13,283	994	2,652,309
May-14	1,596,461	346,084	45,757	90,435	46,665	614,553	24,711	13,071	978	2,778,717
June-15	2,192,479	462,503	41,173	79,268	49,709	657,405	20,659	12,651	946	3,516,793
July-14	2,894,029	613,706	50,070	109,536	54,653	722,894	28,187	12,975	971	4,487,020
August-14	2,606,192	564,565	46,096	102,513	53,939	714,990	31,029	13,608	1,018	4,133,949
September-14	1,811,307	400,797	38,515	80,662	48,299	642,816	27,745	14,122	1,057	3,065,320
October-14	1,585,496	343,627	52,201	97,219	46,708	618,146	24,306	15,379	1,151	2,784,235
November-14	1,704,018	350,407	83,678	163,936	44,846	592,679	23,167	15,454	1,156	2,979,343
December-14	2,087,966	412,172	120,978	270,439	49,932	667,339	32,224	16,776	1,255	3,659,080
January-15	2,103,582	421,378	135,703	262,907	51,069	685,761	38,969	16,442	1,230	3,717,041
February-15	1,742,789	362,781	111,406	198,695	45,641	613,546	34,539	14,236	1,065	3,124,697
March-15	1,707,992	362,744	95,402	187,244	47,986	639,526	32,953	14,821	1,109	3,089,776
April-15	1,486,182	322,404	61,479	119,502	44,407	586,036	26,929	13,621	1,019	2,661,579
May-15	1,601,324	345,822	45,127	89,190	46,556	613,362	24,630	13,354	999	2,780,365

**ATTACHMENT E: Ameren Illinois Utilities System Supply Requirements Forecast for Five Year Planning Period, June 2010 through May 2015**

**Ameren Illinois Utilities System Supply Requirements Forecast for Five Year Planning Period,  
June 2010 through May 2015**

Contract Month	Total Volume (MWh)		Average Load (MW)	
	On-Peak	Off-Peak	On-Peak	Off-Peak
June-10	779,952	680,221	2,216	1,848
July-10	962,074	923,346	2,863	2,263
August-10	972,635	891,295	2,763	2,274
September-10	742,449	684,079	2,210	1,781
October-10	616,307	631,933	1,834	1,549
November-10	636,263	643,953	1,894	1,677
December-10	854,143	774,962	2,321	2,061
January-11	817,614	925,975	2,433	2,270
February-11	721,585	744,639	2,255	2,115
March-11	713,785	647,218	1,940	1,721
April-11	554,568	563,412	1,651	1,467
May-11	558,272	596,638	1,662	1,462
June-11	772,457	657,113	2,194	1,786
July-11	884,743	964,768	2,765	2,275
August-11	1,001,687	827,014	2,722	2,200
September-11	727,653	668,059	2,166	1,740
October-11	597,414	621,304	1,778	1,523
November-11	624,723	624,459	1,859	1,626
December-11	759,159	830,381	2,259	2,035
January-12	804,789	895,509	2,395	2,195
February-12	730,257	725,537	2,173	2,015
March-12	652,701	676,261	1,854	1,725
April-12	538,017	551,637	1,601	1,437
May-12	572,209	553,660	1,626	1,412
June-12	715,562	679,898	2,130	1,771
July-12	898,666	909,095	2,675	2,228
August-12	995,365	793,286	2,705	2,110
September-12	623,621	741,252	2,051	1,782
October-12	626,252	564,650	1,702	1,502
November-12	599,716	620,763	1,785	1,617
December-12	694,594	858,096	2,171	2,024
January-13	820,971	838,098	2,332	2,138
February-13	701,265	694,084	2,191	1,972
March-13	613,703	681,842	1,826	1,671
April-13	549,356	516,347	1,561	1,403
May-13	559,214	543,447	1,589	1,386
June-13	659,364	708,852	2,061	1,772
July-13	926,668	845,483	2,633	2,157
August-13	937,291	815,841	2,663	2,081
September-13	631,444	706,152	1,973	1,765
October-13	609,905	556,066	1,657	1,479
November-13	559,073	634,179	1,747	1,585
December-13	706,229	809,054	2,102	1,983
January-14	792,530	826,158	2,252	2,108
February-14	685,951	675,707	2,144	1,920
March-14	593,096	671,528	1,765	1,646
April-14	534,546	507,837	1,519	1,380

Contract Month	Total Volume (MWh)		Average Load (MW)	
	On-Peak	Off-Peak	On-Peak	Off-Peak
May-14	520,274	559,793	1,548	1,372
June-15	677,120	661,067	2,015	1,722
July-14	911,568	821,002	2,590	2,094
August-14	861,184	852,250	2,563	2,089
September-14	649,892	657,311	1,934	1,712
October-14	601,369	536,814	1,634	1,428
November-14	514,001	647,360	1,691	1,556
December-14	732,969	737,358	2,082	1,881
January-15	721,792	848,303	2,148	2,079
February-15	656,965	666,054	2,053	1,892
March-15	606,607	623,748	1,723	1,591
April-15	525,542	491,434	1,493	1,335
May-15	481,732	574,147	1,505	1,354

**ATTACHMENT F: Ameren Illinois Utilities Residual Supply Requirements Forecast for Five Year Planning Period, June 2010 through May 2015**

**Ameren Illinois Utilities Residual Supply Requirements Forecast for Five Year Planning Period,  
June 2010 through May 2015**

Contract Month	Peak				Off Peak			
	Projected Volume (MW)	Swap Volumes (MW)	2009 Procurement Volumes (MW)	Residual Volumes (MW)	Projected Volume (MW)	Swap Volumes (MW)	2009 Procurement Volumes (MW)	Residual Volumes (MW)
June-10	2,216	1,000	750	466	1,848	1,000	300	548
July-10	2,863	1,000	1,050	813	2,263	1,000	650	613
August-10	2,763	1,000	1,000	763	2,274	1,000	550	724
September-10	2,210	1,000	650	560	1,781	1,000	400	381
October-10	1,834	1,000	450	384	1,549	1,000	150	399
November-10	1,894	1,000	450	444	1,677	1,000	300	377
December-10	2,321	1,000	650	671	2,061	1,000	400	661
January-11	2,433	1,000	750	683	2,270	1,000	500	770
February-11	2,255	1,000	600	655	2,115	1,000	450	665
March-11	1,940	1,000	450	490	1,721	1,000	250	471
April-11	1,651	1,000	300	351	1,467	1,000	100	367
May-11	1,662	1,000	300	362	1,462	1,000	100	362
June-11	2,194	1,000	0	1,194	1,786	1,000	0	786
July-11	2,765	1,000	0	1,765	2,275	1,000	0	1,275
August-11	2,722	1,000	0	1,722	2,200	1,000	0	1,200
September-11	2,166	1,000	0	1,166	1,740	1,000	0	740
October-11	1,778	1,000	0	778	1,523	1,000	0	523
November-11	1,859	1,000	0	859	1,626	1,000	0	626
December-11	2,259	1,000	0	1,259	2,035	1,000	0	1,035
January-12	2,395	1,000	0	1,395	2,195	1,000	0	1,195
February-12	2,173	1,000	0	1,173	2,015	1,000	0	1,015
March-12	1,854	1,000	0	854	1,725	1,000	0	725
April-12	1,601	1,000	0	601	1,437	1,000	0	437
May-12	1,626	1,000	0	626	1,412	1,000	0	412
June-12	2,130	1,000	0	1,130	1,771	1,000	0	771
July-12	2,675	1,000	0	1,675	2,228	1,000	0	1,228
August-12	2,705	1,000	0	1,705	2,110	1,000	0	1,110
September-12	2,051	1,000	0	1,051	1,782	1,000	0	782
October-12	1,702	1,000	0	702	1,502	1,000	0	502
November-12	1,785	1,000	0	785	1,617	1,000	0	617
December-12	2,171	1,000	0	1,171	2,024	1,000	0	1,024
January-13	2,332	0	0	2,332	2,138	0	0	2,138
February-13	2,191	0	0	2,191	1,972	0	0	1,972
March-13	1,826	0	0	1,826	1,671	0	0	1,671
April-13	1,561	0	0	1,561	1,403	0	0	1,403
May-13	1,589	0	0	1,589	1,386	0	0	1,386
June-13	2,061	0	0	2,061	1,772	0	0	1,772
July-13	2,633	0	0	2,663	2,157	0	0	2,157
August-13	2,663	0	0	2,663	2,081	0	0	2,081
September-13	1,973	0	0	1,973	1,765	0	0	1,765
October-13	1,657	0	0	1,657	1,479	0	0	1,479
November-13	1,747	0	0	1,747	1,585	0	0	1,585
December-13	2,102	0	0	2,102	1,983	0	0	1,983
January-14	2,252	0	0	2,252	2,108	0	0	2,108
February-14	2,144	0	0	2,144	1,920	0	0	1,920



Contract Month	Peak				Off Peak			
	Projected Volume (MW)	Swap Volumes (MW)	2009 Procurement Volumes (MW)	Residual Volumes (MW)	Projected Volume (MW)	Swap Volumes (MW)	2009 Procurement Volumes (MW)	Residual Volumes (MW)
March-14	1,765	0	0	1,765	1,646	0	0	1,646
April-14	1,519	0	0	1,519	1,380	0	0	1,380
May-14	1,548	0	0	1,548	1,372	0	0	1,372
June-15	2,015	0	0	2,015	1,722	0	0	1,722
July-14	2,590	0	0	2,590	2,094	0	0	2,094
August-14	2,563	0	0	2,563	2,089	0	0	2,089
September-14	1,934	0	0	1,934	1,712	0	0	1,712
October-14	1,634	0	0	1,634	1,428	0	0	1,428
November-14	1,691	0	0	1,691	1,556	0	0	1,556
December-14	2,082	0	0	2,082	1,881	0	0	1,881
January-15	2,148	0	0	2,148	2,079	0	0	2,079
February-15	2,053	0	0	2,053	1,892	0	0	1,892
March-15	1,723	0	0	1,723	1,591	0	0	1,591
April-15	1,493	0	0	1,493	1,335	0	0	1,335
May-15	1,505	0	0	1,505	1,354	0	0	1,354

**ATTACHMENT G: Ameren Illinois Utilities Contract Volumes to Secure in 2010-2015 Procurement Cycles**

**Ameren Illinois Utilities Off Peak Contract Volumes to Secure in 2010–2015 Procurement Cycles**

Contract Month	Current and Future Ameren Off-Peak Contract Volumes (MW)						
	Projected Volume (MW)	Swap Volumes (MW)	2009 Procurement Volumes (MW)	Residual Volumes (MW)	2010 IPA Procurement (MW)	2011 IPA Procurement (MW)	2012 IPA Procurement (MW)
June-10	1,848	1,000	300	548	550	0	0
July-10	2,263	1,000	650	613	600	0	0
August-10	2,274	1,000	550	724	700	0	0
September-10	1,781	1,000	400	381	400	0	0
October-10	1,549	1,000	150	399	400	0	0
November-10	1,677	1,000	300	377	400	0	0
December-10	2,061	1,000	400	661	650	0	0
January-11	2,270	1,000	500	770	750	0	0
February-11	2,115	1,000	450	665	650	0	0
March-11	1,721	1,000	250	471	450	0	0
April-11	1,467	1,000	100	367	350	0	0
May-11	1,462	1,000	100	362	350	0	0
June-11	1,786	1,000	0	786	250	550	0
July-11	2,275	1,000	0	1,275	600	700	0
August-11	2,200	1,000	0	1,200	550	650	0
September-11	1,740	1,000	0	740	200	550	0
October-11	1,523	1,000	0	523	50	450	0
November-11	1,626	1,000	0	626	150	500	0
December-11	2,035	1,000	0	1,035	400	650	0
January-12	2,195	1,000	0	1,195	550	650	0
February-12	2,015	1,000	0	1,015	400	600	0
March-12	1,725	1,000	0	725	200	550	0
April-12	1,437	1,000	0	437	0	450	0
May-12	1,412	1,000	0	412	0	400	0
June-12	1,771	1,000	0	771	0	250	500
July-12	2,228	1,000	0	1,228	0	550	700
August-12	2,110	1,000	0	1,110	0	500	600
September-12	1,782	1,000	0	782	0	250	550
October-12	1,502	1,000	0	502	0	50	450
November-12	1,617	1,000	0	617	0	150	450
December-12	2,024	1,000	0	1,024	0	400	600
January-13	2,138	0	0	2,138	750	750	650
February-13	1,972	0	0	1,972	700	700	550
March-13	1,671	0	0	1,671	600	550	500
April-13	1,403	0	0	1,403	500	500	400
May-13	1,386	0	0	1,386	500	450	450
June-13	1,772	0	0	1,772	0	600	650
July-13	2,157	0	0	2,157	0	750	750
August-13	2,081	0	0	2,081	0	750	700
September-13	1,765	0	0	1,765	0	600	650
October-13	1,479	0	0	1,479	0	500	550
November-13	1,585	0	0	1,585	0	550	550
December-13	1,983	0	0	1,983	0	700	700
January-14	2,108	0	0	2,108	0	750	750
February-14	1,920	0	0	1,920	0	650	700
March-14	1,646	0	0	1,646	0	600	550

Contract Month	Current and Future Ameren Off-Peak Contract Volumes (MW)						
	Projected Volume (MW)	Swap Volumes (MW)	2009 Procurement Volumes (MW)	Residual Volumes (MW)	2010 IPA Procurement (MW)	2011 IPA Procurement (MW)	2012 IPA Procurement (MW)
April-14	1,380	0	0	1,380	0	500	450
May-14	1,381	0	0	1,381	0	500	450
June-15	1,722	0	0	1,722	0	0	600
July-14	2,094	0	0	2,094	0	0	750
August-14	2,089	0	0	2,089	0	0	750
September-14	1,712	0	0	1,712	0	0	600
October-14	1,428	0	0	1,428	0	0	500
November-14	1,654	0	0	1,654	0	0	550
December-14	1,881	0	0	1,881	0	0	650
January-15	2,079	0	0	2,079	0	0	750
February-15	1,892	0	0	1,892	0	0	650
March-15	1,591	0	0	1,591	0	0	550
April-15	1,335	0	0	1,335	0	0	450
May-15	1,436	0	0	1,436	0	0	450

**Ameren Illinois Utilities Peak Contract Volumes to Secure in 2010 – 2015 Procurement Cycles**

Contract Month	Current and Future Ameren Peak Contract Volumes (MW)						
	Projected Volume (MW)	Swap Volumes (MW)	2009 Procurement Volumes (MW)	Residual Volumes (MW)	2010 IPA Procurement (MW)	2011 IPA Procurement (MW)	2012 IPA Procurement (MW)
June-10	2216	1000	750	466	450	0	0
July-10	3150	1000	1050	1100	1100	0	0
August-10	3039	1000	1000	1039	1050	0	0
September-10	2210	1000	650	560	550	0	0
October-10	1834	1000	450	384	400	0	0
November-10	1894	1000	450	444	450	0	0
December-10	2321	1000	650	671	650	0	0
January-11	2433	1000	750	683	700	0	0
February-11	2255	1000	600	655	650	0	0
March-11	1940	1000	450	490	500	0	0
April-11	1651	1000	300	351	350	0	0
May-11	1662	1000	300	362	350	0	0
June-11	2194	1000	0	1194	550	650	0
July-11	3041	1000	0	2041	1150	900	0
August-11	2994	1000	0	1994	1100	900	0
September-11	2166	1000	0	1166	500	650	0
October-11	1778	1000	0	778	250	550	0
November-11	1859	1000	0	859	300	550	0
December-11	2259	1000	0	1259	600	650	0
January-12	2395	1000	0	1395	700	700	0
February-12	2173	1000	0	1173	500	650	0
March-12	1854	1000	0	854	300	550	0
April-12	1601	1000	0	601	100	500	0
May-12	1626	1000	0	626	150	500	0
June-12	2130	1000	0	1130	0	500	650
July-12	2942	1000	0	1942	0	1050	900
August-12	2975	1000	0	1975	0	1100	900
September-12	2051	1000	0	1051	0	450	600
October-12	1702	1000	0	702	0	200	500
November-12	1785	1000	0	785	0	250	550
December-12	2171	1000	0	1171	0	500	650
January-13	2332	0	0	2332	800	850	700
February-13	2191	0	0	2191	750	800	650
March-13	1826	0	0	1826	650	650	550
April-13	1561	0	0	1561	550	550	450
May-13	1589	0	0	1589	550	550	500
June-13	2061	0	0	2061	0	700	750
July-13	2896	0	0	2896	0	1000	1050
August-13	2929	0	0	2929	0	1050	1000
September-13	1973	0	0	1973	0	700	700
October-13	1657	0	0	1657	0	600	550
November-13	1747	0	0	1747	0	600	600
December-13	2102	0	0	2102	0	750	700
January-14	2252	0	0	2252	0	800	800
February-14	2144	0	0	2144	0	750	750
March-14	1765	0	0	1765	0	600	650

Contract Month	Current and Future Ameren Peak Contract Volumes (MW)						
	Projected Volume (MW)	Swap Volumes (MW)	2009 Procurement Volumes (MW)	Residual Volumes (MW)	2010 IPA Procurement (MW)	2011 IPA Procurement (MW)	2012 IPA Procurement (MW)
April-14	1519	0	0	1519	0	550	500
May-14	1537	0	0	1537	0	550	550
June-15	2015	0	0	2015	0	0	700
July-14	2849	0	0	2849	0	0	1000
August-14	2819	0	0	2819	0	0	1000
September-14	1934	0	0	1934	0	0	700
October-14	1634	0	0	1634	0	0	550
November-14	1691	0	0	1691	0	0	600
December-14	2082	0	0	2082	0	0	750
January-15	2148	0	0	2148	0	0	750
February-15	2053	0	0	2053	0	0	700
March-15	1723	0	0	1723	0	0	600
April-15	1493	0	0	1493	0	0	500
May-15	1505	0	0	1505	0	0	550

**ATTACHMENT H: Commonwealth Edison System Supply Requirements Forecast for Five Year Planning Period, June 2009 through May 2014**

**Commonwealth Edison System Supply Requirements Forecast for Five Year Planning Period,  
June 2010 through May 2015**

Contract Month	Total Volume (MWh)		Average Load (MW)	
	On-Peak	Off-Peak	On-Peak	Off-Peak
June-10	1,896,921	1,624,045	5,389	4,413
July-10	2,231,242	2,197,192	6,641	5,385
August-10	2,169,255	1,969,226	6,163	5,024
September-10	1,588,361	1,512,634	4,727	3,939
October-10	1,357,368	1,415,482	4,040	3,469
November-10	1,501,640	1,500,691	4,469	3,908
December-10	1,916,427	1,695,654	5,208	4,510
January-11	1,752,398	1,886,938	5,215	4,625
February-11	1,557,990	1,522,786	4,869	4,326
March-11	1,599,912	1,451,093	4,348	3,859
April-11	1,301,326	1,311,732	3,873	3,416
May-11	1,330,118	1,399,860	3,959	3,431
June-11	1,852,504	1,584,141	5,263	4,305
July-11	2,076,846	2,250,683	6,490	5,308
August-11	2,228,803	1,841,624	6,057	4,898
September-11	1,539,978	1,492,317	4,583	3,886
October-11	1,330,406	1,395,685	3,960	3,421
November-11	1,481,279	1,485,288	4,409	3,868
December-11	1,730,767	1,854,559	5,151	4,545
January-12	1,748,566	1,900,359	5,204	4,658
February-12	1,619,830	1,557,231	4,821	4,326
March-12	1,524,153	1,524,709	4,330	3,890
April-12	1,308,312	1,317,586	3,894	3,431
May-12	1,411,591	1,355,879	4,010	3,459
June-12	1,790,295	1,684,767	5,328	4,387
July-12	2,217,563	2,192,986	6,600	5,375
August-12	2,249,829	1,876,983	6,114	4,992
September-12	1,403,283	1,636,107	4,616	3,933
October-12	1,480,948	1,297,937	4,024	3,452
November-12	1,502,099	1,494,665	4,471	3,892
December-12	1,659,087	1,950,473	5,185	4,600
January-13	1,848,540	1,846,176	5,252	4,710
February-13	1,555,071	1,548,806	4,860	4,400
March-13	1,460,509	1,597,436	4,347	3,915
April-13	1,381,178	1,270,897	3,924	3,454
May-13	1,419,397	1,366,098	4,032	3,485
June-13	1,706,777	1,780,963	5,334	4,452
July-13	2,344,057	2,116,293	6,659	5,399
August-13	2,160,492	1,973,720	6,138	5,035
September-13	1,487,679	1,568,268	4,649	3,921
October-13	1,481,418	1,303,568	4,026	3,467
November-13	1,421,649	1,567,975	4,443	3,920
December-13	1,745,838	1,887,380	5,196	4,626
January-14	1,851,420	1,858,493	5,260	4,741



Contract Month	Total Volume (MWh)		Average Load (MW)	
	On-Peak	Off-Peak	On-Peak	On-Peak
February-14	1,553,024	1,557,109	4,853	4,424
March-14	1,456,804	1,606,089	4,336	3,936
April-14	1,376,102	1,276,207	3,909	3,468
May-14	1,346,504	1,432,213	4,007	3,510
June-15	1,799,438	1,717,355	5,355	4,472
July-14	2,360,789	2,126,231	6,707	5,424
August-14	2,065,741	2,068,209	6,148	5,069
September-14	1,568,870	1,496,449	4,669	3,897
October-14	1,477,930	1,306,305	4,016	3,474
November-14	1,344,177	1,635,166	4,422	3,931
December-14	1,834,257	1,824,824	5,211	4,655
January-15	1,770,149	1,946,892	5,268	4,772
February-15	1,562,628	1,562,068	4,883	4,438
March-15	1,536,587	1,553,189	4,365	3,962
April-15	1,374,992	1,286,587	3,906	3,496
May-15	1,278,514	1,501,852	3,995	3,542

**ATTACHMENT I: Commonwealth Edison Residual Supply Requirements Forecast for Five Year Planning Period, June 2010 through May 2015**

**Commonwealth Edison Residual Supply Requirements Forecast for Five Year Planning Period, June 2010 through May 2015**

Contract Month	Peak				Off Peak			
	Projected Volume (MW)	Swap Volumes (MW)	2009 Procurement Volumes (MW)	Residual Volumes (MW)	Projected Volume (MW)	Swap Volumes (MW)	2009 Procurement Volumes (MW)	Residual Volumes (MW)
June-10	5,389	3,000	750	1,639	4,413	3,000	200	1,213
July-10	7,306	3,000	2,000	2,306	5,385	3,000	850	1,535
August-10	6,780	3,000	1,650	2,130	5,022	3,000	600	1,422
September-10	4,728	3,000	300	1,428	3,938	3,000	0	938
October-10	4,040	3,000	0	1,040	3,469	3,000	0	469
November-10	4,470	3,000	200	1,270	3,908	3,000	0	908
December-10	5,208	3,000	700	1,508	4,510	3,000	250	1,260
January-11	5,215	3,000	800	1,415	4,625	3,000	400	1,225
February-11	4,868	3,000	550	1,318	4,326	3,000	200	1,126
March-11	4,348	3,000	200	1,148	3,859	3,000	0	859
April-11	3,872	3,000	0	872	3,417	3,000	0	417
May-11	3,960	3,000	0	960	3,430	3,000	0	430
June-11	5,263	3,000	0	2,263	4,304	3,000	0	1,304
July-11	7,139	3,000	0	4,139	5,308	3,000	0	2,308
August-11	6,664	3,000	0	3,664	4,896	3,000	0	1,896
September-11	4,584	3,000	0	1,584	3,885	3,000	0	885
October-11	3,960	3,000	0	960	3,421	3,000	0	421
November-11	4,410	3,000	0	1,410	3,867	3,000	0	867
December-11	5,150	3,000	0	2,150	4,546	3,000	0	1,546
January-12	5,203	3,000	0	2,203	4,658	3,000	0	1,658
February-12	4,821	3,000	0	1,821	4,326	3,000	0	1,326
March-12	4,330	3,000	0	1,330	3,890	3,000	0	890
April-12	3,894	3,000	0	894	3,431	3,000	0	431
May-12	4,011	3,000	0	1,011	3,458	3,000	0	458
June-12	5,329	3,000	0	2,329	4,387	3,000	0	1,387
July-12	7,261	3,000	0	4,261	5,374	3,000	0	2,374
August-12	6,726	3,000	0	3,726	4,991	3,000	0	1,991
September-12	4,616	3,000	0	1,616	3,933	3,000	0	933
October-12	4,025	3,000	0	1,025	3,451	3,000	0	451
November-12	4,472	3,000	0	1,472	3,891	3,000	0	891
December-12	5,185	3,000	0	2,185	4,605	3,000	0	1,605
January-13	5,252	3,000	0	2,252	4,709	3,000	0	1,709
February-13	4,860	3,000	0	1,860	4,400	3,000	0	1,400
March-13	4,346	3,000	0	1,346	3,916	3,000	0	916
April-13	3,924	3,000	0	924	3,454	3,000	0	454
May-13	4,033	3,000	0	1,033	3,484	3,000	0	484
June-13	5,335	0	0	5,335	4,451	0	0	4,451
July-13	7,326	0	0	7,326	5,398	0	0	5,398
August-13	6,753	0	0	6,753	5,034	0	0	5,034
September-13	4,649	0	0	4,649	3,921	0	0	3,921
October-13	4,027	0	0	4,027	3,466	0	0	3,466
November-13	4,442	0	0	4,442	3,920	0	0	3,920
December-13	5,195	0	0	5,195	4,627	0	0	4,627

Contract Month	Peak				Off Peak			
	Projected Volume (MW)	Swap Volumes (MW)	2009 Procurement Volumes (MW)	Residual Volumes (MW)	Projected Volume (MW)	Swap Volumes (MW)	2009 Procurement Volumes (MW)	Residual Volumes (MW)
January-14	5,261	0	0	5,261	4,740	0	0	4,740
February-14	4,853	0	0	4,853	4,423	0	0	4,423
March-14	4,336	0	0	4,336	3,936	0	0	3,936
April-14	3,909	0	0	3,909	3,468	0	0	3,468
May-14	4,009	0	0	4,009	3,509	0	0	3,509
June-15	5,357	0	0	5,357	4,471	0	0	4,471
July-14	7,378	0	0	7,378	5,423	0	0	5,423
August-14	6,763	0	0	6,763	5,069	0	0	5,069
September-14	4,670	0	0	4,670	3,896	0	0	3,896
October-14	4,017	0	0	4,017	3,473	0	0	3,473
November-14	4,421	0	0	4,421	3,931	0	0	3,931
December-14	5,211	0	0	5,211	4,655	0	0	4,655
January-15	5,269	0	0	5,269	4,771	0	0	4,771
February-15	4,883	0	0	4,883	4,438	0	0	4,438
March-15	4,365	0	0	4,365	3,963	0	0	3,963
April-15	3,906	0	0	3,906	3,496	0	0	3,496
May-15	3,996	0	0	3,996	3,542	0	0	3,542

**ATTACHMENT J: Commonwealth Edison Contract Volumes to Secure in Spring 2010  
Procurement Cycle**

**Commonwealth Edison Off Peak Contract Volumes to Secure in 2010–2015 Procurement Cycles**

Contract Month	Off-Peak Contract Volumes to Secure (MW)						
	Projected Volume (MW)	Swap Volumes (MW)	2009 Procurement Volumes (MW)	Residual Volumes (MW)	2010 IPA Procurement (MW)	2011 IPA Procurement (MW)	2012 IPA Procurement (MW)
June-10	4,413	3,000	200	1,213	1200	0	0
July-10	5,385	3,000	850	1,535	1550	0	0
August-10	5,022	3,000	600	1,422	1400	0	0
September-10	3,938	3,000	0	938	950	0	0
October-10	3,469	3,000	0	469	450	0	0
November-10	3,908	3,000	0	908	900	0	0
December-10	4,510	3,000	250	1,260	1250	0	0
January-11	4,625	3,000	400	1,225	1200	0	0
February-11	4,326	3,000	200	1,126	1150	0	0
March-11	3,859	3,000	0	859	850	0	0
April-11	3,417	3,000	0	417	400	0	0
May-11	3,430	3,000	0	430	450	0	0
June-11	4,304	3,000	0	1,304	0	1300	0
July-11	5,308	3,000	0	2,308	700	1600	0
August-11	4,896	3,000	0	1,896	450	1450	0
September-11	3,885	3,000	0	885	0	900	0
October-11	3,421	3,000	0	421	0	400	0
November-11	3,867	3,000	0	867	0	850	0
December-11	4,546	3,000	0	1,546	200	1350	0
January-12	4,658	3,000	0	1,658	250	1400	0
February-12	4,326	3,000	0	1,326	50	1300	0
March-12	3,890	3,000	0	890	0	900	0
April-12	3,431	3,000	0	431	0	450	0
May-12	3,458	3,000	0	458	0	450	0
June-12	4,387	3,000	0	1,387	0	50	1350
July-12	5,374	3,000	0	2,374	0	750	1600
August-12	4,991	3,000	0	1,991	0	500	1500
September-12	3,933	3,000	0	933	0	0	950
October-12	3,451	3,000	0	451	0	0	450
November-12	3,891	3,000	0	891	0	0	900
December-12	4,605	3,000	0	1,605	0	200	1400
January-13	4,709	3,000	0	1,709	0	300	1400
February-13	4,400	3,000	0	1,400	0	100	1300
March-13	3,916	3,000	0	916	0	0	900
April-13	3,454	3,000	0	454	0	0	450
May-13	3,484	3,000	0	484	0	0	500
June-13	4,451	0	0	4,451	0	1550	1550
July-13	5,398	0	0	5,398	0	1900	1900
August-13	5,034	0	0	5,034	0	1750	1750
September-13	3,921	0	0	3,921	0	1350	1400
October-13	3,466	0	0	3,466	0	1200	1250

Contract Month	4,413						
	Projected Volume (MW)	Swap Volumes (MW)	2009 Procurement Volumes (MW)	Residual Volumes (MW)	2010 IPA Procurement (MW)	2011 IPA Procurement (MW)	2012 IPA Procurement (MW)
November-13	3,920	0	0	3,920	0	1350	1400
December-13	4,627	0	0	4,627	0	1600	1650
January-14	4,740	0	0	4,740	0	1650	1650
February-14	4,423	0	0	4,423	0	1550	1550
March-14	3,936	0	0	3,936	0	1400	1350
April-14	3,468	0	0	3,468	0	1200	1250
May-14	3,509	0	0	3,509	0	1250	1200
June-15	4,471	0	0	4,471	0	0	1550
July-14	5,423	0	0	5,423	0	0	1900
August-14	5,069	0	0	5,069	0	0	1750
September-14	3,896	0	0	3,896	0	0	1350
October-14	3,473	0	0	3,473	0	0	1200
November-14	3,931	0	0	3,931	0	0	1400
December-14	4,655	0	0	4,655	0	0	1650
January-15	4,771	0	0	4,771	0	0	1650
February-15	4,438	0	0	4,438	0	0	1550
March-15	3,963	0	0	3,963	0	0	1400
April-15	3,496	0	0	3,496	0	0	1200
May-15	3,542	0	0	3,542	0	0	1250

**Commonwealth Edison Peak Contract Volumes to Secure in 2010–2015 Procurement Cycles**

Contract Month	Peak Contract Volumes to Secure (MW)						
	Projected Volume (MW)	Swap Volumes (MW)	2009 Procurement Volumes (MW)	Residual Volumes (MW)	2010 IPA Procurement (MW)	2011 IPA Procurement (MW)	2012 IPA Procurement (MW)
June-10	5389	3000	750	1639	1650	0	0
July-10	7306	3000	2000	2306	2300	0	0
August-10	6780	3000	1650	2130	2150	0	0
September-10	4728	3000	300	1428	1450	0	0
October-10	4040	3000	0	1040	1050	0	0
November-10	4470	3000	200	1270	1250	0	0
December-10	5208	3000	700	1508	1500	0	0
January-11	5215	3000	800	1415	1400	0	0
February-11	4868	3000	550	1318	1300	0	0
March-11	4348	3000	200	1148	1150	0	0
April-11	3872	3000	0	872	850	0	0
May-11	3960	3000	0	960	950	0	0
June-11	5263	3000	0	2263	700	1550	0
July-11	7139	3000	0	4139	2000	2150	0
August-11	6664	3000	0	3664	1650	2000	0
September-11	4584	3000	0	1584	200	1400	0
October-11	3960	3000	0	960	0	950	0
November-11	4410	3000	0	1410	100	1300	0
December-11	5150	3000	0	2150	600	1550	0
January-12	5203	3000	0	2203	650	1550	0
February-12	4821	3000	0	1821	350	1450	0
March-12	4330	3000	0	1330	50	1300	0
April-12	3894	3000	0	894	0	900	0
May-12	4011	3000	0	1011	0	1000	0
June-12	5329	3000	0	2329	0	750	1600
July-12	7261	3000	0	4261	0	2100	2150
August-12	6726	3000	0	3726	0	1700	2050
September-12	4616	3000	0	1616	0	250	1350
October-12	4025	3000	0	1025	0	0	1000
November-12	4472	3000	0	1472	0	150	1300
December-12	5185	3000	0	2185	0	650	1550
January-13	5252	3000	0	2252	0	700	1550
February-13	4860	3000	0	1860	0	400	1450
March-13	4346	3000	0	1346	0	50	1300
April-13	3924	3000	0	924	0	0	900
May-13	4033	3000	0	1033	0	0	1050
June-13	5335	0	0	5335	0	1850	1900
July-13	7326	0	0	7326	0	2550	2600
August-13	6753	0	0	6753	0	2350	2400
September-13	4649	0	0	4649	0	1650	1600
October-13	4027	0	0	4027	0	1400	1400
November-13	4442	0	0	4442	0	1550	1550
December-13	5195	0	0	5195	0	1800	1850



Contract Month	Peak Contract Volumes to Secure (MW)						
	Projected Volume (MW)	Swap Volumes (MW)	2009 Procurement Volumes (MW)	Residual Volumes (MW)	2010 IPA Procurement (MW)	2011 IPA Procurement (MW)	2012 IPA Procurement (MW)
January-14	5261	0	0	5261	0	1850	1850
February-14	4853	0	0	4853	0	1700	1700
March-14	4336	0	0	4336	0	1500	1550
April-14	3909	0	0	3909	0	1350	1400
May-14	4009	0	0	4009	0	1400	1400
June-15	5357	0	0	5357	0	0	1850
July-14	7378	0	0	7378	0	0	2600
August-14	6763	0	0	6763	0	0	2350
September-14	4670	0	0	4670	0	0	1650
October-14	4017	0	0	4017	0	0	1400
November-14	4421	0	0	4421	0	0	1550
December-14	5211	0	0	5211	0	0	1800
January-15	5269	0	0	5269	0	0	1850
February-15	4883	0	0	4883	0	0	1700
March-15	4365	0	0	4365	0	0	1550
April-15	3906	0	0	3906	0	0	1350
May-15	3996	0	0	3996	0	0	1400