

COMMONWEALTH EDISON COMPANY

Load Forecast for Five-Year Planning Period
June 2025 – May 2030

July 15, 2024

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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 15th 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 2025 through May 2030.

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 non-Residential customers who purchase power and energy from ComEd under fixed-price bundled service (“Blended Service”) tariffs, other than those customers whose service has been declared competitive. Because service to certain classes of customers has been declared competitive either by statute or by the Illinois Commerce Commission (“ICC”), only Residential and non-Residential customers below 100 kW in size are eligible for Blended Service.¹

The Forecast includes the effects of energy efficiency, demand response and renewable energy resources programs. 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, 2025. 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 Forecast also addresses the impacts of demand response and energy efficiency programs on the forecast. Lastly, this Forecast discusses any supply side needs that are projected to be offset by the purchase of renewable energy resources.

B. Development of the Five-Year Load Forecast (June 1, 2025 – May 31, 2030)

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

¹ 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).

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 weekday period from 6 a.m. to 10 p.m. CPT 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” period). 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 and approved by the ICC. 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 2024 multi-year historical analysis of hourly load is very similar to the approach used in past procurement filings. The expanding deployment of Advanced Metering Infrastructure (“AMI”) within ComEd’s service territory has provided the Company with the ability to enhance its standard hourly load profiles. Data from AMI meters were utilized to develop delivery class hourly load profiles for 2015 to 2023. This data was used in the typical hourly models that have been developed and refined over the past few years. These models continue to perform well.

The 2024 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 2015 to December 2023. These are the same profiles used in ComEd’s cost of service studies. As discussed in greater detail below, the profiles show distinct and stable weather-related usage patterns that are indicative of how Residential and small non-Residential customers use electricity. 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 2021 to December 2023.

**Table II-1
Load Forecast Table (Historical Detail 2021-2023)**

ComEd Historical Actual Usage											
Historical Energy Usage in MWh for Eligible Retail Customers (Line Loss Adjusted)											
Year	Month	Residential Load		Watt-hour		Small Load (0 to 100kW)		Street Lighting Load		Total Load (MWh)	
		On-Peak	Off-Peak	On-Peak	Off-Peak	On-Peak	Off-Peak	On-Peak	Off-Peak	On-Peak	Off-Peak
2021	1	794,945	962,847	8,278	9,893	187,013	192,023	496	1,038	990,732	1,165,801
2021	2	860,734	891,440	9,505	9,645	198,321	174,232	472	988	1,069,032	1,076,305
2021	3	720,658	665,915	9,373	8,637	202,222	156,147	415	1,016	932,669	831,716
2021	4	633,369	595,759	8,296	7,846	181,895	139,089	333	990	823,894	743,684
2021	5	657,254	765,384	7,782	9,107	170,797	162,458	245	1,089	836,078	938,039
2021	6	1,153,028	1,117,910	9,030	8,188	237,283	178,869	240	1,049	1,399,581	1,306,015
2021	7	1,159,775	1,196,569	7,444	7,606	227,477	194,022	303	1,324	1,394,999	1,399,522
2021	8	1,412,679	1,306,885	7,774	7,222	261,428	202,950	250	963	1,682,130	1,518,021
2021	9	862,019	880,491	7,287	7,179	221,590	177,630	367	1,036	1,091,262	1,066,336
2021	10	674,001	784,241	7,804	8,499	180,543	160,051	444	1,017	862,791	953,809
2021	11	734,541	783,092	7,950	8,242	180,966	155,492	465	948	923,922	947,773
2021	12	939,102	871,301	9,324	8,627	220,332	171,343	570	985	1,169,328	1,052,255
Totals		10,602,105	10,821,835	99,848	100,691	2,469,866	2,064,307	4,599	12,443	13,176,417	12,999,276
2022	1	985,713	1,108,418	9,384	10,302	224,700	211,975	484	976	1,220,280	1,331,670
2022	2	848,515	893,121	7,655	7,796	205,719	178,750	405	843	1,062,294	1,080,510
2022	3	786,363	775,349	8,191	7,689	221,679	173,556	407	966	1,016,640	957,560
2022	4	668,651	725,597	7,315	7,644	185,240	160,404	317	943	861,523	894,588
2022	5	908,318	929,775	8,308	8,866	209,825	178,086	257	1,048	1,126,708	1,117,775
2022	6	1,325,918	928,692	8,784	7,575	240,184	160,826	222	893	1,575,108	1,097,985
2022	7	1,327,201	1,414,410	6,537	7,283	251,510	229,856	249	1,075	1,585,498	1,652,623
2022	8	1,391,150	1,162,168	8,913	7,766	276,273	193,839	252	900	1,676,588	1,364,674
2022	9	965,860	976,826	7,210	7,270	222,832	180,469	325	897	1,196,227	1,165,462
2022	10	665,469	746,429	6,509	7,193	182,157	161,889	404	913	854,538	916,425
2022	11	755,937	835,806	7,327	7,739	195,554	168,185	457	920	959,276	1,012,650
2022	12	939,656	1,111,104	7,589	8,565	219,323	209,960	532	949	1,167,100	1,330,577
Totals		11,568,750	11,607,693	93,721	95,688	2,634,996	2,207,794	4,310	11,323	14,301,778	13,922,498
2023	1	894,521	1,017,625	7,890	8,740	222,257	207,130	500	998	1,125,168	1,234,494
2023	2	829,560	849,784	7,647	7,737	209,259	176,781	240	487	1,046,706	1,034,789
2023	3	818,919	822,788	7,809	7,426	219,602	173,089	382	886	1,046,712	1,004,189
2023	4	623,248	761,250	6,300	7,312	185,093	171,776	434	1,319	815,075	941,658
2023	5	727,177	713,495	6,703	6,729	200,428	157,512	298	1,177	934,605	878,913
2023	6	1,062,248	939,482	5,471	5,059	224,766	163,828	188	683	1,292,673	1,109,052
2023	7	1,240,744	1,300,991	6,766	7,662	231,250	209,926	201	798	1,478,961	1,519,377
2023	8	1,360,784	1,108,216	7,560	6,631	270,215	188,025	254	835	1,638,813	1,303,707
2023	9	798,298	1,042,767	5,577	6,395	195,618	182,702	270	736	999,763	1,232,601
2023	10	715,308	722,813	5,814	5,960	194,797	154,329	372	796	916,290	883,898
2023	11	729,999	786,644	6,062	6,404	181,053	154,747	395	777	917,509	948,572
2023	12	773,740	947,648	5,888	7,154	191,244	191,122	432	775	971,305	1,146,699
Totals		10,574,546	11,013,504	79,485	83,209	2,525,582	2,130,969	3,967	10,267	13,183,580	13,237,949

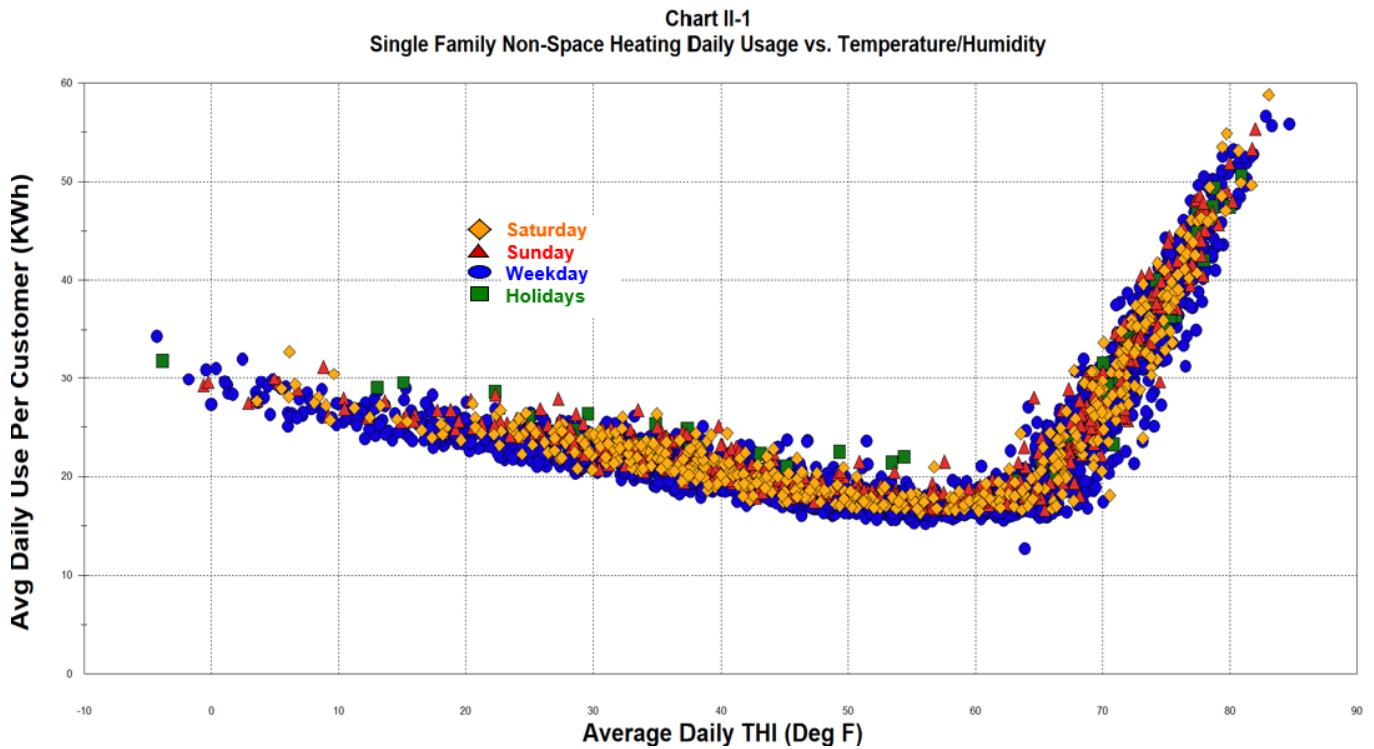
Table II-2 carries forward the total load in MWh from Table II-1 and then provides the average load for each period in MW, which is useful in determining the required volume of standard wholesale energy products.

Table II-2					
Load Forecast Table (Historical Summary 2021-2023)					
ComEd Historical Actual Usage					
Historical Energy Usage for Eligible Retail Customers					
(Line Loss Adjusted)					
Year	Month	Total Load (MWh)		Average Load (MW)	
		On-Peak	Off-Peak	On-Peak	Off-Peak
2021	1	990,732	1,165,801	3,096	2,750
2021	2	1,069,032	1,076,305	3,341	3,058
2021	3	932,669	831,716	2,534	2,212
2021	4	823,894	743,684	2,341	2,021
2021	5	836,078	938,039	2,613	2,212
2021	6	1,399,581	1,306,015	3,976	3,549
2021	7	1,394,999	1,399,522	4,152	3,430
2021	8	1,682,130	1,518,021	4,779	3,873
2021	9	1,091,262	1,066,336	3,248	2,777
2021	10	862,791	953,809	2,568	2,338
2021	11	923,922	947,773	2,750	2,468
2021	12	1,169,328	1,052,255	3,178	2,799
Totals		13,176,417	12,999,276		
2022	1	1,220,280	1,331,670	3,632	3,264
2022	2	1,062,294	1,080,510	3,320	3,070
2022	3	1,016,640	957,560	2,763	2,547
2022	4	861,523	894,588	2,564	2,330
2022	5	1,126,708	1,117,775	3,353	2,740
2022	6	1,575,108	1,097,985	4,475	2,984
2022	7	1,585,498	1,652,623	4,955	3,898
2022	8	1,676,588	1,364,674	4,556	3,629
2022	9	1,196,227	1,165,462	3,560	3,035
2022	10	854,538	916,425	2,543	2,246
2022	11	959,276	1,012,650	2,855	2,637
2022	12	1,167,100	1,330,577	3,474	3,261
Totals		14,301,778	13,922,498		
2023	1	1,125,168	1,234,494	3,349	3,026
2023	2	1,046,706	1,034,789	3,271	2,940
2023	3	1,046,712	1,004,189	2,844	2,671
2023	4	815,075	941,658	2,547	2,354
2023	5	934,605	878,913	2,655	2,242
2023	6	1,292,673	1,109,052	3,672	3,014
2023	7	1,478,961	1,519,377	4,622	3,583
2023	8	1,638,813	1,303,707	4,453	3,467
2023	9	999,763	1,232,601	3,124	3,082
2023	10	916,290	883,898	2,603	2,255
2023	11	917,509	948,572	2,731	2,470
2023	12	971,305	1,146,699	3,035	2,704
Totals		13,183,580	13,237,949		

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 usage 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 usage to obtain the forecasted procurement quantities. 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 usage 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 January 2015 to December 2023 and the average THI on those days. THI, rather than temperature alone, is used because Residential usage is sensitive to humidity. Different geometric shapes and colors are used to distinguish points representing weekdays from those depicting Saturday, Sunday, or holiday usage.

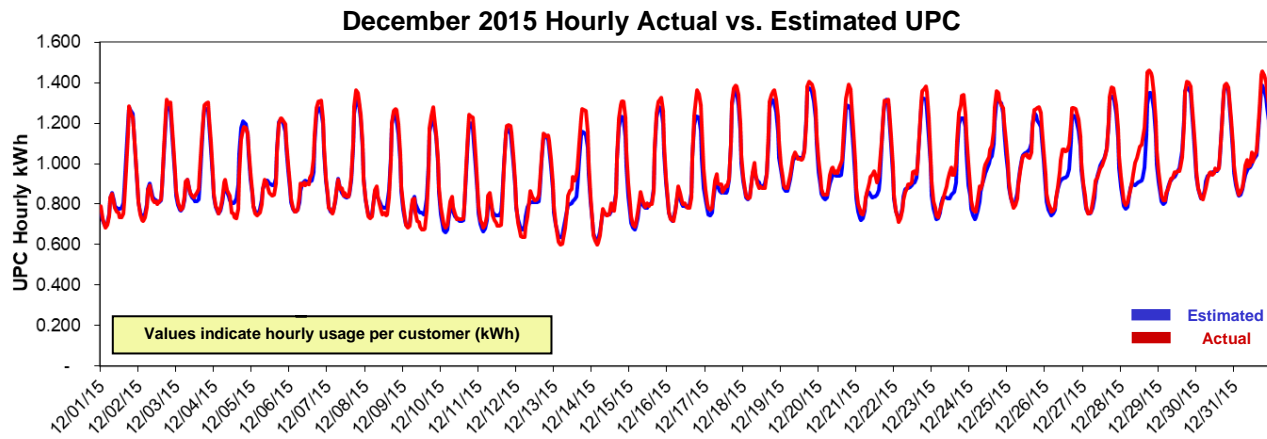
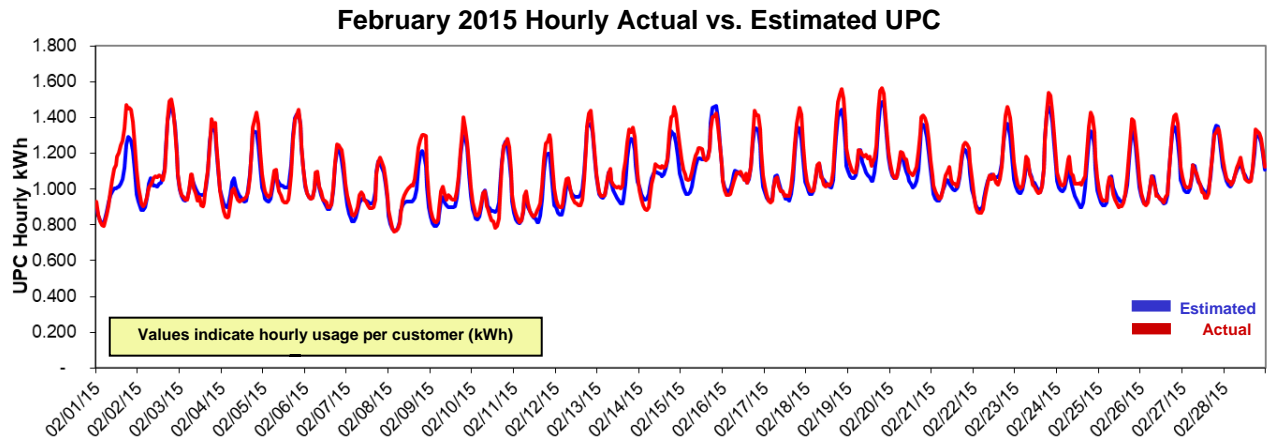
The scatter plot is very useful in understanding the relationship between customer usage and weather. If a relationship between usage and weather did not exist, then the graph would not display a clear pattern. The right side of the graph at the high end of the horizontal axis shows the days on which THI was the highest. The points at that end of the graph indicate that the highest UPC occurred when THI levels were at their peak of 75 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 level appears. From that base level, UPC gradually increases as colder temperatures are experienced.

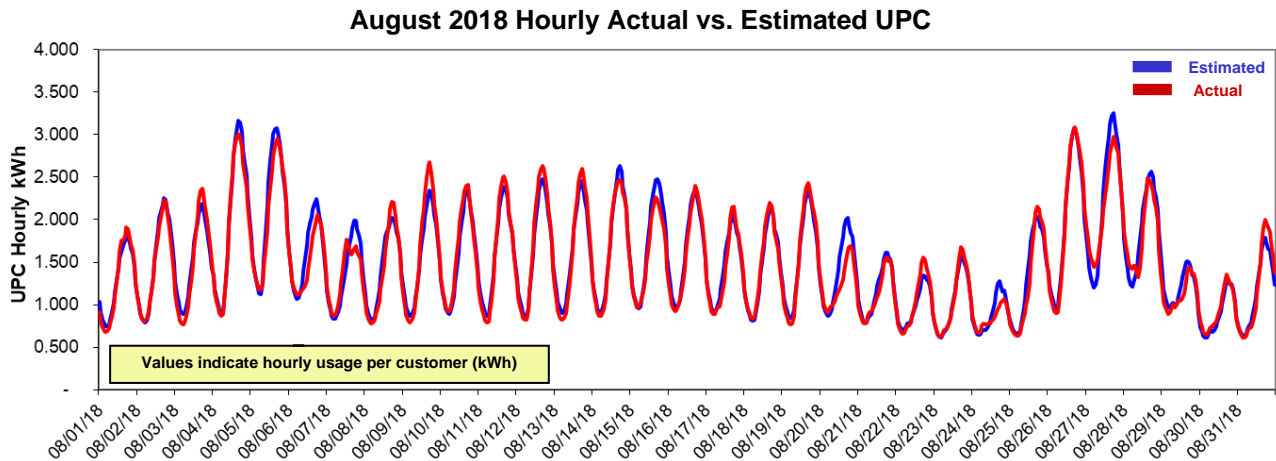
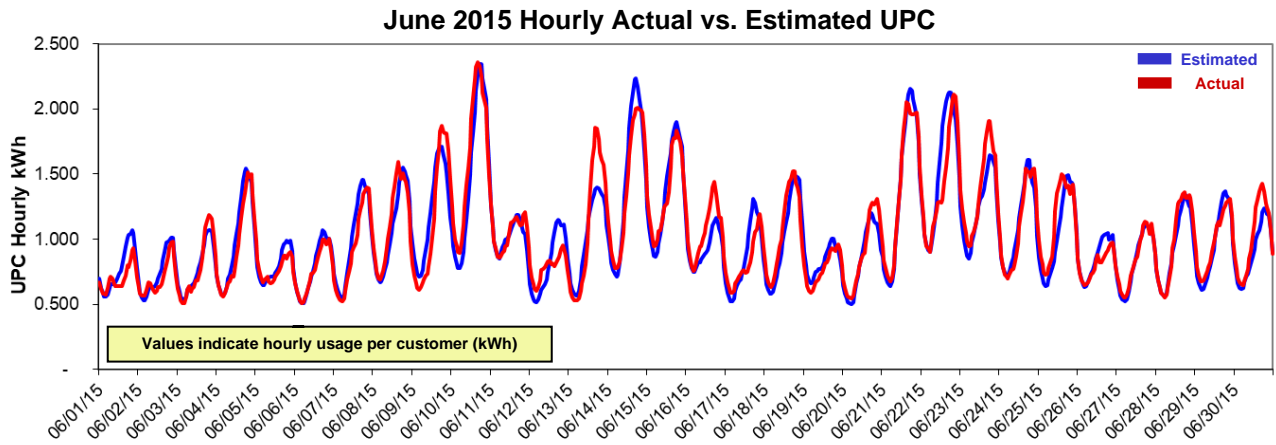
Hourly models were developed to account for the strong weather relationship shown in the graph and to account for numerous other factors that influence Residential usage. The models explicitly account for the differing effects of energy use at various temperatures. Variables are included to allow for 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. 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 estimated² values for the historical estimation period. The following charts demonstrate the performance of the model over four time periods at the hourly level during winter and summer months with warmer or colder than normal weather conditions. The four months are February 2015 (cold winter); December 2015 (warm winter); June 2015 (cool summer) and August 2018 (warm summer). The charts illustrate the model's ability to accurately estimate under varying weather conditions. The heating degree days ("HDD") in February 2015 were 1,405 (above the normal HDD of 1,046) and December 2015 was 800 (below the normal HDD of 1,069). The cooling degree days ("CDD") in June 2015 were 118 (below the normal CDD of 200) and August 2018 was 356 (above the normal CDD of 275).

² 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





In all the graphs above in Chart II-2, the red line indicates the “actual” load data and the blue line indicates the model’s estimated values, adjusted for actual weather. The charts demonstrate that the model’s estimated usage closely mirrors the actual usage and the model is effective in estimating variations in electrical usage patterns that are significantly influenced by weather conditions.

b. Switching Trends and Competitive Retail Market Analysis

In determining the expected load requirements for which standard wholesale products will be procured, it is important to provide the best possible estimate of the number of Eligible Retail Customers that are likely to be served by Retail Electric Suppliers (“RES”). That issue is considered in the following discussion, which reviews retail development in ComEd’s service territory, the entry of RES, 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 continue to be served with supply procured by ComEd.

(i) Introduction and Brief Overview of Retail Development

Retail choice is very active within ComEd's service territory as demonstrated in several ways:

1. Many Residential customers continue to participate in customer choice. Approximately 840,000 Residential customers in the ComEd service territory were taking RES supply as of April 2024 or approximately 22% of total Residential customers. RES participation was higher in the past with a monthly average of approximately 2.4 million Residential customers taking RES supply from March 2013 to May 2014, which equated to approximately 69% of total Residential customers. This high level of engagement denotes meaningful customer choice activity within the ComEd service territory which continues today.
2. Municipal Aggregation ("Muni Agg") has been an important factor in the expansion of Residential RES supply over time. In total there are approximately 359 governmental entities (i.e., municipalities, townships, or counties, hereinafter jointly referred to as "Communities") within the ComEd service territory that had approved a Muni Agg referendum as of June 2024. Approximately 200 of those Communities (or 56% of the total) were being served under a Muni Agg contract as of June 2024. There are no new referendums that we are aware of currently.
3. As noted below, there are still many Residential retailers in the ComEd service territory.
4. Since 2020 a limited number of Residential customers have an additional supply option. The Commission approved Rate RTOUPP (Residential Time of Use Pricing Pilot) on October 2, 2019 in ICC Docket No. 18-1824. This is a four-year pilot program offering an elective time of use Residential rate option and is available to no more than 1,900 Residential customers. Applicable customers can elect to take service beginning June 1, 2020. While limited in scope and overall impact to procurement volumes, it illustrates the varied supply options available to Residential customers.
5. Non-Residential customers are actively participating in customer choice including smaller-sized customers. Approximately 94% of ComEd's entire non-Residential usage is supplied through either RES or Hourly service as of April 2024. There is also meaningful participation by the smaller-sized non-Residential customers as approximately 62% of the 0 to 100 kW non-Residential delivery class was taking RES or Hourly supply in April 2024. These large and steady percentages illustrate that customer choice is very active among a variety of non-Residential customers within the ComEd service territory.

In summary, customers remain actively engaged in retail choice within the ComEd service territory.

(ii) RES Development

There continues to be many RESs within the ComEd service territory. The number of RESs over time is shown in the table below:

**Table II-3
RES Development in the ComEd Service Territory**

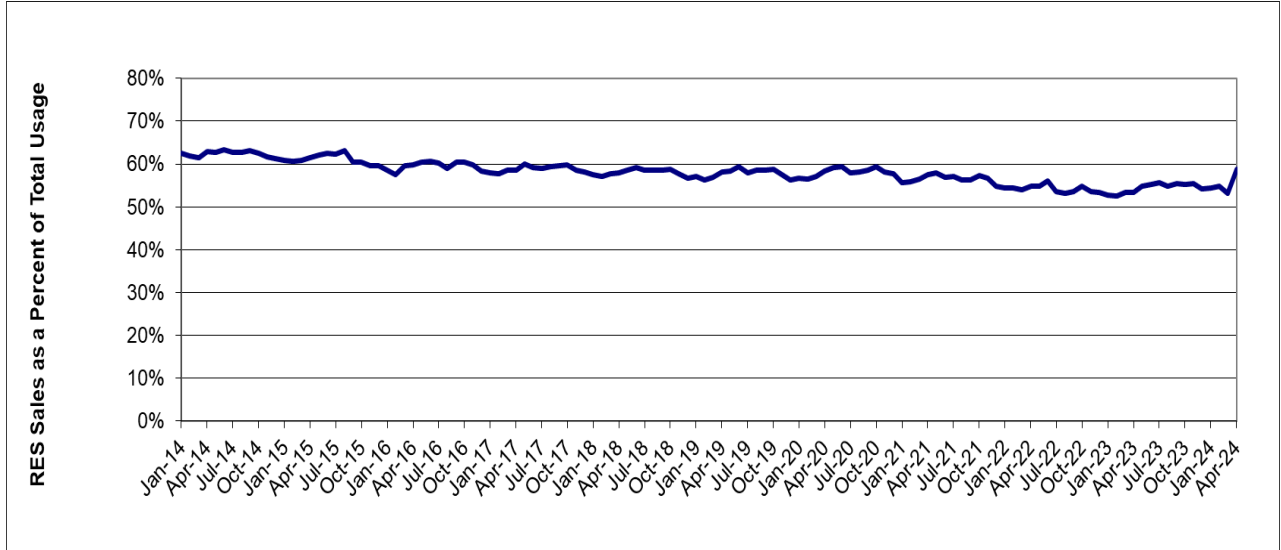
RES Category	May 2018	May 2019	May 2020	May 2021	May 2022	May 2023	May 2024
Number of Active RES ³	90	90	91	94	95	86	90
Number of RESs approved to serve Residential customers	74	78	74	79	87	75	76

From May 2018 to May 2024, we have observed a flat number of active RES in the ComEd service territory which is representative of a stable market. Also, the increase in the number of RES approved to serve Residential customers has shown a meaningful increase over time but has also stabilized in recent years. The consistently large number of RES highlights the active retail market in ComEd’s service territory.

(iii) Future Trends

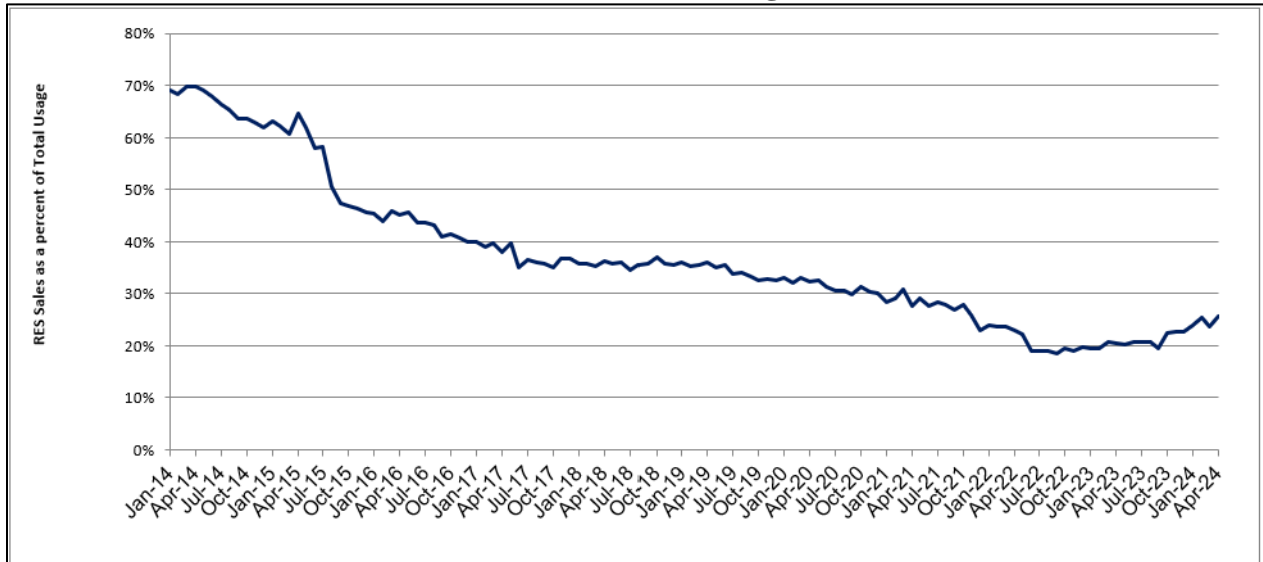
The future trends reflect an active retail market for several reasons. First, RES supply to customers in the 0 to 100 kW class continues to be significant. Chart II-3 below contains the monthly percentage of usage by RES customers from January 2014 through April 2024. The RES percentage remains at a high level averaging 55.3% in 2024 (through April) after averaging 54.3% over the previous two years. Although the RES percentage has been steadily declining since 2021 this trend has more recently stabilized and with some slight increases beginning mid-2023. The RES percentage is 58.8% as of April 2024.

**Chart II-3
0 to 100 kW Switching Statistics**



Second, after notable declines in 2022 attributed to energy pricing volatility and flat level over most of 2023, the retail market for Residential customers continues to be at a meaningful level and has recently grown. Chart II-4 contains the monthly percentage of usage by RES customers from January 2014 to April 2024. Approximately 26% of Residential customers based on usage are taking RES supply as of April 2024. This is up from roughly 21% in April 2023 and is close to pre-2022 levels (RES supply averaged approximately 28% in 2021) but remains well below the over two-thirds taking RES supply in late 2013 as various Muni Agg Communities have suspended their programs over time. However, for the purposes of judging the acceptance and engagement in retail choice by Residential customers, Chart II-4 highlights that Residential customers continue to be active participants in the retail markets.

**Chart II-4
Residential Switching Statistics**



Third, Muni Agg over the past years highlights an engaged customer base related to retail choice. Approximately 359 Communities have passed a Muni Agg referendum within the ComEd service territory. Muni Agg by its very nature requires engagement not only by public officials within each community, but also by the citizens of the community that approve the Muni Agg referendums. This large number of Communities is another indicator of an engaged customer base that is active in retail choice.

For these reasons, we expect retail markets to continue to reflect a meaningful level of engagement during the Forecast period.

(iv) Forecasted Retail Usage

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

**Table II-4
Percentage of Blended Service Usage by Class**

Month	Residential	Watt-hour	0-100 kW
Jun-16	55.9%	38.8%	36.6%
Jun-17	64.3%	41.9%	37.5%
Jun-18	63.2%	43.0%	36.9%
Jun-19	63.6%	43.0%	36.9%
Jun-20	67.5%	48.4%	36.6%
Jun-21	71.1%	49.7%	38.7%
Jun-22	79.7%	49.2%	39.8%
Jun-23	77.9%	37.2%	40.7%
Apr-24	72.8%	38.0%	37.7%
Jun-25	74.8%	36.6%	40.8%
Jun-26	75.1%	36.0%	41.0%
Jun-27	75.1%	35.5%	41.1%
Jun-28	75.1%	35.0%	41.1%
Jun-29	75.1%	34.5%	41.1%
Jun-30	75.1%	34.0%	41.1%

The main drivers of this forecast are:

1. Residential Blended supply is forecasted to increase slightly from current levels over the forecast period. From June 2022 through September 2023, Residential Blended supply averaged 78.8% with a low of 77.6% and high of 80.2%, a range of only 2.6% highlighting a very stable period in the market in terms of customer switching. However, in Q4 2023 the Residential Blended supply percentage dropped to an average of 75.8% and has continued to decline so far in 2024 averaging 73.7% through April. Wholesale natural gas prices fell last year from their 2022 highs with some further declines over the second half of 2023; the decline in Blended supply in Q4 2023 and Q1 2024 is consistent with the overall trend in wholesale energy pricing in the last year. Over the forecast period, wholesale natural gas prices are anticipated to increase from current levels over 2024 and 2025 and then flatten. Residential Blended supply is therefore forecasted to increase modestly from current levels over the next few years and flatten over the remaining forecast period.

We continue to utilize town-code level data related to Muni Agg Communities with contract renewals in 2024. This data reflects recent Muni Agg Communities' usage and decisions as of May 2024 and that data can be found in the spreadsheet entitled "2024 Muni Agg Renewal Tracking.xlsx". While there have been a fair number of communities that have already decided so far this year, they represent only 6% of Muni Agg

decisions in 2024 based on load so one needs to be cautious in the use of these early results, but they are consistent with the more recent trends in Muni Agg activity over the last few years.

Of the Muni Agg Communities with a contract renewal in 2024 which have decided, none have opted to suspend their program as of May 2024. However, this represents the decision of only 33 of the 128 communities due for renewal this year with most due to expire in the second half of the year. Last year only 4 of the 69 Muni Agg communities due to expire in 2023 chose to suspend their programs and return customers back to ComEd, or approximately 12% based on usage, in stark contrast to what was observed in 2022 with roughly 46% based on usage return to ComEd due to the volatility in wholesale electricity prices. The assumption for the remainder of 2024 is a 5% suspension rate reflective of the more recent trend in Muni Agg activity.

So far in 2024, no communities have decided to re-start their program. This is consistent with what was observed in 2022 and 2023 which also had no program re-starts. The same is anticipated for the rest of 2024 reflecting the trend in re-start activity over the last two years.

We continue to assume the City of Chicago will not reactivate its municipal aggregation program with the City's level of Residential switching remaining flat.

A development since 2019 is an increasing number of communities that are choosing a pricing option where the Muni Agg pricing is set to match the ComEd price to compare ("PTC"). The benefit to the customers is that the RES purchases renewable energy credits for the eligible customers, with some options offering 100% Green supply. Under this product not all customers are moved to RES supply. On balance, once the program has been implemented, we had typically found that the percentage of usage on RES supply drops by approximately 30 percentage points. In other words, goes from roughly 80% RES usage to 50% RES usage. This has the effect of increasing Blended usage even though a community is renewing their Muni Agg program. Lately we have observed a general decline in RES usage in the communities that choose to renew their Muni Agg programs with either a PTC or traditional rate option. In more recent years, the usage on RES supply in Muni Agg communities is dropping by about 50% in the PTC versus a traditional rate option, or in other words goes from roughly 70% RES usage with a traditional rate to 20% RES usage with the PTC option. However, as mentioned in more recent filings, the pool of communities that can choose the price to compare option for the first time continues to get smaller and thus the dynamic of increased Blended usage due to communities choosing PTC for the first time is becoming less significant to the overall switching outlook. In both 2022 and 2023 none of the communities up for renewal chose the PTC option from a traditional rate option. We expect similar low activity in 2024 with a modest 2% of total usage up for renewal assumed to choose PTC for the first time. Consequently, approximately 46 GWh of usage is projected to move to

Blended supply in 2023 due to this dynamic (2% of the approximately 4,638 GWh of total usage up for renewal will decide on this option with a corresponding 50% movement to Blended usage). This pricing product adds another layer of complexity to the switching forecast and, as in the past, we will continue to monitor it and keep the IPA informed of further developments. In total, expectations for Muni Agg activity in 2024 translate to an approximately 0.5% increase in the projected Blended supply percentage.

The last component is the switching change in non-Muni Agg communities, which includes communities that have never implemented a Muni Agg program as well as communities that have at some point in time but are currently not on a Muni Agg program. An examination of full-year 2023 data for these communities shows continued movement to Blended supply which translates to an approximately 0.6% increase in the projected Blended supply percentage.

2. The Muni Agg switching environment in 2023 and so far in 2024 reflect more typical switching behaviors prior to wholesale energy pricing pressures. Lower suspension rates are anticipated to continue with some reversal in trend in the longer-term as energy prices rise from current levels and then levelize. The continued popularity of the price to compare option has had the effect of increasing Blended usage over time but this impact is diminishing in recent years as fewer communities are switching from a traditional rate option to the PTC option. Lastly, no Muni Agg referendums are anticipated in the future as there have not been any in the past several years.
3. Non-Muni Agg Residential switching activity is also forecasted to increase consistent with the broader switching outlook. Of the Communities that have never implemented a Muni Agg program approximately 85.3% of Residential usage was on Blended supply at the end of 2023, a 0.8% increase year-over-year. This trend of increasing Blended usage among customers outside Muni Agg communities is expected to continue in the near-term of the forecast period.

Based on these considerations, a forecast of modestly increasing Residential Blended usage in the near-term reflects the increasing Blended supply in Non-Muni Agg communities partially offset by lower suspension rates in Muni Agg communities.

4. Regarding the non-Residential customer forecast there are two distinct groups. The 0 to 100 kW customer group is marginally influenced by Muni Agg activity and the Blended percentage continues to hold steady over the past several years. The 0 to 100 kW Blended usage averaged 41.0% in 2023 and has come down only slightly in 2024 averaging 40.4% from January through April. We anticipate a slight increase in Blended supply for the 0 to 100 kW customers similar to the expectations for Residential. The Watt-

hour customer group is influenced by Muni Agg activity. The percentage of Blended supply for the Watt-hour group has historically followed the same general pattern as Residential customers, but this relationship has deviated in the last few years. Blended supply in the Watt-hour group has been trending downward since 2022 with a more significant decline observed in 2023. This trend of declining Blended supply is forecasted to continue over the forecast period but more gradually than what was observed last year.

5. This Forecast is based on a combination of actual results over several years, recent switching activity and granular data (e.g., community level information). ComEd will continue to monitor and analyze Muni Agg activity (along with other switching activities) and keep the IPA informed of any developments. The best approach in forecasting switching activity, especially in a market that is responding to changing conditions, is to provide regular updates. ComEd will provide a forecast update in March 2025 and July 2025. In addition, any meaningful development related to switching activity during the remainder of 2024 will be communicated to the IPA.

In summary, the effects of those switching drivers by customer group are as follows:

1. The Blended Service portion of the Residential customer class is forecasted to be 74.3% by December 2024 increasing to about 75% in 2025 and remaining flat thereafter.
2. The Blended Service portion of the 0 to 100 kW customer class is forecasted to be 40.7% by December 2024 increasing to about 41% in 2025 and remaining flat thereafter.
3. The Blended Service portion of the Watthour customer class is forecasted to be 37.0% by December 2024 declining to about 36% in 2025 and continuing to decline roughly 0.5% per year on average over the forecast period.

c. Known or Projected Changes to Future Load

Typically, when ComEd forecasts future loads, it considers whether there are any known major customer decisions that would impact load, such as the relocation of part or all of a business. 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 is different from past conditions and could 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 for a four-year period,³ and, more recently, to continue the program post-2016.⁴ Given the most recent trends in switching activity and a general preference for Blended supply, ComEd continues to anticipate flat growth in RRTP customers after several years of strong expansion. Residential RRTP has remained around 37,000 customers from 2021-2023, with approximately 36,780 customers as of June 2024. The expectation is for RRTP customers to remain at these levels throughout the Forecast period.

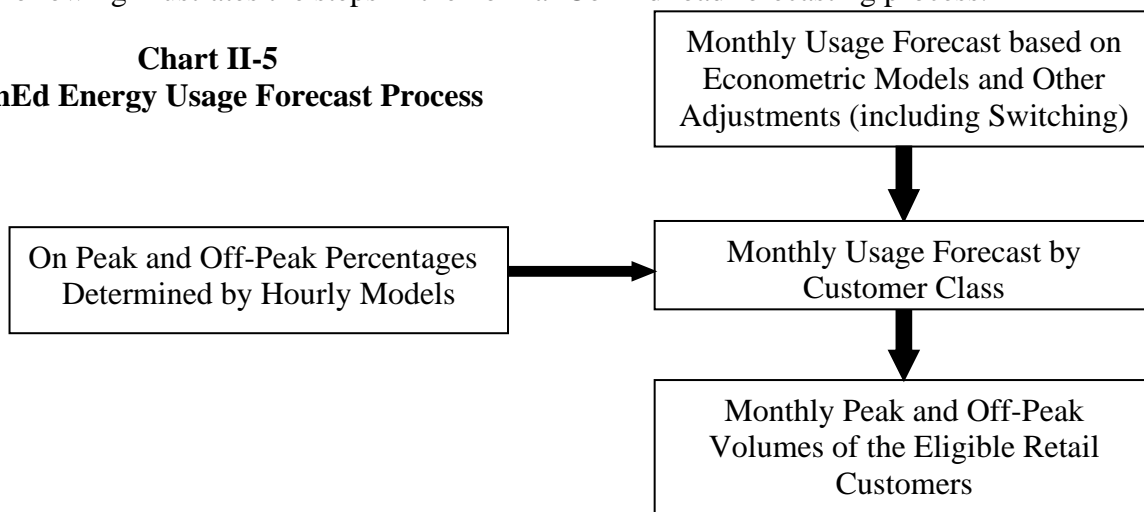
d. Growth Forecast by Customer Class

(i) Introduction

This section describes ComEd’s growth forecast by customer class for the 5-year procurement planning period beginning on June 1, 2025. 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 UPC, or usage per customer. 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 usage. 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 illustrates the steps in the normal ComEd load forecasting process.

**Chart II-5
ComEd Energy Usage Forecast Process**



The forecasting process is model-based subject to adjustments and judgment. A suite of econometric models is used to produce monthly usage 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 service classes). The forecast usage is combined with the input from

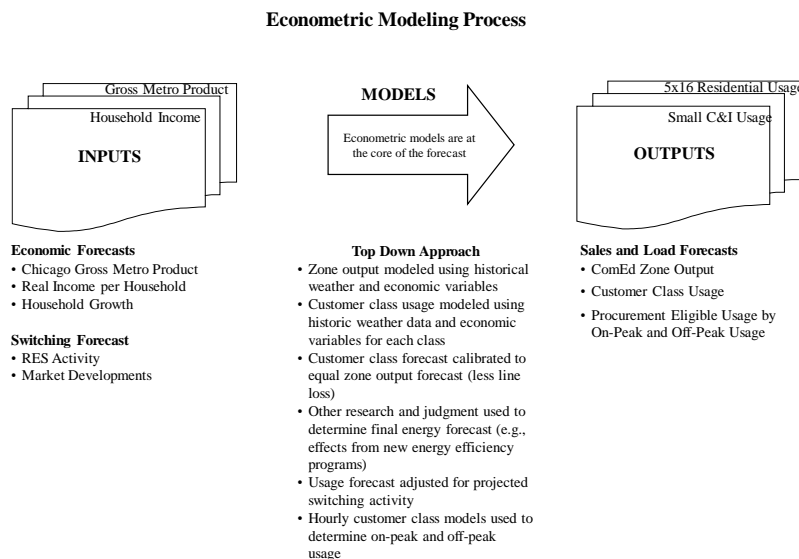
³ See ICC Order of December 20, 2006, in Docket No. 06-0617.

⁴ See ICC Order of January 20, 2016 in Docket No. 15-0602.

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 usage for its service territory are based on a “top-down” approach. The top-down approach provides a forecast of total usage for the entire service territory and allocates the usage to various customer classes using the models specific to each class. The allocation is achieved by reducing the forecasted zone usage by the inherent difference between zone and customer class usage (in particular, line loss) and then calibrating the forecasted customer class usage to equal the system-wide at the meter usage. The econometric models are based on monthly data and have very robust characteristics. Subsequent sections describe the significant relationship between energy usage and other independent variables. For example, the zone model contains sophisticated variables to reflect the effects of temperature and humidity, as well as seasonal usage patterns and other factors. The zone model includes an energy efficiency variable to capture the relationship of ComEd’s energy efficiency efforts in reducing usage. Economic variables are also included. Again, by way of example, the gross metropolitan product (“GMP”) for the Chicago and other metropolitan areas within ComEd’s service territory is a useful measure of economic activity of the service territory. As GMP (which is expressed in billions of dollars) increases, use of electric energy rises as well. There are other economic variables used in the econometric models and those are described below. The economic assumptions (i.e., economic outlook) related to the economic variables are shown in Table II-5.

The COVID-19 pandemic has impacted load both at the home and business and the Company is utilizing similar independent variables presented in last year’s filing within our models to estimate the GWh impact by customer class from dynamics like social distancing, mandated business closures, and remote work. However, with no significant changes in pandemic statistics

in the last two years, these variables do not have a significant impact over the forecast period but do well to help explain variations in historical load within the models.

Table II-5

Chicago Area Economic Forecasts - S&P Global (April 2024)												
Economic Variables	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Gross Metro Product (Billions)	\$ 688	\$ 651	\$ 686	\$ 695	\$ 705	\$ 720	\$ 728	\$ 737	\$ 748	\$ 758	\$ 768	\$ 777
# of Households (Thousands)	3,585	3,563	3,558	3,586	3,587	3,602	3,616	3,625	3,633	3,638	3,642	3,643
Total Employment (Thousands)	4,683	4,338	4,432	4,619	4,689	4,707	4,706	4,679	4,656	4,645	4,639	4,632
Non-Manufacturing	4,259	3,936	4,032	4,213	4,278	4,293	4,309	4,295	4,279	4,275	4,273	4,267
Manufacturing	424	402	400	406	411	414	396	385	377	370	366	364
U.S. GDP	20,574	20,108	21,273	21,666	22,221	22,780	23,200	23,600	24,001	24,432	24,851	25,274
Growth Rate	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Gross Metro Product	1.1%	(5.4%)	5.4%	1.4%	1.4%	2.1%	1.2%	1.3%	1.4%	1.4%	1.3%	1.2%
# of Households	0.5%	(0.6%)	(0.2%)	0.8%	0.0%	0.4%	0.4%	0.3%	0.2%	0.1%	0.1%	0.0%
Total Employment	0.5%	(7.4%)	2.2%	4.2%	1.5%	0.4%	(0.0%)	(0.6%)	(0.5%)	(0.2%)	(0.1%)	(0.2%)
Non-Manufacturing	0.6%	(7.6%)	2.4%	4.5%	1.5%	0.4%	0.4%	(0.3%)	(0.4%)	(0.1%)	(0.0%)	(0.1%)
Manufacturing	(0.1%)	(5.2%)	(0.5%)	1.5%	1.3%	0.5%	(4.2%)	(3.0%)	(2.0%)	(1.9%)	(1.1%)	(0.4%)
U.S. GDP	2.5%	(2.3%)	5.8%	1.8%	2.6%	2.5%	1.8%	1.7%	1.7%	1.8%	1.7%	1.7%

Source: S&P Global

All the variables used in each of the models in the forecasting process are identified in Appendix A-4.⁵

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

(ii) ComEd Monthly Zone Model

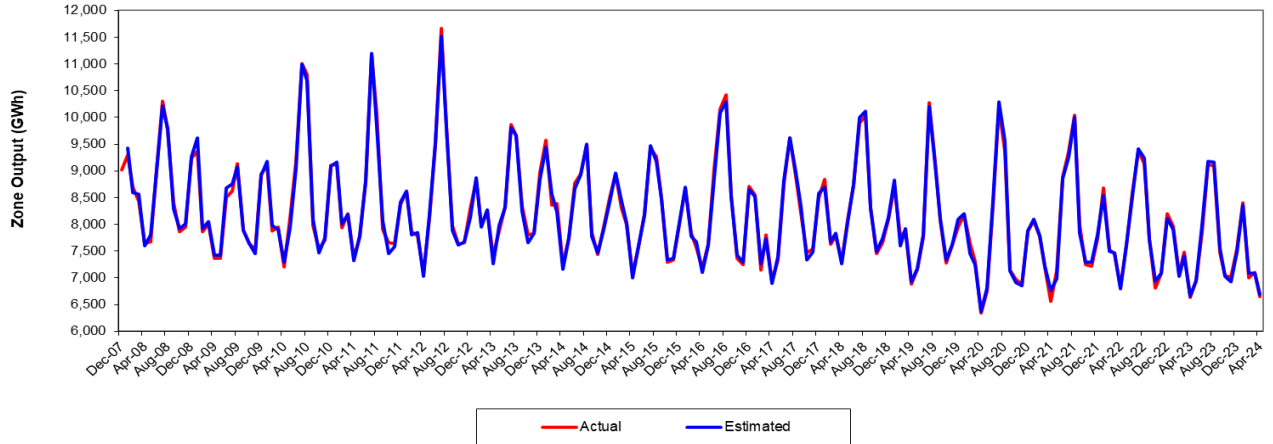
The Monthly Zone Model forecasts energy usage in gigawatt hours (GWh) for the entire ComEd service territory. The following chart shows the performance of the ComEd Monthly Zone Model by comparing actual zone output to the estimates⁶ from that model for each calendar month from January 2008 through April 2024.

⁵ Technical information about the model coefficients and regression statistics are included in Appendix A-2 and A-3.

⁶ Once again, for purposes of this Forecast, the estimates used in Charts II-7, II-8 and II-9 are based on actual weather.

Chart II-7

ComEd Monthly Zone Model: Estimated vs. Actual



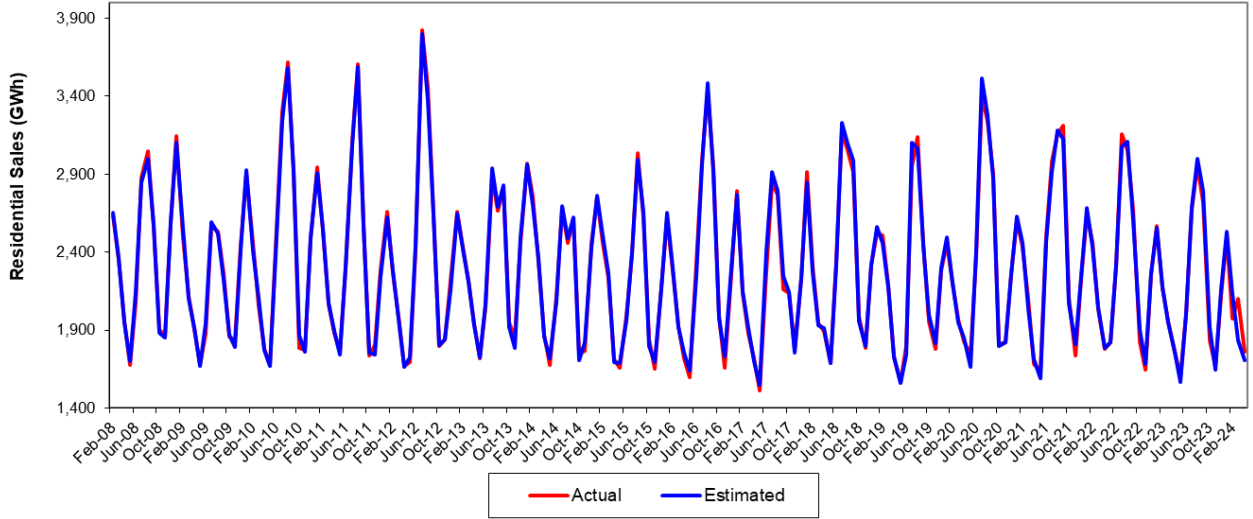
The graph line depicting the Monthly Zone Model's estimated usage (based on actual weather) and the line showing actual usage for the period are nearly identical.

(iii) ComEd Monthly Residential Model

The Monthly Residential Model forecasts monthly Residential bill-cycle usage 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 2008 to April 2024. The graph line depicting the model's estimated usage and the line with actual usage for the period are highly correlated.

Chart II-8

ComEd Monthly Residential Model: Estimated vs. Actual

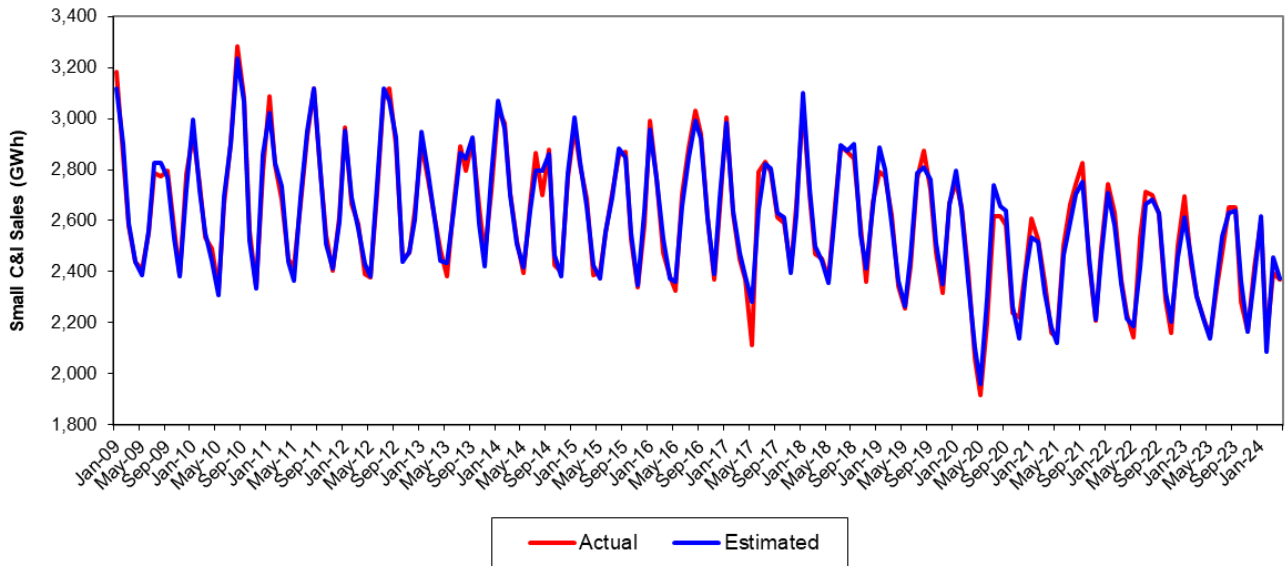


(iv) ComEd Monthly Small C&I Model

The Monthly Small C&I Model forecasts monthly Small C&I bill-cycle usage. Chart II-9 shows an estimated versus actual comparison demonstrating the model's effectiveness.

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 usage related to street lighting. This final model estimates use per day in GWh.

(vi) Growth Forecast

The forecast reflects the above assumptions and a progressively greater adoption of solar generation in the coming years.

In the case of forecasting solar adoption by retail customers, the approach is to consider as many factors as reasonably possible while acknowledging that solar penetration is still in the early stages within the ComEd service territory but growing rapidly. Along these lines, ComEd’s solar forecast uses the System Dynamics model to account for various factors influencing solar adoption. The model captures inputs related to recent IPA decisions, federal tax reform, and expected PV costs. It captures the changes due to the Clean Energy Law as of September 2021 (which was first reflected in the July 2022 filing) and the more recent Inflation Reduction Act which expanded renewable energy incentives. Thus, a significant increase in solar adoption is expected due to provisions in these laws including, but not limited to, an extension in the net metering program, increased capacity limits for installed PV systems to be eligible for net metering, increases in solar rebates, and extensions to investment tax credits. Given these various factors and decisions, the resulting forecast of solar impacts for the Residential and Small C&I customer classes is shown in Table II-5(a). Community solar remains a large portion of the solar outlook. Technically, community solar does not reduce customer usage, but for the purposes of

this Forecast it was included as a reduction to usage to reflect the ultimate quantities the IPA needs to procure.

Table II-5(a)

Calendar Year	Residential Solar (GWh)			Small C&I Solar (GWh)		
	Rooftop	Community	Total Solar	Rooftop	Community	Total Solar
2024	647.0	313.7	960.7	185.9	52.3	238.2
2025	771.4	444.2	1,215.6	223.9	74.0	298.0
2026	923.5	637.5	1,561.0	261.9	106.2	368.2
2027	1,073.2	861.7	1,934.9	299.7	143.6	443.4
2028	1,226.3	1,109.3	2,335.6	338.4	184.9	523.3
2029	1,368.6	1,371.9	2,740.4	375.0	228.6	603.6
2030	1,502.3	1,667.9	3,170.2	409.9	278.0	687.9

ComEd’s historical and forecasted weather-adjusted energy usage for the Residential and Small C&I customer classes are shown in Table II-5(b) and include the above solar assumptions.

Table II-5(b)

ComEd Weather Adjusted Annual Energy Usage				
Year	Residential		Small C&I	
	Usage (GWh)	Percent Growth	Usage (GWh)	Percent Growth
2014	27,447	0.3%	32,046	(0.3%)
2015	27,038	(1.5%)	31,771	(0.9%)
2016	26,888	(0.6%)	31,664	(0.3%)
2017	26,637	(0.9%)	31,455	(0.7%)
2018	26,573	(0.2%)	31,460	0.0%
2019	26,671	0.4%	30,853	(1.9%)
2020	26,894	0.8%	28,529	(7.5%)
2021	27,321	1.6%	29,521	3.5%
2022	26,989	(1.2%)	29,527	0.0%
2023	26,203	(2.9%)	28,929	(2.0%)
2024	26,538	1.3%	28,512	(1.4%)
2025	26,571	0.1%	28,196	(1.1%)
2026	26,775	0.8%	27,815	(1.4%)
2027	27,068	1.1%	27,464	(1.3%)
2028	27,535	1.7%	27,220	(0.9%)
2029	28,173	2.3%	27,148	(0.3%)
2030	28,939	2.7%	27,184	0.1%

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.

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 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 2024-2025 (i.e., 6/1/24 to 5/31/25) portfolio of ComEd programs includes the following:

- **Direct Load Control (“DLC”):** ComEd’s Residential central air conditioning cycling program includes two DLC switch options (i.e., 50% and 100% options) with 62,446 customers. The total reduction potential for the program is estimated to be 63 MW.
- **Voluntary Load Reduction (“VLR”) Program:** VLR is a demand response program that provides fixed compensation amounts to customers for the energy (kWh) they reduce during curtailment events. This program provides for transmission and distribution (“T&D”) compensation based on the local conditions of the T&D network. The portfolio has 965 MW of potential load reduction (ComEd Rider VLR).
- **Hourly Pricing (formerly known as Residential Real-Time Pricing - RRTP) Program:** ComEd Residential supply customers have the option to select Hourly Pricing (i.e., Rate BESH), provided they have a smart meter. The Hourly Pricing program gives customers access to hourly electricity prices that are based on the Residual ComEd Zone PJM wholesale market prices. These prices vary from hour to hour and day to day according to the actual market price of power. This program has 36,780 customers and a load reduction potential of 0.48 MW.
- **Peak Time Savings (PTS) Program:** This program is required by Section 16-108.6(g) of the PUA and was approved by the ICC in Docket No. 12-0484. The PTS program is an opt-in, market-based demand response program for customers with smart meters. Under the program, customers receive bill credits for kWh usage reduction during curtailment periods. Enrollment in Peak Time Savings is currently at 330,368 customers, enabling ComEd to clear 96 MW of summer only capacity from the program into the PJM capacity auction for the 2024-2025 Delivery Year. The 2025-2026 delivery year has yet to be determined.

(ii) Legislative Requirement

Section 8-103B(f)(4.5) of the PUA establishes a goal to implement demand response measures, providing that:

(c) 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 Act, and for customers that elect hourly service from the utility pursuant to Section 16-107 of this Act, provided those customers have not been declared competitive. This requirement continues until December 31, 2026.

Section 1-10 of the Illinois Power Agency Act defines demand response as “measures that decrease peak demand or shifts demand from peak to off-peak periods.”

Table II-6 shows the estimated annual MWs of demand response measures that will need to be implemented over the Five-year Forecast period to meet the goals set forth in the PUA:

**Table II-6
Estimated Annual Level of Demand Response Measures**

Planning Year	Peak Load (Prior Year) (MW)	Annual Goal	Annual Goal (MW)
2025 ⁷	8,092	0.1%	8.09
2026	8,215	0.1%	8.22
2027	8,250	0.1%	8.25
2028	8,340	0.1%	8.34
2029	8,484	0.1%	8.48

(iii) 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 energy usage from 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.

⁷ ComEd’s filed Energy Efficiency and Demand Response Plan (“Revised Plan 6”) in ICC Docket No. 21-0155 is a four-year plan, 2022-2025. For 2026-2030, which is not covered in Revised Plan 6, the goal is projected in a manner consistent with the Plan.

b. Impact of Energy Efficiency Programs

The PUA has several provisions regarding various types of energy efficiency programs. This section discusses the impact of each of these programs on the Forecast.

(i) Section 8-103B Energy Efficiency Measures

As of June 1, 2018, Section 8-103 of the PUA is superseded by Section 8-103B which has new energy efficiency requirements for ComEd. Section 8-103B requires ComEd to implement cost-effective energy efficiency measures beginning January 1, 2018. This provision provides cumulative kWh targets based on a percentage of the deemed average weather normalized sales of electric power and energy during calendar years 2014, 2015, and 2016 of 88,000 GWh. Additionally, there is a spending cap that limits the amount of expenditures on energy efficiency measures in any year. As of September 15, 2021, the Climate and Equitable Jobs Act (“CEJA”) modified key provisions of Section 8-103B of the PUA to include an eligible large private customer opt-out option, increased annual budgets and spending flexibility, increased income eligible expenditure requirements, electrification energy savings, and increased non-electricity energy savings.

(A) kWh Targets

The kWh target for energy efficiency is based on a percentage of the deemed average weather normalized sales of electric power and energy during calendar years 2014, 2015, and 2016 of 88,000 GWh, as reduced by the number of GWh equal to the sum of the annual consumption of eligible large private retail customers that have opted out of applicable subsections averaged across calendar years 2014, 2015, and 2016. Previously, the kWh target was an annual goal based on first year savings. Starting in 2018 under Section 8-103B, the kWh targets will be based on cumulative persisting annual savings (“CPAS”) which is defined as the total electric energy savings in a given year from measures installed in that year or in previous years, but no earlier than January 1, 2012, that are still operational and providing savings in that year because the measures have not yet reached the end of their useful lives. The table below shows the target percentages:

**Table II-7
Target Cumulative Persisting Annual Savings (“CPAS”) Percentages to Meet Energy
Efficiency Goals**

Year	Annual CPAS Percent Reduction in Energy Delivered
2018	7.8%
2019	9.1%
2020	10.4%
2021	11.8%
2022	13.1%
2023	14.4%
2024	15.7%
2025	17.0%
2026	17.9%
2027	18.8%
2028	19.7%
2029	20.6%
2030	21.5%

(B) Projected Overall Goals

The annual energy efficiency goals were determined based on the kWh targets and the rate impact criteria. ComEd has filed its first plan under Section 8-103B on June 30, 2017 (Docket 17-0312) and was approved by the ICC on September 11, 2017. As a result of CEJA’s modifications to the energy efficiency framework, ComEd filed, and the Commission approved, ComEd’s Revised 2022-2025 Energy Efficiency and Demand Response Plan (“Revised Plan 6”) in ICC Docket No. 21-0155 on April 27, 2022. Also, for purposes of this Forecast only,⁸ the allocation of the energy (kWh) targets to the various customer classes (as shown in Table II-8) was based on several years of historical data and judgment.

The above percentages represent the CPAS goal to be achieved by the end of each year for all delivery services customers (excluding some very large 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 service customers, the actual amount of GWh for Eligible Retail Customers that is impacted in each Planning Year is somewhat offsetting between customer types (as shown in Table II-8, below).

⁸ 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 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 decline in forecasted energy efficiency savings from last year’s filing is due to the implementation of the Energy Independence and Security Act (“EISA”) which eliminated Residential lighting savings and impacted a 20% reduction on Commercial lighting savings. The following chart depicts the cumulative impacts of these measures on the Forecast:

**Table II-8
Cumulative Impacts of EE on Load Forecast by Eligible Customer Type⁹**

Planning Year	Residential Allocation (GWh)	Watt-Hour Allocation (GWh)	0-100 kW Allocation (GWh)
2025	2,611	28	967
2026	2,562	29	1,024
2027	2,445	29	1,065
2028	2,325	30	1,097
2029	2,261	30	1,127
2030	2,178	30	1,134

c. Impact of Renewable Energy Resources

Section 1-75(c) of the IPA Act (20 ILCS 3855/1-75(c)) establishes goals and cost thresholds for cost effective renewable energy resources. However, other than the impact of DG solar which was discussed earlier in this document and the energy prices hedging impact related to the 2010 Long Term Renewable contracts, there is no impact on the amount of energy ComEd must procure for Eligible Retail Customers.

⁹ These amounts are cumulative from 2008, when the statutory program began.

3. Five-Year Monthly Load Forecast

Based on all the factors discussed in this section, ComEd has developed the following forecast of projected energy usage of Eligible Retail Customers for the period from June 1, 2025 through May 31, 2026:

Table II-9

ComEd Procurement Period Load Forecast (Expected Load)					
Projected Energy Usage and Average Demand For Eligible Retail Customers					
(Weather Normal, Line Loss and DSM Adjusted)					
Year	Month	Total Load (MWh)		Average Load (MW)	
		On-Peak	Off-Peak	On-Peak	Off-Peak
2025	6	1,137,816	1,113,191	3,386	2,899
2025	7	1,475,361	1,366,312	4,191	3,485
2025	8	1,303,581	1,328,379	3,880	3,256
2025	9	945,485	953,413	2,814	2,483
2025	10	901,419	840,883	2,450	2,236
2025	11	826,121	1,058,033	2,718	2,537
2025	12	1,148,675	1,179,888	3,263	3,010
2026	1	1,119,279	1,273,208	3,331	3,121
2026	2	986,033	1,032,699	3,081	2,934
2026	3	922,551	989,922	2,621	2,532
2026	4	796,848	813,860	2,264	2,212
2026	5	704,924	896,985	2,203	2,116
Totals		12,268,093	12,846,773		

The forecast set forth above shows ComEd’s expected load for the 2024 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 2025 Planning Year is set forth in Tables II-10 and II-11. 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 the forecasted usage tables, “line loss” refers only to distribution losses.

Table II-10

ComEd Procurement Period Load Forecast (Low Load)					
Projected Energy Usage and Average Demand For Eligible Retail Customers					
(Line Loss and DSM Adjusted)					
Year	Month	Total Load (MWh)		Average Load (MW)	
		On-Peak	Off-Peak	On-Peak	Off-Peak
2025	6	942,330	937,824	2,805	2,442
2025	7	1,149,219	1,102,499	3,265	2,812
2025	8	942,332	1,034,495	2,805	2,536
2025	9	891,753	858,253	2,654	2,235
2025	10	838,949	741,734	2,280	1,973
2025	11	753,763	930,888	2,479	2,232
2025	12	1,070,874	1,094,529	3,042	2,792
2026	1	1,098,106	1,181,613	3,268	2,896
2026	2	918,796	929,963	2,871	2,642
2026	3	839,142	849,373	2,384	2,172
2026	4	746,445	711,641	2,121	1,934
2026	5	666,082	765,542	2,082	1,806
Totals		10,857,791	11,138,354		

Table II-11

ComEd Procurement Period Load Forecast (High Load)					
Projected Energy Usage and Average Demand For Eligible Retail Customers					
(Line Loss and DSM Adjusted)					
Year	Month	Total Load (MWh)		Average Load (MW)	
		On-Peak	Off-Peak	On-Peak	Off-Peak
2025	6	1,274,678	1,141,794	3,794	2,973
2025	7	1,799,184	1,597,229	5,111	4,075
2025	8	1,609,531	1,598,175	4,790	3,917
2025	9	945,061	994,476	2,813	2,590
2025	10	983,583	862,120	2,673	2,293
2025	11	909,517	1,113,839	2,992	2,671
2025	12	1,323,358	1,377,497	3,760	3,514
2026	1	1,258,316	1,405,024	3,745	3,444
2026	2	1,102,642	1,109,187	3,446	3,151
2026	3	998,649	1,016,326	2,837	2,599
2026	4	895,706	815,070	2,545	2,215
2026	5	797,698	1,058,004	2,493	2,495
Totals		13,897,923	14,088,741		

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.

The Low-Load Forecast assumes that the summer weather is cooler than normal, that load growth occurs at a rate 2% less than the Expected Load Forecast and higher RES service relative to the Expected Load Forecast shown in Table II-9. In this scenario for switching purposes, Residential, Watt-Hour and 0 to 100 kW Blended usage is reduced by a total of 4% by December 2025 and 6% by December 2026. This switching change equates to approximately 1,500 GWh less for Program Year 2025 and 2,200 GWh less for Program Year 2026 in ultimate procurement quantities. The percentage of Eligible Retail Customers taking Blended Service in this switching scenario is approximately 60% (based on usage) by December 2026 compared to 66% in the Expected Load Forecast.

The High-Load Forecast assumes that the summer weather is hotter than normal, that load growth occurs at a rate 2% more than is expected, and lower RES service. In this scenario for switching purposes, Residential, Watt-Hour and 0 to 100 kW Blended usage is increased by a total of 4% by December 2025 and 6% by December 2026. This switching change equates to approximately 1,500 GWh more for Program Year 2025 and 2,200 GWh more for Program Year 2026 in ultimate procurement quantities. The percentage of Eligible Retail Customers taking Blended Service in this switching scenario is approximately 72% by December 2026 compared to 66% in the Expected Load Forecast.

The +/- 2% load growth assumption in both scenarios reflects the current economic uncertainty.

ComEd's intention is to keep the IPA informed of significant changes in its forecast during the procurement proceeding.

III. CONCLUSION

For all the reasons described here, ComEd believes that its Forecast for the period June 1, 2025 through May 31, 2030 is consistent with the requirements of the PUA and provides an appropriate approach to develop the procurement plan to acquire supply for the Eligible Retail Customers.

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

Residential Single Family Model (Hour 16)			
Variable	Coefficient	T-Stat	Notes
CONST	0.868	26.20	Constant term
Calendar.Monday	-0.093	-9.41	Daily Binary - Monday
Calendar.Tuesday	-0.092	-8.50	Daily Binary - Tuesday
Calendar.Wednesday	-0.096	-8.62	Daily Binary - Wednesday
Calendar.Thursday	-0.100	-8.97	Daily Binary - Thursday
Calendar.Friday	-0.100	-9.15	Daily Binary - Friday
Calendar.Saturday	-0.032	-4.38	Daily Binary - Saturday
Calendar.MLK	0.093	2.11	Martin Luther King's Day
Calendar.PresDay	0.068	1.56	President's Day
Calendar.GoodFri	0.012	0.30	Good Friday
Calendar.MemDay	0.161	3.57	Memorial Day
Calendar.July4th	0.030	0.57	July 4th.
Calendar.LaborDay	0.272	6.01	Labor Day
Calendar.Thanks	0.159	3.47	Thanksgiving Day
Calendar.FriAThanks	0.055	1.14	Friday after Thanksgiving Day
Calendar.XMasWkB4	0.108	1.93	Week before Christmas
Calendar.XMasEve	0.236	3.41	Christmas Eve
Calendar.XMasDay	0.158	2.79	Christmas Day
Calendar.XMasWk	0.099	1.59	Christmas Week
Calendar.NYEve	0.120	1.60	New Year's Eve Day
Calendar.NYDay	0.119	2.01	New Year's Day
DayType.Feb	-0.049	-1.27	Monthly Binary - February
DayType.Mar	-0.132	-3.60	Monthly Binary - March
DayType.MarDLS	0.004	0.11	Day That Daylight Savings Begins In March
DayType.Apr	-0.135	-3.51	Monthly Binary - April
DayType.May	-0.166	-4.21	Monthly Binary - May
DayType.Jun	0.159	3.89	Monthly Binary - June
DayType.Jul	0.180	4.16	Monthly Binary - July
DayType.Aug	0.211	4.98	Monthly Binary - August
DayType.Sep	0.126	3.00	Monthly Binary - September
DayType.Oct	0.019	0.48	Monthly Binary - October
DayType.NovDLS	0.013	0.32	Day That Daylight Savings Ends In November
DayType.Nov	-0.148	-3.47	Monthly Binary - November
DayType.Dec	-0.019	-0.49	Monthly Binary - December
DayType.JanWalk	-0.001	-1.04	Monthly Time Trend - January
DayType.FebWalk	-0.003	-1.73	Monthly Time Trend - February
DayType.MarWalk	0.000	0.06	Monthly Time Trend - March
DayType.AprWalk	0.000	0.15	Monthly Time Trend - April
DayType.MayWalk	0.007	4.82	Monthly Time Trend - May
DayType.JunWalk	-0.001	-0.71	Monthly Time Trend - June
DayType.JulWalk	0.001	0.63	Monthly Time Trend - July
DayType.AugWalk	-0.002	-1.61	Monthly Time Trend - August

DayType.SepWalk	-0.004	-2.82	Monthly Time Trend - September
DayType.OctWalk	-0.005	-3.71	Monthly Time Trend - October
DayType.NovWalk	0.005	2.92	Monthly Time Trend - November
DayType.DecWalk	0.002	0.91	Monthly Time Trend - December
HDD.SeasonHDD	0.007	12.58	Seasonal Heating Degree Days Spline
HDD.LagHDD	0.000	-0.61	1 Day Lag Seasonal Heating Degree Days Spline
HDD.Lag2HDD	0.001	1.14	2 Day Lag Seasonal Heating Degree Days Spline
THI.SeasonTDD	0.155	85.91	Seasonal Cooling Degree Days Spline
THI.LagTDD	-0.002	-0.88	1 Day Lag Seasonal Cooling Degree Days Spline
THI.Lag2TDD	0.015	8.76	2 Day Lag Seasonal Cooling Degree Days Spline
HDD.HDDWkEnd	0.000	0.91	Weekend Seasonal Heating Degree Days Spline
THI.TDDWkEnd	0.003	1.71	Weekend Seasonal Cooling Degree Days Spline
Binary.Yr2016	0.030	2.43	An End Shift to describe usage for 2016
Binary.Yr2017	-0.007	-0.56	An End Shift to describe usage for 2017
Binary.Yr2020	0.019	1.58	An End Shift to describe usage for 2020
AR(1)	0.389	23.70	Autoregressive Term

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 an absolute 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 0.95, which means that 95% of the variance in the hourly data is being explained by the model.

At the daily level, the mean absolute percent error (“MAPE”) for the summation of the hourly models is 3.3%. The 3.3% daily MAPE means that the average absolute 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 a 97% 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	4012.684	522.037	7.687
CalVars.Jan	53.825	30.211	1.782
CalVars.Feb	-411.764	56.174	-7.330
CalVars.Mar	-343.85	81.411	-4.224
CalVars.Apr	-542.536	65.677	-8.261
CalVars.May	-315.063	70.423	-4.474
CalVars.Jun	-183.914	72.930	-2.522
CalVars.Jul	29.038	84.413	0.344
CalVars.Aug	53.762	78.213	0.687
CalVars.Sep	-193.553	64.993	-2.978
CalVars.Oct	-283.26	65.351	-4.334
CalVars.Nov	-359.602	84.784	-4.241
CalVars.WkEndHols	-21.152	7.000	-3.022
CalHDD.HDD_Spring	2.238	0.191	11.738
CalHDD.HDD_Fall	2.223	0.228	9.769
CalHDD.HDD_Winter	1.869	0.085	22.000
CalCDD.SpringTDD	11.677	0.892	13.096
CalCDD.SummerTDD	12.546	0.301	41.698
CalCDD.FallTDD	9.994	1.967	5.082
Monthly.EconIndex15	4076.072	493.334	8.262
EE_Savings.Total	-1.581	0.089	-17.847
CalVars.Apr20	-208.347	76.081	-2.738
CalVars.Yr21Plus	142.421	41.810	3.406
CalVars.Yr2023	-91.457	45.170	-2.025
AR(1)	0.487	0.068	7.201

Residential Customer Class Model			
Variable	Coefficient	StdErr	T-Stat
Monthly.Jan	19.095	1.077	17.722
Monthly.Feb	18.038	1.087	16.593
Monthly.Mar	17.566	1.041	16.869
Monthly.Apr	16.918	1.015	16.660
Monthly.May	17.029	0.984	17.312
Monthly.Jun	18.126	0.989	18.333
Monthly.Jul	20.486	0.99	20.697
Monthly.Aug	20.518	0.995	20.625
Monthly.Sep	19.465	0.995	19.556
Monthly.Oct	18.471	0.983	18.781
Monthly.Nov	17.861	1.032	17.302
Monthly.Dec	18.52	1.036	17.876
CycWthrT.ResHDD_Spring	0.276	0.03	9.287
CycWthrT.ResHDD_Fall	0.226	0.040	5.678
CycWthrT.ResHDD_Winter	0.251	0.013	19.376
CycWthrT.ResCDD_Spring	2.563	0.376	6.814
CycWthrT.ResCDD_Jun	2.623	0.129	20.348
CycWthrT.ResCDD_Jul	2.234	0.064	35.037
CycWthrT.ResCDD_Aug	2.359	0.069	33.972
CycWthrT.ResCDD_Sep	2.54	0.086	29.473
CycWthrT.ResCDD_Fall	2.498	0.161	15.502
CycVars.ResEE_PerDay	-0.897	0.099	-9.094
CycVars.ResBill_MA_Index	-1.364	0.872	-1.564
Monthly.Yr2018Plus	-0.58	0.179	-3.235
Monthly.Avg_IHME_Mobility_Cyc	-0.017	0.008	-2.201
Monthly.July23	-0.897	0.377	-2.382
Monthly.Aug23	-0.789	0.374	-2.111
AR(1)	0.547	0.067	8.125

Small C&I Customer Class Model			
Variable	Coefficient	StdErr	T-Stat
Monthly.Jan	51.443	6.647	7.739
Monthly.Feb	54.582	6.668	8.186
Monthly.Mar	53.739	6.631	8.104
Monthly.Apr	52.682	6.633	7.942
Monthly.May	50.906	6.631	7.677
Monthly.Jun	51.459	6.686	7.697
Monthly.Jul	52.445	6.812	7.699
Monthly.Aug	55.776	6.848	8.145
Monthly.Sep	55.259	6.783	8.147
Monthly.Oct	54.304	6.699	8.106
Monthly.Nov	51.849	6.659	7.786
Monthly.Dec	50.353	6.665	7.555
CycWthrT.SCI_HDD	0.509	0.043	11.931
CycWthrT.SCI_CDD	2.497	0.182	13.759
CycWthrT.SCI_CDDTrend_2021_Cap	-0.044	0.009	-4.802
CycVars.SCI_Econ_Index3	28.713	6.852	4.191
SCI_DelayedBill2	-0.026	0.002	-10.475
CycVars.SCI_EEPerDay	-0.750	0.082	-9.127
Monthly.Avg_IHME_Mobility_Cyc	0.108	0.032	3.419
AR(1)	0.283	0.074	3.852

StreetLighting Class Model			
Variable	Coefficient	StdErr	T-Stat
Monthly.Jan	2.76	0.037	75.021
Monthly.Feb	2.697	0.040	67.617
Monthly.Mar	2.287	0.039	58.31
Monthly.Apr	2.14	0.039	55.412
Monthly.May	1.833	0.040	45.902
Monthly.Jun	1.813	0.037	48.823
Monthly.Jul	1.726	0.037	46.64
Monthly.Aug	1.8	0.035	51.524
Monthly.Sep	1.99	0.034	57.717
Monthly.Oct	2.222	0.035	63.352
Monthly.Nov	2.393	0.035	68.046
Monthly.Dec	2.554	0.035	74.017
CycVars.SL_DelayedBillsPerDay	-0.57	0.133	-4.295
CycVars.SL_DelayedBillsPerDayLag	1.008	0.049	20.482
CycVars.SL_EEPerDay	-0.934	0.021	-43.572

Appendix A-3

Regression Statistics	Zone	Residential	Small C&I	Street Lighting
Iterations	13	16	13	1
Adjusted Observations	196	188	193	123
Deg. of Freedom for Error	171	160	173	108
R-Squared	0.992	0.994	0.97	0.969
Adjusted R-Squared	0.991	0.993	0.967	0.965
AIC	9.181	-1.795	0.708	-4.49
BIC	9.599	-1.313	1.046	-4.147
Log-Likelihood	-1,152.85	-70	-322.14	116.61
Model Sum of Squares	183,063,715	3,724.05	10,272.48	34.25
Sum of Squared Errors	1,474,845.34	23.18	318.32	1.08
Mean Squared Error	8,624.83	0.14	1.84	0.01
Std. Error of Regression	92.87	0.38	1.36	0.1
Mean Abs. Dev. (MAD)	68.79	0.29	1.05	0.07
Mean Abs. % Err. (MAPE)	0.84%	1.36%	1.24%	4.18%
Durbin-Watson Statistic	2.108	1.895	2.014	1.176
Ljung-Box Statistic	22.5	18.86	13.79	46.76
Prob (Ljung-Box)	0.5496	0.7593	0.9512	0.0036
Prob (Jarque-Bera)	0.89	0.647	0.7582	0.036

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). ComEd's weather normals are based on the 30-year time period of 1994 to 2023 for the forecast years of 2025 to 2029. The following models are used in producing the energy usage 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 Monthly Zone Model is monthly zone energy usage for the ComEd service territory. The monthly zone usage is in GWh units.

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 WkEndHols variable informs the model of the number of weekend days and holidays within each calendar month
- The EconIndex15 variable is a composite economic variable that weights the contributions of GMP, US Gross Domestic Product ("GDP"), households, manufacturing employment and non-manufacturing employment in the ComEd service territory. GMP is the gross metropolitan product for the Chicago metropolitan area and includes other metropolitan areas within ComEd's service territory. The variable measures economic activity for the ComEd service territory. Both the GMP and GDP are adjusted for inflation and obtained from IHS Economics. Further, the variables are adjusted for the number of weekends (and holidays) and weekdays within a calendar month because overall energy usage for a given month is a function of those daily influences. The variables' units are

billions of dollars. The households component is the total number of households within the ComEd service territory. This economic variable reflects the effect of a growing customer base on energy usage. This variable is also adjusted for the number of weekends, holidays, and weekdays within a calendar month. Both manufacturing and non-manufacturing employment are measured for the ComEd service territory and are also adjusted for the number of weekdays, weekends, and holidays. The five economic variables are each indexed to January 2008 and then weighted based on an exponential formula with each of these economic variables receiving a roughly one-fifth weighting.

- The EE_Savings.Total variable is composed of estimated monthly cumulative gross energy efficiency savings across ComEd's Residential, Small C&I, Large C&I and Streetlighting customer class programs. This variable is intended to capture the overall trend of energy efficiency activity in the ComEd service territory by ComEd sponsored programs (e.g., lightbulbs, home energy reports).
- 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 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 Year 2021 Plus variable is a binary variable designed to capture the most recent usage activity within the model. It is a binary variable with the unit one for all months beginning with January 2021 and thereafter. By forcing all the residuals to sum to zero for the months January 2021 to present, this variable is useful for forecasting purposes as it ensures that the forecasted usage is closely aligned with the most recent usage pattern.
- The April 2020 variable is a binary variable with the unit one for the month of April in year 2020.
- The Year 2023 variable is a binary variable with the unit one for all months in year 2023.

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.

ComEd Residential Model

The dependent variable in the Residential Model is Residential use per customer per day and the units are kWh per customer per day.

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 Monthly Bill (Moving Average) Index 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 usage, to form a single monthly bill. The monthly bill was also adjusted for the Chicago CPI-U. A 12-month moving average is calculated for each month (average of the current month and the 11 preceding months). Lastly, this variable

is indexed to January 2008. This variable reflects the influence of electricity charges/prices over time related to consumer behavior.

- See EE_Savings.Total variable in the Zone Model section above for description. The ResEE_PerDay variable is a measure of gross energy efficiency savings on a per customer per day basis for the Residential customer class.
- The Year 2018 Plus variable is a binary variable designed to capture the most recent usage activity within the model. It is a binary variable with the unit one for all months beginning with January 2018 and thereafter. By forcing all the residuals to sum to zero for the months January 2018 to present, this variable is useful for forecasting purposes as it ensures that the forecasted usage is closely aligned with the most recent usage pattern.
- The July 2023 variable is a binary variable with the unit one for the month of July in year 2023.
- The August 2023 variable is a binary variable with the unit one for the month of August in year 2023.
- The Avg_IHME_Mobility_Cyc variable is designed to capture the impacts of the COVID-19 pandemic on usage. It is an estimate of the monthly percentage deviation of customer mobility (i.e., movement in and out of the household) from a pre-COVID baseline due the dynamics of social distancing, mandated business closures and remote work over the last few years.
- 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.

ComEd Small C&I Model

The dependent variable in the Small C&I Model 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 Small C&I Economic Index variable is a composite economic variable that weights the contributions of GMP and non-manufacturing employment in the ComEd service territory. These economic variables are each indexed to January 2008 and then weighted based on an exponential formula with a weighting of employment (80%) and GMP (20%). The GMP variable is defined in the Zone model description above and 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.

- See EE_Savings.Total variable in the Zone Model section above for description. The SCI_EEPerDay variable is a measure of gross energy efficiency savings on a per day basis for the Small C&I customer class.
- See Avg_IHME_Mobility_Cyc variable in the Residential Model section above for description. The Avg_IHME_Mobility_Cyc variable is intended to capture the impacts of the COVID-19 pandemic on Small C&I usage.
- The Delayed Bill variable is the month over month (current vs. one month prior) variance in the Small C&I's estimated usage (GWh) of bills that are delayed beginning in October 2009. This variable is used to inform the model about an increase in delayed bill activity primarily in 2010.

ComEd Street Light Model

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

- Monthly binary variables and a shift variable are similar in concept to the Monthly Zone Model.
- The Delayed Bill Per Day variable is the current month's estimated Streetlight usage (GWh) of bills that are delayed beginning in January 2008 on a per day basis.
- The Delayed Bill Per Day Lag variable is the previous month's estimated Streetlight usage (GWh) of bills that are delayed beginning in January 2008 on a per day basis.
- See EE_Savings.Total variable in the Zone Model section above for description. The SL_EEPerDay variable is a measure of gross energy efficiency savings on a per day basis for the Streetlight customer class.

Appendix B-1

ComEd Procurement Period Load Forecast (Expected Load) Projected Energy Usage and Average Demand For Eligible Retail Customers (Weather Normal, Line Loss and DSM Adjusted)					
Year	Month	Total Load (MWh)		Average Load (MW)	
		On-Peak	Off-Peak	On-Peak	Off-Peak
2025	6	1,137,816	1,113,191	3,386	2,899
2025	7	1,475,361	1,366,312	4,191	3,485
2025	8	1,303,581	1,328,379	3,880	3,256
2025	9	945,485	953,413	2,814	2,483
2025	10	901,419	840,883	2,450	2,236
2025	11	826,121	1,058,033	2,718	2,537
2025	12	1,148,675	1,179,888	3,263	3,010
2026	1	1,119,279	1,273,208	3,331	3,121
2026	2	986,033	1,032,699	3,081	2,934
2026	3	922,551	989,922	2,621	2,532
2026	4	796,848	813,860	2,264	2,212
2026	5	704,924	896,985	2,203	2,116
2026	6	1,168,499	1,064,081	3,320	2,892
2026	7	1,505,105	1,304,903	4,090	3,470
2026	8	1,277,334	1,328,119	3,802	3,255
2026	9	926,722	948,073	2,758	2,469
2026	10	849,894	867,273	2,414	2,212
2026	11	872,734	1,020,450	2,727	2,545
2026	12	1,147,683	1,183,041	3,260	3,018
2027	1	1,055,588	1,320,652	3,299	3,115
2027	2	974,486	1,035,397	3,045	2,941
2027	3	947,936	957,075	2,576	2,552
2027	4	769,328	815,367	2,186	2,216
2027	5	680,472	888,708	2,126	2,096
2027	6	1,152,273	1,049,780	3,274	2,853
2027	7	1,345,301	1,419,519	4,004	3,479
2027	8	1,320,701	1,272,417	3,752	3,246
2027	9	911,366	943,066	2,712	2,456
2027	10	794,500	895,754	2,365	2,195
2027	11	912,653	988,633	2,716	2,568
2027	12	1,199,473	1,131,715	3,259	3,010
2028	1	1,108,631	1,264,813	3,299	3,100
2028	2	997,230	1,047,234	2,968	2,909
2028	3	929,927	960,892	2,527	2,562
2028	4	682,269	860,837	2,132	2,152
2028	5	739,081	825,724	2,100	2,106
2028	6	1,137,125	1,039,184	3,230	2,824
2028	7	1,261,264	1,460,454	3,941	3,444
2028	8	1,370,300	1,216,347	3,724	3,235
2028	9	843,407	988,210	2,636	2,471
2028	10	827,939	870,955	2,352	2,222

**ComEd Procurement Period Load Forecast (Expected Load)
 Projected Energy Usage and Average Demand For Eligible Retail Customers
 (Weather Normal, Line Loss and DSM Adjusted)**

Year	Month	Total Load (MWh)		Average Load (MW)	
		On-Peak	Off-Peak	On-Peak	Off-Peak
2028	11	916,940	993,370	2,729	2,580
2028	12	1,030,447	1,287,496	3,220	3,037
2029	1	1,177,149	1,236,831	3,344	3,155
2029	2	964,924	1,047,916	3,015	2,977
2029	3	882,570	995,023	2,507	2,545
2029	4	717,728	827,506	2,136	2,155
2029	5	727,871	823,224	2,068	2,100
2029	6	1,059,512	1,094,740	3,153	2,851
2029	7	1,314,883	1,413,979	3,913	3,466
2029	8	1,361,177	1,225,767	3,699	3,260
2029	9	788,992	1,033,982	2,595	2,486
2029	10	854,627	862,714	2,322	2,294
2029	11	934,809	997,055	2,782	2,590
2029	12	1,038,899	1,307,420	3,247	3,084
2030	1	1,179,410	1,259,254	3,351	3,212
2030	2	967,817	1,064,081	3,024	3,023
2030	3	839,128	1,035,823	2,497	2,545
2030	4	738,001	820,978	2,097	2,231
2030	5	720,940	822,678	2,048	2,099
Totals		60,193,138	63,965,283		

Appendix B-2

ComEd Procurement Period Load Forecast (Low Load)					
Projected Energy Usage and Average Demand For Eligible Retail Customers					
(Weather Normal, Line Loss and DSM Adjusted)					
Year	Month	Total Load (MWh)		Average Load (MW)	
		On-Peak	Off-Peak	On-Peak	Off-Peak
2025	6	942,330	937,824	2,805	2,442
2025	7	1,149,219	1,102,499	3,265	2,812
2025	8	942,332	1,034,495	2,805	2,536
2025	9	891,753	858,253	2,654	2,235
2025	10	838,949	741,734	2,280	1,973
2025	11	753,763	930,888	2,479	2,232
2025	12	1,070,874	1,094,529	3,042	2,792
2026	1	1,098,106	1,181,613	3,268	2,896
2026	2	918,796	929,963	2,871	2,642
2026	3	839,142	849,373	2,384	2,172
2026	4	746,445	711,641	2,121	1,934
2026	5	666,082	765,542	2,082	1,806
2026	6	944,650	822,929	2,684	2,236
2026	7	1,161,874	949,363	3,157	2,525
2026	8	907,543	947,351	2,701	2,322
2026	9	830,145	807,116	2,471	2,102
2026	10	748,156	727,578	2,125	1,856
2026	11	749,847	854,948	2,343	2,132
2026	12	1,011,236	1,044,882	2,873	2,666
2027	1	983,916	1,169,668	3,075	2,759
2027	2	884,593	870,108	2,764	2,472
2027	3	839,420	767,445	2,281	2,047
2027	4	704,919	668,521	2,003	1,817
2027	5	638,518	707,493	1,995	1,669
2027	6	927,659	751,397	2,635	2,042
2027	7	1,027,906	978,588	3,059	2,399
2027	8	962,641	825,496	2,735	2,106
2027	9	790,207	782,887	2,352	2,039
2027	10	684,554	730,190	2,037	1,790
2027	11	773,540	801,603	2,302	2,082
2027	12	1,046,317	969,069	2,843	2,577
2028	1	997,666	1,111,006	2,969	2,723
2028	2	884,124	858,973	2,631	2,386
2028	3	810,355	751,211	2,202	2,003
2028	4	617,252	691,962	1,929	1,730
2028	5	659,301	655,459	1,873	1,672
2028	6	905,253	719,675	2,572	1,956
2028	7	929,269	1,005,275	2,904	2,371
2028	8	961,415	785,426	2,613	2,089
2028	9	733,277	788,536	2,291	1,971
2028	10	705,793	687,433	2,005	1,754

**ComEd Procurement Period Load Forecast (Low Load)
 Projected Energy Usage and Average Demand For Eligible Retail Customers
 (Weather Normal, Line Loss and DSM Adjusted)**

Year	Month	Total Load (MWh)		Average Load (MW)	
		On-Peak	Off-Peak	On-Peak	Off-Peak
2028	11	767,330	783,794	2,284	2,036
2028	12	890,314	1,073,498	2,782	2,532
2029	1	1,041,749	1,061,330	2,960	2,707
2029	2	833,829	854,051	2,606	2,426
2029	3	753,716	766,104	2,141	1,959
2029	4	639,810	644,524	1,904	1,678
2029	5	631,762	644,388	1,795	1,644
2029	6	806,903	768,606	2,401	2,002
2029	7	927,688	972,559	2,761	2,384
2029	8	937,001	774,019	2,546	2,059
2029	9	679,639	804,110	2,236	1,933
2029	10	735,279	645,178	1,998	1,716
2029	11	765,531	771,933	2,278	2,005
2029	12	880,488	1,068,635	2,752	2,520
2030	1	1,036,785	1,045,511	2,945	2,667
2030	2	827,498	842,486	2,586	2,393
2030	3	703,724	783,111	2,094	1,924
2030	4	660,408	608,733	1,876	1,654
2030	5	640,785	602,942	1,820	1,538
Totals		50,839,376	50,885,454		

Appendix B-3

ComEd Procurement Period Load Forecast (High Load)					
Projected Energy Usage and Average Demand For Eligible Retail Customers					
(Weather Normal, Line Loss and DSM Adjusted)					
Year	Month	Total Load (MWh)		Average Load (MW)	
		On-Peak	Off-Peak	On-Peak	Off-Peak
2025	6	1,274,678	1,141,794	3,794	2,973
2025	7	1,799,184	1,597,229	5,111	4,075
2025	8	1,609,531	1,598,175	4,790	3,917
2025	9	945,061	994,476	2,813	2,590
2025	10	983,583	862,120	2,673	2,293
2025	11	909,517	1,113,839	2,992	2,671
2025	12	1,323,358	1,377,497	3,760	3,514
2026	1	1,258,316	1,405,024	3,745	3,444
2026	2	1,102,642	1,109,187	3,446	3,151
2026	3	998,649	1,016,326	2,837	2,599
2026	4	895,706	815,070	2,545	2,215
2026	5	797,698	1,058,004	2,493	2,495
2026	6	1,383,531	1,132,463	3,930	3,077
2026	7	1,959,978	1,563,694	5,326	4,159
2026	8	1,683,417	1,648,277	5,010	4,040
2026	9	1,037,157	973,856	3,087	2,536
2026	10	969,153	941,423	2,753	2,402
2026	11	1,008,683	1,124,176	3,152	2,803
2026	12	1,398,649	1,436,824	3,973	3,665
2027	1	1,242,984	1,525,229	3,884	3,597
2027	2	1,152,088	1,147,379	3,600	3,260
2027	3	1,082,781	1,009,210	2,942	2,691
2027	4	915,166	835,950	2,600	2,272
2027	5	868,003	1,018,641	2,713	2,402
2027	6	1,376,979	1,191,196	3,912	3,237
2027	7	1,818,196	1,760,984	5,411	4,316
2027	8	1,804,288	1,610,271	5,126	4,108
2027	9	1,076,488	967,518	3,204	2,520
2027	10	932,605	995,538	2,776	2,440
2027	11	1,073,843	1,116,009	3,196	2,899
2027	12	1,508,330	1,384,047	4,099	3,681
2028	1	1,338,714	1,481,882	3,984	3,632
2028	2	1,205,874	1,178,442	3,589	3,273
2028	3	1,103,765	1,014,824	2,999	2,706
2028	4	812,154	928,049	2,538	2,320
2028	5	1,016,238	903,744	2,887	2,305
2028	6	1,393,059	1,197,233	3,958	3,253
2028	7	1,751,073	1,844,819	5,472	4,351
2028	8	1,920,749	1,555,060	5,219	4,136
2028	9	990,972	1,069,069	3,097	2,673
2028	10	1,006,999	970,061	2,861	2,475

**ComEd Procurement Period Load Forecast (High Load)
 Projected Energy Usage and Average Demand For Eligible Retail Customers
 (Weather Normal, Line Loss and DSM Adjusted)**

Year	Month	Total Load (MWh)		Average Load (MW)	
		On-Peak	Off-Peak	On-Peak	Off-Peak
2028	11	1,104,063	1,140,138	3,286	2,961
2028	12	1,350,286	1,583,677	4,220	3,735
2029	1	1,456,659	1,468,774	4,138	3,747
2029	2	1,191,249	1,205,519	3,723	3,425
2029	3	1,080,381	1,065,803	3,069	2,726
2029	4	876,217	902,053	2,608	2,349
2029	5	1,012,888	929,332	2,878	2,371
2029	6	1,379,623	1,236,789	4,106	3,221
2029	7	1,807,257	1,871,782	5,379	4,588
2029	8	1,976,611	1,570,502	5,371	4,177
2029	9	919,159	1,172,718	3,024	2,819
2029	10	1,088,181	949,928	2,957	2,526
2029	11	1,156,989	1,157,196	3,443	3,006
2029	12	1,374,338	1,654,833	4,295	3,903
2030	1	1,497,990	1,516,239	4,256	3,868
2030	2	1,229,120	1,238,563	3,841	3,519
2030	3	1,049,805	1,136,754	3,124	2,793
2030	4	954,744	874,755	2,712	2,377
2030	5	998,620	973,743	2,837	2,484
Totals		74,234,019	73,263,707		