



July 15, 2023

Dear: Mr. Granahan,

MidAmerican is submitting its final hourly load and generation data for the July 15, 2023 deadline for submission to Illinois Commerce. Please review the data and let me know if there are any questions or concerns with this information.

MidAmerican is transitioning its forecasted load and capability to align with MISO's new seasonal resource adequacy construct beginning with this filing. The following information is being supplied with this filing.

1. Load Forecast Documentation_IL_07152023.pdf – This file contains a discussion of load forecast methodology.
2. IL_Base_Fcst_EST_07152023.xlsx – This file contains the required base scenario MidAmerican Illinois hourly load forecast from January 1, 2023, through December 31, 2029.
3. IL_Base_Retail_Sales_Forecast_07152023.xlsx – This file contains MidAmerican Illinois hourly retail sales load forecast from January 1, 2023, through December 31, 2050.
4. IL_High_Fcst_EST_07152023.xlsx – This file contains a high scenario MidAmerican Illinois hourly load forecast from January 1, 2023, through December 31, 2029.
5. IL_Low_Fcst_EST_07152023.xlsx – This file contains a low scenario MidAmerican Illinois hourly load forecast from January 1, 2023, through December 31, 2029.
6. IL_NCP_Forecast_07152023.xlsx – This file contains the noncoincident peak demand forecast.
7. MWh_Sales_and_NCP_MW_High_Scenario.xlsx – This file contains the MWh sales forecast and the non-coincident peak demand forecast supporting the high hourly forecast scenario.
8. MWh_Sales_and_NCP_MW_Low_Scenario.xlsx – This file contains the MWh sales forecast and the non-coincident peak demand forecast supporting the low hourly forecast scenario.
9. Forecasted Load and Capability_Fall 2023_07152023.xlsx – This file contains MidAmerican's forecasted load and capability utilizing Seasonal Accredited Capacity ratings. Different from previous submissions, this contains four seasonal Load and Capability tabs consistent with the MISO Seasonal Capacity Construct approved in September 2023.
10. Historical and Forecasted SAC_Fall 2023_07152023.xlsx – this file shows historical seasonal accredited capacity (SAC) values for the Illinois historical resources. Due to the fact that SAC values are new for the 2023/2024 planning year, historical values are not shown.
11. Generation and Load Data - MEC Projection Fall 2023_07152023.xlsx. This file contains the hourly MWh generation and sales forecast, including a summary tab computing the on and off-peak short energy positions and a tab summarizing the resources required, the resources already under contract, and the quantities to be procured.

Sincerely,

A handwritten signature in black ink that reads "Kristina Grandquist". The signature is written in a cursive, flowing style.

Kristina Grandquist
Business Support Analyst
Transmission Development & Policy
1-515-281-2483

Cc: Torsten Clausen, Staff (Torsten.Clausen@illinois.gov); and Vincent Musco, Bates White (Vincent.musco@bateswhite.com)

Methodology for the 2023 Plan Illinois Electric Customers and Sales Forecasts

Note: MEC has projected retail kWh sales impacts due to COVID-19 and has incorporated those projected impacts into the retail kWh sales forecast and the peak demand forecast.

The 2023 Plan electric customer and sales forecasts were produced using econometric models on a monthly basis and are carried out in three steps using a top-down approach:

Step 1: The aggregate customer numbers were forecasted directly by revenue class:

- Residential
- Commercial
- Industrial
- Public authority.

Industrial kWh sales were forecast directly. The street lighting forecasts were forecast using trending. In this class, the current customer numbers were assumed to remain constant while the corresponding energy sales were projected to grow approximately 0.05% annually in IL. Similar to the peak demand forecast, the Quad Cities' economic and demographic drivers are assumed to be a good proxy for MidAmerican Illinois service territory electric sales and customers in these forecasts.

Step 2: For residential, commercial and public authority, econometric models were built to forecast kWh per customer. The resulting kWh per customer forecasts were multiplied by the appropriate customer forecasts to arrive at a kWh sales forecast. For industrial, the kWh per customer values for each revenue class were calculated using customer and sales forecasts, and employed to check the presence of any discontinuity between the historical and forecasted values.

Step 3: The projected customers and sales numbers were modeled using data specific to the area being forecast. Economic data for the Quad Cities' metropolitan statistical area was used in building the models.

Economic and demographic variables

Some variables, such as customer numbers, price, sales, revenue class, jurisdiction, etc., were obtained internally from the company database while other data, such as economic, demographic and weather, were received from external sources.

The economic and demographic data for the models were obtained from the IHS Markit, Inc., a part of S&P Global database. The economic and demographic data forecast was performed by IHS Markit, Inc., a part of S&P Global in January 2022. The list of variables considered for the electric sales and customer forecasts is shown in Table 1. For MEC's Illinois service territory, economic and demographic variables specific to the Quad Cities metropolitan area were used in the forecasting process. The Quad Cities area encompasses MEC's Illinois service territory.

Table 1: List of economic and demographic variables considered for the 2023 Plan forecasts

Quad Cities MSA	
1	Real Gross Metropolitan Area Product (Millions 2012\$)
2	Real Gross Metropolitan Area Product, Government, State and Local (Millions 2012\$)
3	Real Gross Metropolitan Area Product, Manufacturing (Millions 2012\$)
4	Population (Thousands)
5	Households, Family and Non-Family (Thousands)
6	Employment (NAICS), Total Non-Farm (Thousands)
7	Employment (NAICS), State and Local Government (Thousands)

Weather variables

The weather variables (derived from conditions at the Moline International Airport) used in the present forecast are:

Current month and previous month cooling degree days (CDD)

Current month and previous month heating degree days (HDD)

The present energy forecasts are based on billed data. This means that the sales numbers reflect, in part, the weather conditions from the previous month as well as the weather conditions for the current month, depending on the meter read date. To take this into account, both current month and previous month degree days are used in the modeling process. The forecasts used actual weather values for the historical period and normal weather values for the forecast period. For the 2023 Plan electric kWh sales forecast, normal weather was defined as the average monthly degree days from 2002-2021.

To compare the growth rates the historical sales figures were “weather normalized” using average (normal) weather values. The normalization process consists of three steps. First, the historic predicted numbers were obtained from a regression model using the actual weather values. Second, the sales were re-calculated using average weather results.¹ Third, the difference between them, which defines the weather impact, was subtracted from the corresponding actual sales to arrive the normalized sales. In mathematical terms, the weather normalization can be written as follows:

$$Normalized\ Sales = ActualSales - [PredictedSales_{ActualWeather} - PredictedSales_{NormalWeather}]$$

¹ The same equation obtained in the first step was used.

Modeling

The econometric forecasting method used in this study assumes that the relationship between the dependent and independent variables is linear (additive) and defined as follows:

$$y = r + \alpha X + \beta Y + \gamma Z$$

where X, Y and Z are the variables, α , β and γ are the coefficients and r is the constant.

The forecasts were prepared using MetrixND software, version 4.7, developed by Itron, Inc. The forecasts typically involve finding a mathematical relationship between the dependent and independent variables. The steps taken in this forecast were as follows: The historical numbers since 2000 and the forecast numbers for economic variables until 2052 were obtained. These values were then exported into MetrixND and the analysis was carried out.

The primary criterion in selecting the variables was the relevance to the dependent variable being forecasted. Other considerations were the sign (the direction of change) and impact (the magnitude of elasticity coefficients) of variables on the forecasted dependent variable. Some of the statistical parameters important to the econometric model are:

Adjusted R-Square: It indicates the fraction of total variation explained by the independent variables in the regression. Its value ranges between 0 and 1, 1 being a perfect fit.

$$R^2 = \frac{\text{Explained Variation}}{\text{Total Variation}}$$

Adjusted R^2 takes into account the number of variables (k) with a constant sample size (n) as this leads to a decrease in the degree of freedom (n-k). Thus, adjusted R^2 is more conservative.

$$\text{Adjusted } R^2 = 1 - (1 - R^2) \left(\frac{n-1}{n-k} \right)$$

F-Statistics (Probability): This is an alternative measure of goodness of the fit. F-statistics number indicates the probability that the estimated regression fit is purely accidental. This number is preferred to be as low as possible as compared to a critical number of 5%.

Mean Absolute Percentage Error (MAPE): MAPE defines the magnitude of errors in the model. It is the average of absolute values of the residual error percentages measured at each data point. The lower the MAPE number the better the model is considered to be.

Durbin-Watson Statistic: It tests the hypothesis that the errors from a model do not exhibit first order autocorrelation. In the absence of autocorrelation, the statistic has a value of 2. While it

varies between 0 and 4, a value above 2 indicates negative autocorrelation, while a value below 2 indicates positive autocorrelation.

Test parameters for statistical significance

The t-statistics and P-values show the statistical significance of independent variables in 95% confidence interval (or 5% significance level).

To evaluate the reasonableness of the model, the residual patterns and model fit statistics were studied. The residuals indicate the difference between the predicted and actual values. Any pattern associated with residuals suggests a missing variable(s). The residuals were studied through the autocorrelation factor and partial autocorrelation diagrams.

Customer forecasts

Variables and model statistics

The customer forecasts in general were straight-forward and involved fewer variables. The customer variables used in the models of different revenue classes are:

- Residential: Number of households in the Quad Cities Metropolitan Statistical Area (MSA), binary variable for the Illinois rate case impact and monthly binary variables
- Commercial: Time trend variable, binary variables for the Illinois rate case impact and monthly binary variables
- Industrials: Economic variable weighted between the number of households and the real gross metro area product for the Quad Cities, binary variable for the Illinois rate case impact and monthly binary variables
- Public authority: Non-farm employment in the Quad Cities MSA, binary variable for the Illinois rate case impact, binary variable for COVID-19 impact and monthly binary variables

The statistics for the customer forecasts are tabulated in Table 2.

Table 2: Adjusted R² and MAPE values for the customer forecasts

Revenue Class	MAPE	Adjusted R-squared
Residential	0.04%	0.997
Commercial	0.12%	1.000
Industrial	1.06%	0.999
Public Authority	0.43%	0.953

Customer forecast results

The monthly customer numbers are shown below at an average annual level for each revenue class.

Table 3: Summary of the historical and forecast average annual customer numbers in different classes

	Residential	Commercial	Industrial	Public Authority	Street Lighting	Total
2014	75,812	7,765	99	1,392	44	85,112
2015	74,455	8,998	56	1,302	44	84,854
2016	74,298	9,209	49	1,288	42	84,887
2017	74,159	9,401	39	1,371	42	85,012
2018	73,933	9,653	38	1,410	43	85,078
2019	73,873	9,803	40	1,422	44	85,183
2020	73,810	9,920	42	1,396	44	85,212
2021	73,902	10,049	45	1,407	44	85,448
2022	73,764	10,167	47	1,435	44	85,456
2023	73,896	10,358	46	1,440	44	85,784
2024	73,983	10,536	46	1,446	44	86,055
2025	74,077	10,708	46	1,451	44	86,326
2026	74,149	10,878	46	1,455	44	86,571
2027	74,211	11,045	46	1,459	44	86,806
2028	74,256	11,213	46	1,463	44	87,021
2029	74,324	11,379	46	1,466	44	87,260
2030	74,377	11,546	46	1,469	44	87,482
2031	74,427	11,712	46	1,472	44	87,702
2032	74,464	11,879	46	1,475	44	87,908

Sales forecasts

Variables and model statistics

The energy forecasts are more complicated and involve more variables than do the customer forecasts. For the residential, commercial and public authority classes, sales are determined by multiplying customers by use per customer. For the industrial class, sales are modeled directly. For the street lighting class, sales are forecast using trending. The sales forecast variables used in the industrial class model are:

- Industrial: Weighted economic variable made up of the real gross metropolitan area product for the Quad Cities MSA and the non-farm employment in the Quad Cities MSA, the number of billing days in each month and monthly binaries.

The statistics for the sales forecasts are tabulated in Table 4.

Table 4: Adjusted R² and MAPE values for the sales forecasts

Revenue Class	MAPE	Adjusted R-squared
Industrial	7.26%	0.280

The comparison of tables (Tables 2 and 4) clearly indicates that better statistics were obtained for the customer models than sales models. The reason is that there is more uncertainty in the sales forecasts due to the presence of multiple drivers and their possible interactions. For example, a relatively small change in the historical usage pattern of a large industrial customer could have a measureable impact on the total energy usage in this class. Similarly, the changes in billing cycle could have significant effect on the billed sales.

Sales forecast results

The monthly billed sales numbers were forecasted at an aggregate level for each revenue class. The annual historical data and 10-year forecast values are summarized in Table 5.

Table 5: Summary of the historical and forecast annual billed sales of different revenue classes (MWh)

	Residential	Commercial	Industrial	Public Authority	Street Lighting	Total
2014	676,836	435,336	681,658	177,095	12,595	1,983,520
2015	627,826	461,907	641,935	163,747	10,129	1,905,544
2016	646,439	466,908	634,925	169,402	9,949	1,927,623
2017	606,492	465,721	637,991	163,514	10,487	1,884,204
2018	663,656	478,047	626,337	169,615	10,829	1,948,484
2019	640,126	459,416	619,944	166,444	6,735	1,892,665
2020	635,986	417,648	633,797	146,405	6,940	1,840,776
2021	660,874	424,249	691,686	145,988	6,832	1,929,630
2022	629,672	463,582	697,957	146,946	6,832	1,944,990
2023	632,284	465,184	698,655	147,540	6,832	1,950,496
2024	634,920	466,091	699,354	148,078	6,832	1,955,275
2025	636,988	466,602	700,053	148,571	6,832	1,959,045
2026	638,591	466,865	700,753	149,025	6,832	1,962,067
2027	640,196	466,954	701,454	149,443	6,832	1,964,879
2028	641,360	466,905	702,155	149,825	6,832	1,967,078
2029	643,097	466,739	702,857	150,178	6,832	1,969,703
2030	644,468	466,465	703,560	150,505	6,832	1,971,831
2031	645,869	466,091	704,264	150,801	6,832	1,973,858
2032	646,916	465,622	704,968	151,076	6,832	1,975,414

The figures in the table above are retail billed MWh sales.

Usage per customer (UPC) forecasts

For the residential, commercial and public authority classes, kWh per customer values was forecast using econometric models. For the industrial and street lighting classes, the kWh per customer forecast values were calculated using the forecast sales and customer numbers data.

UPC forecast results:

Residential model – Number of members per household in the Quad Cities MSA, billing days, cooling degree days (current month), heating degree days (current month), binary variable for the Illinois rate case impact, variable to estimate impact of COVID-19 and monthly binaries

Commercial model – Time trend multiplied by members per household variable, cooling degree days (current month), heating degree days (lagged month), billing days, hours of light, binary variable for the Illinois rate case impact, variable to estimate impact of COVID-19, an autoregressive term and monthly binaries

Public Authority model – Weighted economic variable consisting of members per household, number of households, real per capita income and non-farm employment in the Quad Cities MSA, billing days, cooling degree days (current month), hours of light, binary variable for the Illinois rate case impact, an autoregressive term, variable to estimate impact of COVID-19 and monthly binaries

Table 6: Model Statistics

Revenue Class	MAPE
Residential	2.11%
Commercial	3.85%
Public Authority	4.89%

Methodology for the 2023 Plan Monthly Illinois Non-Coincident Electric Gross Peak Demand Forecast

2021 Electric Gross Peak Demand

The gross peak numbers used in the analysis are the historical gross peaks, which take into account demand side management impacts.

The gross peak load value was calculated according to the following equation:

$$\text{Gross Peak} = \text{Native Peak Load} + \text{Residential Direct Load Control} + \text{Curtailment}$$

Native Peak Load: For MEC's Illinois service territory, the 2021 native system peak load of 442 MW occurred on August 10, 2021 in the hour ending at 3:00 p.m. Central Daylight Time. Note: this figure does include 14.1 MW of load from MEC Illinois' distribution only customers.

SummerSaver Program: SummerSaver is MEC's residential direct load control program. Load displaced due to the energy saving program which aims to curtail energy usage of on-peak hours was also received from the energy efficiency group. At the time of gross system peak, the SummerSaver program was not in effect.

Curtailment: Load displaced due to curtailment of customers on an interruptible rate. There was no curtailment event in effect at the time of gross system peak.

Monthly Source Data and Model

The historical hourly data underlying the model is load research data by class for MEC's Illinois service territory. The data was divided into the following classes: residential, small commercial, large commercial, small industrial and large industrial. This data was at the meter level. MEC used data from January 1, 2015 through December 31, 2021 to build a monthly non-coincident electric gross peak demand model for its Illinois service territory.

The class data was added together to derive the total Illinois load. Next, the monthly peak dates and times were calculated. Weather data, taken from the weather station at the Quad City International Airport in Moline, IL, associated with the peak dates were compiled for use in the model.

The forecasting model consists of an economic driver variable, a number of weather variables and monthly indicator variables.

The monthly peak results from the monthly NCP model were adjusted to equal the level of the annual peak demand from the annual NCP model. The annual NCP model will be described later.

Economic variables

Net Energy for Load

For the 2023 Plan forecast, MEC used the area's net energy for load as the economic driver.

Weather variables

Six weather variables were used:

1. Summer peak day maximum temperature (summer = May through September)
2. Summer peak day average daily dew point
3. Winter peak day minimum temperature (winter = November through March)
4. Winter peak day three day build up (the sum of the average temperatures of the three days prior to the winter peak day)
5. Shoulder peak day HDD65 (shoulder = April and October; HDD65 = 65 less the peak day average temperature, if the average temperature is less than 65; = 0 if the average temperature is greater than 65)
6. Shoulder peak day CDD65 (shoulder = April and October; CDD65 = the peak day average temperature less 65, if the average temperature is greater than 65; = 0 if the average temperature is less than 65)

The forecast weather was calculated using the rank and average method for 2008 through 2021. First, the weather variables, as measured on the monthly peak days, were averaged for each month across the years. This revealed the monthly order for each weather variable throughout the year. For each year, the peak day weather variables were then ranked. Next, the ranked results were averaged: the highest values averaged, the second highest values averaged, and so on. The average of the highest values was then assigned to the month with the highest value, the average of the second highest values was then assigned to the month with the second highest value and so on.

The remaining explanatory variables in the model were monthly binary variables and a binary variable indicating whether or not the gross peak demand occurred on a Friday.

Table 7: MEC Illinois non-coincident peak demand forecast

Year	NCP MW
2023	442.91
2024	443.67
2025	444.27
2026	444.74
2027	445.19
2028	445.54
2029	445.95
2030	446.29
2031	446.61
2032	446.85
2033	447.06
2034	447.26

Annual Source Data and Model

The historical data underlying the model is annual non-coincident peak demand information for MEC’s Illinois service territory provided by MEC’s Control Center. The data included load from MEC Illinois’ distribution only customers. Before modeling, the distribution only load was subtracted out. MEC used annual data from 2000 through 2021 to build an annual non-coincident electric gross peak demand model for its Illinois service territory.

Weather data, taken from the weather station at the Quad City International Airport in Moline, IL, associated with the peak dates were compiled for use in the model.

The forecasting model consists of an economic driver variable, a weather variable and a binary variable for whether or not the day of peak was on a Friday.

Economic variable

Net Energy for Load

For the 2023 Plan forecast, MEC Illinois’ net energy for load was used as the model driver.

Weather variable

The single peak day weather variable used was constructed as a weighted average of the temperature-humidity index on the peak day, the maximum dry bulb temperature on the peak day and a heat build-up variable measured as a sum of the average dry bulb temperatures on the three days prior to the peak day.

The forecast weather was calculated the average of the variables above from 2000 through 2021.

The remaining explanatory variable in the model was a binary variable indicating whether or not the gross peak demand occurred on a Friday.

Energy Efficiency in the Load Forecast

MEC has energy efficiency programs operating in its Illinois service territory. Estimated past energy savings are implicit in the historical data used to derive the electric sales forecast models. Without adjustment, this method implies that the level of future estimated program savings will be similar to past estimated program savings. Estimated program impacts in the forecast period are not projected to deviate measurably from estimated historical levels, so no adjustment was made to the forecasting models.

Note: the electric retail sales and customers forecast and the electric gross peak demand forecast are subject to management review.

Load Forecast for the Retail Choice Switching

MEC has one active alternative retail supplier in its Illinois service territory. The retail choice switching forecast was derived by reviewing recent switching activity and projecting forward recent trends. Switched load is expected to grow from 15.5 MW in 2022 to 15.7 MW in 2028.

Table 8: Retail Switching: Monthly Peak Demand and Energy Forecasts

	Residential kWh	Commercial kWh	Industrial kWh	Public Authority kWh	Street Lighting kWh	Total kWh	MW Demand
Jan-22	36,382	2,140,511	2,026,181	863,989	-	5,067,063	8.94
Feb-22	44,508	1,762,298	2,845,703	393,031	-	5,045,540	9.23
Mar-22	43,972	2,863,885	2,722,848	1,346,693	-	6,977,398	8.52
Apr-22	33,852	2,049,215	2,389,520	758,143	-	5,230,730	8.50
May-22	34,387	2,062,079	2,446,973	903,679	-	5,447,118	11.59
Jun-22	43,212	2,320,997	3,460,065	1,380,314	-	7,204,588	11.50
Jul-22	36,818	2,438,764	2,305,919	1,172,931	-	5,954,432	9.27
Aug-22	37,228	2,446,139	3,594,618	1,383,893	-	7,461,878	15.50
Sep-22	44,720	2,465,295	2,650,000	1,378,154	-	6,538,169	13.80
Oct-22	53,020	2,270,767	2,650,000	1,247,652	-	6,221,439	12.00
Nov-22	34,946	2,083,061	2,650,000	902,273	-	5,670,281	12.30
Dec-22	38,072	2,138,494	2,650,000	1,025,013	-	5,851,578	9.66
Jan-23	35,389	2,028,866	2,650,000	865,285	-	5,579,541	8.96
Feb-23	43,293	1,648,687	2,650,000	393,621	-	4,735,601	9.26
Mar-23	44,038	2,714,511	2,650,000	1,348,714	-	6,757,262	8.54
Apr-23	33,903	1,942,332	2,650,000	759,281	-	5,385,516	8.52
May-23	34,439	1,954,525	2,650,000	905,035	-	5,543,999	11.62
Jun-23	43,277	2,199,939	2,650,000	1,382,385	-	6,275,601	11.53
Jul-23	36,873	2,311,563	2,650,000	1,174,691	-	6,173,127	14.47
Aug-23	37,284	2,453,480	2,650,000	1,385,970	-	6,526,734	15.54
Sep-23	44,787	2,472,694	2,650,000	1,380,222	-	6,547,703	13.83
Oct-23	53,100	2,277,582	2,650,000	1,249,524	-	6,230,206	12.03
Nov-23	34,999	2,089,313	2,650,000	903,627	-	5,677,939	12.33
Dec-23	38,129	2,144,912	2,650,000	1,026,551	-	5,859,592	9.68
Jan-24	35,442	2,034,956	2,650,000	866,584	-	5,586,982	8.98
Feb-24	43,358	1,653,635	2,650,000	394,211	-	4,741,205	9.28
Mar-24	44,104	2,722,658	2,650,000	1,350,737	-	6,767,499	8.56
Apr-24	33,954	1,948,162	2,650,000	760,420	-	5,392,535	8.54
May-24	34,490	1,960,391	2,650,000	906,393	-	5,551,275	11.65
Jun-24	43,342	2,206,541	2,650,000	1,384,459	-	6,284,342	11.56
Jul-24	36,929	2,318,501	2,650,000	1,176,454	-	6,181,883	14.51
Aug-24	37,340	2,460,844	2,650,000	1,388,049	-	6,536,233	15.58
Sep-24	44,855	2,480,115	2,650,000	1,382,293	-	6,557,263	13.87
Oct-24	53,180	2,284,418	2,650,000	1,251,399	-	6,238,996	12.06
Nov-24	35,051	2,095,584	2,650,000	904,983	-	5,685,618	12.36
Dec-24	38,186	2,151,349	2,650,000	1,028,091	-	5,867,627	9.71
Jan-25	35,495	2,041,063	2,650,000	867,884	-	5,594,442	9.01
Feb-25	43,423	1,658,598	2,650,000	394,803	-	4,746,824	9.30
Mar-25	44,170	2,730,829	2,650,000	1,352,764	-	6,777,764	8.58
Apr-25	34,005	1,954,009	2,650,000	761,561	-	5,399,574	8.57
May-25	34,542	1,966,275	2,650,000	907,753	-	5,558,570	11.68
Jun-25	43,407	2,213,164	2,650,000	1,386,537	-	6,293,107	11.59
Jul-25	36,984	2,325,459	2,650,000	1,178,219	-	6,190,662	14.55
Aug-25	37,396	2,468,230	2,650,000	1,390,132	-	6,545,757	15.62
Sep-25	44,922	2,487,559	2,650,000	1,384,367	-	6,566,847	13.90
Oct-25	53,259	2,291,274	2,650,000	1,253,277	-	6,247,810	12.09
Nov-25	35,104	2,101,873	2,650,000	906,341	-	5,693,317	12.39
Dec-25	38,243	2,157,806	2,650,000	1,029,634	-	5,875,683	9.73
Jan-26	35,549	2,047,189	2,650,000	869,186	-	5,601,924	9.03
Feb-26	43,488	1,663,576	2,650,000	395,395	-	4,752,460	9.33
Mar-26	44,237	2,739,025	2,650,000	1,354,794	-	6,788,056	8.60
Apr-26	34,056	1,959,873	2,650,000	762,704	-	5,406,632	8.59
May-26	34,594	1,972,176	2,650,000	909,115	-	5,565,885	11.71
Jun-26	43,472	2,219,806	2,650,000	1,388,617	-	6,301,895	11.62
Jul-26	37,039	2,332,438	2,650,000	1,179,987	-	6,199,465	14.58
Aug-26	37,452	2,475,637	2,650,000	1,392,218	-	6,555,307	15.66
Sep-26	44,989	2,495,024	2,650,000	1,386,444	-	6,576,458	13.94
Oct-26	53,339	2,298,150	2,650,000	1,255,158	-	6,256,647	12.12
Nov-26	35,157	2,108,181	2,650,000	907,700	-	5,701,038	12.42
Dec-26	38,301	2,164,282	2,650,000	1,031,179	-	5,883,762	9.75
Jan-27	35,602	2,053,333	2,650,000	870,491	-	5,609,425	9.05
Feb-27	43,554	1,668,569	2,650,000	395,989	-	4,758,111	9.35
Mar-27	44,303	2,747,245	2,650,000	1,356,827	-	6,798,375	8.62
Apr-27	34,107	1,965,755	2,650,000	763,848	-	5,413,710	8.61
May-27	34,646	1,978,095	2,650,000	910,479	-	5,573,220	11.73
Jun-27	43,537	2,226,468	2,650,000	1,390,701	-	6,310,706	11.65
Jul-27	37,095	2,339,439	2,650,000	1,181,757	-	6,208,291	14.62
Aug-27	37,508	2,483,067	2,650,000	1,394,307	-	6,564,882	15.69
Sep-27	45,057	2,502,513	2,650,000	1,388,524	-	6,586,094	13.97
Oct-27	53,419	2,305,048	2,650,000	1,257,041	-	6,265,508	12.15
Nov-27	35,209	2,114,508	2,650,000	909,062	-	5,708,780	12.45
Dec-27	38,358	2,170,778	2,650,000	1,032,726	-	5,891,862	9.78
Jan-28	35,655	2,059,495	2,650,000	871,797	-	5,616,948	9.07
Feb-28	43,619	1,673,577	2,650,000	396,583	-	4,763,778	9.37
Mar-28	44,369	2,755,491	2,650,000	1,358,863	-	6,808,723	8.65
Apr-28	34,158	1,971,655	2,650,000	764,994	-	5,420,807	8.63
May-28	34,698	1,984,032	2,650,000	911,845	-	5,580,575	11.76
Jun-28	43,602	2,233,150	2,650,000	1,392,788	-	6,319,540	11.68
Jul-28	37,151	2,346,460	2,650,000	1,183,531	-	6,217,141	14.65
Aug-28	37,564	2,490,520	2,650,000	1,396,399	-	6,574,483	15.73
Sep-28	45,124	2,510,023	2,650,000	1,390,608	-	6,595,756	14.01
Oct-28	53,500	2,311,966	2,650,000	1,258,927	-	6,274,392	12.18
Nov-28	35,262	2,120,855	2,650,000	910,427	-	5,716,543	12.49
Dec-28	38,416	2,177,293	2,650,000	1,034,276	-	5,899,984	9.80

Table 9: Retail Switching: Monthly Customer Count Forecasts

	Residential	Commercial	Industrial	Public Authority	Street Lighting	Total
Jan-22	72	152	5	18	-	247
Feb-22	72	154	5	18	-	249
Mar-22	70	152	5	18	-	245
Apr-22	70	152	5	18	-	245
May-22	70	152	5	18	-	245
Jun-22	70	152	5	18	-	245
Jul-22	70	152	5	18	-	245
Aug-22	70	144	5	18	-	237
Sep-22	70	144	5	18	-	237
Oct-22	70	144	5	18	-	237
Nov-22	70	144	5	18	-	237
Dec-22	70	144	5	18	-	237
Jan-23	70	144	5	18	-	237
Feb-23	70	144	5	18	-	237
Mar-23	70	144	5	18	-	237
Apr-23	70	144	5	18	-	237
May-23	70	144	5	18	-	237
Jun-23	70	144	5	18	-	237
Jul-23	70	144	5	18	-	237
Aug-23	70	144	5	18	-	237
Sep-23	70	144	5	18	-	237
Oct-23	70	144	5	18	-	237
Nov-23	70	144	5	18	-	237
Dec-23	70	144	5	18	-	237
Jan-24	70	144	5	18	-	237
Feb-24	70	144	5	18	-	237
Mar-24	70	144	5	18	-	238
Apr-24	70	144	5	18	-	238
May-24	70	144	5	18	-	238
Jun-24	70	144	5	18	-	238
Jul-24	70	144	5	18	-	238
Aug-24	70	145	5	18	-	238
Sep-24	70	145	5	18	-	238
Oct-24	70	145	5	18	-	238
Nov-24	70	145	5	18	-	238
Dec-24	70	145	5	18	-	238
Jan-25	70	145	5	18	-	238
Feb-25	70	145	5	18	-	238
Mar-25	70	145	5	18	-	238
Apr-25	70	145	5	18	-	238
May-25	70	145	5	18	-	238
Jun-25	70	145	5	18	-	238
Jul-25	70	145	5	18	-	238
Aug-25	70	145	5	18	-	238
Sep-25	70	145	5	18	-	238
Oct-25	70	145	5	18	-	238
Nov-25	70	145	5	18	-	238
Dec-25	70	145	5	18	-	238
Jan-26	70	145	5	18	-	238
Feb-26	70	145	5	18	-	238
Mar-26	70	145	5	18	-	238
Apr-26	70	145	5	18	-	238
May-26	70	145	5	18	-	238
Jun-26	70	145	5	18	-	238
Jul-26	70	145	5	18	-	238
Aug-26	70	145	5	18	-	239
Sep-26	70	145	5	18	-	239
Oct-26	70	145	5	18	-	239
Nov-26	70	145	5	18	-	239
Dec-26	70	145	5	18	-	239
Jan-27	70	145	5	18	-	239
Feb-27	70	145	5	18	-	239
Mar-27	70	145	5	18	-	239
Apr-27	70	145	5	18	-	239
May-27	70	145	5	18	-	239
Jun-27	70	145	5	18	-	239
Jul-27	70	145	5	18	-	239
Aug-27	70	146	5	18	-	239
Sep-27	70	146	5	18	-	239
Oct-27	70	146	5	18	-	239
Nov-27	70	146	5	18	-	239
Dec-27	70	146	5	18	-	239
Jan-28	70	146	5	18	-	239
Feb-28	70	146	5	18	-	239
Mar-28	70	146	5	18	-	239
Apr-28	70	146	5	18	-	239
May-28	70	146	5	18	-	239
Jun-28	70	146	5	18	-	239
Jul-28	70	146	5	18	-	239
Aug-28	70	146	5	18	-	240
Sep-28	70	146	5	18	-	240
Oct-28	70	146	5	18	-	240
Nov-28	70	146	5	18	-	240
Dec-28	70	146	5	18	-	240