# BEFORE THE
# FLORIDA PUBLIC SERVICE COMMISSION
# DOCKET NO. 080317-EI

IN RE: TAMPA ELECTRIC COMPANY'S
PETITION FOR AN INCREASE IN BASE RATES
AND MISCELLANEOUS SERVICE CHARGES

TECO
TAMPA ELECTRIC

## DIRECT TESTIMONY AND EXHIBIT
## OF
## LORRAINE L. CIFUENTES

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**BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

**PREPARED DIRECT TESTIMONY**

**OF**

**LORRAINE L. CIFUENTES**

**Q.** Please state your name, business address, occupation and employer.

**A.** My name is Lorraine L. Cifuentes. My business address is 702 North Franklin Street, Tampa, Florida 33602. I am employed by Tampa Electric Company ("Tampa Electric" or "company") as Manager, Load Research and Forecasting in the Regulatory Affairs Department.

**Q.** Please provide a brief outline of your educational background and business experience.

**A.** In 1986, I received a Bachelor of Science degree in Management Information Systems from the University of South Florida. In 1992, I received a Masters of Business Administration degree from the University of Tampa. In October 1987, I joined Tampa Electric as a Generation Planning Technician and I have held various positions within the areas of Generation Planning, Load Forecasting and Load Research. In October 2002, I was promoted to

Manager, Load Research and Forecasting. My present responsibilities include the management of Tampa Electric's customer, peak demand and energy sales forecasts as well as management of Tampa Electric's load research program and other related activities.

**Q.** What is the purpose of your direct testimony?

**A.** My direct testimony describes Tampa Electric's customer, demand and energy forecasting process, describes the methodologies and assumptions, and presents the forecasts used in Tampa Electric's budget that support its request for a base rate increase. Additionally, I demonstrate how these forecasts are appropriate and reasonable.

**Q.** Have you prepared an exhibit to support your direct testimony?

**A.** Yes, I am sponsoring Exhibit No. ____ (LLC-1) consisting of 10 documents, prepared under my direction and supervision. These consist of:

Document No. 1 List Of Minimum Filing Requirement Schedules Sponsored Or Co-Sponsored By Lorraine L. Cifuentes

Document No. 2 Customer Forecast

| | |
|---|---|
| Document No. 3 | Economic Assumptions Average Annual Growth Rate |
| Document No. 4 | Real Price Of Electricity |
| Document No. 5 | Per-Customer Energy Consumption |
| Document No. 6 | Retail Energy Sales |
| Document No. 7 | Per-Customer Peak Demand |
| Document No. 8 | Peak Demand |
| Document No. 9 | Firm Peak Demand |
| Document No. 10 | Load Factor |

**Q.** Are you sponsoring any sections of Tampa Electric's Minimum Filing Requirements ("MFRs")?

**A.** Yes. I sponsor or co-sponsor the MFRs shown in Document No. 1 of my Exhibit No. ____ (LLC-1).

**Q.** What is Tampa Electric's existing and forecasted customer base?

**A.** Tampa Electric's current customer base and forecasted growth is shown in Document No. 2 of my exhibit. In 2007, Tampa Electric's customer base was 666,354 and is projected to grow at an average annual rate of 2.1 percent over the next 10 years. The company expects to have 679,941 customers in 2009.

**Q.** By how much has Tampa Electric's customer base increased since 1992, the year of Tampa Electric's last rate case filing?

**A.** Since 1992, the number of customers Tampa Electric serves has increased by almost 200,000 or 42 percent. Peak energy demands have also increased significantly. Summer peak demand has increased by approximately 1,350 MW or 50 percent, while summer firm peak demands have increased even further, by 1,480 MW or 62 percent.

**Q.** How is Tampa Electric's inflation assumption, which is used in its operations and maintenance ("O&M") budget, developed?

**A.** Tampa Electric uses the Consumer Price Index ("CPI") projections provided by Moody's Economy.com, a leading provider of economic forecasting services, in developing its inflation forecast for budgeting purposes. CPI is the most widely utilized indicator of changes in the price of goods and services. MFR Schedules C-33 and C-40 provide historical and projected annual percent changes in CPI. The projected values were used as a guide in the development of the 2009 projected test year O&M budget.

**TAMPA ELECTRIC'S FORECASTING PROCESS**

**Q.** Please describe Tampa Electric's load forecasting process.

**A.** Tampa Electric uses econometric models and statistically adjusted engineering ("SAE") models, which are integrated to develop projections of customer growth, energy consumption and peak demands. The econometric models measure past relationships between economic variables, such as population, employment and customer growth. The SAE models incorporate end-use trends into an econometric model and are used for projecting average per-customer consumption. Tampa Electric has consistently used these models for generation planning purposes and the modeling results have been submitted to the Florida Public Service Commission for review and approval in past regulatory proceedings and in the Ten-Year Site Plan approval process. The models have proven to be accurate within plus or minus three percent. MFR Schedule F-5 provides a more detailed description of the forecasting process.

**Q.** What assumptions were used in the base case analysis of customer growth?

**A.** The primary economic drivers for the customer forecast

are state population estimates, service area households and Hillsborough County employment. The state population forecast is the starting point for developing the customer and energy projections. Both the University of Florida's Bureau of Economic and Business Research ("BEBR") and Moody's Economy.com provide population projections for Florida. The population forecast is based upon the projections of BEBR in the short-term and is a blend of BEBR and Economy.com for the long-term forecast. Service area households and Hillsborough County employment assumptions are used to estimate non-residential customer growth because they are proven indicators of such growth. An increase in the number of households results in a need for additional services, restaurants and retail establishments. Projections of employment in the construction sector are a good indicator of expected trends in local construction activity. Similarly, commercial and industrial employment growth is a good indicator of the level of activity to expect in their respective sectors. Economy.com provides projections of Hillsborough County households and employment by major sectors. The 10-year historical and forecasted average annual growth rates for these economic indicators are shown in Document No. 3 of my exhibit.

**Q.** What assumptions were used in the base case analysis of energy sales growth?

**A.** Customer growth and per-customer consumption growth are the primary drivers for growth in energy sales. The average per-customer consumption for each revenue class is based on SAE models with three components. The first component includes assumptions of the long-term saturation and efficiency trends in end-use equipment. The second component captures changes in economic conditions, such as real household income, persons per household and the price of electricity, and how these factors affect a residential customer's consumption level. A complete list of the critical economic assumptions used in developing these forecasts is shown in Document No. 3 of my exhibit. The third component captures the seasonality of energy consumption. Heating and cooling degree-day assumptions allocate the appropriate monthly weather impacts and are based on weather patterns over the past 20 years. MFR Schedule F-07 provides a description and the historical and projected values of each assumption used in the development of the 2009 test year retail energy sales.

**Q.** What assumptions were used in the base case analysis of

peak demand growth?

**A.** Peak demand growth is affected by long-term appliance trends, economic conditions and weather conditions. The end-use and economic conditions are integrated into the peak demand model from the energy sales forecast. The weather variables are heating and cooling degree-days at the time of the peak and for the 24-hour period of the peak day. Weather variables provide the seasonality to the monthly peaks.

**Q.** Does Tampa Electric assess the reasonableness of these base assumptions?

**A.** Yes. The base case economic assumptions have been evaluated based on a comparison of the data series' historical average annual growth rates to the projected average annual growth rates for the forecast period. In addition, economic forecasts are compared to alternate sources and evaluated for consistent trends. Economy.com's projections for Florida employment by major sectors and Florida real household income are compared to the projections of the Office of Economic and Demographic Research of the Florida Legislature. The projected trends for Florida were consistent between the two

sources; therefore, it is reasonable to conclude that Economy.com's Hillsborough County projections were also reasonable.

**Q.** Were the forecasts for population growth also evaluated for reasonableness?

**A.** Yes. Economy.com and BEBR's population forecasts were compared and evaluated for consistency. A blend of the two sources was used and provides a reasonable population projection for the state of Florida.

**Q.** Why are population projections at the state level preferred over the Hillsborough County or service area level?

**A.** State level population projections are preferred over county level projections for several reasons. Tampa Electric's forecasting models show a very high correlation between Florida population and residential customer growth. In addition, Hillsborough County represents approximately 85 percent of Tampa Electric's service area but portions of Polk, Pasco, and Pinellas counties are also served. Historical and projected population growth rates are similar for Florida and

Hillsborough County; therefore, Florida population is a reasonable explanatory variable to use in Tampa Electric's customer models.

**Q.** Was the price of electricity included in your energy sales models?

**A.** Yes. The price of electricity was included in each per-customer consumption model. Document No. 4 of my exhibit includes the real or inflation-free price of electricity by class. The price variable was primarily used to capture long-term impacts of the real price of electricity. The recent increases in the real price of electricity have resulted in reduced growth in residential sales in the short-term and increased growth as the price moderates. In order to eliminate recent abnormal swings in prices, a smoothed trend of the real price of electricity was used in the residential model. Energy sales for the remaining sectors were not as sensitive to the changes in the real price of electricity.

**Q.** Historically, what has been the accuracy of the company's retail energy sales forecasts?

**A.** Over the past 10 years, the average accuracy of the retail energy sales forecasts, excluding the phosphate sector, which is volatile year over year, is 1.1 percent.

**Q.** Have Tampa Electric's forecasting models and assumptions used in developing the customer, demand and energy forecasts been reviewed for reasonableness?

**A.** Yes. Itron Corporation is an industry leader that provides utility forecasting software and methodologies to more than 160 utilities and energy companies. Itron has reviewed Tampa Electric's forecasting models and the assumptions used to develop the customer, demand and energy forecasts. Itron Corporation concluded that the forecast models were theoretically sound with excellent model statistics and modeling errors were reasonable and consistent with other utilities.

**TAMPA ELECTRIC'S FORECASTED GROWTH**

**Q.** What is Tampa Electric's customer growth forecast?

**A.** Tampa Electric is projecting an annual average increase of 15,730 new customers over the next 10 years (2008-2017). This average annual increase of 2.1 percent is slightly lower than the average annual growth rate of 2.6

percent during the past 10 years (1998-2007), as reflected in Document No. 2 of my exhibit.

**Q.** What is Tampa Electric's energy sales forecast?

**A.** Retail energy sales are expected to increase at an average annual rate of 2.0 percent. The primary driver behind the increase in the energy sales forecast is the average annual increase in customers of 2.1 percent. In addition, per-customer consumption is expected to remain relatively flat at an average annual rate of -0.1 percent, as shown in Document No. 5 of my exhibit. Combining the growth in customers and per-customer consumption results in the average annual rate of 2.0 percent. When energy sales to the phosphate sector are excluded, retail energy sales are expected to increase at an average annual rate of 2.1 percent. Historical and forecasted energy sales are shown in Document No. 6 of my exhibit.

**Q.** What is the primary driver behind the average annual per-customer consumption growth rate of -0.1 percent?

**A.** The lower growth rate for per-customer consumption is driven by updated economic and appliance efficiency trend

assumptions and the addition of Tampa Electric's new conservation programs approved in 2007.

**Q.** Do higher energy prices have an energy conservation effect?

**A.** Yes. Tampa Electric has seen a correlation between recent increases in energy costs and a resulting reduction in consumption levels. However, while the reduced consumption results in decreased energy sales, peak demand growth is still occurring due to the lower price-elasticity of peak demand.

**Q.** Did you consider the housing slowdown in your growth analysis?

**A.** Yes. The recent downturn in housing is reflected in the population estimates used in the customer growth models. The current slowdown in customer growth is stronger and will last longer than previously expected. Tampa Electric does not expect housing growth to revert back to normal levels until 2010 and perhaps later.

**Q.** What is Tampa Electric's peak demand forecast for 2008 through 2017?

**A.** Summer and winter peak usage per-customer is projected to remain relatively flat over the next 10 years, which is consistent with recent historical growth rates as well as per-customer energy consumption. Document No. 7 of my exhibit shows historical and forecasted peak usage per-customer for summer and winter peaks. The annual growth in customers and in per-customer demand results in an average annual growth rate of 2.0 percent for the winter peak and a 2.1 percent growth rate for the summer peak. As shown in Document No. 8 of my exhibit, peak demand for the summer of 2008 is forecasted to be 4,144 MW, increasing to 4,983 MW in 2017, an average increase of 93 MW per year. The forecasted 2008 winter peak is 4,275 MW, increasing to 5,129 MW in 2017, an average increase of 95 MW per year. The summer and winter peak demands projected for the 2009 test year are 4,206 MW and 4,345 MW, respectively. Summer and winter firm peak demands, which have been reduced by curtailable load such as load management and interruptible loads, are shown in Document No. 9 of my exhibit.

**Q.** Are conservation and demand-side management ("DSM") impacts accounted for in the energy sales and peak demand forecasts?

**A.** Yes. Tampa Electric forecasts demand and energy reductions for each conservation and DSM program, which are aggregated to represent the total cumulative savings. The total incremental savings adjust the energy sales and peak demand forecasts each year.

**Q.** Are Tampa Electric's forecasts of customers, energy sales and demand appropriate and reasonable?

**A.** Yes. The results have been compared to trend analyses and annual multi-regression sales models. The average annual growth rates for per-customer demand and energy usage are compared with each other for consistency and compared to historical growth rates. Summer and winter load factors are reviewed to ensure proper integration of the peak and energy models. The results show that the load factors are reasonable compared to historical years. Load factors have dropped slightly due to the loss of phosphate load. The load factors are shown in Document No. 10 of my exhibit. In addition, Itron Corporation has reviewed the company's forecasts results and concluded that they are consistent with the economic outlook and with historical usage trends.

**Q.** Please summarize your direct testimony.

**A.** The purpose of my direct testimony is to present Tampa Electric's customer, peak demand and energy sales forecasts and the methodologies and assumptions used to arrive at the projections for the 2009 test year. Tampa Electric's 2007 customer base was 666,354 and is projected to grow at an average annual rate of 2.1 percent over the next 10 years. Per-customer demand and energy consumption is expected to remain relatively flat over the next 10 years. Combining the growth in customers and per-customer consumption, retail energy sales are expected to increase at an average annual rate of 2.0 percent over the next 10 years. These forecasts are based on proven methodologies using appropriate and reasonable assumptions. The forecasting models described in my direct testimony have consistently been used by Tampa Electric for generation planning purposes and the results have been submitted to the Commission for review and approval in past regulatory proceedings and in the Ten-Year Site Plan approval process.

**Q.** Does this conclude your direct testimony?

**A.** Yes, it does.

# EXHIBIT

# OF

# LORRAINE L. CIFUENTES

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**LIST OF MINIMUM FILING REQUIREMENT SCHEDULES**

**SPONSORED OR CO-SPONSORED BY LORRAINE L. CIFUENTES**

| MFR Schedule | Title |
|---|---|
| C-33 | Performance Indices |
| C-34 | Statistical Information |
| C-35 | Payroll And Fringe Benefit Increases Compared To CPI |
| C-36 | Non-Fuel Operations And Maintenance Expense Compared To CPI |
| C-40 | O&M Compound Multiplier Calculation |
| E-9 | Cost Of Service - Load Data |
| E-11 | Development Of Coincident And Non-Coincident Demands For Cost Study |
| E-16 | Customers By Voltage Level |
| E-17 | Load Research Data |
| E-18 | Monthly Peaks |
| E19a | Demand And Energy Losses |
| E-19b | Energy Losses |
| E-19c | Demand Losses |
| F-5 | Forecasting Models |

| MFR Schedule | Title |
|---|---|
| F-6 | Forecasting Models - Sensitivity Of Output To Changes In Input Data |
| F-7 | Forecasting Models - Historical Data |
| F-8 | Assumptions |

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# Customer Forecast

| Year | Customer Base |
|---|---|
| 1998 | 530,251 |
| 1999 | 543,660 |
| 2000 | 560,100 |
| 2001 | 575,780 |
| 2002 | 590,199 |
| 2003 | 604,901 |
| 2004 | 619,535 |
| 2005 | 635,748 |
| 2006 | 653,706 |
| 2007 | 666,354 |
| 2008 | 671,707 |
| 2009 | 679,941 |
| 2010 | 692,676 |
| 2011 | 708,020 |
| 2012 | 724,250 |
| 2013 | 741,160 |
| 2014 | 758,743 |
| 2015 | 776,706 |
| 2016 | 794,739 |
| 2017 | 813,276 |

**Average Annual Customer Growth Rates**

| | |
|---|---|
| 1998-2007 | 2.6% |
| 2008-2017 | 2.1% |

**Average Annual Absolute Customer Growth**

| | |
|---|---|
| 1998-2007 | 15,123 |
| 2008-2017 | 15,730 |

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# Economic Assumptions
# Average Annual Growth Rate
# (AAGR)

| | 1998-2007 | 2008-2017 |
|---|---|---|
| Florida Population | 2.3% | 2.0% |
| Persons Per Household | 0.0% | -0.4% |
| Real Household Income | 1.6% | 1.3% |
| Construction Employment | 4.1% | 2.7% |
| Commercial Employment | 2.4% | 2.2% |
| Governmental Employment | 0.7% | 1.5% |
| Industrial Employment | -0.9% | -0.6% |
| Commercial Output | 4.1% | 3.9% |
| Governmental Output | 1.0% | 2.0% |
| Industrial Output | 2.5% | 2.2% |
| Industrial Production Index (Manuf.) | 2.4% | 1.0% |

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# Real Price of Electricity
# ($/MWH)

| | Residential | Commercial | Industrial | Governmental |
|---|---|---|---|---|
| 1998 | 61.70 | 49.94 | 41.28 | 48.50 |
| 1999 | 60.54 | 48.78 | 41.57 | 47.57 |
| 2000 | 60.78 | 49.44 | 42.24 | 48.23 |
| 2001 | 62.45 | 51.58 | 44.18 | 50.58 |
| 2002 | 65.57 | 55.02 | 47.49 | 53.97 |
| 2003 | 64.12 | 54.18 | 46.82 | 52.91 |
| 2004 | 67.05 | 57.09 | 49.64 | 55.86 |
| 2005 | 64.99 | 54.83 | 47.98 | 53.75 |
| 2006 | 67.42 | 61.19 | 54.29 | 60.01 |
| 2007 | 67.43 | 62.00 | 56.46 | 60.72 |
| 2008 | 67.70 | 60.73 | 55.31 | 59.38 |
| 2009 | 67.67 | 60.66 | 55.39 | 59.10 |
| 2010 | 67.77 | 59.54 | 54.55 | 57.84 |
| 2011 | 67.89 | 58.16 | 53.30 | 56.43 |
| 2012 | 67.88 | 57.49 | 52.78 | 55.65 |
| 2013 | 67.87 | 57.77 | 53.29 | 55.67 |
| 2014 | 67.83 | 58.14 | 53.75 | 55.86 |
| 2015 | 67.78 | 58.56 | 54.26 | 56.11 |
| 2016 | 67.73 | 59.33 | 55.19 | 56.64 |
| 2017 | 67.67 | 60.56 | 56.51 | 57.63 |
| | | **Average Annual Growth Rate** | | |
| 1998-2007 | 1.0% | 2.4% | 3.5% | 2.5% |
| 2008-2017 | 0.0% | 0.0% | 0.2% | -0.3% |

# Per-Customer Energy Consumption
# (kWh/Customer)

| | Total Retail | Total Excluding Phosphate |
|---|---|---|
| 1998 | 30,226 | 27,358 |
| 1999 | 29,071 | 26,865 |
| 2000 | 29,705 | 27,370 |
| 2001 | 29,483 | 27,460 |
| 2002 | 30,371 | 28,039 |
| 2003 | 30,166 | 28,058 |
| 2004 | 29,759 | 27,777 |
| 2005 | 29,747 | 27,940 |
| 2006 | 29,103 | 27,673 |
| 2007 | 29,313 | 27,739 |
| 2008 | 29,322 | 27,781 |
| 2009 | 29,404 | 27,846 |
| 2010 | 29,391 | 27,860 |
| 2011 | 29,318 | 27,821 |
| 2012 | 29,243 | 27,779 |
| 2013 | 29,169 | 27,739 |
| 2014 | 29,098 | 27,700 |
| 2015 | 29,035 | 27,672 |
| 2016 | 28,990 | 27,658 |
| 2017 | 28,952 | 27,650 |
| **Average Annual Growth Rates** | | |
| 1998-2007 | -0.3% (1) | 0.2% |
| 2008-2017 | -0.1% | -0.1% |
| **Average Annual Absolute Growth** | | |
| 1998-2007 | (101) | 42 |
| 2008-2017 | (41) | (15) |

(1) Total Retail includes phosphate energy, which can be very volatile, thereby distorting the actual customer usage trend. Therefore, removal of phosphate energy provides the actual customer usage trend.

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# Retail Energy Sales
## (GWH)

| | Total Retail | Total Excluding Phosphate |
|---|---|---|
| 1998 | 16,027 | 14,505 |
| 1999 | 15,805 | 14,604 |
| 2000 | 16,638 | 15,329 |
| 2001 | 16,976 | 15,810 |
| 2002 | 17,925 | 16,547 |
| 2003 | 18,247 | 16,971 |
| 2004 | 18,437 | 17,208 |
| 2005 | 18,911 | 17,762 |
| 2006 | 19,025 | 18,089 |
| 2007 | 19,533 | 18,483 |
| 2008 | 19,696 | 18,659 |
| 2009 | 19,993 | 18,933 |
| 2010 | 20,358 | 19,297 |
| 2011 | 20,758 | 19,697 |
| 2012 | 21,179 | 20,118 |
| 2013 | 21,619 | 20,558 |
| 2014 | 22,078 | 21,016 |
| 2015 | 22,552 | 21,492 |
| 2016 | 23,040 | 21,980 |
| 2017 | 23,546 | 22,486 |
| **Average Annual Growth Rates** | | |
| 1998-2007 | 2.2% | 2.7% |
| 2008-2017 | 2.0% | 2.1% |
| **Average Annual Absolute Growth** | | |
| 1998-2007 | 390 | 442 |
| 2008-2017 | 428 | 425 |

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# Per-Customer Peak Demand
# (kW/Customer)

| | Winter | Summer |
|---|---|---|
| 1998 | 5.11 | 6.16 |
| 1999 | 6.27 | 6.20 |
| 2000 | 6.13 | 5.90 |
| 2001 | 6.60 | 5.99 |
| 2002 | 6.12 | 6.16 |
| 2003 | 6.42 | 5.99 |
| 2004 | 5.40 | 6.03 |
| 2005 | 5.80 | 6.24 |
| 2006 | 5.72 | 6.13 |
| 2007 | 5.10 | 6.19 |
| 2008 | 6.36 | 6.17 |
| 2009 | 6.39 | 6.19 |
| 2010 | 6.38 | 6.19 |
| 2011 | 6.37 | 6.18 |
| 2012 | 6.36 | 6.17 |
| 2013 | 6.34 | 6.16 |
| 2014 | 6.33 | 6.15 |
| 2015 | 6.32 | 6.14 |
| 2016 | 6.31 | 6.13 |
| 2017 | 6.31 | 6.13 |
| **Average Annual Growth Rates** | | |
| 1998-2007 | 0.0% | 0.1% |
| 2008-2017 | -0.1% | -0.1% |
| **Average Annual Absolute Growth** | | |
| 1998-2007 | 0.00 | 0.00 |
| 2008-2017 | -0.01 | -0.01 |

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# Peak Demand
## (MW)

| | Winter | Summer |
|---|---|---|
| 1998 | 2,710 | 3,266 |
| 1999 | 3,409 | 3,372 |
| 2000 | 3,435 | 3,303 |
| 2001 | 3,801 | 3,448 |
| 2002 | 3,612 | 3,634 |
| 2003 | 3,881 | 3,623 |
| 2004 | 3,344 | 3,737 |
| 2005 | 3,686 | 3,968 |
| 2006 | 3,736 | 4,010 |
| 2007 | 3,398 | 4,123 |
| 2008 | 4,275 | 4,144 |
| 2009 | 4,345 | 4,206 |
| 2010 | 4,419 | 4,290 |
| 2011 | 4,509 | 4,379 |
| 2012 | 4,603 | 4,470 |
| 2013 | 4,701 | 4,567 |
| 2014 | 4,804 | 4,667 |
| 2015 | 4,910 | 4,770 |
| 2016 | 5,017 | 4,874 |
| 2017 | 5,129 | 4,983 |
| **Average Annual Growth Rates** | | |
| 1998-2007 | 2.5% | 2.6% |
| 2008-2017 | 2.0% | 2.1% |
| **Average Annual Absolute Growth** | | |
| 1998-2007 | 76 | 95 |
| 2008-2017 | 95 | 93 |

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# Firm Peak Demand
## (MW)

| | Winter | Summer |
|---|---|---|
| 1998 | 2,332 | 2,945 |
| 1999 | 2,990 | 3,069 |
| 2000 | 3,009 | 3,067 |
| 2001 | 3,407 | 3,165 |
| 2002 | 3,259 | 3,318 |
| 2003 | 3,455 | 3,351 |
| 2004 | 2,936 | 3,445 |
| 2005 | 3,287 | 3,725 |
| 2006 | 3,523 | 3,769 |
| 2007 | 3,127 | 3,876 |
| 2008 | 3,955 | 3,889 |
| 2009 | 4,020 | 3,943 |
| 2010 | 4,088 | 4,020 |
| 2011 | 4,171 | 4,101 |
| 2012 | 4,257 | 4,183 |
| 2013 | 4,346 | 4,272 |
| 2014 | 4,440 | 4,363 |
| 2015 | 4,536 | 4,459 |
| 2016 | 4,638 | 4,558 |
| 2017 | 4,744 | 4,662 |
| **Average Annual Growth Rates** | | |
| 1998-2007 | 3.3% | 3.1% |
| 2008-2017 | 2.0% | 2.0% |
| **Average Annual Absolute Growth** | | |
| 1998-2007 | 88 | 103 |
| 2008-2017 | 88 | 86 |

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# Load Factor
## (%)

| | Winter | Summer |
|---|---|---|
| 1998 | 67.5% | 56.0% |
| 1999 | 52.9% | 53.5% |
| 2000 | 55.3% | 57.5% |
| 2001 | 51.0% | 56.2% |
| 2002 | 56.7% | 56.3% |
| 2003 | 53.6% | 57.4% |
| 2004 | 62.9% | 56.3% |
| 2005 | 58.6% | 54.4% |
| 2006 | 58.1% | 54.2% |
| 2007 | 65.6% | 54.1% |
| 2008 | 52.6% | 54.3% |
| 2009 | 52.5% | 54.3% |
| 2010 | 52.6% | 54.2% |
| 2011 | 52.6% | 54.1% |
| 2012 | 52.5% | 54.1% |
| 2013 | 52.5% | 54.0% |
| 2014 | 52.5% | 54.0% |
| 2015 | 52.4% | 54.0% |
| 2016 | 52.4% | 54.0% |
| 2017 | 52.4% | 53.9% |
| **Average Annual Growth Rates** | | |
| 1998-2007 | -0.3% | -0.4% |
| 2008-2017 | 0.0% | -0.1% |