BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Docket No. R-2024-3046523

Duquesne Light Company

Statement No. 3

Direct Testimony of Todd A. Mobley
Subject: Sales Forecast

Date: March 20, 2024

DIRECT TESTIMONY OF TODD A. MOBLEY

Q. Please state your full name and business address.

A. Todd Allen Mobley; 411 Seventh Avenue, 9th Floor, Pittsburgh, PA 15219.

Q. What is your position at Duquesne Light Company ("Duquesne Light" or "Company")?

A. Director, Data & Analytics.

Q. How long have you worked at Duquesne Light?

A. Since June 2014.

Q. What are your current responsibilities?

A. In addition to other responsibilities, I manage Duquesne Light's sales throughput forecasting.

Q. What are your qualifications, work experience and educational background?

A. I have a Bachelor of Science in Mathematics and a Master of Business Administration from the University of Notre Dame, including classes in statistics, probability, and regression modeling and forecasting. Beyond my time at Duquesne Light, relevant work experience includes more than three years of experience as a Quantitative Analyst at Allegheny Energy. I also have industry training through Itron's Energy Forecasting Group.

Q. What is the purpose of your direct testimony regarding Duquesne Light's request for increased rates?

A. The purpose of my testimony is to present the Company's sales forecast and the methodology used in its development.

Q. Are you sponsoring any exhibits as part of your direct testimony?

A. Yes, I am. I am sponsoring Exhibit TM-1, which is the past five years of weather normalized Company sales segmented by customer class. I am also sponsoring Exhibit TM-2, which is the Company's forecast of sales during the Historical Test Year through 2028, including the Future Test Year and Fully Projected Future Test Year, also segmented by customer class. Finally, I am sponsoring Exhibit TM-3, which displays the savings we expect to achieve through the Company's Act 129 Programs for the period of 2023 through 2028.

Q. Please explain how these exhibits were prepared?

A. These exhibits were prepared by me, starting with Exhibit TM-1, which is based on weather normalized internal Company sales records. Exhibit TM-2 comes from the results of the annual forecast models I develop, which will be further described in this testimony. Lastly, Exhibit TM-3 displays the savings we expect to achieve through the Company's Act 129 Programs for the period of 2023 through 2028.

Q. Before discussing your findings and methodology in detail, could you please address whether you accounted for the impacts of the COVID-19 pandemic?

A. Yes. The COVID-19 pandemic has had significant impacts across many aspects of customers' lives, including their electric consumption patterns. I discuss how the Company accounted for pandemic impacts in the sales forecasts later in my testimony.

Q. Please summarize your findings.

A. The forecast assumes normal temperature patterns for all years. Duquesne Light control area sales declined 0.3% between 2022 and the Historic Test Year (HTY). Control area sales are projected to grow 0.8% between the HTY and the Future Test Year (FTY). Control area sales are projected to decline 0.2% between the FTY and the Fully Projected Future Test Year (FPFTY). Total control area sales are projected to grow at a compound annual growth rate of 0.1% between the HTY and 2028.

Residential usage comprises approximately 31% of Duquesne Light's annual sales during the FPFTY, and this segment is expected to decline at a compound annual growth rate of 0.2% between the HTY and 2028. This projected decline is being driven by energy efficiency and distributed generation trends, and is partially offset by projected customer and electric vehicle (EV) growth.

Commercial usage comprises approximately 45% of Duquesne Light's annual sales, and this segment is expected to remain mostly flat, declining at a compound annual growth rate of less than 0.1% between the HTY and 2028. This projection is being driven by energy efficiency and distributed generation trends, offset by growth associated with EV and new large customers.

Finally, Industrial usage comprises approximately 23% of Duquesne Light's annual sales. This segment is expected to grow at a compound annual growth rate of 0.6% between the HTY and 2028. The projected growth is being driven by new large customers, partially offset by energy efficiency trends and customer declines.

These forecasts are detailed in Exhibit TM-2.

Q. What procedures and methodology does Duquesne Light utilize for preparing its forecasts?

A. I develop the sales forecasts by modeling each rate and customer class separately, using multiple regression. For Residential and Commercial rate classes, I employ Itron's Statistically Adjusted End-Use (SAE) framework, which captures electricity usage for heating, cooling, and all other end-uses through a series of composite variables. For Industrial rate classes, I use multiple regressions more heavily reliant on trend variables.

The raw regression forecasts are then adjusted for a handful of external factors, namely: projected growth in electric vehicles, growth in distributed generation connections, known and potential new large commercial and industrial customers, projected growth in electric heating adoption, the phasing out of the RA rate class, and for Industrial rate classes, projected deemed Act 129 energy efficiency savings. The outcome is a calendar monthly forecast for kWh and customer count by rate class.

Q. What data do you utilize for the inputs into your forecasts?

A. The main data inputs used in the forecast models and their sources include:

- Historical kWh sales, customer count, and net metering requests by rate class provided internally
- 15 year historical daily temperature for Duquesne Light territory provided by AccuWeather.
- Historical and forecasted regional energy efficiency trends provided by Itron via the Energy Information Administration
- Historical and projected Duquesne Light Act 129 program deemed savings for Industrial customer class
- Historical and forecasted economic data for Allegheny and Beaver Counties provided by Oxford Economics
- Light duty Electric Vehicle electricity usage forecast provided by Electric Power Research Institute
- Medium and heavy duty Electric Vehicle electricity usage forecast provided by Concentric Energy Advisors
- Projected growth rates in solar installations for PA provided by US Solar Market Insight report from GTM Research
- Market intelligence regarding known and potential new large commercial and industrial customers and known and potential energy efficiency projects
- Historical Google's Community Mobility Reports, which chart movement trends over time by geography, and across different categories of places such as retail and recreation, workplaces, and residential.

Q. How are Duquesne Light Company's Pa. Act 129 Energy Efficiency and Conservation obligations factored into your forecasts?

A. For Residential and Commercial classes, all energy efficiency and conservation effects, inclusive of Act 129, are incorporated through Itron's SAE model framework, which leverages the Energy Information Administration regional forecasts regarding end use equipment and appliance efficiency and saturation trends. For Industrial classes, the projected Act 129 deemed savings are subtracted from the unadjusted forecasts.

Q. Q. How did you determine Act 129 savings beyond the end of Phase IV in 2025?

A. The Company's current Act 129 Energy Efficiency and Demand Response Program five year program (Phase IV) ends in May 2026. The Company used a five year projected sales forecast ending in 2028. Given the high likelihood of continued energy efficiency and demand response programs and initiatives, savings are reflected for the Industrial rate classes through 2028. This is shown in Exhibit TM-3 which shows accumulated savings by customer class by year. Subsequent annual savings are calculated at a level slightly less than the average savings exhibited under the Company's Phase IV.

Q. Are there any major events impacting the Company's test year forecasts?

A. Major events addressed through adjustments to the raw regression forecasts include: projected growth in electric vehicles, growth in net metering connections, known and potential new large commercial and industrial customers, known and

potential energy efficiency projects, projected growth in electric heating adoption, and the phasing out of the RA rate class. Of note for phasing out RA, there is no net impact on usage as it is assumed that any incremental RA usage will shift to the RH rate class.

In addition to the above, the COVID-19 pandemic impacted historical sales and shifted usage patterns, serving to decrease Commercial usage due to on-going work from home and hybrid work activity. The pandemic temporarily increased Residential usage and decreased Industrial usage as well due to the associated increased shelter at home and work from home activity, restrictions on business activities, and the overall downturn in economic activity. These trends are reflected in the regressions through incorporating Google's Community Mobility Reports.

Beyond these major events, the Company continues to evaluate the impact of potential new weather patterns in light of mild weather that has served to depress throughput the last few years, including the HTY. At this time, there is no change in methodology for preparing these forecasts.

Q. How does the COVID-19 pandemic impact the FPFTY?

A. Usage impacts due to the pandemic are reflected in the regressions through incorporating Google's Community Mobility Reports as well as categorical variables to reflect activity since Google ceased publishing those reports as of October 2022. The categorical variables account for the shift to a "new normal" post-pandemic. In comparing usage versus pre-pandemic historical data, Commercial usage has decreased due to on-going work from home and hybrid work activity.

Q. Could you explain Duquesne Light Company's peak load demand forecasts?

A. Our peak load demand forecasts are provided to us by PJM, our Regional Transmission Organization. PJM develops peak load demand forecasts for each zone in its territory, and provides these forecasts to its members.

Q. Were your procedures and methodology for preparing these forecasts consistent with those utilized in prior Duquesne Light proceedings?

A. Yes.

Q Does this conclude your direct testimony?

A. Yes, it does. I reserve the right to supplement my testimony through the course of this proceeding.

Exhibit TM-1
Todd Mobley

Duquense Light Company

Weather Normalized Annual Retail Sales (GWh) by Customer Class

	2018	2019	2020	2021	2022
Residential	4,060	4,004	4,189	4,228	4,203
Commerical	6,134	6,026	5,549	5,783	5,741
Industrial	2,611	2,472	2,352	2,510	2,575
Lighting	54	53	51	55	54
Total	**12,859**	**12,554**	**12,140**	**12,576**	**12,573**

Year to Year Change by GWh

	2018	2019	2020	2021	2022
Residential		(56)	185	39	(25)
Commerical		(108)	(478)	234	(42)
Industrial		(140)	(120)	158	65
Lighting		(2)	(2)	4	(1)
Total		**(305)**	**(414)**	**435**	**(3)**

Year to Year Change by Percentage

	2018	2019	2020	2021	2022
Residential		-1.4%	4.6%	0.9%	-0.6%
Commerical		-1.8%	-7.9%	4.2%	-0.7%
Industrial		-5.3%	-4.8%	6.7%	2.6%
Lighting		-2.9%	-3.5%	8.1%	-2.0%
Total		**-2.4%**	**-3.3%**	**3.6%**	**0.0%**

Exhibit TM-2
Todd Mobley

Duquense Light Company

Forecasted Retail Sales (GWh) by Customer Class

	Historic Test Year 2023	Future Test Year 2024	Fully Projected Future Test Year 2025	2026	2027	2028
Residential	4,012	3,954	3,948	3,947	3,957	3,975
Commerical	5,631	5,663	5,667	5,646	5,631	5,628
Industrial	2,837	2,961	2,933	2,933	2,935	2,917
Lighting	53	52	52	51	51	50
Total	**12,533**	**12,630**	**12,600**	**12,578**	**12,574**	**12,571**

Year to Year Change by GWh

	Historic Test Year 2023	Future Test Year 2024	Fully Projected Future Test Year 2025	2026	2027	2028
Residential	(191)	(58)	(5)	(1)	10	18
Commerical	(110)	33	4	(21)	(16)	(2)
Industrial	263	123	(28)	0	2	(18)
Lighting	(1)	(1)	(0)	(0)	(0)	(0)
Total	**(40)**	**96**	**(30)**	**(22)**	**(5)**	**(3)**

Year to Year Change by Percentage

	Historic Test Year 2023	Future Test Year 2024	Fully Projected Future Test Year 2025	2026	2027	2028
Residential	-4.5%	-1.5%	-0.1%	0.0%	0.3%	0.5%
Commerical	-1.9%	0.6%	0.1%	-0.4%	-0.3%	0.0%
Industrial	10.2%	4.3%	-0.9%	0.0%	0.1%	-0.6%
Lighting	-1.6%	-1.9%	-0.5%	-0.8%	-0.9%	-0.9%
Total	**-0.3%**	**0.8%**	**-0.2%**	**-0.2%**	**0.0%**	**0.0%**

Note: Historic Test Year (2023) is weather normalized

Exhibit TM-3
Todd Mobley

Duquense Light Company

Act 129 Program Savings (GWh) by Customer Class

	Historic Test Year 2023	Future Test Year 2024	Fully Projected Future Test Year 2025	2026	2027	2028
Residential	22	44	64	84	106	128
Commercial	38	78	120	156	186	217
Industrial	18	35	48	65	79	91
Lighting	-	-	-	-	-	-
Total	**78**	**158**	**232**	**305**	**370**	**436**