

BEFORE

THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of)	
Duke Energy Ohio, Inc., for an)	Case No. 21-887-EL-AIR
Increase in Electric Distribution Rates.)	
In the Matter of the Application of)	
Duke Energy Ohio, Inc., for Tariff)	Case No. 21-888-EL-ATA
Approval.)	
In the Matter of the Application of)	
Duke Energy Ohio, Inc., for Approval)	Case No. 21-889-EL-AAM
to Change Accounting Methods.)	

SUPPLEMENTAL DIRECT TESTIMONY OF

BENJAMIN W.B. PASSTY, PH.D.

ON BEHALF OF

DUKE ENERGY OHIO, INC.

_____	Management policies, practices, and organization
_____	Operating income
_____	Rate Base
_____	Allocations
_____	Rate of return
_____	Rates and tariffs
<u> X </u>	Other: Load Forecasting

August 18, 2022

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I. INTRODUCTION AND PURPOSE

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is Benjamin W.B. Passty. My business address is 526 South Church
3 Street, Charlotte, North Carolina 28202.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5 A. I am employed by Duke Energy Business Services LLC (DEBS) as a Lead Load
6 Forecasting Analyst in the Load Forecasting group. DEBS provides various
7 administrative and other services to Duke Energy Ohio, Inc., (Duke Energy Ohio or
8 Company) and other affiliated companies of Duke Energy Corporation (Duke Energy).

9 **Q. ARE YOU THE SAME DR. PASSTY WHO FILED DIRECT TESTIMONY IN**
10 **THESE PROCEEDINGS?**

11 A. Yes.

12 **Q. WHAT IS THE PURPOSE OF YOUR SUPPLEMENTAL DIRECT TESTIMONY**
13 **IN THESE PROCEEDINGS?**

14 A. My Supplemental Direct Testimony describes and supports the Company's objections to
15 certain findings and recommendations contained in the Report by the Staff of the Public
16 Utilities Commission of Ohio (Staff) issued in these proceedings on May 19, 2022 (Staff
17 Report). The Company filed its Objections to the Staff Report of Investigation and
18 Summary of Major Issues on June 17, 2022.

II. OBJECTIONS SPONSORED BY WITNESS

19 **Q. PLEASE EXPLAIN THE COMPANY'S OBJECTION NUMBER 4a.**

20 A. Duke Energy Ohio objects to Staff's recommendation to adjust the Company's
21 forecasted test year revenue to reflect the actual billing determinants for the
22 period January 1, 2021 through December 31, 2021, and the consequent
23 abandonment of the Company's proposed test year. The Staff's adjustment of

1 billing determinants to reflect calendar year 2021 actual data is unreasonable
2 insofar as it ignores the concept of the rate case test year by pulling in out-of-
3 period data.

4 **Q. DID STAFF PROVIDE ANY BASIS OR SUPPORT FOR MAKING THIS**
5 **ADJUSTMENT?**

6 A. No. The Staff Report provides no explanation. There is nothing in the Staff
7 Report that indicates the Company's submitted forecast was unreasonable or
8 improper.

9 **Q. PLEASE EXPLAIN WHY DUKE ENERGY OHIO OBJECTS TO THIS**
10 **ADJUSTMENT.**

11 A. First, as I previously stated, there is nothing in the Staff Report that suggests that
12 the Company's submitted forecast is improper or unreasonable, or that it was
13 improper or unreasonable at the time it was created several months ago. For that
14 reason alone, Staff's recommended adjustment should be rejected.

15 Second, Staff's adjustment to the billing determinants uses calendar year
16 2021 actual sales and disregards the test period forecast submitted in the
17 Company's application, which consists of the April 1, 2021, through March 31,
18 2022. On September 1, 2021, the Company filed a motion in these proceedings to
19 set the test year as the twelve months beginning April 1, 2021, and ending March
20 31, 2022. By Entry dated October 20, 2021, the Commission approved the
21 Company's request, stating in relevant part:

22 It is, therefore,

1 ORDERED, That the test period for Duke shall be the
2 twelve months beginning April 1, 2021, and ending March 31,
3 2022, and the date certain shall be June 30, 2021...¹

4 By using calendar year 2021, Staff's adjustment is objectionable insofar as it
5 ignores the approved test year as was ordered by the Commission in its Entry.
6 Staff's use of the 2021 calendar year instead of the approved test year results in
7 the improper inclusion of three months of data (January 2021 through March
8 2021) that falls outside of the approved test year into its analysis and ignores three
9 months of data that is actually within the approved test period (January through
10 March 2022). Staff's recommendation should, therefore, be rejected.

11 **Q. DO YOU HAVE AN OPINION ABOUT THE SUITABILITY OF THE**
12 **CALENDAR YEAR 2021 AS A SUBSTITUTE FOR THE TEST YEAR?**

13 A. I do. The public health situation was incredibly dynamic in the Duke Energy Ohio
14 service area during the first quarter of 2021, which was a time prior to large scale
15 availability of vaccines for working-age persons. In comparison to calendar year
16 2021, I would argue that the period of April 2021-March 2022 more closely
17 resembles the patterns of work and behavior going forward with regard to
18 employment, remote work, and consumption of services. Many of these are
19 among factors that directly affect our load forecast.

20

¹ Entry, pg. 5, October 20, 2021.

1 **Q. WHAT BILLING DETERMINANTS DOES THE COMPANY PROPOSE?**

2 A. The Company supports the billing determinants filed with Company's application.
3 However, if the Commission finds that the Company's proposed billing
4 determinants are unreasonable, the Company proposes that actual weather
5 normalized test year billing determinants be used. See below and witness Sailers'
6 Supplemental Direct Testimony for addition information. Using actual weather
7 normalized test year billing determinants, Staff's revenue recommendation
8 decreases \$5,894,480.

9 **Q. DOES THE COMPANY HAVE ANY ADDITIONAL OBJECTIONS TO**
10 **STAFF'S ADJUSTMENT TO THE COMPANY'S SALES FORECAST?**

11 A. Yes. Even if Staff's predisposition to adjust the Company's submitted forecast to
12 reflect actual data were reasonable, which it is not, such an adjustment should be
13 weather normalized. Staff's adjustment to the Company's forecast to reflect actual
14 data, on a non-normalized basis, overstates the Company's sales and revenues for
15 future periods. Therefore, to the extent the Commission determines that actual
16 data should be used versus the Company's submitted forecast, such data should
17 also be weather normalized.

18 **Q. PLEASE EXPLAIN WHY IT IS REASONABLE TO ADJUST THE**
19 **COMPANY'S SALES FORECAST TO REFLECT WEATHER**
20 **NORMALIZED SALES?**

21 A. Building a successful model for the impact of longer-term drivers—such as the
22 economic forecast, the growth in new customers, and the long-term expectations
23 for end-use efficiencies—requires holding any remaining factors constant. Since

1 weather is the most important source of variation in the demand for short-term
2 energy, this weather normalization process allows it to be held constant.
3 Following a process for weather-adjusting historical data allows for a continuous
4 data series of sales to be viewed with the unpredictability of weather “netted out.”

5 **Q. CAN YOU PROVIDE MORE SPECIFIC INFORMATION ABOUT THE**
6 **IMPACT OF WEATHER NORMALIZATION ON THE LOAD**
7 **FORECAST IN THIS PROCEEDING?**

8 A. Yes. During the Company’s proposed test year, several months exhibited weather
9 that was far above “normal” weather as computed via average temperatures,
10 which further illustrates the importance of weather normalization. Specifically,
11 August, September, and October of 2021 were all much warmer than their
12 average temperatures since 1991. Measured by the CDD scale, August and
13 September exceeded normal weather by more than 20%, and October 2022
14 accumulated nearly triple the average of cooling degree days. Measured relative
15 to other Octobers, this was the most extreme temperature in six years.
16 Conversely, unusually warm weather can lead to reduced energy volume in other
17 months: the very mild temperatures in December 2021 resulted in heating degree
18 days being 30% below normal.

19 Weather normalization provides a systematic method for adjusting the
20 energy increase implied by this warm weather (or, as applicable, below average
21 temperatures), such that energy can be anticipated when temperatures are at more
22 normal levels. Adjusting for these impacts leads to expectations for energy that
23 are better suited to a future in which weather conditions will doubtless vary.

1 **Q. ARE YOU AWARE IF THE COMMISSION HAS ENDORSED THE USE**
2 **OF WEATHER NORMALIZED DATA TO ADJUST BASE REVENUE**
3 **LEVELS IN A RATE CASE?**

4 A. Yes. In the Company's 1995 Application to adjust its natural gas rates, the
5 Commission agreed that base revenue levels "must be modified to reflect weather
6 normalization."²

III. CONCLUSION

7 **Q. DOES THIS CONCLUDE YOUR SUPPLEMENTAL DIRECT**
8 **TESTIMONY?**

9 A. Yes.

² *In the Matter of the Application of The Cincinnati Gas & Electric Company for an Increase in its Rates for Gas Service to All Jurisdictional Customers*, Case No. 95-656-GA-AIR, Opinion and Order pg. 40 (December 12, 1996).

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Summary: Testimony Supplemental Direct Testimony of Benjamin W.B. Passty, Ph.D on Behalf of Duke Energy Ohio, Inc. electronically filed by Mrs. Tammy M. Meyer on behalf of Duke Energy Ohio Inc. and D'Ascenzo, Rocco and Kingery, Jeanne and Akhbari, Elyse Hanson and Vaysman, Larisa and Brama, Elizabeth