

State of Wisconsin

Wisconsin Public Service Commission

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Joint Application of Wisconsin
Electric Power Company and
Wisconsin Gas LLC for Authority to
Adjustment Electric, Natural Gas and
Steam Rates

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Case No. 05-UR-110

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Direct Testimony and Exhibits

of

Roger D. Colton

ON BEHALF OF:

Walnut Way Conservation Corp.

September 9, 2022

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

2 A. My name is Roger Colton. My address is 34 Warwick Road, Belmont MA 02478.

3 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT POSITION?**

4 A. I am employed by Fisher Sheehan & Colton, Public Finance and General Economics of
5 Belmont, Massachusetts. In that capacity, I provide technical assistance to a variety of
6 federal and state agencies, consumer organizations and public utilities on rate and
7 customer service issues involving water/sewer, natural gas and electric utilities.

8 **Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?**

9 A. I am testifying on behalf of Walnut Way.

10 **Q. PLEASE DESCRIBE YOUR PROFESSIONAL BACKGROUND.**

11 A. I work primarily on low-income utility issues. This involves regulatory work on rate and
12 customer service issues, as well as research into low-income usage, payment patterns,
13 and affordability programs. At present, I am working on various projects in the states of
14 New Hampshire, Maryland, Pennsylvania, Ohio, Michigan, Kansas, Wisconsin and
15 Washington. My typical clients include state agencies (e.g., Pennsylvania Office of
16 Consumer Advocate, Maryland Office of People's Counsel, Illinois Office of Attorney
17 General), federal agencies (e.g., the U.S. Department of Health and Human Services),
18 community-based organizations (e.g., National Housing Trust, Natural Resources
19 Defense Council, Sierra Club), and private utilities (e.g., Toledo Water, Entergy Services,
20 Xcel Energy d/b/a Public Service of Colorado). In addition to state-specific and utility-
21 specific work, I engage in national work throughout the United States. For example, in

1 2011, I worked with the U.S. Department of Health and Human Services (the federal
2 LIHEAP office) to advance the review and utilization of the Home Energy Insecurity
3 Scale as an outcomes measurement tool for the federal Low-Income Home Energy
4 Assistance Program (“LIHEAP”). In 2007, I was part of a team that performed a multi-
5 sponsor public/private national study of low-income energy assistance programs. In 2020,
6 I completed a study of water affordability in twelve U.S. cities for the London-based
7 newspaper, The Guardian. In 2021, I prepared a Water Affordability Plan for the City of
8 Toledo (OH). A brief description of my professional background is provided in Ex.-
9 WW-Colton-1.

10 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.**

11 A. After receiving my undergraduate degree in 1975 (Iowa State University), I obtained
12 further training in both law and economics. I received my law degree in 1981 (University
13 of Florida). I received my Master’s Degree (regulatory economics) from the MacGregor
14 School of Antioch University in 1993.

15 **Q. HAVE YOU EVER PUBLISHED ON PUBLIC UTILITY REGULATORY**
16 **ISSUES?**

17 A. Yes. I have published three books and more than 80 articles in scholarly and trade
18 journals, primarily on low-income utility and housing issues. I have published an equal
19 number of technical reports for various clients on energy, water, telecommunications and
20 other associated low-income utility issues. My most recent publication is a chapter in the
21 book “Energy Justice: US and International Perspectives,” published by Edward Elgar
22 Publishing in London. My chapter was titled “The equities of efficiency: distributing

1 usage reduction dollars.” It offers an objective definition of “equity” based on legal and
2 economic doctrine.

3 **Q. HAVE YOU EVER TESTIFIED BEFORE THIS OR OTHER UTILITY**
4 **COMMISSIONS?**

5 A. Yes. While I submitted a “Statement” in Phase I of the Wisconsin Public Service
6 Commission’s (WPSC or Commission) recent Quad IV review proceeding, I have not
7 testified before the Commission in the recent past. Otherwise, I have testified in more
8 than 300 regulatory and judicial proceedings in 43 states and various Canadian provinces
9 on a wide range of utility issues, primarily involving low-income rates, energy efficiency,
10 and customer service issues. A list of the states and provinces in which I have testified is
11 provided in Ex.-WW-Colton-1.

12 **Q. PLEASE EXPLAIN THE PURPOSE OF YOUR DIRECT TESTIMONY.**

13 A. My Direct Testimony is presented in seven parts, as follows.

- 14 ➤ Part 1 examines the impacts of Wisconsin Electric Power Company and
15 Wisconsin Gas LLC (collectively referred to as WEPCO) proposed rate increases
16 on the affordability of bills to low-income customers over time.
- 17 ➤ Part 2 examines more closely the ongoing effect that COVID-19 has on ability-to-
18 pay in Wisconsin, taking a particular look at the impacts found by income.
- 19 ➤ Part 3 examines the relationship which has repeatedly been found to exist between
20 home energy burdens and the payment patterns of low-income households;

- 1 ➤ Part 4 examines a first mechanism which WEPCO can employ in order to break
2 the cycle of inability-to-pay, with this first mechanism involving a low-income
3 discount rate;
- 4 ➤ Part 5 examines a second mechanism which WEPCO can employ in order to
5 break the cycle of inability-to-pay, with this second mechanism involving targeted
6 low-income energy efficiency investments;
- 7 ➤ Part 6 examines a third mechanism which WEPCO can employ in order to break
8 the cycle of inability-to-pay, with this third mechanism involving modest
9 modifications to the Company’s tariffed customer service rules and collection
10 practices;
- 11 ➤ Finally, Part 7 proposes a mechanism which WEPCO can employ in tracking its
12 response to inability-to-pay, with this mechanism involving data collection in the
13 nature of performance-based ratemaking.

14 **Q. PLEASE SUMMARIZE THE DOCUMENTS YOU HAVE REVIEWED IN THE**
15 **PREPARATION OF YOUR TESTIMONY TODAY?**

16 A. In preparing my Direct Testimony, I have examined the filing of WEPCO in these
17 dockets (including both testimony and exhibits/schedules). I have examined various WE
18 Energies documents, including, without limitation, the WE Energies annual report to the
19 Wisconsin PSC, WEPCO’s Form 861 filings with the U.S. Energy Information
20 Administration, and the Company’s natural gas and electric tariffs. I have reviewed the
21 responses provided to Walnut Way discovery, along with the discovery responses of
22 other parties. In addition, I have undertaken an extensive review of Census data relevant
23 to the WEPCO service territory.

1 **Q. ARE YOU SPONSORING ANY EXHIBITS WITH YOUR TESTIMONY?**

2 A. Yes. With this Testimony, I am filing:

- 3 ➤ Ex.-WW-Colton-1: Roger Colton professional background;
- 4 ➤ Ex.-WW-Colton-2: We Energies Service Territory Map
- 5 ➤ Ex.-WW-Colton-3: Sierra Club, Energy Burdens in Milwaukee report
- 6 ➤ Ex.-WW-Colton-4: Response to 3-WW-INT-2
- 7 ➤ Ex.-WW-Colton-5: Walnut Way Diagram, Connection Between Household
- 8 Energy Security (EI) and Health
- 9 ➤ Ex.-WW-Colton-6: Response to 2-WW/DR/17
- 10 ➤ Ex.-WW-Colton-7: PECO Energy low-income collaborative
- 11 ➤ Ex.-WW-Colton-8, Schedule, Difficulty of Low-Income Customers in Making
- 12 Bill Payments
- 13 ➤ Ex.-WW-Colton-9, Focus on Energy 2021 Annual Report, Vol. 1 (excerpt)
- 14 ➤ Ex.-WW-Colton-10, Consumers Energy (Michigan) geo-targeting settlement;
- 15 ➤ Ex.-WW-Colton-11, Response to 2-CW-5(b)
- 16 ➤ Ex.-WW-Colton-12, Response to 2-CW-6
- 17 ➤ Ex.-WW-Colton-13, Response to 2-WW/INT-1
- 18 ➤ Ex.-WW-Colton-14, We Energies Program Report (excerpt)
- 19 ➤ Ex.-WW-Colton-15, Response to Staff Data Request KM-1.1
- 20 ➤ Ex.-WW-Colton-16, Supplemental Response to 2-WW/INT-15
- 21 ➤ Ex.-WW-Colton-17, Response to 2-WW/INT-15 & Attach01
- 22 ➤ Ex.-WW-Colton-18, Response to 2-WW/INT-9
- 23 ➤ Ex.-WW-Colton-19, Response to 2-WW/DR-10

1 this proceeding and, based on the data and discussion presented throughout
2 my Testimony, should be answered in the affirmative.

- 3 ➤ The Commission should approve a funding stream to allow stakeholders such
4 as Walnut Way to meaningfully participate in the collaborative process. A
5 participation support fund of \$250,000, not to be earmarked for any single
6 stakeholder, would be reasonable.
- 7 ➤ The Commission should direct WEPCO to develop and implement a
8 Community-Based Targeting Pilot modelled on the Consumers Energy pilot
9 program adopted as part of a settlement of a proceeding reviewing the
10 Consumers “Energy Waste Reduction” (“EWR”) plan as approved by the
11 Michigan PSC on March 17, 2022.
- 12 ➤ The five Zip Codes to be targeted should include Zip Codes 53205, 53206,
13 53208, 53210, and 53212. As I demonstrate above, these Zip Codes are not
14 only dramatically disproportionately low-income, but they are substantially
15 disproportionately payment-troubled as well. An expenditure of \$1.0 million
16 is reasonable for this Pilot.
- 17 ➤ The development and implementation of the geo-targeting initiative should
18 also follow the low-income needs assessment (LINA) protocol established in
19 the Consumers Energy settlement and the data reporting protocols established
20 in that Settlement.
- 21 ➤ Walnut Way should be incorporated as an essential partner in assisting
22 WEPCO to develop and deliver the geo-targeting pilot project.
- 23 ➤ The Company’s Low-Income Forgiveness Tool (LIFT) program should be
24 incorporated into WEPCO’s permanent tariffs.
- 25 ➤ WEPCO should modify LIFT to allow customers to demonstrate their income-
26 eligibility for LIFT by proving that they are a recipient of Supplemental
27 Nutrition Assistance Program (SNAP) (formerly known as Food Stamps)
28 benefits.
- 29 ➤ Low-income customers--defined to be those customers who are eligible to
30 receive benefits from the Low-Income Home Energy Assistance Program
31 (LIHEAP)—should be exempt from late payment charges.
- 32 ➤ Residential late payment charges should not be imposed until unpaid account
33 balances are at least 90 days old.

1 ➤ The Commission direct WEPCO to incorporate the following practices and
2 procedures regarding Deferred Payment Agreements (DPAs) into its tariff as a
3 means to mitigate and collect uncollectibles:

4 A. *The Company shall not disconnect or refuse to restore service to any*
5 *residential customer whose service has been or is subject to*
6 *termination for a delinquent amount unless and until the Company*
7 *first offers the customer an opportunity to enter into a reasonable*
8 *deferred payment agreement.*

9 B. *Whenever a residential customer advises the Company that the*
10 *customer is presently unable to pay a total outstanding bill and/or*
11 *deposit the Company shall offer the customer a reasonable deferred*
12 *payment agreement, which affirmatively takes into consideration the*
13 *customer's financial circumstances.*

14 C. *The customer has the option, when negotiating a deferred payment*
15 *agreement, to include the current month's bill plus the reconnection*
16 *charges, deposits, or other customer service fees, if any, in the total*
17 *amount to be paid over the term of the deferred payment agreement.*

18 D. *The Company shall not require a residential customer to pay, as a*
19 *down-payment, more than the lessrt of \$100 or 10 percent of the total*
20 *outstanding bill due at the time the agreement(s) is made or executed.*

21 E. *Should a customer be a participant in an energy assistance or*
22 *income-supplement program as identified in this section, the*
23 *Company shall not require the customer to pay, as a down-payment,*
24 *more than five (5) percent of the amount covered by the payment*
25 *agreement, or the cost of one-third of one month's average usage,*
26 *whichever is greater. The income supplement or energy assistance*
27 *programs that qualify a customer for this down-payment include: (1)*
28 *Weatherization Assistance Program (WAP); (2) LIHEAP; (3) public*
29 *or assisted housing; (4) SSI; (5) SNAP (formerly Food Stamps); (6)*
30 *TANF; (7) Telephone Lifeline; (8) PAAD (Pharmaceutical Assistance*
31 *for the Aged and Disabled); (9) WIC; (10) Medicaid; (11) free or*
32 *reduced school lunch/school breakfast; (12) Head Start; (13)*
33 *Dependency and Indemnity Compensation (DIC) for Surviving Spouse*
34 *or Parents of Veterans; or (14) other programs as may from time to*
35 *time be recognized by the Commission. As part of the DPA process,*
36 *the Company shall provide customers reasonable time to supply the*

1 utility with written documentation of their participation in or
2 qualification for any such program.

3 F. The deferred payment agreement shall reflect the specific
4 circumstances of the particular case and shall be determined by both
5 the Company and the customer receiving residential utility service. A
6 deferred payment agreement must provide for installments as low as
7 \$10 per month and no down-payment, when the customer or applicant
8 demonstrates financial need for such terms, but need not provide for
9 monthly installments of less than \$10.

10 G. The Company shall develop written deferred payment agreement
11 procedures and forms for evaluating the financial need of a customer
12 or applicant, for assuring the confidential handling of such
13 information, for arriving at fair and reasonable payment terms, and
14 for training its personnel, which procedures shall be filed with the
15 Wisconsin Public Service Commission.

16 H. The Company shall provide a written payment agreement form in
17 clear and understandable language and format at the time of the
18 initial agreement on a deferred payment arrangement. The written
19 payment agreement form shall contain the following information: (1)
20 that the Company is required to offer a payment agreement that the
21 customer or applicant is able to pay, considering his or her
22 individual household financial circumstances; (2) that if the customer
23 or applicant demonstrates financial need, alternate terms will be
24 available, a down payment may not be required and installments may
25 be as low as \$10 per month above current bills; and (3) that the
26 agreement should not be signed if the customer or applicant is unable
27 to pay its terms.

28 I. Should a customer fail to maintain a DPA, the Company shall offer to
29 renegotiate the DPA. The Company shall offer the customer another
30 DPA and roll the entire arrearage and current bill into the new
31 arrearage amount. The customer shall again have the option, when
32 negotiating a deferred payment agreement, to include the current
33 month's bill plus the reconnection charges, deposits, or other
34 customer service fees, if any, in the total amount to be paid over the
35 term of the deferred payment agreement.

1 **Part 1. A Comparison of Electric and Natural Gas Prices to Income.**

2 **Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR**
3 **TESTIMONY.**

4 A. In this section of my testimony, I provide an overview of the prices and bills that are
5 faced by the residential customers of WEPCO in Wisconsin. I find that WEPCO
6 residential customers, particularly low-income customers, are facing increasing
7 difficulties in their ability to pay their WEPCO bills. These difficulties are caused in
8 large part by the sharply rising prices charged by WEPCO. I examine the particular
9 affordability problems present in Milwaukee County. I also examine WEPCO natural
10 gas prices.

11 **A. WEPCO Rates and Low-Income Status Over Time.**

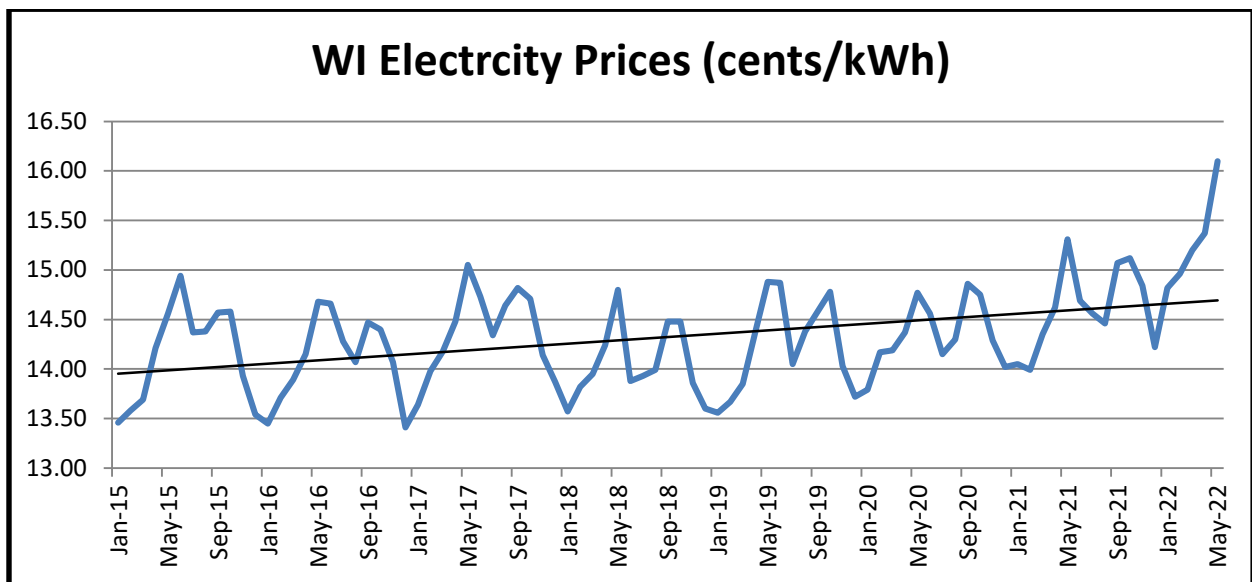
12 **Q. HOW HAVE WEPCO RATES CHANGED IN RECENT YEARS?**

13 A. WEPCO residential rates have risen substantially faster than the incomes of Wisconsin's
14 low-income customers. In reaching this conclusion, I have examined the history of prices
15 charged by WEPCO relative to the history of changes in incomes of low-income
16 residents of the Company. I find that in recent years, increases in the price of electricity
17 have substantially outstripped increases in the incomes experienced by the Company's
18 lowest income households.

19 **Q. WHAT ELECTRIC PRICES HAVE YOU REVIEWED?**

20 A. In my review, I have examined the monthly Wisconsin electric prices reported to the
21 Energy Information Administration of the U.S. Department of Energy (EIA/DOE). I
22 examined data beginning in January 2015 and extending to the most recent month

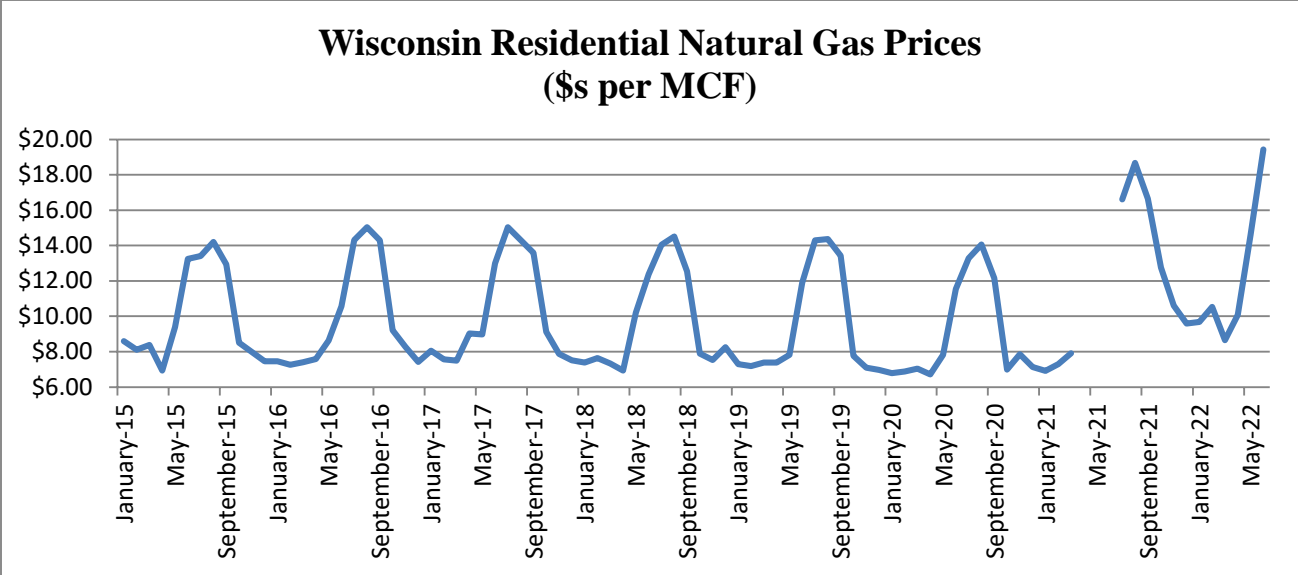
1 available (May 2022). I chose to begin with 2015 data given that this time frame
2 provides several years of data prior to the advent of the novel Coronavirus health
3 pandemic. The data is presented in the Chart below. As can be seen, in that 41 month
4 period, electric prices have increased by nearly 20% (nearly 3% per year), from a low of
5 13.56 cents per kWh in January 2015 to a high of 16.1 cents per kWh in May 2022. I use
6 Wisconsin state data given that data specific to WEPCO is not yet reported for months in
7 either 2021 or 2022.



8

9 **Q. WHAT NATURAL GAS PRICES HAVE YOU EXAMINED?**

10 A. I have examined the price of natural gas in Wisconsin for the same time period as I
11 examined for electricity (January 2015 through June 2022). As with electricity prices,
12 monthly prices for WEPCO are not available. Accordingly, I examined statewide prices
13 as the nearest surrogate.



1

2 As can be seen from the Chart immediately above, the trend of natural gas prices was
 3 somewhat like the trends in Wisconsin electric prices. Prices varied by season each year.
 4 On a year-over-year basis, however, natural gas prices were reasonably steady. However,
 5 beginning in 2021, Wisconsin’s natural gas prices saw a substantial fly-up. While
 6 January 2021 prices were \$6.90 per MCF, June 2022 prices were \$19.45 per MCF. On a
 7 year over year basis, for four seasonal months (October, January, April, June),

	2015	2016	2017	2018	2019	2020	2021	2022
October	\$8.51	\$9.20	\$9.12	\$7.88	\$7.76	\$6.98	\$12.76	---
January	\$8.60	\$7.46	\$8.05	\$7.37	\$7.28	\$6.78	\$6.90	\$9.68
April	\$6.93	\$7.57	\$9.03	\$6.92	\$7.37	\$6.71	\$---	\$10.07
June	\$13.24	\$10.57	\$12.99	\$12.37	\$11.90	\$11.55	\$---	\$19.45

8 The Table shows that January and April 2022 natural gas prices were 50% higher than
 9 January and April prices in 2020 (April 2021 prices were not available). June 2022
 10 natural gas prices are nearly two times higher than June 2020 prices. This pending

1 natural gas rate proceeding before the Wisconsin PSC will increase residential natural gas
2 prices even further.

3 It should be remembered, of course, that there are a substantial number of WEPCO
4 customers who will bear the burden of *both* the increased electricity prices *and* the
5 increased natural gas prices. I have attached a map showing the overlapping service
6 territories as Ex.-WW-Colton-2.

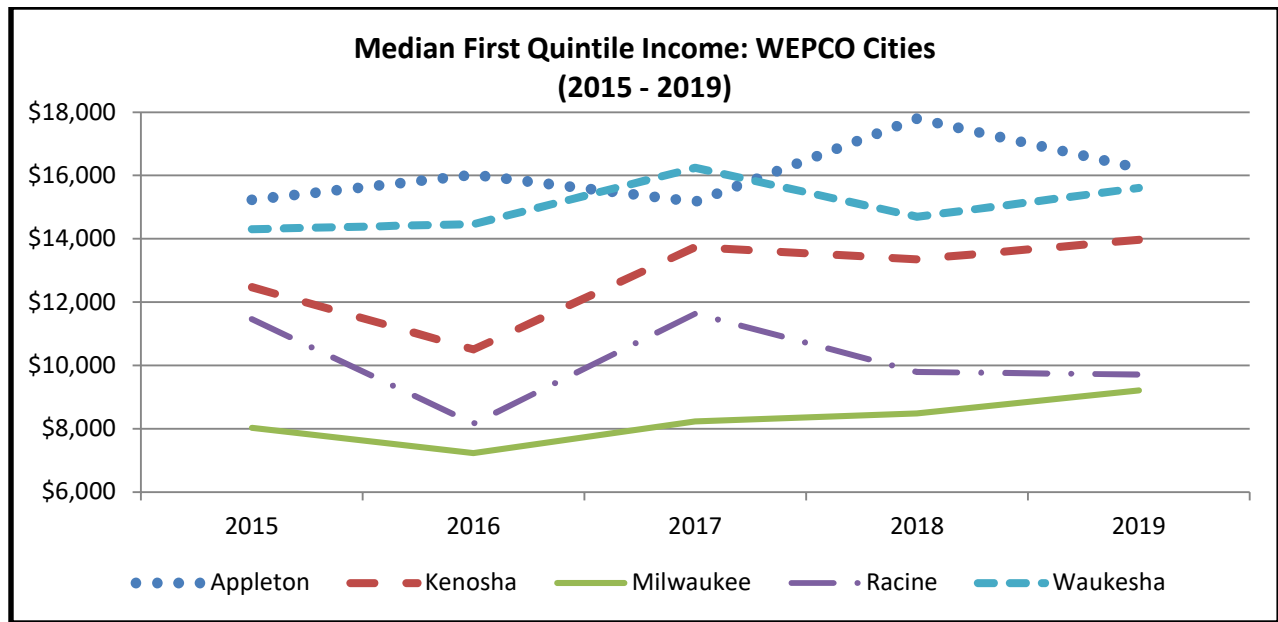
7 **Q. HAVE YOU COMPARED THESE PRICE INCREASES TO INCOME CHANGES**
8 **DURING THE SAME TIME PERIOD?**

9 A. In comparing the increases in electricity and natural gas prices to incomes, I have
10 examined the mean income for the First Quintile (Q1) of income for five cities in the
11 WEPCO service territory: (1) Appleton; (2) Kenosha; (3) Milwaukee; (4) Racine; and (5)
12 Waukesha. I identified these five cities by referencing the jurisdictions that WEPCO
13 serves as listed in its electricity tariff. As is evident, incomes throughout the WEPCO
14 service territory have not increased at the same rate as electricity and natural gas prices
15 increased. In none of WEPCO's five cities did the rate of increase in income equal or
16 exceed the rate of increases in electricity and natural gas prices. Milwaukee had a rate of
17 increase in incomes that comes closest to the rate of increase in electricity natural gas
18 prices (14.8%). Milwaukee, however, also has the lowest average income of the five
19 cities examined. Indeed, in Racine, Q1 incomes actually declined during the period 2015
20 through 2019. In both Appleton and Waukesha, the five year increase in Q1 incomes was
21 less than 10%.

	2015	2016	2017	2018	2019	Pct since 2015
Appleton	\$15,232	\$16,019	\$15,171	\$17,799	\$16,231	9.1%
Kenosha	\$12,471	\$10,507	\$13,739	\$13,350	\$13,971	12.0%
Milwaukee	\$8,025	\$7,236	\$8,232	\$8,477	\$9,211	14.8%
Racine	\$11,461	\$8,164	\$11,639	\$9,796	\$9,719	-15.2%
Waukesha	\$14,307	\$14,464	\$16,244	\$14,702	\$15,604	9.1%

1 The same data is set forth below in Chart form. Several important observations can be
2 seen in this Chart. First, the Chart illustrates that one cannot assume that incomes will
3 always increase over time. In all five of WEPCO’s cities, there were one or more years
4 in which the average Q1 income declined in one year relative to the immediately
5 preceding year. Second, Q1 incomes in the WEPCO service territory show variability
6 from one year to the next, up and down. In some years, Q1 incomes increased, but in
7 other years, Q1 increases declined. As a result of this variability, average incomes in this
8 lowest tier of quantiles do not support ongoing increases in WEPCO electricity and
9 natural gas rates. Third, the Chart illustrates the substantial difference in Q1 incomes
10 between communities. In Milwaukee in particular, Q1 incomes are considerably lower
11 than in other WEPCO cities. In 2019, the last year for which data is publicly available,
12 the average Q1 income in Milwaukee was only \$9,200, compared to an average Q1
13 income of more than more than \$16,000 in Appleton and to more than \$15,600 in
14 Waukesha.

¹ American Community Survey, Table B19081 (1-year data, 2015 – 2019). One-year data for 2020 is not available for minor civil divisions. The Census Bureau reported that COVID-related data collection problems prevented the collection of adequate data to allow publication.



1

2 **Q. IS THERE ANY OTHER IMPORTANT OBSERVATION ABOUT THE Q1**
 3 **INCOMES IN THESE WEPCO CITIES?**

4 A. Table 3 below compares the average Q1 income to 100% of Poverty Level for a two-
 5 person household for each year. Average household size in these five Wisconsin cities is
 6 between 2-persons and 3-persons.² As can be seen, in every instance but one (Appleton
 7 in 2018), the average Q1 income for WEPCO’s five cities is at or below 100% of the
 8 Poverty Level (for a two-person household). If average Q1 incomes were compared to
 9 Poverty Level for a three-person household, they would represent even lower percentages
 10 of Poverty. The harms of increasingly unaffordable WEPCO electricity and natural gas
 11 bills, in other words, fall primarily on the households falling in the lowest Poverty
 12 brackets.

² American Community Survey, 1-year data, Table B25010 (Appleton: 2.40 persons; Kenosha: 2.51 persons; Milwaukee: 2.51 persons; Racine: 2.47; Waukesha: 2.35 persons).

	100% FPL (2-persons)	Appleton	Kenosha	Milwaukee	Racine	Waukesha
2015	\$15,930	96%	78%	50%	72%	90%
2016	\$16,020	100%	66%	45%	51%	90%
2017	\$16,240	93%	85%	51%	72%	100%
2018	\$16,460	108%	81%	52%	60%	89%
2019	\$16,910	96%	83%	54%	57%	92%

1 **B. The Particular Affordability Problems Facing Milwaukee.**

2 **Q. IS THERE ANY FINAL SET OF BACKGROUND DATA THAT SHOULD BE**
3 **CONSIDERED BEFORE EXAMINING THE SPECIFICS OF WEPCO’S**
4 **PROPOSED RATES?**

5 **A.** Yes. It is possible to identify particularly vulnerable locations in the WEPCO service
6 territory through application of the federal Justice40 (“J40”) index.³ On July 20, 2021,
7 the Office of Management and the Budget (“OMB”) published interim guidelines
8 regarding, inter alia, how to identify “disadvantaged communities.” OMB stated:

9 In Executive Order 14008, the President directed the Director of the Office of
10 Management and Budget (OMB), the Chair of the Council on Environmental
11 Quality (CEQ), and the National Climate Advisor, in consultation with the
12 White House Environmental Justice Advisory Council (WHEJAC), to jointly
13 publish guidance on how certain Federal investments might be made toward a

³ “Justice40 is a whole-of-government effort to ensure that Federal agencies work with states and local communities to make good on President Biden’s promise to deliver at least 40 percent of the overall benefits from Federal investments in climate and clean energy to disadvantaged communities.” Shalanda Young, Brenda Mallory, and Gina McCarthy, “The Path to Achieving Justice40,” July 20, 2021, available at <https://www.whitehouse.gov/omb/briefing-room/2021/07/20/the-path-to-achieving-justice40/> (accessed August 15, 2022).

1 goal that 40 percent of the overall benefits of such investments flow to
2 disadvantaged communities – the Justice40 Initiative.⁴

3 OMB said further:

4 Agencies should consider appropriate data, indices, and screening tools to
5 determine whether a specific community is disadvantaged based on a
6 combination of variables that may include, but are not limited to, the
7 following:

- 8 • Low income, high and/or persistent poverty
- 9 • High unemployment and underemployment
- 10 • Racial and ethnic residential segregation, particularly where the
11 segregation stems from discrimination by government entities
- 12 • Linguistic isolation
- 13 • High housing cost burden and substandard housing Distressed
14 neighborhoods
- 15 • High transportation cost burden and/or low transportation access
- 16 • Disproportionate environmental stressor burden and high cumulative
17 impacts
- 18 • Limited water and sanitation access and affordability
- 19 • Disproportionate impacts from climate change
- 20 • High energy cost burden and low energy access
- 21 • Jobs lost through the energy transition
- 22 • Access to healthcare

23 In determining which variables to consider, agencies should consider the
24 statutory authority for covered programs.

25 Each of the identified “J40 communities” comprises a single Census Tract.⁵

⁴ OMB Memorandum 21-28, Interim Implementation Guidance for the Justice40 Initiative, July 20, 2021, available at <https://www.whitehouse.gov/wp-content/uploads/2021/07/M-21-28.pdf> (accessed August 15, 2022).

⁵ Census Tracts are small, relatively permanent statistical subdivisions of a county or statistically equivalent entity that can be updated by local participants prior to each decennial census as part of the Census Bureau’s Participant Statistical Areas Program (PSAP). The Census Bureau delineates census tracts in situations where no local participant responded or where state, local, or tribal governments declined to participate. The primary purpose of census tracts is to provide a stable set of geographic units for the presentation of statistical data.

Census tracts generally have a population size between 1,200 and 8,000 people, with an optimum size of 4,000 people. A census tract usually covers a contiguous area; however, the spatial size of census tracts varies widely depending on the density of settlement. Census tract boundaries are delineated with the intention of being

1 In Wisconsin, 230 Census Tracts have been identified as “disadvantaged”⁶ through the
2 J40 process. Significant concentrations of these are Justice40 communities in the
3 WEPCO service territory. Of the 230 Wisconsin communities identified as
4 “disadvantaged,” 135 are located in Milwaukee County (out of a total of 298 total
5 Milwaukee Census Tracts); seven are located in Kenosha County (out of a total of 36);
6 and 10 are located in Racine (out of a total of 35). Two out of every three disadvantaged
7 communities (identified through the J40 process) (66%), in other words, fall within these
8 three WEPCO counties.

9 According to the federal J40 data base, these communities have been identified as having
10 high home energy burdens. The Milwaukee vulnerable Census Tracts, on average, fall
11 into the 82nd percentile of energy burdens in Wisconsin; the Kenosha Census Tracts fall
12 into the 62nd percentile; the Racine Census Tracts fall into the 69th percentile. In fact, of
13 the 135 vulnerable J40 Census Tracts in Milwaukee County, 60 have energy burdens that
14 fall at or above the 90th percentile burden in the State of Wisconsin.

15 **Q. IS THERE ANY OTHER ATTRIBUTE OF CONCERN THAT YOU HAVE**
16 **IDENTIFIED FOR THESE WEPCO CENSUS TRACTS?**

17 A. Yes, I have identified the “Racially or Ethnically Concentrated Areas of Poverty”
18 (R/ECAP) in Wisconsin and examined characteristics in those areas that would affect

maintained over a long time so that statistical comparisons can be made from census to census. Census tracts occasionally are split due to population growth or merged as a result of substantial population decline.https://www.census.gov/programs-surveys/geography/about/glossary.html#par_textimage_13

⁶ U.S. Council on Environmental Quality, Climate and Economic Justice Screening Tool, available at <https://screeningtool.geoplatform.gov/en/downloads> (accessed September 8, 2022).

1 their ability to pay their electricity and natural gas bills. R/ECAP is a metric used by the
2 U.S. Department of Housing and Urban Development (HUD). HUD explains why it
3 developed the R/ECAP construct:

4 To assist communities in identifying racially/ethnically-concentrated areas of
5 poverty (R/ECAPs), HUD has developed a census tract-based definition of
6 R/ECAPs. The definition involves a racial/ethnic concentration threshold and
7 a poverty test. The racial/ethnic concentration threshold is straightforward:
8 R/ECAPs must have a non-white population of 50 percent or more.
9 Regarding the poverty threshold, Wilson (1980) defines neighborhoods of
10 extreme poverty as census tracts with 40 percent or more of individuals living
11 at or below the poverty line. Because overall poverty levels are substantially
12 lower in many parts of the country, HUD supplements this with an alternate
13 criterion. Thus, a neighborhood can be a R/ECAP if it has a poverty rate that
14 exceeds 40% or is three or more times the average tract poverty rate for the
15 metropolitan/micropolitan area, whichever threshold is lower. Census tracts
16 with this extreme poverty that satisfy the racial/ethnic concentration threshold
17 are deemed R/ECAPs.

18 * * *

19
20
21 While this definition of R/ECAP works well for tracts in CBSAs, places
22 outside of these geographies are unlikely to have racial or ethnic
23 concentrations as high as 50 percent. In these areas, the racial/ethnic
24 concentration threshold is set at 20 percent.⁷

25
26 Wisconsin has 62 Census Tracts that are currently identified as R/ECAP Tracts. That is a
27 substantial expansion over the past 20 years. In 2000, Wisconsin had 26 R/ECAP Census
28 Tracts, while in 2010, Wisconsin had 50 R/RECAP Census Tracts. Of Wisconsin's 62
29 "current" R/ECAP Census Tracts, three (3) are in Racine County, one (1) is Kenosha
30 County, and one (1) is in Menominee County. The remaining 57 are in Milwaukee

⁷ HUD (2022). Racially or Ethnically Concentrated Areas of Poverty, available at <https://hudgis-hud.opendata.arcgis.com/datasets/HUD::racially-or-ethnically-concentrated-areas-of-poverty-r-ecaps/about> (accessed August 18, 2022).

1 County. The discussion below focuses on the 57 (of 62 total) R/ECAP Census Tracts in
2 Milwaukee County.

3 **Q. HAVE YOU HAD OCCASION TO CONSIDER THE HOME ENERGY**
4 **BURDENS IN THESE VULNERABLE WEPKO COMMUNITIES?**

5 A. Yes. The data on energy burdens for those Census Tracts is set forth in Table 4 below.
6 The 57 R/ECAP Census Tracts in Milwaukee County have very high home energy
7 burdens. For residential customers as a whole, 26 Census Tracts have home energy
8 burdens at or above 6% of income. The lowest burden amongst the 57 Census Tracts is
9 3.1% of income, while the highest is 9.6% (with the median being 6.0%). Low-income
10 energy burdens in the Milwaukee County R/ECAP Census Tracts are considerably higher
11 than burdens for residential households as a whole. The lowest low-income burden
12 amongst the 57 Census Tracts in Milwaukee County is 8.3%, while the highest is 19.3%
13 (with the median being 12.8%). The distribution of home energy burdens for both
14 residential customers as a whole, and for low-income residential customers in particular,
15 is set forth in the Table below.

Distribution of Residential Burdens		Distribution of Low-Income Burdens	
<3%	0	<9%	4
3% - <6%	28	9% - <12%	14
6% - <7%	14	12%-<14%	19
7% - <8%	10	14%-<16%	11
8% - <9%	3	16%-<18%	7
9% or more	2	18% or more	2
Sum	57	Sum	57

1
2 The extent to which the Milwaukee energy burdens are high can be seen by comparing
3 the Milwaukee R/ECAP Census Tracts to the State of Wisconsin as a whole. In
4 Wisconsin, the Census Tract with the lowest energy burden for residential households has
5 a burden of 1.0%, while the Census Tract with the highest burden is the Milwaukee
6 R/ECAP Census Tract with a burden of 9.6%. The weighted average home energy
7 burden statewide is 2.9% of income, less than half of the median residential burden in the
8 Milwaukee County R/ECAP Census Tracts (of 6.0%) and less than one-quarter of the
9 median low-income burden in the Milwaukee County R/ECAP Census Tracts.

10 **Q. HAVE YOU HAD OCCASION TO CONSIDER UNAFFORDABILITY ISSUES IN**
11 **MILWAUKEE COUNTY IN PARTICULAR?**

12 A. Yes. The Sierra Club’s recent study of home energy burdens in the City of Milwaukee
13 supports the need for “equity” to take affordability in account. The Sierra Club’s
14 Milwaukee study, *Energy Burdens in Milwaukee: Study Reveals Major Disparities &*

1 *Links to Redlined Areas*, is attached to this Testimony as Ex.-WW-Colton-3 (hereafter
2 referred to as *Milwaukee Burdens*).

3 *Milwaukee Burdens* explains that “energy burdens” represent bills as a percentage of
4 income. A household with an energy bill of \$2,000 and an annual income of \$20,000, for
5 example, experiences an energy burden of 10% of income. Energy burdens that equal or
6 exceed 6% of income are considered to be high energy burdens.

7 High energy burdens harm households in numerous ways. According to *Milwaukee*
8 *Burdens*, high energy burdens not only threaten access to life sustaining home energy
9 through nonpayment disconnections, but high burdens force “tough choices between
10 paying energy bills and buying food, covering rent or mortgage payments, obtaining
11 medical treatment and medicine, and accessing other life essentials.” According to
12 *Milwaukee Burdens*, “households with high energy burdens experience many negative
13 long-term effects on health and well-being including a greater risk for respiratory
14 diseases and increased stress.”

15 **Q. IS THE PRESENCE OF VULNERABILITIES AND HIGH ENERGY BURDENS**
16 **IN THE WEPCO SERVICE TERRITORY RACIALLY NEUTRAL?**

17 A. No. High energy burdens in Milwaukee are not racially neutral. *Milwaukee Burdens*
18 reports that 85,000 people, or roughly 6% of the Milwaukee metro population, live in
19 high energy burden Census Tracts. According to *Milwaukee Burdens*:

20 However, areas with high energy burdens are disproportionately Black and
21 Hispanic/Latinx communities. While 16% of Milwaukee’s metro population
22 is Black, 65% of residents of high-burden neighborhoods are Black. 11% of

1 the metro area population is Hispanic or Latinx, but 21% of the population in
2 high-burden neighborhoods is Hispanic/Latinx.

3
4 In contrast, *Milwaukee Burdens* reports that “while the Milwaukee metro area’s white
5 population is two-thirds of the total population, white residents only account for 9% of
6 the population in high-burden neighborhoods.” The median energy burden for
7 Milwaukee’s Black and Hispanic/Latinx population is more than two times higher than
8 Milwaukee’s White population. While the median energy burden for Milwaukee’s Black
9 population is 5.0%, and for the city’s Hispanic/Latinx population is 5.3%, the median
10 energy burden for Milwaukee’s White population is only 2.1%.

11 Overall, the Sierra Club’s *Milwaukee Burdens* Report found that Milwaukee County’s
12 Census Tracts that have home energy burdens at or above 6% of income have a distinctly
13 different racial and ethnic make-up than the Census Tracts with burdens below 6% of
14 income.⁸

- 15 ➤ The population of Milwaukee County Census Tracts with burdens less than 6% is
16 comprised of 22.3% Blacks, while the Census Tracts with burdens at or above
17 6% is 67.4% Black.
- 18 ➤ The population of Milwaukee County Census Tracts with burdens less than 6% is
19 comprised of 55.7% White, while the Census Tracts with burdens at or above 6%
20 is 8.7% White.
- 21 ➤ The population of Milwaukee County Census Tracts with burdens less than 6% is
22 comprised of 14.4% Hispanic/Latinx, while the Census Tracts with burdens at or
23 above 6% are 18.4% Hispanic/Latinx.

24 The demographics of high burden Milwaukee Census Tracts is discussed in more detail
25 in the discussion of the *Milwaukee Burdens* report attached as Ex.-WW-Colton-2.

⁸ This distinction is to be expected. By definition, as discussed above, the R/ECAP Census Tracts have high penetrations of a non-White population.

1 **C. A Focus on the Lindsay Heights Neighborhood.**

2 **Q. HAVE YOU HAD OCCASION TO EXAMINE MILWAUKEE’S LINDSAY**
3 **HEIGHTS NEIGHBORHOOD IN PARTICULAR?**

4 A. Yes. Lindsay Heights is a particular Milwaukee neighborhood that is served by Walnut
5 Way, on whose behalf I testify in this proceeding. I define the Lindsay Heights
6 neighborhood as including Zip Codes 53205 and 53206 in Milwaukee. In turn, Zip Code
7 53205 has 9 Census Tracts,⁹ while Zip Code 53206 has 17 Census Tracts.¹⁰

8 The Lindsay Heights neighborhood is extraordinarily poor. Of the 23 unduplicated
9 Census Tracts, only one has an average First Quintile income of more than \$10,000
10 (Census Tract 1859: \$11,898), and only one more has an average Q1 income of between
11 \$9,000 and \$10,000. In contrast, eight of these 23 Census Tracts have average Q1
12 incomes of less than \$5,000, while 13 have an average Q1 income of less than \$6,000.

13 The total population with incomes below Poverty Level is substantial. Of the 25 Census
14 Tracts in the Lindsay Heights neighborhood with Poverty Data, 12 have more than 40%
15 of their total population with income below the Federal Poverty Level; nine of those 12
16 Census Tracts have more than 50% of their total population with income below the
17 Poverty Level. In the neighborhood as a whole, four of every ten persons (39%) lives
18 with an annual income at or below Poverty. One of every seven persons living in Poverty
19 (14%) is a child age six or younger.

⁹ Census Tract ##s 141,1854, 1855, 1856, 1858, 1859, 1860, 1861, 1862.

¹⁰ Census Tract ##s 42, 43, 45, 46, 47, 64, 65, 66, 67, 68, 84, 85, 86, 87, 88, 1854, 1855.

1 **Q. WHAT DO YOU CONCLUDE?**

2 A. Even given the disproportionate difficulties facing Milwaukee as a whole, which I have
3 discussed in more detail elsewhere in my Testimony, the Lindsay Heights neighborhood
4 will be particularly hard struck. WEPCO reports that it is seeking a residential rate
5 increase of \$6.00 per month for electricity and of \$5.94 to \$6.39 per month for natural
6 gas. (E.g., Ex.-WEPCO/WG-Nelson-10.) This is on top of residential bills that already
7 exceed \$1,200/year on average for electric, and \$600/year or more on average for natural
8 gas. (Ex.-WW-Colton-4.) While \$72 in additional electric costs, or \$144 in additional
9 electric and natural gas costs, may not seem overwhelming to many people, when a
10 household's annual income is \$5,000, the increase in bills, unto itself, will represent 1.5%
11 of income for electricity (standing alone) or 3% of annual income for combined
12 electricity and natural gas. Given that the generally accepted definition of an
13 "affordable" burden is deemed to be 6% of income (for combined electricity and natural
14 gas), the added burden on this Milwaukee neighborhood can be easily seen.

15 In August 2022, Walnut Way published an illustration of the connection between
16 household energy security and health. As Walnut Way demonstrated, the primary
17 impacts of household energy insecurity include such factors as unaffordable energy bills,
18 impaired energy access, and indoor temporary extremes. These "primary impacts" then
19 lead to secondary impacts such as housing and food insecurity, therm discomfort,
20 maladaptive coping, dampness and mold, and poor indoor air quality. The health
21 outcomes are then numerous. (Ex.-WW-Colton-5). As I demonstrate above, for the
22 residents of this vulnerable Milwaukee neighborhood, the concerns about the impacts of
23 energy insecurity on their households, and on their children, is well-founded.

1 **Part 2. The Ongoing Economic Impacts of COVID-19 in Wisconsin.**

2 **Q. PLEASE DESCRIBE THE PURPOSE OF THIS SECTION OF YOUR**
3 **TESTIMONY.**

4 A. In this section of my testimony, I review the ongoing adverse impacts that COVID-19 is
5 having on the ability of low-income customers, in particular, to pay their ongoing basic
6 household expenses. I find that there are substantial ongoing payment difficulties.

7 Wisconsin, as with other states around the nation, has been hard hit by the novel
8 Coronavirus (COVID-19) health pandemic in recent years. In assessing the impacts of
9 any public utility's actions relative to the ability of income-challenged utility customers
10 to make utility bill payments, one must first acknowledge the ongoing impacts which
11 COVID-19 might be having on ability-to-pay.

12 The U.S. Census Bureau has tracked the impacts of COVID-19 through its periodic
13 "PULSE Survey." The Census Bureau began collecting information through the PULSE
14 Survey in April 2020.¹¹ Data collection continues through today. The discussion here is
15 limited to a relative narrow focus of the PULSE Surveys, the impact of COVID-19 on the
16 ability of households to pay for their "usual household expenses." Statewide data for
17 Wisconsin is discussed below.

¹¹ The most recent PULSE Survey data tables were published on July 20, 2022, with data collected through July 11, 2022 (accessible at <https://www.census.gov/programs-surveys/household-pulse-survey/data.html#phase3.5>).

1 The discussion below focuses on a limited number of the “weeks”¹² surveyed by the
2 Census Bureau. The intent is to provide an insight into how the ability-to-pay of
3 Wisconsin residents varied over the course of the pandemic (recognizing that the health
4 emergency is not considered to be “over” even at this point in mid-2022). The weeks
5 reviewed include: (1) Week 13: August 19, 2020 through August 31, 2020;¹³ (2) Week
6 21: December 9, 2020 through December 21, 2020; (3) Week 31: May 26, 2021 through
7 June 7, 2021; (4) Week 41: December 29, 2021 through January 10, 2022; and (5) Week
8 47: June 29, 2022 through July 11, 2022.¹⁴ After looking at the impacts of COVID-19 by
9 income, the discussion will briefly turn to an examination of the impacts by the presence
10 of older residents and the presence of children.

11 **A. COVID-19 Impacts on Ability-to-Pay**

12 **Q. WHAT IMPACT HAS COVID-19 HAD ON THE ABILITY OF WISCONSIN**
13 **RESIDENTS TO PAY USUAL HOUSEHOLD EXPENSES?**

14 A. Overall, COVID-19 continues to have an ongoing adverse impact on the extent to which
15 Wisconsin residents have a difficulty in paying for usual household expenses.¹⁵ The
16 degree of difficulty for each of the five weeks examined is presented in the Table below.

¹² Phase 1 of the Household Pulse Survey was collected and disseminated on a weekly basis. All later phases of the survey have used two-week collection and dissemination periods. Despite going to a two-week collection period, the Household Pulse Survey continues to call these collection periods “weeks” to maintain continuity. Phases 3.3 and later maintain the two-week collection periods but shifted to a two-weeks on, two-weeks off collection approach.

¹³ This is the first week the PULSE Survey began to ask questions about household difficulties in paying their “usual household expenses.”

¹⁴ This is the most recent PULSE Survey for which data has been publicly released as of the date this discussion was authored.

¹⁵ The difficulty is limited to “difficulty paying for usual household expenses *in the last 7 days*.” (emphasis added).

1 For the population as a whole, Wisconsin residents are having more difficulty today in
 2 paying their usual household expenses than they have had since the advent of COVID-19.
 3 On the one hand, not only has the percentage of population finding it “not at all difficult”
 4 to pay their usual household expenses fallen to the lowest level since Week 13 of
 5 COVID-19, but the combined percentage of households finding it either “not at all
 6 difficult” or only “a little difficult” has fallen to the lowest level since that early week of
 7 COVID-19.

	Total	Not at all difficult	A little difficult	Somewhat difficult	Very difficult
Week 13	4,438,719	55%	20%	13%	9%
Week 21	4,438,719	46%	20%	17%	13%
Week 31	4,454,731	58%	16%	13%	6%
Week 41	4,454,731	50%	20%	12%	12%
Week 47	4,514,873	41%	24%	17%	10%

8 In contrast, as shown in Table 5 above, the percentage of Wisconsin residents having
 9 difficulty paying their usual household expenses declined from week 13 through Week
 10 31. In 2022, however, those difficulties have been clearly trending upward, both for
 11 those are finding it “very difficult” to pay their usual household expenses and those who
 12 report finding it either “somewhat difficult” or “very difficult.”¹⁷

¹⁶ Percentages may not add to 100% because those not reporting have been omitted.

¹⁷ It should be noted, of course, that while these difficulties are documented through the Census Bureau’s COVID-19 PULSE Survey, the difficulties that are being reported are not necessarily limited to those caused by, or associated with, COVID-19.

1 **Q. DO YOU FIND DIFFERENCES BASED ON INCOME?**

2 A. Yes. The difficulty which Wisconsin’s low-income population is facing in paying for
3 usual household expenses is higher today than it has been since the advent of the
4 COVID-19 pandemic. For purposes of examining low-income households, data on
5 income status was limited to households with annual income of less than \$50,000. With
6 the exception of a brief uptick in difficulties in Week 21 of the Census PULSE Surveys,
7 the highest percentage of the lowest income population now facing a “very difficult” time
8 is documented in the most recent time period. Nearly four-of-ten persons with income
9 less than \$25,000 reports having had a “very difficult” time paying their usual household
10 expenses “in the last seven days.” Indeed, a full 70% of this lowest income population
11 (i.e. annual income below \$25,000) reports having either a “very difficult” or a
12 “somewhat difficult” time paying their bills in mid-2022 (Week 47 of the Census PULSE
13 Survey).

14 Not surprisingly, the highest income range considered (from \$35,000 to \$49,999) has the
15 least difficult time in paying their usual household expenses. Even then, however, the
16 problems faced by this population falling into the higher tier of the three income ranges
17 considered are nonetheless considerable. Nearly one-in-five (18%) report facing a “very
18 difficult” time in paying their usual household expenses, while nearly half (28% + 18% =
19 46%) report having either a “somewhat difficult” or a “very difficult” time in paying their
20 bills.

Week 13	Not At All Difficult	A Little Difficult	Somewhat Difficult	Very Difficult
Less than \$25,000	31%	15%	19%	35%
\$25,000 - \$34,999	33%	30%	13%	23%
\$35,000 - \$49,999	51%	23%	16%	10%
Week 21	Not At All Difficult	A Little Difficult	Somewhat Difficult	Very Difficult
Less than \$25,000	13%	15%	25%	46%
\$25,000 - \$34,999	24%	21%	36%	20%
\$35,000 - \$49,999	38%	27%	12%	23%
Week 31	Not At All Difficult	A Little Difficult	Somewhat Difficult	Very Difficult
Less than \$25,000	38%	10%	24%	29%
\$25,000 - \$34,999	55%	27%	16%	2%
\$35,000 - \$49,999	59%	14%	19%	8%
Week 41	Not At All Difficult	A Little Difficult	Somewhat Difficult	Very Difficult
Less than \$25,000	18%	19%	23%	40%
\$25,000 - \$34,999	31%	25%	21%	23%
\$35,000 - \$49,999	36%	31%	21%	12%
Week 47	Not At All Difficult	A Little Difficult	Somewhat Difficult	Very Difficult
Less than \$25,000	13%	17%	33%	37%
\$25,000 - \$34,999	12%	18%	32%	38%
\$35,000 - \$49,999	31%	22%	28%	18%

1 **B. Overall Economic Health and the Financial Well-Being of the Most Vulnerable.**

2 **Q. DO YOU NOT FIND THAT CONTRARY TO THE DATA ABOVE, IN**
3 **WISCONSIN WAGES ARE GENERALLY INCREASING WITH**
4 **UNEMPLOYMENT DECREASING?**

5 **A.** One must be very careful in assessing the improving health of the economy as a whole
6 and the financial health of households who are the most vulnerable. The increase in

1 Poverty attributable to COVID-19 is important for purposes of this proceeding because it
2 is not likely to be resolved in the foreseeable future. The long-term danger arises because
3 when people lose their jobs, the long-lasting effects are not just on their income.

4 Unemployment has a negative effect on workers' skills and education, even on their
5 health. Human capital, the skills of the overall workforce, decays over time because of
6 the loss of jobs. Moreover, with the COVID-19 pandemic, it is generally recognized that
7 many of the jobs that have been lost will never come back. One research paper from the
8 Becker Friedman Institute for Economics at the University of Chicago estimated that
9 between 32% and 42% of COVID-19 induced layoffs will be permanent.¹⁸

10 **Q. IS THERE A SECOND ECONOMIC IMPACT THAT SHOULD BE**
11 **CONSIDERED IN THIS PROCEEDING?**

12 A. Yes. Nearly 40% of U.S. households, including nearly all low-wage workers, fall into a
13 category referred to as “liquid asset poor.” “Liquid asset poverty,” which is
14 interchangeable with “liquid asset poor,” is a term-of-art that refers to households who
15 lack sufficient liquid assets to replace income in order to subsist at the Poverty Level for
16 three months in the absence of income. According to a Pew Research Center report,
17 “only about one-in-four (23%) [lower income adults] say they have rainy day funds set
18 aside that would cover their expenses for three months in case of an emergency such as
19 job loss, sickness or an economic downturn, compared with 48% of middle-income and

¹⁸ Davis et al. (June 2020). COVID-19 is also a Reallocation Shock, available at: https://bfi.uchicago.edu/wp-content/uploads/BFI_WP_202059.pdf (last accessed December 3, 2020).

1 75% of upper-income adults.”¹⁹ Even as the COVID-19 economic crisis resolves itself
2 for many people, the impact of the lack of savings will become increasingly pronounced,
3 with low-income customers, in particular, unable to draw on resources to pay day-to-day
4 bills. Particularly for lower-income households, economic difficulties will prevail for an
5 extended period of time not only because these households have been forced to use their
6 emergency savings, but also because they have been forced to incur substantial debt
7 during the COVID-19 pandemic to date. According to Pew:

8 Those affected by coronavirus related job loss or pay cuts are much more
9 likely than those who have not experienced these setbacks to have drawn on
10 additional resources. Fully 46% of adults who say they or someone in their
11 household have either been laid off or taken a pay cut as a result of the
12 coronavirus outbreak say they have used money from a savings or retirement
13 account to pay their bills, compared with 17% of those who have not
14 experienced these setbacks.²⁰

15
16 As the COVID-19 economic crisis continues, these households are now running out of
17 savings to draw down. This is an ongoing phenomenon in Wisconsin. According to the
18 Census Bureau’s “Week 47” COVID-19 PULSE Survey, discussed in detail above, a
19 substantial majority of Wisconsin residents are now using “regular income sources like
20 those received before the pandemic;” those that do, have had few payment difficulties in
21 paying their usual household expenses in the last seven days. However, nearly 1.3
22 million residents continue to use credit cards or loans to pay their usual household

¹⁹ Parker, Horowitz and Brown (April 21, 2020). About Half of Lower-Income Americans Report Household Job or Wage Loss Due to COVID-19, Pew Research Center: Washington D.C. Available at <https://www.pewsocialtrends.org/2020/04/21/about-half-of-lower-income-americans-report-household-job-or-wage-loss-due-to-covid-19/> (last accessed November 17, 2020).

²⁰ Parker, Minkin and Bennett (September 24, 2020). Economic Fallout from COVID-19 Continues to Hit Lower-Income Americans the Hardest, at 1, Pew Research Center (Washington D.C.). Accessible at: <https://www.pewsocialtrends.org/2020/09/24/economic-fallout-from-covid-19-continues-to-hit-lower-income-americans-the-hardest/>.

1 expenses, with more than 40% reporting that they found it “somewhat difficult” or “very
 2 difficult” to pay their usual household expenses. Nearly 900,000 Wisconsin residents
 3 report that they continue to draw money from savings (or sell assets, including
 4 withdrawals from retirement accounts). Of these, nearly half (47%) reported finding it
 5 “somewhat difficult” or “very difficult” to pay their usual household expenses in the last
 6 seven days.

	Total	Not at all difficult	A little difficult	Somewhat difficult	Very difficult
Used in the last 7 days to meet spending needs					
Regular income sources like those received before the pandemic	3,278,474	48.7%	27.4%	16.0%	7.8%
Credit cards or loans	1,293,904	27.3%	28.1%	30.1%	14.6%
Money from savings or selling assets or possessions (including withdrawals from retirement accounts)	891,442	19.2%	33.8%	29.9%	17.1%
Borrowing from friends or family	350,089	4.3%	9.3%	35.6%	50.7%
Government rental assistance	59,386	0%	36.2%	13.3%	50.5%

7 In sum, merely because the economy is growing more healthy for the population as a
 8 whole does not mean that the needs of the most vulnerable can be ignored. There is a
 9 huge population in Wisconsin who continue to suffer economically, and will likely do so
 10 for the foreseeable future, as a result of the COVID-19 pandemic.

11 **Part 3. The Relationship between Energy Burdens and Payment Patterns.**

12 **Q. PLEASE EXPLAIN WHY THE INFORMATION AND DISCUSSION ABOVE IS**
 13 **RELEVANT TO THIS WEPCO RATE CASE?**

14 **A.** As bills become increasingly unaffordable, the payment difficulties of those low-income
 15 customers who face unaffordability become increasingly substantial as well. While
 16 WEPCO could not provide data on payment patterns disaggregated by customer

1 segments (Ex.-WW-Colton-6), this conclusion has been documented time and again.
2 One impact of the unaffordability I discuss, in other words, is its impact on the operating
3 costs (e.g., collection costs, working capital, uncollectibles) that are then passed through
4 to other ratepayers. In addition, much of utility ratemaking involves a balancing of
5 investor interests and customer interests. Establishing a return on equity, for example, is
6 fundamentally predicated on balancing customer and investor interests. It is necessary
7 for the PSC to understand the customer interests in order to appropriately balance them
8 against the competing investor interests. Finally, while I do not address revenue
9 requirement issues in my testimony, the needs of low-income customers as I have
10 identified above and additional burdens created by this rate increase would support the
11 conclusions of staff and other stakeholders who may present carefully reasoned
12 adjustments to the Company's reported revenue requirement.

13 What is frequently lacking in a consideration of the unaffordability of utility bills,
14 however, is a consideration of how the failure to deliver affordable bills adversely affects
15 the overall costs associated with providing service to ratepayers. In my discussion below,
16 I identify those impacts. I will first reference national data. I will next examine data from
17 near-by states. I will finally examine what data WEPCO could provide with respect to its
18 own customer base.

19 **A. National Data**

20 **Q. PLEASE EXPLAIN THE RELATIONSHIP BETWEEN LOW-INCOME STATUS**
21 **AND BILL PAYMENT DIFFICULTIES.**

1 A. The relationship that exists between low-income status and bill payment difficulties has
 2 been established in numerous studies. The EIA/DOE convincingly established the
 3 relationship between income and “energy insecurity” in nationwide data from its 2015
 4 Residential Energy Consumption Survey (RECS).²¹ The data is presented in Table 8.

Table 8. Household Energy Insecurity, 2015
EIA/DOE Residential Energy Consumption Survey (RECS)²²

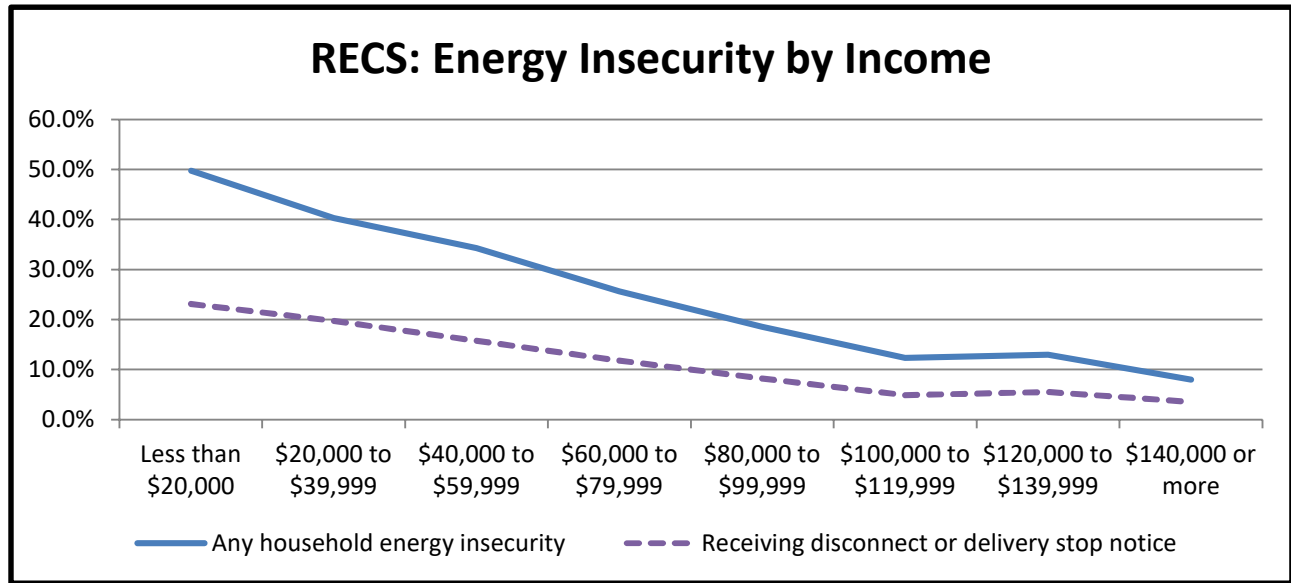
2015 annual household income	Any household energy insecurity	Reducing or forgoing food or medicine to pay energy costs	Leaving home at unhealthy temperature	Receiving disconnect or delivery stop notice	Unable to use heating equipment	Unable to use cooling equipment
Less than \$20,000	49.8%	38.4%	20.1%	23.1%	10.5%	10.0%
\$20,000 to \$39,999	40.3%	29.3%	13.9%	19.8%	7.0%	8.1%
\$40,000 to \$59,999	34.2%	22.8%	10.3%	15.8%	5.4%	5.4%
\$60,000 to \$79,999	25.7%	14.5%	7.2%	11.8%	3.3%	5.3%
\$80,000 to \$99,999	18.6%	8.2%	4.1%	8.2%	1.0%	2.1%
\$100,000 to \$119,999	12.3%	7.4%	3.7%	4.9%	1.2%	1.2%
\$120,000 to \$139,999	13.0%	7.4%	5.6%	5.6%	N/A	N/A
\$140,000 or more	8.0%	2.7%	2.7%	3.6%	0.9%	1.8%

5 The data shows that as household income increases, home energy insecurity decreases.
 6 The Figure below shows the relationship between “any household energy insecurity” in
 7 general, and, for purposes here, the receipt of a notice of disconnection (applicable to
 8 public utilities) or “stop delivery” notice (applicable to deliverable fuels such as fuel oil).
 9 Of households with income less than \$20,000, 23.1% had received a disconnect/stop
 10 delivery notice compared to only 15.8% of households with income between \$40,000 and

²¹ Data from the 2019 RECS has not yet been publicly released. The 2015 data is the most recent data available. <https://www.eia.gov/consumption/residential/data/2015/index.php> (accessed August 17, 2022).

²² <https://www.eia.gov/consumption/residential/data/2015/hc/php/hc11.1.php> (accessed August 17, 2022).

1 \$59,999. When income increased to between \$80,000 and \$99,999, the percentage
2 decreased further to 8.2%.



3 The 2015 results were not unique, nor surprising given similar examinations of earlier
4 RECS data. In 2005, the federal agency administering LIHEAP funded a one-time
5 special set of questions through the 2005 RECS. A resulting review of the 2005 data was
6 undertaken for the federal LIHEAP office.²³ The LIHEAP study reported that
7 households with income below the Federal Poverty Level had higher rates of energy
8 insecurity than other households (*e.g.*, households with income at 100% to 150% of
9 Poverty; households with income above 150% of Poverty). Poverty Level, rather than
10 income, is associated with all types of energy insecurity, the study found (concluding that
11 it is important to take into account household size).²⁴ The study found, higher residential

²³APPRISE, Inc. (Feb. 2010). LIHEAP Special Study of the 2005 Residential Energy Consumption Survey, Dimensions of Energy Insecurity for Low-Income Households, Final Report, prepared for U.S. Department of Health and Human Services, Administration for Children and Families, Office of Community Services, Division of Energy Assistance, <http://www.appriseinc.org/resource-library/selected-reports/energy-survey-research-and-policy-analysis/> (accessed August 17, 2022).

²⁴ Poverty Level is income taking into account household size. In 2022, for example, 100% of Poverty for a 1-person household is \$13,590, while 100% of Poverty for a 2-person household is \$18,310, and for a 3-person

1 energy burdens, but not higher home energy burdens,²⁵ are associated with all types of
2 energy insecurity, including both service interruptions and “financial energy
3 insecurity.”²⁶

4 This DOE data is confirmed by more recent data from the National Energy Assistance
5 Directors Association (“NEADA”). NEADA periodically conducts a Congressionally-
6 funded survey of low-income households who receive benefits through LIHEAP. The
7 most recent NEADA survey was published in December 2018.²⁷ NEADA provides three
8 results that are important from the perspective of how inability-to-pay and targeted low-
9 income energy efficiency fit together.

10 First, not only do a significant number of low-income households skip paying, or pay less
11 than, their full home energy bill due to not having enough money for their energy bill, but

household is \$23,030. <https://aspe.hhs.gov/topics/poverty-economic-mobility/poverty-guidelines> (accessed August 17, 2022).

²⁵ Pursuant to the federal LIHEAP statute, “home energy” is a defined term. By statute, “home energy” is limited to home heating and cooling used in a residential dwelling. <https://www.acf.hhs.gov/ocs/fact-sheet/liheap-fact-sheet> (accessed August 17, 2022). *See also*, 42 U.S.C. 8621(6). In contrast, “residential energy” includes energy used for home heating and cooling, water heating, and appliances. *See*, Dimensions of Energy Insecurity, *supra*, at 32 (contrasting “home energy” and “residential energy”).

²⁶ “[I]n 2005, households with high residential energy burden were much more likely to have a heat interruption than households with moderate or low burdens. However, it appears that there is very little relationship between home energy burden and heat interruptions. One reason that high residential energy burden is better associated with heat interruptions compared to home energy burden may be the fact that if the household cannot pay its whole energy bill, it will be without heat regardless of what portion of the energy bill was for space heating . . . [The data] focuses on the constraints households face on household necessities or whether they received shutoff notices or threats. The [data] shows that both types of financial Energy Insecurity appear to be related to residential energy burden, but not related to the level of home energy burden.” (Dimensions of Energy Insecurity, *supra*, at 33, 34).

²⁷ NEADA (December 2018). 2018 National Energy Assistance Survey, Final Report, available at <http://www.appriseinc.org/resource-library/selected-reports/energy-survey-research-and-policy-analysis/> (accessed August 17, 2022).

1 the percentage reporting to take such actions increases as incomes decline. Table 9
 2 presents data which shows that one-in-nine LIHEAP recipients either skipped paying
 3 their home energy bills every month, or paid less than their full bill. Nearly three times
 4 as many LIHEAP recipients with income *less than 50%* of Poverty, and 1.5 times as
 5 many recipients with income between 51 and 100% of Poverty, did so than did LIHEAP
 6 recipients with income *greater than 150%* of Poverty. Fewer than half of LIHEAP
 7 recipients said that they “never” skipped paying a bill, or paid less than their full bill.
 8 While roughly three-in-five (57%) recipients with income *greater than 150%* of Poverty
 9 reported never missing a payment, or paying less than their full payment, only two-in-
 10 five (40%) recipients with income below 50% of Poverty reported never skipping a
 11 payment.

	Total	Poverty Level			
		0 - 50%	51 – 100%	101 – 150%	>150%
Almost every month	11%	17%	9%	11%	6%
Some Months	21%	34%	17%	20%	15%
1 or 2 Months	17%	8%	24%	12%	20%
Never / No	49%	40%	47%	56%	57%
Don't Know/Refused	2%	2%	3%	1%	2%

12 Second, one impact of skipping payments, or making less than full payments, is that
 13 LIHEAP recipients also report having received shutoff notices. The data is set forth in
 14 Table 10. Fewer than half reported having “never” received a shutoff notice, while
 15 nearly one-third report having received a shutoff notice either “almost every month”
 16 (11%) or “some months” (21%). Again, there is a noticeable difference between

1 households at the lowest income levels and households at the highest income level. While
 2 more than one-quarter (27%) of LIHEAP recipients with income less than 50% of
 3 Poverty report having received a disconnect notice either “almost every month” (10%) or
 4 “some months” (17%), only 4% of households with income *greater than* 150% of
 5 Poverty reported receiving disconnect notices that frequently (0% almost every month;
 6 4% some months). More than four-fifths (84%) of LIHEAP recipients with income
 7 greater than 150% of Poverty report never having received a shutoff notice, while only
 8 one-half (50%) of LIHEAP recipients with income less than 50% of Poverty did so.

Table 10. Received Notice or Threat to Disconnect or Discontinue Electricity or Home Heating Fuel Due to Not Having Enough Money for the Energy Bill During the Past Year
 2018 NEA Survey Final Report (at 26 – 27)

	Total	Poverty Level			
		0 - 50%	51 – 100%	101 – 150%	>150%
Almost every month	4%	10%	3%	4%	0%
Some Months	13%	17%	15%	9%	4%
1 or 2 Months	17%	20%	18%	15%	12%
Never / No	64%	50%	62%	70%	84%
Don't Know/Refused	2%	4%	2%	2%	0%

9 Third, the NEADA survey of LIHEAP recipients reports that nearly one-in-six (15%)
 10 recipients experienced either an electricity shutoff or a natural gas shutoff due to
 11 nonpayment during the past year. When utility fuels are examined individually, the
 12 NEADA data shows that 13% of all LIHEAP recipients had their electricity disconnected
 13 for nonpayment, and 7% of LIHEAP recipients had their natural gas service disconnected
 14 for nonpayment. The data is presented in Table 11. The lowest income recipients had
 15 service disconnected far more frequently than did higher income recipients—five times

1 more frequently for electricity (24% vs. 5%), and nearly six times more frequently for
 2 natural gas (12% vs. 2%).

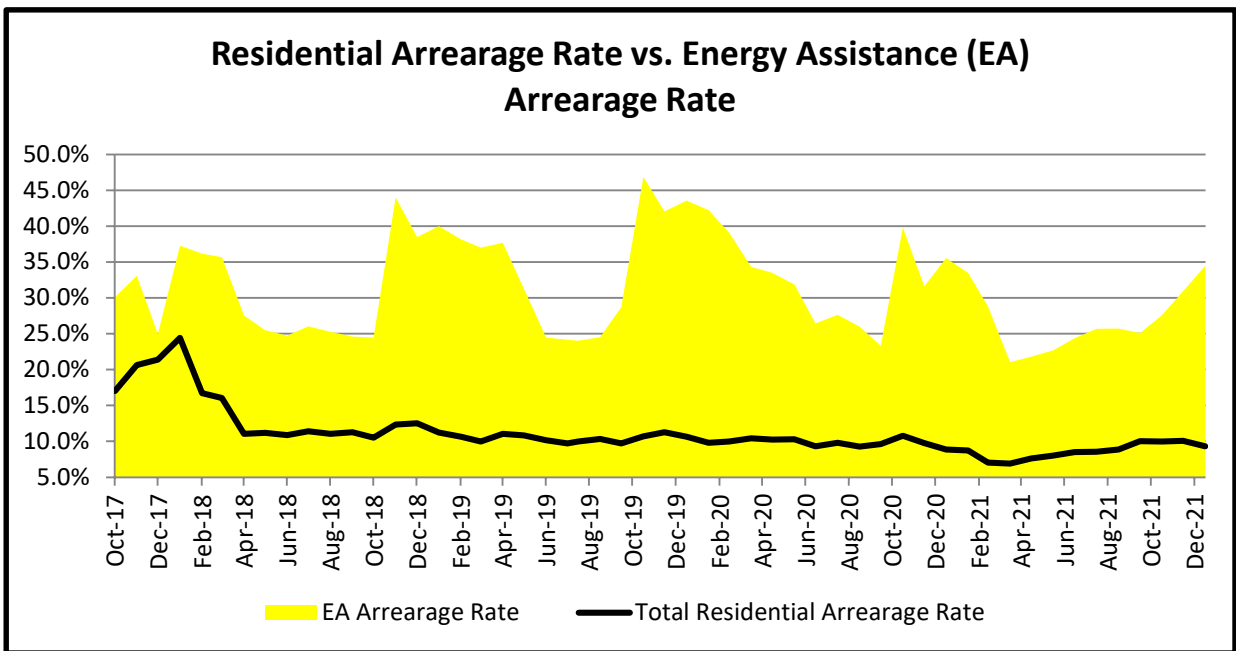
	Total	Poverty Level			
		0 - 50%	51 – 100%	101 – 150%	>150%
Electricity	13%	24%	12%	9%	5%
Gas	7%	12%	6%	8%	2%
Electricity or Gas	15%	26%	14%	13%	7%

3 Based on the data and discussion above, two conclusions have been convincingly
 4 established. First, substantial numbers of low-income households either skip payments or
 5 make less than their full utility bill in any given month because they lack the household
 6 resources to make such payments. As a result, utilities such as WEPCO would incur
 7 working capital costs they would not have incurred had low-income bills been paid.
 8 Second, as a result of these actions, utilities respond by engaging in collection activity
 9 that frequently leads to the threatened or actual disconnection of service. The failure to
 10 pay, and the utility collection activity which results from that failure to pay, is clearly
 11 related to low-income status. While problems are more prevalent in the lowest income
 12 tier of poverty (0 – 50%), there is a bright line of distinction between those households
 13 with income at or below 150% of Poverty and those households with income exceeding
 14 150% of Poverty.

15 **B. STATE-SPECIFIC DATA**

16 **Q. DOES DATA FROM OTHER STATES SUPPORT THE CONCLUSIONS YOU**
 17 **HAVE DRAWN FROM THIS NATIONAL INFORMATION?**

1 A. Yes. The national information I present above is uniformly consistent with data that has
 2 been generated for natural gas and electric utilities in other states. Not only each study
 3 unto itself, but the group of studies taken as a whole, demonstrates that low-income
 4 customers suffer from a greater inability-to-pay than residential customers generally.
 5 This data demonstrates further that it is not only possible, but probable, for WEPCO to
 6 help address both the inability-to-pay problems of the individual customers and the
 7 business problems arising from those payment troubles by offering low-income services



8 such as I recommend in my Testimony. Perhaps most comparable to Wisconsin is other
 9 Midwestern data from Iowa presented in the Chart below.

10 The Iowa Utilities Board tracks the arrearages of Energy Assistance (“EA”) recipients
 11 and residential customers. The Figure below shows the percentage of revenue in arrears
 12 by month since October 2017. This data range shows two complete winter heating
 13 seasons prior to COVID-19 through the most recent month available. The data shows
 14 that the percentage of low-income accounts in arrears in Iowa was generally 2.5 times

1 higher than the percentage of residential accounts in arrears, with seasonal variation
2 pushing the rate up to more than four times higher.

3 Not only is a higher percentage of Iowa’s low-income accounts in arrears, but those
4 accounts that are in arrears are deeper in arrears. Even with the seasonal variation of the
5 level of arrears for both residential and low-income accounts, low-income customers
6 have average unpaid balances of well over \$100 more than the unpaid balances of
7 residential customers as a whole.

8 **C. WEPCO-Specific Data.**

9 **Q. HAVE YOU HAD OCCASION TO EXAMINE ANY WEPCO SPECIFIC DATA?**

10 A. Yes. I have examined collections data for five low-income Census Tracts in the City of
11 Milwaukee and compared that data for residential data as a whole. The five Census
12 Tracts I selected have high penetrations of low-income customers. For the two years of
13 data provided,²⁸ 9.8% of all WEPCO customers were identified as low-income. In the
14 five comparison zip codes, 31.0% of all customers were identified as low-income.

	2021	2022	Two-Year Total
53205	38.0%	40.0%	38.9%
53206	43.2%	45.8%	44.3%
53208	24.2%	25.6%	24.8%
53210	33.9%	36.1%	34.8%
53212	22.6%	24.1%	23.2%
Sum LI zip codes	30.2%	32.1%	31.0%

²⁸ WEPCO provided data for February through December of 2021 and for January through August of 2022.

Total WEPCO	9.5%	10.2%	9.8%
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1 The count of all customers in the five low-income zip codes represented 4.0% of all
2 WEPCO customers in 2021, 3.9% in 2022, and 3.9% for the two years combined. The
3 payment difficulties facing these zip codes, however, are far out of proportion to the
4 percentage of total customers represented by the zip codes. The data is set forth in the
5 Table below.

	2021	2022	Two-Year Total
Percent customers of total customers	3.9%	3.9%	4.0%
Percent disconnect notices of total disconnect notices	14.6%	15.1%	14.8%
Percent disconnections of total disconnections	16.1%	15.5%	15.9%
Percent dollars at time of disconnection of total dollars at time of disconnection	21.1%	20.3%	20.8%
Percent defaulted payment plans of total defaulted payment plans	11.4%	10.8%	11.8%

6 Several observations flow from the data in the Table above. First, the collection efforts
7 directed toward the five low-income Milwaukee Zip Codes is disproportionate to the
8 number of customers in those Zip Codes. The percentage of disconnection notices and
9 percentage of nonpayment disconnections occurring in these five Zip Codes is four times
10 higher than the percentage of total customer in the Zip Codes.

11 Second, the rate at which collections efforts proceed to an actual disconnection of service
12 is higher in these five Zip Codes. This conclusion flows from the fact the percentage of
13 actual nonpayment disconnections in the Zip Codes is consistently higher than the
14 percentage of disconnection notices that are issued.

1 Third, those customers who are in sufficient arrears to experience the actual termination
2 of service are further in arrears than are customers who experience the actual termination
3 of service for the WEPCO service territory as a whole. While the five Zip Codes
4 represent 15.9% of all nonpayment disconnections for the two year of data, they represent
5 20.8% of the total arrears at the time of disconnection.

6 Finally, deferred payment plans disproportionately default in the five Zip Codes studied.
7 While the five Zip Codes represent 3.9% of all customers for the two year period as a
8 whole, they represent 11.8% of the defaulted payment plans during that same time period.

9 **Q. DO YOU FIND ANY OTHER DATA RELEVANT TO THE PAYMENT**
10 **TROUBLES OF THE LOW-INCOME MILWAUKEE ZIP CODES?**

11 A. Yes. WEPCO is more likely to use the disconnection of service rather than the
12 negotiation of payment plans in the five low-income WEPCO Zip Codes. The ratio of
13 nonpayment disconnections to active deferred payment arrangements is consistently
14 higher in the five Milwaukee Zip Codes examined.

	2021	2022	Two Year Total
All WEPCO customers	0.044	0.040	0.037
LI Milwaukee Zip Codes	0.050	0.047	0.043

15
16 **Q. WHAT DO YOU CONCLUDE?**

17 A. The same home energy insecurity that has been identified not only in national studies, but
18 also in the data from neighboring states, exists in the WEPCO service territory as well.
19 The data clearly shows that more low-income customers are in payment trouble; that

1 those who are in payment trouble are in deeper trouble; that those who are in payment
2 trouble are more likely to lose their service; and that traditional WEPCO responses (such
3 as deferred payment plans) have been disproportionately ineffective. A new response is
4 needed.

5 **Part 4. Breaking the Cycle of Inability-to-Pay: Low-Income Rates.**

6 **Q. PLEASE DESCRIBE THE PURPOSE OF THIS SECTION OF YOUR**
7 **TESTIMONY.**

8 A. In this part of my testimony, I describe the available and reasonable utility responses that
9 can serve as alternatives to the responses that WEPCO currently pursues in response to
10 inability-to-pay. While I do not recommend the adoption of any single affordability rate
11 structure in this proceeding, I do recommend that the Wisconsin PSC endorse the
12 implementation of an affordability rate. I further recommend that the question of what
13 might constitute the most appropriate bill affordability program structure for WEPCO be
14 assigned to a collaborative process for consideration in the Company's next base rate
15 case.

16 In sum, pursuing a collaborative process for WEPCO would advance the finding of the
17 Pennsylvania PUC, when it first adopted a low-income rate, when it found:

18 We, in conjunction with utilities, and social service agencies, have all worked
19 hard to devise ways to [e]nsure that low-income Pennsylvanians have utility
20 services which really are necessities of life as the tragic fire deaths associated
21 with the loss of utility service underlined.

22 However, for the poorest households with income considerably below the
23 poverty line, existing initiatives do not enable these customers to pay their
24 bills in full and to keep their service. . .Consequently, to address realistically

1 these customers' problems and to stop repeating a wasteful cycle of
2 consecutive, unrealistic payment agreements that cannot be kept, despite the
3 best of intentions, followed by service termination, then restoration, and then
4 more unrealistic agreements, we believe that new approaches like PECO's
5 CAP program and the OCA's proposed EAP program should be tried.²⁹

6 **A. Broad Structure of a Collaborative Process.**

7 **Q. PLEASE DESCRIBE THE BROAD STRUCTURE OF THE COLLABORATIVE**
8 **PROCESS THAT YOU RECOMMEND.**

9 A. I recommend that the Wisconsin PSC assign the task of developing the specific structure
10 of a WEPCO bill affordability program to a collaborative process. The collaborative
11 process should be under the direction of a Wisconsin PSC staffperson. The process
12 should be charged with developing how to deliver affordability assistance. The policy
13 question of whether to deliver affordability assistance, however, should be decided by the
14 Wisconsin PSC in this proceeding and, based on the data and discussion presented
15 throughout my Testimony, should be answered in the affirmative. The collaborative
16 process should involve the following steps:

- 17 ➤ The collaborative process should begin with each party³⁰ submitting specific
18 hypotheses of potential measures to be explored.
- 19 ➤ As part of the collaborative discussions, the collaborative process should identify the
20 gaps in information and data that would impede reaching a resolution of the
21 assessment of hypotheses. Responsibility for presenting the data to fill those gaps,
22 including the responsibility to develop that data where it currently does not exist, is
23 assigned to particular parties to the collaborative process.

²⁹ Pennsylvania Public Utility Commission v. Columbia Gas of Pennsylvania, R-891468, Final Order, at 159 (September 19, 1990).

³⁰ As with litigation, the collaborative process should be open to all stakeholders joining as named parties. Once begun, however, again as with litigation, the process would be limited to those named parties.

- 1 ➤ After a period of time in which relevant information is collected and discussed, each
2 party should submit a “term sheet” outlining the affordability structure they would
3 recommend.
- 4 ➤ Each contested issue, as identified by a comparison of the term-sheets, should be
5 subject one at a time to group discussion under the direction of Wisconsin PSC staff.
6 Discussions should be time-limited to prompt the collaborative process to move
7 toward a decision, either agreeing or disagreeing.
- 8 ➤ At the end of a prescribed time-certain –I would recommend a twelve month period
9 starting from the date of the final order in this proceeding—the Final Collaborative
10 Report as described below would be prepared and presented.
- 11 ➤ At the end of a prescribed time period within which the collaborative process would
12 proceed, the next step should involve the Wisconsin PSC staffperson(s) who is
13 facilitating the collaborative submitting a Final Collaborative Report to the Wisconsin
14 PSC documenting the areas of agreement and identifying the areas of disagreement.
15 Parties would be bound to support the identified areas of agreement before the
16 Wisconsin PSC.
- 17 ➤ The final step would then be the presentation, by the parties to the collaboration, of
18 data and argument to the Wisconsin PSC in support of their respective positions as
19 limited by the areas of disagreement identified in the Final Collaborative Report. The
20 Wisconsin PSC would sit as the final decision-maker on those areas of
21 disagreement.³¹

22 **Q. IS THERE ANY OTHER KEY ELEMENT TO A SUCCESSFUL**
23 **COLLABORATIVE PROCESS?**

24 A. Yes. In order for a collaborative process such as that which I recommend above to
25 succeed, each stakeholder must have a reasonable opportunity to equally participate. For
26 stakeholders such as Walnut Way, therefore, there must be compensation provided to
27 allow Walnut Way to retain legal representation, as well as to retain expert assistance to
28 help it review, understand and respond to data provided to the collaborative process. In

³¹ The PSC could, also, reject the results of the collaborative process *in toto* should it find those results to be patently unreasonable.

1 the event that the collaborative process which I recommend is adopted, one part of that
2 approval should be the approval of a funding stream to allow stakeholders such as Walnut
3 Way to meaningfully participate. A participation support fund of \$250,000, not to be
4 earmarked for any single stakeholder, would be reasonable.

5 **Q. PLEASE DESCRIBE THE DATA COLLECTION YOU REFERENCE ABOVE.**

6 A. Yes. Collaborative processes with which I have historically been involved are frequently
7 very data intensive. One purpose of a collaborative is to move any discussion about rate
8 models, and their impacts, down from the more abstract discussions of policy and
9 “suppositions” to a focus on real data. Data that I would suggest is important to the
10 collaborative process I recommend includes (but may not be limited) to information
11 disaggregated by residential customers and low-income customers:³²

- 12 1. The dollars of bills for current service by month.
- 13 2. The dollars of actual receipts from customers³³ by month.³⁴
- 14 3. The number of accounts receiving a bill by month.

³² I recognize that the collaborative would need to come to an agreement on what to use to designate “low-income customers.”

³³ The source of revenue is irrelevant. The phrase here “from customers” is, for example, not intended to distinguish receipts from LIHEAP and receipts paid out-of-pocket by customers.

³⁴ The combination of Metric #1 and Metric #2 allows us to look at the percentage of bills that are paid each month. If you place the dollars of bills (Metric #1) in the denominator and the dollars of receipts (Metric #2) in the numerator, you can calculate what percentage of bills is being paid on a monthly basis. You can also aggregate these monthly bills (and payments) so that you can examine the results (the term for this calculation is “payment coverage ratio”) on an annual basis, on a seasonal basis, or on any other time period which you desire. For example, in an evaluation I performed of a Colorado energy affordability program, one question was the extent to which customers made payments after receiving a disconnect notice. I calculated a bill payment coverage ratio for the four months after the receipt of a disconnect notice. One additional question was the extent to which customers made payments after having service disconnected and reconnected (or whether customers simply fell back into arrears again). Again, that was tested by examining the payment coverage ratio for the four months subsequent to the reconnection.

- 1 4. The number of accounts making a payment by month.³⁵
- 2 5. The number of disconnect notices issued by month.³⁶
- 3 6. The number of accounts in arrears (setting aside the LIFT arrears. This would, in
- 4 other words, be limited to arrears incurred since customers entered the LIFT
- 5 program) by month;
- 6 7. The dollars of arrears (with the same disclaimers) by month;
- 7 8. The average arrears of accounts with arrears (other than their LIFT arrears) by
- 8 month;
- 9 9. Conversely, the number of accounts with a \$0 balance³⁷ by month,³⁸
- 10 10. The number of Final Bills by month (as I explain below, this is a better metric
- 11 than disconnections); and
- 12 11. Finally, the number of Final Bills disaggregated by those with an arrearage
- 13 (beyond the LIFT arrears) and those with no arrearage³⁹ by month.⁴⁰

³⁵This allows us to see what percentage of people make some payment (while Metric #1 and Metric #2 allow us to see what percentage of the bill is paid).

³⁶ Data elements 1, 2, 3, 4 and 5 also allow us to calculate a number of other metrics. For example, the number of disconnect notices per \$1,000 in bills (or, similarly, the number of disconnect notices per \$1,000 in payments) lets us see how hard the Company has to work to collect its revenue. Similarly, the number of disconnect notices per 1,000 bills provides insights into the extent of payment troubled status of customers. You can also “flip” these metrics. Looking at the amount of dollars received per disconnect notice allows us to assess the efficiency of collection. An increasing amount of revenue per disconnect notice may mean that the Company is issuing fewer disconnect notices, or that the Company is collecting more dollars, either of which is a positive development.

³⁷ Experience counsels that testing for whether an account has a \$0 balance is easier than tracking whether a customer has made a payment “in-full” and “on-time” each month. In fact, it is the \$0 balance which a utility should have the most interest in.

³⁸ In contrast, the extent to which customers make partial payments is determined through the “payment coverage ratio” discussed above. A “payment coverage ratio” of more than 0% and less than 100% indicates a partial payment.

1 The usefulness of such information is demonstrated through my discussion in this
2 Testimony of the Company’s responses to data requests 2-WW/INT-15 and 2-WW/INT-
3 17 above. (See PSC Ref.##446238, 446239, 446240, 446241.)

4 **Q. CAN YOU PROVIDE AN EXAMPLE OF A SIMILAR COLLABORATIVE**
5 **PROCESS IN WHICH YOU HAVE PARTICIPATED?**

6 A. Yes. Ex.-WW-Colton-7 sets forth key documents from a similar collaborative process
7 involving PECO Energy Company, two key low-income advocacy groups, and the
8 Pennsylvania Office of Consumer Advocate (“OCA”) (for whom I worked).⁴¹ OCA is
9 the state-funded agency that represents the interests of all residential ratepayers in utility
10 regulatory proceedings.

11 The first document is the “Secretarial Letter” from the Pennsylvania PUC to the named
12 parties in litigation involving the structure of PECO Energy’s low-income affordability
13 program. Those parties were directed to seek to “resolve[...] some or all of their
14 differences regarding PECO’s CAP design. . .” The Secretarial Letter recommended that
15 the parties “consider enlisting the services of the Commission’s mediation process in the
16 interim. . .in an attempt to resolve their differences. . .” The parties were charged with

³⁹ By definition, a “Final Bill” will have a balance for usage incurred prior to the bill. The metric tracked here is whether the Final Bill has an unpaid balance from a *prior* billing period (i.e., an arrearage).

⁴⁰ The Final Bills metric does not allow us to directly measure who receives a Final Bill because of payment troubles and who receives a Final Bill simply because they are moving. However, we can gain some insights into that question by examining the extent to which someone was current on their account at the time they receive a Final Bill.

⁴¹Because of their duplicative nature, not all signature sheets have been included with the respective documents in Ex.-WW-Colton-10.

1 indicating by a date-certain “the elements of any partial or complete consensus.” The
2 Secretarial Letter finally indicated that “failure to reach a full resolution by [a date
3 certain] will result in this matter being assigned to the OALJ [Office of Administrative
4 Law Judge] for an on-the-record proceeding. . .”

5 The second document is the Joint Petition for Settlement filed as a result of the
6 collaborative process in which the PUC directed the parties to engage. The Joint Petition
7 states in relevant part that:

8 the Joint Petitioners engaged the services of the Commission’s mediation office,
9 and conducted extensive mediation services. At least eight half- or full-day
10 sessions [occurred] over the next several months, with extensive exchange of
11 data and other information between the Joint Petitioners. As a result of that
12 extensive mediation effort and related settlement discussions, the Joint
13 Petitioners reached an agreement on a new CAP design and related issues, as set
14 forth in the Term Sheet. As stated previously, each of the Joint Petitioners will
15 file a Statement in Support of this Joint Petition.

16
17 The resulting agreed-upon structure of the “new CAP design” is presented in the Term
18 Sheet appended to the Joint Petition.

19 **Q. PLEASE SUMMARIZE THE PURPOSE FOR WHICH YOU SUBMIT THE**
20 **PECO ENERGY CAP COLLABORATIVE PROCESS DOCUMENTS.**

21 A. I submit the PECO Energy CAP Collaborative Process documents in support of two
22 propositions. First, these documents support the proposition that a collaborative process
23 such as that which I recommend above is a reasonable means of reaching resolution on
24 the type of low-income bill affordability program which a utility should implement.
25 Second, these documents support the broader proposition that a utility bill affordability
26 program is a reasonable response by a regulated public utility to the inability-to-pay

1 circumstances facing low-income customers. I do not submit these documents in support
2 of proposing a bill affordability structure which mirrors the PECO agreement.

3 As I recommend for WEPCO, with PECO Energy, the question of *whether* to adopt a bill
4 affordability program was determined by the Wisconsin PSC at the front-end. The
5 collaborative process was directed to consider *how* to implement an affordable bill
6 program design.

7 **B. The Payment Impacts of an Affordable Low-Income Rate.**

8 **Q. HAVE OTHER STATES FOUND THAT THE OFFER OF AN AFFORDABLE**
9 **LOW-INCOME RATE CAN BREAK THE CYCLE OF NONPAYMENT?**

10 A. Yes. A number of affordability programs adopted by energy (i.e., natural gas and
11 electric) utilities have demonstrated affordable rates can break the cycle of nonpayment.
12 For more than 30 years, I have been involved with the affordability programs
13 implemented by Pennsylvania's gas and electric distribution utilities. At the direction of
14 the Pennsylvania Public Utility Commission (PUC), independent third-party firms have
15 evaluated these programs. The independent evaluation results for six Pennsylvania gas
16 and electric distribution utilities are presented in Table 15 below. The evaluation results
17 span a number of years, indicating that these results are not a function of any particular
18 external factor that may have existed in a particular year. The results include four electric
19 utilities and two natural gas utilities.

**Table 15. Total Bill Payment Coverage Ratios
Low-Income Customer Assistance Program (CAP) Participants**

	Test Year Enrollees			Net Change Relative to Comparison Group
	Pre-CAP	In CAP	Change	
PGW (2019) ⁴²	72%	92%	20%	36%
PPL (non-htg) (2020) ⁴³	84%	98%	15%	21%
PPL (heating) (2020)	83%	104%	21%	26%
Peoples Gas (2017) ⁴⁴	85%	123%	39%	36%
First Energy (Met Ed) (non-htg/htg) ⁴⁵	NA	91%/93%	NA	NA
First Energy (PN) (Non-htg/htg)	NA	91%/119%	NA	NA
First Energy (PP) (non-htg/htg)	NA	100%/98%	NA	NA
UGI (electric) (2012) ⁴⁶	60%	66%	5%	18%
Duquesne Light (non-htg) (2015) ⁴⁷	77%	94%	17%	31%
Duquesne Light (htg) (2015)	75%	92%	17%	23%

1 Q. WHAT DOES THE PENNSYLVANIA RESEARCH FIND?

2 A. The results presented in Table 15 show the total “bill payment coverage ratio” for
 3 participants in the various low-income discount programs of the Pennsylvania utilities,
 4 called Customer Assistance Programs (“CAPs”). The bill payment coverage ratio places

⁴² APPRISE, Inc. (March 2019). Philadelphia Gas Works Universal Service Programs Impact Evaluation, Final Report, available at <https://www.puc.pa.gov/pdocs/1614503.pdf> (accessed August 3, 2022).

⁴³ APPRISE, Inc. (January 2020). PPL Electric Utilities Universal Service Programs, Final Report, available at <https://www.puc.pa.gov/pdocs/1656535.pdf> (accessed August 3, 2022).

⁴⁴ APPRISE, Inc. (August 2017). Peoples Natural Gas 2017 Universal Service Program, Evaluation, Final Report, available at https://www.puc.pa.gov/General/pdf/USP_Evaluation-Peoples.pdf (accessed August 3, 2022).

⁴⁵ APPRISE, Inc. (January 2017). FirstEnergy Universal Service Programs, Final Evaluation Report available at https://www.puc.pa.gov/general/pdf/USP_Evaluation-FirstEnergy.pdf (accessed August 3, 2022).

⁴⁶ APPRISE, Inc. (July 2012). UGI Utilities, Inc. – Gas Division and UGI Penn Natural Gas, Inc. Universal Service Program, Final Evaluation Report available at https://www.puc.pa.gov/general/pdf/USP_Evaluation-UGI.pdf (accessed August 3, 2022).

⁴⁷ APPRISE, Inc. (July 2015). Duquesne Light Universal Service Programs, Final Evaluation Report, available at https://www.puc.pa.gov/general/pdf/USP_Evaluation-Duquesne.pdf (accessed August 3, 2022).

1 dollars of payments in the numerator and dollars of bills in the denominator to determine
2 the percentage of bills that have been paid. The Table makes two comparisons. First, the
3 Table shows the bill payment coverage ratio for the year before participants enrolled in
4 CAP and bill payment coverage ratio for the first full year of CAP participation. Second,
5 the Table shows the percentage change for CAP participants (pre-CAP vs. in-CAP)
6 compared to the “net change” relative to a low-income comparison group. The net change
7 subtracts the change within the comparison group from the change in the CAP participant
8 group. If the bill payment coverage ratio for the CAP participants improved by 15%, for
9 example, and the payment coverage ratio for the comparison group improved by 3%, the
10 net change for CAP participants is 12%. In contrast, if the payment coverage ratio for
11 CAP participants improved by 15%, and the payment coverage ratio for the comparison
12 group declined by 3%, the net change for the CAP participants is 18%. The “net change,”
13 in other words, is the change for CAP participants relative to what their change would
14 have been had they been in the comparison group.

15 The three First Energy utilities (Metropolitan Edison; Penn Power; Penelec) did not have
16 pre-CAP data or comparison group data presented in their program evaluation. First
17 Energy’s evaluation presented only the in-CAP bill payment coverage ratios.

18 Table 15 shows not only that in-CAP low-income payment performance resulted in
19 payments of consistently between 90% and 100% (or more) of low-income bills, but the
20 Table also shows that the bill payment performance significantly improved once a low-
21 income customer enrolled in the percentage of income-based CAP. Setting aside UGI
22 (electric) as an outlier (UGI also has a natural gas division, the program for which was

1 not included in UGI’s evaluation),⁴⁸ the lowest in-CAP payment coverage ratio was 92%
2 (Duquesne Light heating: up from 75%); Philadelphia Gas Works: up from 72%). The
3 smallest improvement in payment coverage ratios (considering only the pre- versus post-
4 participation data) was 15% (Penn Power and Light, PPL), and that increase was from
5 84% prior to CAP participation to 98% during CAP participation.

6 **Q. IS THERE OTHER RESEARCH THAT SUPPORTS THESE FINDINGS?**

7 A. Yes. Ample evidence proves that offering well-designed affordability programs are an
8 effective method to generate revenue. Aside from the multiple third-party evaluations
9 from Pennsylvania utilities that I discuss above, this conclusion has repeatedly been
10 reached by other program evaluators. For example, New Jersey utilities offer the
11 Universal Service Fund (USF). The 2006 evaluation of the USF from the New Jersey
12 Board of Public Utilities left little question that utility unaffordability problems were a
13 function of bill burdens,⁴⁹ rather than simply being a function of income or poverty.⁵⁰ The
14 New Jersey USF evaluation documents clearly find that as the percentage of income
15 payment responsibilities increase, payment compliance decreases. The New Jersey
16 evaluation studied what it called the “Effective Coverage Ratio.” The Effective Coverage
17 Ratio represents the percentage of a bill rendered to a customer that is actually paid.
18 Table 16 sets forth the data.

⁴⁸ For purposes here, UGI (electric) will be referred to simply as “UGI.”

⁴⁹ A “bill burden” is the annual water bill as a percentage of annual income. For example, if the customer has a water bill of \$600 and an annual income of \$10,000, the bill burden is 6% ($\$600 / \$10,000 = 0.10$).

⁵⁰ APPRISE, Inc. (2006). Impact Evaluation and Concurrent Process Evaluation of the New Jersey Universal Service Fund: Final Report, prepared for the New Jersey Board of Public Utilities.

Net Energy Burden	Bill Payment Coverage Rate			
	<50%	50% - <90%	90% - <100%	100% or more
Less than 2%	0.0%	2.7%	5.3%	92.0%
2% - 3%	0.0%	6.0%	11.5%	82.5%
3% - 4%	0.0%	10.0%	13.2%	76.9%
4% - 6%	0.0%	11.6%	16.6%	71.6%
6% - 8%	0.4%	16.6%	17.4%	65.5%
Over 8%	1.0%	25.6%	16.1%	57.4%

1 Table 16 shows that increased percentage of bill burdens charged to New Jersey’s USF
 2 participants had an adverse impact on the ability of USF participants to sustainably pay
 3 their bills. As seen in the Table:

- 4 ➤ While more than 80% of households with an effective bill burden⁵¹ below 3
 5 percent covered 100 percent or more of their annual bill, less than 60 percent of
 6 households with a [net burden] at or above 8 percent covered 100 percent of their
 7 annual bill.
- 8 ➤ While 26% of the participants with net bill burdens⁵² exceeding 8% of income
 9 paid between 50% and 90% of their bill, only 6% of households with energy
 10 burdens of between 2% and 3% had coverage rates that low. Fewer than 3% of
 11 customers with burdens less than 2% had bill payment coverage ratios that low.

12 Similarly, an evaluation of the Equitable Gas Energy Assurance Program (EAP) in New
 13 York examined the impacts on payment patterns from a somewhat different perspective.⁵³

⁵¹ An “effective bill burden” is a household’s annual energy bill, net of federal assistance provided through the Low-Income Home Energy Assistance Program (LIHEAP), as a percentage of household income. For example, if a household has an energy bill of \$1,400, receives a LIHEAP grant of \$600, and has an annual household income of \$10,000, the household has an “effective bill burden” of 8% ($[\$1,400 - \$600] / \$10,000 = 0.08$).

⁵² The term “net bill burden” is synonymous with “effective bill burden.” The term “net bill burden” refers to a household’s home energy bill, net of LIHEAP assistance, as a percentage of household income.

⁵³ H. Gil Peach (1996). Impact Assessment of the Equitable Gas Company Energy Assistance Program, H. Gil Peach and Associates: Beaverton, OR.

1 The EAP was an account management pilot program designed to permit low-income
2 customers to pay 8% of their annual household income for natural gas service.⁵⁴ EAP
3 was targeted primarily to customers who had failed in traditional collection processes.
4 According to the EAP evaluation, “EAP was designed to provide a way for low-income
5 customers to pay their bill, to motivate customers to conserve energy, encourage
6 consistent bill payment behaviors, and increase participation in available assistance
7 programs.”⁵⁵ The Equitable evaluation reported:

8 [The Table below] shows the effect of EAP participation on the regularity of
9 payment. It is clear in looking across the columns of [the Table] that EAP is
10 quite successful in restoring the pattern of regular payment. The two groups
11 outside EAP, Group 1, in the baseline year before it enters EAP (column 2),
12 and Group 2, in the second study year (the “participation” year), which
13 continues to remain outside EAP although qualifying for EAP have payment
14 profiles similar to each other. Those who begin EAP but drop out in less than
15 one year have the worst payment record (column 3), while stable EAP
16 participants have the best record (columns 4 & 5). These two columns
17 showing results of stable participation have quite similar profiles for
18 frequency of payment.

19
20 * * *

21 This review of payment shows that EAP does work as designed. Most EAP
22 customers are willing and able to pay the EAP price offered. Although there
23 is attrition, the amount of stability demonstrated in this payment-troubled
24 low-income sector is quite remarkable. . . And the program does result in
25 restoration of a pattern of reliable customer payment.⁵⁶
26

⁵⁴ “To make 8% of annual household income cover necessary gas service, Equitable offers EAP credits to customers making regular payments. The credit makes up the difference between the customer’s bill and the customer’s 8% EAP payment plus energy assistance grants.” *Id.*, at 15.

⁵⁵ *Id.*, at 13 – 15.

⁵⁶ *Id.*, at 45 – 46.

Table 17. Is Payment Frequency Reliable:
Frequency of Payment (out of 12 possible) by Customer

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Paid by Customer	Baseline group: not in EAP (Group 1)	At least some participation in EAP (Group 1)	Stable: First Full EAP Year (Group 1)	Stable: 24 months (Group 3)	Qualified but Never Entered (Group 2)
n	No EAP pre- period	<12 months post- period	12-mo EAP post- period	12-mo EAP post- period	No EAP pre-or post-
	221	68	153	137	258
Full payments	5.19	2.74	9.75	9.77	5.02
Partial payments	3.15	3.18	1.19	1.22	3.73
Missed payments	3.66	6.09	1.07	1.01	3.25

NOTE: The cases in column 3 are stable second year cases. There may or may not be gaps in their prior year EAP participation.

1
2 Finally, the National Fuel Gas Distribution Corporation (NFG) retained an independent
3 third-party to evaluate its three-tiered discount program (Low-Income Residential
4 Assistance Plan, LIRA) offered in New York. The evaluation assessed the “program
5 impact on the actual number of payments made during the pre and post periods.”⁵⁷ The
6 evaluation reported:

7 Note that LIRA participants have increased the number of payments overall
8 by 25% (from an average of 7.4 per participant in the pre period to 9.3 in the
9 post). During the same period, nonparticipant Group A witnessed an
10 improvement of approximately 7%. Nonparticipant Group B’s number of
11 payments actually decreased by 6%. Using a proportional change approach. .
12 .the program net impact is estimated to be between 19% and 31% (1.37 to
13 2.30 payments per participant). . .Combining the two nonparticipant groups
14 into one and comparing it to the participants produced an overall estimate of
15 30% (2.2 payments) with a t-test of 14.63, indicating a highly significant
16 increase.⁵⁸

17 The New York evaluation went on to report:
18

⁵⁷ Haeri (1999). Final Evaluation Report, Low-Income Residential Assistance Program, prepared for National Fuel Gas Distribution Corporation, New York, Barakat and Chamberlin, Inc.

⁵⁸ *Id.*, at 9 – 10.

1 . . .the LIRA participants' payment amount, as a proportion of their bill, also
2 increased. Before the program, participants paid approximately 67% of their
3 total bills. After the program, this proportion increased to 86%, a 29%
4 improvement. During the same period, nonparticipants also increased the
5 proportion of their bills by 21% and 14% for Group A and B respectively.
6 Using the same proportional change mentioned earlier, the program net
7 impact is estimated to be between 6% and 11%. . .Overall, the increase due to
8 the program was estimated at 10% (t-test=6.08).⁵⁹

9 As I stated with respect to the PECO collaborative, the data I discuss above is not offered
10 to necessarily recommend adoption of a percentage of income program design for
11 WEPCO, although the data I discuss throughout my testimony indicate that this would be
12 reasonable. Rather, the data demonstrates that alternatives exist that would improve the
13 collection of revenue for WEPCO relative to the ongoing cycle of unaffordability I
14 document earlier in my testimony.

15 **Q. DOES THIS RESEARCH PROVIDE INSIGHTS INTO WHY BILL PAYMENT**
16 **PATTERNS IMPROVE?**

17 A. Yes. Insights into the reason for the improved payment patterns can be derived from the
18 data presented in Exh.-WW-Colton-8, derived from the same independent third-party
19 evaluations of the low-income programs. This Schedule reports data on the ease or
20 difficulty of bill payment reported by program participants before enrolling in the
21 discount program and while being enrolled in the discount program. (Not all utility
22 evaluations undertook this data collection and analysis.)

⁵⁹ *Id.*, at 10.

1 When taking into consideration the performance of each comparison group, even UGI's
2 performance demonstrates the role played by the CAP in improving bill payment. While
3 the improvement within the participant group (pre-participation vs. in-participation) was
4 5%, UGI (electric)'s net change relative to its comparison group was 18% (meaning that
5 while performance improved within the participant population, payment performance
6 declined by 13% in the comparison group). The net improvement in bill payment
7 coverage ratios relative to the comparison groups ranged from roughly 20% to more than
8 35% amongst the various evaluations.

9 The difference that the low-income programs make is evident at both ends of the
10 spectrum of bill payment difficulty (ease). Ex.-WW-Colton-8 shows that for each utility,
11 there was a substantial decline in the percentage of program participants who reported
12 finding it "very difficult" to make their bill payments. In addition, for each utility, there
13 was a substantial increase in the percentage of program participants who reported finding
14 it "not at all difficult" ("very easy") or "not too difficult" ("somewhat easy") to make bill
15 payments during program participation.

16 ➤ For PPL, while 63% reported finding it very difficult to make bill payments
17 before program participation, only 3% reported it being very difficult after
18 enrolling in CAP. In contrast, while 5% reported it being not at all difficult (very
19 easy) to make bill payments before program participation, 34% reported it being
20 not at all difficult after enrollment. Similarly, the change in the percentage
21 reporting it being "somewhat easy" ("not too difficult") increased from 10%
22 prior to program participation to 47% after program enrollment.

23 ➤ For Peoples Gas, while 58% reported finding it very difficult to make bill
24 payments before program participation, only 5% reported it being very difficult
25 after CAP enrollment. While 4% reported it being "very easy" ("not at all
26 difficult") to make bill payments before program participation, and 5% reported
27 it being "somewhat easy" ("not too difficult") before program participation, 34%

1 said it was “very easy,” and 47% said it was “somewhat easy” to make bill
2 payments after enrollment.

- 3 ➤ For the FirstEnergy utilities, while 56% reported it being very difficult to make
4 bill payments before program participation, 13% reported it being very difficult
5 to make bill payments after enrollment. In contrast, while 3% said it was “very
6 easy” (not at all difficult), and 4% said it was “somewhat easy” (not too difficult)
7 to make bill payments before program participation, those numbers increased to
8 26% and 36% respectively after program enrollment.

9 Similar results were found for both UGI (electric) and Duquesne Light. The percentage of
10 low-income customers finding it “very difficult” to pay their bills before program
11 participation dropped from 67% to 7% for UGI (electric), and from 49% to 2% for
12 Duquesne Light. The percentage of low-income customers who reported finding it “very
13 easy” (not at all difficult) to pay their bills increased from 0% to 26% for UGI (electric)
14 and from 1% to 36% for Duquesne Light. The percentage who reported it being
15 “somewhat easy” (not too difficult) increased from 6% to 33% for UGI (electric) and
16 from 9% to 53% for Duquesne Light.

17 **C. Collections Impacts and their Effect on Discrimination Concerns.**

18 **Q. DOES THE DATA PRESENTED ABOVE PROVIDE SUPPORT FOR WHY**
19 **LOW-INCOME RATES SHOULD NOT BE CONSIDERED DISCRIMINATORY**
20 **UNDER STATE LAW?**

21 A. Yes. Consistent with its view of the function of such programs as expressed in the early
22 Columbia Gas decision I quoted above, the decision of the Pennsylvania Commission
23 was that low-income rate affordability programs were a necessary tool for utilities to use
24 in combating the problem of nonpayment. Indeed, the decision to implement what would
25 become known as Pennsylvania’s Customer Assistance Programs (CAPs) arose out of the

1 PUC's investigation into the control of uncollectible accounts, not out of a proceeding on
2 how to deliver low-income assistance.⁶⁰ Through that investigation, the Pennsylvania
3 PUC's Bureau of Consumer Services (BCS) had developed recommendations for
4 implementation of CAPs. The Commission found:

5 CAPs provide alternatives to traditional collection methods for low-income,
6 payment troubled customers. Generally, customers enrolled in a CAP agree
7 to make monthly payments based on household family size and gross income.
8 These regular monthly payments, which may be for an amount that is less
9 than the current bill, are made in exchange for continued provision of utility
10 service.⁶¹

11 The Commission continued:

12 As a result of our investigation, the Commission believes that an
13 appropriately designed and well implemented CAP, as an integrated part of a
14 company's rate structure, is in the public interest. To date, few utilities have
15 implemented CAPs. The purpose of this Policy Statement is to encourage
16 expanded use of CAPs and to provide guidelines to be followed by utilities
17 who voluntarily implement CAPs. These guidelines prescribe a model CAP
18 which is designed to be a more cost-effective approach for dealing with
19 issues of customer inability to pay than are traditional collection methods.⁶²

20 In sum, in Pennsylvania, while preservation and expansion of the CAP programs was
21 eventually written into statute as part of the restructuring of the electricity and natural gas
22 industries, the Pennsylvania CAP programs were initiated by the state PUC without

⁶⁰ In the Matter of the Investigation into the Control of Uncollectible Accounts, Docket No. I-900002 (initiated October 11, 1990).

⁶¹ Policy Statement on Customer Assistance Programs (CAP), Docket No. M-00920345, at 2 (July 2, 1992).

⁶² Id., at 2. This Commission decision was supported by the BCS Final Report, which indicated: "The Bureau's position is that ratepayers are already bearing significant costs attributable to the problems of payment troubled customers and uncollectible balances. Further, BCS believes that incorporating the following recommendations into utility operations will lead to a more rational and cost effective use of existing resources. Over time, proper implementation of the recommendations may result in a reduction of total utility costs." BCS Uncollectibles Report, at 120.

1 explicit statutory authorization. Instead, the PUC found that CAPs should be an
2 “integrated part of a company’s rate structure.” The programs, the Commission found,
3 were “a more cost effective approach for dealing with issues of customer inability to pay
4 than are traditional collection methods.”

5 **Q. HAS ANY OTHER STATE COMMISSION TAKEN A SIMILAR VIEW OF**
6 **LOW-INCOME RATES?**

7 A. A review of the basis for the adoption of Ohio’s low-income rates reveals that such
8 programs are not grounded simply on the social pressure to help those in need of rate
9 assistance. Rather, low-income rate assistance programs are found to serve fundamental
10 regulatory purposes quite apart from, and in addition to, their social functions. The State
11 of Ohio initiated the first straight Percentage of Income Payment Plan (PIPP) in the
12 United States.⁶³ The Ohio PIPP was developed by the Public Utility Commission of Ohio
13 (PUCO). The PUCO created the Ohio PIPP in 1983 in response to an emergency arising
14 from the inability of low-income Ohio residents to maintain their home energy service.⁶⁴
15 The PUCO found that the proposed Ohio PIPP best accomplished the goals the
16 Commission sought relative to other available alternatives. The goal, PUCO noted,
17 involves protection of the interests of two disparate groups of ratepayers:

18 We are not willing to stand by while others, too poor to pay for utility service
19 during the winter, freeze. At the same time, we are ever mindful of protecting
20 the vast majority of customers of utilities under our jurisdiction who pay their
21 bills in full from responsibility for greatly increasing uncollectibles.⁶⁵

⁶³ A “straight PIPP” is a rate that bases bills on a percentage of household income for income-qualified customers. It stands in contrast to a “fixed credit” program or a “tiered discount” program, both of which are income-based.

⁶⁴ Docket No. 83-303-GE-COI (November 23, 1983).

⁶⁵ I acknowledge, as an aside, that Wisconsin has a winter shutoff moratorium, as does Pennsylvania.

1
2 The proposed PIPP, according to the Commission, best served *both* of those goals given
3 available alternatives:

4 We have in this proceeding looked at such alternatives to the percentage of
5 income plan as maintaining the status quo, extending payment plans from six
6 months to twelve or more months, and having another moratorium. All things
7 considered, the percentage of income plan adopted by the Commission today
8 will do the most to assist those in need to maintain utility service while
9 protecting the companies' remaining ratepayers.

10 In sum, the PUCO found that "from our perspective, the true long-term solution to the
11 problem is three-fold: adequate tax funded energy assistance programs, adequate tax
12 funded weatherization and conservation programs, and adequate Commission rules. Of
13 those, only the first, energy assistance, is totally outside of this Commission's
14 jurisdiction."

15 In citing the Pennsylvania and Ohio examples, I again emphasize that I am not
16 necessarily recommending the adoption of a PIPP in Wisconsin, although the data would
17 support that outcome. I am recommending a collaborative process to develop a Made-in-
18 Wisconsin program in the context of the unaffordability of rates that I discuss in detail
19 above, for Wisconsin's largest utility.

20 **D. Available Ratepayer-Funded Bill Affordability Models.**

21 **Q. PLEASE SUMMARIZE POTENTIAL BILL AFFORDABILITY MODELS THAT**
22 **MIGHT BE CONSIDERED.**

23 A. Various models exist through which ratepayer-funded bill affordability programs can
24 deliver meaningful assistance to low-income inability-to-pay customers. The order in

1 which I present these programs should not be construed as any indication of a program
2 preference on my part. Each program design has offers unique trade-offs depending on
3 the public policy that is deemed to be controlling.

- 4 ➤ “Straight percentage of income payment plan (PIPP): A straight percentage of
5 income payment plan (PIPP) is a program design that has been adopted in a
6 variety of American states (e.g., Maine, New Jersey, Ohio, Illinois) and by
7 some Pennsylvania electric and natural gas utilities (e.g., Philadelphia Gas
8 Works, First Energy). The fundamental structure of each program involves
9 capping the utility bill at an affordable percentage of the customer’s gross
10 annual household income.
- 11 ➤ “Fixed credit” Percentage of Income Payment Plan: The Fixed Credit Option
12 (“FCO”) is a more recent iteration of the “straight PIPP.” Through the FCO, it
13 is the bill credit rather than the customer payment that remains fixed on a
14 monthly basis. Pursuant to an FCO program, if a customer’s consumption
15 increases, the customer bears the responsibility for paying the increased usage.
16 In contrast, if the program participant’s consumption decreases, the customer
17 keeps the benefit from the reduced bill.
- 18 ➤ Income-Based Tiered Rate Discount: The income-based tiered rate discount
19 (“TRD”) is a program such as has been adopted by the State of New
20 Hampshire for electric affordability assistance. Under an income-based TRD,
21 the program administrator calculates, for different levels of income, what
22 percentage of discount would be needed to reduce an average residential bill
23 at standard residential rates to an affordable percentage of income. Every
24 customer with an income falling in the income tier will receive the percentage
25 discount deemed to be appropriate, on average, for customers in that tier. If
26 the utility operates a four-tier TRD, for example, customers with the lowest
27 incomes (i.e., Tier 1) may receive a 60% discount for bills to be at the
28 affordable burden on average, while customers with the highest income (i.e.,
29 Tier 4) might receive a 25% discount.⁶⁶
- 30 ➤ Income-Based “Fixed Credit” Benefit Payment: The income-based fixed
31 credit benefit payment (“FCBP”) program is the Ontario Electricity Support
32 Program (“OESP”). The historical antecedent for such an approach is the
33 income-based tiered rate discount described immediately above. Rather than
34 providing a percentage discount off the bill at standard rates, however, the

⁶⁶ The percentage discounts I am using here are presented simply for the sake of illustration. They are not proposals.

1 FCBP provides a monthly fixed credit that varies based on household income
2 (and, as in Ontario, can vary by both income *and* household size).

- 3 ➤ Flat Rate Discount (“Percentage of Bill” Plan): The Flat Rate Discount is the
4 affordability approach adopted by states such as California (its CARES
5 program) and Massachusetts. Under this approach, all income-eligible
6 customers receive a designated discount off the standard residential rates. In
7 California the low-income discount is 20%, while in Massachusetts the
8 discounts generally range from 30% to 40% depending on the utility.⁶⁷ A
9 uniform rate discount makes no effort to tie the amount of the discount to any
10 determination of what an affordable bill might be. This approach comes the
11 closest to viewing bill affordability assistance as a pure “social program.”
- 12 ➤ Multi-Tiered Inclining Block Rate: An inclining block rate structure does not
13 represent an “affordability” program in a strict sense of delivering affordable
14 bills. An inclining block rate structure does, however, simultaneously serve
15 the dual functions of promoting conservation and improving affordability.
16 Most informed opinion today⁶⁸ agrees that low-income tends to be associated
17 with lower consumption levels.⁶⁹ While the consumption of low-income
18 households may be less efficient (on a per square foot of housing basis),⁷⁰
19 low-income households have housing units that are sufficiently smaller such
20 that the overall level of usage will be lower than their higher income
21 counterparts. Given this observation (i.e., that low income is generally
22 associated with lower usage), inclining block rate structures will deliver lower
23 bills to lower-income customers.

24 Q. WHAT DO YOU CONCLUDE?

⁶⁷ The Uniform Rate Discount is sometimes referred to as a “Percentage of Bill” approach. A 20% discount, in other words, is an 80% “percentage of bill.”

⁶⁸ See e.g., Gazze, et al. (2019). 10 Facts About Electricity Costs for Low-Income Families: The Electricity Cost Burden and Tools to Address it, Elevate Energy (Chicago, IL); Cluett, et al. (2016). Building Better Energy Efficiency Programs for Low-Income Households, American Council for an Energy Efficient Economy (Washington D.C.).

⁶⁹ See also, EIA/DOE, 2015 Residential Energy Consumption Survey, Table CE5.3a and CE5.3b (available at <https://www.eia.gov/consumption/residential/data/2015/index.php?view=consumption#undefined>).

⁷⁰ This conclusion makes sense, given the generally-accepted belief that lower income housing is older and less efficient, while lower-income appliances (e.g., refrigerators) also tend to be older and less efficient.

1 A. Based on the data and discussion I present above, I conclude that there is no single model
2 of low-income bill affordability assistance that exists to the exclusion of all other models.
3 Each model, to a greater or lesser extent, would address the unaffordability of WEPCO
4 bills burdens that are associated with the rates being proposed in this proceeding. Each
5 model, to a greater or lesser extent, would address the adverse cost consequences to all
6 ratepayers (e.g., working capital, collection costs, uncollectibles) of the inability of the
7 Company's low-income customers to be able to pay their bills in a full, timely, and
8 regular manner. While some models deliver benefits in a more appropriate fashion
9 through a more appropriate structure,⁷¹ there are multiple program designs from which to
10 select (alone or in combination with each other) an appropriate program affordability
11 approach for Wisconsin. A Made-in-Wisconsin affordable bill program would not only
12 be an appropriate way for WEPCO to address the costs it incurs as a result of low-income
13 nonpayment, and which are passed through to all ratepayers as a result of base rate cases
14 such as this proceeding, but it would have ample precedent in other jurisdictions
15 throughout the nation.

16 **Q. IS THERE ANY OVER-ARCHING OBJECTIVE WHICH A LOW-INCOME**
17 **DISCOUNT SHOULD PURSUE?**

18 A. Yes. The over-arching objective of a low-income discount should be to cap the home
19 energy bills of low-income customers at an affordable percentage of income. An
20 affordable burden of 6% has been the standard generally relied upon by policymakers

⁷¹ See generally, Roger Colton (November 2007). "Best Practices: Low Income Rate Affordability Programs: Articulating and Applying Rating Criteria," prepared for Hydro Quebec: Montreal.

1 with respect to affordable home energy. The 6% burden has been frequently adopted,⁷²
2 including in the states of New Hampshire,⁷³ New York,⁷⁴ New Jersey⁷⁵ and Illinois.⁷⁶ In
3 addition, the Pennsylvania PUC has capped home energy burdens for households with
4 annual income at or below 50% of Poverty Level at 6% of income.⁷⁷ The 6% burden
5 addresses total energy (both gas and electric).⁷⁸ Whatever low-income discount approach
6 is adopted, the decision should be structured to adopt this principle of capping bills at an
7 affordable percentage of income.

8 **E. The Role of Arrearage Management.**

⁷² Six percent is based on the recognition that total shelter costs are generally deemed to be unaffordable to the extent that they exceed 30% of income. Moreover, utility costs tend to equal 20% of total shelter costs. A multiplication of those two data points (20% times 30%) yields the 6% figure.

⁷³ New Hampshire Public Utilities Commission, Docket No. DE 06-079 (2006). (“The current tiered Low Income Electric Assistance Program (EAP) was designed with the goal of making electricity “affordable” at 4 % of household gross income for power and light usage and 6% of household gross income for electric heat.”)

⁷⁴ The New York Public Service Commission favored a 6% energy burden level because it appears to be a widely accepted limit for utility payments, including in New Jersey and Ohio; and also reflected by EIA data. New York Public Service Commission’s *Order Adopting Low Income Program Modifications and Directing Utility Filings* at 7-48, Case 14-M-0565 (effective May 20, 2016).

⁷⁵ New Jersey requires USF customers who use natural gas for heating and electricity will pay 3% for their natural gas service and 3% for their electricity service. If, however, the customer uses electricity for heating, the entire 6% is devoted to the electricity service. The discount provided to customers is based on the difference between their annual utility bill (after LIHEAP is applied) and the required percentage of household income.
<https://www.state.nj.us/dca/divisions/dhcr/faq/usf.html#q1>

⁷⁶ Illinois administers a percentage of income plan (PIP) that charges customers a maximum of 6% of their income for gas and electric service. The maximum PIP credit, however, is \$150 per month or \$1,800 annually. Illinois Senate Bill 1918 at 108-109. <http://www.ilga.gov/legislation/96/SB/PDF/09600SB1918lv.pdf>

⁷⁷ Pennsylvania PUC (September 19, 2019). Home Energy Affordability for Low-Income Customers in Pennsylvania, Final Policy Statement and Order, Docket M—2019-3012599.

⁷⁸ The appropriate division between gas and electric is a matter of policy for the Commission. The burden might be split in half (3% gas; 3% electric. In contrast, it might be allocated 4%/2% (electric/gas) so as to acknowledge the higher proportion of the total home energy bill represented by electricity.

1 **Q. PLEASE DESCRIBE THE PURPOSE OF THIS SECTION OF YOUR**
2 **TESTIMONY.**

3 A. In this section of my testimony, I explain why arrearage management is a necessary
4 element to any response to inability-to-pay. Arrearage management, however, cannot be
5 a stand-alone response. An arrearage management component will address the unpaid
6 bills of inability-to-pay customers incurred during the time that bills were unaffordable.
7 An arrearage management program, at its heart, involves a bargain with the customer.
8 For each complete payment the customer makes of the affordable bills, a pro rata portion
9 of the arrearages incurred during the time that bills were unaffordable will be credited to
10 the account. After a prescribed period of time, if the inability-to-pay customer has made
11 all of his or her current bill payments, the pre-existing arrearage balance will have been
12 reduced to zero.

13 **Q. WHY IS AN ARREARAGE MANAGEMENT COMPONENT A NECESSARY**
14 **COMPONENT OF A BILL AFFORDABILITY INITIATIVE?**

15 An arrearage management program component is necessary because bill affordability is
16 driven by the total bill, not simply by the bill for current service. It serves little function
17 to make the bill for current service affordable if the total bill will remain unaffordable
18 because of the pre-existing arrears.

19 **Q. WHY IS AN ARREARAGE MANAGEMENT COMPONENT NOT A**
20 **SUFFICIENT STAND-ALONE RESPONSE TO INABILITY-TO-PAY?**

1 A. Arrearage management will not work on a stand-alone basis. Such a program does not
2 recognize and address the reason that the arrearage balance was incurred in the first
3 instance. To the extent that the unpaid bills were incurred because of the inability-to-pay
4 bills for current service, a stand-alone arrearage management initiative does not address
5 the cause of the unpaid bills. Not only is it unlikely that the current bills for service will
6 be paid in the future, allowing customers to earn their arrearage management credits, but
7 even should such payments be made in the short-term, the expected result would
8 nonetheless still be that additional arrearages will be incurred in the future with the need
9 to repeat the cycle.

10 **Q. IS THERE A SPECIFIC ARREARAGE MANAGEMENT DESIGN THAT**
11 **SHOULD BE MADE A PART OF A BILL AFFORDABILITY PROGRAM?**

12 A. Yes. I propose that the LIFT program, as I discuss in more detail below, be modestly
13 modified. Moreover, the LIFT program should be made subject to a Company tariff and
14 incorporated as a permanent part of WEPCO's rates.

15 **Part 5. Breaking the Cycle of Inability-to-Pay: Usage Reduction.**

16 **Q. PLEASE DESCRIBE THE PURPOSE OF THIS SECTION OF YOUR**
17 **TESTIMONY.**

18 A. The purpose of this section of my testimony is to explain how energy efficiency
19 investments appropriately targeted to low-income customers can not only help reduce the
20 cycle of inability-to-pay by reducing bills, but can help generate financial benefits to the
21 utility as well.

1 **A. The Lack of Low-Income Energy Efficiency Investments.**

2 **Q. DO LOW-INCOME CUSTOMERS MAKE INVESTMENTS IN ENERGY**
3 **EFFICIENCY IN ORDER TO REDUCE THEIR BILLS TO MORE**
4 **AFFORDABLE LEVELS?**

5 A. No. Without enhanced attention, low-income households will be “left behind” in their
6 ability to reduce energy consumption in order to achieve more affordable bills. Table 18
7 sets forth data on how frequently a home is “drafty,” measuring how well air-sealed a
8 home is. Data is from the Department of Energy’s 2015 Residential Energy
9 Consumption Survey (“RECS”), the most recent RECS for which data is publicly
10 available. Data is for the East North Central (“ENC”) Census Division, the Census
11 division of which Wisconsin is a part.

12 As can be seen, there is a clear relationship between income and the draftiness of a home.
13 While 16% of the ENC population has an annual income below \$20,000, 31% of that
14 population reports that their home is drafty “all the time,” while 26% report that their
15 home is draft “most of the time.” In contrast, as incomes increase, the frequency with
16 which households report their homes as being frequently drafty substantially declines in
17 proportion to the population at varying income ranges. At income ranges from \$60,000
18 through \$140,000, the proportion of households reporting that their home is drafty “all of
19 the time” is lower than the frequency of households in each lower income range. In
20 contrast, at income ranges of \$60,000 to \$120,000, the frequency with which households
21 report that their home is “never” drafty is lower than the proportion of households in
22 those lower income ranges in the total population.

Table 18. Income by How Frequently Home is Drafty
(East North Central) (2015 RECS)

Annual Income	All The Time	Most of the Time	Some of the Time	Never	Grand Total
Less than \$20,000	31%	26%	13%	15%	16%
\$20,000 - \$39,999	23%	25%	28%	25%	26%
\$40,000 - \$59,999	22%	16%	16%	13%	15%
\$60,000 - \$79,999	9%	10%	16%	19%	16%
\$80,000 - \$99,999	8%	10%	8%	11%	9%
\$100,000 - \$119,999	0%	5%	5%	7%	6%
\$120,000 - \$139,999	0%	4%	6%	4%	5%
\$140,000 or more	7%	3%	7%	6%	6%
Grand Total	100%	100%	100%	100%	100%

1 Similarly, Table 19 sets out the RECS data on how well insulated homes are
2 disaggregated by level of income. While households with income of less than \$20,000
3 represent 16% of the total population, they represent 58% of the population reporting that
4 they homes are “not insulated.” In contrast, while households with income exceeding
5 \$80,000 represent 26% of the total population, they represent 32% of the population with
6 “well-insulated” homes. Lower income households are under-represented in the
7 population with well-insulated homes. While households with income less than \$40,000
8 represent 42% of the population, they represent 37% of the population with well-
9 insulated homes.

Annual Income	Well-Insulated	Adequately Insulated	Poorly Insulated	Not Insulated	Grand Total
Less than \$20,000	16%	14%	22%	58%	16%
\$20,000 - \$39,999	21%	28%	30%	0%	26%
\$40,000 - \$59,999	13%	14%	21%	0%	15%
\$60,000 - \$79,999	18%	18%	8%	0%	16%
\$80,000 - \$99,999	10%	10%	6%	22%	9%
\$100,000 - \$119,999	9%	5%	5%	0%	6%
\$120,000 - \$139,999	5%	4%	6%	19%	5%
\$140,000 or more	8%	7%	2%	0%	6%
Grand Total	100%	100%	100%	100%	100%

1 **Q. WHY DOES THIS LACK OF INVESTMENT OCCUR?**

2 A. The reason this lack of energy efficiency investment occurs is that low-income
3 households face market barriers that prevent these households from investing in energy
4 efficiency measures, even if those measures would generate a payback in even the short-
5 to mid-term. These market barriers involve certain housing-related characteristics of
6 low-income households in Wisconsin; the physical characteristics of the housing units
7 themselves; and certain financial characteristics of the low-income households who
8 occupy those units. In assessing these market barriers, I begin by identifying all 5-digit
9 Zip Code Tabulation Areas (“ZCTAs”).⁷⁹

⁷⁹ ZCTAs are nearly, but not quite, identical to Zip Codes. ZCTAs are used by the U.S. Census Bureau, while Zip Codes are creatures of the U.S. Postal Service. According to the U.S. Census Bureau: “ZIP Code Tabulation Areas (ZCTAs) are generalized areal representations of United States Postal Service (USPS) ZIP Code service areas. The USPS ZIP Codes identify the individual post office or metropolitan area delivery station associated with mailing addresses. USPS ZIP Codes are not areal features but a collection of mail delivery routes. The term ZCTA was created to differentiate between this entity and true USPS ZIP Codes.” For a generalized discussion of the

1 **Q. PLEASE EXPLAIN THE HOUSING RELATED CHARACTERISTICS YOU**
2 **HAVE EXAMINED.**

3 A. The housing-related characteristics of low-income households in Wisconsin tend to make
4 energy efficiency investments unavailable to low-income households without outside
5 assistance. Without assistance through programs such as those offered by WEPCO, low-
6 income households would be systematically excluded from being able to access energy
7 efficiency as a mechanism to reduce home usage, thus controlling energy bills and thus
8 energy burdens. Two illustrative “market barriers” related to the housing-related
9 characteristics of low-income households in Wisconsin are considered below: (1) the
10 tenure of households; and (2) the mobility of Wisconsin households.

11 **Q. HAVE YOU EXAMINED THE IMPACT OF RENTER STATUS?**

12 A. Low-income households in Wisconsin are predominantly renters. On the one hand,
13 Wisconsin had 1,580,945 occupied units occupied by homeowners in 2019, of which
14 roughly 36,192 (2%) had income at below \$10,000; of all owner occupied units, 111,821
15 (7%) were occupied by households with annual income below \$20,000. On the other
16 hand, Wisconsin had 777,217 occupied housing units in 2019, of which 203,171 (26%)
17 were occupied by renters with an annual income at or below \$20,000.⁸⁰ If you are poor in
18 Wisconsin, you are most likely to be a renter as well (65% of all households with income
19 below \$20,000 are renters).

differences between Zip Codes and ZCTA, *See* U.S. Census Bureau, *ZIP Code Tabulation Areas*,
<https://www.census.gov/programs-surveys/geography/guidance/geo-areas/zctas.html> (accessed August 19, 2022).

⁸⁰ Table B25118, American Community Survey, 5-year data, 2019.

1 This finding has two significant impacts on whether energy efficiency is accessible to
2 low-income households without adoption of appropriately funded and targeted energy
3 efficiency investments. First, tenants have little or no incentive to improve their
4 landlord's property and receive little, if any, of the increased value of the property.
5 Second, tenants do not generally have the authority to make decisions over improvements
6 to major housing systems, whether it be a heating/cooling system or a hot water system.
7 Indeed, even major appliances such as refrigerators are often owned (and thus controlled)
8 by the property owner rather than by the household.

9 It is important to understand the relationship between tenure status and income for
10 households living in Wisconsin. The “tenure” of households considers whether such
11 households own or rent their homes. Renters, particularly low-income renters, run into
12 the problem of “split incentives.” The term “split incentives” refers to the situation
13 where the cost of installing measures is borne by the owner of a housing unit while the
14 benefit of reduced consumption (and thus reduced bills) is directed toward the resident
15 (*i.e.*, the tenant). As a result, since the costs and benefits are borne by different
16 stakeholders, no investment occurs.

17 The problems caused by renter status, however, go well beyond this economic problem.
18 There is a legal problem as well. When a person is a tenant, the person does not have
19 what is called the “dominion interest” over the major systems in a home that would
20 generate substantial energy efficiency (and thus bill reductions). The “dominion interest”
21 refers to the authority to make decisions. Even if the tenant has the financial wherewithal
22 to fund such investments, as a non-owner of the home, the tenant would not have the

1 authorization to make such changes to the major systems and appliances, (whether it be
2 heating, hot water, refrigeration or something else) resulting in the energy efficiency
3 improvements.

4 **Q. WHAT DO YOU CONCLUDE?**

5 A. There is no question but that to the extent that renter status presents a market barrier to
6 the installation of energy efficiency measures in Wisconsin, those market barriers
7 disproportionately impede the installation of energy efficiency measures for low-income
8 households. The very fact that low-income households are disproportionately renters, as
9 I discuss above, presents market barriers that homeowners do not face when considering
10 the accessibility of energy efficiency measures as a usage reduction technique.

11 **Q. WHAT IS THE SECOND “HOUSING RELATED” CHARACTERISTIC YOU**
12 **EXAMINED?**

13 A. In addition to their tenure, a second housing-related attribute of low-income tenants that
14 impedes their ability to use energy efficiency as a mechanism to reduce home energy
15 consumption is their tendency to be more mobile. Census data demonstrates quite clearly
16 that, compared to the proportion of the total population that changes residences each year,
17 nearly twice as many low-income households move. As a result, even in those instances
18 where a tenant may have the authority to invest in an energy efficiency measure, and
19 assuming a financial ability to do so, the payback period required to justify such an
20 investment would need to match the household's tenure. A low-income household, in
21 other words, will not invest in a measure with a two-year payback if that household
22 intends to move to a different dwelling in 12 months. A low-income household will not

1 invest in a measure with a three-year payback if that household does not anticipate
2 remaining in the home for more than two years.

3 An examination of the mobility of low-income households compared to the mobility of
4 households as a whole shows the increased frequency of mobility within the low-income
5 population in Wisconsin. This data can be used as a surrogate for households that do not
6 have a sufficient length of residence to be able to justify energy efficiency investments.
7 Few energy efficiency investments provide a one-year payback. In addition to excluding
8 many low-income households completely from the efficiency market, restricting
9 investments exclusively to measures that would generate a one-year payback would result
10 in substantial cream-skimming of usage reduction, with the bulk of cost-effective usage
11 reduction missed.

12 The mobility of households in Wisconsin can be measured by the extent to which they
13 lived in the same home at the same time the previous year (“12 months ago”). Table 20
14 indicates that mobility is much more prevalent in the low-income population than it is
15 within the non-low-income population. In 2019, while 21% of all persons with
16 household income less than \$10,000 had moved within the last year, and 16% of all
17 persons with household income between \$10,000 and \$35,000 had, fewer than 9% of all
18 households with income greater than \$75,000 had moved relative to their residence one-
19 year.⁸¹

⁸¹ Table B07010, American Community Survey, 5-year data, 2019.

Table 20. Lived in Same House One-Year Ago (by income)
(Wisconsin)

	Percent of Population
Total: With income: \$1 to \$9,999 or less	78.8%
Total: With income: \$10,000 to \$14,999	83.7%
Total: With income: \$15,000 to \$24,999	84.7%
Total: With income: \$25,000 to \$34,999	85.6%
Total: With income: \$35,000 to \$49,999	87.3%
Total: With income: \$50,000 to \$64,999	89.3%
Total: With income: \$65,000 to \$74,999	90.5%
Total: With income: \$75,000 or more	91.4%

1
2 As can be seen, low-income households are two times more likely to move in a given
3 year than higher income households are.

4 **Q. IS THERE A THIRD TYPE OF LOW-INCOME CHARACTERISTIC THAT**
5 **IMPEDES LOW-INCOME INVESTMENT IN ENERGY EFFICIENCY?**

6 A. Yes. There exist financial-related characteristics of the housing units themselves which
7 present market barriers to low-income investment in energy efficiency. The very fact of
8 high energy costs to low-income customers in Wisconsin creates a barrier to the
9 implementation of energy efficiency measures as a strategy to control those costs. As
10 home energy prices increase as a percentage of income, low-income households have
11 fewer available discretionary resources to invest in measures that could reduce their
12 family expenditures. The discussion below examines the stress on household income by
13 focusing on total shelter costs. Rising home energy prices are a major factor in driving
14 overall shelter prices upwards in Wisconsin. This impact is a particular problem for the
15 lowest income households.

1 One impact of the home energy bills facing the Wisconsin's low-income households is
2 the stress that such bills place on the household budgets of the state's poor. One common
3 principle in reviewing basic family budgets is that total shelter costs should represent no
4 more than 30% of a household's income. A household devoting in excess of 30 percent of
5 income toward shelter costs is considered to be over-extended. The affordability of
6 housing under federal programs such as the Low-Income Housing Tax Credit and Home
7 Investment Partnership Program (HOME) programs, for example, is determined by
8 reference to the 30% burden figure. In addition, programs such as the Section 8
9 subsidized housing program, as well as public housing, are governed by the principle that
10 total shelter costs should not exceed 30% of income. In assessing shelter burdens under
11 the U.S. Department of Housing and Urban Development's ("HUD") Comprehensive
12 Housing Affordability Strategy ("CHAS") planning process, "excess" burdens are
13 defined as those over 30% of income. Shelter costs include rent/mortgage payments plus
14 all utilities (except telephone); internet service is not considered to be a utility.

15 The U.S. Census Bureau reports shelter burdens, disaggregated by rental burdens and
16 homeowner burdens. In Wisconsin, 79% of all renters with income less than \$20,000 a
17 year have rent burdens exceeding 30% of income. Indeed, 70% of all renters with
18 income less than \$20,000 have rent burdens exceeding 40% of income. By the time
19 annual incomes increase to \$20,000 - \$35,000, rent burdens drop dramatically (36% with

1 burdens exceeding 40%), and drop even more substantially when annual incomes
2 increase to between \$35,000 and \$50,000 (15% with burdens exceeding 40%).⁸²

3 **Q. WHAT DO YOU CONCLUDE?**

4 A. High shelter burdens impede low-income energy efficiency investments in two ways.
5 First, the high shelter costs, themselves, present an impediment to low-income
6 households being able to invest in energy efficiency measures. If the household struggles
7 to meet its day-to-day bills, it does not have the discretionary income to invest in energy
8 savings measures, even if those measures are “cost-effective” over some reasonable
9 period of time. In addition, as home energy takes up an increasing proportion of total
10 shelter costs, there is less money “left” to pay for the housing component of total shelter
11 costs. As a result, Wisconsin’s low-income households are either forced into increasingly
12 lower-priced (and presumptively lower quality) housing, or those households face
13 ongoing bill payment problems attributable to the mismatch between household resources
14 and household expenses. In either case, the very housing cost characteristics that cause
15 the need to improve energy efficiency in order to reduce bills is also the characteristic
16 that makes it less likely that such investments in energy efficiency can occur.

17 This impediment to the ability of low-income households to invest in energy efficiency
18 should be of concern in a WEPCO rate case because it is the energy bills, themselves,
19 that are contributing to the budget squeeze imposed by shelter costs.

⁸² Table B25074, American Community Survey, 5-year data, 2019.

1 **Q. IS THERE A FINAL CHARACTERISTIC OF LOW-INCOME HOUSEHOLDS**
2 **THAT YOU HAVE EXAMINED WHICH IMPEDES ENERGY EFFICIENCY**
3 **INVESTMENTS TO PROMOTE AFFORDABILITY?**

4 A. The final characteristics that I have examined includes the financial characteristics of the
5 low-income households themselves. If a household lacks the funds to invest in efficiency
6 improvements in the first instance, the cost-effectiveness of those investments in even the
7 medium term becomes irrelevant. The fact that these households are *low-income*
8 households is a factor which, unto itself, presents additional market barriers. One
9 consequence of the income status of many Wisconsin customers involves the inability of
10 these households to afford even cost-effective energy efficiency improvements. As might
11 be expected for households with annual incomes at or below \$10,000 or \$15,000,
12 low-income households tend to have extremely low liquidity. The payback period for any
13 particular energy efficiency measure becomes irrelevant if the household does not have
14 the investment capital with which to begin.

15 **Q. WHY IS THE LOW-INCOME STATUS, ITSELF, A BARRIER TO ENERGY**
16 **EFFICIENCY INVESTMENT?**

17 A. The importance of the low-income status, for example, can be seen in decision-making
18 regarding appliance replacements. It is often cost-effective for a consumer to spend
19 somewhat more money for a more energy efficient new appliance. In such a purchase
20 decision, if a less efficient refrigerator costs \$600 and the more efficient refrigerator costs
21 \$800, it may well be cost-effective for the customer to pay the \$200 difference to
22 purchase the more efficient appliance. As I found earlier, however, a reliance on such
23 purchase decisions will exclude households that are not in the market to purchase a new

1 refrigerator with which to begin. It is axiomatic to note that it is unlikely that many low-
2 income households have recently spent \$600 for a new refrigerator.

3 In addition, low-income households tend to have very high implicit discount rates (also
4 sometimes known as hurdle rates or internal rates of return). In a report for the Electric
5 Power Research Institute (EPRI), Cambridge Systematics found that the implicit discount
6 rate for low-income households ranged up to the 80 - 90 percent level. This translates into
7 a payback period of roughly one year. Requiring efficiency investments to be justified by
8 a hurdle rate of 90-percent or more will almost entirely exclude low-income households
9 from the energy efficiency market.

10 **Q. WHAT DATA ON INCOME HAVE YOU EXAMINED?**

11 A. When I discuss “low-income” customers in the WEPCO service territory, the incomes
12 associated with these customers are quite low. Table 21 sets forth the percentage of
13 households in the ZCTAs throughout Wisconsin by income level. Roughly one-in-ten
14 (9.0%) customers in Wisconsin have an annual income less than \$15,000, or roughly
15 \$1,250 per month. Nearly one-in-five households (18.0%) have an annual income of less
16 than \$25,000, while nearly one-in-four (22.5%) have an annual income of less than
17 \$30,000.⁸³

⁸³ Table B19001, American Community Survey, 5-year data, 2019.

Table 21. Percent of Households by Annual Household Income
 (Table B19001, ACS, 5-year, 2019)

Annual Household Income	Percent	Cumulative Percent
Total: Less than \$10,000	4.7%	4.7%
Total: \$10,000 to \$14,999	4.3%	9.0%
Total: \$15,000 to \$19,999	4.4%	13.4%
Total: \$20,000 to \$24,999	4.6%	18.0%
Total: \$25,000 to \$29,999	4.5%	22.5%
Total: \$30,000 to \$34,999	4.8%	27.3%
Total: \$35,000 to \$39,999	4.5%	31.8%
Total: \$40,000 to \$44,999	4.6%	36.4%
Total: \$45,000 to \$49,999	4.2%	40.6%
Total: \$50,000 to \$59,999	8.0%	48.6%
Total: \$60,000 to \$74,999	10.8%	59.4%
Total: \$75,000 to \$99,999	14.2%	73.6%
Total: \$100,000 to \$124,999	9.8%	83.4%
Total: \$125,000 to \$149,999	6.0%	89.4%
Total: \$150,000 to \$199,999	5.7%	95.1%
Total: \$200,000 or more	4.9%	100.0%
Total:	100.0%	

1 **Q. HAVE YOU EXAMINED DATA DOCUMENTING THE LACK OF**
 2 **INVESTMENT BY LOW-INCOME HOUSEHOLDS IN ENERGY EFFICIENCY**
 3 **MEASURES?**

4 A. Yes. Data from the most recent (2015) Residential Energy Consumption Survey –the
 5 RECS was discussed in more detail above—demonstrates how this can occur. The
 6 disproportionate lack of access to more efficient appliances, for example, is evident from
 7 the penetration of such appliances within the low-income community. The RECS does
 8 not have sufficiently large sample sizes to provide state-specific data. This data,

1 therefore, considers data from the East North Central Census Division, which is the
2 Division of which Wisconsin is a part. The data on penetration rates of Energy Star
3 appliances (or rather the *lack* of penetration) is set forth in Table 22 below. It shows that:

- 4 ➤ While households with annual income below \$40,000 represent 42% of the total
5 population, those households represent only 31% of households with programmable
6 thermostats for space heating; only 28% of households with Energy Star water
7 heaters (of those households with water heaters); only 27% of households with
8 Energy Star refrigerators; and only 30% of those with Energy Star freezers (of those
9 households having freezers).
- 10
- 11 ➤ In contrast, while households with annual income in excess of \$100,000 represent
12 17% of the total population, those households represent 24% of households with
13 programmable thermostats for space heating; 25% of households with Energy Star
14 water heaters; 27% of households with Energy Star refrigerators; and 20% of
15 households with Energy Star freezers (of those households with freezers).
- 16

17 Moreover, for none of these four energy efficiency upgrades to home appliances does the
18 penetration of households with income less than \$20,000 reach the same percentage of
19 households with income that low in the population as a whole (16% within total
20 population vs. 12% with programmable thermostats; 9% with Energy Star water heaters;
21 9% with Energy Star refrigerators; and 10% with Energy Star Freezers).

22 **Q. WHAT DO YOU CONCLUDE?**

23 A. As the East North Central Census Division moves to more efficient appliances, low-
24 income households are being left behind.

**Table 22. Energy Efficient Appliance Saturation by Income
(East North Central) (2015 RECS)**

Income	Total	Programmable Thermostat			Energy Star Water Heater			Energy Star Refrigerator			Energy Star Freezer		
		No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes
Less than \$20,000	16%	18%	38%	12%	16%	0%	9%	19%	61%	9%	10%	19%	10%
\$20,000 - \$39,999	26%	18%	32%	19%	28%	0%	19%	32%	32%	18%	23%	28%	20%
\$40,000 - \$59,999	15%	15%	19%	15%	15%	0%	18%	14%	14%	18%	19%	14%	13%
\$60,000- \$79,999	16%	16%	7%	18%	17%	0%	18%	17%	17%	18%	18%	15%	22%
\$80,000 - \$100,000	9%	8%	2%	11%	9%	0%	10%	8%	8%	10%	12%	8%	13%
\$100,000 - \$120,000	6%	4%	2%	8%	5%	0%	9%	4%	4%	9%	8%	5%	8%
\$120,000 - \$139,999	5%	4%	0%	6%	3%	0%	7%	2%	2%	7%	7%	3%	6%
\$140,000 or more	6%	2%	0%	10%	6%	0%	9%	3%	3%	11%	4%	7%	6%

1 In addition to this discussion of energy efficiency in appliances, I discussed the
2 relationship between income and having drafty homes, as well as the relationship
3 between income and having inadequate insulation, earlier in my Testimony.

4 **Q. HAVE YOU HAD OCCASION TO EXAMINE THE ANNUAL REPORT ON**
5 **FOCUS ON ENERGY?**

6 A. Yes. I have reviewed the Focus on Energy Calendar Year 2021 Evaluation Report (May
7 22, 2022) (hereafter, 2021 Focus on Energy Report), which I have attached as Ex.-WW-
8 Colton-9. That Report documents the same barriers to low-income participation that I
9 discuss above. The 2021 Focus on Energy Report, for example, stated:

10 Compared with non-limited-income respondents, limited-income respondents
11 more often reported not making improvements because they did not own the
12 house and did not have the money for new equipment.

- 13
- 14 • For limited-income respondents, the most frequent responses were not
- 15 owning the home (29%), being unaware of what equipment or offerings were

1 available for rebates (19%), and not having enough money to cover either the
2 improvement or initial down payment (35%).

3 (Id. at 23; see also, Figure 13, page 24). The Focus on Energy Report concluded:

4 **Outcome 3. Limited-income respondents reported different reasons for**
5 **not participating in Focus on Energy than non-limited-income**
6 **respondents.** The most common was not having enough money for energy
7 upgrades or even an initial down payment to begin the installation process.
8 The second most mentioned was not owning the home. Though offerings
9 directed to limited-income customers are available, such as Energy Savings
10 Packs and increased incentives for income qualified customers, major
11 upgrades may be out of reach for customers who do not own their home or
12 have enough money for the initial cost of the equipment or improvements.

13 Id. at 41). It is reasonable to conclude that, while low-income residential
14 customers are helping to fund the Focus on Energy program, they derive little
15 benefit from that funding. Additional effort on the part of WEPCO is thus
16 merited.

17 **D. A Geo-Targeted Pilot Project as a Remedy.**

18 **Q. HAVING PRESENTED THE PROBLEM IN SUCH DETAIL, WHAT DO YOU**
19 **PROPOSE AS A REMEDY OR SOLUTION?**

20 A. A WEPCO Community-Based Targeting Pilot can be modelled on the Consumers Energy
21 pilot program adopted as part of a settlement of a proceeding reviewing the Consumers
22 “Energy Waste Reduction” (“EWR”) plan. That settlement was approved by the
23 Michigan PSC on March 17, 2022. In that Consumers Settlement, the parties
24 (Consumers Energy, and environmental intervenors which included the Sierra Club,
25 Natural Resources Defense Council, Ecology Center, and National Housing Trust),
26 agreed in relevant part as follows:

1 *Geographic Targeting. The parties agree that in 2022 Consumers Energy will*
2 *initiate the research studies identified below to support development of an*
3 *income-qualified geo-targeting protocol.*

4 *a. A low income needs assessment (“LINA”) study to identify historic*
5 *participation and coverage of the Company’s income qualified programs,*
6 *characterize low-income areas using available datasets, and develop*
7 *scenarios for ranking geographies based on high need criteria or for*
8 *optimizing specific benefits to inform future prioritization of services. All data*
9 *collection of customers will comply with current Commission data and*
10 *privacy regulations and is subject to future Commission regulation on the*
11 *collection, storage, and dissemination of customer information whether*
12 *individual or in aggregate. . .*

13 *The parties agree that Consumers Energy will initiate a follow-up research effort*
14 *utilizing the LINA research to develop a protocol and implementation strategy for*
15 *future geographic targeting initiatives designed to increase vulnerable and/or*
16 *underserved low income customers’ participation in income qualified single and*
17 *multi-family programs through geographically and programmatically targeted*
18 *approaches, ensure availability and promotion of air sealing and insulation*
19 *measures by partner agencies and contractors, and increase trade ally awareness*
20 *regarding the identification of health and safety deferrals. The Company agrees*
21 *to incorporate the targeting protocol in the development of its next EWR Plan*
22 *filing.*

23 In addition to this “LINA” effort, the March 2022 Consumers Energy settlement provided
24 that:

25 *Income Qualified Flint Initiative. The Company agrees to invest \$1 million*
26 *between 2023 and 2024 to support an Income Qualified program targeted*
27 *initiative in and around Flint to identify and assess the impact of a geographically*
28 *targeted approach to the delivery of EWR services. The initiative aims to find and*
29 *provide EWR intervention to economically vulnerable customers including those*
30 *in arrears (which can include CARE, HHC, and SER recipients), struggling to*
31 *pay utility bills, and at risk of deferral due to health and safety concerns. The*
32 *initiative will focus on expanding existing efforts with community agencies,*
33 *energy assistance coordination, outreach to income-qualified participants who*
34 *recently installed emergency equipment, education and awareness efforts, trade*
35 *ally education and engagement, and other targeted approaches.*

1 *a. Consumers Energy can use this \$1 million in any of the following zip codes*
2 *in Flint: 48502, 48503, 48504, 48505, 48506, and 48507; however,*
3 *Consumers Energy will prioritize outreach to zip code 48505, followed by*
4 *48503 and then 48502, and finally by 48507, 40504, and 48506.⁸⁴*

5 **Q. WHAT DO YOU RECOMMEND?**

6 A. One way to engage in intentional targeting is to engage in a neighborhood-based outreach
7 for delivering WEPCO energy efficiency measures to low-income customers. As I
8 describe in detail above, it is possible to identify a limited number of specific Census
9 Tracts that have a high concentration of households with characteristics demonstrating a
10 particular need within the WEPCO service territory. Neighborhood targeting would seek
11 to treat the entire neighborhood, recognizing that doing so would generate a high
12 penetration of investment in households that have demonstrated characteristics of need.
13 The implementation of a successful neighborhood targeting scheme, such as I
14 recommend here, has been implemented by other electric and natural gas utilities.

15 I recommend a community-based geo-targeting pilot recommended for WEPCO of the
16 same scope and funding as was adopted in Michigan.⁸⁵ I have attached the Michigan
17 Consumers Energy geo-targeting settlement to my Testimony as Ex.-WW-Colton-10. A

⁸⁴ Michigan Public Service Commission, In the Matter, on the Commission’s own motion, regarding the regulatory reviews, revisions, determinations, and/or approvals necessary for Consumers Energy Company to fully comply with Public Act 295 of 2008, as amended by Public Act 342 of 2016, Case No. U-20875, Order Approving Settlement Agreement, March 17, 2022).

⁸⁵ While I reference energy efficiency investments in the text of my testimony, these references should not preclude additional attention on the delivery of electrification investments and renewable investments to the same neighborhoods. These neighborhoods are frequently, if not generally, excluded from receiving the benefits of these investments (i.e., electrification, renewables) for largely the same reasons they are excluded from receiving the benefits of energy efficiency.

1 community organization such as Walnut Way, which has experience in both
2 weatherization and housing development, would be an ideal pilot partner.⁸⁶

3 Just as the Consumers program was targeted toward zip codes in Flint, a WEPCO
4 program should be targeted to zip codes in Milwaukee. Based on my discussion above, it
5 is possible to identify a limited number of Milwaukee Zip Codes that would serve as the
6 basis for such a program. The five Zip Codes I recommend targeting include Zip Codes
7 53205, 53206, 53208, 53210, and 53212. As I demonstrate above, these Zip Codes are
8 not only dramatically disproportionately low-income, but they are substantially
9 disproportionately payment-troubled as well. An expenditure of \$1.0 million is
10 reasonable for this Pilot. (Ex.-WW-Colton-10, at para. 18(a)). The development and
11 implementation of the geo-targeting initiative should also follow the low-income needs
12 assessment (LINA) protocol established in the Consumers Energy settlement (Ex.-WW-
13 Colton-10, at para. 17(a)) and the data reporting protocols established in that Settlement
14 (Id. para. 18(b)).

15 **Q. IS WALNUT WAY AN APPROPRIATE PARTNER WITH WHICH WEPCO**
16 **SHOULD COLLABORATE ON THIS GEO-TARGETING PILOT?**

⁸⁶ One type of pilot program often suggested for low-income households is a program known as Pay As You Save (PAYS). Before such a program should be pursued, particularly for low-income customers, and even as a pilot, numerous obstacles would need to be overcome. See generally, Colton (July-August 2015). “While On-Bill Financing of Energy Efficiency May Have its Place, Shortcomings Make Its Use for Residential Customers Inappropriate,” FSC Law and Economics Insights (“More and more proposals today involve developing an On Bill Repayment (sometimes referred to as On-Bill Financing, or OBF) regime through which utility customers can finance energy efficiency investments. This issue reviews OBF programs and concludes that, irrespective of the extent to which, if at all, a utility might seek to develop an OBF program for non-residential customers, OBF is inappropriate for residential ratepayers.”)

1 A. Yes. In 2019, Walnut Way was one of only two communities to receive the Partnership
2 for Resilient Communities award from the Institute for Sustainable Communities. The
3 award allowed Walnut Way to mobilize its social enterprise, Blue Skies Landscaping, to
4 complete a series of green infrastructure projects. Blue Skies Landscaping not only
5 provides environmental improvements, but in so doing, also focuses on providing job
6 training to members of the neighborhood who traditionally have faced barriers to
7 employment. For purposes here, Walnut Way developed a working partnership with the
8 City of Milwaukee’s Environmental Collaboration Office. In addition to its green
9 infrastructure work, Walnut Way worked with the City’s Milwaukee Shines program, an
10 initiative to install photovoltaic solar systems on four neighborhood sites. Through this
11 work, with multiple partners both public-sector and private-sector, Walnut Way
12 demonstrated the ability to collaborate that would be essential to delivering the geo-
13 targeting pilot project that I recommend in my Testimony above.

14 **Q. IS WEPCO AUTHORIZED TO PROVIDE ENERGY EFFICIENCY**
15 **INVESTMENTS OUTSIDE THE CONFINES OF FOCUS ON ENERGY?**

16 A. Yes. While WEPCO has stated that it has not intended to offer any additional programs
17 beyond those currently in place through the statewide Focus on Energy programs (Ex.-
18 WW-Colton-11), it is certainly authorized to do so. WEPCO states that it “operates two
19 PSCW-approved voluntary programs incremental to those offered by Focus on Energy.”
20 (Ex.-WW-Colton-12.) These include the Residential Assistance Program (RAP) and the
21 Voluntary Design Assistance Program (VDAP). (Id.; see also Ex.-WW-Colton-13.)
22 According to WEPCO, “these programs are funded by the Company, and implemented in
23 coordination with Focus on Energy.” (Ex.-WW-Colton-12.) These programs are clearly

1 authorized by statute. (Wis. Statutes, Sec. 196.374(5)(d)). However, for reasons
2 explained above, they are not likely to benefit low-income residential customers,
3 indicating that additional programs are needed.

4 **Q. HAVE YOU HAD OCCASION TO EXAMINE THE ANNUAL REPORT ON**
5 **WEPCO'S ENERGY EFFICIENCY PROGRAMS OUTSIDE OF FOCUS ON**
6 **ENERGY?**

7 A. Yes. I have examined the 2021 Annual Report (January – December) as submitted in
8 Docket 5-EE-2021 (“Wisconsin Utility Energy Efficiency, Customer Service
9 Conservation Report”) (hereafter “2021 Annual Report”), which I have attached as Ex.-
10 WW-Colton-14. That report identifies several aspects of how the existing Wisconsin
11 Energy programs fail to address low-income needs. The report begins by noting that WE
12 Energies substantially underspent its 2021 residential budget. While the 2021 residential
13 budget was \$3,116,720, the actual 2021 residential spending was only \$1,792,308
14 (57.5%). Moreover, We Energies reports that its programs are not designed to reach a
15 substantial number of homes. For example, the Residential Natural Gas Assistance
16 Program was designed to reach 150 units in 2021, of which 145 units were actually
17 completed. (Id. at 7). No electric funds are delivered through the RAP program.

18 The VDAP initiative, of course, is not a residential initiative at all. (Id., at 15).

1 **E. The Financial Benefits to WEPCO Arising from Targeted Efficiency.**

2 **Q. PLEASE EXPLAIN HOW YOUR DISCUSSION ABOVE RELATES TO RATES**
3 **BY HELPING TO BREAK THE CYCLE OF INABILITY-TO-PAY.**

4 A. The delivery of energy efficiency investments to low-income customers would not only
5 yield resource conservation and avoided cost benefits to WEPCO, but would deliver a
6 broad range of other utility cost reductions as well. Accordingly, low-income energy
7 efficiency programs should be implemented as an important tool in controlling other
8 system-wide utility costs. Avoided costs commonly associated with low-income energy
9 efficiency would include savings such as reduced arrears, reduced working capital, and
10 reduced credit and collection expenses.

11 The notion that energy efficiency investments directed toward payment-troubled, low-
12 income customers can yield benefits beyond the traditional “avoided costs” is neither new
13 nor revolutionary. The existence of direct financial benefits to utilities arising from
14 energy efficiency programs targeted specifically to low-income households has been
15 recognized for over 35 years. The presence of such expanded avoided costs was first
16 postulated in 1987. That analysis stated that targeted electric efficiency programs had
17 advantages that went beyond the traditional energy and capacity savings associated with
18 energy efficiency measures:

19 The cost-effective reduction of system costs is relevant and important in
20 every part of the business operations of the utility, not simply to the power
21 supply function. Accordingly, a utility should be concerned with the problem
22 of nonpayment, overdue payment, and partial payment of utility bills. Bad
23 debt arises when ratepayers demand power from the system and then do not
24 pay for it on a timely basis [A] new conservation program [can be
25 proposed] that is justified on an avoided cost basis. The proposal rejects the
26 historical view that avoided costs include only an energy and a capacity
27 component. Instead, it introduces the notion of avoided bad debt. As long as

1 the energy efficiency program costs less than the bad debt it will avoid, the
2 program is cost-justified.⁸⁷

3 In this 1987 article, “bad debt” is defined to include all aspects of costs associated with
4 payment troubles. The term includes not only written-off accounts, but credit and
5 collection expenses, working capital expenses, and a host of other expenses related to
6 nonpayment. Since that time, the existence and importance of such expanded avoided
7 costs has become generally-accepted. Analysts have repeatedly confirmed that low-
8 income energy efficiency generates benefits beyond energy and capacity savings.

9
10 **Q. HOW CAN ENERGY EFFICIENCY INVESTMENTS APPROPRIATELY**
11 **TARGETED TO LOW-INCOME CUSTOMERS REDUCE COSTS TO WEPCO?**

12 A. My discussion here is not intended to be an exhaustive list of how energy efficiency
13 investments targeted to low-income customers might reduce costs to WEPCO. Instead,
14 this list is intended to be illustrative.

- 15 ➤ If a low-income customer has an arrearage, the total “asked to pay” amount
16 includes the unpaid arrears *plus* the bill for current service. To the extent that
17 energy efficiency investments reduce the bill for current service, more of the
18 total payment by the customer will be available to apply to the retirement of
19 arrears. By reducing the level of arrears, not only does WEPCO reduce its
20 working capital requirement, it reduces its risk of bad debt (in the event that
21 some portion of the arrears ultimately goes unpaid).
- 22 ➤ To the extent that a customer has been unsuccessful on a payment plan, the
23 arrearages subject to that payment plan are placed in jeopardy of ultimate
24 nonpayment. By reducing the asked-to-pay amount for current service,
25 particularly on a seasonal basis, given a constant payment, the ability of a
26 low-income customer to successfully complete a payment plan increases. As

⁸⁷ Colton and Sheehan (1987). “A New Basis for Conservation Programs for the Poor: Expanding the Concept of Avoided Costs,” 21 *Clearinghouse Review* 135, 139.

1 a result, WEPCO would reduce both its working capital requirement and its
2 risk of loss due to bad debt.

- 3 ➤ To the extent that WEPCO disconnects service to a low-income customer for
4 nonpayment, reducing that customer's bills would make the reconnection of
5 service more affordable. As a result, WEPCO would not only reduce its risk
6 of loss due to bad debt, but it would also preserve its future stream of revenue
7 from having the customer back on its system, and more likely to remain, with
8 a more affordable bill.

9 **Q. WHY IS WORKING CAPITAL A PARTICULARLY IMPORTANT EXPENSE**
10 **REDUCTION TO CONSIDER IN ASSESSING THE IMPACT OF**
11 **APPROPRIATELY-DESIGNED, TARGETED, AND FUNDED LOW-INCOME**
12 **ENERGY EFFICIENCY INVESTMENTS?**

13 A. Working capital expense is driven by two factors: (1) the *level* of arrears; and (2) the *age*
14 of arrears. For example: (1) An arrearage of \$1,500 generates a greater working capital
15 expense than an arrearage of \$500. (2) An arrearage that is 120 days old generates a
16 greater working capital expense than an arrearage that is 60 days old. Accordingly,
17 working capital reductions are important to consider for several reasons.

- 18 ➤ First, working capital reductions arise even if arrearages are not eliminated
19 entirely. If a low-income customer carries an arrearage of \$100 rather than \$300,
20 there is a working capital reduction, all else equal.
- 21 ➤ Second, working capital reductions occur if bill payment is accelerated, even if
22 the *total* dollars of payment over time is the same. A low-income customer with a
23 90-day arrears results in a lower working capital expense than a low-income
24 customer with a 30-day arrears, all else equal.
- 25 ➤ Third, since working capital is a capital item, working capital carries an equity
26 return with it. The rate impact of reducing either the dollar level of arrears (*i.e.*,
27 increasing the completeness of payment) or the number of days before a bill is
28 paid (*i.e.*, increasing the timeliness of payment), is more than the working capital
29 cost reduction itself. There is a return associated with it as well.

1 ➤ Fourth, there will be a tax impact associated with the equity portion of the return
2 on working capital. As a result, every one-dollar reduction in working capital,
3 generates more than a one-dollar reduction in rates.

4 To the extent that an appropriately designed, targeted, and funded low-income program
5 has the impact of reducing the number of low-income customers in arrears, the dollars of
6 arrears which low-income customers carry, or the length of time that arrearages remain
7 outstanding, there is a working capital reduction that redounds to the benefit of
8 ratepayers. (*See generally* Response to 2-WW/INT-17, Attach01, PSC Ref.#446240.)

9 **Q. WHAT ARE YOUR GENERAL CONCLUSIONS ABOUT THE POTENTIAL**
10 **COST SAVINGS TO WEPCO FROM APPROPRIATELY DESIGNED,**
11 **TARGETED, AND FUNDED LOW-INCOME ENERGY EFFICIENCY**
12 **INVESTMENTS?**

13 A. Cost reductions arise from reductions in arrears in at least the following ways. To the
14 extent that WEPCO reduces the dollar level of arrears, the Company will experience
15 expense savings. To the extent that WEPCO reduces the amount of time a customer
16 carries arrears, the Company will experience expense reductions. To the extent that
17 WEPCO reduces the credit and collection activity needed to pursue bill payment, the
18 Company will experience expense reductions. Expense reductions include, amongst
19 other things, reduced bad debt, reduced working capital, and reduced credit and
20 collection expenses. In addition, to the extent that WEPCO retains its customers against
21 nonpayment disconnections, it preserves future sales and future revenue streams.

1 **Q. HAVE OTHER UTILITIES IMPLEMENTED LOW-INCOME USAGE**
2 **REDUCTION PROGRAMS BASED ON THEIR BENEFICIAL ARREARAGE**
3 **REDUCTION IMPACTS?**

4 A. Yes. Pennsylvania’s electric and natural gas utilities have operated what that state’s PUC
5 calls the Low-Income Usage Reduction Program (“LIURP”). Electric utilities offer three
6 types of usage reduction packages to low-income households: (1) an electric space
7 heating package; (2) an electric water heating package; (3) a baseload electric package.

8 The Pennsylvania experience makes clear that WEPCO can achieve significant energy
9 savings by targeting electric efficiency measures in low-income households whether or
10 not those households heat with electricity. LIURP jobs designed to reduce electricity
11 usage, other than heating, are referred to as an “electric baseload package.” Between
12 1989 and 2009, electric baseload jobs represented roughly two-in-five (115,098 of
13 292,071 total jobs: 39.4%) of all LIURP homes.⁸⁸ Over the 20-year period, electric
14 baseload jobs outnumbered every other type of usage reduction treatment, including the
15 treatment of electric space heating homes (n=85,999 jobs).

16
17 In January 2009, Penn State University prepared a comprehensive long-term evaluation
18 of the LIURP program examining data over the first 18 years of program operation. The
19 evaluation provides important lessons that inform whether WEPCO would promote least-

⁸⁸ Customer Services Information System Project, Pennsylvania State University (January 2009). *Long-Term Study of Pennsylvania’s Low-Income Usage Reduction Program: Results of Analyses and Discussion*, prepared for Pennsylvania Public Utility Commission, Penn State University: State College (PA).

1 cost service by adopting an appropriately designed, targeted, and funded low-income
2 electric efficiency program. The LIURP evaluation reported:

- 3 ➤ “LIURP is a cost-effective method of reducing both energy consumption *and*
4 *energy bill arrearages* . . . Sixty nine percent of LIURP households reduce
5 their energy consumption following weatherization treatments, with an
6 average reduction of 16.5 percent.” Electric baseload jobs generated a usage
7 reduction of 698.2 kWh, or 19.1%.” (emphasis added).
- 8 ➤ “Of those households with energy bill arrearages, 40 percent reduce their
9 arrearage following weatherization services. Thirty seven percent of electric
10 industry households reduce their arrearages.”⁸⁹ LIURP was targeted to
11 households with arrears (within the population of large energy users). The
12 LIURP evaluation found that “by the end of the year following
13 weatherization, 68 percent of the households have an energy bill arrearage, a
14 decrease of 29 percent . . . Although the average number of full payments
15 made does not vary from the pre- to post-period, the percent of households
16 with missed payments decreased and the average number of partial payments
17 increased.”
- 18 ➤ “The [third] most significant, and most common, variable that is positively
19 related to reductions in energy consumption is the amount of arrearage owed
20 in the pre-period [before usage-reduction treatments are installed], suggesting
21 that households with large arrearages are motivated to make the necessary
22 behavioral changes to contribute toward additional reductions in energy
23 consumption. It therefore makes sense to target households with higher
24 arrearages when prioritizing LIURP jobs.”

25 The objectives established for Pennsylvania’s LIURP are similar to the objectives I
26 recommend for a low-income usage reduction component to be added in this proceeding,
27 including, but not limited to:

- 28 ➤ To assist low-income residential customers in conserving energy by reducing
29 their energy *consumption*;

⁸⁹ The LIURP evaluation found that this result was consistent with prior U.S. Department of Energy (DOE) research, which found that “low-income families who receive weatherization have a lower rate of default on their utility bills and require less emergency heating assistance.” Bruce Tonn, et al. (2001). “Weatherizing the Home of Low-Income Home Energy Assistance Program Clients: A Programmatic Assessment,” U.S. Department of Energy: Washington D.C.

- 1 ➤ To assist participating households in reducing their energy *bills*; and
- 2 ➤ To decrease the incidence and risk of customer payment delinquencies and the
- 3 attendant utility costs associated with customer arrearage and uncollectible
- 4 accounts.

5 **Q. WHAT DO YOU CONCLUDE WITH RESPECT TO THE BENEFITS OF AN**
6 **APPROPRIATELY DESIGNED, TARGETED, AND FUNDED LOW-INCOME**
7 **ENERGY EFFICIENCY INVESTMENT PROGRAM?**

8 A. Each of the impacts that I have identified represents a financial benefit arising from an
9 appropriately designed, targeted, and funded low-income energy efficiency program to
10 WEPCO and its customers. Given the extent of these potential expense reductions to
11 WEPCO, the benefits of the low-income program create an independent justification for
12 the recommendations I make regarding the structure, funding, and targeting of a geo-
13 targeted pilot program as I discuss above. I recommend that the Commission include as
14 an Order point in this proceeding a direction to WEPCO to adopt a geo-targeted low-
15 income energy efficiency program targeted to the Milwaukee zip codes identified in my
16 Testimony above. That directive should approve WEPCO’s inclusion of the costs of such
17 a geo-targeted program in the rates approved in this proceeding.

18 **Part 6. Breaking the Cycle of Inability-to-Pay:**
19 **Tariffed Customer Service and Collections Practices.**

20 **Q. PLEASE DESCRIBE THE PURPOSE OF THIS SECTION OF YOUR**
21 **TESTIMONY.**

22 A. WEPCO’s rates routinely work to increase the home energy burdens faced by low-
23 income customers and, as a result, increase the inability-to-pay with an expectation of a

1 deterioration in low-income payment patterns. In my Testimony below, I will propose a
2 series of steps that will modify or eliminate WEPCO credit and collection processes and
3 procedures that exacerbate rather than help alleviate or mitigate low-income nonpayment
4 difficulties.

5 **A. Arrearage Management Program.**

6 **Q. PLEASE DESCRIBE THE PURPOSE OF THIS SECTION OF YOUR**
7 **TESTIMONY.**

8 A. In this section of my testimony, I explain why WEPCO should be directed to continue its
9 Arrearage Management Program (AMP) indefinitely. The Company's Low-Income
10 Forgiveness Tool (LIFT) program should be incorporated into WEPCO's permanent
11 tariffs. In any future base rate case, of course, it would be possible for WEPCO, the
12 Commission, and other stakeholders, to assess the impacts of the program, as well as the
13 need to further continue the program, or to modify the program. This is no more and no
14 less than what is available for other rates.

15 **Q. PLEASE DESCRIBE YOUR UNDERSTANDING OF WEPCO'S CURRENT**
16 **AMP.**

17 A. The Low-Income Forgiveness Tool (LIFT) program is offered to low-income residential
18 customers in WE Energies' service territory with an arrears balance of at least \$300.
19 Enrolled customers will have a portion of their arrears forgiven monthly while on the
20 plan. As of June 30, 2022, there were 25,000 customers enrolled in LIFT. While there is
21 no ceiling on enrollment, WE Energy states that "after multiple solicitations of all eligible

1 customers, the enrollment appears to be consistent at 25,000, and that amount is expected
2 to remain relatively constant.” (Ex.-WW-Colton-15.)

3 **Q. HOW EFFECTIVE HAS LIFT BEEN IN ADDRESSING LOW-INCOME**
4 **ARREARS?**

5 A. According to WEPCO, “with a year of experience with the LIFT program, to date, 88%
6 of LIFT payment arrangements remained current and in compliance with program
7 requirements, while the corresponding rate for typical payment arrangements is
8 approximately 8%.” (Id.). WEPCO continued: “Said differently, the LIFT program
9 boasts a compliance rate of over 10 times that of a typical payment arrangement.” (Id.)
10 Moreover, WEPCO reports that “as a result of participation in the LIFT program, there
11 are currently approximately 25,000 customers removed from the disconnection process.”
12 (Id.)

13 **Q. HOW COSTLY HAS THE LIFT PROGRAM BEEN TO DATE?**

14 A. In identifying “program costs,” WEPCO said:

15 Approximately \$11 million that will flow through the escrow accounting
16 recovery mechanism; however, absent the LIFT program, the arrears
17 balances for qualifying customers would have totaled \$25.5 million, so the
18 LIFT program has reduced by \$14.5 million the amount that otherwise would
19 have needed to be recovered through the uncollectible escrow account.

20 (Id., at 2) (emphasis added).

21 **Q. WHAT IS YOUR REACTION TO THIS REPORTING BY WEPCO?**

22 A. As I explain in detail in the opening sections of my Testimony above, the need for
23 a low-income Arrearage Management Program such as LIFT is as great as it has

1 ever been. Particularly for Wisconsin residents with low incomes, the percentage
2 who report that they have had some difficulties, or considerable difficulties, in
3 paying their usual household expenses “in the past seven days” is as high as it has
4 been since the advent of COVID-19.

5 The fact that the WEPCO LIFT program has removed low-income customers
6 from the disconnection process; has generated payment compliance more than ten
7 times greater than typical payment arrangements; and has actually *reduced* the
8 dollar amount “that otherwise would have needed to be recovered through the
9 uncollectible escrow account”; is not surprising. As I explained in detail, with
10 supportive research from one state after another, as bills as a percentage of
11 income increase to low-income customers, payment compliance decreases. A
12 “bill” to a low-income customer, of course, is not separated into separate bills for
13 arrearages and for current service. Rather, the bill received by a low-income
14 customer, and which that customer must either pay (or not) is a single bill with a
15 single asked-to-pay amount. Adding substantial arrears in addition to bills for
16 current service that may already represent unaffordable burdens, simply increases
17 the bill as a percentage of income to even higher levels and reduces payment
18 compliance. Adding arrears to a low-income bill for current service not only
19 places payment of the arrearage in jeopardy, but places payment of the bill for
20 current service in jeopardy as well.

21 **Q. DO YOU PROPOSE ANY MODIFICATION TO THE EXISTING LIFT**
22 **PROGRAM?**

1 A. Other than recommending that LIFT be incorporated into WEPCO's permanent
2 rates and regulations by making it's a tariffed "rate," I offer only one modest
3 recommended modification to LIFT. At present, in order to income-qualify for
4 LIFT, a customer must have received Energy Assistance either in the current year
5 or in the immediately preceding year. (Ex.-WW-Colton-15.) As I discuss in
6 more detail below, however, this requirement that a customer be an Energy
7 Assistance recipient severely limits the low-income population which can enroll
8 LIFT. In 2021, fewer than 30% of the low-income Wisconsin households eligible
9 to receive LIHEAP actually received LIHEAP. Moreover, WEPCO's own data
10 demonstrates that, using its definition of "low income" to include only those
11 receiving energy assistance (Ex.-WW-Colton-16), it has identified only 121,332
12 of its customers as "low-income," fewer than 10% of its residential customer
13 base. (See Ex.-WW-Colton-17). That is substantially fewer customers than the
14 number of customers who would have income at or below Wisconsin's maximum
15 income eligibility for LIHEAP (60% of State Median Income).

16 Finally, this level of participation occurred in a year in which the economic
17 impacts of COVID-19 resulted in a higher level of LIHEAP benefit, accompanied
18 by a higher level of LIHEAP participation, than in most years. Given that
19 WEPCO reports that participation in LIFT has improved the payment compliance
20 rate with payment plans by more than 10-times (from 8% to 88%), it would
21 benefit both the Company and the Company's low-income customer base to open
22 the door to program participation somewhat further.

1 **Q. WHAT DO YOU RECOMMEND?**

2 A. I recommend that WEPCO allow customers to demonstrate their income-
3 eligibility for LIFT by proving that they are a recipient of Supplemental Nutrition
4 Assistance Program (SNAP) (formerly known as Food Stamps) benefits.
5 Allowing this mechanism to demonstrate income-eligibility does not expand the
6 income eligibility for LIFT. Maximum income for Food Stamp eligibility is set
7 generally at 135% of the Federal Poverty Level. In contrast, Energy Assistance
8 eligibility in Wisconsin is set at 60% of State Median Income. Opening LIFT to
9 this additional eligible population (i.e., SNAP recipients) would not impose a
10 substantial administrative burden on WEPCO. The Company would not need to
11 determine income eligibility, other than to receive proof of the receipt of SNAP
12 benefits.

13 **Q. IS THERE REASON TO INCLUDE SNAP RECIPIENTS IN THE INCOME-**
14 **QUALIFIED POPULATION FOR LIFT?**

15 A. Yes. In addition to acknowledging the inherent limitations of the Energy Assistance
16 program, opening LIFT to SNAP recipients makes LIFT available to a population of low-
17 income customers who have already applied for, and been found eligible to receive,
18 public assistance that helps them pay their home energy bills. Research shows that the
19 receipt of federal SNAP assistance has the effect of reducing unpaid utility bills by a
20 substantial percentage. Research at the National Poverty Center, at the University of
21 Michigan, documents that the receipt of SNAP benefits helps low-income customers
22 improve their utility bill payments. The research of Shaeffer and Gutierrez was designed

1 to examine the impact, if any, of SNAP assistance on the reduction of “material
2 hardships,” beyond food hardships, on households with and without children.⁹⁰

3 Nonpayment of utility bills was one of the “material hardships” considered. The study
4 reported that “we find a statistically significant and substantively large negative
5 relationship between SNAP participation and both food insecurity and the ability of
6 families to pay essential household expenses, particularly, housing expenses.” According
7 to the researchers, “SNAP participation may reduce other aspects of material hardship as
8 well by allowing recipients to reallocate resources originally directed toward the purchase
9 of food to other essential expenses such as housing and utility costs.”

10 Their findings stated that "SNAP has a sizeable effect not just on the food security of
11 households with children, but also on their non-food material well-being also." In
12 particular, the study found a "statically significant negative relationship between SNAP
13 participation and the risk that households will fall behind on their . . .utilities." The receipt
14 of SNAP reduced the percentage of households with children not paying their utility bills
15 by 46.8% (from 33.5% to 17.8%). Particularly given that these income-qualified
16 customers have taken steps (other than the receipt of Energy Assistance) to receive public
17 assistance which helps them reduce their unpaid utility bills, it is appropriate to allow
18 such customers to participate in LIFT.

⁹⁰ H. Luke Shaefer and Italo A. Gutierrez, "The Supplemental Nutrition Assistance Program and Material Hardships among Low-Income Households with Children," *Social Service Review* 87, no. 4 (December 2013): 753-779.

1 **Q. IS IT POSSIBLE TO ESTIMATE THE NUMBER OF FOOD STAMP**
2 **RECIPIENTS IN THE WEPCO SERVICE TERRITORY?**

3 A. Yes. I matched the list of Zip Codes which WEPCO provided as having residential
4 customers with Census data on Zip Code Tabulation Areas (ZCTAs). The Census reports
5 the number of households by ZCTA which receive either Food Stamps or cash public
6 assistance (or both). According to the American Community Survey (5-year data) (Table
7 B19058), WEPCO has 191,263 households receiving Food Stamps and/or cash
8 assistance. While not all of those Food Stamp recipients will be customers of WEPCO
9 (some, for example, may be renters who have their electric bills included in rent), given
10 the ubiquitous nature of electricity service, the ACS data provides a sound upper limit on
11 the number of potential participants. In addition to having some households who will not
12 be electricity customers, of those households who are customers, some will not have
13 WEPCO arrears (or have sufficient arrears to qualify for LIFT). In addition, not all low-
14 income customers with arrears would apply for the LIFT program. Given that WEPCO
15 reports having identified between roughly 120,000 (121,332 in 2021) and 130,000
16 (130,599 in 2022) low-income customers (*see* Ex.-WW-Colton-17), the Census count of
17 Food Stamp recipients indicates that my recommendation would represent a modest, but
18 not overwhelming, expansion of the low-income population that could be served by
19 LIFT.

1 **Q. WHAT FURTHER DO YOU RECOMMEND?**

2 A. Based on the experience of WEPCO with its LIFT program to date, particularly
3 when coupled with the ongoing and substantial need for WEPCO to address low-
4 income inability-to-pay, along with the positive financial impacts to the utility
5 from the operation of the LIFT program, I recommend that WEPCO be directed to
6 incorporate the LIFT program, as modified according to my recommendation
7 above, into its permanent tariffed rates and regulations. To do so, I recommend
8 that the parameters of LIFT be formally memorialized into tariff pages reflecting
9 those parameters which WEPCO has laid out in response to discovery. (Ex. WW-
10 Colton-15).

11 **B. Late Payment Charges.**

12 **Q. PLEASE DESCRIBE THE PURPOSE OF THIS SECTION OF YOUR**
13 **TESTIMONY.**

14 A. In this section of my Testimony, I explain why WEPCO should exempt low-income
15 customers from the imposition of late payment charges. I conclude that late payment
16 charges provide no incentive for low-income customers to make more complete or more
17 accelerated payments. I conclude that responding to low-income inability-to-pay by
18 imposing a late payment charge to further *increase* bills will exacerbate rather than
19 alleviate or mitigate nonpayment. The impact is to threaten the continued service to low-
20 income customers, while at the same time increasing costs to remaining non-low-income
21 customers.

1 **Q. WHAT LATE PAYMENT CHARGE DOES WEPCO IMPOSE ON UNPAID**
2 **BALANCES?**

3 A. WEPCO’s tariffs provide that the Company will impose a late payment charge of 12%
4 per year. The Company’s Electric Tariff (Section 404, Tariff Sheet 65, Revision 1) states
5 that “(1) The charge will be applied to outstanding charges past due but no sooner than 20
6 days after the mailing date of the bill. . . (3) The charge will not be waived if it was
7 properly applied, except when the Company is unable to obtain a scheduled meter
8 reading and the customer disputes the estimate.” The Company’s residential tariff
9 provides that “A one percent (1%) per month late payment charge will be applied to
10 outstanding charges past due.” (Sheet 21, Revision 16;⁹¹ see also, Ex. WW-Colton-18).

11 **Q. CAN LATE PAYMENT CHARGES BE JUSTIFIED AS AN INCENTIVE FOR**
12 **CUSTOMERS TO MAKE ON-TIME PAYMENTS?**

13 A. Late payment charges cannot be justified as an incentive for customers to make on-time
14 payments, particularly if applied to low-income accounts. No utility industry study that I
15 know of exists that assesses the extent to which late payment charges reduce residential
16 bad debt. Similarly, no industry study exists that I know of which links the imposition of
17 a Late Payment Charge to the reduction of residential arrears in general. Finally, no
18 industry study exists that I know of which considers, let alone establishes, that the
19 imposition of a Late Payment Charge results in the acceleration of residential customer
20 payments.

⁹¹ I set aside the fact that WEPCO does not charge a Late Payment Charge of 12% per year. It charges a Late Payment Charge of 1% per month. Moreover, it charges a Late Payment Charge on unpaid late payment charges. Accordingly, its compounded rate is *more* than 12% a year.

1 Moreover, if the Company incurs an expense by having a customer pay his or her bill *after*
2 the due date, the Company would, of necessity, incur a savings of equal amount by having
3 a customer pay his or her bill *before* the due date. If a late payment charge is sufficient to
4 serve as an incentive to accelerate payment such that it is not made after the due date, a
5 credit of equal magnitude would seem to be sufficient to serve as an incentive to accelerate
6 payment such that it is made before the due date.

7 **Q. WHAT DO YOU RECOMMEND GENERALLY?**

8 A. I recommend that WEPCO not be permitted to impose its late payment charge on
9 residential arrears that are less than 90-days overdue.

10 **Q. DO YOU HAVE A SECOND RECOMMENDATION REGARDING LATE**
11 **PAYMENT CHARGES?**

12 A. Yes. I recommend that low-income customers --defined to be those customers who are
13 eligible to receive benefits from the Low-Income Home Energy Assistance Program
14 (LIHEAP)--be exempt from late payment charges. This definition differs from the
15 definition of “low-income” currently employed by WEPCO. WEPCO currently defines
16 “low-income” to include only those customers who actually receive LIHEAP. (Exh.2-
17 WW-Colton-16). For the reasons I explain later in my Testimony, restricting the
18 definition of low-income customers exclusively to those who receive LIHEAP is too
19 narrow.

20 **Q. WHY DO YOU RECOMMEND THAT LOW-INCOME CUSTOMERS BE**
21 **EXEMPT FROM LATE PAYMENT CHARGES AT ALL?**

1 A. WEPCO's Late Payment Charge is counterproductive when the Company is further from
2 full payment after imposing the charge than before. Particularly in situations involving
3 low-income households, this will often be the case. One distinguishing attribute of a low-
4 income household is the fact of the limited amount of income available to pay month-to-
5 month utility bills. The low-income status of WEPCO's customers, as well as the
6 connection between payment difficulties and the level of a bill (as a percentage of income),
7 was discussed in detail earlier in my Testimony. Even if a Late Payment Charge gets paid,
8 therefore, the result is simply to divert limited funds away from the low-income customer's
9 ability to pay his or her current bill and to the payment of Late Payment Charges instead.

10 The conclusion that imposing a Late Payment Charge is likely to be a losing proposition
11 does not depend for its efficacy on an assumption of nonpayment or partial payment. Even
12 in those instances where the customer makes full payment of the outstanding arrears, the
13 utility cannot be found *ipso facto* to have benefited from the late payment charge. So long
14 as the late paying household has a limited *corpus*, if some part of the household's ability-to-
15 pay is diverted to paying late payment charges, there is that much less left to pay current
16 bills. WEPCO should not be permitted to engage in a collection process that is
17 counterproductive.

18 **Q. ISN'T THERE A BUSINESS CASE TO BE MADE FOR IMPOSING LATE**
19 **PAYMENT CHARGES ON LOW-INCOME CUSTOMERS?**

20 A. No. For a business case to be made for extending a Late Payment Charge to low-income
21 customers, the Company would need to show that the incremental money it receives
22 through the late payment charge more than offsets any revenue it loses because the late

1 payment charge impedes rather than facilitates bill payment. A Late Payment Charge
2 imposed on low-income customers an increasingly unaffordable and unpayable range.
3 This result places collection of both the original balance and the unpaid Late Payment
4 Charges in jeopardy. Under such circumstances, the Company loses more money than it
5 generates by imposing Late Payment Charges on low-income customers. Finally, even
6 though the Company cannot demonstrate that Late Payment Charges are serving to
7 promote full and timely payment by residential customers generally, the imposition of a
8 late payment charge will have even less of an impact on low-income customers in this
9 regard. I conclude that late payment charges should be waived for low-income
10 customers.

11 **C. Deferred Payment Agreements.**

12 **Q. PLEASE DESCRIBE THE PURPOSE OF THIS SECTION OF YOUR**
13 **TESTIMONY.**

14 A. In this section of my testimony, I examine the reasonableness of a number of practices
15 and procedures that WEPCO should incorporate into its tariffs as an implementation of
16 the requirements set forth in the Wisconsin Public Service Commission's Administrative
17 Regulations. The purpose of these proposed tariffed provisions are both to further ensure
18 the regular implementation of protections provided by the Commission's regulations with
19 respect to deferred payment agreements, and to provide protections to low-income
20 customers who may not have sufficient arrears to qualify for the Company's LIFT
21 program.

1 **Q. PLEASE EXPLAIN THE BASIS FOR CONCLUDING THAT THERE IS A NEED**
2 **TO ADOPT SUCH IMPLEMENTING TARIFF PROVISIONS.**

3 A. WEPCO, itself, states that it has very little success with recovering revenue through the
4 deferred payment plans it offers. According to the Company, outside of its LIFT
5 program, it has a “compliance rate” of only 8% with its payment plans. (Ex.-WW-Colton-
6 15.). Stated in the converse, WEPCO experiences a failure rate of 88%; nearly nine-of-
7 ten of its non-LIFT payment plans fail. Despite that 88% failure rate, WEPCO states that
8 it does not have any reports in its possession, whether or not prepared for the Company
9 itself, which analyze “why residential customers do not successfully complete deferred
10 payment plans to avoid the disconnection of service.” (Ex.-WW-Colton-19).

11 **Q. IN LIGHT OF LIFT, WHY DO YOU HAVE A CONCERN WITH RESPECT TO**
12 **THIS FAILURE RATE FROM THE PERSPECTIVE OF LOW-INCOME**
13 **CUSTOMERS?**

14 A. While WEPCO’s LIFT program has been highly successful, and I have recommended
15 that it be incorporated into WEPCO’s tariffs and extended as a permanent program, the
16 limits of the program must nonetheless be recognized. In order to qualify for LIFT, not
17 only must a customer have a minimum unpaid balance (\$300), but the customer must
18 have *received* Energy Assistance in the current or past heating season. (KM -1.1)
19 (emphasis added).

1 While it is reasonable to conclude that customers who receive Energy Assistance⁹² are
2 “low-income” customers, as I documented above, the percentage of all low-income
3 customers who receive Energy Assistance is quite low.⁹³ More than seven-of-ten
4 WEPCO customers that would be income-qualified for LIFT, in other words, are not
5 eligible to receive arrearage forgiveness through LIFT because they did not receive
6 Energy Assistance. This limitation is mitigated to a certain degree if my recommendation
7 on expanding LIFT eligibility to include Food Stamp eligibility is adopted.

8 The data above demonstrates how there is a substantial low-income population that may
9 well have a need for help in responding to their unpaid bills. (See 2/WW-INT-17,
10 Attach01, PSC Ref.#446241.) These customers, even though low-income, would be
11 subject to payment plan terms that require a 60% downpayment and a maximum payment
12 plan term of 12 months. (Ex. WW-Colton-20.⁹⁴

13 **Q. ARE THERE SPECIFIC COMMISSION REGULATIONS THAT YOU HAVE**
14 **REVIEWED IN PREPARING YOUR RECOMMENDATIONS?**

15 A. Yes. My recommendations below are designed specifically to implement Wisconsin
16 Administrative Code, section PSC 113.0404. That regulation states that “Every deferred

⁹² “Energy Assistance” is presumed to be a reference to the federal Low-Income Home Energy Assistance Program (LIHEAP).

⁹³In 2021, at the state level, of the 649,672 households eligible to receive LIHEAP in Wisconsin, only 189,837 (29.2%) did so. National Energy and Utility Affordability Coalition, “Wisconsin by the Numbers” (2021), available at <https://neuac.org/liheap-state-by-state-metrics/>.

⁹⁴ While WEPCO states that it continues to have in place a reduced downpayment of 35% (rather than 60%), and a maximum term of 18 months (rather than 12 months), it is “possible” that it will “revert back to our ‘standard practice’” of its “pre-pandemic payment arrangement terms.” (Ex.-WW-Colton-20.)).

1 payment agreement entered into due to the customer's inability to pay the outstanding bill
2 in full shall provide that service will not be discontinued if the customer pays a
3 reasonable amount of the outstanding bill and agrees to pay a remaining outstanding
4 balance in installments.” The Regulation continues on to state that “for purposes of
5 determining reasonableness. . .the parties shall consider the customer’s ability to pay.” In
6 assessing the “ability to pay,” the utility is directed to consider, amongst other things, the
7 size of the delinquent account; the reasons why the debt has been outstanding; and “any
8 other relevant factors concerning the circumstances of the customer, such as household
9 size, income and expenses.” (Id.) (emphasis added).

10 When WEPCO reports that its general “compliance rate” for deferred payment plans is
11 8%, yet its low-income compliance rate through LIFT is 88% (more than ten times
12 higher), it is reasonable to believe that the Company is not adequately or appropriately
13 complying with the general directive to “consider the customer’s ability to pay” and to
14 take into account “the circumstances of the customer, such as household size, income and
15 expenses.”

16 **Q. WHAT DO YOU RECOMMEND?**

17 A. Based on the data and analysis presented above, I recommend that the Commission direct
18 WEPCO to incorporate the following practices and procedures regarding DPAs into its
19 tariff as a means to mitigate and collect uncollectibles:

20 A. *The Company shall not disconnect or refuse to restore service⁹⁵ to any*
21 *residential customer whose service has been or is subject to termination for a*

⁹⁵ This section applies to persons who are on-system (“disconnect”) or off-system (“restore”).

1 *delinquent amount unless and until the Company first offers⁹⁶ the customer*
2 *an opportunity to enter into a reasonable deferred payment agreement.*

3 *B. Whenever a residential customer advises the Company that the customer is*
4 *presently unable to pay a total outstanding bill and/or deposit,⁹⁷ the*
5 *Company shall offer the customer a reasonable deferred payment agreement,*
6 *which affirmatively takes into consideration the customer's financial*
7 *circumstances.*

8 *C. The customer has the option, when negotiating a deferred payment*
9 *agreement, to include the current month's bill plus the reconnection charges,*
10 *deposits, or other customer service fees, if any, in the total amount to be paid*
11 *over the term of the deferred payment agreement.*

12 *D. The Company shall not require a residential customer to pay, as a down-*
13 *payment, more than the lesser⁹⁸ of \$100 or 10 percent of the total outstanding*
14 *bill⁹⁹ due at the time the agreement(s) is made or executed.*

15 *E. Should a customer be a participant in an energy assistance or income-*
16 *supplement program as identified in this section, the Company shall not*
17 *require the customer to pay, as a down-payment, more than five (5) percent*
18 *of the amount covered by the payment agreement, or the cost of one-third of*
19 *one month's average usage, whichever is greater. The income supplement or*
20 *energy assistance programs that qualify a customer for this down-payment*
21 *include: (1) Weatherization Assistance Program (WAP); (2) LIHEAP; (3)*
22 *public or assisted housing; (4) SSI; (5) SNAP; (6) TANF; (7) Telephone*
23 *Lifeline; (8) PAAD (Pharmaceutical Assistance for the Aged and Disabled);*
24 *(9) WIC; (10) Medicaid; (11) free or reduced school lunch/school breakfast;*
25 *(12) Head Start; (13) Dependency and Indemnity Compensation (DIC) for*
26 *Surviving Spouse or Parents of Veterans; or (14) other programs as may*

⁹⁶ This section makes the offer of a deferred payment arrangement (DPA) a prerequisite to a disconnection of service. It places a proactive duty on the Company, not merely a reactive or passive duty to “accept” a payment plan proffered by the customer.

⁹⁷ The customer need not ask for a DPA; he/she need only say that he/she is presently unable to pay the bill.

⁹⁸ It is not “either-or” here. It is the lesser of the two stated amounts.

⁹⁹ Note how this section precludes the utility from requiring payment of certain fees “up front.” So, it is not a down-payment plus a reconnect fee (or some other fee). The DPA applies to the “total outstanding bill.”

1 *from time to time be recognized by the Commission.¹⁰⁰ As part of the DPA*
2 *process, the Company shall provide customers reasonable time to supply the*
3 *utility¹⁰¹ with written documentation of their participation in or qualification*
4 *for any such program.*

5 *F. The deferred payment agreement shall reflect the specific circumstances of*
6 *the particular case and shall be determined by both the Company and the*
7 *customer receiving residential utility service.¹⁰² A deferred payment*
8 *agreement must provide for installments as low as \$10 per month and no*
9 *down-payment, when the customer or applicant demonstrates financial need*
10 *for such terms, but need not provide for monthly installments of less than*
11 *\$10.*

12 *G. The Company shall develop written deferred payment agreement procedures*
13 *and forms for evaluating the financial need of a customer or applicant,¹⁰³ for*
14 *assuring the confidential handling of such information, for arriving at fair*
15 *and reasonable payment terms, and for training its personnel, which*
16 *procedures shall be filed with the Wisconsin Public Service Commission.*

17 *H. The Company shall provide a written payment agreement form in clear and*
18 *understandable language and format at the time of the initial agreement on a*
19 *deferred payment arrangement. The written payment agreement form shall*
20 *contain the following information: (1) that the Company is required to offer a*
21 *payment agreement that the customer or applicant is able to pay,*
22 *considering his or her individual household financial circumstances; (2) that*
23 *if the customer or applicant demonstrates financial need, alternate terms will*
24 *be available, a down payment may not be required and installments may be*
25 *as low as \$10 per month above current bills; and (3) that the agreement*
26 *should not be signed if the customer or applicant is unable to pay its terms.*

¹⁰⁰ This differs from my recommendation to expand LIFT to include Food Stamp recipients in addition to LIHEAP recipients. My recommendation regarding LIFT is designed to allow program administration to be as automated as possible. My recommendation here involves an assumption that the negotiation of a payment plan would allow a greater opportunity for WEPCO to identify whether the customer is a participant in one of the identified programs.

¹⁰¹ The utility may likely contract the service of fulfilling this section to a community-based organization. This section does not preclude that result.

¹⁰² This section disallows the use of standardized plans. It requires DPAs to “reflect the specific circumstances of the particular case.”

¹⁰³ The Company needs to document how it will consider a customer’s financial circumstances.

1 I. *Should a customer fail to maintain a DPA, the Company shall offer to*
2 *renegotiate the DPA. The Company shall offer the customer another DPA*
3 *and roll the entire arrearage and current bill into the new arrearage amount.*
4 *The customer shall again have the option, when negotiating a deferred*
5 *payment agreement, to include the current month’s bill plus the reconnection*
6 *charges, deposits, or other customer service fees, if any, in the total amount*
7 *to be paid over the term of the deferred payment agreement.*

8 J. *The Company shall renegotiate and/or amend the deferred payment*
9 *agreement of a residential customer if said customer demonstrates that his or*
10 *her financial circumstances have changed significantly.*¹⁰⁴

11 K. *The Company shall offer a new payment agreement to a customer who is in*
12 *default of any existing payment agreement if the customer has made at least*
13 *two consecutive full payments under the first payment agreement. The new*
14 *payment agreement shall be for the same term as or longer than the term of*
15 *the first agreement. The customer shall be required to pay for current service*
16 *in addition to the monthly payments under the new payment agreement and*
17 *may be required to make the first payment up-front as a condition of entering*
18 *into the new payment agreement.*

19 In addition to being applicable to payment plans generally, the above stated tariff
20 language should be applicable to any payment plans that are entered into pursuant to the
21 Company’s LIFT program.

22 As noted above, these proposed tariff provisions are not in contravention of the
23 Commission’s existing regulations. Rather, the Tariff language, simply provides more
24 specificity in detailing how WEPCO intends to implement the mandate set forth in the
25 Commission’s existing regulation. While WEPCO currently asserts that it “will consider
26 a customer’s household size and income when determining reasonable deferred payment
27 agreement terms” (Ex. WW-Colton-21), it provides no guidance on how or to what extent
28 those factors will be “considered.” (Id.). At present, but subject to change in 2023, for

¹⁰⁴ Renegotiation is on a going-forward basis.

1 “identified low-income” customers, WEPCO states that it will “require a minimum of
2 \$600 or 40% of the contract balance (whichever is less”) as a payment plan
3 downpayment, and will provide payment plan terms of “up to 18 monthly installments on
4 the balance.” (Ex.WW-Colton-22).

5 **F. Due Dates and Collections.**

6 **Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR**
7 **TESTIMONY.**

8 A. In this section of my testimony, I explain modifications that WEPCO should make in
9 response to a low-income customer’s stated inability-to-pay. Should a customer express
10 such an inability-to-pay, and express a willingness and intent to seek external third-party
11 bill payment assistance, WEPCO should place a collections hold on that customer’s
12 account for 60 days to allow the application process to proceed.

13 **Q. IS THERE ANY PRECEDENT FOR PLACING A COLLECTIONS HOLD TO**
14 **ALLOW AN APPLICATION PROCESS TO PROCEED WHEN A CUSTOMER**
15 **SEEKS PROTECTIONS FROM COLLECTIONS?**

16 A. Yes. The Wisconsin Public Service Commission’s Administrative Rules provide that
17 A utility shall postpone the disconnection of service, or reconnect the service
18 if disconnected, for up to 21 days to enable the occupant to arrange for
19 payment, if the occupant produces a licensed Wisconsin physician's statement
20 or notice from a public health, social services or law enforcement official
21 which identifies the medical or protective services emergency and specifies
22 the period of time during which disconnection will aggravate the
23 circumstances. During this extension of service, the utility and occupant shall
24 work together to develop resources and make reasonable payment
25 arrangements in order to continue the service on a permanent basis.

1 (Wis. Admin. Code, sec. 113.0301(13)). While this section of the Administrative Code
2 articulates an obligation on the part of every utility, stating what the utility must do, it
3 does not state the converse, what the utility may do. A utility such as WEPCO may
4 postpone the disconnection of service, or reconnect service, for a specified period of time.
5 to allow a customer to apply for external assistance to assist with bill payment, and to
6 have that application acted upon.

7 **Q. WHAT IS THE FACTUAL BASIS FOR PROVIDING FOR THIS**
8 **POSTPONEMENT?**

9 A. WEPCO reports that it has a reasonably expedited collection process but only for a
10 limited number of customers and only during a limited time period. WEPCO states in
11 response to Walnut Way discovery that its collection timeline does not begin unless a
12 customer has a delinquent balance of more than \$300. (Ex. WW-Colton-23.) Even within
13 those accounts, collections are not directed toward everyone. The Company states that its
14 collections process “progressively works” up to an outbound telephone call and field
15 termination during the “disconnection period.” (Id.) Collections are pursued only during
16 the non-winter moratorium period. (Id.)

17 It would, as I have discussed in detail throughout my testimony, benefit not only the low-
18 income customer to have low-income arrears not become larger (or older) than necessary,
19 but would benefit all ratepayers generally. Controlling nonpayment by addressing
20 inability-to-pay helps to constrain a variety of costs that would otherwise be passed
21 through to ratepayers. Programs exist to assist low-income customers to retire unpaid
22 balances that they cannot afford to pay. These programs include, but are not necessarily

1 limited to, the federal LIHEAP Crisis program; the Keep Wisconsin Warm/Cool Fund;
2 and (though temporary), the federal Emergency Rental Assistance Program (ERAP).
3 Each program, however, may be accessed only by submission of an application and
4 confirmation that the household is income-eligible.

5 If WEPCO proceeds with the disconnection of service while customers are seeking third
6 party assistance, not only does the customer face the difficulties associated with being
7 without utility service, but the impact will simply be to increase the cost of having service
8 restored. To the extent that the third party pays for any restoration fee (and any
9 associated deposit), the impact is to reduce the funding available for other low-income
10 customers to access assistance.

11 **Q. WHAT DO YOU RECOMMEND?**

12 A. I recommend that WEPCO adopt a policy, incorporated into its residential tariffs, that
13 mirrors its policy on medical or protective services collection holds. The WEPCO tariff
14 currently provides that “Without receipt of the statement or notice required by Wisconsin
15 Administrative Code Ch. PSC 113.0301(13), any Company employee (management and
16 represented) in the contact centers and field who has a reasonable basis to believe a
17 medical or protective services emergency exists may order a same day, or as soon as
18 reasonably practical, reconnection of service if service has been disconnected or these
19 employees may order a 21 day extension if service is at risk of disconnection.” (Section
20 406.5(e), Tariff Original Sheet 76.2). I recommend WEPCO adopt a parallel provision
21 which would read substantially as follows:

1 any Company employee (management and represented) in the contact centers
2 and field who knows, or who has a reasonable basis to believe, a customer
3 subject to nonpayment collection has or will apply for third-party assistance
4 through a public or private program to assist in paying their outstanding
5 balance, may order a same day, or as soon as reasonably practical,
6 reconnection of service if service has been disconnected or these employees
7 may order a 60 day extension if service is at risk of disconnection.

8 The extended time is not only to permit the customer to make an application for
9 assistance, but to allow the third party to process such application and to make such
10 assistance available.

11 **Part 7. Tracking the Cycle of Inability-to-Pay:**
12 **Modelled on Performance-Based Ratemaking.**

13 **Q. PLEASE DESCRIBE THE PURPOSE OF THIS SECTION OF YOUR**
14 **TESTIMONY.**

15 A. In this section of my testimony, I recommend that the Commission direct WEPCO to
16 adopt a system of data reporting that would allow the Company, the Commission, and
17 other stakeholders to track the extent to which the Company is having an impact on
18 breaking the cycle of inability-to-pay. While I do not accompany this recommendation
19 with a proposal for incentives and/or penalties, adopting this structure is closely modelled
20 on aspects of performance-based ratemaking.

1 **A. Structuring a Performance-Based Mechanism to Track the Cycle of Inability-to-Pay.**

2 **Q. PLEASE DESCRIBE THE PURPOSE OF THIS SECTION OF YOUR**
3 **TESTIMONY.**

4 A. A public utility such as WEPCO is the institution ultimately responsible for whether or not it
5 moves toward ensuring affordable service in its service territory. The utility industry has (or
6 should have) the knowledge, the marketing capability, and the technical capability to
7 provide affordable service for all of its customers. What the industry needs is the incentive
8 to make such service available.¹⁰⁵ In this section of my Testimony, I introduce a mechanism
9 that would allow WEPCO, the Commission, and other stakeholders, to track the Company's
10 success (or lack thereof) in addressing the cycle of inability-to-pay that I discuss throughout
11 my testimony.

12 **Q. HOW DOES THIS PRINCIPLE APPLY TO WEPCO'S CURRENT RATE**
13 **PROCEEDING?**

14 A. If one adopts this principle, regulators should incorporate specific outcome-based criteria
15 into the review of a utility company's affordable rate efforts specifically.¹⁰⁶ More
16 specifically, these outcome-based criteria should recognize that affordable service does *not*
17 exist for many low-income households, but that WEPCO can take affirmative steps --of
18 which low-income rates, targeted energy efficiency, and arrearage forgiveness are but three-

¹⁰⁵It is largely because regulation permits a direct pass-through of all credit and collection expenses, as well as other expenses associated with nonpayment, that utilities can continue to fail to acknowledge the business problems raised by low-income inability-to-pay.

¹⁰⁶The National Regulatory Research Institute (NRRI) has historically recommended a performance-based criterion involving the avoidance of service disconnections. *See*, Burns, Robert, *et al.*, Alternatives to Utility Service Disconnection, National Regulatory Research Institute: Columbus, OH (May 1995).

1 - toward achieving that goal. The Company should then be judged not only on what steps it
2 takes to improve its goal of providing affordable service, but on what actual progress it has
3 made toward that goal.

4 Wisconsin has not previously considered performance-based rates for assessing the
5 outcomes of low-income programs. Accordingly, what I recommend below is a system of
6 data-collection which, over time, will provide a basis to allow the State to move in that
7 direction in future WEPCO rate cases.

8 **Q. WHAT ARE THE INTENDED OUTCOMES TO BE ACHIEVED BY ADOPTING**
9 **SUCH A DATA REPORTING STRUCTURE?**

10 A. This analysis proposes a Customer Collection Indicator as the basis for data collection. The
11 intent of the proposed Customer Collections Indicator is to generate several outcomes:

- 12 ➤ First, it will impose upon WEPCO an ongoing obligation to devote resources to
13 ensuring affordable service.
- 14 ➤ Second, it will impose upon WEPCO an ongoing obligation to assess whether its
15 services are priced beyond the financial means of certain customers. If service
16 affordability begins to fall for whatever reason, the Company would be required
17 to develop a scheme to offset those impacts.
- 18 ➤ Finally, it frees up WEPCO management to address the ongoing failure to
19 provide affordable service. Rather than micro-managing every aspect of the
20 Company's efforts to promote affordable service within the constraints of
21 revenue collection, Wisconsin regulators would be saying that WEPCO will
22 eventually be judged by the outcome, rather than by the effort.

23 **Q. DO YOU HAVE PERFORMANCE INDICATORS THAT YOU RECOMMEND?**

24 A. Yes. Within the conceptual framework described above, this section describes how
25 outcome-based criteria regarding affordable service might be implemented. This

1 recommended outline considers how WEPCO is addressing the payment troubles of its
2 customers. Failing to adequately address payment problems creates problems not only for
3 the households facing problems, but for all remaining ratepayers as well. This performance
4 review indicator would involve the following components:

- 5 ➤ **Termination of Service.** Every residential customer who experiences an
6 involuntary termination of service for nonpayment represents the ultimate failure
7 of a company to adequately address payment problems. The disconnection of
8 service represents not only a social problem for those households disconnected,
9 but represents a business problem for the company as well. In the absence of
10 remote disconnections (which WEPCO may or may not use for electricity and/or
11 natural gas disconnections), the Company must spend money on the physical act
12 of disconnecting service. Moreover, the disconnection of service represents a
13 loss of a future revenue stream to help offset fixed company costs. Accordingly,
14 the rate of service disconnections for a utility's low-income residential
15 customers should be compared to the rate of service disconnections for
16 residential customers generally.

17 The performance of the company in this regard is to be measured by the
18 "termination rate." Termination rate is calculated by dividing the number of
19 residential service terminations by the number of residential customers (as well
20 as the number of low-income disconnections by the number of low-income
21 customers).¹⁰⁷

- 22 ➤ **Payment Agreements.** Unsuccessful deferred payment agreements are another
23 measure of company performance in responding to payment-troubled customers.
24 Each household who is unable to successfully retire its arrears through a
25 negotiated deferred payment agreement is an indication that the utility failed to
26 adequately assess the ability-to-pay potential of the household. Through this
27 failure, WEPCO not only imposes a social cost on the household, but imposes a
28 business cost of either negotiating a new payment agreement or in pursuing other
29 credit and collection measures against the household. The rate of unsuccessful
30 deferred payment agreements for a utility's low-income customers should be no
31 more than the rate of unsuccessful deferred payment agreements for residential

¹⁰⁷ "Low-income" would include all customers identified by WEPCO as being low-income. This would include, for example, LIHEAP recipients, LIFT participants (which should include LIHEAP plus Food Stamp participants), and any customer identified as "low-income" for purposes of the payment plan processes I identify above.

1 customers generally.¹⁰⁸ The percent of customers who successfully complete
2 deferred payment agreements is an indication of the extent that a company
3 adequately addresses customer's payment problems.

4 ➤ **Money-at-Risk.** The percent of customers in debt reflects the general state of
5 collections. The total amount of money owed by customers is one of the most
6 important collection figures that can be reported. Collectability rates of 95
7 percent and more should be expected for current bills, while collectability rates
8 for arrears of older than 60-days drop sharply. The total money owed and at risk
9 is the sum of money owed by customers in arrears and the money owed by
10 customers on deferred payment agreements. The rate at which money is placed
11 at risk is calculated by summing the total dollars in arrears along with the total
12 dollars subject to deferred payment arrangements. This dollar figure is then
13 divided by the total revenue of the Company. Money-at-risk rates should be
14 disaggregated by customer class. This third component compares the money-at-
15 risk rate for low-income customers to the money-at-risk rate for residential
16 customers generally.

17 ➤ **Customers in Arrears.** Maintaining customers that do not timely pay their bills
18 is an indication of the failure of a utility to adequately address the payment-
19 troubles of its customers. To the extent that customers *do* develop past due bills,
20 WEPCO should be willing and able either to collect those bills immediately, or
21 to place those customers on reasonable deferred payment agreements. The
22 existence of customers in arrears represents a failure in both of these processes.
23 Customers that are in arrears, but which have not entered into a deferred
24 payment agreement, represent a risk of loss to the company. Stated conversely,
25 by entering into a deferred payment plan, the risk that the customer will
26 ultimately lose its utility service is lessened. One aspect of collections involves
27 both getting --and keeping-- late-paying customers on deferred payment
28 arrangements.

29 Comparisons of arrears between utilities and between time periods, however,
30 can be misleading because of differences in the level of bills. For this reason, a
31 weighted statistic is calculated so that the effect of different average bills is taken
32 into consideration. More specifically, the score used in this performance
33 indicator is the Weighted Arrears for all households who are not in deferred

¹⁰⁸ A successful completion of a deferred payment agreement involves a household which retires its arrears without need for renegotiation of a defaulted agreement and without need of the disconnection of service. Given the universal mandate that utilities enter into only "reasonable" deferred payment agreements, virtually all deferred payment agreements presumably should be successfully completed using this definition.

1 payment agreements. It is calculated by dividing the total monthly arrears not
2 subject to deferred payment agreements by the average monthly customer bill.¹⁰⁹
3 This metric thus compares the Weighted Arrears for low-income customers to
4 the Weighted arrears of residential customers overall.

¹⁰⁹This is sometimes known as a "bills behind" statistic. This statistic calculates the number of average bills contained in an average arrearage. Hence, if one customer has an arrears of \$400 and an average monthly bill of \$200, that customer has a weighted arrears of 2.0 "bills behind." If a different customer has an arrears of \$400 and an average monthly bill of \$140, that customer has a weighted arrears of 2.86 bills behind. The second customer, and thus the utility serving that customer, is in more serious payment trouble.

As BCS observes, use of a weighted arrears measure "permits comparisons to be drawn between companies by eliminating the effects of different customer bills on arrearages." Without such a measure, "the interpretations of average arrearages, either over time or in comparison between companies presents some difficulties." Bureau of Consumer Services, Utility Payment Problems: The Measurement and Evaluation of Responses to Customer Nonpayment, Pennsylvania Public Utility Commission: Harrisburg, PA (October 1983).

1 **Q. PLEASE EXPLAIN WHY THERE IS A NEED FOR EACH COMPONENT.**

2 A. All four components are necessary to reach the desired results without creating perverse
3 incentives to pursue counter-productive collection strategies. Consider, for example, that
4 reducing arrears without accounting for increasing shutoffs would lead a utility to refuse to
5 negotiate reasonable payment plans with those least able to pay. The utility would then
6 follow with the termination of service. The end sought, however, is not simply the reduction
7 of arrears, but rather the pursuit of affordable bills. Similarly, increasing the number of
8 payment plans without penalizing high proportions of unaffordable plans would lead a
9 utility to place customers on deferred payment arrangements without regard to the chance of
10 those plans to succeed. There is not only a need to get payment-troubled customers on
11 deferred payment arrangements, but to get them on *affordable* plans with a reasonable
12 opportunity for success. The incorporation of all four metrics into a measure of how well
13 WEPCO is accomplishing the goal of breaking the cycle of nonpayment is, in other words,
14 necessary so that no single component creates a perverse incentive on another outcome.

15 **Q. CAN YOU SUMMARIZE YOUR RECOMMENDATION?**

16 A. Yes. Application of the four metrics described above result in a relatively simply ratio for
17 each metric. The percentage calculated for low-income customers¹¹⁰ is placed in the
18 numerator. The percentage calculated for residential customers is placed in the
19 denominator. A resulting ratio of more than 1.0 indicates that there is a need for
20 improvement. A resulting ratio of less than 1.0 indicates that WEPCO is performing well.

¹¹⁰ Reference my discussion of how to define “low-income” in note 107, supra.

1 **Q. HAS THE PERFORMANCE APPROACH YOU RECOMMEND ABOVE EVER**
2 **BEEN USED BEFORE?**

3 A. Yes. The recommended measurement of equity is based on the Academic Equity
4 Scorecard,¹¹¹ which in turn, is based on Kaplan and Norton’s “balanced scorecard for
5 business.”¹¹² I recently explained how this “balanced scorecard for business” could be
6 applied in a utility regulatory context.¹¹³ A copy of that book chapter explaining its
7 applicability is appended to my Testimony as Ex.-WW-Colton-24.

8 **B. Comparing the Performance-Based Mechanism to WEPCO’s Existing “Risk” Assessment.**

9 **Q. PLEASE DESCRIBE THE PURPOSE OF THIS SECTION OF YOUR**
10 **TESTIMONY.**

11 A. In this section of my Testimony, I examine the Company’s methodology for responding
12 to inability-to-pay. WEPCO provided Walnut Way specific documents in response to a
13 request concerning how the Company characterizes patterns of nonpayment; how it
14 identifies the characteristics of nonpayer, how it identifies predictors of nonpayment, and
15 how it identifies strategies to reduce nonpayment. (Ex.-WW-Colton-25.).

¹¹¹ Bensimon, Estela Mara Bensimon, Lan Hao and Leticia Tomas Bustillos (2003). Measuring the State of Equity in Public High Education, at 3, paper presented at Harvard Civil Rights and UC Conference on Expanding Opportunity in Higher Education: California and the Nation.

¹¹² Robert Kaplan & David Norton, The Balanced Scorecard: Measures that Drive Performance, 70 Harv. Bus. Rev. 71 (1992).

¹¹³ Colton (2018). The Equities of Efficiency: Distributing Energy Usage Reduction Dollars, in Salter, Gonzalez and Warner, eds. (2018). Energy Justice: US and International Perspectives, Edward Elgar Publishing, 2018, London, England.

1 The Company’s initial objection to this document request, however, is as informative as
2 the documents it actually provided. WEPCO initially objected to providing documents
3 regarding nonpayment and nonpayers (as described above), asserting that such a request
4 is “seeking information *irrelevant* to any determination the Commission is asked to make
5 in this administrative proceeding. . .” (Id.). Even while the Company seeks to recover the
6 costs of nonpayment, and seeks to impose non-cost-based late payment charges on
7 nonpayers, it asserts that information about nonpayment and nonpayers should not be
8 considered by the Commission. It is this policy choice on the part of the Company that
9 the data collection presented above, and the discussion presented below, is designed to
10 address.

11 **Q. CAN YOU PROVIDE AN EXAMPLE OF THE FAILURE OF WEPCO’S**
12 **HISTORIC APPROACH?**

13 A. Yes. As I cited above, in its discussion of its ongoing LIFT program, WEPCO reports
14 that only 8% of its deferred payment plans are successfully completed. (Ex.-WW-Colton-
15 15). Despite the fact that, by its own reporting, roughly 11 out of every 12 deferred
16 payment plans the Company enters into fail, when asked for any study of evaluation that
17 the Company might have prepared on “*why* residential customers do not successfully
18 complete deferred payment plans (sometimes known as payment agreements or other
19 similar terms) in order to avoid the disconnection of service for nonpayment,” the
20 Company conceded that it had engaged in no such study or evaluation. (Ex.-WW-Colton-
21 19). However, not only had it performed no such study, it went further to object to the
22 request for such information as being *irrelevant* to this rate case. (Id.).

1 **Q. PLEASE EXPLAIN YOUR CONCLUSIONS ABOUT THE DOCUMENTS**
2 **WEPCO PROVIDED ABOUT NONPAYMENT AND NONPAYERS?**

3 A. My focus of attention is on WEPCO's process for "scoring and segmentation." (Ex.-
4 WW-Colton-25, Attachment 4) (hereafter Scoring and Segmentation). WEPCO's
5 analysis identifies certain "attributes" that the Company uses to develop a "score
6 continuum from probably will pay to probably won't pay." (Scoring and Segmentation, at
7 1). The analysis states that "attributes can include # times delinquent in past x months,
8 length of time as a customer and / or at the current premise, size and age of balance, time
9 since last payment, presence of a transfer, past reaction collection activities." (Scoring
10 and Segmentation at 1, 3). As a result of this scoring, WEPCO has identified four "risk
11 segments," including: (1) #1, where no collection activity is taken; (2) #2 where there is a
12 "gentle reminder" if the balance gets too high; (3) #3 where there is a "short grace period
13 with hard warning then aggressive collections"; and (4) #4 where there is "immediate
14 collection activity with termination as quickly as possible." (Id., at 2).

15 The following has been identified as one of the "benefits" which WEPCO has identified:
16 "if an account is identified as a high risk account, strong collection activity should be
17 instituted immediately to minimize the bad debt losses on the account." (Scoring and
18 Segmentation, at 2).

19 **Q. PLEASE RESPOND TO THIS COMPANY DOCUMENT PRESENTING HOW IT**
20 **PLANS TO RESPOND TO NONPAYMENT.**

21 A. There are three fundamental problems with the Company's approach. First, the
22 Company's approach set forth in the Scoring and Segmentation report is exclusively

1 reactive. The approach assumes that a customer is in debt and sets forth a collection
2 process to respond to that nonpayment. The Company's approach is akin to a medical
3 system that waits until someone becomes ill, only then to deliver medical care (rather
4 than trying to keep the person healthy in the first place). Second, the Company's
5 approach does not attempt to identify the cause of nonpayment. When the utility adopts a
6 procedure that responds to chronic nonpayment with "immediate collection activity with
7 termination as quickly as possible," there is no place where the utility asks "why is there
8 chronic nonpayment." Without knowing the cause of the nonpayment, the Company
9 never addresses the question of how to prevent the nonpayment rather than focusing
10 exclusively on how to respond to the nonpayment. Third, the approach creates a
11 downward spiral, with each nonpayment making a more aggressive collection response
12 more likely, each more aggressive collection response making the next nonpayment more
13 likely, and each subsequent nonpayment/collection response continuing the cycle of
14 nonpayment. The Company's approach perpetuates the "cycle of nonpayment" rather
15 than trying to interrupt that cycle.

16 **Q. IS THERE A SECOND PROBLEM?**

17 A. Yes. In addition, the Company's approach certainly is not racially neutral. As the Sierra
18 Club's Milwaukee Report, previously discussed, and attached as Ex.-WW-Colton-3,
19 reports:

20 areas with high energy burden are disproportionately Black and
21 Hispanic/Latinx communities. While 16% of Milwaukee's metro population
22 is Black, 65% of residents of high-burden neighborhoods are Black. 11% of
23 the metro area population is Hispanic or Latinx, but 21% of the population in
24 high-burden neighborhoods is Hispanic/Latinx. While the Milwaukee metro

1 area's white population is two thirds of the total population, white residents
2 only account for 9% of the population in high-burden neighborhoods.

3 Simply because the "attributes" (using the Company's terminology) do not explicitly
4 consider race and/or ethnicity as a factor does not mean that the operation of the Scoring
5 and Segmentation analysis is racially neutral. Indeed, based on the Sierra Club's
6 Milwaukee analysis, it is reasonably evident that the analysis set forth is not racially
7 neutral.

8 **Q. DO YOU HAVE A FINAL OBSERVATION?**

9 A. Race is not the only "protected class" when one considers the adverse impacts of credit
10 scoring such as that which is set forth in the WEPCO Scoring and Segmentation analysis.
11 Pursuant to the federal Equal Credit Opportunity Act (ECOA) (15 U.S.C. sec. 1691, et
12 seq.), for example, discrimination is not only barred based on race and color, it is also
13 barred based on sex or gender, marital status, age (either young or old), and public
14 assistance status, amongst other grounds. When the Scoring and Segmentation analysis
15 yields consistently more adverse collections impacts based on attributes such as "length
16 of time as a customer" and "length of time at current residence," as well as when the
17 Scoring and Segmentation analysis yields consistently more adverse collections impacts
18 based on past payment patterns, it is reasonable to conclude that tenants are not being
19 treated equally; that low-income customers who receive public assistance are not being
20 treated equally; that low wage women are not being treated equally; and that persons of
21 color are not being treated equally. While poverty, standing alone, is not a protected
22 class, poverty (and low-income status) may have such an inherent relationship that the

1 adverse impacts on members of protected classes are caught in the Scoring and
2 Segmentation system.

3 The Company has not considered these impacts of its Scoring and Segmentation analysis.
4 It states that it has not prepared a customer segmentation analysis. (Ex.-WW-Colton-6).
5 And the only document it provided identifying the “characteristics of nonpayers” 2-WW-
6 Colton-25, Attachment 4) does not include any demographic analysis, let alone any
7 consideration of the impacts of the Company’s Scoring and Segmentation analysis on
8 protected classes.

9 **Q. WHAT DO YOU CONCLUDE?**

10 A. I conclude that the Scoring and Segmentation analysis provided by WEPCO raises
11 serious concerns. Relative to my discussion of outcome performance measurement, I
12 conclude that the Scoring and Segmentation analysis impedes, rather than enhances,
13 addressing the cycle of nonpayment which the performance metrics I present help to
14 track.

15 **Q. DOES THIS COMPLETE YOUR DIRECT TESTIMONY?**

16 A. Yes, it does.