

Pre-filed Testimony of Patricia H. Richards

Re: WEC Rate Design Change

PUC Case No. _____

May 1, 2019: CORRECTED August 16, 2019

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STATE OF VERMONT
PUBLIC Utility commission

Case No. _____

Petition of Washington Electric Cooperative,)
Inc. (“WEC”), for approval of Rate Design)
Changes and a Change in Rate Schedules)
Pursuant to 30 V.S.A. § 225 and 226)
effective June 17, 2019)

**PREFILED TESTIMONY OF
PATRICIA H. RICHARDS
ON BEHALF OF**

WASHINGTON ELECTRIC COOPERATIVE

May 1, 2019

CORRECTED AUGUST 16, 2019

Patricia H. Richards testifies to explain:

- Goals and objectives of the proposed rate design which are intended to conform with Act 56 (Renewable Energy Standard), the Vermont Comprehensive Energy Plan, and promote efficient use of energy;
- Process used to determine the proposed rate structure;
- Member outreach;
- Expected impacts of the rate design change; and
- Compliance with 30 V.S.A. §§ 218, 225, 226, 30 V.S.A. Ch. 89 (Act 56), and other authority.
- This corrected prefiled testimony addresses an administrative error in my May 1, 2019 prefiled testimony. The corrections are redlined and explained in the last two questions and answers.

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Exhibits

Exhibit WEC 1-PR-1: Patricia H. Richards Resume

Exhibit WEC 2- PR-2: Rate Summary Exhibit.xls

Exhibit WEC 3-PR-3: Redlined and Final Tariff Sheets

Exhibit WEC 4-PR-4: 2019 Residential Rate Comparison.pdf

Exhibit WEC 5-PR-5: Hypothetical Residential Monthly Member.xls

Exhibit WEC 6-PR-6: RES and Farm Class Use.xls

Exhibit WEC 7-PR-7: Average Res Use WEC v GMP v EAP.xls

Exhibit WEC 8-PR-8: WEC Member Focus Group on Rate Design.ppt

Exhibit WEC 9-PR-9: Coop Current Articles

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

2 A. My name is Patricia H. Richards and I am General Manager for Washington Electric
3 Cooperative, Inc. (“WEC”). My position with WEC as General Manager commenced
4 July 1, 2013. My business address is 40 Church Street, East Montpelier, Vermont 05651.

6 **Q. Please describe your experience prior to becoming General Manager for WEC.**

7 A. Prior to becoming WEC’s General Manager, I served as a Senior Consultant for La Capra
8 Associates (recently renamed to Daymark Energy Advisors). La Capra Associates is a
9 consulting firm specializing in energy planning and market analysis, energy procurement
10 and portfolio management, regulatory and ratemaking economics, and regulatory policy
11 in the electricity, natural gas and water utility industries. Prior to working with La Capra
12 Associates, I held several positions in Vermont which addressed power supply, demand
13 side management, and regulatory issues.

15 More specifically, I was an energy planner and power supply manager and I have over 30
16 years of experience in the electric utility industry. My areas of experience include power
17 supply procurement and management, wholesale and retail power transactions,
18 understanding and managing portfolios in power supply markets, power project financial
19 analysis and due diligence, asset valuations, integrated resource planning and analysis,

1 demand side management evaluation and planning, and electric utility cost of service and
2 rates. My principle work focused on utilities and wholesale and retail power companies.
3 I have advised managers concerning the electric power supplies for several Vermont and
4 New England consumer owned electric utilities. I have also advised large industrial
5 customers, power plant developers, and owners regarding specific power projects and
6 transactions, portfolio risk management strategies and power market eligibility. I have
7 prepared and reviewed numerous valuation analyses of power projects and assets,
8 managed power portfolios, and worked with utilities in managing resources. I have
9 evaluated the economics, contract structure, credit security, and development prospects of
10 renewable and non-renewable power plants in the northeast. I have prepared or have
11 overseen the preparation of integrated resource plans for several Vermont utilities.

12
13 My experience also includes the preparation of numerous electric utility rate cases related
14 to power supply expenses. I have prepared and submitted testimony in numerous
15 Vermont utility proceedings including, but not limited to:

- 16 • VT PSB Docket 6270 (Amendment of VEPPI Contracts).
- 17 • VT PSB Docket 7422 (VPPSA financing of McNeil NOx reduction project).
- 18 • VT PSB Docket 7691 (2011 Washington Electric Cooperative Rate Case).
- 19 • VT PSB Docket 7670 (2010 Hydro Quebec US Purchase Power Agreement).
- 20 • VT PSB Docket 7825 (2012 Washington Electric Cooperative Rate Case).

- 1 • VT PSB Docket 8510 (2014 Washington Electric Cooperative Rate Case).
- 2 • VT PSB Docket 8505 (2014 Washington Electric Cooperative Net Metering Tariff).
- 3 • VT PSB Docket 8181 (2014 Washington Electric Cooperative Integrated Resource
- 4 Plan).
- 5 • VT PSB Docket 8721 (2016 Washington Electric Cooperative Siloxane Removal
- 6 System)
- 7 • VT PUC Case No 17-3664-PET (2017 Washington Electric Cooperative Integrated
- 8 Resource Plan)
- 9 • VT PUC Case No 17-3552 -TF (2017 Washington Electric Cooperative Local Open
- 10 Access Transmission Tariff)
- 11 • VT PUC Case No 18-1425-TF (2018 Washington Electric Cooperative Rate Case).
- 12 • VT PUC Case No 18-3959-TF (2019 Washington Electric Cooperative Rate Case).
- 13

14 **Q. Have you previously submitted testimony in other state regulatory proceedings?**

15 A. Yes. I have submitted testimony to the Michigan Public Service Commission in the
16 following cases:

- 17 • U-16794 (Consumers Energy Company, request for rate increase, 2011).
- 18 • U-16890 (Consumers Energy Company, request for approval of 2012 Power
- 19 Supply Cost Recovery plan).
- 20 • U-17097 (DTE Electric Company's, request for approval of its 2013 Power Supply

1 Cost Recovery Plan).

2 My qualifications are set forth in my resume, **Exhibit WEC 1-PR-1**.

3
4 **Q. What is the purpose of your testimony?**

5 A. My testimony outlines the goals and objectives of Washington Electric Cooperative's
6 (WEC's) plan to change its rate structure. I will explain the process used to determine
7 which rate structure WEC selected. I also explain several areas of member outreach to
8 educate and inform the WEC membership, and comment on expected impacts of the rate
9 design change. My testimony also supports and supplements the work performed by
10 Cooperative Finance Corporation (CFC) which is provided by witness Jason A. Strong.

11
12 **Q. What are the goals and objectives of WEC's proposed rate structure?**

13 A. WEC's goals of energy efficiency and conservation remain a primary focus. In addition,
14 WEC seeks to implement new environmentally focused goals as well as take action to
15 comply with and state initiatives, in particular the Renewable Energy Standard (RES) and
16 the Vermont Comprehensive Energy Plan. By lowering the energy portion of WEC's
17 rates, WEC will encourage increased use of renewable electricity and displace fossil fuel
18 uses. This is particularly true when combined with incentives offered in our Tier III
19 program also known as Button Up WEC. The RES's intent is to increase use of
20 renewable electricity while combating the damaging effects of climate change from fossil

1 fuel uses. WEC is a utility with 100% renewable power and any fossil fuel use that is
2 displaced by electricity from WEC helps combat the harmful effects of climate change.
3 A major state focus in the Comprehensive Energy Plan is to achieve use of 90%
4 renewable energy in all forms of energy including electricity, transportation and home
5 heating. This new state lead direction was enacted in 2015 through Act 56 and it requires
6 WEC to take action to meet requirements of a RES. WEC's proposed rate design better
7 aligns its rates with these new state initiatives.

8
9 **Q. What were the goals of WEC's existing rate design?**

10 A. WEC has, for many years, had a two-tier energy rate structure, combined with a very
11 modest monthly fixed charge (currently \$14.19 per month). Members have been charged
12 a low energy rate for their first 200 kWh (kilowatt-hours) per month (currently \$0.11350
13 per kWh), and a higher rate (currently \$0.25341 per kWh) for power above 200 kWh.
14 The existing goals stemmed from two core principles:

- 15 1. WEC should provide members with enough affordable power to meet their basic
16 needs, and
- 17 2. Higher cost for electricity in excess of 200 kWh would encourage energy
18 efficiency.

19 That policy has worked. Over the past decade WEC has experienced annual reductions in
20 the average energy consumption among Washington Electric's members. In fact,

1 ~~56%~~42% of WEC members use less than 500 kWh ~~or less~~ per month and the average use
2 of ~~455~~ 473 kWh per month is well below the statewide average.

3
4 **Q. Please summarize WEC's member demographics.**

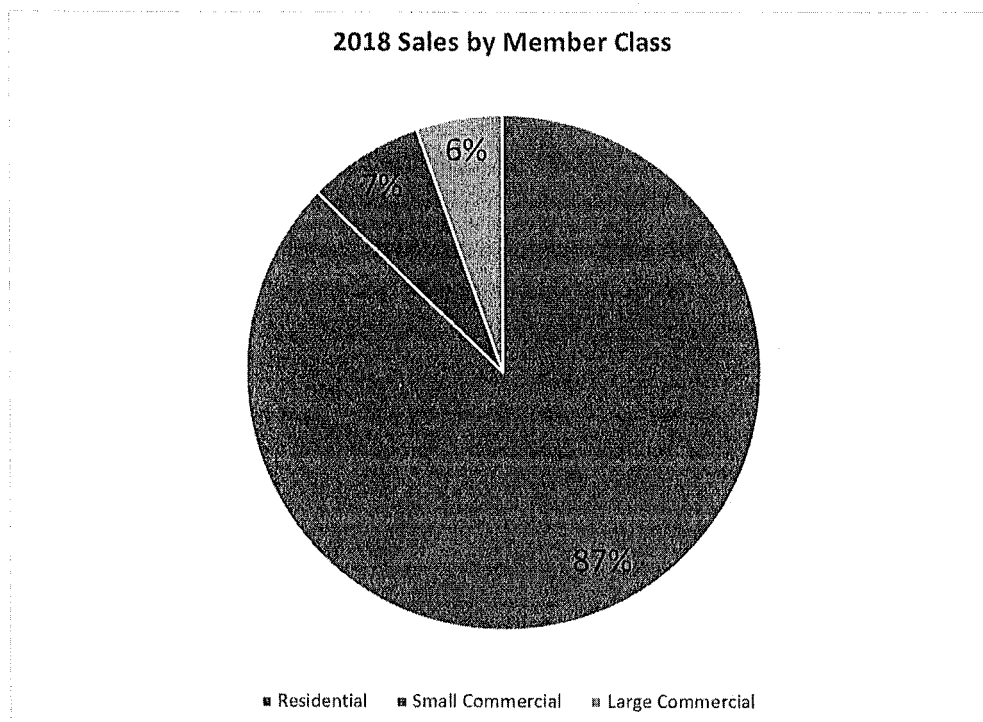
5 A. WEC's membership is comprised of several groups with the predominant portion of
6 consumers represented by residences (which includes some small farms). Based on the
7 number of 2018 members, 94% are residential while 6% of the membership consists of
8 commercial or business related electric use. This data is summarized in the following
9 table.

Member Class	2018 Number of Meters	Percent of Total
Residential	11,280	94%
Small Commercial	671	6%
Large Commercial	12	0.1%
Total	11,963	100%

Member Class	2018 Number of Meters	Percent of Total
Residential	10,836	94%
Small Commercial	671	6%
Large Commercial	12	0.1%
Total	11,519	100%

11
12
13 As measured on an energy basis, WEC's retail energy sales are also overwhelmingly
14 residential; about 87%. WEC has small commercial and large power sales (schools, office

1 buildings, and light manufacturing) making up the remainder, about 7% and 6% of the
2 total, respectively. A summary of WEC's retail sales by membership class is provided
3 below. Given the predominant concentration of residential members, my testimony
4 focuses on the residential customer class.



5
6
7 **Q. Please summarize WEC's current rates.**

8 A. WEC maintains five rate classes; residential, small commercial, large power, street
9 lighting, and time of day. While five rate classes are offered only four have active
10 members. The time of day rate is not currently used by any WEC member and therefore it
11 was not updated as part of the rate design. After WEC's standard or base rate offerings

1 are updated as part of this rate design filing, WEC will return attention to the time of day
2 rate and explore other rate products. It is expected that only a small group of members
3 will be interested in time of day and other rate offerings, and therefore we will consider
4 these more nuanced rates at a later date after the standard rate classes have been updated.
5 WEC maintains rate structures with a low monthly fixed customer charge and energy
6 rates that cover the vast majority of WEC's fixed and variable costs. Please see **Exhibit**
7 **WEC 2-PR-2** which provides a summary of WEC's current rates by membership class.

8
9 **Q. Has WEC prepared new tariffs that reflect the proposed rate design?**

10 **A. Yes. Please see Exhibit WEC 3-PR-3.**
11

12 **Q. Please describe the rates for WEC's residential consumers which comprise the bulk**
13 **of WEC retail sales.**

14 **A. WEC's largest rate class, comprised of residential and farm consumers, includes a low**
15 **customer charge and inclining two-tiered energy rate. WEC currently includes a monthly**
16 **fixed charge of \$14.19 with a low block energy rate for the first 200 kWh of energy used**
17 **at \$0.1135 per kWh and anything higher than 200 kWh is charged at \$0.25341 per kWh.**

18
19 **Q. How does WEC's residential rate compare to other Vermont utilities?**

20 **A. WEC's monthly customer charge of \$14.19 is the fifth highest in the state. WEC has the**

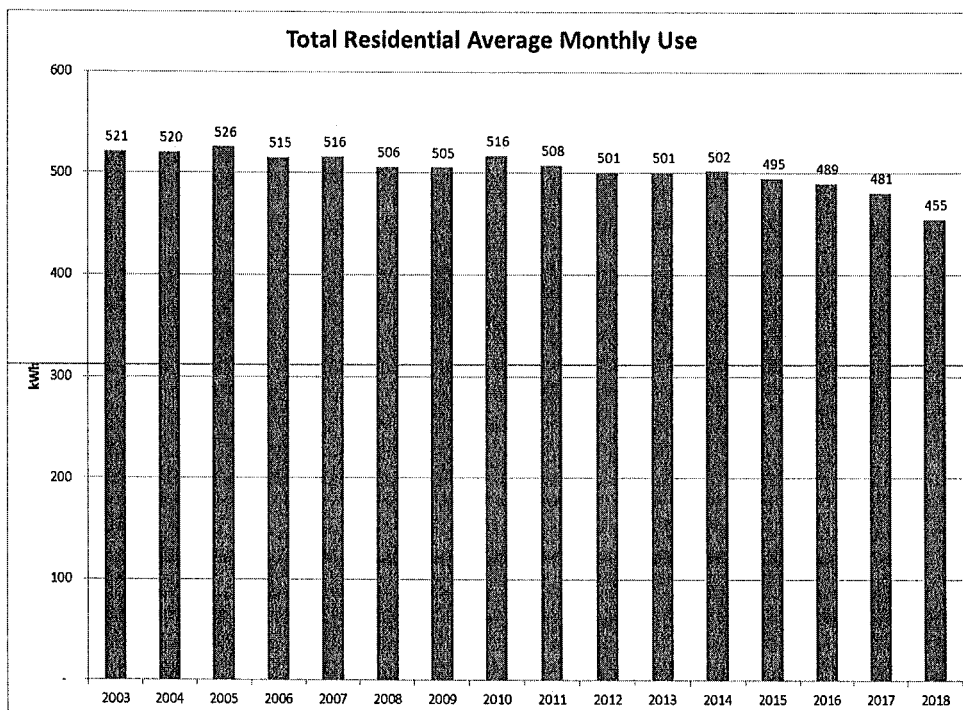
1 largest sized low block of any Vermont utility; WEC's low block of 200 kWh is unique
2 in the state. The vast majority of those utilities with a low block use 100 kWh. Please see
3 **Exhibit WEC 4-PR-4** for a summary of rates among Vermont utilities. There are 15
4 utilities that use a low block. Of the fifteen offering a low block, ten use a 100 kWh low
5 block while two are less than 100 kWh. The rate charged for the low block (\$0.1135 per
6 kWh) is also the highest rate of those utilities with a low block.

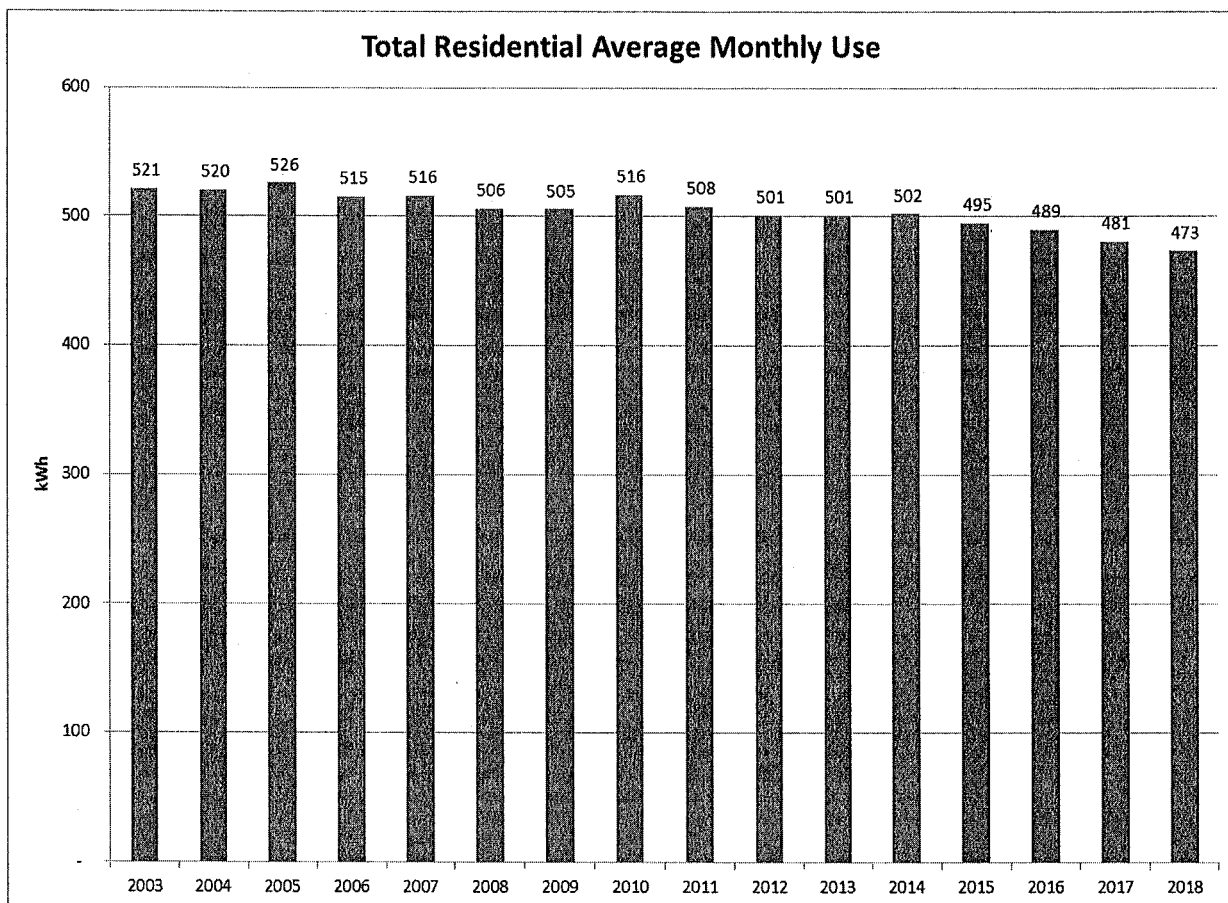
7
8 WEC's tail block energy rate is also the highest rate in the state, and is disproportionally
9 higher than other Vermont utilities. This is due in part to WEC's low monthly customer
10 charge and sparsely populated service territory. WEC has eight customers per mile and is
11 the least densely populated utility in the state. This fact makes WEC's per unit cost
12 higher than other utilities as there are fewer consumers to spread operating expenses over.

13
14 **Q. When was WEC's last rate design and what were the core policy goals?**

15 A. WEC's existing rates are based on a fully allocated cost of service study from 2009. One
16 objective of the rate work from 2009, was to update rate class revenue requirements and
17 realign retail rates among the classes. At that time, WEC maintained an inclining two
18 tiered energy rate for its largest rate class, residential members, and it increased the low
19 block from 150 kWh to 200 kWh for residential members. Small commercial and large
20 power continued with one uniform energy rate based on the allocated cost of service.

1
2 A vast majority of WEC's members are represented in the residential class and the WEC
3 Board focused its goals on this membership class. The key design determinant for the
4 existing rate structure was to encourage energy efficiency by having a noticeably higher
5 energy charge for the tail block to discourage high use. The intent was to encourage
6 energy efficiency and conservation. WEC was very successful in this effort as it has one
7 of the lowest average use rates per residential customer in the state. WEC's current
8 average use is 455 473 kWh per month and this level of use has been declining for
9 several years. WEC's average use is also significantly lower than the state wide
10 residential average of 546 kWh per month (based on PSD rate comparison files which
11 included data from 2016).





Q. Why is WEC doing a rate design in 2019?

A. Due to the impacts of climate change and a number of legislative mandates, WEC concluded it was time to realign its retail rates and explore a new method to send price signals to its consumers. WEC's goal is to help combat climate change and reach the goals of recent state lead laws. While the goals of energy efficiency and conservation remain a primary focus, WEC also seeks to reflect new goals and initiatives to combat the damaging effects of climate change. WEC is a utility with 100% renewable power and any fossil fuel use that is replaced by electricity from WEC works to combat the harmful

1 effects of climate change.

2
3 A major state lead focus outlined in the Comprehensive Energy Plan is to achieve use of
4 90% renewable energy in all forms of energy including electricity as well as energy used
5 in transportation and home heating. This new direction was promulgated into law in
6 2015 through Act 56 and it requires WEC to take action to meet requirements of a
7 Renewable Energy Standard (RES).

8
9 A primary goal in this new rate design is to lower the energy portion of WEC's rates.
10 This will lead to increased use of renewable electricity in place of fossil fuel uses. A new
11 rate structure combined with incentives offered in the Button Up WEC program will help
12 WEC reach the state requirements of the RES. We understand that rates alone will not
13 drive fossil fuel switching but coupled with other programs, will be of significance.
14 Pairing lower energy rates with incentives from WEC's Tier III plan (Button Up) we
15 believe will help considerably and transition WEC members away from fossil fuel use
16 over the long term.

17
18 **Q. Please describe how Act 56 is intertwined with the rate design work.**

19 A. Act 56, (Renewable Energy Standard) passed by the Legislature in 2015, requires utilities
20 to assist their customers (in WEC's case its members) in switching away from carbon-

1 producing fossil fuels in transportation and in thermal (heating) usage. The intent is to
2 help the state reach its goal of obtaining 90 percent renewable energy of all its energy
3 uses by 2050. By switching fossil fuel to renewable electricity, the state's carbon
4 footprint will decline, and the harmful effects of climate change will be mitigated. The
5 concept is referred to as beneficial electricity.

6
7 It should be noted that WEC's power portfolio is 100 percent renewable. Therefore, the
8 more WEC moves members' fossil fuel energy use to electric based renewable resources,
9 the closer it is to achieving Act 56 requirements and the goals of the state Comprehensive
10 Energy Plan to achieve 90% renewable by 2050. WEC created a plan through its Button
11 Up program to encourage and incentivize fuel switching. First and foremost, Button-Up
12 emphasizes the importance of a tight and weatherized home through energy audits and
13 follow-up weatherization efforts. No matter what source of energy people are using to
14 heat the home, they'll use less of it with a tight house. Button-Up also helps people buy
15 and install cold-climate heat pumps, which operate on electricity and reduce the demand
16 for other fossil fuels such as gas or oil burning heating equipment. Additionally, the
17 program supports switching to solar-powered hot water heaters, heat pump water heaters,
18 electric vehicles and woodchip heating systems. WEC also installed five publicly
19 available electric vehicle charging stations to encourage the movement away from
20 gasoline-powered cars and trucks.

1
2 WEC programs, including Button-Up, address the goals of Act 56 effectively because our
3 power is 100% renewable. By replacing gasoline to power a car with electricity from
4 WEC, the member completely offsets the gasoline with renewable power. In order to
5 achieve beneficial electrification and send appropriate price signals, the tail block is
6 being realigned to meet new goals. Therefore, WEC seeks to lower the tail block rate in
7 order to make an impact on fossil fuel reduction. Making this an even-more critical
8 consideration is that Act 56 levies financial penalties on utilities that fail to meet their
9 requirements as required in Tier III of the RES. As the requirements of Tier III increase
10 each year, WEC will need to place additional emphasis on meeting the state's goals as set
11 out in the RES.

12
13 **Q. Has the WEC Board of Directors taken a policy position on climate change?**

14 A. Yes. In 2018 the WEC Board of Directors unanimously passed a climate change
15 statement. The statement reads:

16 *The WEC Board of Directors acknowledges that rapid global warming and associated*
17 *climate instability are real, and are significantly attributable to human activities. We are*
18 *concerned that global warming presents great risk of serious and negative economic,*
19 *environmental and health ramifications to humans, along with challenges to the*
20 *continued existence of numerous other forms of life on this planet.*

1
2 *WEC urges NRECA and NEAEC to support meaningful efforts on the part of the*
3 *electricity sector to address global warming, including legislation at the federal, state,*
4 *and local levels to mitigate the harmful effects of climate change. An effective response*
5 *must also address financial impacts incurred by cooperatives burdened with legacy*
6 *power supply commitments.*
7

8 **Q. How does WEC's proposed rate design support the WEC Board's climate change**
9 **policy?**

10 A. The work to realign WEC's rates with a lower charge for energy is directly aligned with
11 the WEC's climate change statement and goals. At the state and local level, we seek to
12 encourage members to continue using electricity with efficiency in mind, but we also
13 want members to switch over and use electricity for other energy needs such as home
14 heating and powering cars. A lower energy rate will send a price signal that helps
15 members take action toward beneficial electrification and reduce their carbon footprint by
16 using WEC's 100% renewable electricity.
17

18 The Comprehensive Energy Plan identifies transportation as responsible for producing
19 most of Vermont's greenhouse gases, 43%, followed by heating buildings, 28%. WEC
20 seeks to send a universal price signal to all of its members that using its 100% renewable

1 power is not only good for the environment but also a good financial decision. WEC is
2 100% renewable and we can reduce carbon footprint in material way as members switch
3 from fossil fuel uses to renewable electricity.

4
5 **Q. Does WEC collect more revenue from the proposed rate design?**

6 A. No. The rate design is revenue neutral and explained in Jason Strong's testimony.
7 **Exhibit WEC 12-JAS-3.** WEC will collect the same total revenue as it does in the
8 existing rate structure.

9
10 **Q. Does the rate design analysis support a higher customer charge?**

11 A. Yes. The cost of service study analysis, included as **Exhibit WEC 11-JAS-2** and
12 supported by Witness Jason A. Strong, demonstrates and supports the increase in the
13 customer charge.

14
15 **Q. Does a higher monthly customer charge provide WEC increased financial stability?**

16 A. Yes. WEC has declining energy sales which puts added pressure on cost recovery. This
17 trend of declining energy sales has also contributed to a greater frequency of rate
18 increases. WEC's current rates place a large emphasis in recovering the vast majority of
19 its fixed cost on the kWh sale component of WEC's rates. The additional fixed cost
20 recovery through the customer charge makes gradual improvement in efforts to stabilize

1 and ensure more aligned collection of operating revenue which is needed to meet
2 operating expenses, margins and debt service covenant obligations. Increased collection
3 of revenue through a monthly fixed charge provides more of WEC's revenues based on
4 the number of meters on its system rather than recovering it from variable energy use.
5 While energy sales are declining, meters and consumer counts are increasing at a gradual
6 and steady pace. Increasing the monthly customer charge also improves equity and
7 fairness to members using the system by more accurately charging for the cost of service
8 based on cost causation principles.

9
10 **Q. Are the proposed rates consistent with state policy?**

11 A. Yes. In addition to consistency with Act 56, the new rates are consistent with the PUC's
12 rate making precedent, serve the public interest, and are just and reasonable. This new
13 rate design increases equitable distribution of costs to its members while simultaneously
14 improving prices to encourage deployment of Tier III and beneficial electrification
15 consistent with the Vermont's Renewable Energy Standard requirements and state
16 Comprehensive Energy Plan, and WEC 2017 Integrated Resource Plan

17
18 **Q. Please describe the residential billing determinates proposed by the rate design.**

19 A. WEC's proposed rate design retains the same components as the current rate structure but
20 shifts costs between the monthly fixed charge and the variable energy rate components.

1 The residential rate includes a \$25.00 monthly customer charge thereby recovering more
2 in revenue from the fixed component. The low block size was decreased from 200 kWh
3 to 100 kWh while simultaneously lowering the low block rate from \$0.1135 to \$0.0800
4 per kWh. In this way, we maintain affordability of basic use of electric energy by having
5 a very low energy rate in the low block. This also helps to dampen the financial effect of
6 the rate design on low users which see the biggest impact from the rate design change.
7 The tail block decreases from \$0.25341 to \$0.19961 per kWh for the variable portion of
8 the energy charge. A summary of the rates for all member classes is provided in **Exhibit**
9 **WEC 2-PR-2.**

10
11 **Q. How much of the residential monthly fixed costs would be recovered in the new**
12 **charge?**

13 A. In CFC's 2019 fully allocated cost of service study it was determined if all fixed costs
14 were covered by the monthly fixed customer charge the fee would be \$89.67 per month
15 (See **Exhibit WEC 11-JAS-2** page 6). While WEC is proposing to increase the fixed
16 monthly portion of its rates, it will still only cover 28 percent of the fixed costs in the
17 fixed monthly customer charge with it set to \$25.00 per month. WEC seeks to balance the
18 transition from the existing rate design to a new design such that it doesn't significantly
19 impact low user members. By retaining a small portion of the fixed costs in the customer
20 charge and maintaining the majority of costs in the variable component, WEC maintains

1 balance as it transitions to a less heavily weighted variable charge. We believe this rate is
2 more fair to the membership and that it is just and reasonable.

3
4 **Q. Why did WEC chose to lower the first residential energy block from 200 to 100**
5 **kWh and why is the rate set at \$0.08 per kWh?**

6 A. WEC proposes to retain a low block variable energy rate but reduce it from 200 kWh to
7 100 kWh. The smaller size with lower energy rate helps keep low user bill impacts
8 manageable. Hence, the low block acts as a bill impact mitigation measure for very low
9 users.

10
11 WEC also desires to retain a low block at a low rate to encourage conservation and
12 provide an affordable allotment of power for WEC members' basic needs. The low block
13 is provided only to residential members and is linked to power received from New York
14 Power Authority (NYPA) known as preferential power for residential consumers. Using
15 100 kWh is more closely aligned with WEC's NYPA power block allotment. WEC
16 received 11,014 MWH of power from NYPA in 2018. Allocating this block of power
17 over the residential membership base translates to roughly 81 kWh per member per
18 month which aligns well with a 100 kWh low block. Due to seasonal hydro fluctuations
19 of NYPA power, WEC rounded up to a 100 kWh block as a reasonable proxy of the
20 NYPA power block. WEC also lowered the rate to 8 cents per kWh to balance the impact

1 of the rate design on low-use members, and to allow an easier transition to the new rate
2 design.

3
4 **Q. Did WEC explore the impacts of the proposed rate at various levels of use?**

5 A. Yes. WEC looked at various levels of energy use and calculated the impact to bills by
6 the size of consumption. Members using 500 kWh or more per month will see lower bills
7 in the proposed rate design while those using less will see increases. Please see **Exhibit**
8 **WEC 5-PR-5** for details.

9
10 As provided in the exhibit, those using 200 kWh a month will see the largest impact with
11 bills increasing from \$36.89 per month to \$52.96 per month. At 500 kWh per month the
12 bill decreases very slightly from \$112.91 to 112.84 (lowering the bill by \$0.07 per
13 month); the 500 kWh levels is essentially neutral in the rate design. At 700 kWh the bill
14 decreases from \$163.60 to \$152.77 for a savings of \$10.83 per month.

15
16 These changes are just and reasonable, because the monthly customer charge with all
17 fixed costs embedded is actually \$89.67. What this means is members paying less than
18 \$89.67 per month do not cover the average cost of service. Therefore, cost shifting is
19 occurring from low users with bills under \$89.67 to higher users thereby creating equity
20 issues. To achieve a more just and reasonable rate structure, increasing the monthly

1 customer charge creates more balance and fairness in how WEC recovers its cost.

2
3 **Q. Please describe the stratification of use among WEC residential members and the**
4 **impacts under the proposed rate design.**

5 A. WEC created a histogram of all residential users to identify the volume of its membership
6 at various levels of use per month. Please see **Exhibit WEC 6-PR-6**. This stratification
7 allows WEC to see how many of its members are in the low, moderate and high use
8 groups. Roughly 22% of WEC members use between 0 and 250 kWh per month. The
9 largest group use was between 300 kWh and 700 kWh per month represent 56% of WEC
10 members. Approximately 22% of WEC members use more than 700 kWh per month.
11 Members using 500 kWh or more will see lower bills while members using under 500
12 kWh will see higher bills; 58% of members will see lower bills while 42% will see
13 increased bills.

14
15 **Q. What steps did WEC take to reduce the impacts to low income members with the**
16 **new rate design?**

17 A. WEC is concerned about the impact of rates on low income members and we note that
18 many in this category already struggle to pay electric bills under WEC's current rates.
19 WEC's average annual write off value is roughly \$42,426 per year. These uncollected
20 payments are driven by those least able to afford to pay their bill. With the tail block rate

1 under the existing rate schedule set very high at \$0.25341 per kWh, low income members
2 struggle to pay their bill under WEC's current rates. The high tail block has been difficult
3 for low income members. The proposed rate design will make electricity more affordable
4 if the low income member uses more than 500 kWh per month.

5
6 Many low income members live in housing conditions in which it is difficult to control
7 use of electricity due to poor thermal design and lack of insulation. Exacerbating this
8 situation, many low income members lack necessary capital to invest in energy saving
9 technology like efficient refrigerators, LED lighting, and modern home heating systems
10 that use little electricity. This is important as many low income members are not low use
11 members (low income electricity use tends to be higher than the average member use).

12
13 While we do not have specific income data for WEC members, we believe the
14 stratification of use for low income in other utility service territories is similar to that of
15 the WEC membership. This assertion is based on data received from GMP for its low
16 income program. WEC compared its monthly membership use with that of GMPs and
17 overlaid GMP's low income participation with the data. This histogram is displayed in
18 **Exhibit WEC 7-PR-7**. The exhibit demonstrates that GMP has low income use in all the
19 stratification levels and approximately 61% of GMP low income customers use more
20 than 500 kWh per hour. WEC's overall stratification use levels are comparable to GMPs

1 as displayed in the exhibit. If we assume the low income results in GMP's service
2 territory are indicative of WEC's low income use, the majority of WEC's low income
3 users will see lower bills from the new rate design.

4
5 **Q. Has WEC engaged its members and performed outreach relative to the rate design?**

6 A. Yes. WEC has performed significant membership outreach on this issue. To follow are
7 the areas of outreach work that WEC conducted.

- 8 o Board of Directors (all directors are members of the Coop and voted on this issue
9 based on their representation of member Coop interests)
- 10 o Focus Groups comprised of WEC Members
- 11 o Articles in Coop Currents (newsletter)
- 12 o Bill Messages
- 13 o Membership meeting on September 19, 2018

14
15 **Q. Please describe WEC Board of Directors activity and work on this issue.**

16 A. The WEC Board discussed rate design for two years and engaged in intense debate on
17 possible structures. The Board was very active and highly engaged in this major policy
18 decision. The vetting and debate took two years of Board meetings and sub-committee
19 meetings to explore, discuss and understand the impacts to members. The Board spent
20 considerable time and attention understanding the details and impacts to the membership

1 before reaching a decision.

2
3 Ultimately the Board supported a lower energy rate with the goal of helping members
4 shift from a carbon economy to one that uses more renewable based power from WEC's
5 100% renewable power sources. The board voted in October 2018 to move ahead with
6 the rate design in which it will increase the monthly customer charge to \$25, offer a low
7 block of 100 kWh set at a rate of 8 cents per kWh and charge for a tail block that is lower
8 than current rates. Other rate design structures considered by the Board included:

- 9 • Monthly Customer Charge ranging from existing level to \$30 per month
10 • \$25 monthly customer charge with two tiered energy block ranging from 8 cents
11 to 11.5 cents per kWh for the low block
12 • \$30 monthly customer charge with two tiered energy block ranging from 8 cents
13 to 10 cents per kWh for the low block.
14 • \$25 monthly customer charge one energy rate (elimination of inclining block rate)

15
16 The board chose a moderate change in rates in an effort to continue encouraging energy
17 efficiency by keeping a low block while dropping the tail block rate. This also created the
18 least impact to low users of electricity.

19
20 **Q. What other outreach work did WEC do to help inform and shape the Board's**

1 **decision?**

2 A. WEC took significant steps to seek input from its members. Considerable work went into
3 carrying out an informative focus group exercise that would help WEC leaders
4 understand the membership's thoughts about rate design. A summary of the steps and
5 results is provided in **Exhibit WEC 8-PR-8**. The consultant hired to facilitate the focus
6 group work, called 620 members with the goal of obtaining a representative sample
7 including low, medium and high users. Of the 620 called, 19 members participated in the
8 focus group session. Care was taken to identify members by use, income, and town. The
9 key aspect was to have a highly representative sample of the membership in an effort to
10 ascertain what the membership at large would think about changing the rate structure.
11 Member engagement and feedback was critical to inform the WEC Board in its decision
12 making. The focus group took place on November 4, 2017 from 8:30 to 12:30. A
13 summary of the preparation and outcomes is included in **Exhibit WEC 8-PR-8**.

14
15 A presentation was made to the 19 members that attended, outlining why WEC was
16 considering the change to rates and outlining three hypothetical rate structures:

- 17 ○ Option 1, Status Quo - Rates at the time of the presentation: \$12.97 monthly
18 charge, up to 200 kWh @ \$0.10373/kWh, and greater than 200 kWh at
19 \$0.23160/kWh
20 ○ Option 2, \$25 monthly charge, and all energy use charged at \$0.16140/kWh

(removal of inclining rate structure and one energy rate for all energy use)

- Option 3, \$25 monthly charge, up to 100 kWh @ \$0.09961/kWh, and greater than 100 kWh at \$0.17511/kWh

Members were put into three groups and they debated the merits of the various rate options. The discussion was robust and rich. Participants provided thoughtful and insightful feedback and they were highly engaged in the event. They were also extremely appreciative of being asked to participate. Soliciting members opinions through the focus group reinforced the cooperative business model that includes a high degree of member engagement.

The outcome and key findings from the focus groups were as follows:

- All groups valued conservation/efficiency and wanted to keep some element of a low block at a reduced rate;
- All groups valued being WEC members and being part of the rate design process;
- All groups valued fairness to all WEC members;
- Options 1 and 3 were most popular:
 - OPTION 1, Status Quo, \$12.97 monthly charge, 200 kWh at \$0.10373/kWh, and above 200 kWh at \$0.23160/kWh
 - OPTION 3, \$25 monthly charge, 100 kWh at \$0.09961/kWh, and above

1 100 kWh at \$0.17511/kWh

- 2 ○ No one voted for Option 2 (one energy rate) – all groups wanted to keep the two-
3 tiered inclining rate system

4
5 **Q. Did the WEC Board of Directors use the results of the focus group to inform their**
6 **decision to approve a rate structure of \$25 and a two-tiered energy rate with a low**
7 **block of 100 kwh at 8 cents per kWh?**

8 A. Yes. The outcome of the focus group work was very important to the WEC Board. The
9 board took away from this effort that preserving an inclining rate structure was important
10 to the membership. It also sought to soften the impact to low users from the change in
11 rates and set the low block at 8 cents to help low users keep bills down.

12
13 **Q. Did WEC include articles about the rate design work in its newsletter Coop**
14 **Currents?**

15 A. Yes. WEC wrote eighteen articles about the rate design work over the past two years in
16 an effort to educate, inform and solicit feedback from WEC members. We also provided
17 two on-bill messages providing notice of a membership meeting in September 2018 to
18 discuss the rate design. A summary of the articles and communication is provided below.

SUMMARY RATE DESIGN COMMUNICATIONS				
MONTH	YEAR	TITLE	TYPE	PAGE
JUNE	2017	WEC EYES CHANGES TO ITS RATE STRUCTURE	COOP CURRENTS ARTICLE	1
JULY	2017	NEW RATE DESIGN PROCESS	COOP CURRENTS PRESIDENT'S MESSAGE	2
SEPT	2017	RATE DESIGN	COOP CURRENTS PRESIDENT'S MESSAGE	2
OCT	2017	RATE DESIGN LISTENING GROUPS	COOP CURRENTS MANAGER'S REPORT	3
DECEMBER	2017	REFLECTING ON THE NEW REALITY (2017 COMMUNITY MTG)	COOP CURRENTS ARTICLE	11
JANUARY	2018	LISTENING FOR CONSENSUS	COOP CURRENTS ARTICLE	1
MARCH	2018	RATE DESIGN	COOP CURRENTS PRESIDENT'S MESSAGE	3
APRIL	2018	RATE DESIGN STILL UNDER BOARD CONSTRUCTION	COOP CURRENTS MANAGER'S REPORT	3
JUNE	2018	RATE DESIGN RECOMMENDATION COMING SOON	COOP CURRENTS PRESIDENT'S AND GENERAL MANAGER'S MESSAGE	3
JULY	2018	WITH NEW RATE DESIGN STRUCTURE WEC LOOKS TO THE FUTURE	COOP CURRENTS ARTICLE	1
JULY	2018	WEC PRESENTS NEW RATE DESIGN TO MEMBERS	COOP CURRENTS PRESIDENT'S AND GENERAL MANAGER'S MESSAGE	3
JULY	2018	ANOTHER SAVE THE DATE	BILL MESSAGE	
AUGUST	2018	ANOTHER SAVE THE DATE	BILL MESSAGE	
SEPT	2018	RATE DESIGN COMMUNITY CONVERSATION: SEPTEMBER 19	COOP CURRENTS NOTICE OF MEETING	
SEPT	2018	RATE DESIGN MEETING SEPTEMBER 19	COOP CURRENTS PRESIDENT'S AND GENERAL MANAGER'S MESSAGE	3
OCT	2018	MEMBERS SPEAK UP AT PUBLIC FORUM ON RATE DESIGN	COOP CURRENTS ARTICLE	1
OCT	2018	THOUGHTS AFTER SEPTEMBER'S RATE DESIGN MEETING	COOP CURRENTS PRESIDENT'S AND GENERAL MANAGER'S MESSAGE	3
DECEMBER	2018	WEC ANNOUNCES RATE INCREASE IN 2019 AT COMMUNITY MTG...	COOP CURRENTS ARTICLE	1
DECEMBER	2018	HOW NEW RATE DESIGN SOFTENS FUTURE RATE INCREASES	COOP CURRENTS PRESIDENT'S AND GENERAL MANAGER'S MESSAGE	3
JANUARY	2019	PROPOSED RATE DESIGN	COOP CURRENTS PRESIDENT'S MESSAGE	3

Copies of the articles are also provided in **Exhibit WEC 9-PR-9**.

Q. Please summarize the membership meeting held on September 2018 to explain the rate design work?

A. WEC held a public forum on September 19, 2018 and invited all WEC members to attend. We provided notice on bills, in Coop Currents and on our website of the meeting. We had a small turn out with 12 members in attendance. All that attended were self selected and all were low users (less than 400 kWh per month). Most that spoke expressed concern about their bills going up but understood and appreciated why WEC was considering the change.

The WEC Board took the feedback from those attending seriously and reinforced the concept of keeping the low block while making the rate low at 8 cents per kWh. The low

1 block continues to reinforce and reward energy efficiency through low use and provides
2 low users with the opportunity to control their bills balanced with WEC's need to lower
3 the tail block rate.

4
5 At this meeting WEC management advised those in attendance that in developing the
6 new rate structure, the board and staff relied on feedback from the focus groups. It was
7 explained the focus group was a representative sample of members—inclusive of low,
8 medium, and high users; owners and renters; low and high incomes, and other measures
9 of diversity. WEC explained at the meeting and in various newsletters the next step is to
10 work with state regulators to propose a new pricing plan and the proposal would be
11 thoroughly vetted.

12 **Q. Do the above corrections change the outcome of the rate design filing?**

13 A. No. WEC identified an administrative error in the counting of its seasonal
14 residential membership class. The seasonal rate class was eliminated in July of 2018.
15 Descriptive and informational data reported pertaining to average use of residential
16 members had used a data set that double counted seasonal residential members. The
17 corrections to the testimony are included in exhibit Sup-PR 1 (page 7,8, and 12). The
18 information is descriptive only and does not impact the outcome or fundamentals of the
19 filing.

20

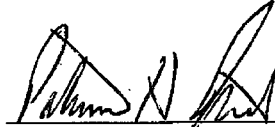
1 **Q. Are the corrections limited to the above redlined changes?**

2 **A. Yes. There are no changes or corrections to my May 1, 2019 prefled testimony**
3 **other than those identified through this redlined version.**

4
5
6 **Q. Does this complete your testimony?**

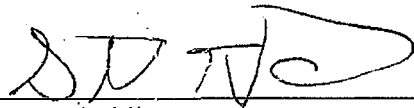
7 **A. Yes, at this time.**
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WASHINGTON ELECTRIC COOPERATIVE, INC.



Patricia H. Richards, General Manager
Washington Electric Cooperative, Inc.

At East Montpelier, Vermont, this 16th day of ~~May~~August, 2019, Patricia H. Richards
personally appeared before me and acknowledged that the facts and matters contained herein are
true to the best of her knowledge, information, opinion, and belief, and that she executed the
foregoing document as her free act and deed.



Notary Public

My Commission Expires 2020

1 foregoing document as her free act and deed.

2

3

4

5 _____
Notary Public

6 My Commission Expires _____