

DIRECT TESTIMONY OF LAURIE A. BURRIDGE KOWALIK

I. INTRODUCTION AND BACKGROUND

Q. PLEASE STATE YOUR NAME, POSITION, AND BUSINESS ADDRESS.

A. My name is Laurie A. Burridge-Kowalik. I am the Manager of Rates for CenterPoint Energy Service Company, LLC (“CenterPoint Energy”). My business address is 1111 Louisiana St., Houston, Texas 77002.

Q. PLEASE SUMMARIZE YOUR EDUCATION AND PROFESSIONAL EXPERIENCE.

A. Exhibit LABK-1, included with this direct testimony, summarizes my education and professional experience.

Q. WHAT ARE YOUR PRESENT RESPONSIBILITIES?

A. My duties include the implementation of strategy around cost of service, cost allocation, rate design, and tariffs for delivery rates in various electric and gas jurisdictions across six different states. I also implement risk mitigation strategies relating to revenues and costs. This includes review, analysis, and participation in the formulation of law, rules, and policy at the state and federal level.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING?

A. I am testifying on behalf of CenterPoint Energy Houston Electric, LLC (“CenterPoint Houston” or the “Company”).

Q. HAVE YOU PREVIOUSLY FILED TESTIMONY BEFORE THE PUBLIC UTILITY COMMISSION OF TEXAS (“COMMISSION”)?

A. Yes. I have previously filed testimony at the Commission in several proceedings. A list of these proceedings is provided in Exhibit LABK-1.

1 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

2 A. The purpose of my testimony is to explain and support: (1) the overall level of costs
3 in Rider EECRF to recover energy efficiency costs for 2019; (2) the calculation of
4 rates included in the Company's Rider EECRF for the various rate classes; and (3) the
5 Company's Rider EECRF tariff.

6 **Q. WHAT EXHIBITS HAVE YOU INCLUDED WITH YOUR TESTIMONY?**

7 A. In addition to Exhibit LABK-1, I have included Exhibits LABK-2 (Calculation of
8 Rider EECRF Charges), LABK-3 (Rider EECRF – Annotated), and LABK-4 (Rider
9 EECRF – Clean Copy), all of which were prepared under my direct supervision.

10 **Q. HOW DOES YOUR TESTIMONY RELATE TO THE DIRECT TESTIMONY
11 OF CENTERPOINT HOUSTON WITNESS JOHN R. DURLAND?**

12 A. My testimony primarily focuses on the design of the Company's Rider EECRF and
13 the underlying calculations of the rates included in Rider EECRF. Mr. Durland's
14 testimony discusses the Company's estimated 2019 program costs, programs designs,
15 and historical program spending.

16 **II. SUMMARY OF ENERGY EFFICIENCY COST RECOVERY**

17 **Q. WHAT LEVEL OF ENERGY EFFICIENCY COSTS IS CENTERPOINT
18 HOUSTON PROPOSING TO RECOVER THROUGH ITS RIDER EECRF IN
19 2019?**

20 A. In 2019, CenterPoint Houston is requesting to recover a total of \$42,787,780 through
21 Rider EECRF. This amount includes:

- 22 • 2019 program costs;
23 • 2017 over-recovery;

- 1 • The Company’s earned performance bonus for 2017;
- 2 • 2017 EECRF rate-case expenses for both the Company and participating
- 3 municipalities;
- 4 • An administrative adjustment to forgo an under-collection from the lighting
- 5 customer class; and
- 6 • Evaluation, Measurement & Verification (“EM&V”) costs for 2019 program
- 7 years that were allocated to CenterPoint Houston by the Commission Staff.

8 **Q. PLEASE PROVIDE AN ACCOUNTING OF THE TOTAL EECRF COSTS BY**

9 **CATEGORY.**

10 **A. Please see Table 1 below: **Table 1 – EECRF COSTS****

2019 Program Costs	\$37,897,605
2017 (Over)/Under Recovery	(\$5,174,341)
2017 Earned Bonus	\$9,491,299
2019 EM&V Costs	\$541,294
2017 EECRF Rate-case Expenses	\$32,281 ¹
2017 Administrative Expense Adjustments	\$(359) ²
Total:	\$42,787,780

¹ This amount includes both the Company’s incurred expenses for its 2017 EECRF proceeding, *Application of CenterPoint Energy Houston Electric, LLC for Approval of an Adjustment to Its Energy Efficiency Cost Recovery Factor*, Docket No. 47232 (Nov. 17, 2017), and the expenses incurred by municipalities that participated in that proceeding. Pursuant to 16 Tex. Admin. Code (“TAC”) §25.181(i), EECRF proceeding expenses are considered administrative expense, which are included in the Company’s 2019 program costs calculation; however, in its Application, the Company has presented these expenses separately so that they are more easily identifiable.

1 **III. CALCULATION OF RIDER EECRF CHARGES**

2 **Q. HOW DID YOU CALCULATE THE PROPOSED RIDER EECRF**
3 **CHARGES?**

4 A. Consistent with 16 TAC §25.181, the Rider EECRF charges are the sum of: (1) the
5 Company's 2019 energy efficiency program costs, including an administrative
6 adjustment noted below (2) a credit for the over-recovery of 2017 energy efficiency
7 program costs; (3) the 2017 energy efficiency program performance bonus earned by
8 the Company; (4) 2019 EM&V costs; (5) 2017 EECRF rate-case expenses¹; and (6) a
9 \$6,297 administrative cost adjustment which includes a reduction of \$359² for the
10 Company's under-collection from the Lighting Class and \$5,938³ that is already
11 factored into the 2017 actual program cost noted above and described in John
12 Durland's testimony. These cost categories comprise the total energy efficiency
13 program revenue requirement, which is then divided by forecasted billing
14 determinants for each rate class in order to arrive at the specific rates for each class.
15 The Company's total EECRF revenue requirement request is \$42,787,780. The
16 resulting proposed Rider EECRF charges are shown in Schedule A of Exhibit LABK-
17 2.

² The under-collection from the reconciliation of Docket No. 42359 for the Lighting class in Exhibit LABK-2.

³ Historically any administrative adjustment was reflected separately but in this application, it is reflected in the 2017 actual program costs at the amount of \$5,938. See Direct Testimony of John Durland.

1 Q. ARE THE EECRF COSTS ASSIGNED OR ALLOCATED TO RATE
2 CLASSES REASONABLE AND CONSISTENT WITH PURA § 39.905(b)(4)
3 AND 16 TAC §25.181?

4 A. Yes. PURA § 39.905(b)(4) directs the Commission to provide oversight and adopt
5 rules for the energy-efficiency program, including ensuring that the costs associated
6 with the program and any shareholder bonus are borne by the rate classes that receive
7 the services under the program. 16 TAC §25.181(f)(12)(D) directs the Commission
8 to address in findings of fact in an EECRF proceeding whether the costs assigned or
9 allocated to rate classes are reasonable. As discussed in my testimony, the costs
10 assigned or allocated to rate classes are reasonable and consistent with PURA and 16
11 TAC §25.181, and they should be approved by the Commission.

12

13

IV. 2019 PROGRAM COSTS ALLOCATION

14 Q. WHAT IS THE TOTAL AMOUNT OF PROJECTED 2019 PROGRAM
15 COSTS THE COMPANY IS SEEKING TO RECOVER IN THIS
16 PROCEEDING?

17 A. The Company is seeking to recover \$37,897,605 in program costs for its 2019
18 program year. This amount includes the projected cost of incentives and all actual or
19 allocated research and development and related administration costs, related to the
20 Company's 2019 energy efficiency programs. In addition, the Company is requesting
21 recovery of \$32,281 for 2017 Company and municipal EECRF rate-case expenses,
22 which are considered administrative expenses under 16 TAC §25.181(i).

1 **Q. HOW DOES CENTERPOINT HOUSTON PROPOSE TO ALLOCATE ITS**
2 **2019 ENERGY EFFICIENCY PROGRAM COSTS AMONG THE VARIOUS**
3 **RATE CLASSES?**

4 A. 16 TAC §25.181(f)(2) requires that EECRF costs be directly assigned to each rate
5 class that receives services under the programs to the maximum reasonably extent
6 possible. The Company has made a direct assignment of the costs of each of its 2019
7 energy efficiency programs to the appropriate rate classes to the maximum extent
8 reasonably possible. This calculation is provided in Exhibit LABK-2, Schedule B.

9 **Q. PLEASE EXPLAIN THE DIFFERENCE BETWEEN A RATE CLASS AND A**
10 **CUSTOMER CLASS.**

11 A. 16 TAC §25.181(c)(49) defines a rate class as the retail rate classes approved in the
12 utility's most recent base-rate proceeding, excluding non-eligible customers. A
13 customer class is a generic designation used to differentiate residential, commercial,
14 and industrial customers.

15 **Q. HAVE 2019 PROGRAM COSTS BEEN DIRECTLY ASSIGNED AS**
16 **REQUIRED BY THE RULE?**

17 A. Yes. All costs that are directly assignable to a specific rate class have been directly
18 assigned.

19 **Q. DOES THE COMPANY HAVE ANY PROJECTED 2019 PROGRAM COSTS**
20 **THAT ARE NOT DIRECTLY ASSIGNABLE TO A SPECIFIC RATE CLASS?**

21 A. Yes. Most of the Company's administration expenses are not directly assignable to
22 specific rate classes because they are not directly related to any specific program or

1 rate class but, rather, are related to administration of the Company's entire energy
2 efficiency program.

3 **Q. WHAT IS THE TOTAL ADMINISTRATIVE EXPENSE ASSOCIATED WITH**
4 **THE COMPANY'S 2019 ENERGY EFFICIENCY PROGRAMS?**

5 A. The Company's total requested projected administrative expense for 2019 is
6 \$4,772,605.⁴ This includes all reasonable and necessary costs incurred by the
7 Company to administer its programs as well as all related research and development
8 costs.

9 **Q. DOES THE RULE ADDRESS HOW TO ALLOCATE ADMINISTRATIVE**
10 **EXPENSES THAT ARE NOT DIRECTLY ASSIGNABLE TO A SPECIFIC**
11 **RATE CLASS?**

12 A. Yes. 16 TAC §25.181(i) states that any portion of a utility's administrative costs that
13 are not directly assignable to a specific program shall be allocated among the
14 programs in proportion to the program costs.

15 **Q. HAS THE COMPANY COMPLIED WITH 16 TAC §25.181(i) IN**
16 **ALLOCATING THESE ADMINISTRATIVE EXPENSES TO THE**
17 **APPROPRIATE RATE CLASSES FOR 2017 EXPENSES?**

18 A. Yes. The non-assignable administrative expenses were allocated among the programs
19 in proportion to the Company's 2017 actual program costs, consistent with 16 TAC
20 §25.181(i). The allocation of non-assignable administrative expenses of the
21 Company's administrative expense is contained within the program costs shown in

⁴ See June 1, 2018, CNP Energy Efficiency Plan and Report, Table 6.

1 the workpapers supporting the schedules attached as Exhibit LABK-2, Schedule F to
2 my testimony.

3 **Q. DOES THE COMPANY HAVE ANY DIRECTLY ASSIGNED**
4 **ADMINISTRATIVE EXPENSES ADJUSTMENTS?**

5 A. Yes. The Company has made directly assigned administrative adjustments. In order
6 to remove the lighting class from the EECRF Rider, the Company has made an
7 administrative adjustment of \$359, directly assigned to the lighting class, to take the
8 lighting revenue requirement to zero. This is depicted on Schedule F page 3 and
9 Schedule A within Exhibit LABK-2.

10 **V. 2019 EM&V COSTS**

11 **Q. HOW DOES 16 TAC §25.181 ADDRESS THE RECOVERY OF EM&V COSTS**
12 **THROUGH EECRF RATES?**

13 A. Per 16 TAC §25.181(q)(10), all utilities are assigned EM&V costs in proportion to
14 their annual program costs. Also, the 2013 and 2014 EM&V expenses outlined in the
15 EM&V contractor's budget "shall be recovered through the EECRFs approved by the
16 Commission in the EECRF proceedings initiated by the utilities in 2013." The same
17 process was used for the 2019 EM&V expenses.

18 **Q. WHAT AMOUNT OF EM&V COSTS HAS BEEN ASSIGNED TO**
19 **CENTERPOINT HOUSTON FOR 2019?**

20 A. As noted in the testimony of Mr. Durland, the amount assigned to CenterPoint
21 Houston by Commission Staff for 2019 is \$541,294.

22 **Q. HAS THE COMPANY INCLUDED RECOVERY OF ITS ASSIGNED EM&V**
23 **AMOUNT IN THE PROPOSED RIDER EECRF?**

24 A. Yes.

1 Q. HOW ARE THESE COSTS ALLOCATED TO THE VARIOUS RATE
2 CLASSES?

3 A. These costs are allocated to the rate classes in proportion to actual program costs in
4 2017.

5 **VI. PERFORMANCE BONUS**

6 Q. DID CENTERPOINT HOUSTON EARN A BONUS FOR ITS 2017 PROGRAM
7 PERFORMANCE?

8 A. Yes. Consistent with the standard articulated in 16 TAC §25.181(h), the Company's
9 performance bonus for 2017 program performance is \$9,491,299. Calculation of the
10 Company's net benefits and performance bonus for the 2017 program year is shown
11 in Schedule E of Exhibit LABK-2.

12 Q. HAS THIS AMOUNT BEEN INCLUDED IN THE PROPOSED EECRF
13 CHARGES REQUESTED IN THIS APPLICATION?

14 A. Yes.

15 Q. PLEASE DESCRIBE HOW THE PERFORMANCE BONUS IS ALLOCATED.

16 A. CenterPoint Houston has allocated its 2017 performance bonus of \$9,491,299 to rate
17 classes in proportion to the 2017 program costs associated with meeting the demand
18 and energy goals, per 16 TAC §25.181(h)(6).

19 **VII. (OVER)/UNDER RECOVERY OF 2017 EECRF COSTS**

20 Q. DID CENTERPOINT HOUSTON HAVE AN OVER- OR UNDER-
21 RECOVERY OF EECRF COSTS DURING 2017?

22 A. Yes. The Company over-recovered \$5,174,341 in EECRF revenue.

1 Q. PLEASE DESCRIBE THE CALCULATION FOR OVER-RECOVERY OF
2 2017 PROGRAM COSTS.

3 A. For 2017, the Company's EECRF rates were designed to recover \$45,492,241 in
4 energy efficiency costs. This consisted of \$36,508,012 in forecasted program costs, a
5 performance bonus of \$10,608,015, a previous period over-recovery of \$1,328,468,
6 2017 EM&V costs of \$0, 2015 historical administrative adjustment of \$67,000, a
7 2014 EECRF Remand Docket No.42359⁵ over-recovery of \$264,197and rate-case
8 expenses of \$35,879.⁶ These amounts were approved by the Commission in Docket
9 No. 46014.⁷ In 2017, the Company's actual program costs were \$31,420,852 plus
10 actual EM&V costs of \$531,335 for \$31,952,187 or approximately \$4.556 million
11 less than authorized in the Commission's Final Order in Docket No. 46014. When
12 taking into account the program costs, the performance bonus, the previous period
13 over-recovery, the EM&V costs, the historical administrative adjustment, the EECRF
14 Remand, and the rate-case expenses, the Company's total actual energy efficiency-
15 related program costs were \$40,936,416 in 2017. Total revenues collected through
16 the EECRF Rider were \$46,110,757, resulting in an overall over-recovery of
17 \$5,174,341. The calculation for over-recovery of 2017 program costs is provided in
18 Exhibit LABK-2, Schedule H.

⁵ Remand of Docket No. 36952 (Application of CenterPoint Energy Houston Electric, LLC to Defer Energy Efficiency Cost Recovery and for Approval of an Energy Efficiency Cost Recovery Factor) Consolidated, Docket No. 42359 (Aug. 26, 2014).

⁶ Application of CenterPoint Energy Houston Electric, LLC for Approval of an Adjustment to Its Energy Efficiency Cost Recovery Factor, Docket No. 46014 (Nov. 2, 2016).

⁷ *Id.*

1 **Q. HOW HAS THE COMPANY ASSIGNED THE OVER-RECOVERY AMOUNT**
2 **TO THE VARIOUS RATE CLASSES?**

3 A. Pursuant to 16 TAC §25.181(f)(2), an under- or over-recovery of costs shall be
4 calculated as the difference between actual EECRF revenues and actual costs for each
5 specific rate class. The Company has followed this methodology and allocated any
6 under- or over-recovery directly to the rate classes from which those costs were
7 under- or over-recovered in proportion to their actual program costs in 2017. The
8 calculation is provided in Exhibit LABK-2, Schedule H, page 2.

9 **VIII. HISTORICAL PROGRAM COSTS**

10 **Q. WERE ANY OF THE COMPANY'S ENERGY EFFICIENCY PROGRAM**
11 **COSTS IN 2017 RECOVERED THROUGH BASE RATES?**

12 A. No. All of the Company's 2017 energy efficiency program costs were collected
13 through its EECRF.

14
15 **IX. BILLING DETERMINANTS AND RATE DESIGN**

16 **Q. WHAT BILLING DETERMINANTS ARE USED TO CALCULATE THE**
17 **PROPOSED RIDER EECRF CHARGES?**

18 A. I have designed the Company's 2019 EECRF charges on a per kWh (energy) basis.
19 The calculation of billing determinants for each rate class is included in Schedule G
20 of Exhibit LABK-2.

21 **Q. OVER WHAT TIME PERIOD ARE THE BILLING DETERMINANTS**
22 **FORECASTED?**

23 A. I have designed Rider EECRF with an effective date of March 1, 2019, and used
24 forecasted billing units from March 2019 through February 2020. Schedule G of

1 Exhibit LABK-2 provides forecasted billing units by month and the latest annual
2 actual billing units at the time of filing.

3 **Q. DID CENTERPOINT HOUSTON RECEIVE ANY OPT-OUT**
4 **APPLICATIONS FROM DISTRIBUTION-LEVEL INDUSTRIAL**
5 **CUSTOMERS?**

6 A. Yes. Pursuant to 16 TAC §25.181(w), industrial customers taking service at
7 distribution voltage may opt-out of participation in energy efficiency programs if they
8 submit timely notice to the Company identifying the distribution accounts for which
9 they elect to opt-out. A total of 52 industrial customers opted-out of participation in
10 the Company's 2017 energy efficiency programs through the identification notice
11 process provided in the rule. These customers are opted-out for three years before
12 having to file an updated notice. For the 2018 energy efficiency program year, a total
13 of 72 industrial customers opted-out for the next three years. For the 2019 energy
14 efficiency program year, a total of 10 industrial customers opted-out for the next three
15 years. Thus, a total of 134 industrial customers have opted-out for the 2019 energy
16 efficiency program year. These customers account for approximately 1.3 million
17 kWh per year.

18 **Q. HOW IS THE KWH ASSOCIATED WITH THESE OPT-OUT CUSTOMERS**
19 **REFLECTED IN THIS FILING?**

20 A. The load associated with these opt-out customers has been removed from the
21 calculation of the energy efficiency demand reduction goals. The Company has also
22 removed the associated kWh from the billing determinant forecasts used to establish
23 the EECRF rates.

1 Q. WERE SYSTEM LOSSES OR LINE LOSSES USED IN CALCULATING THE
2 RIDER EECRF CHARGES?

3 A. No. The proposed EECRF rates are based solely on energy usage at the meter and
4 require no adjustment for system losses or line losses.

5 Q. IS THE COMPANY'S ESTIMATE OF ITS BILLING DETERMINANTS FOR
6 2019 REASONABLE?

7 A. Yes. The Company's billing determinant forecast has used the methodology as in
8 each EECRF proceeding since 2009, and the Commission has found that its
9 calculation of billings determinants was reasonable in each case.

10

11

X. TARIFF FOR RETAIL DELIVERY SERVICE

12 Q. HAVE YOU PREPARED AN UPDATED RIDER EECRF TO BE INCLUDED
13 IN THE TARIFF FOR RETAIL DELIVERY SERVICE?

14 A. Yes. Exhibit LABK-4 presents the updated Rider EECRF rate schedule, which shows
15 the Rider EECRF charges by rate class consistent with 16 TAC §25.181(f).

16 Q. WHAT IS THE PROPOSED EFFECTIVE DATE OF THE UPDATED RIDER
17 EECRF?

18 A. Pursuant to 16 TAC §25.181(f)(8), the Company proposes an effective date of March
19 1, 2019.

20

XI. SUMMARY AND RECOMMENDATIONS

21 Q. PLEASE SUMMARIZE YOUR TESTIMONY AND RECOMMENDATIONS.

22 A. The adjustments to Rider EECRF are consistent with the Commission's Substantive
23 Rules and the Commission's applicable decisions in previous CenterPoint Houston
24 EECRF cases. The proposed 2019 Rider EECRF is calculated correctly. I

**Direct Testimony of Laurie A. Burrige-Kowalik
CenterPoint Energy Houston Electric, LLC
Energy Efficiency Cost Recovery Factor Filing**

1 recommend approval of the adjusted Rider EECRF with an effective date of March 1,
2 2019.

3 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

4 **A. Yes.**


AFFIDAVIT

The State of Texas §

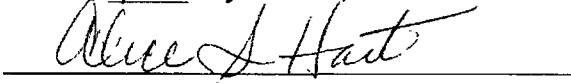
County of Harris §

BEFORE ME, the undersigned notary public, this day personally appeared Laurie A. Burridge-Kowalik, to me known, whom being duly sworn according to law, deposes and says:

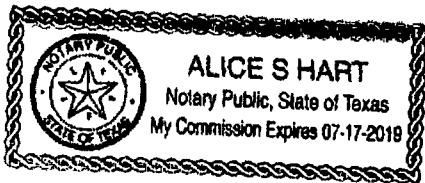
“My name is Laurie A. Burridge-Kowalik. I am of legal age and a resident of the State of Texas. The foregoing testimony and the opinions stated therein are, in my judgment and based upon my professional experience, true and correct.”


Laurie A. Burridge-Kowalik

SWORN TO AND SUBSCRIBED before me on the 1st day of June, 2018.


Notary Public in and for the State of Texas

(SEAL)



Laurie A. BurrIDGE-KowalIK
Manager of Rates & Regulatory
CenterPoint Energy Service Company, LLC
1111 Louisiana Street, Houston, Texas 77002

CURRENT RESPONSIBILITIES (2013 – Present)

Overall responsibilities include assisting in the development and implementation of strategy around cost of service, cost allocation, rate design, and tariffs for delivery rates in the ERCOT and Texas jurisdictions. Also coordinates with many departments, the development and implementation of risk mitigation strategies for changes in revenues and costs. This includes review, analysis, and participation in the formulation of law, rules, and policy at the state and federal level.

PREVIOUS PROFESSIONAL EMPLOYMENT

CenterPoint Energy Service Company, LLC – 2009-2013

Lead Rate Analyst	2011-2013
Senior Rate Analyst	2009-2011

Reliant Energy/RRR Energy – 2007-2009

Manager, RTO Policy	2009-2009
Regulatory Specialist	2007-2009

Metropolitan Transit Authority of Harris County 1991-2005

Director, Operations Management Support – Operations	2000-2005
Management Analyst III/IV – Finance	1996-2000
Acting Director, Ridership Development – Service Development	1995-1996
Senior Project Manager – Service Development	1993-1995
Senior Analyst – Operations	1991-1993

EDUCATION

University of Houston, B.S., Computer Science
University of St. Thomas, MBA, Marketing and Finance

PREVIOUS TESTIMONY:

Public Utility Commission of Texas

Docket No. 42334 – *Application of CenterPoint Energy Houston Electric, LLC for Interim Update of Wholesale Transmission Rates Pursuant to P.U.C. Substantive Rule § 25.192(h)(1)*

Docket No. 43836 – *Application of CenterPoint Energy Houston Electric, LLC for Interim Update of Wholesale Transmission Rates Pursuant to P.U.C. Substantive Rule 25.192(h)*

Docket No. 44881 – *Application of CenterPoint Energy Houston Electric, LLC for Interim Update of Wholesale Transmission Rates Pursuant to 16 Tex. Admin. Code § 25.192(h)*

Docket No. 45214 – *Application of CenterPoint Energy Houston Electric, LLC for Interim Update of Wholesale Transmission Rates Pursuant to 16 Tex. Admin. Code § 25.192(h)*

Docket No. 45747 – *Application of CenterPoint Energy Houston Electric, LLC to Amend its Distribution Cost Recovery Factor Pursuant to 16 Tex. Admin. Code § 25.243 and to Reconcile Docket No. 44572 Revenues*

Docket No. 46014 – *Application of CenterPoint Energy Houston Electric, LLC for Approval of an Adjustment to its Energy Efficiency Cost Recovery Factor*

Docket No. 46230 – *Application of CenterPoint Energy Houston Electric, LLC for Interim Update of Wholesale Transmission Rates Pursuant to 16 Tex. Admin. Code § 25.192(h)*

Docket No. 46703 – *Application of CenterPoint Energy Houston Electric, LLC for Interim Update of Wholesale Transmission Rates Pursuant to 16 Tex. Admin. Code § 25.192(h)*

Docket No. 47032 – *Application of CenterPoint Energy Houston Electric, LLC to Amend its Distribution Cost Recovery Factor Pursuant to 16 Tex. Admin. Code § 25.243*

Docket No. 48226 – *Application of CenterPoint Energy Houston Electric, LLC to Amend its Distribution Cost Recovery Factor*

Docket No. 48389 – *Application of CenterPoint Energy Houston Electric, LLC for Interim Update of Wholesale Transmission Rates Pursuant to 16 Tex. Admin. Code § 25.192(h)*

Exhibit LABK-2

CenterPoint Energy Houston Electric March 2019 Annual EECRF Filing

Docket No.

Schedules A - I

<u>Schedule</u>	<u>Description</u>
Schedule A	Calculation of 2019 Rider EECRF
Schedule B	2019 Energy Efficiency Program Costs
Schedule C	2017 kWh Savings
Schedule C WP1:	2017 kW and kWh savings breakout
Schedule D	2017 kW Savings
Schedule E	Calculation of 2017 Performance Bonus (By Rate Class)
Schedule E WP1:	Calculation of Performance Bonus based on 2017 Performance
Schedule F	Calculation of 2019 EM&V Costs (By Rate Class)
Schedule F PG2:	Calculation of 2017 Rate Case Expenses (By Rate Class)
Schedule F PG3:	Calculation of 2017 Administrative Expense Adjustments (By Rate Class)
Schedule G PG1-PG4	Rider EECRF Billing Determinants (includes opt-out customers removed from the commercial class)
Schedule H PG1, PG2	Calculation of Over/Under Amounts for Over/Under Recovery of Energy Efficiency Costs and Allocation to Rate Classes
Schedule I	2017 Actual Expenditures (By Rate Class)

Schedule A

CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC
Calculation of Rider EECRF (Energy Efficiency Cost Recovery Factor)
Effective March 2019 - February 2020 Billing Months

Customer Class	2019 Energy Efficiency Costs	2017 Performance Bonus Recovery	2017 (Over)-recovery of Program Costs and Revenue	2019 Rider EECRF Recovery	2019 - 2020 Billing Determinants	Preliminary Rider EECRF Charges	2019 EM&V Costs	2017 CEHE Rate Case Expenses	2017 Mutl Rate Case Exp.	2017 Administrative Expense Adjustments	2019 Total Rider EECRF Recovery	Total 2019 - 2020 Billing Determinants	Total Rider EECRF Charges Effective March 1, 2019	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
				(1) + (2) + (3)		(4) / (5)					(6) + (7) + (8) + (9) + (10)		(11) / (12)	
Residential	\$ 19,913,585	\$ 5,010,135	\$ (3,111,019)	\$ 21,812,702	30,597,853,284	\$0.000713	\$ 241,449	\$ 12,317	\$ 4,722	\$ -	\$ 22,071,191	30,597,853,284	\$0.000721	per kWh
Secondary <=10 kVA	\$ 819,003	\$ 148,097	\$ (793,400)	\$ 173,700	973,572,021	\$0.000178	\$ 18,632	\$ 364	\$ 140	\$ -	\$ 192,835	973,572,021	\$0.000198	per kWh
Secondary >10 kVA	\$ 14,720,004	\$ 3,828,616	\$ (808,552)	\$ 17,740,068	33,463,762,410	\$0.000530	\$ 251,407	\$ 9,413	\$ 3,609	\$ -	\$ 18,004,497	33,463,762,410	\$0.000538	per kWh
Primary Service	\$ 2,388,051	\$ 485,930	\$ (494,542)	\$ 2,579,438	3,876,800,770	\$0.000614	\$ 29,318	\$ 1,195	\$ 458	\$ -	\$ 2,410,409	3,876,800,770	\$0.000622	per kWh
Transmission Non-Profit Governmental	\$ 56,962	\$ 18,522	\$ 65,334	\$ 140,817	845,000,000	\$0.000167	\$ 488	\$ 46	\$ 17	\$ -	\$ 141,367	845,000,000	\$0.000167	per kWh
Transmission Services	\$ -	\$ -	\$ (32,520)	\$ (32,520)	20,893,195,141	(\$0.000002)	\$ -	\$ -	\$ -	\$ -	\$ (32,520)	20,893,195,141	(\$0.000002)	per kWh
Lighting	\$ -	\$ -	\$ 359	\$ 359	231,768,712	\$0.000002	\$ -	\$ -	\$ -	\$ (359)	\$ -	231,768,712	\$0.000000	per kWh
Total	\$ 37,897,605	\$ 9,491,299	\$ (5,174,341)	\$ 42,214,563	\$ 90,881,952,337		\$ 541,294	\$ 23,335	\$ 8,946	\$ (359)	\$ 42,787,780	\$ 90,881,952,337		
Check:	\$ 37,897,605	\$ 9,491,299	\$ (5,174,341)	\$ 42,214,563	\$ 90,881,952,337		\$ 541,294	\$ 23,335	\$ 8,946	\$ (359)	\$ 42,787,780	\$ 90,881,952,337		

	Charge per kWh (includes Rate Case Exp & Admin. Adjust.)	2014 Cost Caps per kWh (includes 2.12% CPI)	2015 Cost Caps per kWh (includes 1.56% CPI)	2016 Cost Caps per kWh (includes 1.69% CPI)	2017 Cost Caps per kWh (does not include -1.8% CPI)	2018 Cost Caps per kWh (includes 1.11% CPI)	2019 Cost Caps per kWh (includes 2.05% CPI)	
Residential	\$0.000713	\$0.001223	\$0.001244	\$0.001266	\$0.001266	\$0.001277	\$0.001303	Satisfactory
Commercial	\$0.000522	\$0.000766	\$0.000778	\$0.000791	\$0.000791	\$0.000798	\$0.000815	Satisfactory

2019 Energy Efficiency Program Costs - CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC

Schedule B

2019 EE Costs per Program for EECRF	Program Amount:	RESIDENTIAL	SECONDARY < 10 kVA	SECONDARY > 10 kVA	PRIMARY	TRANSMISSION	TOTAL
Commercial:	\$ 17,984,019						
Large Commercial SOP		\$ -	\$ 586,215	\$ 6,130,072	\$ 127,630	\$ -	\$ 6,843,917
Commercial MTP (SCORE, Healthcare , Data Center)		\$ -	\$ 161,766	\$ 5,510,587	\$ 469,853	\$ -	\$ 6,142,206
Large Commercial Load Management SOP		\$ -	\$ -	\$ 2,230,884	\$ 1,338,925	\$ 53,303	\$ 3,623,112
Retro-Commissioning MTP		\$ -	\$ -	\$ 546,829	\$ 358,577	\$ -	\$ 905,406
REP (Commercial CoolSaver)		\$ -	\$ 9,206	\$ 125,255	\$ -	\$ -	\$ 134,461
Advanced Lighting Commercial		\$ -	\$ 59,918	\$ -	\$ -	\$ -	\$ 59,918
R&D		\$ -	\$ 1,898	\$ 176,378	\$ 93,066	\$ 3,659	\$ 275,000
Residential:	\$ 12,863,271						
REP (CoolSaver & Efficiency Connection)		\$ 1,619,783					\$ 1,619,783
Residential Demand Response Program		\$ 972,800					\$ 972,800
CenterPoint Energy High Efficiency Homes MTP		\$ 4,052,706					\$ 4,052,706
Residential & SC SOP		\$ 594,319					\$ 594,319
Advanced Lighting Residential		\$ 1,138,450					\$ 1,138,450
Residential Pool Pump & A/C Distributor MTP		\$ 2,613,309					\$ 2,613,309
Multi-Family MTP		\$ 1,051,903					\$ 1,051,903
Smart Thermostat Program (Pilot)		\$ 595,000					\$ 595,000
R&D		\$ 225,000					\$ 225,000
Hard-to-Reach:	\$ 7,050,315						
Hard-to-Reach SOP		\$ 1,255,537					\$ 1,255,537
Multi-Family MTP (HTR)		\$ 551,903					\$ 551,903
Targeted Low Income MTP (Agencies in Action)		\$ 5,242,875					\$ 5,242,875
TOTAL		\$19,913,585	\$819,003	\$14,720,004	\$2,388,051	\$56,962	\$37,897,605
Breakout of Planned 2019 Program Expenditures:							
		RESIDENTIAL	SECONDARY < 10 kVA	SECONDARY > 10 kVA	PRIMARY VOLTAGE	TRANSMISSION VOLTAGE	
2019 TOTAL - ALL PROGRAMS		\$19,913,585	\$819,003	\$14,720,004	\$2,388,051	\$56,962	\$37,897,605
		52.55%	2.16%	38.84%	6.30%	0.15%	

2017 kWh Savings - CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC

Schedule C

2017 kWh Savings	RESIDENTIAL	SECONDARY < 10 kVA	SECONDARY > 10 kVA	PRIMARY VOLTAGE	TRANSMISSION VOLTAGE
Large Commercial					
C & I Standard Offer Incentives	-	2,856,291	41,262,975	799,730	-
Data Centers	-	-	3,837,458	323,887	-
Load Management Standard Offer	-	-	462,455	278,405	11,083
REPCoolsaver Commercial Program	-	8,725	213,671	-	-
Sustainable Schools	-	-	3,661,656	-	-
Retro-Commissioning SB-7	-	-	781,007	1,330,416	-
Energy Smart Schools (SCORE)	-	714,818	20,988,773	1,292,405	-
Healthcare	-	-	6,653,151	-	-
Advanced Lighting Commercial	-	947,499	0	0	-
Residential and Small Commercial Customers:					
R & SC SOP	134,764	-	-	-	-
New Home Program	51,344,879	-	-	-	-
Water & Space Heating MT	1,946,710	-	-	-	-
Advanced Lighting Residential	18,002,485	-	-	-	-
A/C Distributor	7,700,017	-	-	-	-
REP Demand Response (RES)	103,152	-	-	-	-
REP Coolsaver (RES) Program	848,031	-	-	-	-
Pool Pump Program	4,136,657	-	-	-	-
Energy Wise - Resource Action Program	1,155,524	-	-	-	-
REP Efficiency Connection (RES)	1,302,387	-	-	-	-
High Efficiency New Construction	2,757,330	-	-	-	-
Hard-to-Reach Customers:					
Hard To Reach SOP (HTR)	587,204	-	-	-	-
Water & Space Heating MT HTR	839,484	-	-	-	-
Low Income Weatherization	6,004,030	-	-	-	-
Multi-Family Direct Install	103,352	-	-	-	-
High Efficiency New Construction HTR	48,430	-	-	-	-
TOTALS	97,014,436	4,527,334	77,861,146	4,024,842	11,083
	RESIDENTIAL	SECONDARY < 10 kVA	SECONDARY > 10 kVA	PRIMARY VOLTAGE	TRANSMISSION VOLTAGE
2017 kWh Savings - ALL PROGRAMS	97,014,436	4,527,334	77,861,146	4,024,842	11,083
	52.89%	2.47%	42.45%	2.19%	0.01%
				kWh Sum:	183,438,841

2017 Savings and Breakout by Commercial Class - CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC

Schedule C - Workpaper 1

	kW	Total kWh	Secondary < 10 kVA		Secondary > 10 kVA		Primary		Transmission		Secondary < 10 kVA	Secondary > 10 kVA	Primary	Transmission
			kW	kWh	kW	kWh	kW	kWh	kW	kWh	%	%	%	%
Large Commercial Customers:	138,823	86,424,405												
C & I Standard Offer Incentives	7,339	44,918,996	629	2,856,291	6,567	41,262,975	144	799,730	0	0	8.6%	89.5%	2.0%	0.0%
Data Centers	544	4,161,345	0	0	497	3,837,458	47	323,887	0	0	0.0%	91.4%	8.6%	0.0%
Load Management Standard Offer	125,560	751,943	0	0	77,312	462,455	46,401	278,405	1,847	11,083	0.0%	61.6%	37.0%	1.5%
REP Coolsaver Commercial Program	125	222,396	8	8,725	117	213,671	0	0	0	0	6.7%	93.3%	0.0%	0.0%
Sustainable Schools	466	3,661,656	0	0	466	3,661,656	0	0	0	0	0.0%	100.0%	0.0%	0.0%
Retro-Commissioning SB-7	172	2,111,423	0	0	104	781,007	68	1,330,416	0	0	0.0%	60.4%	39.6%	0.0%
Energy Smart Schools (SCORE)	3,878	22,995,996	131	714,818	3,412	20,988,773	335	1,292,405	0	0	3.4%	88.0%	8.6%	0.0%
Healthcare	549	6,653,151	0	0	549	6,653,151	0	0	0	0	0.0%	100.0%	0.0%	0.0%
Advanced Lighting Commercial	189	947,499	189	947,499	0	0	0	0	0	0	100.0%	0.0%	0.0%	0.0%
Residential and Small Commercial Customers:											0.7%	64.1%	33.9%	1.3%
R & SC SOP	72	134,764												
New Home Program	15,708	51,344,879												
Water & Space Heating MT	1,383	1,946,710												
Advanced Lighting Residential	3,596	18,002,485												
A/C Distributor	2,937	7,700,017												
REP Demand Response (RES)	17,192	103,152												
REP Coolsaver (RES) Program	1,625	4,136,657												
Pool Pump Program	723	2,757,330												
Energy Wise - Resource Action Program	475	1,302,387												
REP Efficiency Connection (RES)	227	1,155,524												
High Efficiency New Construction	233	848,031												
Hard-to-Reach Customers:														
Hard To Reach SOP (HTR)	540	587,204												
Water & Space Heating MT HTR	993	839,484												
Low Income Weatherization	3,856	6,004,030												
Multi-Family Direct Install	21	103,352												
High Efficiency New Construction HTR	21	48,430												

2017 kW Savings - CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC

Schedule D

2017 kW Savings	RESIDENTIAL	SECONDARY < 10 kVA	SECONDARY > 10 kVA	PRIMARY	TRANSMISSION
Large Commercial Customers:					
C & I Standard Offer Incentives	-	629.25	\$ 6,566.72	143.52	-
Data Centers	-	-	\$ 497.31	46.83	-
Load Management Standard Offer	-	-	\$ 77,311.85	46,400.80	1,847.22
REPCoolsaver Commercial Program	-	8.38	\$ 116.76	-	-
Sustainable Schools	-	-	\$ 465.97	-	-
Retro-Commissioning SB-7	-	-	\$ 103.70	68.00	-
Energy Smart Schools (SCORE)	-	131.35	\$ 3,412.16	334.68	-
Healthcare	-	-	\$ 549.15	-	-
Advanced Lighting Commercial	-	189.25	0	-	-
Residential and Small Commercial Customers:					
R & SC SOP	72	-	-	-	-
New Home Program	15,708	-	-	-	-
Water & Space Heating MT	1,383	-	-	-	-
Advanced Lighting Residential	3,596	-	-	-	-
A/C Distributor	2,937	-	-	-	-
REP Demand Response (RES)	17,192	-	-	-	-
REP Coolsaver (RES) Program	1,625	-	-	-	-
Pool Pump Program	723	-	-	-	-
Energy Wise - Resource Action Program	475	-	-	-	-
REP Efficiency Connection (RES)	227	-	-	-	-
High Efficiency New Construction	233	-	-	-	-
Hard-to-Reach Customers:					
Hard To Reach SOP (HTR)	540	-	-	-	-
Water & Space Heating MT HTR	993	-	-	-	-
Low Income Weatherization	3,856	-	-	-	-
Multi-Family Direct Install	21	-	-	-	-
High Efficiency New Construction HTR	21	-	-	-	-
TOTAL	49,601.88	958.23	89,023.62	46,993.83	1,847.22

	RESIDENTIAL	SECONDARY < 10 kVA	SECONDARY > 10 kVA	PRIMARY VOLTAGE	TRANSMISSION VOLTAGE
2017 kW Savings - ALL PROGRAMS	49,601.88	958.23	89,023.62	46,993.83	1,847.22
	26.32%	0.51%	47.25%	24.94%	0.98%
				Sum kW:	188,424.79

Calculation of 2017 Performance Bonus (By Rate Class) Schedule E

Customer Class		2017
		Performance
	% of 2017 Actual	Bonus
	EE Expenditures	\$9,491,299
Residential	52.79%	\$ 5,010,134.91
Secondary <= 10 kVA	1.56%	\$ 148,097.17
Secondary > 10 kVA	40.34%	\$ 3,828,615.75
Primary	5.12%	\$ 485,929.63
Transmission Non-Profit Governmental	0.20%	\$ 18,521.78
Transmission - Industrial	0.00%	\$ -
Lighting	0.00%	\$ -
Total	100.00%	\$ 9,491,299

Class	2017 Actual Energy Efficiency Expenditures	% of Total
Residential	\$16,586,002	52.79%
Secondary <= 10 kVA	\$490,274	1.56%
Secondary > 10 kVA	\$12,674,595	40.34%
Primary	\$1,608,665	5.12%
Transmission Non-Profit Governmental	\$61,316	0.20%
Transmission - Industrial	\$0	0.00%
Lighting	\$0	0.00%
Total	\$31,420,852	100.00%

CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC

Schedule E - Workpaper 1

<u>Performance Incentive Calculation for Calendar Year 2017</u>	kW	kWh
2017 Program Goals	60,420	105,855,840
2017 Program Savings	188,425	183,438,841
<i>Reported/Verified Total (including HTR, measures with 10yr EUL, and measures with EULs < or > 10 years)</i>	188,425	183,438,841
<i>Reported/Verified Hard-to-Reach</i>	5,430	7,582,500
Avoided Cost		
<i>per kW</i>		\$80
<i>per kWh</i>		\$0.03989
<i>Inflation Rate</i>		2.0%
<i>Discount Rate</i>		8.21%
Total Avoided Cost (see avoided cost savings table)		\$126,525,075
2017 Program Costs		\$31,612,083
Net Benefits = Total Avoided Cost - Total Program Costs		
Net Benefits		\$94,912,992
Bonus based on 10% of Net Benefits		\$9,491,299

Schedule F

2017 Actual Commercial Expenditures By Rate Class Per Program - CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC

Program	Secondary < 10 kVA	Secondary > 10 kVA	Primary	Transmission	Total Commercial Programs	Residential	Total All Programs
1 Residential Programs						\$ 16,586,092	\$ 16,586,092
2 C & I Standard Offer Incentives	\$ 355,976.52	\$ 4,646,347.27	\$ 84,113.68	\$ -	\$ 5,086,438	\$ -	\$ 5,086,438
3 Data Centers	\$ -	\$ 277,046.83	\$ 75,592.83	\$ -	\$ 352,643	\$ -	\$ 352,643
4 Load Management Standard Offer	\$ -	\$ 2,203,508.89	\$ 1,024,434.89	\$ 60,808.71	\$ 3,288,740	\$ -	\$ 3,288,740
6 REP/Coalover Commercial Program	\$ 11,934.19	\$ 107,407.75	\$ -	\$ -	\$ 119,342	\$ -	\$ 119,342
7 Sustainable Schools	\$ -	\$ 357,348.58	\$ -	\$ -	\$ 357,349	\$ -	\$ 357,349
8 Retro-Commissioning SB-7	\$ -	\$ 195,427.69	\$ 149,444.71	\$ -	\$ 344,872	\$ -	\$ 344,872
6 Energy Smart Schools (SCORE)	\$ 69,690.35	\$ 3,151,551.22	\$ 261,172.60	\$ -	\$ 3,482,424	\$ -	\$ 3,482,424
9 Healthcare	\$ 48,705.17	\$ -	\$ -	\$ -	\$ 48,705	\$ -	\$ 48,705
9 Advanced Lighting Commercial	\$ 4,057.57	\$ 104,896.47	\$ 13,313.51	\$ 307.46	\$ 122,775	\$ -	\$ 122,775
10 R&D	\$ 490,274.20	\$ 12,674,894.52	\$ 1,808,656.28	\$ 61,216.17	\$ 14,934,030	\$ -	\$ 14,934,030
Total by Rate Class						\$ 16,586,092	\$ 31,420,062.00

Program	Secondary < 10 kVA	Secondary > 10 kVA	Primary	Transmission	Check	Residential
C & I Standard Offer Incentives	7.06%	91.35%	1.63%	0.00%	100.00%	
Data Centers	0.00%	91.81%	8.19%	0.00%	100.00%	
Load Management Standard Offer	0.00%	67.00%	31.15%	1.85%	100.00%	
REP/Coalover Commercial Program	10.00%	90.00%	0.00%	0.00%	100.00%	
Sustainable Schools	0.00%	100.00%	0.00%	0.00%	100.00%	
Retro-Commissioning SB-7	0.00%	56.67%	43.33%	0.00%	100.00%	
Energy Smart Schools (SCORE)	2.06%	90.49%	7.53%	0.00%	100.00%	
Healthcare	0.00%	100.00%	0.00%	0.00%	100.00%	
Advanced Lighting Commercial	100.00%	0.00%	0.00%	0.00%	100.00%	
R&D	3.38%	\$5.44%	10.84%	0.41%	100.00%	
Residential & Hard to Reach	0.00%	0.00%	0.00%	0.00%	100.00%	

Program	Allocation Per				Total
	Terra Tech, EEMV	Secondary < 10 kVA	Secondary > 10 kVA	Primary	
C & I Standard Offer Incentives	\$ 1,489,239	\$ 9,867.47	\$ 122,189.40	\$ 2,285.42	\$ 1,613,581.29
Data Centers	\$ 25,022.67	\$ -	\$ 21,149.80	\$ 1,680.72	\$ 47,853.19
Load Management Standard Offer	\$ 28,387.47	\$ 2,832.43	\$ 21,691.45	\$ 8,163.33	\$ 59,074.68
REP/Coalover Commercial Program	\$ 26,324.26	\$ -	\$ -	\$ -	\$ 26,324.26
Sustainable Schools	\$ -	\$ -	\$ -	\$ -	\$ -
Retro-Commissioning SB-7	\$ 36,126.82	\$ 480.16	\$ 18,805.20	\$ 15,221.62	\$ 70,633.80
Energy Smart Schools (SCORE)	\$ 23,027.33	\$ -	\$ 20,839.46	\$ 1,730.71	\$ 45,607.50
Healthcare	\$ 5,951.95	\$ -	\$ -	\$ -	\$ 5,951.95
Advanced Lighting Commercial	\$ 17,762.66	\$ -	\$ -	\$ -	\$ 17,762.66
Residential & SC SOP	\$ 6,004.31	\$ -	\$ -	\$ -	\$ 6,004.31
Smart Thermostat Program (Plan)	\$ 17,344.08	\$ -	\$ -	\$ -	\$ 17,344.08
Advanced Lighting Residential	\$ 21,189.22	\$ -	\$ -	\$ -	\$ 21,189.22
Residential Pool Pump & A/C Distributor MTP	\$ 20,892.80	\$ -	\$ -	\$ -	\$ 20,892.80
Residential Demand Response Program	\$ 25,699.27	\$ -	\$ -	\$ -	\$ 25,699.27
REP (CoolSaver & Efficiency Connection)	\$ 39,872.85	\$ -	\$ -	\$ -	\$ 39,872.85
CenterPoint Energy High Efficiency Homes MTP	\$ 46,165.22	\$ -	\$ -	\$ -	\$ 46,165.22
Hard to Reach SOP (HTR)	\$ 20,510.27	\$ -	\$ -	\$ -	\$ 20,510.27
Hard-to-Reach	\$ 17,408.17	\$ -	\$ -	\$ -	\$ 17,408.17
Multi-Family MTP (HTR)	\$ 6,011.91	\$ -	\$ -	\$ -	\$ 6,011.91
Targeted Low Income MTP (Agriculture in Action)	\$ -	\$ 18,832.02	\$ 281,887.45	\$ 28,317.30	\$ 309,036.77
Total	\$ 441,284.18	\$ 18,832.02	\$ 281,887.45	\$ 28,317.30	\$ 770,307.95

Calculation of 2017 Rate Case Expenses (By Rate Class)

Schedule F - Page 2

Customer Class		2017	2017
		CEHE Rate Case	Muni. Rate Case
	% of 2017 Actual EE Expenditures	Expenses \$23,335	Expenses \$8,946
Residential	52.79%	\$ 12,317.49	\$ 4,722.37
Secondary <=10 kVA	1.56%	\$ 364.10	\$ 139.59
Secondary > 10 kVA	40.34%	\$ 9,412.71	\$ 3,608.72
Primary	5.12%	\$ 1,194.67	\$ 458.02
Transmission Non-Profit Governmental	0.20%	\$ 45.54	\$ 17.46
Transmission - Industrial	0.00%	\$ -	\$ -
Lighting	0.00%	\$ -	\$ -
Total	100.00%	\$ 23,335	\$ 8,946

Calculation of 2017 Administrative Expense Adjustments (By Rate Class)

Schedule F - Page 3

Rate Class		2017	2017	2017
		Administrative Expense	Administrative Expense	Administrative Expense
	% of 2017 Actual	Adjustments	Directly Assigned	
	EE Expenditures	\$0		Total
Residential	52.79%	\$ -	\$ -	\$ -
Secondary <=10 kVA	1.56%	\$ -	\$ -	\$ -
Secondary > 10 kVA	40.34%	\$ -	\$ -	\$ -
Primary	5.12%	\$ -	\$ -	\$ -
Transmission Non-Profit Governmental	0.20%	\$ -	\$ -	\$ -
Transmission - Industrial	0.00%	\$ -		\$ -
Lighting	0.00%	\$ -	\$ (359)	\$ (359)
Total	100.00%	\$ -	\$ (359)	\$ (359)

CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC
Rater BSCR Billing Determinants

Actuals through February 2018. Forecast for remainder of 2018 and through February 2020. From the 2018-22 Business Plan

Schedule G Page 1

Rate Class	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18
Residential Service	2,078,149,350	1,546,938,362	1,726,483,735	1,766,829,751	2,326,638,110	3,045,578,357	3,457,311,047	3,934,023,385	3,072,922,036	2,954,107,704	1,883,733,742	1,763,859,615	2,546,294,391	1,777,849,480
Secondary Service Less Than or Equal to 10 kVA	79,251,324	62,398,970	78,460,389	64,914,076	76,282,915	81,627,768	79,094,725	90,677,815	77,283,640	82,716,919	70,830,865	72,205,028	87,131,956	68,553,324
Secondary Service Greater Than 10 kVA	2,493,890,871	2,212,361,260	2,395,194,459	2,398,404,799	2,643,094,035	2,948,341,879	2,963,371,027	3,005,064,033	2,977,873,488	2,907,671,024	2,414,971,523	2,298,878,323	2,767,946,615	2,181,107,380
Primary Service	292,566,090	287,673,609	308,502,325	333,093,383	319,225,237	364,400,973	356,998,660	299,932,519	397,137,942	340,260,420	312,902,743	285,278,541	346,729,501	269,097,134
Transmission Non-Profit/Governmental	68,428,691	47,292,068	92,718,140	106,017,112	103,827,195	106,875,203	105,085,195	105,405,377	104,980,944	100,727,299	101,431,249	101,354,683	95,704,424	95,873,179
Transmission Service	1,834,843,898	1,623,162,999	1,559,964,939	1,866,765,880	1,563,525,088	1,638,973,573	1,853,483,095	1,725,832,407	1,858,001,090	1,643,261,217	1,752,856,959	2,026,012,586	2,387,826,321	1,335,959,962
Lighting Services	22,659,118	22,358,854	22,737,875	21,981,741	22,627,831	22,354,726	21,694,077	22,203,563	21,572,357	21,739,908	21,221,598	20,702,626	21,325,874	20,649,253
Total	6,869,789,343	5,802,186,121	6,184,061,862	6,558,006,742	7,055,220,411	8,208,152,479	8,837,037,827	9,183,159,099	8,509,771,496	8,050,484,491	6,557,948,679	6,568,291,403	8,252,959,082	5,749,089,712

* Billing Determinants include the reduction in energy demand of 133 commercial customers that qualified under the opt-out provision in the amended energy efficiency rules

CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC
Rider EECRF Billing Determinants

Schedule G Page 2

	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast
Rate Class	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19
Residential Service	1,707,131,198	1,881,716,826	2,356,388,284	3,116,893,548	3,630,889,204	3,747,393,903	3,390,372,453	2,513,781,665	1,930,237,005	1,848,929,231	2,044,617,617	1,847,577,168	1,739,855,877	1,917,878,635	2,401,790,579
Secondary Service Less Than or Equal to 10 kVA	73,263,720	75,105,269	77,930,481	82,569,020	86,364,602	89,527,805	86,983,231	82,582,980	79,029,236	78,102,528	81,134,369	75,594,652	73,271,635	75,179,555	78,076,837
Secondary Service Greater Than 10 kVA	2,338,100,684	2,491,579,459	2,652,359,493	2,946,477,204	3,117,375,570	3,145,321,696	3,152,702,395	2,845,404,574	2,584,698,898	2,429,935,006	2,547,700,530	2,421,653,909	2,405,575,999	2,560,972,567	2,724,494,877
Primary Service	294,206,679	311,100,980	317,009,758	351,288,261	357,927,276	357,030,042	369,052,877	328,311,876	316,128,046	289,692,920	284,849,074	291,570,027	295,956,920	312,471,522	317,884,063
Transmission Non-Profit/Governmental	92,718,140	106,017,112	103,827,195	106,875,203	105,085,195	105,405,377	104,980,944	100,727,299	101,431,249	101,354,683	65,808,941	65,866,418	63,317,109	71,790,690	72,463,755
Transmission Service	1,416,664,046	1,580,727,501	1,623,878,027	1,661,307,008	1,611,826,831	1,636,920,357	1,648,424,430	1,590,735,579	1,621,890,855	1,683,028,939	1,685,433,291	1,552,477,591	1,495,112,862	1,665,371,954	1,707,558,628
Lighting Services	20,844,421	21,058,936	20,630,912	20,900,921	20,548,084	20,712,588	20,221,685	20,584,261	20,083,137	20,317,717	19,703,876	19,846,367	19,481,326	19,728,756	19,350,674
Total	5,942,928,887	6,467,306,082	7,152,024,150	8,286,311,165	8,930,016,762	9,102,311,767	8,772,738,016	7,482,128,235	6,653,498,426	6,451,361,024	6,729,247,697	6,274,586,132	6,092,571,729	6,623,393,678	7,321,619,412

* Billing Determinants include the reduction in energy demand

CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC		Schedule G Page 3					Schedule G Page 4					
Risk EECRF Billing Determinants		Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast		
Rate Class		Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Total	
Residential Service		3,177,109,004	3,701,220,213	3,820,168,034	3,456,373,157	2,562,826,794	1,967,971,123	1,885,133,669	2,083,694,070	1,883,832,131	30,597,853,284	KWH
Secondary Service Less Than or Equal to 10 kVA		82,797,830	86,681,099	89,935,586	87,456,238	83,104,083	79,595,677	78,727,858	82,422,789	76,322,834	973,572,021	KWH
Secondary Service Greater Than 10 kVA		3,024,681,998	3,197,577,493	3,224,372,698	3,227,560,711	2,910,224,181	2,640,864,647	2,480,794,288	2,592,279,739	2,474,363,212	33,463,762,410	KWH
Primary Service		351,331,050	357,954,991	356,808,084	367,692,196	326,384,059	314,307,497	287,839,603	290,871,235	297,299,549	3,876,800,770	KWH
Transmission Non-Profit/Governmental		74,877,275	72,171,236	73,238,695	72,569,859	70,210,030	71,644,157	71,041,834	65,808,941	65,866,418	845,000,000	KWH
Transmission Service		1,749,848,126	1,770,669,498	1,802,320,929	1,816,552,559	1,754,214,395	1,866,365,389	1,853,210,150	1,695,442,278	1,716,528,373	20,893,195,141	KWH
Lighting Services		19,655,609	19,352,059	19,549,951	19,106,224	19,499,841	19,040,728	19,301,512	18,787,512	18,914,521	231,768,712	KWH
Total		8,480,300,892	9,205,626,389	9,386,393,978	9,047,310,945	7,726,463,383	6,959,789,218	6,676,048,914	6,829,306,562	6,533,127,037	90,881,952,337	

* Billing Determinants include the reduction in energy demand

2017 EECRF Estimated Over/Under Calculation and Allocation to Rate Classes
Calculation of 2017 Over/Under Calculation

Schedule H Page 1

<u>Revenue Requirement</u>	<u>Actual</u>	<u>Approved EECRF</u>	<u>Source</u>	
2017 Program Costs	\$31,420,852	\$36,508,012	CEHE for 2017 Actual; 2017 Budget from EECRF filing	-\$5,087,160
2015 Bonus:	\$10,608,015	\$10,608,015		
2015 Rate Case Expenses	\$35,879	\$35,879		
2017 EM&V Costs	\$531,335	\$0		\$531,335
2015 Historical Admin. Adjust.	(\$67,000)	(\$67,000)		
2014 EECRF Remand No. 42359	(\$264,197)	(\$264,197)		
2015 Over Recovery:	(\$1,328,468)	(\$1,328,468)		
Total	\$40,936,416	\$45,492,241		-\$4,555,825

Negative value represents
"approved but not spent."

Revenue
EECRF

January	\$2,697,953.88	CenterPoint Energy Revenue Statistics for 2017
February	\$2,204,237.82	" "
March	\$3,119,390.68	" "
April	\$3,259,433.63	" "
May	\$3,843,991.14	" "
June	\$4,706,219.46	" "
July	\$5,076,542.95	" "
August	\$5,398,325.00	" "
September	\$4,805,313.71	" "
October	\$4,562,009.46	" "
November	\$3,326,730.41	" "
December	\$3,110,608.57	" "
Total EECRF	\$46,110,756.71	Total of above

Total 2017 Revenue:	<u>\$46,110,756.71</u>	\$ (4,555,825.36) Under-Expenditures - "Approved but not spent"
EECRF Over/(Under):	\$5,174,341.16	\$ 618,515.80 Over-collection from approved revenue.
		\$ 5,174,341.16 Total Over-recovery to be returned through 2019 EECRF

"Over-collection"
Positive value represents over-collection
from actual 2017 expenditures and revenues.

Allocation of 2017 Over/Under Calculation to Rate Classes

Schedule H Page 2

Class	2017 Over/(Under)-Expenditure Class Calculation			2017 Over/(Under)-Collection Class Calculation			Net True-Up
	2017 Actual Energy Efficiency Expenditures (includes bonus, EM&V, over/under recovery, historical admin. adj., and rate case exp.) (1)	2017 Budgeted Energy Efficiency Costs (includes bonus, EM&V, over/ under recovery, historical admin. adj., and rate case exp.) (2)	2017 Over/ (Under) Expenditure (3) = (1)-(2)	Approved 2017 EECRF Total Requirement Amount (4)	2017 EECRF Actual Recovery Amount (5)	2017 EECRF Over / (Under) Collection of Revenue (6) = (5) - (4)	Net 2017 Over/ (Under) Recovery (7) = (3) + (6)
Residential	\$21,815,105	\$23,547,052	(\$1,731,946)	\$23,547,052	\$24,926,124	\$1,379,072	\$3,111,019
Secondary <= 10 kVA	(\$2,283,405)	(\$2,272,906)	(\$10,499)	(\$2,272,906)	(\$1,490,005)	\$782,902	\$793,400
Secondary > 10 kVA	\$16,662,007	\$18,526,040	(\$1,864,033)	\$18,526,040	\$17,470,558	(\$1,055,481)	\$808,552
Primary	\$4,823,244	\$5,796,813	(\$973,570)	\$5,796,813	\$5,317,786	(\$479,027)	\$494,542
Transmission Non-Profit Governmental	\$16,178	(\$8,045)	\$24,222	(\$8,045)	(\$49,156)	(\$41,111)	(\$65,334)
Transmission - Industrial	(\$97,400)	(\$97,400)	\$0	(\$97,400)	(\$64,880)	\$32,520	\$32,520
Lighting	\$687	\$687	\$0	\$687	\$329	(\$359)	(\$359)
Total	\$40,936,416	\$45,492,241	(\$4,555,825)	\$45,492,241	\$46,110,757	\$618,516	\$5,174,341

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Ties to 2018 EEPR Secti

2017 Actual Expenditures

Schedule I

	2017 Actual Exp.	2015 Bonus	2015 Rate Case Exp.	2017 EM&V Costs	2015 Hist. Admin. Adj.	2015 EECRF Remand	2015 (Over)/Under	Total Per/Class
Residential	\$16,586,002	\$5,483,952	\$18,548	\$274,680	(\$34,637)	(\$104,338)	(\$409,103)	\$21,815,105
Sec < 10	\$490,274	\$137,278	\$464	\$6,876	(\$867)	(\$3,034)	(\$2,914,396)	-\$2,283,405
Sec > 10	\$12,674,595	\$4,073,587	\$13,778	\$204,038	(\$25,729)	(\$38,615)	(\$239,648)	\$16,662,007
Primary	\$1,608,665	\$901,268	\$3,048	\$45,143	(\$5,692)	(\$15,023)	\$2,285,836	\$4,823,244
Trans. Non-Profit	\$61,316	\$11,930	\$40	\$598	(\$75)	(\$6,473)	(\$51,157)	\$16,178
Trans. Indus.	\$0	\$0	\$0	\$0	\$0	(\$97,400)	\$0	-\$97,400
Lighting	\$0	\$0	\$0	\$0	\$0	\$687	\$0	\$687
Totals	\$31,420,852	\$10,608,015	35,879	531,335	(\$67,000)	(\$264,197)	(\$1,328,468)	\$40,936,416

Class	2015 Actual Energy Efficiency Expenditures	% of Total	2015 Performance Bonus	2015 Rate Case Expenses	2017 EM&V Costs Per Tetra Tech	2015 Historical Admin. Adj	2017 EM&V Costs spent of \$531,355	2015 EECRF Remand No. 42359
Residential	\$18,524,336	51.70%	\$5,483,952	\$18,548	\$0	(\$34,637)	\$274,680	(\$104,338)
Secondary <= 10 kVA	\$463,713	1.29%	\$137,278	\$464	\$0	(\$867)	\$6,876	(\$3,034)
Secondary > 10 kVA	\$13,760,240	38.40%	\$4,073,587	\$13,778	\$0	(\$25,729)	\$204,038	(\$38,615)
Primary	\$3,044,407	8.50%	\$901,268	\$3,048	\$0	(\$5,692)	\$45,143	(\$15,023)
Transmission Non- Profit/ Govt	\$40,297	0.11%	\$11,930	\$40	\$0	(\$75)	\$598	(\$6,473)
Transmission - Industrial	\$0	0.00%	\$0	\$0	\$0	\$0	\$0	(\$97,400)
Lighting	\$0	0.00%	\$0	\$0	\$0	\$0	\$0	\$687
Total	\$35,832,993	100.00%	10,608,015	35,879	0	(67,000)	531,335	(264,197)

CenterPoint Energy Houston Electric, LLC
 Applicable: Entire Service Area

6.1.1.6.9 RIDER EECRF – ENERGY EFFICIENCY COST RECOVERY FACTOR

AVAILABILITY

Pursuant to Public Utility Regulatory Act §39.905 and Public Utility Commission of Texas Substantive Rule §25.181, the energy efficiency cost recovery factor (EECRF) is a non-bypassable charge applicable to all Retail Customers.

METHOD OF CALCULATION

EECRF charges shall be calculated annually and shall equal by rate class the sum of: forecasted energy efficiency costs, any adjustment for past over-recovery or under-recovery of EECRF costs, any energy efficiency performance bonus, any previous year’s EECRF proceeding rate case expenses, and any allocated Evaluation, Measurement & Verification (“EM&V”) costs; divided by the forecasted billing units for each class.

MONTHLY RATE

A Retail Customer’s EECRF for the billing month shall be determined by multiplying the appropriate EECRF charge shown below by the Retail Customer’s applicable billing unit for the current month.

Rate Class	EECRF Charge	Billing Unit
Residential Service	\$0.000721	Per kWh
Secondary Service Less than or Equal to 10 kVA	\$0.000198	Per kWh
Secondary Service Greater than 10 kVA	\$0.000538	Per kWh
Primary Service	\$0.000622	Per kWh
Transmission Non-Profit Governmental	\$0.000167	Per kWh
Transmission Service – Industrial	(\$0.000002)	Per kWh
Lighting Services	N/A	

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NOTICE

This Rate Schedule is subject to the Company’s Tariff and Applicable Legal Authorities.

Revision Number: 10th

Effective: 3/1/19

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CenterPoint Energy Houston Electric, LLC

Applicable: Entire Service Area

6.1.1.6.9 RIDER EECRF – ENERGY EFFICIENCY COST RECOVERY FACTOR**AVAILABILITY**

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METHOD OF CALCULATION

EECRF charges shall be calculated annually and shall equal by rate class the sum of: forecasted energy efficiency costs, any adjustment for past over-recovery or under-recovery of EECRF costs, any energy efficiency performance bonus, any previous year's EECRF proceeding rate case expenses, and any allocated Evaluation, Measurement & Verification ("EM&V") costs; divided by the forecasted billing units for each class.

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Primary Service	\$0.000622	Per kWh
Transmission Non-Profit Governmental	\$0.000167	Per kWh
Transmission Service -- Industrial	(\$0.000002)	Per kWh
Lighting Services	N/A	

NOTICE

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