PUC DOCKET NO. _____

§

§

APPLICATION OF CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC FOR APPROVAL OF AN ADJUSTMENT TO ITS ENERGY EFFICIENCY COST RECOVERY FACTOR

PUBLIC UTILITY COMMISSION OF TEXAS

June 1, 2017

§

Contact: Laurie Burridge-Kowalik
Manager of Rates
CenterPoint Energy Service Company, LLC
1111 Louisiana St.
Houston, TX 77002
Tel. No: (713) 207-7245
Fax: (713) 207-0046

laurie.burridge-kowalik@centerpointenergy.com

TABLE OF CONTENTS

<u>Description</u>	Page(s)
Application	2-7
Attachment 1 – Notice	8-9
Attachment 2 – Protective Order	
Testimony	
John R Durland	29-62
Exhibit JRD-1	63-107
Exhibit JRD-2	
Exhibit JRD-3	
Exhibit JRD-4	
Exhibit JRD-5	
Workpapers	160-204
Joseph F. Jernigan	205-220
Exhibit JFJ-1	221-238
Exhibit JFJ-2	239
Exhibit JFJ-3	240

Electronic files: Exhibit JFJ-1.xlsx

APPLICATION OF CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC FOR APPROVAL OF AN ADJUSTMENT TO ITS ENERGY EFFICIENCY COST	<i>\$\times\$</i>	PUBLIC UTILITY COMMISSION OF TEXAS
RECOVERY FACTOR	§	

DOCKET NO.

APPLICATION OF CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC FOR APPROVAL OF AN ADJUSTMENT TO ITS ENERGY EFFICIENCY COST RECOVERY FACTOR

CenterPoint Energy Houston Electric, LLC ("CenterPoint Houston" or the "Company") files this Application for Approval of an Adjustment to Its Energy Efficiency Cost Recovery Factor ("Application").

I. AUTHORIZED REPRESENTATIVES

The telephone number and address of CenterPoint Houston's authorized business representative are:

Laurie A. Burridge-Kowalik
Manager of Rates
CenterPoint Energy, Inc.
1111 Louisiana St.
Houston, TX 77002
713.207.7245
713.207.0046 (fax)
laurie.burridge-kowalik@centerpointenergy.com

The telephone numbers and addresses of CenterPoint Houston's authorized legal representatives are:

Mickey Moon
State Bar No. 00791291
CenterPoint Energy Service Company, LLC
1111 Louisiana, 46th Floor
Houston, Texas 77002
713.207.7231
713.454.7197 (e-fax)
mickey.moon@centerpointenergy.com

Mark Santos
Parsley Coffin Renner LLP
P.O. Box 13366
Austin, TX 78711
512.879.0936
512.879.0912 (fax)
mark.santos@perllp.com

CenterPoint Houston requests that all information and documents in this filing be served on each of the persons above at their respective addresses or fax numbers.

II. JURISDICTION

The Public Utility Commission of Texas ("Commission") has jurisdiction over the Application pursuant to the Public Utility Regulatory Act § 39.905 ("PURA") and 16 Tex. Admin. Code ("TAC") 25.181.

III. AFFECTED PERSONS AND TERRITORIES

The Application affects all retail electric providers ("REPs") serving end-use retail electric customers in CenterPoint Houston's certificated service territory and will affect the retail electric customers of those REPs to the extent the REPs pass along to their customers the charges under Rider EECRF.

IV. 2018 EECRF REQUEST

As set forth in CenterPoint Houston's Energy Efficiency Plan and Report ("EEPR"), the Company's energy efficiency goal for 2018 is a 0.4% reduction in its peak demand of residential and commercial customers.² The projected demand and energy savings necessary to achieve the goal are 61.42 MW and 107,608 MWh.³ In order to achieve its goal and associated projected

¹ TEX. UTIL, CODE ANN., Title 2 (Vernon 2009 and Supp. 2016).

² See 16 TAC 25.181(e)(1)(D). The Company's 2017 EEPR is attached as Exhibit JRD-1 to the Direct Testimony of John Durland.

³ See Direct Testimony of John Durland at Exhibit JRD-1, p. 5.

savings, CenterPoint Houston estimates that it will spend approximately \$36,435,834 on energy efficiency program incentives and administrative costs in 2018.⁴

Additionally, CenterPoint Houston's successful 2016 energy efficiency programs caused the Company to exceed its 2016 energy efficiency goals.⁵ The total avoided cost achieved was \$144,087,143 and the net benefit to ratepayers was equal to \$110,353,348.⁶ Per 16 TAC 25.181(h)(3), the Company's earned performance incentive is equal to 10% of the net benefits achieved or \$11,035,335.

Further, consistent with 16 TAC 25.181 and Commission precedent, the Company: requests recovery of \$1,063,413⁷ in certain Evaluation, Measurement and Verification ("EM&V") expenses assigned to the Company by Commission Staff for the 2017 and 2018 program years; and has included a credit in the amount of \$2,210,578 to account for the over-recovery of energy efficiency revenues during 2016. CenterPoint Houston is also requesting recovery of 2016 Energy Efficiency Cost Recovery Factor ("EECRF") proceeding expenses in the amount of \$73,821.8

Accordingly, and pursuant to PURA § 39.905 and 16 TAC 25.18, CenterPoint Houston requests approval to recover a total of \$46,397,825 through its Rider EECRF in 2018, consisting of: (1) estimated 2018 energy efficiency program costs of \$36,435,834; (2) a performance incentive for 2016 program achievements of \$11,035,335; (3) \$1,063,413 for 2017-2018 EM&V

⁴ Id. This amount does not include 2017-2018 Energy Efficiency Cost Recovery Factor proceeding expenses, which are considered an administrative expense under 16 TAC 25.181(i) but are listed separately in the Application to make them more easily identifiable.

⁵ *Id.* at Exhibit JRD-1, p. 42.

⁶ See Direct Testimony of Joseph F. Jernigan at Exhibit JFJ-1, Schedule E WP1.

⁷ Id. at Schedule F.

⁸ This amount includes the Company's incurred expenses for its 2016 EECRF proceeding, Application of CenterPoint Energy Houston Electric, LLC for Approval of an Adjustment to Its Energy Efficiency Cost Recovery Factor, Docket No. 46014 and expenses incurred by municipalities that participated in that proceeding.

expenses assigned to the Company by Commission Staff; (4) a credit of \$2,210,578 related to the over-recovery of 2016 program costs; and (5) \$73,821 in 2016 EECRF proceeding expenses.

V. DESCRIPTION OF FILING PACKAGE

In support of its request, CenterPoint Houston has included the direct testimony, exhibits and schedules of John R. Durland and Joseph F. Jernigan. Mr. Durland, Manager of Energy Efficiency Compliance for CenterPoint Houston, explains and supports: (1) the background for the Commission's energy efficiency requirements for investor-owned utilities; (2) the reasonableness of CenterPoint Houston's energy efficiency programs and the Company's historical 2016 expenditures; (3) the Company's planned 2018 energy efficiency program expenditures; and (4) how CenterPoint Houston met the Commission's requirements for an energy efficiency performance bonus based on 2016 program achievements and the amount in performance bonus to be included in this year's EECRF filling.

Mr. Jernigan, Senior Regulatory Analyst for CenterPoint Energy Service Company, LLC, explains and supports: (1) the overall level of costs in Rider EECRF to recover energy efficiency costs for 2018; (2) the calculation of rates included in the Company's Rider EECRF for the various rate classes; and (3) the Company's Rider EECRF tariff.

VI. REVIEW OF 2016 PROGRAM COSTS

Pursuant to 16 TAC 25.181(f)(12), the Company is providing the testimony of Mr. Durland to support the reasonableness of its program costs for the 2016 program year. Subsection (f)(12) states that the scope of an EECRF proceeding includes the extent to which the costs recovered through the EECRF complied with PURA and the Commission's rules, and the extent to which the costs recovered were reasonable and necessary to reduce demand and energy growth. As described in Mr. Durland's testimony, the Company's costs recovered through the

EECRF in 2016 complied with PURA and the Commission's rules and were reasonable and necessary to reduce demand and energy growth.

VII. NOTICE

Consistent with the notice provisions in 16 TAC 25.181(f)(13), within seven days of this filing, CenterPoint Houston proposes to provide notice to each party that participated in the Company's 2016 EECRF proceeding, Docket No. 46014;9 to all REPs that are authorized to provide service in CenterPoint Houston's service area at the time the EECRF application is filed; to all parties that participated in the Company's most recent base rate case, Docket No. 38339;10 and to the state agency that administers the federal weatherization program. Attachment 1 to the Application is CenterPoint Houston's proposed form of notice. The Company requests approval of the attached notice as sufficient and in accordance with Commission 16 TAC 25.181(f)(13) and 16 TAC 22.55. The Company will file proof of notice within 14 days after this Application is filed.

VIII. REQUEST FOR PROTECTIVE ORDER

In accordance with 16 TAC 25.181(f)(10)(H), CenterPoint Houston is including with this Application a list of each energy efficiency administrator and/or service provider receiving more than 5% of its overall incentive payments and the percentage of the Company's incentives received by those providers. The rule provides that this information may be treated as confidential. Additionally, in response to requests for information, CenterPoint Houston may be compelled to provide information that is considered confidential or highly sensitive under the Commission's rules, PURA § 32.101 or the Texas Public Information Act. 11

⁹ Application of CenterPoint Energy Houston Electric, LLC for Approval of an Adjustment to Its Energy Efficiency Cost Recovery Factor, Docket No. 46014.

Application of CenterPoint Energy Houston Electric, LLC for Authority to Change Rates, Docket No. 38339.

CenterPoint Houston proposes that the Commission adopt the protective order included as Attachment 2, which is the same protective order approved the Company's last EECRF proceeding, Docket No. 46014.

IX. PRAYER

CenterPoint Houston requests that this Application be granted, that the proposed adjustments to Rider EECRF be approved effective with the commencement of the Company's March 2018 billing month, that the Commission find that the Company's 2016 EECRF program costs were reasonable, and that CenterPoint Houston be granted such other relief to which it may be entitled.

Respectfully submitted,

Mickey Moon

State Bar No. 00791291

CenterPoint Energy Service Company, LLC

1111 Louisiana, 46th Floor

Houston, Texas 77002

713.207.7231

713.454.7197 (e-fax)

mickey.moon@centerpointenergy.com

Mark A. Santos

State Bar No. 24037433

Parsley Coffin Renner LLP

P.O. Box 13366

Austin, TX 78711

512.879,0936

512.879.0912 (fax)

ATTORNEYS FOR CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC

NOTICE OF APPLICATION OF CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC FOR APPROVAL OF AN ADJUSTMENT TO ITS ENERGY EFFICIENCY COST RECOVERY FACTOR

On June 1, 2017, CenterPoint Energy Houston Electric, LLC ("CenterPoint Houston" or the "Company") filed with the Public Utility Commission of Texas ("Commission") an Application for Approval of an Adjustment to Its Energy Efficiency Cost Recovery Factor ("the Application").

CenterPoint Houston's energy efficiency goal for 2018, as required by 16 Tex. ADMIN. CODE ("TAC") §25.181(e)(1)(C)-(D), is a 0.4% reduction in its summer weather-adjusted peak demand for the combined residential and commercial customers for the previous program year. To achieve that goal and the accompanying savings, CenterPoint Houston plans to implement 18 energy efficiency programs in 2018. 16 TAC §25.181(f)(1) permits CenterPoint Houston to recover funding for its energy efficiency programs through an Energy Efficiency Cost Recovery Factor ("EECRF"). The Application therefore seeks recovery of the following costs through Rider EECRF beginning with the commencement of the Company's March 2018 billing month: (1) estimated 2018 energy efficiency program costs of \$36,435,834; (2) a performance incentive for 2016 program achievements of \$11,035,335; (3) \$1,063,413 for 2017-2018 Evaluation. Measurement and Verification expenses assigned to the Company by Commission Staff; (4) a credit of \$2,210,578 related to the over-recovery of 2016 program costs; and (5) \$73,821 in 2016 EECRF proceeding expenses. The Company's total EECRF revenue requirement is \$46,397,825. In addition, pursuant to 16 TAC \$25,181(f)(12), the Company is seeking a determination as to the reasonableness of its program costs for the 2016 program year.

The 2018 Rider EECRF will apply to all retail electric providers ("REPs") serving enduse retail electric customers in CenterPoint Houston's certificated service territory. Rider EECRF will affect the retail electric customers of those REPs to the extent that the REPs pass along to their customers the charges under Rider EECRF.

The 2018 Rider EECRF will include the following charges on bills rendered to REPs:

Rate Class	EECRF Charge	Billing Unit
Residential Service	\$0.000729	Per kWh of Usage Per Month
Secondary Service Less than or Equal to 10 kVA	\$0.001481	Per kWh of Usage Per Month
Secondary Service Greater than 10 kVA	\$0.000612	Per kWh of Usage Per Month
Primary Service	\$0.000560	Per kWh of Usage Per Month
Transmission Non-Profit Governmental	\$0.000280	Per kWh of Usage Per Month
Transmission Service – Industrial	N/A	N/A

Lighting Services	N/A	N/A
-------------------	-----	-----

Persons with questions or who want more information about this filing may contact CenterPoint Energy, 1111 Louisiana, Houston, Texas 77002, or call Ms. Laurie A. Burridge-Kowalik at (713) 207-7245. Persons who wish to intervene in or comment upon these proceedings should notify the Public Utility Commission of Texas as soon as possible, as an intervention deadline will be imposed. A request to intervene or for further information should be mailed to the Public Utility Commission of Texas, P.O. Box 13326, Austin, Texas 78711-3326. Further information may also be obtained by calling the Public Utility Commission of Texas at (512) 936-7120 or (888) 782-8477. Hearing- and speech-impaired individuals with text telephones (TTY) may contact the Commission at (512) 936-7136. All communications should refer to Docket No.

DOCKET IN	<i></i> -	
APPLICATION OF CENTERPOINT	§	
ENERGY HOUSTON ELECTRIC, LLC	§	PUBLIC UTILITY COMMISSION
FOR APPROVAL OF AN	8	
ADJUSTMENT TO ITS ENERGY	§	OF TEXAS
EFFICIENCY COST RECOVERY	§	
FACTOR	§	

DOCKET NO

PROTECTIVE ORDER

This Protective Order shall govern the use of all information deemed confidential (Protected Materials) or highly confidential (Highly Sensitive Protected Materials) by a party providing information to the Public Utility Commission of Texas (Commission), including information whose confidentiality is currently under dispute.

It is ORDERED that:

- 1. Designation of Protected Materials. Upon producing or filing a document, including, but not limited to, records stored or encoded on a computer disk or other similar electronic storage medium in this proceeding, the producing party may designate that document, or any portion of it, as confidential pursuant to this Protective Order by typing or stamping on its face "PROTECTED PURSUANT TO PROTECTIVE ORDER ISSUED IN DOCKET NO. ______" or words to this effect and consecutively Bates Stamping each page. Protected Materials and Highly Sensitive Protected Materials include not only the documents so designated, but also the substance of the information contained in the documents and any description, report, summary, or statement about the substance of the information contained in the documents.
- 2. <u>Materials Excluded from Protected Materials Designation</u>. Protected Materials shall not include any information or document contained in the public files of the Commission or any other federal or state agency, court, or local governmental authority subject to the Texas Public Information Act. Protected Materials also shall not include documents or information which at the time of, or prior to disclosure in a proceeding, is or was public knowledge, or which becomes public knowledge other than through disclosure in violation of this Protective Order.

- 3. Reviewing Party. For the purposes of this Protective Order, a Reviewing Party is a party to this docket.
- 4. Procedures for Designation of Protected Materials. On or before the date the Protected Materials or Highly Sensitive Protected Materials are provided to the Commission, the producing party shall file with the Commission and deliver to each party to the proceeding a written statement, which may be in the form of an objection, indicating: (1) any and all exemptions to the Public Information Act, Tex. Gov't. Code Ann., Chapter 552, claimed to be applicable to the alleged Protected Materials; (2) the reasons supporting the providing party's claim that the responsive information is exempt from public disclosure under the Public Information Act and subject to treatment as protected materials; and (3) that counsel for the providing party has reviewed the information sufficiently to state in good faith that the information is exempt from public disclosure under the Public Information Act and merits the Protected Materials designation.
- 5. Persons Permitted Access to Protected Materials. Except as otherwise provided in this Protective Order, a Reviewing Party shall be permitted access to Protected Materials only through its Reviewing Representatives who have signed the Protective Order Certification Form. Reviewing Representatives of a Reviewing Party include its counsel of record in this proceeding and associated attorneys, paralegals, economists, statisticians, accountants, consultants, or other persons employed or retained by the Reviewing Party and directly engaged in these proceedings. At the request of the Commissioners or their staff, copies of Protected Materials may be produced by the Staff of the Public Utility Commission of Texas (Commission Staff) or the Commission's Policy Development Division (PDD) to the Commissioners. The Commissioners and their staff shall be informed of the existence and coverage of this Protective Order and shall observe the restrictions of the Protective Order.
- Highly Sensitive Protected Material Described. The term Highly Sensitive Protected
 Materials is a subset of Protected Materials and refers to documents or information which

a producing party claims is of such a highly sensitive nature that making copies of such documents or information or providing access to such documents to employees of the Reviewing Party (except as set forth herein) would expose a producing party to unreasonable risk of harm, including but not limited to: (1) customer-specific information protected by § 32.101(c) of the Public Utility Regulatory Act; (2) contractual information pertaining to contracts that specify that their terms are confidential or which are confidential pursuant to an order entered in litigation to which the producing party is a party; (3) market-sensitive fuel price forecasts, wholesale transactions information and/or market-sensitive marketing plans; and (4) business operations or financial information that is commercially sensitive. Documents or information so classified by a producing party shall bear the designation "HIGHLY SENSITIVE PROTECTED MATERIALS PROVIDED PURSUANT TO PROTECTIVE ORDER ISSUED IN DOCKET NO. " or words to this effect and shall be consecutively Bates Stamped in accordance with the provisions of this Protective Order. The provisions of this Protective Order pertaining to Protected Materials also apply to Highly Sensitive Protected Materials, except where this Protective Order provides for additional protections for Highly Sensitive Protected Materials. In particular, the procedures herein for challenging the producing party's designation of information as Protected Materials also apply to information that a producing party designates as Highly Sensitive Protected Materials.

7. Restrictions on Copying and Inspection of Highly Sensitive Protected Material. Except as expressly provided herein, only one copy may be made of any Highly Sensitive Protected Materials except that additional copies may be made in order to have sufficient copies for introduction of the material into the evidentiary record if the material is to be offered for admission into the record. A record of any copies that are made of Highly Sensitive Protected Material shall be kept and a copy of the record shall be sent to the producing party at the time the copy or copies are made. The record shall include

Protected Material shall be made available for inspection only at the location or locations provided by the producing party, except as provided by Paragraph 9. Limited notes may be made of Highly Sensitive Protected Materials, and such notes shall themselves be treated as Highly Sensitive Protected Materials unless such notes are limited to a description of the document and a general characterization of its subject matter in a manner that does not state any substantive information contained in the document.

- 8. Restricting Persons Who May Have Access to Highly Sensitive Protected Material. With the exception of Commission Staff, the Office of Public Utility Counsel (OPC), and the Office of the Attorney General (OAG) when the OAG is representing a party to the proceeding and except as provided herein, the Reviewing Representatives for the purpose of access to Highly Sensitive Protected Materials may be persons who are: (1) outside counsel for the Reviewing Party; (2) outside consultants for the Reviewing Party working under the direction of Reviewing Party's counsel; or (3) employees of the Reviewing Party working with and under the direction of Reviewing Party's counsel who have been authorized by the presiding officer to review Highly Sensitive Protected Materials. The Reviewing Party shall limit the number of Reviewing Representatives that review each Highly Sensitive Protected document to the minimum number of persons necessary. The Reviewing Party is under a good faith obligation to limit access to each portion of any Highly Sensitive Protected Materials to two Reviewing Representatives whenever possible. Reviewing Representatives for Commission Staff, OAG and OPC, for the purpose of access to Highly Sensitive Protected Materials, shall consist of their respective counsel of record in this proceeding and associated attorneys, paralegals, economists, statisticians, accountants, consultants, or other persons employed or retained by them and directly engaged in these proceedings.
- Copies Provided of Highly Sensitive Protected Material. A producing party shall provide one copy of Highly Sensitive Protected Materials specifically requested by the Reviewing

Party to the person designated by the Reviewing Party who must be a person authorized to review Highly Sensitive Protected Material under Paragraph 8, and be either outside counsel or an outside consultant. Other representatives of the reviewing party who are authorized to view Highly Sensitive Material may review the copy of Highly Sensitive Protected Materials at the office of the Reviewing Party's representative designated to receive the information. Any Highly Sensitive Protected documents provided to a Reviewing Party may not be copied except as provided in Paragraph 7 and shall be returned along with any copies made pursuant to Paragraph 7 to the producing party within two weeks after the close of the evidence in this proceeding. The restrictions contained herein do not apply to Commission Staff, OPC, and the OAG when the OAG is representing a party to the proceeding.

- 10. Procedures in Paragraphs 10-14 Apply to Commission Staff, OPC, and the OAG and Control in the Event of Conflict. The procedures set forth in Paragraphs 10 through 14 apply to responses to requests for documents or information that the producing party designates as Highly Sensitive Protected Materials and provides to Commission Staff, OPC, and the OAG in recognition of their purely public functions. To the extent the requirements of Paragraphs 10 through 14 conflict with any requirements contained in other paragraphs of this Protective Order, the requirements of these Paragraphs shall control.
- 11. Copy of Highly Sensitive Protected Material to be Provided to Commission Staff, OPC, and the OAG. When, in response to a request for information by a Reviewing Party, the producing party makes available for review documents or information claimed to be Highly Sensitive Protected Materials, the producing party shall also deliver one copy of the Highly Sensitive Protected Materials to the Commission Staff, OPC (if OPC is a party), and the OAG (if the OAG is representing a party) in Austin, Texas. Provided however, that in the event such Highly Sensitive Protected Materials are voluminous, the materials will be made available for review by Commission Staff, OPC (if OPC is a

party), and the OAG (if the OAG is representing a party) at the designated office in Austin, Texas. The Commission Staff, OPC (if OPC is a party), and the OAG (if the OAG is representing a party) may request such copies as are necessary of such voluminous material under the copying procedures set forth herein.

- Delivery of the Copy of Highly Sensitive Protected Material to Staff and Outside Consultants. The Commission Staff, OPC (if OPC is a party), and the OAG (if the OAG is representing a party) may deliver the copy of Highly Sensitive Protected Materials received by them to the appropriate members of their staff for review, provided such staff members first sign the certification provided in Paragraph 15. After obtaining the agreement of the producing party, Commission Staff, OPC, and the OAG (if the OAG is representing a party) may deliver the copy of Highly Sensitive Protected Materials received by it to the agreed, appropriate members of their outside consultants for review, provided such outside consultants first sign the certification attached hereto.
- Paragraph 7, Commission Staff, OPC, and the OAG may not make additional copies of the Highly Sensitive Protected Materials furnished to them unless the producing party agrees in writing otherwise, or, upon a showing of good cause, the Presiding Officer directs otherwise. Limited notes may be made by Commission Staff, OPC (if OPC is a party), and the OAG (if the OAG is representing a party) of Highly Sensitive Protected Materials furnished to them and all such handwritten notes will be treated as Highly Sensitive Protected Materials as are the materials from which the notes are taken.
- 14. <u>Public Information Requests</u>. In the event of a request for any of the Highly Sensitive Protected Materials under the Public Information Act, an authorized representative of the Commission, OPC, or the OAG may furnish a copy of the requested Highly Sensitive Protected Materials to the Open Records Division at the OAG together with a copy of this Protective Order after notifying the producing party that such documents are being

furnished to the OAG. Such notification may be provided simultaneously with the delivery of the Highly Sensitive Protected Materials to the OAG.

15. Required Certification. Each person who inspects the Protected Materials shall, before such inspection, agree in writing to the following certification set forth in the attachment to this Protective Order:

I certify my understanding that the Protected Materials are provided to me pursuant to the terms and restrictions of the Protective Order in this docket, and that I have been given a copy of it and have read the Protective Order and agree to be bound by it. I understand that the contents of the Protected Materials, any notes, memoranda, or any other form of information regarding or derived from the Protected Materials shall not be disclosed to anyone other than in accordance with the Protective Order and unless I am an employee of Commission Staff or OPC shall be used only for the purpose of the proceeding in DOCKET NO.

________. I acknowledge that the obligations imposed by this certification are pursuant to such Protective Order. Provided, however, if the information contained in the Protected Materials is obtained from independent public sources, the understanding stated herein shall not apply.

In addition, Reviewing Representatives who are permitted access to Highly Sensitive Protected Material under the terms of this Protective Order shall, before inspection of such material, agree in writing to the following certification set forth in the Attachment to this Protective Order:

I certify that I am eligible to have access to Highly Sensitive Protected Material under the terms of the Protective Order in this docket.

A copy of each signed certification shall be provided by the reviewing party to counsel for the producing party and served upon all parties of record.

16. <u>Disclosures Between Reviewing Representatives and Continuation of Disclosure</u>

<u>Restrictions After a Person is no Longer Engaged in the Proceeding.</u> Any Reviewing

Representative may disclose Protected Materials, other than Highly Sensitive Protected

Materials, to any other person who is a Reviewing Representative provided that, if the person to whom disclosure is to be made has not executed and provided for delivery of a signed certification to the party asserting confidentiality, that certification shall be executed prior to any disclosure. A Reviewing Representative may disclose Highly Sensitive Protected Material to other Reviewing Representatives who are permitted access to such material and have executed the additional certification required for persons who receive access to Highly Sensitive Protected Material. In the event that any Reviewing Representative to whom Protected Materials are disclosed ceases to be engaged in these proceedings, access to Protected Materials by that person shall be terminated and all notes, memoranda, or other information derived from the Protected Material shall either be destroyed or given to another Reviewing Representative of that party who is authorized pursuant to this Protective Order to receive the protected materials. Any person who has agreed to the foregoing certification shall continue to be bound by the provisions of this Protective Order so long as it is in effect, even if no longer engaged in these proceedings.

- Producing Party to Provide One Copy of Certain Protected Material and Procedures for Making Additional Copies of Such Materials. Except for Highly Sensitive Protected Materials, which shall be provided to the Reviewing Parties pursuant to Paragraph 9, and voluminous Protected Materials, the producing party shall provide a Reviewing Party one copy of the Protected Materials upon receipt of the signed certification described in Paragraph 15. Except for Highly Sensitive Protected Materials, a Reviewing Party may make further copies of Protected Materials for use in this proceeding pursuant to this Protective Order, but a record shall be maintained as to the documents reproduced and the number of copies made, and upon request the Reviewing Party shall provide the party asserting confidentiality with a copy of that record.
- Procedures Regarding Voluminous Protected Materials. Production of voluminous
 Protected Materials will be governed by P.U.C. PROC. R. 22.144(h). Voluminous

Protected Materials will be made available in the producing party's voluminous room, in Austin, Texas, or at a mutually agreed upon location, Monday through Friday, 9:00 a.m. to 5:00 p.m. (except on state or Federal holidays), and at other mutually convenient times upon reasonable request.

- 19. Reviewing Period Defined. The Protected Materials may be reviewed only during the Reviewing Period, which shall commence upon entry of this Protective Order and continue until the expiration of the Commission's plenary jurisdiction. The Reviewing Period shall reopen if the Commission regains jurisdiction due to a remand as provided by law. Protected materials that are admitted into the evidentiary record or accompanying the evidentiary record as offers of proof may be reviewed throughout the pendency of this proceeding and any appeals.
- 20. Procedures for Making Copies of Voluminous Protected Materials. Other than Highly Sensitive Protected Materials, Reviewing Parties may take notes regarding the information contained in voluminous Protected Materials made available for inspection or they may make photographic, mechanical, or electronic copies of the Protected Materials, subject to the conditions hereof; provided, however, that before photographic, mechanical, or electronic copies can be made, the Reviewing Party seeking photographic, mechanical, or electronic copies must complete a written receipt for copies on the attached form identifying each piece of Protected Materials or portions thereof the Reviewing Party will need.
- Protected Materials to be Used Solely for the Purposes of These Proceedings. All Protected Materials shall be made available to the Reviewing Parties and their Reviewing Representatives solely for the purposes of these proceedings. Access to the Protected Materials may not be used in the furtherance of any other purpose, including, without limitation: (1) any other pending or potential proceeding involving any claim, complaint, or other grievance of whatever nature, except appellate review proceedings that may arise from or be subject to these proceedings; or (2) any business or competitive endeavor of

- whatever nature. Because of their statutory regulatory obligations, these restrictions do not apply to Commission Staff or OPC.
- 22. Procedures for Confidential Treatment of Protected Materials and Information Derived from those Materials. Protected Materials, as well as a Reviewing Party's notes, memoranda, or other information regarding or derived from the Protected Materials are to be treated confidentially by the Reviewing Party and shall not be disclosed or used by the Reviewing Party except as permitted and provided in this Protected Order. Information derived from or describing the Protected Materials shall be maintained in a secure place and shall not be placed in the public or general files of the Reviewing Party except in accordance with the provisions of this Protective Order. A Reviewing Party must take all reasonable precautions to ensure that the Protected Materials including notes and analyses made from Protected Materials that disclose Protected Materials are not viewed or taken by any person other than a Reviewing Representative of a Reviewing Party.
- 23. Procedures for Submission of Protected Materials. If a Reviewing Party tenders for filing any Protected Materials, including Highly Sensitive Protected Materials, or any written testimony, exhibit, brief, motion, or other type of pleading or other submission at the Commission or before any other judicial body that quotes from Protected Materials or discloses the content of Protected Materials, the confidential portion of such submission shall be filed and served in sealed envelopes or other appropriate containers endorsed to the effect that they contain Protected Material or Highly Sensitive Protected Material and are sealed pursuant to this Protective Order. If filed at the Commission, such documents shall be marked "PROTECTED MATERIAL" and shall be filed under seal with the Presiding Officer and served under seal to the counsel of record for the Reviewing Parties. The Presiding Officer may subsequently, on his/her own motion or on motion of a party, issue a ruling respecting whether or not the inclusion, incorporation or reference to Protected Materials is such that such submission should remain under seal. If filing before a judicial body, the filing party: (1) shall notify the party which provided the

information within sufficient time so that the providing party may seek a temporary sealing order; and (2) shall otherwise follow the procedures set forth in Rule 76a, Texas Rules of Civil Procedure.

- 24. Maintenance of Protected Status of Materials During Pendency of Appeal of Order Holding Materials are Not Protected Materials. In the event that the Presiding Officer at any time in the course of this proceeding finds that all or part of the Protected Materials are not confidential or proprietary, by finding, for example, that such materials have entered the public domain or materials claimed to be Highly Sensitive Protected Materials are only Protected Materials, those materials shall nevertheless be subject to the protection afforded by this Protective Order for three (3) full working days, unless otherwise ordered, from the date the party asserting confidentiality receives notice of the Presiding Officer's order. Such notification will be by written communication. This provision establishes a deadline for appeal of a Presiding Officer's order to the Commission. In the event an appeal to the Commissioners is filed within those three (3) working days from notice, the Protected Materials shall be afforded the confidential treatment and status provided in this Protective Order during the pendency of such appeal. Neither the party asserting confidentiality nor any Reviewing Party waives its right to seek additional administrative or judicial remedies after the Commission's denial of any appeal.
- Notice of Intent to Use Protected Materials or Change Materials Designation. Parties intending to use Protected Materials shall notify the other parties prior to offering them into evidence or otherwise disclosing such information into the record of the proceeding. During the pendency of Docket No. _____ at the Commission, in the event that a Reviewing Party wishes to disclose Protected Materials to any person to whom disclosure is not authorized by this Protective Order, or wishes to have changed the designation of certain information or material as Protected Materials by alleging, for example, that such information or material has entered the public domain, such Reviewing Party shall first

file and serve on all parties written notice of such proposed disclosure or request for change in designation, identifying with particularity each of such Protected Materials. A Reviewing Party shall at any time be able to file a written motion to challenge the designation of information as Protected Materials.

- 26. Procedures to Contest Disclosure or Change in Designation. In the event that the party asserting confidentiality wishes to contest a proposed disclosure or request for change in designation, the party asserting confidentiality shall file with the appropriate Presiding Officer its objection to a proposal, with supporting affidavits, if any, within five (5) working days after receiving such notice of proposed disclosure or change in designation. Failure of the party asserting confidentiality to file such an objection within this period shall be deemed a waiver of objection to the proposed disclosure or request for change in designation. Within five (5) working days after the party asserting confidentiality files its objection and supporting materials, the party challenging confidentiality may respond. Any such response shall include a statement by counsel for the party challenging such confidentiality that he or she has reviewed all portions of the materials in dispute and without disclosing the Protected Materials, a statement as to why the Protected Materials should not be held to be confidential under current legal standards, or alternatively that the party asserting confidentiality for some reason did not allow such counsel to review such materials. If either party wishes to submit the material in question for in camera inspection, it shall do so no later than five (5) working days after the party challenging confidentiality has made its written filing.
- 27. Procedures for Presiding Officer Determination Regarding Proposed Disclosure or Change in Designation. If the party asserting confidentiality files an objection, the appropriate Presiding Officer will determine whether the proposed disclosure or change in designation is appropriate. Upon the request of either the producing or reviewing party or upon the Presiding Officer's own initiative, the presiding officer may conduct a prehearing conference. The burden is on the party asserting confidentiality to show that

officer determines that such proposed disclosure or change in designation should be made, disclosure shall not take place earlier than three (3) full working days after such determination unless otherwise ordered. No party waives any right to seek additional administrative or judicial remedies concerning such Presiding Officer's ruling.

- 28. Maintenance of Protected Status During Periods Specified for Challenging Various Orders. Any party electing to challenge, in the courts of this state, a Commission or Presiding Officer determination allowing disclosure or a change in designation shall have a period of ten (10) days from: (1) the date of an unfavorable Commission order; or (2) if the Commission does not rule on an appeal of an interim order, the date an appeal of an interim order to the Commission is overruled by operation of law, to obtain a favorable ruling in state district court. Any party challenging a state district court determination allowing disclosure or a change in designation shall have an additional period of ten (10) days from the date of the order to obtain a favorable ruling from a state appeals court. Finally, any party challenging a determination of a state appeals court allowing disclosure or a change in designation shall have an additional period of ten (10) days from the date of the order to obtain a favorable ruling from the state supreme court, or other appellate court. All Protected Materials shall be afforded the confidential treatment and status provided for in this Protective Order during the periods for challenging the various orders referenced in this Paragraph. For purposes of this Paragraph, a favorable ruling of a state district court, state appeals court, supreme court or other appellate court includes any order extending the deadlines set forth in this Paragraph,
- 29. Other Grounds for Objection to Use of Protected Materials Remain Applicable. Nothing in this Protective Order shall be construed as precluding any party from objecting to the use of Protected Materials on grounds other than confidentiality, including the lack of required relevance. Nothing in this Protective Order constitutes a waiver of the right to argue for more disclosure, provided, however, that unless and until such additional

- disclosure is ordered by the Commission or a court, all parties will abide by the restrictions imposed by the Protective Order.
- 30. <u>Protection of Materials from Unauthorized Disclosure</u>. All notices, applications, responses, or other correspondence shall be made in a manner, which protects Protected Materials from unauthorized disclosure.
- 31. Return of Copies of Protected Materials and Destruction of Information Derived from <u>Protected Materials</u>. Following the conclusion of these proceedings, each Reviewing Party must, no later than thirty (30) days following receipt of the notice described below, return to the party asserting confidentiality all copies of the Protected Materials provided by that party pursuant to this Protective Order and all copies reproduced by a Reviewing Party, and counsel for each Reviewing Party must provide to the party asserting confidentiality a letter by counsel that, to the best of his or her knowledge, information, and belief, all copies of notes, memoranda, and other documents regarding or derived from the Protected Materials (including copies of Protected Materials) that have not been so returned, if any, have been destroyed, other than notes, memoranda, or other documents which contain information in a form which, if made public, would not cause disclosure of the substance of Protected Materials. As used in this Protective Order, "conclusion of these proceedings" refers to the exhaustion of available appeals, or the running of the time for the making of such appeals, as provided by applicable law. If, following any appeal, the Commission conducts a remand proceeding, then the "conclusion of these proceedings" is extended by the remand to the exhaustion of available appeals of the remand, or the running of the time for making such appeals of the remand, as provided by applicable law. Promptly following the conclusion of these proceedings, counsel for the party asserting confidentiality will send a written notice to all other parties, reminding them of their obligations under this Paragraph. Nothing in this Paragraph shall prohibit counsel for each Reviewing Party from retaining two (2) copies of any filed testimony, brief, application for rehearing, hearing exhibit, or other

- pleading which refers to Protected Materials provided that any such Protected Materials retained by counsel shall remain subject to the provisions of this Protective Order.
- 32. Applicability of Other Law. This Protective Order is subject to the requirements of the Public Information Act, the Open Meetings Act, and any other applicable law, provided that parties subject to those acts will give the party asserting confidentiality notice, if possible under those acts, prior to disclosure pursuant to those acts.
- 33. Procedures for Release of Information Under Order. If required by order of a governmental or judicial body, the Reviewing Party may release to such body the confidential information required by such order; provided, however, that: (1) the Reviewing Party shall notify the party asserting confidentiality of such order at least five (5) calendar days in advance of the release of the information in order for the party asserting confidentiality to contest any release of the confidential information; (2) the Reviewing Party shall notify the producing party that there is a request for such information within five (5) calendar days of the date the Reviewing Party is notified of the request for information; and (3) the Reviewing Party shall use its best efforts to prevent such materials from being disclosed to the public. The terms of this Protective Order do not preclude the Reviewing Party from complying with any valid and enforceable order of a state or federal court with competent jurisdiction specifically requiring disclosure of Protected Materials earlier than contemplated herein.
- 34. Best Efforts Defined. The term "best efforts" as used in the preceding paragraph requires that the Reviewing Party attempt to ensure that disclosure is not made unless such disclosure is pursuant to a final order of a Texas governmental or Texas judicial body or written opinion of the Texas Attorney General which was sought in compliance with the Public Information Act. The Reviewing Party is not required to delay compliance with a lawful order to disclose such information but is simply required to timely notify the party asserting confidentiality, or its counsel, that it has received a challenge to the confidentiality of the information and that the Reviewing Party will either proceed under

- the provisions of § 552.301 of the Public Information Act, or intends to comply with the final governmental or court order.
- 35. Notify Defined. Notify, for purposes of Paragraphs 33 and 34, shall mean written notice to the party asserting confidentiality at least five (5) calendar days prior to release; including when a Reviewing Party receives a request under the Public Information Act. However, the Commission, OAG or OPC may provide a copy of Protected Materials to the Open Records Division of the OAG as provided herein.
- 36. Requests for Non-Disclosure. If the producing party asserts that the requested information should not be disclosed at all, or should not be disclosed to certain parties under the protection afforded by this Order, the producing party shall tender the information for in camera review to the presiding officers within ten (10) calendar days of the request. At the same time, the producing party shall file and serve on all parties its argument, including any supporting affidavits, in support of its position of nondisclosure. The burden is on the producing party to establish that the material should not be disclosed. The producing party shall serve a copy of the information under the classification of Highly Sensitive Protected Material to all parties requesting the information that the producing party has not alleged should be prohibited from reviewing the information. Parties wishing to respond to the producing party's argument for nondisclosure shall do so within five working days. Responding parties should explain why the information should be disclosed to them, including why disclosure is necessary for a fair adjudication of the case if the material is determined to constitute a trade secret. If the Presiding Officer finds that the information should be disclosed as Protected Material under the terms of this Protective Order, the Presiding Officer shall stay the order of disclosure for such period of time as the Presiding Officer deems necessary to allow the producing party to appeal the ruling to the commission.
- 37. <u>Sanctions Available for Abuse of Designation</u>. If the Presiding Officer finds that a producing party unreasonably designated material as Protected Material or as Highly

Sensitive Protected Material, or unreasonably attempted to prevent disclosure pursuant to Paragraph 36, the Presiding Officer may sanction the producing party pursuant to P.U.C. PROC. R. 22.161.

- 38. <u>Modification of Protective Order</u>. Each party shall have the right to seek changes in this Protective Order as appropriate from the Presiding Officer.
- 39. <u>Breach of Protective Order</u>. In the event of a breach of the provisions of this Protective Order, the producing party, if it sustains its burden of proof required to establish the right to injunctive relief, shall be entitled to an injunction against such breach without any requirements to post bond as a condition of such relief. The producing party shall not be relieved of proof of any element required to establish the right to injunctive relief. In addition to injunctive relief, the producing party shall be entitled to pursue any other form of relief to which it is entitled.

Protective Order Certification

I certify my understanding that the Protected Materials are provided to me pursuant to terms and restrictions of the Protective Order in this docket, and that I have been given a copy it and have read the Protective Order and agree to be bound by it. I understand that the conte of the Protected Materials, any notes, memoranda, or any other form of information regarding derived from the Protected Materials shall not be disclosed to anyone other than in accordance with the Protective Order and unless I am an employee of Commission Staff or OPC shall used only for the purpose of the proceeding in Docket No I acknowledge that obligations imposed by this certification are pursuant to such Protective Order. Provide however, if the information contained in the Protected Materials is obtained from independing public sources, the understanding stated herein shall not apply.				
Signature	Party Represented			
Printed Name	Date			
I certify that I am eligible to have access of the Protective Order in this docket.	to Highly Sensitive Protected Material under the terms			
Signature	Party Represented			
Printed Name	Date			

I request to view/copy the following documents:

Document Requested	# of Copies	Non-Confidential	Confidential and/or H.S.
		. –	
· · ·			
Signature	Party Rep	resented	 -
Printed Name	Date		

APPLICATION OF CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC FOR APPROVAL OF AN ADJUSTMENT TO ITS ENERGY EFFICIENCY COST RECOVERY FACTOR	<i></i>	PUBLIC UTILITY COMMISSION OF TEXAS
--	---------	---------------------------------------

DOCKET NO.

DIRECT TESTIMONY OF

John R. Durland

FOR

CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC

June 1, 2017

TABLE OF CONTENTS

I.	INTRODUCTION AN	D BACKGR	OUND			
II.	THE COMMISSION'S	ENERGY E	EFFICIENCY F	RULES		
III.	CENTERPOINT HOEFFICIENCY PROGR					
IV.	CENTERPOINT HOU	STON'S 201	6 ENERGY EI	FFICIEN	CY PROGR	AMS 1
V.	PROGRAMS FOR HA	RD-TO-REA	ACH AND LO	W-INCO	ME CUSTO	MERS2
VI.	OVER-RECOVERY O	F PROGRA	M COSTS			2
VII.	II. ENERGY EFFICIENCY PERFORMANCE BONUS24					
VIII	EM&V AND RATE-C	ASE EXPEN	ISES		,	20
IX.	ADMINISTRATION COSTS2					
X.	CONCLUSION	•••••		,	***************************************	3
		TABLE	OF EXHIBITS	s		
Exh	<u>ibit</u>	Description	1			
Exhi	bit JRD-1		t Houston's 201 eport filed in Pr			ficiency
Exhibit JRD-2		Affidavit of Ms. Michelle Townsend				
Exhi	bit JRD-3	Affidavit of	Ms. Mary Kirl	k		
Exhibit JRD-4		Affidavit of	Mr. Randy Su	tton		
Exhibit JRD-5		Affidavit of	Mr. Mickey M	loon		

1		DIRECT TESTIMONY OF JOHN DURLAND
2		I. <u>INTRODUCTION AND BACKGROUND</u>
3	Q.	PLEASE STATE YOUR NAME AND POSITION.
4	A.	My Name is John Durland, Manager of Energy Efficiency Compliance for
5		CenterPoint Energy Houston Electric, LLC ("CenterPoint Houston" or the
6		"Company"). My business address is 1111 Louisiana St., Houston, Texas 77002.
7	Q.	PLEASE SUMMARIZE YOUR EDUCATION AND PROFESSIONAL
8		EXPERIENCE.
9	A.	I started my career in Energy Efficiency with CPS Energy in San Antonio Texas
10		as a consultant in 2010. I managed CPS Energy's residential energy efficiency
11		programs and was responsible for the solar rebate program until I started my
12		career with CenterPoint Energy in August of 2016. I've earned an undergraduate
13		degree in Business Administration, Masters of Business Administration and I am
14		a Certified Energy Manager.
15	Q.	ON WHOSE BEHALF ARE YOU TESTIFYING?
16	A.	I am testifying on behalf of CenterPoint Houston.
17	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY?
18	A.	The purpose of my testimony is to: (1) provide background on the Public Utility
19		Commission of Texas' ("Commission") energy efficiency requirements for
20		investor-owned utilities; (2) support the reasonableness of CenterPoint Houston's
21		energy efficiency programs and the Company's 2016 expenditures on those
22		programs; (3) describe the Company's planned 2018 energy efficiency program
23		expenditures; and (4) explain how CenterPoint Houston met the Commission's

1		requirements for an energy efficiency performance bonus based on 2016 program
2		achievements and the amount of the performance bonus to be included in the
3		Energy Efficiency Cost Recovery Factor ("EECRF").
4	Q.	WHAT EXHIBITS HAVE YOU INCLUDED WITH YOUR TESTIMONY?
5	A.	Exhibit JRD-1 is CenterPoint Houston's 2017 Energy Efficiency Plan and Report
6		- Revision 1 ("EEPR"), filed in Project No. 46907. Exhibit JRD-2 is an affidavit
7		from Ms. Michelle Townsend supporting affiliate expenses. Exhibit JRD-3 is an
8		affidavit from Ms. Mary Kirk verifying accounting practices, and Exhibit JRD-4
9		is an affidavit from Mr. Randy Sutton regarding compensation of employees.
10		Exhibit JRD-5 is an affidavit from Mr. Mickey Moon verifying the Company's
11		rate case expenses.
12	Q.	WERE YOUR TESTIMONY AND THE EXHIBITS ATTACHED
13		THERETO PREPARED BY YOU OR UNDER YOUR DIRECT
14		SUPERVISION AND CONTROL?
15	A.	Yes, they were.
16	Q.	DOES YOUR TESTIMONY RELATE TO THE DIRECT TESTIMONY OF
17		ANY OTHER WITNESS?
18	A.	Yes. Company witness Joe Jernigan's testimony focuses on the design of the
19		tariff and calculation of the rates for the 2018 Rider EECRF.
20	Q.	PLEASE SUMMARIZE THE COSTS REQUESTED BY THE COMPANY
21		IN THIS CASE.
22	A.	As described below and in the testimony of Mr. Jernigan, CenterPoint Houston
23		requests approval to recover a total of \$46,397,825 through its 2018 Rider EECRF

1		consisting of: (1) estimated 2018 energy efficiency program costs of \$36,435,834;
2		(2) a performance bonus for 2016 program achievements of \$11,035,335; (3)
3		\$73,821 in 2016 EECRF rate-case expenses; (4) \$1,063,413 in EM&V cost for
4		2017 and 2018 (EM&V Cost are not currently being recovered for 2017); and (5)
5		a credit of \$2,210,578 for over-recovery of 2016 program costs.
6		II. THE COMMISSION'S ENERGY EFFICIENCY RULES
7	Q.	WOULD YOU PLEASE PROVIDE A SUMMARY OF THE ANNUAL
8		ENERGY EFFICIENCY GOALS PRESCRIBED BY COMMISSION
9		RULES?
10	A.	16 Tex. Admin. Code ("TAC") 25.181(e) requires investor-owned utilities to
l 1.		achieve savings goals through market-based standard offer programs ("SOPs")
12		and limited, targeted, market transformation programs ("MTPs"). Specifically,
13		the rule requires a 0.4% reduction of the electric utility's annual peak demand of
14		residential and commercial customers for the 2014 program year and for
15		subsequent program years. 16 TAC 25.181(m) sets forth the requirements for the
16		SOPs and MTPs.
17	Q.	ARE THERE ANY LIMITS ON WHAT THE COMPANY MAY SPEND IN
18		ORDER TO ACHIEVE THESE GOALS?
19	A.	Yes. 16 TAC 25.181(f)(7) states that the sum of energy efficiency costs shall not
20		exceed the following:
21		 For residential customers for program years 2016 and 2017,
22		\$0.001266 per kWh; and

1		• For residential customers for program year 2018, \$0.001263 per				
2		kWh increased or decreased by a rate equal to the 2016 calendar				
3		year's percentage change in the South urban consumer price index				
4		(CPI), as determined by the Federal Bureau of Labor Statistics;				
5		 For commercial customers for program years 2016 and 2017, rates 				
6		designed to recover revenues equal to \$0.000791 per kWh times				
7		the aggregate of all eligible commercial customers' kWh				
8		consumption; and				
9		• For commercial customers for program year 2018, rates designed				
10		to recover revenues equal to \$0.000790 per kWh increased or				
l 1		decreased by a rate equal to the 2016 calendar year's percentage				
12		change in the South urban CPI, as determined by the Federal				
13		Bureau of Labor Statistics times the aggregate of all eligible				
14		commercial customers' kWh consumption.				
15	Q.	IS THE COMPANY ADMINISTERING ITS ENERGY EFFICIENCY				
16		PROGRAMS IN COMPLIANCE WITH THE COMMISSION'S RULES?				
17	A.	Yes.				
18	Q.	IS THE AMOUNT THAT CUSTOMERS WILL BE REQUIRED TO PAY				
19		AS A RESULT OF THE COMPANY'S EECRF REQUEST LESS THAN				
20		THE BUDGET CAP IMPOSED BY 16 TAC 25.181(F)(7)?				
21	A.	Yes. If the Company's request is approved as filed, the 2018 residential monthly				
22		per-customer EECRF charge will be \$0.000729 per kWh, Secondary Service Less				
23		than or Equal to 10 kVA will be \$0.001481 per kWh, Secondary Service Greater				

1		than 10 kVA will be \$0.000612 per kWh, Primary Service will be \$0.000560 per
2		kWh, Transmission Service - Non-Profit Governmental will be \$0.000280 per
3		kWh.
4	Q.	HAVE THERE BEEN ANY STATUTORY CHANGES TO SECTION
5		39.905 OF THE PUBLIC UTILITY REGULATORY ACT ("PURA")
6		SINCE THE COMPANY'S LAST EECRF FILING?
7	A.	No.
8 9		III. CENTERPOINT HOUSTON'S CURRENT AND FUTURE ENERGY EFFICIENCY PROGRAMS
10	Q.	PLEASE DESCRIBE THE ENERGY EFFICIENCY PROGRAMS
11		CENTERPOINT HOUSTON CURRENTLY OFFERS.
12	A,	CenterPoint Houston currently offers nineteen programs. These programs target
13		broad market segments as well as specific market sub-segments and technologies.
14		Six programs target the Company's commercial customers, nine programs involve
15		residential customers, and four programs serve the hard-to-reach class. The
16		nineteen programs are listed as follows:
17	1.	Commercial Standard Offer Program (SOP)
18	2.	Large Commercial Load Management (MTP)
19	3.	Commercial Market Transformation Program; SCORE, Healthcare, Data Center
20		Program
21	4.	Retro-Commissioning MTP
22	5.	Sustainable Schools MTP
23	6.	REP (Commercial CoolSaver)
24	7.	CenterPoint Energy High Efficiency Homes MTP
25	8.	Advanced Lighting Residential MTP
26	9.	
27	10	REP (Residential CoolSaver and Efficiency Connection)
28	11	. Smart Pool Program Residential MTP
29	12	. Multi-Family Market Rate MTP

I 13. I	Residential	Demand	Response	SOP
---------	-------------	--------	----------	-----

- 2 14. Residential & Small Commercial (SC) SOP
- 3 15. Energy Wise Resource Action MTP
- 4 16. Hard-to-Reach SOP
- 5 17. Multi-Family MTP HTR
- 6 18. Targeted Low Income MTP (Agencies in Action)
- 7 19. REP (CoolSaver Income Qualified)
- 8 A description of each program can be found in Section I of Exhibit JRD-1.

9 Q. DOES CENTERPOINT HOUSTON OFFER ENERGY EFFICIENCY

10 PROGRAMS TO ALL OF ITS ELIGIBLE CUSTOMERS?

- 11 A. Yes. CenterPoint Houston's energy efficiency programs meet the Commission's
- requirement in 16 TAC 25.181(a) that all eligible customers "have a choice of and
- access to the utility's portfolio of energy efficiency programs that allow each
- customer to reduce energy consumption, summer and winter peak demand, or
- 15 energy costs."

16 O. WILL CENTERPOINT HOUSTON OFFER THE SAME 2017 ENERGY

17 EFFICIENCY PROGRAMS IN 2018?

- 18 A. No. The Energy Wise Resource Action Program will not be offered in 2018. The
- 19 Sustainable Schools Program will be consolidated into other MTP's and the
- 20 Commercial Pool Pump program has been eliminated as a standalone program.

21 Q. WHAT IS THE COMPANY'S 2018 ENERGY EFFICIENCY PROGRAM

- 22 BUDGET?
- 23 A. The total 2018 program budget amount reflected in Table 6 of Section IV of
- Exhibit JRD-1 is \$36,435,834 excluding any EM&V costs.

1	Q.	HOW DID CENTERPOINT HOUSTON DETERMINE THE BUDGET
2		FOR ITS ENERGY EFFICIENCY PROGRAMS IN 2018?
3	A.	Several factors went into the determination of CenterPoint Houston's 2018 energy
4		efficiency budget. First and foremost, CenterPoint Houston must meet the
5		requirements set forth in PURA § 39.905 and 16 TAC 25.181. The key
6		requirements of the statute and rule can be summarized as follows:
7		 Meet a demand goal of a 0.4% reduction of peak demand;
8		• Meet an energy goal based on a 20% capacity factor applied to the
9		demand goal;
10		• Achieve savings for hard-to-reach customers of at least 5% of the total
11		demand goal;
12		Offer programs to all eligible customer classes;
13	•	• Ensure programs are cost-effective;
14		Budget not less than 10% of the energy efficiency program on the targeted
15		low-income energy efficiency program; and
16		Spend up to 15% of total program cost on program administration and up
17		to 10% of costs on R&D but spend no more than 20% on program
18		administration and R&D combined.
19		Other key factors that played a role in establishing CenterPoint Houston's 2018
20		energy efficiency budget included:
21		 Maintaining the continuity of standard offer and MTPs;
22		Responding to market and customer needs;

I		Positioning CenterPoint Houston to meet future goals through R&D and
2		pilot program investments; and
3		Ramping up programs that are particularly cost-effective and will be relied
4		on to meet future goals.
5		Additional details of CenterPoint Houston's 2018 energy efficiency budget can be
6		found in Exhibit JRD-1.
7	Q.	PLEASE EXPLAIN THE BASIS FOR THE \$4,435,834 OF PROJECTED
8		2018 ADMINISTRATION COSTS AS SHOWN ON TABLE 6 OF EXHIBIT
9		JRD-1.
10	A.	The estimated administration costs include labor to administer the programs,
11		outreach for those programs, research and development ("R&D") projects and
12		verification activities. To project the 2018 costs, I started with 2016 actual costs,
13		increased those costs to account for expanded programs in 2017 and additional
ι4		labor to run those programs, and then further adjusted those 2017 costs based on
15		expected 2018 programs to meet 2018 goals as well as future goal requirements.
16		The budgeted amount is less than the 20% limit on administration and R&D
17		combined costs provided by the Commission's Substantive Rules.
18	Q.	PLEASE EXPLAIN THE BASIS FOR THE \$325,000 OF PROJECTED
19		2018 R&D COSTS AS SHOWN ON TABLE 6 OF EXHIBIT JRD-1.
20	A.	To stimulate the market for new energy efficiency technologies, the Company
21		budgeted that amount for the continuation of Research and Development projects
22		in 2018. Current R&D projects are described on pages 20 and 21 of Exhibit
23		JRD-1. That budgeted amount is reasonable based on prior years' budgets and

1		possible new programs and is less than the 10% limit on recoverable R&D costs
2		provided by the Commission's Substantive Rules. As in past years, additional
3		projects may be added during the 2018 program year as needed or as demand
4		increases.
5	Q.	WOULD YOU PROVIDE AN EXAMPLE OF A COMPANY R&D
6		PROJECT OR PILOT PROGRAM AND EXPLAIN HOW THE
7		COMPANY IMPLEMENTS THOSE PROGRAMS?
8	A.	Yes, CenterPoint Energy will partner with Aiqueous, a water conservation
9		organization to study potential energy efficiency opportunities that may be
10		obtained through the 2017 State-wide water plan. The project will review what
11		approved Region H (CenterPoint Energy territory) water plan projects will affect
12		electric use and demand. In addition, the study will determine what technologies
13		and strategies could drive energy efficiency improvements and how CenterPoint
14		Energy could engage with the local water districts and utilities. This study will
15		provide potential outreach opportunities for CenterPoint Energy.
16	Q.	WHAT SAVINGS WILL OCCUR IF THE COMPANY SUCCESSFULLY
17		IMPLEMENTS ITS PLANNED ENERGY EFFICIENCY PROGRAMS IN
18		2018?
19	A.	The Company projects program savings at the meter of 161.56 MW and 197,297
20		MWh for 2018. Please see Table 5 in Exhibit JRD-1 for additional detail.

1	Q.	PLEASE COMMENT ON THE OVERALL COST-EFFECTIVENESS OF
2		CENTERPOINT HOUSTON'S 2018 ENERGY EFFICIENCY
3		PROGRAMS.
4	A.	The average cost of peak demand reduction expected by CenterPoint Houston's
5		programs in 2018 is projected to be approximately \$40 per kW.1 We expect a
6		general decrease in cost effectiveness in the future due to decreasing avoided cost
7		of energy, higher baselines, and increasing customer adoption rates for 2018.
8		Nevertheless, CenterPoint Energy Efficiency programs continue to offer excellent
9		ratepayer value and cost effectiveness is expected to fluctuate with changes in
10		avoided cost and customer adoption cycles of technology.
11 12		IV. <u>CENTERPOINT HOUSTON'S 2016 ENERGY EFFICIENCY</u> <u>PROGRAMS</u>
13	Q.	WHAT FACTORS HAVE BEEN IDENTIFIED BY THE COMMISSION
14		AS RELEVANT TO THE EVALUATION OF ENERGY EFFICIENCY
15		PROGRAM COSTS?
16	A.	16 TAC 25,181(f)(12) explicitly identifies certain factors that are to be addressed
17		in the evaluation of program costs. I address each of these factors below.
18	Q.	CAN YOU PROVIDE A BRIEF SUMMARY OF HOW CENTERPOINT
19		HOUSTON HAS DEVELOPED AND IMPLEMENTED ITS ENERGY
20		EFFICIENCY PROGRAM PORTFOLIO?
21	A.	The Company has been developing and implementing an energy efficiency
22		program portfolio since 2002 when the Legislature began requiring utilities to
23		achieve savings equal to a 10% reduction in annual growth in demand for

¹ Total Projected Program Spend in 2018 divided by Projected Demand Savings using a 5.5 year EUL.

	residential and commercial customers. In 2005, as a result of a settlement in its
	then pending base rate case,2 CenterPoint Houston's existing programs were
	expanded to include additional low-income and hard-to-reach programs. Since
	2009, following the Legislature's direction related to increasing goals, these
	programs have been further expanded. Throughout this entire period, the
	Company has consistently and diligently followed Commission rule requirements,
	engaged program participants and stakeholders for feedback on market demand
	and needs (both inside and outside of the Energy Efficiency Implementation
	Project process), and developed an annual review process for assessing
	accomplishment and challenges in individual programs. In recent years, this
	annual review has taken place after the close of the calendar year while the
	Company was preparing its annual EEPR filing and allows the Company to
	annually assess the effectiveness of the program portfolio and make necessary
	changes in order to maintain successful and cost effective programs.
Q.	PLEASE ASSESS THE OVERALL SUCCESS OF AND BENEFITS
	PROVIDED BY CENTERPOINT HOUSTON'S ENERGY EFFICIENCY
	PROGRAMS.
A.	CenterPoint Houston's energy efficiency programs have performed well and
	achieved significant benefits. The Company exceeded its energy efficiency goal
	each year since the inception of the initial rules. In 2016, over 50,000 customers
	participated in and benefited from the programs. Demand was reduced by 167

MWs and energy savings were over 190,000 MWHs. The Company achieved

² See Petition by Commission Staff for a Review of the Rates of CenterPoint Energy Houston Electric LLC Pursuant to PURA § 36.151, Docket No. 32093 (Sep. 5, 2006).

1		282% of the statutory peak demand reduction goal and 183% of the energy goal.
2		CenterPoint Houston's low-income customers also benefited greatly from the
3		Company's energy efficiency program in 2016, with \$4,970,045 out of total
4		expenditures of \$33,110,909 (approximately 15%) going to low-income
5		programs. Over 4,127 low-income customers participated in 2016 programs, and
6		these customers will enjoy projected electric savings that total more than 5.8MW
7		and 7,712MWH.
8	Q.	WHAT WERE CENTERPOINT HOUSTON'S ENERGY EFFICIENCY
9		PROGRAM COSTS IN 2016?
10	A.	\$33,110,909, The Company's historical program costs are provided on Table 10
11		of the EEPR, Exhibit JRD-1.
12	Q.	WERE THE COMPANY'S ENERGY EFFICIENCY PROGRAM COSTS
13		LESS THAN OR EQUAL TO THE AVOIDED COST OF THOSE
14		PROGRAMS, AS CALCULATED PER SUBSECTION (d) OF 16 TAC
15		25.181?
16	A.	The energy efficiency program costs were less than the avoided cost of those
17		programs, resulting in positive total benefits to ratepayers.
18	Q.	HAVE CENTERPOINT HOUSTON'S SAVINGS BEEN ACHIEVED IN A
19	,	MANNER THAT IS CONSISTENT WITH THE COST-EFFECTIVENESS
20		STANDARD IN 16 TAC 25.181?
21	A.	Yes. The Company's portfolio of programs exceeds CenterPoint Houston's
22		energy efficiency goals while staying within the costs caps established under 16
23		TAC 25.181(f)(7).

1	Q.	THE FINAL ORDER IN DOCKET 46014 LAST YEAR'S ENERGY
2		EFFICIENCY COST RECOVER FACTOR FILING, REQUIRED
3		CENTERPOINT HOUSTON TO WORK WITH COMMISSION STAFF
4		REGARDING THE COST EFFECTIVENESS OF CERTAIN PROGRAMS.
5		HAS THAT REQUIREMENT HAS BEEN MET?
6	A.	Yes. CenterPoint Houston has met with Commission Staff to discuss the three
7		programs identified in last year's final order as not cost-effective. With respect to
8		the Energy Wise Resource Action Program, the vendor reduced the cost of the kit
9		to finish the school year with an anticipated cost effectiveness that exceeds 1.0.
10		The Commercial Pool Pump program has been eliminated in 2017 as a standalone
11		program. CenterPoint Energy worked with the vendor in an attempt to develop a
12		more cost effective program, however, we were unable to come to an agreement
13		and the program is not accepting applications in 2017. Finally, the Income
14		Qualified CoolSaver Program is now cost effective and reported a cost
15		effectiveness score of 1.0.
16	Q.	WHAT DO SECTION 39.905 OF PURA AND 16 TAC 25.181 SAY ABOUT
17		MATCHING OF COSTS AND REVENUE?
18	A.	Section 39.905(b-1) is set out below.
19 20 21 22 23 24 25		The energy efficiency cost recovery factor under Subsection (b)(1) may not result in an over-recovery of costs but may be adjusted each year to change rates to enable utilities to match revenues against energy efficiency costs and any incentives to which they are granted. The factor shall be adjusted to reflect any over-collection or under-collection of energy efficiency cost
25		recovery revenues in previous years.

1		This provision calls for a process of setting rates to match revenues and costs of
2		the energy efficiency program. In this context, the first sentence, which says that
3		an EECRF may not result in an over-recovery of costs, suggests the kind of
4		process that the Commission has established in 16 TAC 25.181 ("Rule"), in which
5		rates are adjusted on an annual basis. This annual adjustment process prevents the
6		over-recovery of energy efficiency program costs. Among the provisions of the
7		Rule that address the matching issue in Section 39.905(b-1) are provisions that
8		require the review of key rate elements in each EECRF, namely, estimated costs
9		in subsection (f)(12)(A), calculations of over- or under-recovery of costs in
10		subsection (f)(12)(B), cost allocations in subsection (f)(12)(D), estimated billing
11		determinants in subsection (f)(12)(E), and system losses and line losses in
12		subsection (f)(12)(F).
13	Q.	HAVE CENTERPOINT HOUSTON'S COSTS AND REVENUES
14		MATCHED?
15	A.	Yes. As detailed below and in the testimony of Joe Jernigan, in 2016 CenterPoint
16		Houston had an over-recovery of \$2,210,578 on \$33,110,909 of program
17		expenditures. The Company proposes to return \$1,752,245 in over-collection for
18		2016 residential programs to residential customers and to return \$458,333 in
19		over-collection for 2016 commercial programs to commercial customers.
20	Q.	HAVE LINE LOSSES BEEN FACTORED INTO THE CALCULATION
21		OF THE COMPANY'S GOALS?
22	A.	Yes. The line loss values approved in the latest CenterPoint Energy Houston
23		Electric rate case, Docket 38339 were incorporated into the peak demand values

1		used to calculate the MW goal. Line loss values for each rate class were weighted
2		according to 2016 program participation to arrive a cumulative line loss of
3		5.11%.3
4	Q.	HAVE ANY EXISTING MARKET CONDITIONS IN THE COMPANY'S
5		SERVICE TERRITORY AFFECTED CENTERPOINT HOUSTON'S
6		ENERGY EFFICIENCY COSTS?
7	A.	While CenterPoint Houston has been able to keep its program costs low and
8		maintain the cost effectiveness of its programs over the years, market conditions
9		are increasing program costs gradually. As an example, as more energy efficient
10		lighting is adopted in the market potential savings are reduced by free ridership
11		and increased baselines. Energy savings have to come from incorporating new
12		technology like occupancy sensors which cost more for less demand reduction.
13	Q.	WERE THE ENERGY EFFICIENCY COSTS INCURRED BY
14		CENTERPOINT HOUSTON CONSISTENT WITH THE
15		ACHIEVEMENTS OF ITS ENERGY EFFICIENCY PROGRAMS IN 2016?
16	A.	Yes. CenterPoint Houston's programs produced over \$110 million in net benefits
17		in 2016.
18	Q.	HOW DO CENTERPOINT HOUSTON'S COSTS COMPARE TO COSTS
19		IN OTHER MARKETS WITH SIMILAR CONDITIONS?
20	A.	CenterPoint Houston's portfolio of programs is the lowest cost, on a total
21		dollar-per-kW achieved basis, of all the ERCOT utilities.4

Refer to JRDWP1 for detailed line loss calculation
 Refer to JRDWP2 for a detailed calculation of portfolio costs versus other ERCOT utilities.

1	Q.	HAVE ANY CIRCUMSTANCES CHANGED IN THE COMPANY'S
2		SERVICE TERRITORY THAT AFFECTED CENTERPOINT
3		HOUSTON'S ABILITY TO IMPLEMENT ANY OF ITS ENERGY
4		EFFICIENCY PROGRAMS?
5	A.	Not materially. Market conditions in the CenterPoint Houston service territory
6		have generally been consistent over time and this consistency has helped the
7		Company to reach its goals.
8	Q.	HOW DID THE NUMBER OF ENERGY EFFICIENCY SERVICE
9		PROVIDERS OPERATING IN THE COMPANY'S TERRITORY AFFECT
10		ITS ABILITY TO IMPLEMENT PROGRAMS IN 2016?
11	A.	Since 2002, CenterPoint Energy has attempted to encourage the growth of service
12		providers in its territory. The Company has furthered this development through
13		training, seminars, and adjusting to changes in the market as they arise. Annually,
14		the number of service providers available has been sufficient for the Company to
15		meet its goals.
16	Q.	WERE THE COMPANY'S PROGRAMS IMPLEMENTED IN
17		ACCORDANCE WITH RECOMMENDATIONS OF THE
18		COMMISSION'S EM&V CONTRACTOR?
19	A.	Yes. CenterPoint Energy Houston Electric has incorporated or conformed to all of
20		the applicable recommendations made by the EM&V Contractor.

1	Q.	CAN YOU DESCRIBE THE COMPANY'S BIDDING AND
2		ENGAGEMENT PROCESS FOR CONTRACTING WITH PROGRAM
3		IMPLEMENTERS AND/OR PROGRAM ADMINISTRATORS?
4	A.	The selection process for energy efficiency program implementers and/or
5		program administrators is governed by the Company's Purchasing Policy.
6		CenterPoint Energy's Purchasing Policy (February 18, 2016) states:
7 8 9 10 11 12 13 14 15 16 17		Competitive bidding is required for all purchases that equal or exceed \$50,000. As part of that process, if there are compelling business reasons to forgo the bidding process and award a sole source contract, or if competitive bids have been received and evaluated, and a decision is made not to award the ensuing purchase to the lowest evaluated bidder, CNP Purchasing and the requisition initiator must agree on and document the decision in sufficient detail to justify it. The requisition, including the sole source or premium justification documentation, must be properly approved by the next authorization level above that required for the transaction in the Authorization Policy.
19		The steps to the formal competitive bid process, which may vary slightly
20		depending on the nature of the project, are outlined below:
21		1. Secure Authorization for the purchase per Authorization Policy
22		2. Collaborate with Client to define the Scope of Work/Specifications,
23		including
24		3. Contract Value and Term
25		4. Compensation basis
26		5. Contract form & format
27		6. Determine performance metrics/service level agreement
28		7. Develop RFP Document
29		8. Create Bid Sheet or Salary/Task Matrix

Direct Testimony of John Durland CenterPoint Energy Houston Electric, LLC Energy Efficiency Cost Recovery Factor Filing

1		9. Determine the Evaluation Criteria and weights (weights are not
2		disclosed to RFP participants)
3		10. Establish Contract Documents (Terms and Conditions, Compensation
4		Schedule, NDA, Supplier Diversity Documents)
5		11. Pre-qualify Bidders (include MWBEs or justify exclusion)
6		12. Distribute RFP Document via electronic sourcing system (ESO)
7		13. Pre-Bid Conference (optional)
8		14. Close of Vendor Questions
9		15. Proposal Submittal
10		16. Proposal Evaluation
11		17. Determine "Short List" (optional)
12		18. Vendor Presentations/Site Visit (optional)
13		19. Preliminary Award
14		20. Contract Negotiation
15		21. Final Award
16		22. Executive Approval
17		23. Implementation
18	Q.	HAS CENTERPOINT HOUSTON PROVIDED A LIST OF ALL ENERGY
19		EFFICIENCY SERVICE PROVIDERS IN THIS FILING CONSISTENT
20		WITH 16 TAC 25.181(f)(10)(K)'S DIRECTION?
21	A.	Yes, a confidential list of all energy efficiency service providers can be found in
22		my workpapers. ⁵

⁵ JRDWP3 –Energy Efficiency Service Providers.

1	Q.	CAN YOU SPEAK TO HOW CENTERPOINT HOUSTON HAS
2		EVALUATED CUSTOMER PARTICIPATION IN ITS PROGRAMS AND
3		IMPLEMENTED CHANGES TO GENERATE MORE PARTICIPATION
4		OR TRANSFORM THE MARKET FOR THE COMPANY'S PROGRAMS?
5	A.	CenterPoint Houston continues to review its programs on an annual basis to
6		determine if adjustments are needed to generate more participation. CenterPoint
7		Houston reviews participation levels at both the program and measure
8		level. Program adjustments can include raising or lowering incentive payments,
9		adding or removing measures, or instituting new program rules based on changes
10		in market conditions and/or Commission rules.
11	Q.	HAS CENTERPOINT HOUSTON SET ITS INCENTIVE PAYMENTS
12		WITH THE OBJECTIVE OF ACHIEVING ITS ENERGY AND DEMAND
13		GOALS AT THE LOWEST REASONABLE COST PER PROGRAM?
14	A.	Yes. Through the annual review process described above, the Company
15		consistently evaluates its incentive payment levels to ensure that its programs are
16		provided at the lowest reasonable cost.
17	Q.	CAN YOU SPEAK TO THE REASONABLENESS OF CENTERPOINT
18		HOUSTON'S R&D AND ADMINISTRATIVE COSTS IN 2016?
19	A.	The table below compares research and development costs to the prior year's
20		actual level of total program costs. As this table shows, the research expenditures
21		were well below the 10% cap in subsection (e) of the statute and subsection (i) of
22		the rule.

Year	Research and	Prior Year	R&D Costs as
	Development	Total Program	Percentage of Prior
	Costs	Costs	Year Total Costs
2016	\$322,930	\$33,110,909	.98%

The table below compares administration costs to total program costs and compares the sum of administration and R&D costs to the current year's level of total program costs. The information in the table shows that the administration costs were below the 15% cap in the rule and the combined administration and R&D costs were below the 20% cap in the rule.

A.

Year	Administration Costs	Administration + R&D Costs	Current Year Total Program Costs	Admin. Costs as % of Total	Admin. + R&D as % of Total
2016	\$3,482,074	\$3,805,004	\$33,110,909	10.5%	11.49%

In sum, the R&D costs and total administrative costs are well below the caps established by the statute and the rule. In addition, the challenging environment in which the Company has operated its energy efficiency program warrants a strong research effort to maintain the effectiveness of the program.

Q. HAS THE COMPANY COMPLIED WITH ANY OTHER RELEVANT COMMISSION RULES WITH RESPECT TO ITS HISTORICAL EECRF PROGRAM EXPENDITURES?

Yes. As detailed in the attached affidavit of Ms. Mary Kirk at Exhibit JRD-3, the Company's books and records have been maintained at all times in accordance with the FERC Uniform System of Accounts, as prescribed by Section 14.151 of PURA, and meet all applicable requirements of 16 TAC 25.72.

	V. <u>PROGRAMS FOR HARD-TO-REACH AND LOW-INCOME</u> <u>CUSTOMERS</u>
Q.	WHAT ARE THE COMMISSION'S REQUIREMENTS REGARDING
	PROGRAM SAVINGS ASSOCIATED WITH HARD-TO-REACH
	CUSTOMERS?
A.	16 TAC 25.181(e)(3)(F) requires that savings achieved through programs for
	hard-to-reach customers shall be no less than 5.0% of the utility's total demand
	reduction goal.
Q.	DID CENTERPOINT HOUSTON MEET THE COMISSION'S
	HARD-TO-REACH REQUIREMENTS IN 2016?
A.	Yes. In 2016, the Company spent \$4,970,045 on programs for hard-to-reach
	customers resulting in a savings of 5.85 MW, which is more than 5.0% of the
	Company's demand reduction goal.
Q.	WILL THE COMPANY MEET ITS HARD-TO-REACH REQUIREMENT
	IN 2018?
A.	Yes. The Company is budgeted to spend \$5,876,040 on programs for
	hard-to-reach customers. The Company anticipates this investment will result in
	4.6 MW in savings, which is more than 5.0% of the Company's demand reduction
	goal.
	A. Q. Q.

1	Q.	DID THE COMPANY HAVE ANY FUNDS THAT WERE NOT
2		OBLIGATED AFTER JULY OF ITS 2016 PROGRAM YEAR THAT IT
3		MADE AVAILABLE FOR USE IN THE HARD-TO-REACH PROGRAMS
4		THAT YEAR?
5	A.	Yes, the Company identified funds available at the end of the third quarter.
6		However only Low Income Weatherization surpassed its forecasted spend.
7	Q.	WHAT ARE THE COMMISSION'S REQUIREMENTS WITH RESPECT
8		TO SPENDING ON PROGRAMS FOR LOW-INCOME CUSTOMERS?
9	A.	Under PURA § 39.905(f) and 16 TAC 25.181(r), each unbundled transmission
10		and distribution utility shall include in its energy efficiency plan a targeted
11		low-income energy efficiency program, including the following requirements:
12		• Each utility shall ensure that annual expenditures for the targeted
13		low-income energy efficiency program are not less than 10% of the
14		utility's energy efficiency budget for the program year.
15		The utility's targeted low-income program shall incorporate a
16		whole-house assessment that will evaluate all applicable energy efficiency
17		measures for which there are commission-approved deemed savings. The
18		cost-effectiveness of measures eligible to be installed and the overall
19		program shall be evaluated using the Savings-to-Investment (SIR) ratio.
20		Any funds that are not obligated after July of a program year may be made
21		available for use in the hard-to-reach program.

1	Q.	DID CENTERPOINT HOUSTON MEET ITS TARGETED LOW-INCOME
2		ENERGY EFFICIENCY PROGRAM REQUIREMENTS IN 2016?
3	A.	Yes. The Company met the requirements of PURA § 39.905(f). Targeted
4		low-income spending was 12% of total spending in 2016.
5	Q.	DOES THE COMPANY ANTICIPATE THAT IT WILL MEET THE
6		TARGETED LOW-INCOME ENERGY EFFICIENCY PROGRAM
7		REQUIREMENTS IN 2018?
8	A.	Yes. CenterPoint Houston estimates that it will spend \$3,846,606 on targeted
9		low-income programs in 2018, which is 10.6% of the Company's total 2017
10		estimate for all energy efficiency programs.
11		VI. OVER-RECOVERY OF PROGRAM COSTS
12	Q.	DO THE COMMISSION'S RULES REQUIRE AN ELECTRIC UTILITY
13		TO ADJUST ITS EECRF FOR THE OVER-RECOVERY OF PROGRAM
14		COSTS?
15	A,	Yes. 16 TAC 25.181(f)(10)(D) states that a utility must include in its EECRF
16		application the amount of any over- or under-recovery energy efficiency program
17		costs whether collected through base rates or the EECRF.
18	Q.	DID CENTERPOINT HOUSTON OVER-RECOVER PROGRAM COSTS
19		FOR 2015 PROGRAMS?
20	A.	Yes. CenterPoint Houston over-recovered program costs in 2016. The total
21		over-recovered amount is \$2,210,578.

1	Q.	WHY DID CENTERPOINT HOUSTON OVER-RECOVER \$2,210,578 IN
2		PROGRAM COSTS IN 2016?
3	A.	The Company spent less on its programs than it originally anticipated and an
4		under-collection occurred due to lower than estimated billing determinants.
5		Program spending was \$2,284,891 under forecast and billing determinants
6		represented \$74,313 of the discrepancy.
7	Q.	HOW DOES THE COMPANY PROPOSE TO ADDRESS THE
8		OVER-RECOVERY OF 2016 PROGRAM COSTS IN THE 2018 RIDER
9		EECRF?
10	A.	As discussed in the direct testimony of Mr. Joe Jernigan and shown in his
11		accompanying workpapers, the Company proposes to return \$1,752,245 in
12		over-collection for 2016 residential programs to residential customers and to
13		return \$458,333 in over-collection for 2016 commercial programs to commercial
14		customers. Please see Mr. Joe Jernigan's direct testimony for further detail.
15		VII. <u>ENERGY EFFICIENCY PERFORMANCE BONUS</u>
16	Q.	WHAT DOES 16 TAC 25.181 PROVIDE REGARDING AN ELECTRIC
17		UTILITY'S ABILITY TO EARN AN ENERGY EFFICIENCY
18		PERFORMANCE BONUS?
19	A.	16 TAC 25.181(h) states that a utility that exceeds its demand reduction goal and
20		does not exceed the cost cap "shall be awarded a performance bonus." (emphasis
21		added) The rule states that the performance bonus shall equal 1% of the net
22		benefits the utility's energy efficiency programs achieve for every 2% that the

1		utility exceeds the demand reduction goal, up to a maximum of 10% of the
2		utility's total net benefits.
3	Q.	DOES CENTERPOINT HOUSTON QUALIFY FOR A PERFORMANCE
4		BONUS BASED ON ITS 2016 ENERGY EFFICIENCY PROGRAMS?
5	A.	Yes. CenterPoint Houston achieved 282% of its 2016 goal, and costs were well
6		within avoided cost limits defined by 16 TAC 25.181. Net benefits (avoided cost
7		minus program costs) generated by the 2016 programs totaled \$110,353,348. The
8		Company's program costs in 2016 were \$33,733,795 inclusive of EM&V
9		expenses and 2016 rate case expenses. CenterPoint Houston is therefore
10		requesting a performance bonus of \$11,035,335.
11	Q.	HOW WAS THE AMOUNT OF THE REQUESTED PERFORMANCE
12		BONUS CALCULATED?
13	A.	A detailed performance bonus calculation can be found in my workpapers and on
14		page 42 of Exhibit JRD-1.6
15	Q.	IS THE AVOIDED COSTS CALCULATION USED TO DETERMINE
16		CENTERPOINT HOUSTON'S PROPOSED ENERGY EFFICIENCY
17		PERFORMANCE BONUS CORRECT AND CONSISTENT WITH THE
18		METHODOLOGY APPROVED BY THE COMMISSION IN DOCKET
19		NO. 42560, APPLICATION OF CENTERPOINT HOUSTON ELECTRIC
20		COMPANY, LLC FOR APPROVAL OF AN ADJUSTMENT TO ITS ENERGY
21		EFFICIENCY COST RECOVERY FACTOR?
22	A.	It is. The avoided costs calculation is provided in my workpapers. ⁷

⁶ JRDWP4 – Detailed Bonus Calculation.

VIII. EM&V AND RATE-CASE EXPENSES 1 2 CAN YOU SPEAK TO THE EM&V COSTS INCLUDED IN THE Q. 3 **COMPANY'S FILING?** Yes, 16 TAC 25.181 was amended in 2012 to include a section detailing the new 4 A. EM&V process. 8 Consistent with that amendment, the Commission has entered 5 into an agreement with an EM&V contractor and that contractor is currently 6 evaluating each utility's programs and the costs incurred. The EM&V 7 contractor's expenses are to be collected through each utility's EECRF, and those 8 costs are not subject to the cost caps established in § 25.181(f)(8) of the rule.9 9 10 HOW WERE THE ESTIMATED EM&V COSTS IN THE FILING Q. 11 **DETERMINED?** The EM&V costs are based on data provided to all Texas utilities from 12 Α. 13 Commission Staff. For program year 2018, the total projected EM&V costs 14 identified at this time are \$1,063,413 for both 2017 and 2018. No EMV projected costs are incorporated into the 2017 Rider EECRF. EM&V cost for 2017 are 15 expected to be \$531,972 and 2018 are expected to be \$531,441, because 2017 16 EM&V cost are not currently being recovered, the cost of both years is requested 17 18 in 2018. Details from the Tetra Tech forecast can be found in Workpaper8.

9Id at 10.

⁷ JRDWP5 – Avoided Cost by EUL

⁸ See P.U.C. SUBST. R. 25.181(q).

1	Q.	PLEASE ADDRESS THE RATE-CASE EXPENSES INCLUDED IN THIS
2		FILING.
3	A.	The Energy Efficiency Rule permits the recovery of rate case expenses through
4		the EECRF process. Specifically, utilities are permitted to include costs relating
5		to the previous year's EECRF proceeding. 10 As such, the Company has included
6		in this filing a request for its 2016 EECRF rate case expenses, which totaled
7		\$73,821. The invoices relating to the Company's 2016 EECRF rate case expenses
8		are included with the affidavit of Mr. Mickey Moon attesting to the
9		reasonableness of those costs at Exhibit JRD-5. A description of how the 2016
10		EECRF rate case expenses are incorporated into the 2018 Rider EECRF rates can
11		be found in Mr. Joe Jernigan's testimony.
12	Q.	WERE THERE ANY MUNICIPAL RATE-CASE EXPENSES IN 2016?
13	A.	Yes, the Company received \$15,327 in invoices from the Gulf Coast Coalition of
14		Cities ("GCCC") and \$14,845 in expenses from the City of Houston that appear to
15		relate to CenterPoint Houston's 2016 EECRF proceeding. These invoices are
16		included in my workpapers and the amounts related to 2016 EECRF municipal
17		rate case expenses have been included in the calculation of the 2018 EECRF. ¹¹
18	Q.	DOES THE COMPANY SUPPORT THE REASONABLENESS OF THESE
19		EXPENSES?
20	A.	CenterPoint Houston does not oppose recovery of GCCC's or The City of
21		Houston's rate-case expenses. However, consistent with prior Commission
22		practice and precedent, the Company believes that GCCC and the City of Houston

 ¹⁶ TAC 25.181(f)(3).
 11 JRDWP6 – GCCC and COH Invoices

1		must support, in the form of testimony or an affidavit, the reasonableness of its
2		own rate case expenses.
3	Q,	ARE THERE ANY OTHER DIFFERENCES IN THIS FILING
4		COMPARED TO THE COMPANY'S PREVIOUS EECRF CASES?
5	A.	No. The Company has supported the reasonableness of its estimated 2018 energy
6		efficiency program costs and corresponding allocations in the same manner as it
7		did in Docket Nos. 36952, 38213, 39363, 40356, 41540, 42560, 44783 and 46014.
8		IX. <u>ADMINISTRATION COSTS</u>
9	Q.	16 TAC 25.181(f)(10)(I) NOW REQUIRES UTILITIES TO PROVIDE AN
10		EXPLANATION OF ANY AFFILIATE AND ADMINISTRATIVE COSTS
11		AS PART OF ITS EECRF APPLICATION. WERE ANY AFFILIATE OR
12		ADMINISTRATIVE COSTS INCLUDED IN THE COSTS RECOVERED
13		THROUGH THE COMPANY'S 2016 EECRFS?
14	A.	Yes. The administrative expenses necessary to implement the Company's energy
15		efficiency programs in 2016 are summarized in my workpapers. 12 A portion of
16		the Company's administrative costs included shared service expenses.
17	Q.	WHAT WAS THE NATURE OF THE AFFILIATE EXPENSE INCURRED
18		IN 2016?
19	A.	All of the affiliate expenses were provided by the Company's Shared Services
20		division. They included IT expenses and were all direct-billed pursuant to the
21		methodology approved by the Commission in the Company's last general
22		rate-case proceeding, Docket No. 38339. Additionally, accompanying my

 $^{^{\}rm 12}$ JRDWP7 – Administrative Expenses.

	testimony at Exhibit JRD-2 is the affidavit of Ms. Michelle Townsend. Ms.
2	Townsend's sworn statement, describes the nature of the costs, confirms that
3	these costs were reasonable and necessary, and demonstrates that the affiliate
1	standard in PURA has been met for recovery of these costs.

Q. PLEASE DESCRIBE THE GENERAL NATURE OF THE REMAINING

ADMINSTRATIVE EXPENSES?

The remaining administrative expenses include labor costs, consultant fees, inspections, and miscellaneous program administrative expenses. CenterPoint Houston's energy efficiency department consists of one Director, a Manager of Compliance, a Manager of Program Implementation, six Energy Efficiency Consultants that are responsible for implementing the programs, one staff engineer as well as other technical support, one Inspection Supervisor that oversees four contract inspectors, and three Administrative and Budget professionals. As noted in the affidavit of Mr. Randy Sutton, accompanying my testimony at Exhibit JRD-4, compensation for Energy Efficiency staff has been determined according to the same corporate methodology approved by the Commission in Docket No. 38339. Additionally, consultant fees are paid to third-party implementers for various programs. These consultants are selected using CenterPoint Houston's previously described bidding and engagement process. Training for Company personnel is offered annually through corporate training programs as well as outside energy efficiency and other professional conferences and seminars.

23

5

6

7

8

10

11

12

13

14

15

16

17

18

19

20

21

22

A.

1	Q.	HAS THE COMPANY MADE ANY ADJUSTMENTS IN THIS FILING TO
2		REMOVE ADMINSTRATIVE EXPENSES?
3	A.	Yes. Prior to this filing, CenterPoint Houston conducted an analysis of its
4		administrative costs and, consistent with Commission precedent and 16 TAC
5		25.181, has made an adjustment of \$4,031 to remove certain expenses. 13
6	Q.	ARE ANY ALLOCATED ADMINISTRATIVE GENERAL COSTS OR
7		ALLOCATED GENERAL PLANT COSTS INCLUDED IN THE EECRF
8		PROGRAM COSTS AND/OR ADMINISTRATIVE COSTS?
9	A.	No.
10	Q.	ARE ANY OUT-OF-STATE TRAVEL, LODGING, MEALS OR
11		CONFERENCE COSTS INCLUDED IN 2016 EECRF EXPENSE?
12	A.	Yes. CenterPoint Houston staff members travel to out-of-state energy efficiency
13		and professional conferences to learn from other utilities and markets in effort to
14		make CenterPoint Houston's energy efficiency programs as effective as possible.
15	Q.	DOES THE ADMINISTRATION OR R&D COSTS INCLUDE SALARIES
16		AND OTHER COMPENSATION FOR ANY EMPLOYEES WHO WORK
17		ON ACTIVITIES OTHER THAN ENERGY EFFICIENCY?
18	A.	No.

¹³ These include certain meals the Company has removed from administrative costs.

1	Q.	HAS THE COMPANY PROVIDED A BREAKDOWN OF 2016
2		ADMINISTRATION AND R&D COSTS EXPENDED ON OUTSIDE
3		CONSULTING SERVICES?
4	A.	Yes. The total amount of 2016 Administration and R&D costs expended on
5		outside consulting services was \$936,626. Workpaper 8 includes a breakdown of
6		the consultant, the cost, and the general description of services rendered.
7		X. <u>CONCLUSION</u>
8	Q.	IS CENTERPOINT HOUSTON'S ESTIMATE REGARDING THE COST
9		TO PROVIDE ITS 2018 ENERGY EFFICIENCY PROGRAM
10		REASONABLE?
11	A.	Yes.
12	Q.	WERE THE COMPANY'S ENERGY EFFICIENCY PROGRAM COSTS
13		IN 2016 REASONABLE, NECESSARY, AND PRUDENTLY INCURRED?
14	A.	Yes.
15	Q.	DOES THE CENTERPOINT HOUSTON APPLICATION FOR AN EECRF
16		COMPLY WITH ALL THE REQUIREMENTS OF THE COMMISSION
17		RULES?
18	A.	Yes,
19	Q.	DOES THIS CONCLUDE YOUR TESTIMONY?
20	A.	Yes.

AFFIDAVIT

The State of Texas §

County of Harris §

BEFORE ME, the undersigned notary public, this day personally appeared John R. Durland, to me known, whom being duly sworn according to law, deposes and says:

"My name is John R. Durland. 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."

John R. Durland

SWORN TO AND SUBSCRIBED before me on the 30 day of May, 2017.

Notary Public in and for the State of Texas

(SEAL)



CenterPoint Energy Houston Electric, LLC

2017 Energy Plan and Report

Pursuant to P.U.C. SUBST. R. § 25.181(n)

Revised

June 1, 2017

Project No. 46907

TABLE OF CONTENTS

<u>Introc</u>	luction	<u>3</u>
EEPF	COrganization	4
Exect	utive Summary	5
<u>Energ</u>	gy Efficiency Plan	<u>7</u>
I.	2017 Programs	<u>7</u>
A	. 2017 Portfolio	7
В	Existing Programs	8
C	. New Programs 2017	21
D	New Programs 2018.	21
II.	Customer Classes	22
III.	Energy Efficiency Goals and Projected Savings	23
IV.	Program Budgets.	26
Energ	zy Efficiency Report	27
V.	Historical Demand Savings Goals and Energy Targets for Previous Five Years	27
VI.	Projected Saving Reported and Verified Demand and Energy Savings	28
VII.	Historical Program Expenditures	30
VIII.	Program Funding for Calendar Year 2016	31
IX.	Market Transformation Program Results	33
X.	Research and Development Results	37
XI.	Administrative Funds Expended	39
XII.	Current Energy Efficiency Cost Recovery Factor EECRF	40
XIII.	Revenue Collected Through EECRF	40
XIV.	Over or Under Recovery of Energy Efficiency Program Costs	40
XV.	Underserved Counties	4 <u>1</u>
XVI.	Performance Bonus Calculation	42
Appe	endix A: Acronyms	<u>43</u>
Appe	endix B: Glossary	44
Appe	endix C: Reported Demand and Energy Reduction by County	45

Introduction

CenterPoint Energy Houston Electric, LLC (CenterPoint Houston) presents this Energy Efficiency Plan and Report (EEPR) to comply with Substantive Rules § 25.181 and § 25.183, which implement Public Utility Regulatory Act (PURA) § 39.905. PURA § 39.905 and Substantive Rule § 25.181 require that each investor-owned electric utility achieve the following savings goal through market-based standard offer programs (SOPs) and limited, targeted, market transformation programs (MTPs):

 0.4% reduction of the electric utility's peak demand of residential and commercial customers for the 2016, 2017 and 2018 program years.

The format used in the EEPR is consistent with the requirements outlined in § 25.181(n) and the Company's 2016 EEPR filing. The EEPR presents the results of CenterPoint Houston's 2016 energy efficiency programs and describes how the company plans to achieve its goals and meet the requirements set forth in § 25.181. Planning information provided focuses on 2017 and 2018 projected savings and projected budgets, as well as information on programs to be offered, and discusses outreach and informational activities and workshops designed to encourage participation by energy service providers and retail electric providers (REPs).

EEPR Organization

This EEPR consists of an executive summary, sixteen sections, and three appendices. Sections one through four explain the planning section of the EEPR, while sections five through eleven present energy efficiency report information. The final five sections address the Energy Efficiency Cost Recovery Factor (EECRF) and the performance bonus achieved in 2016. The three appendices provide a description of the acronyms used throughout the report, give the location of the glossary of commonly used terms, and the demand and energy savings for each program by county.

Executive Summary

The Energy Efficiency Plan portion of this EEPR details CenterPoint Houston's plans to achieve a 0.4% reduction in its peak demand of residential and commercial customers by December 31, 2017, and another 0.4% reduction in its peak demand of residential and commercial customers by December 31, 2018. The Plan also addresses the corresponding energy savings goal, which is calculated from the demand savings goal using a 20% capacity factor. The goals, budgets, and implementation plans that are included in this EEPR are determined by requirements of Rule § 25.181 and the information gained from prior implementation of the selected programs. Table 1 presents a summary of 2017 and 2018 goals, projected savings, and projected budgets.

Table 1: Summary of Annual Goals, Projected Savings and Projected Budgets¹

	Calendar Year	Normalized Peak Demand	MW Goal	Demand (MW) Goal	Energy (MWh) Goal ²	Projected MW Savings	Projected MWh Savings ³	Projected Budget (in 000's)
Annual	2017	15,104	0.4% of peak demand	60.42	105,856	163,03	197,310	\$36,508
Goals	2018	15,354	0.4% of peak demand	61,42	107,608	1 61 .5 6	191,297	\$36,436

Peak Demand figures are from Table 4; Projected Savings from Table 5; Projected Budget from Table 6. All MW and MWh figures in this Table and throughout this EEPR are measured at the meter.

² Calculated using a 20% capacity factor

Peak demand reduction and energy savings projections are for the current and following calendar year that CenterPoint Houston is planning and budgeting for in the EEPR. These projected savings reflect estimates based on information gained from prior implementation of the programs.

In order to reach the projected savings presented in Table 1, CenterPoint Houston will implement the following programs:

- 1. Commercial Standard Offer Program (SOP)
- 2. Large Commercial Load Management (MTP)
- 3. Commercial Market Transformation Program; SCORE, Healthcare, Data Center Program
- 4. Retro-Commissioning MTP
- 5. Sustainable Schools MTP
- 6. REP (Commercial CoolSaver)
- 7. CenterPoint Energy High Efficiency Homes MTP
- Advanced Lighting Residential MTP
- Residential A/C Distributor MTP
- 10. REP (Residential CoolSaver and Efficiency Connection)
- 11. Smart Pool Program Residential MTP
- 12. Multi-Family Market Rate MTP
- 13. Residential Demand Response SOP
- 14. Residential & Small Commercial (SC) SOP
- 15. Energy Wise Resource Action MTP
- 16. Hard-to-Reach SOP
- 17. Multi-Family MTP HTR
- 18. Targeted Low Income MTP (Agencies in Action)
- 19. REP (CoolSaver Income Qualified)

Where applicable program manuals for these programs can be found on CenterPoint Houston's sponsor portal https://centerpoint.anbetrack.com/

As detailed in this report, CenterPoint Houston successfully implemented SOPs and MTPs required by PURA § 39.905 that met the statutory energy efficiency savings goal of 0.4% peak demand reduction. CenterPoint Houston's goals for 2016 were 59.58 MW in peak demand reduction and 104,384 MWh in energy savings. Actual achieved reductions in 2016 totaled 167.7 MW and 190,856 MWh. The total forecasted spending for 2016 was \$35.4 million, actual 2016 spending totaled \$33.1 million.

Energy Efficiency Plan

I. 2017 Programs

A. 2017 Program Portfolio

CenterPoint Houston plans to implement 19 programs in 2017. These programs target both broad market segments and specific market sub-segments that offer significant opportunities for cost-effective savings. CenterPoint Houston anticipates that targeted outreach to a broad range of service providers will be necessary in order to meet the savings goals required by PURA § 39.905 on a continuing basis. Table 2 lists each program and identifies target markets and applications.

Table 2: 2017 Energy Efficiency Program Portfolio

Commercial SOP	Commercial	Retrofit; New Construction
Commercial MTP (SCORE, Healthcare, Data Center)	Commercial	Retrofit; New Construction
Large Commercial Load Management SOP	Commercial	Load Management
Retro-Commissioning MTP	Commercial	Tune-up of existing facilities
Sustainable Schools Program	Commercial	Educational
REP (Commercial CoolSaver)	Commercial	Retrofit
REP (Residential CoolSaver & Efficiency Connection)	Residential	Retrofit
REP (CoolSaver Income Qualified)	Hard-to-Reach	Retrofit
Residential Demand Response SOP	Residential	Load Management
CenterPoint Energy High Efficiency Homes MTP	Residential	New Construction
Residential & SC SOP	Residential & Small Commercial	Retrofit
Advanced Lighting Residential	Residential	Retrofit; New Construction
Residential A/C Distributor MTP	Residential & Small Commercial	Retrofit
Smart Pool Program Residential	Residential	Retrofit; New Construction
Energy Wise Resource Action MTP	Residential	Educational
Hard-to-Reach SOP	Hard-to-Reach	Retrofit
Multi-Family MTP	Residential	New Construction
Multi-Family MTP (HTR)	Hard-to-Reach	New Construction
Targeted Low Income MTP (Agencies in Action)	Hard-to-Reach	Retrofit

The programs listed in Table 2 are described further in sub-section B. CenterPoint Houston maintains two energy efficiency websites⁴: one targeted to the end user and one for project sponsors. The energy efficiency sponsor portal contains requirements for project participation and most of the forms required for project submission. These websites are one method of communication used to provide project sponsors with program updates and information.

B. Existing Programs

Commercial Standard Offer Program (SOP)

Program Design

The Commercial SOP targets commercial customers with incentives paid for a variety of measures installed in new or retrofit applications including Lighting, HVAC, Motors, or other Custom measures.

Implementation Process

CenterPoint Houston will continue implementation of its Commercial SOP whereby any eligible project sponsor may submit an application for qualifying projects.

Outreach and Research activities

- Maintains internet website with program processes on how to register for participation, as well as
 how to input a viable project, detailed project eligibility, end-use measures, incentives,
 workbooks to assist with providing incentive estimates, as well as procedures and application
 forms
- Participates in appropriate industry-related meetings and events to generate awareness and interest
- Conduct workshops as necessary to explain elements such as: responsibilities of the project sponsor, project requirements, incentive information, and the application and reporting process.

CenterPoint Houston energy efficiency website is <u>www.centerpointefficiency.com</u>; CenterPoint Houston's sponsor portal is https://centerpoint.anbetrack.com/

The Commercial Market Transformation Program (MTP)

Program Design

Three Program Offerings: SCORE/CitySmart, Healthcare Energy Efficiency Program (HEEP), and the Data Center Energy Efficiency Program (DCEEP)

The SCORE/CitySmart program targets public and private K-12 schools, higher education, cities, counties, state governmental agencies, non-profit and faith-based organizations. A third party program implementer provides technical assistance, engineering analysis, and performance benchmarking to program participants in order to help them make decisions about cost-effective investments. The SCORE Lite portion of the program provides higher incentives to participants that do not require the technical assistance or engineering analysis provided by the implementer.

The HEEP provides technical support and incentives for implementing energy efficiency projects to eligible healthcare facilities including hospitals, doctors' offices, clinics, laboratories, medical office buildings (MOB), and assisted living/nursing care facilities.

The DCEEP provides technical support and incentives for implementing energy efficiency projects to commercial customers that have a dedicated data center, server room or server closets for specialized IT-related equipment such as data storage, web hosting and telecommunications.

Implementation Process

Commercial Market Transformation Program uses third party implementers to help eligible participants identify energy efficiency measure upgrades in their facilities. The program pays incentives to participants for approved measures that result in both demand and energy savings.

Outreach and Research Activities

- Contracts with third-party program implementers to implement outreach and planning activities
- · Participates in appropriate industry-related meetings and events to generate awareness and interest
- Conducts workshops as necessary to explain elements of program requirements, incentive information, application and reporting processes.

Large Commercial Load Management SOP (CLM)

Program Design

The CLM program will be available to non-residential distribution, governmental, educational, and non-profit customers. Curtailments will be initiated when the Electric Reliability Council of Texas (ERCOT) declares an EEA2 event or deems that an EEA2 event is imminent. Incentives will be paid to project sponsors for measured and verified kW reductions based on their average performance over all events. Participating facilities must be equipped with an Interval Data Recorder (IDR) or smart meter, and be able to curtail a minimum of 100 kW to be eligible.

Implementation Process

Implementation of this program will be through customers and third-party entities representing eligible facilities within the CenterPoint Houston service territory. The CLM will initiate up to a maximum of six events totaling 22 hours per year during the summer on peak period (up to a maximum of 2 test curtailments lasting 1 to 3 hours; and up to a maximum of 4 unscheduled events based on ERCOT EEA2 events lasting 1 to 4 hours each). A 30-minute notice is given to all participants prior to each event.

Outreach and Research Activities

- Maintains program information on the program tracking database.
- Conducts workshops as necessary to explain elements such as responsibilities of the project participant, project requirements, incentive information, and the application and reporting process
- Participates in appropriate industry-related meetings and events to generate awareness and interest.

Retro-Commissioning MTP (RCx)

Program Design

RCx is an optimization program for existing buildings (50,000 square foot and larger) that identifies no-cost or low-cost measures (up to a 3 year simple payback) the customer can implement to reduce the demand and energy usage in commercial facilities. The program is designed to provide end-users with a free engineering analysis to improve the performance within their facilities that will reduce electric demand and consumption. Facility owners are required to implement all of the identified measures with simple payback of less than 1.5 years or pay towards the cost of the analysis. Customers do not receive capital improvement incentives in this program.

Implementation Process

The program is implemented through a third-party implementer. Program information is provided on CenterPoint Houston's website. RCx Agents, typically consulting engineering firms, are used to deliver the program to customers. The engineering analysis is comparable to an ASHRAE Level 2 audit.

- Maintains internet website with detailed project eligibility, procedures, and application forms
- Participates in appropriate industry-related meetings and events to generate awareness and interest
- Conducts workshops as necessary to explain elements such as responsibilities of the project sponsor and RCx Agents, project requirements, incentive information, and the application and reporting process

Sustainable Schools MTP (SSP)

Program Design

The SSP is an energy education and conservation program that targets physical science high school and middle school students and teachers as well as school district energy managers. In the behavioral portion of the program, Sustainability Teams will be formed to promote awareness of energy conservation, set goals for reducing the school's energy consumption, and recommend behavioral changes. This will be accomplished by providing educational supplements, training teachers and students on the use of energy audit kits, and instructions on monitoring the school's energy consumption. Students will be expected to prepare an energy audit report of their findings and present the results to school administration. In the operational portion of the program, CenterPoint Energy and its program implementer will meet with participating district energy managers and facilities staff to target no-cost and low-cost measures that will reduce energy consumption.

Implementation Process

CenterPoint Houston will continue implementation of the SSP through the spring of 2017. Program activities after the spring of 2017 have not been finalized at this time, but may continue in some form thru other existing programs.

- Contracts with a third-party program implementer to implement outreach and planning activities
- Participates in appropriate industry-related meetings and events to generate awareness and interest
- Conducts meetings with potential participants to explain program requirements, potential
 incentives, and education opportunities.

Retail Electric Provider MTP

Program Design

This program offers energy saving products and services to end use residential and/or commercial customers through participating Retail Electric Providers (REPs). Participating REPs market the energy saving measures and services to their customers in the CenterPoint Energy Houston Electric (CEHE) service territory. REPs are able to participate in any or all of the following programs:

- CoolSaver A/C Tune-up Program Residential
- CoolSaver A/C Tune-up Program Commercial
- CoolSaver A/C Tune-up Program Income Qualified
- Efficiency Connection Electronic Marketplace LED Bulbs

CoolSaver A/C Tune-Up Program - Residential, Income Qualified and Commercial

The CoolSaver A/C Tune-up program utilizes specially trained air conditioning contractors to perform comprehensive A/C tune-ups for residential, residential income qualified and commercial customers. The program provides incentives, paid to the A/C contractor, to reduce the customer's upfront cost of system diagnosis and correction. It also provides participating trade allies with training on best practices and discounts on high quality diagnostic tools.

Efficiency Connection Electronic Marketplace – LED Bulbs

Efficiency Connection is an online marketplace that enables customers to shop for discounted energy efficiency products. Through the program's third party vendor, products are delivered directly to qualifying residential customers. Program marketing informs the customer of the importance of installing LED's in high use areas and replacing existing incandescent, fluorescent and halogen lamps to increase savings.

Implementation Process

The Retail Electric Provider program utilizes a third-party program participant or REP to recruit and enroll customers. Incentives are paid to program service providers or contractors for the average verified demand and energy savings achieved through the program.

- Contracts with a third-party program implementer to implement outreach and planning activities
- REPs market the program to existing customers via e-mail, phone calls, social media and direct mail

Residential Demand Response (SOP)

Program Design

The Residential Demand Response program provides demand reduction during the summer peak period, when ERCOT issues an EEA2 emergency alert. Participants are tested twice during the summer peak period and are available for up to five additional demand response events. Events may last from one to four hours and may be initiated Monday through Friday between the hours of 1:00 pm and 7:00 pm. The program begins June 1, and ends on September 31.

Implementation process

The Residential Demand Response program utilizes CenterPoint Energy's internal tracking database to enroll customers who own a Wi-Fi enabled device that can provide curtailment during energy saving events.

Outreach and Research Activities

• Maintains internet website with detailed project eligibility, end-use measures, incentive structure, procedures, application forms and list of third-party project sponsors

CenterPoint Energy High Efficiency Home MTP

The High Efficiency Home MTP incentivizes the construction of efficient homes and educates consumers and contractors on energy efficient practices. To qualify for incentives all homes must achieve 10% kWh savings better than the Texas Baseline Reference Home (TBRH). An additional bonus will be offered for those builders who build ENERGY STAR® certified homes. Each home is reviewed for verifiable demand and energy savings.

Outreach and Research Activities

- Contracts with a third-party program implementer to implement outreach, training and planning activities
- Advertise using a multitude of media, including billboards, radio, TV, point of purchase signage, online and targeted relocation publications, as well as supporting the local home builder association publications

Residential Standard Offer Program (SOP)

Program Design

The Residential SOP targets retrofit measures for residential customers with incentives being paid to project sponsors, for qualifying measures that provide verifiable demand and energy savings. The program is open to all qualifying energy efficiency measures, including, but not limited to: air conditioning, duct sealing, weatherization, ceiling insulation, water saving measures, and ENERGY STAR® windows.

Implementation Process

Any eligible project sponsor may submit an application for a project meeting the minimum requirements. Program information is provided on CenterPoint Houston's website.

Outreach and Research Activities

 Maintains internet website with detailed project eligibility, end-use measures, incentive structure, procedures, application forms and list of third-party project sponsors

15

Advanced Lighting Residential MTP

Program design

This program offers point of purchase discounts to residential customers at participating retail stores for the purchase of qualified (i.e., ENERGY STAR® rated) high efficiency LED lighting products.

Implementation process

The Advanced Lighting program is implemented by a third-party program implementer. Point of purchase discounts will be applied to residential customers at participating retailers, including Home Depot, Lowes, and Sam's Club.

Outreach and Research activities

- In-store promotions of the program via signage
- Participates in appropriate industry-related meetings and events to generate awareness and interest.

A/C Distributor MTP

Program design

The A/C Distributor MTP provides incentives to air conditioning distributors who agree to facilitate the installation of high-efficiency air conditioners and heat pumps in existing single-family and multi-family homes.

Implementation process

Any registered A/C distributor may submit an application for participation in the program. Program information is provided on CenterPoint Houston's website.

- Contracts with a third-party program implementer to implement outreach and planning activities
- Conduct workshops as necessary to explain elements such as responsibilities of the distributors and contractors, program requirements, incentive information, and the application and reporting process

Smart Pool Program Residential MTP

Program Design

The Residential Smart Pool Program provides incentives to registered contractors for the successful sale, installation, calibration and reporting of ENERGY STAR® qualified variable speed swimming pool pumps for new or existing residential applications. After two years as a pilot program, the program transitions to MTP.

Implementation process

The program will be implemented using a third-party program implementer. The third-party implementer will recruit and train pool professionals.

Outreach and Research activities

- Attend appropriate industry-related meetings and seminars to generate awareness and interest
- Conduct workshops as necessary to explain program elements such as responsibilities of the participating contractors, project requirements, and reporting process
- Provide educational campaigns to the consumer about the benefits and payback for efficient pool operation

Energy Wise Educational Program

Program design

This program is designed to show the benefits of energy efficiency through educational programs. The Energy Wise Program utilizes a school delivery format to provide take-home Resource Action Kits to sixth grade students.

Implementation process

The program uses a third-party program implementer that recruits teachers. Recruited teachers will receive program materials that include; a teacher and student workbook, kit of efficiency materials, a parent letter explaining the program and a survey.

Outreach and Research activities

• Utilize third party implementer (Resource Action) to recruit schools and teachers.

Hard-To-Reach Standard Offer Program (HTR SOP)

Program Design

Incentives are paid to project sponsors for qualifying measures installed in retrofit applications which provide verifiable demand and energy savings to customers whose annual total household income is less than 200% of current federal poverty guidelines. Qualifying energy efficiency measures, include but are not limited to; air conditioning, duct sealing, weatherization, ceiling insulation, water saving measures, and ENERGY STAR® windows.

Implementation Process

Any registered project sponsor may submit an application for a project meeting the minimum requirements. Program information is provided on CenterPoint Houston's website.

Outreach and Research Activities

- Maintain an internet website with detailed project eligibility, end-use measures, incentive structure, procedures and application forms
- Conduct workshops as necessary to explain elements such as responsibilities of the project sponsor, project requirements, incentive information, and the application and reporting process

Multi-family MTP

Program Design

The Multi-family MTP encompasses two programs; Multi-family Water and Space Heating and Multi-family New Construction MTP. Multi-family Space and Water Heating promotes the installation of energy efficient non-electric water heating in multi-family housing developments. Multi-family New Construction MTP incentivizes energy efficiency in new multi-family buildings.

Multi-family HTR MTP

Program Design

The Multi-family HTR MTP encompasses three programs; Multi-family Water and Space Heating, Multi-family New Construction MTP, and Direct Install programs. Multi-family Space and Water Heating promotes the installation of energy efficient non-electric water heating in multi-family housing developments. Multi-family New Construction MTP incentivizes energy efficiency in new multi-family

buildings. The Multi-family Direct Install Program offers property owners and managers a free visual audit of existing units to see if the property is eligible for energy efficient direct install measures, which may include CFLs and water saving measures and is only available to customers whose annual total household income is less than 200% of current federal poverty guidelines. If eligible, these measures will be installed at no cost and include an educational component.

Implementation Process

The Multi-family HTR and Multi- Family MTP programs are implemented by a 3rd party program implementer (Frontier Energy).

Outreach and Research Activities

- Contracts with a third-party program implementer to implement outreach and planning
- Provide point of purchase materials including yard signs, marketing kits, and brochures to participating developers and property managers

Targeted Low-Income MTP (Agencies in Action)

Program Design

The Targeted Low-Income MTP facilitates the installation of energy efficiency upgrades for low-income residential customers in single family or multi-family homes. Local non-profit organizations and energy service companies provide comprehensive, whole-house retrofits that maximize electricity savings to homes with an SIR greater than 1 by installing attic insulation, solar screens, lighting retrofits, water saving measures, ENERGY STAR® room air conditioners, central air conditioning systems, ENERGY STAR® refrigerators, duct efficiency improvement and air infiltration control for participants that have an annual household income of less than 200% of the federal poverty guidelines, and a maximum expenditure of \$6,500 is allowed per home.

Implementation Process

CenterPoint Houston contracts with a program implementer (Frontier Energy) that has the responsibility of recruiting and overseeing the participating agencies and ESCOs. A NEAT audit and the SIR score determine which projects are selected for renovation.

- Partner with a 3rd party implementer
- Contact non-profit organizations for potential participation

Research and Development (R&D) Projects

In 2017 CenterPoint Energy plans to implement the following R&D projects. Additional projects may be implemented depending on research opportunities and the availability of budgeted R&D funds.

Program: Water Energy Nexus

In 2017, CenterPoint Energy will partner with Aiqueous, a water conservation organization to study potential energy efficiency opportunities that may be obtained through the 2017 State-wide water plan. The project will review what approved Region H (CenterPoint Energy territory) water plan projects will affect electric use and demand. In addition, the study will determine what technologies and strategies could drive energy efficiency improvements and how CenterPoint Energy could engage with the local water districts and utilities. This study will provide potential outreach opportunities for CenterPoint Energy.

Program: Smart thermostat

Smart thermostats or learning thermostats adjust temperature settings based on occupant behavior. The thermostat recognizes patterns of temperature settings and/or occupancy and adjusts the thermostat slightly to gain efficiencies. In order to create an energy efficiency program around smart thermostats it will be necessary to have supporting data and documentation to establish a deemed savings value. The R&D project scope currently entails a review of operational data from customers equipped with smart thermostats and will compare them against similar customers who do not have smart thermostats (control group). The comparison results should support a smart thermostat deemed savings value for demand and energy in the Greater Houston area. CenterPoint Energy will solicit a vendor to conduct the study in 2017.

Program: CenterPoint Portfolio Planning and Analysis

CLEAResult's comprehensive approach to analyzing DSM portfolios will be used to aid CenterPoint in designing a portfolio of commercial energy efficiency programs that seamlessly incorporate high-level utility goals, while also meeting demand and energy savings targets. The collaborative approach creates realistic and achievable designs that work, and provides program managers with the necessary context to understand how implementation and program design are inherently connected. CenterPoint Energy will also be reviewing its database and Residential programs through 2017 and in to 2018 using the same approach. The vendor has not been selected for the second phase of this project.

Program: Power Across Texas

The Power Across Texas (PAT) launched a separate and independent initiative in 2016: the Texas Energy Poverty Research Institute (TEPRI). Its mission as a research institute is to acquire and share actionable data that helps meet the needs of the energy poor in Texas. CenterPoint Energy's contribution to Texas Energy Poverty Research Institute is funding work to access the poverty and energy nexus and how to bring more cost effective programs to that group of customers.

C. New Programs for 2017

There are no new programs currently planned for program year 2017. Throughout the year we will be modifying our portfolio to consolidate and rebrand programs.

D. Potential New Programs for 2018

In 2018 we intend to launch a new portfolio of programs using existing measures. We are evaluating the possibility of implementing two new programs independently in 2018, which if successful would become part of more comprehensive programs.

Program: Small Commercial Buildings Energy Efficiency Program

A pilot study was completed in 2016, and evaluated potential energy efficiency programs to be marketed toward small commercial properties. The small commercial buildings sector, buildings less than 50,000 square feet, accounts for more than 50% of total U.S. commercial building space. This sector houses a majority of small businesses that are acknowledged to be major drivers of the US economy. These include buildings like food services, office buildings, strip malls, retail, lodging, mixed-use development and places of worship. This sector is diverse and fragmented in nature and a majority of buildings are owner managed but very few are actually occupied by the owner. Small building owners lack the time and capital to spend on energy efficiency measures and there are very few resources and tools available to invest in energy assessment at these facilities. Results of the study are still being evaluated for a potential program to be offered in 2018 or later.

Program: Smart Thermostat Pilot Program

A pilot program to determine the feasibility of implementing a thermostat program aimed at energy savings from modifying schedules and optimizing HVAC set points.

II. Customer Classes

Customer classes targeted by CenterPoint Houston's energy efficiency programs are the Hard-to-Reach, Residential, and Commercial customer classes.

The annual MW savings goal will be allocated to customer classes by examining historical program results, evaluating economic trends, and taking into account Substantive Rule § 25.181, which state that no less than 5% of the utility's total demand reduction savings goal should be achieved through programs for hard-to-reach customers and no less than 10% of the energy efficiency budget is to be spent on targeted low-income programs, respectively. Table 3 summarizes the number of customers in each of the customer classes. It should be noted, however, that the actual distribution of the goal and budget must remain flexible based upon the response of the marketplace and the overriding objective of meeting legislative and Commission goals.

Table 3: Summary of Customer Classes

Customer Class	Number of Customers
Commercial	271,555
Residential	1,337,497
Hard to Reach ⁵	792,276

⁵ CenterPoint Houston does not require income information for electric service and no records are available to correlate revenue for the Hard-to-Reach customer class. However, according to the U.S. Census Bureau, Current Population Survey 2015 Annual Social and Economic Supplement, 37.2% of Texas families fall below 200% of the poverty threshold. Applying that percentage to CenterPoint Houston's residential customer totals, the number of HTR customers is estimated at 792,000. Program goals will be based on the requirement in the energy efficiency rule that no less than 5% of the total energy efficiency demand goal will be achieved through the programs in the Hard-to-Reach customer class.

III. Energy Efficiency Goals and Projected Savings

As prescribed by Substantive Rule § 25.181, CenterPoint Houston's demand goal for 2017 is specified as 0.4% of peak demand since the goal of 30% of its five-year average rate of growth in demand was satisfied in 2013. For the purposes of this report, the 2016 demand goal is based on the 5-year average of weather adjusted peak demand for 2011-2015 and the 2017 demand goal is based on the 5-year average of weather adjusted peak demand for 2012-2016. The corresponding energy savings goals are determined by applying a 20 percent capacity factor to the demand savings goals.

Table 4 presents historical annual peak demand for 2010-2016 and estimated peak demand for 2017 and 2018. Table 5 presents the corresponding projected demand and energy savings broken out by program for each customer class for 2017 and 2018. The projected savings is the demand and energy savings that can be achieved based on the annual budget shown in Table 6. The MW and MWh values presented in table 5 are at the customer meter and include line loss values approved in the latest CenterPoint Energy Houston Electric rate case, Docket 38339.

Table 4: Annual Growth in Demand and Energy Consumption

		Peak Demai	nd (MW)		En	ergy Consu	unption (C	Wh)
Calendar	Total	System		ential & mercial	Total	System		ential & mercial
Year	Actual ⁶	Weather Adjusted ^{7,8}	Actual	Weather Adjusted	Actual	Weather Adjusted	Actual	Weather Adjusted
2010	16,315	16,341	14,602	14,628	81,142	80,373	80,263	79,494
2011	17,284	16,688	15,321	14,725	84,354	81,635	83,385	80,666
2012	16,614	16,507	14,906	15,013	82,720	83,034	81,790	82,104
2013	17,012	16,925	14,894	14,981	84,431	84,616	83,533	83,718
2014	16,592	17,032	14,692	15,131	86,159	87,044	68,420	69,680
2015	18,056	17,768	15,960	15,672	88,232	88,326	71,013	71,107
2016	17,957	18,201	15,731	15,975	91,322	91,336	72,022	72,036
2017	18,364	N/A ⁹	16,236	N/A	92,593	N/A	76,652	N/A
2018	18,732	JN/A	16,521	IN/A	93,836	IN/A	77,828	IN/A

2017 Goals

MW Goal = 15,104 x 0.4% = 60.42MW MWh Goal = 60.42MW x 8760 Hours x 20% Load Factor = 105,856MWh

2018 Goals

MW Goal = 15,354x 0.4% = 61.42MW MWh Goal = 61.42MW x 8760 Hours x 20% Load Factor = 107,608MWh

⁶ 2017 and 2018 Calendar Year "Actual" values are forecasted.

⁷ "Actual Weather Adjusted" Peak Demand is "Actual" Peak Demand adjusted for weather fluctuations using weather data for the most recent ten years.

⁸ Weather adjustment calculations are based on hourly weather data from NOAA's Quality Controlled Local Climatological Data (QCLCD).

⁹ NA = Not Applicable: Energy efficiency goals are calculated based upon the actual weather-adjusted growth in demand

Table 5: Projected Demand and Energy Savings Broken Out by Program for Each Customer Class (at Meter)

	20	17	20:	18
Program Goals by Customer Class for 2017 and 2018	Projected Savings (MW) at Meter	Projected Savings (MWh) at Meter	Projected Savings (MW) at Meter	Projected Savings (MWh) at Meter
Large Commercial	123.7	146,574.6	121.8	139,149.5
Large Commercial SOP	16.13	88,316.5	15.0	86,000.0
Commercial MTP (Texas Score & Healthcare, DCEEP)	4.4	25,938.4	7.0	38,000.0
Large Commercial Load Management SOP	98.4	590.5	98.0	590.0
Retro-Commissioning MTP	1.9	14,742.9	1.7	14,000.0
Sustainable Schools	0.7	2,127.6	0.0	0.0
REP (Commercial CoolSaver)	0.8	2,377.8	0.2	559.5
Data Centers Program	1.4	12,480.9	0.0	0.0
Residential and Small Commercial	34.7	43,400.6	35.1	44,813.6
New Homes MTP	6.2	14,583.3	6.2	14,583.3
Residential & SC SOP	1.0	1,740.9	1.0	1,740.9
Smart Thermostat Program	0.0	0.0	0.3	1,200.0
Advanced Lighting Residential	2.6	10,755.8	2.8	11,950.9
Residential A/C Distributor MTP	0.9	2,138.1	0.9	2,263.9
REP (CoolSaver & Efficiency Connection)	3.3	10,023.5	3.3	10,000.0
Residential Demand Response Program	19.5	117.0	19.5	117.0
Multi-Family MTP MR	0.7	1,430.9	0.7	1,430.9
Smart Pool Program Residential	0.4	1,526.7	0.4	1,526.7
Energy Wise Resource Action MTP	0.2	1,084.3	0.0	0.0
Hard-to-Reach	4.6	7,334.9	4.6	7,334.2
Hard-to-Reach SOP Program	1.9	3,668.8	1.9	3,668.8
Multi-Family MTP (HTR)	1.5	1,476.2	1.5	1,476.2
Targeted Low Income MTP (Agencies in Action)	1.2	2,053.6	1.2	2,053.6
REP (Coolsaver Income Qualified)	0.0	136.3	0.0	135.7
TOTAL CONTRACT OF THE PROPERTY	163.03	197,310.10	161.56	191,297.30

IV. Program Budgets

Table 6 presents total projected budget allocations required to achieve the projected demand and energy savings for calendar years 2017 and 2018. The budget allocations are a result of the projected demand and energy savings presented in Table 5. The budget allocations presented in Table 6 include incentive and administration costs for each program and customer class.

Table 6: Proposed Annual Budget Broken Out by Program for Each Customer Class

D		2017			2018	
Program Estimated Budget by Customer Class for 2017 and 2018	Incentives	Admin	Total Budget	Incentives	Admin	Total Budget
Large Commercial	\$15,907,762	\$1,879,047	\$17,786,809	\$15,700,000	\$1,934,153	\$17,634,153
Large Commercial SOP	\$6,750,000	\$911,251	\$7,661,251	\$6,500,000	\$914,243	\$7,414,243
Commercial MTP (TX Score, HEEP, DCEEP)	\$3,432,762	\$393,912	\$3,826,674	\$5,000,000	\$583,823	\$5,583,823
Large Commercial Load Management SOP	\$3,000,000	\$317,539	\$3,317,539	\$3,300,000	\$323,112	\$3,623,112
Retro-Commissioning MTP	\$925,000	\$119,774	\$1,044,774	\$ 800,000	\$105,406	\$905,406
Sustainable Schools	\$375,000	\$31,462	\$406,462	\$0	\$0	\$0
REP (Commercial CoolSaver)	\$425,000	\$31,611	\$456,611	\$100,000	\$7,568	\$107,568
Smart Pool Program Commercial	\$0	\$0	\$0	\$0	\$0	\$0
Data Centers Program	\$1,000,000	\$73,497	\$1,073,497	\$0	\$0	\$0
Residential and Small Commercial	\$11,350,000	\$1,259,991	\$12,609,991	\$11,300,000	\$1,300,641	\$12,600,641
New Homes MTP	\$3,500,000	\$432,540	\$3,932,540	\$3,500,000	\$440,131	\$3,940,131
Residential & SC SOP	\$500,000	\$92,692	\$592,692	\$500,000	\$94,319	\$594,319
Smart Thennostat Program (Pilot)	\$0	\$0	\$0	\$250,000	\$47,500	\$297,500
Advanced Lighting Residential	\$900,000	\$79,096	\$979,096	\$1,000,000	\$89,426	\$1,089,426
Residential A/C Distributor MTP	\$1,700,000	\$259,410	\$1,959,410	\$1,800,000	\$279,490	\$2,079,490
REP (Coo)Saver & Eff. Connection)	\$2,200,000	\$172,652	\$2,372,652	\$2,200,000	\$175,682	\$2,375,682
Residential Demand Response Program	\$900,000	\$71,544	\$971,544	\$900,000	\$72,800	\$972,800
Multi-Family MTP	\$650,000	\$66,311	\$716,311	\$650,000	\$67,474	\$717,474
Smart Pool Program Residential	\$500,000	\$33,235	\$533,235	\$500,000	\$33,819	\$533,819
Energy Wise Resource Action MTP	\$500,000	\$52,512	\$552,512	\$0	\$0	\$0
Hard-to-Reach	\$5,000,250	\$860,962	\$5,861,212	\$5,000,000	\$876,040	\$5,876,040
Hard-to-Reach SOP Program	\$1,000,000	\$251,130	\$1,251,130	\$1,000,000	\$255,537	\$1,255,537
Multi-Family MTP (HTR)	\$650,000	\$66,311	\$716,311	\$650,000	\$67,474	\$717,474
Targeted Low Income MTP (Agencies in Action	\$3,300,000	\$537,178	\$3,837,178	\$3,300,000	\$546,606	\$3,846,606
REP (Coolsaver Income Qualified)	\$ 50,250	\$6,344	\$56,594	\$50,000	\$6,423	\$56,423
SUB TOTAL	\$32,258,012	\$4,000,000	\$36,258,012	\$32,000,000	\$4,110,834	\$36,110,834
R&D	\$0	\$250,000	\$250,000	\$0	\$325,000	\$325,000
PROGRAMIOTAL	\$32,258,012	\$4,250,000	\$36,508,012	\$32,000,000	S4,435,834	536,435,832
			\$ 80			\$1,063,412
ESCRIP PROGRAM TOTAL	47.745 (p. 98.98) (p. 98.88)	ana akan matak ya : Matakaran	\$36,508,012		Publish Made Bars	\$37,499,247

^{*}EM&V cost were not captured in the EECRF for 2017.

Energy Efficiency Report

V. Historical Demand Savings Goals and Energy Targets for Previous Five Years Table 7 documents CenterPoint Houston's actual demand goals and energy targets for the previous five years (2012 – 2016). Each value was calculated using the methods outlined in Substantive Rule § 25.181.

Table 7: Historical Demand and Energy Savings Goals (at Meter)

Calendar Year	•	Actual Weather Adjusted Energy Goals at Meter (MWh)	Actual Demand Savings at Meter (MW)	Actual Weather Adjusted Encrgy Savings at Meter (MWh)
2016	59.40	104,314.00	167.70	190,856.85
2015	58.83	103,069.00	168.49	188,255,21
2014	55.73	97,639.00	159.19	153,170.39
2013	54.85	96,088.00	195.97	160,106.74
2012	39.20	68,693.82	175.40	130,617.00
2011	39.21	68,694.00	110.24	146,092,00

VI. Projected Savings, Reported and Verified Demand and Energy Savings

Table 8 breaks out the projected savings reported and verified demand energy savings by customer class for each program. The projected savings were reported in the Energy Efficiency Plan filed in April of 2016. The reported and verified savings are those savings that have been achieved and verified in 2016 calendar year.

Table 8: Projected Savings versus Reported and Verified Savings for 2016 (at Meter)

		•		2016		
	Project	ed Savings	Verifi	ed Savings	Report	ed / Verified
	MW	MWh	MW	MWh	MW	MWh
Large Commercial	116,5	97,955.1	126.0	102,523.5	126.0	102,523.5
Large Commercial SOP	11.2	65,976.7	9.5	62,265.9	9.5	62,265.9
Commercial MTP (TX Score & HEEP)	3.9	15,413,1	4.0	22,947.4	4.0	22,947.4
Large Commercial Load Management SOP	96.9	266.6	109.1	654.7	109.1	654.7
Retro-Commissioning MTP	1.1	4,050.0	0.5	2,306.2	0.5	2,306.2
Sustainable Schools	0,6	1,038.9	0.6	2,669.4	0.6	2,669.4
REP (Commercial CoolSaver)\	1.4	1,717.1	1,3	2,875.0	1.3	2,875.0
Pool Pump Program Commercial	0.4	726,2	0.06	530.1	0.1	530.1
Data Centers Program	1.0	8,766.5	1.0	8,274.7	1,0	8,274.7
Residential and Small Commercial	20.1	54,580.6	35.8	80,621.0	35,8	80,621.0
New Homes MTP	10.5	27,453.3	13.7	42,736.6	13.7	42,736.6
Residential & SC SOP	0.9	1,809.1	0,1	295.9	0.1	295.9
Advanced Lighting Residential	1,0	7,132.3	2.6	14,095.8	2.6	14,095.8
Residential & SC A/C Distributor MTP	1.7	5,452,1	2.3	6,308.9	2.3	6,308.9
REP (CoolSaver & Efficiency Connection)	1.3	4,028.2	3.8	10,151.8	3,8	10,151.8
Residential Demand Response Program	2.0	12.0	11.1	66.7	11,1	66.7
Multi-Family MTP (RES & Energy Star MF Low Rise	1.2	3,125.8	1.3	4,140.4	1.3	4,140.4
Smart Pool Program Residential	1.2	3,600.0	0.5	1,824.0	0.5	1,824.0
Energy Wise Resource Action MTP	0.4	1,967.9	0,3	1,001.0	0.3	1,001.0
Hard-to-Reach	4.6	8,181.3	5.85	7,712.4	5.8	7,712.4
Hard-to-Reach SOP Program	1.3	2,353.6	0.3	629.0	0.3	629,0
Multi-Family MTP (HTR)	1.2	3,125.8	2.3	2,669.9	2.3	2,669.9
Targeted Low Income MTP (Agencies in Action)	2.2	2,701.9	3.1	4,251.4	3.1	4,251.4
REP (Coolsaver Income Qualified)	0,0	0.0	0.1	162.0	0.1	162.0
TOTAL	141.2	160,716.9	167.7	190,857	167.7	190,856.8

Table 9: Projected Savings versus Reported and Verified Savings for 2015 (at Meter)

				2015		
	Project	ed Savings	Verifi	ed Savings	Reporte	d / Verified
	MW	MWh	MW	MWh	MW	MWh
Large Commercial	135,13	105,613,46	125.22	113,510.94	125.22	113,510.94
Large Commercial SOP	12.02	71,051.78	11.57	76,024.92	11.57	76,024.92
Commercial MTP (TX Score & HEEP)	4.27	16,683.13	3.63	18,411.51	3.63	18,411.51
Large Commercial Load Management SOP	114.08	330.84	106.04	636.21	106.04	636,21
Retro-Commissioning MTP	1.40	5,400.00	0.96	3,690.76	0.96	3,690.76
Sustainable Schools	0.57	1,038.92	0.45	1,418.78	0.45	1,418.78
REP (Commercial CoolSaver)\	1.34	1,616.07	1.65	5,115.98	1.65	5,115.98
Pool Pump Program Commercial	0.44	726.18	0.01	95.21	0.01	95.21
Data Centers Program	1.01	8,766,54	0.91	8,117.58	0,91	8,117.58
Residential and Small Commercial	20.38	53,787.18	37.53	66,473.86	37.53	66,473.86
ENERGY STAR® Homes MTP	10.49	27,453.30	13.59	31,821,15	13.59	31,821.15
Residential & SC SOP	0.85	1,809.06	0.50	1,054.29	0.50	1,054.29
Advanced Lighting Residential	0.62	6,691.74	2.43	10,619.03	2.43	10,619.03
Residential & SC A/C Distributor MTP	1.90	6,179.06	2.22	6,335.95	2.22	6,335.95
REP (CoolSaver, Eff. Connection & Demand Respons	3.34	4,040.18	16.90	10,632.62	16.90	10,632.62
Multi-Family MTP (RES & Energy Star MF Low Rise	1.13	2,847.08	0.80	2,257.24	0.80	2,257.24
Pool Pump Program Residential	1.52	2,498.91	0.71	2,395.29	0.71	2,395.29
Energy Wise Resource Action MTP	0.54	2,267,86	0.38	1,358.30	0.38	1,358.30
Hard-to-Reach	5.45	9,145.65	5.74	8,270.41	5.74	8,270.41
Hard-to-Reach SOP Program	1.51	2,913.21	1.29	2,636.71	1.29	2,636.71
Multi-Family MTP (HTR)	1.13	2,847.08	1.86	1,665.33	1.86	1,665.33
Targeted Low Income MTP (Agencies in Action)	2.81	3,385.35	2.55	3,843.40	2.55	3,843.40
REP (Coolsaver Income Qualified)	N/A	N/A	0.04	124.98	0,04	124.98
TOTAL	160.96	168,546.29	168.49	188,255.21	168.49	188,255.21

VII. Historical Program Expenditures

This section documents CenterPoint Houston's incentive and administration expenditures for the previous five years (2011 - 2016) broken out by program for each customer class. Administrative costs do not include EM&V or rate case cost.

Table 10: Historical Program Incentive and Administrative Expenditures $(2012-2016)^{10}$

Instorical Statutory Program Funding by Customer Class	2016		20	15	201	4	201	13	20	12
Instorical Statutory Program Funding by Customer Chass	Incentives	Admin	Incentives	Admin	Incentives	Admin	Incentives	Admin	Incentives	Admin
Large Commercial	\$14,984,848	\$1,874,746	\$15,297,984	\$1,808,656	\$14,527,295	\$2,146,049	\$17,014,058	\$1,818,911	\$15,322,812	\$1,840,79
Large Commercial SOP	\$5,932,906	\$973,862	56,283,259	\$795,079	\$6,335,962	\$1,087,653	\$6,597,644	\$954,748	\$6,118,676	\$1,113,95
Retro-Commissioning MTP	\$451,417	\$52,715	\$464,977	\$48,338	\$260,367	\$43,365	\$924,415	\$98,467	\$728,186	\$98,95
Commercial MTP (Texas SCORE & Healthcare)	\$3,641,919	\$366,294	\$3,216,713	\$386,926	\$3,015,795	\$400,337	\$2,933,764	\$230,852	\$2,175,141	\$248,36
Large Commercial Load Management SOP	\$3,106,220	\$327,570	\$3,244,409	\$346,521	\$3,506,366	\$396,980	\$5,221,196	\$350,800	\$5,625,000	\$303,36
Sustainable Schools	\$334,782	\$28,914	\$357,537	\$49,264	\$319,547	\$55,048	\$209,070	\$31,015	\$74,196	\$10,80
Advanced Lighting Program	N/A	N/A	N/A	N/A	\$601,336	\$108.094	\$632,539	\$111,449	\$601,613	\$65,33
REP Program (Commercial CoolSaver)	\$400,300	\$30,474	\$397,350	\$45,679	\$487,922	\$54,57 2	\$495,429	\$41,581		
Pool Pump Program Commercial	\$119,576	\$12,377	\$100,247	\$11,489	N/A	N/A	N/A	N/A	N/A	N/A
Data Centers	\$997,729	\$82,540	\$1,233,493	\$125,310	N/A	N/A	N/A	N/A	N/A	N/A
Residential and Small Commercial	\$9,832,154	\$1,126,186	\$11,659,302	\$1,308,234	\$10,275,021	\$1,224,176	\$9,173,682	\$960,688	\$8,991,307	\$1,094,181
New Homes MTP	\$2,636,756	\$339,312	\$3,892,457	\$399,031	\$4,064,036	\$466,162	\$3,474,935	\$318,973	\$3,513,219	\$354,43
Residential SOP	\$79,596	\$31,791	\$300,720	\$61,320	\$254,477	\$41,964	\$387,886	\$70,664	\$500,874	\$83,36
Advanced Lighting Program	\$943,324	\$74,665	\$843,658	\$108,397	\$772,689	\$81,713	\$440,152	\$37,808	\$415,568	\$43,56
Multi-Family MTP (RES)	\$462,168	\$28,541	\$506,714	\$48,463	\$472,690	\$70,662	\$252,600	\$46,1 53	\$347,050	\$50,05
A/C Distributor Program	\$1,968,257	\$201,245	\$2,173,535	\$210,007	\$1,906,639	\$228,715	\$1,548,290	\$171,697	\$1,642,142	\$191,09
Pool Pump Program Residential	\$550,894	\$63,589	\$582,718	\$87,710	\$83,400	\$13,668	N/A	N/A	N/A	N/A
Energy Wise Resource Action MTP	\$502,515	\$103,808	\$657,801	\$89,390	\$666,317	\$78,607	\$749,997	547,823	\$538,740	\$47,47
REP (CoolSaver, Eff. Connection & Demand Response	\$2,688,643	\$283,236	\$2,701,700	\$303,916	\$1,951,523	\$218,283	\$1,568,860	\$131,673	\$1,384,156	\$254,12
Home Performance with ENERGY STAR®	N/A	N/A	N/A	N/A	\$103,250	\$24,402	\$750,962	\$135,897	\$649,558	\$69,56
Community Weatherization (RES)	NUA	N/A		21/4		NVA	N/A	N/A	N/A	N/A
City of Houston Weatherization (RES)	N/A	NA	N/A	N/A	N/A	N/A	New	nr.g.	N/A	10.74
Hard-to-Reach	\$4,488,903	\$481,142	\$4,844,189	\$521,843	\$6,386,605	\$770,007	\$7,492,187	\$627,394	\$5,551,440	\$535,801
Hard-To-Reach SOP	\$245,907	\$111,156	\$971,292	\$160,463	\$606,341	\$118,105	\$933,114	\$173,248	\$1,702,481	\$195,05
Multi-Family MTP (HTR)	\$554,407	\$48,936	\$447,33 0	\$49,039	\$279,358	\$39,808	\$50,400	\$9,435	\$63,200	\$9,11
Res HTR-Afford. Home	N/A	N/A	\$3,529	\$312	\$20,295	\$3,591	562,400	\$13,040	\$49,985	\$5,72
Targeted Low Income MTP (Agencies in Action)	\$3,656,549	\$318,396	\$3,360,588	\$303,786	\$5,480,611	\$608,503	\$6,446,273	\$431,671	\$3,735,774	\$325,90
TDHCA Low-Income Weatherization (SB-712)										
Rebuilding Together Houston	N/A	N∕A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Community Weatherization (HTR)	N/A	N∕A	N/A	N/A	IV/A	N/A	N/A	N/A	D/A	IN/A
City of Houston Weatherization (HTR)										
REP (Cookaver Income Qualified)	\$32,040	\$2,655	\$61,450	\$8,243	N/A	N/A	N/A	N/A	N/A	N/A
R&D		\$322,930		\$392,784	\$0	\$435,563	\$0	\$1,196,274	\$0	\$1,422,48
TOTAL	\$19,305,805	\$3,805,004	V. A.	of of the Towns ou	\$31,188,921	er's 21 2 en 180 - 11				ļ

¹⁰ 2016 actual spending taken from Table 11 in the current EEPR; 2015, 2014, 2013, and 2012 actual spending from the 2016 EEPR filed under Project 45675.

VIII. Program Funding for Calendar Year 2016

As shown on Table 11, CenterPoint Houston spent a total of \$33,110,909 on energy efficiency programs in 2016. This was less than the budgeted \$35,145,800. Changes to individual program budgets that resulted in greater than 10% increases or decreases are described below.

- The Retro-Commissioning Market Transformation program was not fully subscribed in 2016 and several projects were either partially funded or moved to 2017 therefore it was 37% underrun.
- Commercial Pool Pump Pilot Program is still in early stages of development which proved the infrastructure was not yet in place to support the budget which had an under spend of 50%.
- The Residential New Home New Construction program experienced issues with the energy savings calculator provided by the program partner and aggressive targets set by the implementer.
 The program exceeded savings targets.
- Residential Standard Offer Program has seen a decline in spending due to certain measures
 having stricter requirements such as duct efficiency, this lead to an 81% underrun in budget. The
 excess money was moved to other programs.
- Residential Hard to Reach (SOP) has seen a decline in spending due to certain measures having stricter requirements such as duct efficiency, this lead to a 71% underrun in budget.
- The A/C Distributor Program spent an additional 28%. The program was allocated additional funds from programs that were underspent.
- The Residential Demand Response portion of the REP program was underspent by 29% due to low enrollment. We are still optimistic that this program will succeed as thermostats with Wi-Fi capability are becoming widely adopted.
- The Multi-Family MTP spending was lower by 30% due to delays in construction projects for both market-rate and hard-to-reach. HTR was underspent by 13%.
- The residential pool pump program was more successful than anticipated and was oversubscribed by 18%

Table 11: Program Funding for Calendar Year 2016

Funds Remaining (Not Committed) Percentage Change From Budgeted\Actual	\$645,255 4%	\$325,232 4%		-\$194,790 6%	\$298,119 -37%	\$32,804 -8%	\$14,476 -3%	\$131,047 -50%	-\$33,520 3%	%6- 090'590'I\$	\$865,932 -23%	\$468,913 -81%	-\$62,739 7%	-\$472,502 28%	-\$53,310 2%	\$208,541 -30%	\$249,231 -30%	-\$94,683 18%	-\$44,323 8%	\$647,505 -12%	\$870,438 -71%	\$94,307 -14%	-\$282,545 8%	-\$34,695	\$2,357,820 -7%	-\$72.930 . 29%	
Funds Committed (Not Expended)	80	Ş	Ş	\$	\$	\$0	\$0	0\$	80	80	80	[0\$	80	{0\$	\$ 0	\$0 <u></u>	\$0	\$00	\$0	\$0	OS.	£0	\$0	0\$	0	\$	
Total Funds Expended	\$16,859,595	\$ 6,906,768	\$ 4,008,213		\$ 504,131	\$ 363,696	\$ 430,774	\$ 131,953	\$ 1,080,270	\$ 10,958,340	\$ 2,976,068	\$ 111,387	\$ 1,017,989	\$ 2,169,502	\$ 2,376,363	\$ 490,709	\$ 595,516		\$ 606,323	\$4,970,045	\$ 357,062	\$ 603,343	\$ 3,974,945	\$ 34,695	\$ 32,787,980	\$ 322,930	
Actuals Funds Expended (Admin)	\$1,874,746	\$ 973,862	366,294	327,570	\$ 52,715	-	-	\$ 12,377	82,540	\$1,126,186	\$ 339,312	\$ 31,791	\$ 74,665	\$ 201,245	\$ 230,470	\$ 28,541	\$ 52,766		\$ 103,808	\$481,142	\$ 111,156	\$ 48,936	\$ 318,396	\$ 2,655	3,482,074	\$ 322,930	li
Actuals Funds Expended (Incentives)	\$14,984,848	\$ 5,932,906	3,641,919	-	\$ 451,417	\$ 334,782	\$ 400,300	\$ 119,576	\$ 997,729	\$9,832,154	\$ 2,636,756	965,67 \$	\$ 943,324	\$ 1,968,257	\$ 2,145,893	\$ 462,168	\$ 542,750	\$ 550,894	\$ 502,515	\$4,488,903	\$ 245,907	\$ 554,407	\$ 3,656,549	32,040	29,305,905		
Forecasted Budget	\$17,504,850	\$ 7,232,000	4,080,100		\$ 802,250	396,500	445,250	\$ 263,000	1,046,750	\$12,023,400	\$ 3,842,000	\$ 580,300	\$ 955,250	\$ 1,697,000	\$ 2,323,053	\$ 699,250	\$ 844,747	\$ 519,800	\$ 562,000	\$5,617,550	\$ 1,227,500	\$ 697,650	\$ 3,692,400	-	35,145,800	\$ 250,000	
Number of Customer Meters	971	347	Г	226		9	7	21		45,433	11,260	261	ΝA	2,424	7,402	2,098	10,875	543	10,570	4,127	322	2,157	1,550	86	50,531	0	
Program Funding for Calendar Year 2016	Large Commercial	Large Commercial SOP	Commercial MTP (TX Score & Healthcare)	Large Commercial Load Management SOP	Retro-Commissioning MTP	Sustainable Schools	REP (Commercial CoolSaver)	Pool Punp Program Commercial	Data Centers Program	Residential and Small Commercial	New Homes MTP	Residential & SC SOP	Advanced Lighting Residential	A/C Distributor MTP	REP (CoolSaver & Efficiency Connection)	Multi-Family MTP (RES & Energy Star MF Low Rise)	Residential Demand Response Program	Pool Pump Program Residential	Energy Wise Resource Action MTP	Hard-to-Reach	Hard-to-Reach SOP Program	Multi-Family MTP (HTR)	Targeted Low Income MTP (Agencies in Action)	REP (CoolSaver Income Qualified)	SUB TOTAL	R&D	

2016 Energy Efficiency Plan and Report

IX. Market Transformation Program Results

The Commercial MTP

SCORE/SCORE Lite/City Smart

In 2016, the program paid incentives to a total of 32 separate customers, with savings impacting over 120 facilities or buildings. The customers served through this program include: 20 school districts, 3 private schools, 2 colleges/universities, 2 municipal governments, 4 county governments, and 1 faith-based organization. Lighting and HVAC measures represented a majority of the projects that were incentivized in 2016.

SCORE Lite program participation and impacts continue to grow as customers and contractors are becoming better equipped to be self-directed in the program. CenterPoint Energy and the program implementer will continue to promote greater self-reliance for SCORE Lite participants. The program will also focus additional outreach efforts to customer segments that have not participated as heavily in the SCORE/CitySmart program, namely local governments, faith-based organizations, and non-profits.

The 2016 HEEP program completed 14 projects which yielded 932 kW and 7,046 MWh. The projects included HVAC replacements, lighting retrofits, window replacements and HVAC optimization projects. The healthcare facilities included hospitals, clinics, laboratories and medical office buildings.

Retro-Commissioning MTP (RCx)

In 2016, CenterPoint Energy projected to acquire 1.1 MW and 4,050 MWh savings from this program. CenterPoint Energy verified and is reporting 488.93 kW and 2,306 MWh.

Sustainable Schools Program (SSP)

In 2016, CenterPoint Energy projected to acquire 570 kW and 1,038,920 kWh savings from this program. CenterPoint Energy verified and is reporting 637.4 kW and 2,669,417 kWh.

Smart Pool Program - Commercial Pilot

In 2016, CenterPoint Energy projected to acquire .44 MW and 726 MWh savings from this program. CenterPoint Energy verified and is reporting .05855 MW and 530.1 MWh. This program was removed as a program offering for 2017.

Data Centers MTP

In 2016 CenterPoint Energy is reporting a savings of 1.01 MW and 8,275 MWh at a cost of \$1.1M for the Data Center program.

New Homes MTP

In 2016, CenterPoint Energy is reporting 13.67 MW and 42,736 MWh for \$2.98M. This program drives builders to use energy efficient methods in design and construction.

Advanced Lighting Residential MTP

In 2016, CenterPoint Energy projected to acquire 1.0 MW and 7,132 MWh from this program. CenterPoint Energy verified and is reporting 2.6 MW and 14,096 MWh.

A/C Distributor MTP

In 2016, the program had 8 distributors that preformed over 2,400 HVAC and heat pump change outs. Incentives were increased to encourage sales of 17 SEER and higher, and incentives were reduced for the 16 SEER, for a savings of 2.32 MW and 6,308 MWh.

Smart Pool Program - Residential MTP

In 2016, CenterPoint Energy projected to acquire 1.2 MW and 3,600 MWh savings from this program. CenterPoint Energy verified and is reporting 508.2 kW and 1,823,728 kWh.

Energy Wise Resource Action MTP

The Energy Wise program uses kits to teach school children about energy efficiency. The education and kits are believed to have a lasting impact. This program provided .28 MW and 1,000 MWh. This program is not in the plan for 2018, due to the decreasing savings and lower avoided cost.

Targeted Low-Income MTP (Agencies in Action)

In 2016, the program reached 1,550 homes in the CenterPoint Energy electric territory. Of these homes, 1,339 were multi-family units and 211 were single family homes. Heat pumps were the leading measure installed in the multi-family units and made up the majority of incentives paid. Air infiltration, ceiling insulation, and AC replacements were just a few of the measures installed in single family homes.

Retail Electric Provider Market Transformation Program

CoolSaver - The CoolSaver portion of the REP MTP program provided free comprehensive air conditioning tune-ups to residential, small commercial and income qualified residential customers in the CenterPoint Houston service territory. The program was marketed by seventeen (17) participating retail electric providers. The tune-ups were performed by twenty-eight (28) specially trained A/C contractor companies. The participating Retail Electric Providers included Ambit Energy, Amigo Energy, Brilliant Energy, Champion Energy Services, Direct Energy, Entrust Energy, Frontier Utilities, Gexa Energy, Hudson Energy, Infinite Energy, Just Energy, Reliant Energy, Spark Energy, Star Tex Power, Tara Energy, TriEagle Energy and Veteran Energy. As a result, 7,293 residential A/C tune-ups were completed, 116 residential low-income tune-ups were completed and 1,302 commercial A/C tune-ups were performed in 2016.

Efficiency Connection - In 2016, CenterPoint Energy Houston Electric continued the online Efficiency Connection website to promote and deliver energy efficient LED bulbs at a reduced price. The program was marketed by 16 participating REPs and yielded 33,997 Energy Star rated LED bulbs. The participating Retail Electric Providers included Ambit Energy, Amigo Energy, Bounce Energy, Champion Energy Services, CPL Energy, Direct Energy, Entrust Energy, First Choice Power, Frontier Utilities, Infinite Energy, Just Energy, Reliant Energy, Spark Energy, Star Tex Power, Tara Energy, and TriEagle Energy.

Residential Demand Response - During the summer of 2016, four companies including Energy Hub, Reliant Energy, Just Energy and Earth Networks, participated in CNP's Residential Demand Response BYOD (Bring your own device) program. The Sponsors enrolled customers with Wi-Fi enabled programmable thermostats in their home. Energy Hub enrolled 4,340 customers, Reliant Energy enrolled 1,320 customers, Just Energy enrolled 2,724 customers and Earth Networks enrolled 2,344 customers, for a total of 10,728 customers. Two, three-hour demand response test events were initiated by CenterPoint Energy Distribution Dispatch personnel during the summer peak period.

Multi-Family MTP Program & Multi-Family HTR MTP Program

The Multi-Family Water & Space Heating MTP promotes the installation of energy efficient non-electric water heating and space heating in housing projects. In 2016, the Multi-Family Water and Space Heating MTP paid incentives on seven apartment complexes with a total of 1,395 units in the CenterPoint Houston service area. Of these units, 434 were classified as Hard-To-Reach and 961 units were classified as Market Rate complexes. Three of these complexes installed gas boiler systems, two installed individual water heaters and three complexes installed combination gas heating systems. The Direct Install program reached 1,724 Hard-To-Reach units. The ENERGY STAR® program incentivized the construction of 1,139 market rate units. Interest in these programs continues to be favorable. There are several potential projects for the 2017 program year. To plan more effectively for the Multi-family portfolio, developers, architects and builders were invited to attend a Market Transformation 2016 Program kickoff meeting that included information on the Multi-Family Water & Space Heating, Multi-Family Direct Install, and Multi-Family ENERGY STAR programs.

A similar kickoff meeting is planned for the 2017 program. 2017 will largely represent a continuation of the Multi-Family Water & Space Heating and Direct Install program elements. The new High Efficiency New Construction program element is proposed to expand participation eligibility to include both low-and mid-rise projects, and to incorporate greater flexibility in estimating and documenting above-code energy savings via additional RESNET accredited energy modeling software tools, and tools that are capable of performing hourly analyses per AHRAE 90.1.

X. Research and Development Results

In 2016, CenterPoint Houston implemented the following R&D projects:

Program: Mini-Split Heat Pumps

The Mini-Split Heat Pump project continued from 2014, with CenterPoint Energy Houston partnering with Frontier Associates and Mitsubishi Electric to implement a ducted and ductless mini-split heat pump study within a garden style multi-family complex located in Houston. The study encompassed 28 Mitsubishi Mr. Slim mini-split systems equipped with inverter compressors and 28 traditional unitary Carrier split system heat pumps. CenterPoint Energy is currently working with vendors and external consultants to interpret the findings and determine how to incorporate them in to a program.

Program: Green Proving Ground - Collaborative Study with General Services Administration (GSA) and Oncor

The Green Proving Ground Program (GPG) partnership with utilities began in 2013. The basis of the program is to leverage the GSA's real estate portfolio and utility R&D funds to evaluate innovative sustainable building technologies. Evaluations, performed in association with independent researchers and the Department of Energy (DOE), are used to support the development of GSA performance specification and inform decision making within GSA, other federal agencies, and the real estate industry. Only those parts of the GPG program that align with utility goals will be funded from utility R&D funds. Installations for two Houston sites were underway by close of 2015; Houston Customs House and Bob Casey Courthouse. The technology is a HVAC Load Reduction (HLR) system, which is intended to solve the major cause of HVAC energy waste in commercial buildings. Installations are scheduled for measurement and verification during 2016. It is anticipated that the efforts with the collaborative will end in 2017.

Program: Small Commercial Buildings Energy Efficiency Pilot Study

The Houston Advanced Research Center (HARC) has been contracted to design a small commercial energy efficiency R&D project to analyze the cost effectiveness and to determine the potential of a full program. The project design will look at three alternate program types; a conventional direct install approach and two separate energy manager style programs. CenterPoint Energy is evaluating a Small Commercial buildings energy efficiency program or measure list.

Program: Power Across Texas

The Power Across Texas (PAT) launched a separate and independent initiative in 2016: the Texas Energy Poverty Research Institute (TEPRI). Its mission as a research institute is to acquire and share actionable data that helps meet the needs of the energy poor in Texas. TEPRI has its roots in one of PAT's signature programs that in 2013 brought together academia, industry and government to address access to electricity in South Texas. CenterPoint Energy's contribution to Texas Energy Poverty Research Institute is funding work to access the poverty and energy nexus and how to bring more cost effective programs to that group of customers.

XI. Administrative Funds Expended

In 2016, CenterPoint Houston incurred administrative costs on categories such as continued development of its energy efficiency tracking database (eTrack), employees' salaries, employees' training, employees' travel, purchase of supplies, and other activities necessary and appropriate for successful program implementation. These costs meet the definition of administration costs as defined by the energy efficiency rule under Substantive Rule 25.181(i)(1) that states these type of costs "include all reasonable and necessary costs incurred by the utility in carrying out its responsibilities..." We monitor the spending in these cost categories throughout the year and make mid-course corrections as necessary to ensure the success of our portfolio of energy efficiency and demand response programs.

XII. Current Energy Efficiency Cost Recovery Factor (EECRF)

CenterPoint Houston's 2017 EECRF was approved by the Public Utility Commission of Texas in Docket No. 46014 on November 2, 2016 for the amount of \$45,492,241. EM&V cost were not included in the 2017 EECRF. Per Docket No. 46014, ordering paragraph 2,

"CenterPoint's 2017 EECRF is approved in the amount of \$45,492,241 through its 2017 EECRF; which is composed of (a) estimated 2017 energy-efficiency program costs of \$36,508,012, (b) a performance incentive for 2015 program achievements of \$10,608,015, (c) a credit of \$1,328,468 related to-the over-recover of 2015 program costs, (d) an adjustment of \$67,000 to exclude certain historical administrative costs,(e) \$35,879 in 2015 EECRF proceeding expenses, and (f) a credit of \$264,197 related to the over-recovery of the surcharge approved in Docket No. 42359."

XIII. Revenue Collected Through EECRF

In 2016, CenterPoint Houston collected a total of \$37,571,561 in energy efficiency program costs through the EECRF Rider.

XIV. Over or Under-recovery of Energy Efficiency Program Costs

In Docket No. 44783, the PUC approved energy efficiency costs to be recovered in 2016 of \$37,645,874 consisting of:

\$35,395,800	2016 Forecasted Program Costs
\$ 6,640,550	2014 Bonus
-\$ 5,020,922	2014 Over-Recovery
\$ 549,065	2016 Forecasted EM&V Expenses
-\$ 85,500	2014 Historical Admin Adjustment
\$ 166,881	2014 Rate Case Expense
\$ 37,645,87	4 Total EECRF Costs

In 2016, actual program costs were \$33,110,909 and actual EM&V costs were \$549,065 for total energy efficiency related costs of \$35,360,983. Total revenues collected through the EECRF Rider were \$37,571,561, resulting in overall over-recovery of \$2,210,578.

XV. Under-served Counties

There were no counties within the CenterPoint Houston service territory that were under-served by the Company's energy efficiency programs in 2016. All of the CenterPoint Houston's energy efficiency programs were accessible to all counties within the Company's electric service area. Appendix C lists the counties served by CenterPoint Houston and the amount of savings each county experienced in 2016 through the company's energy efficiency programs.

XVI. Performance Bonus Calculation

In 2016, CenterPoint Houston's total spending on the implementation of Energy Efficiency Programs was \$33,110,909. Per Substantive Rule § 25.181, the calculation of performance bonus is 10% of Net Benefits. Therefore, CenterPoint Houston will request a performance bonus of \$11,039,602 as part of the 2017 EECRF filing.

Table 12 shows the performance bonus calculation for CenterPoint Houston for 2016

•	kW	kWh
2016 Program Goals	59,400	104,314,000
2016 Program Savings	167,701	190,856,847
Reported/Verified Total (including HTR, measures with 10yr EUL, and measures with EULs <		
or > 10 years)	167,701	190,856,847
Reported/Verified Hard-to-Reach	5,847	7,712,402
Avoided Cost		
per kW		\$80
per kWh		\$0.051
Inflation Rate		2.0%
Discount Rate		8.21%
Total Avoided Cost	\$	144,087,143
2016 Program Costs 12	8	33,733,795
Net Benefits = Total Avoided Cost - Total Program Cost		
Net Benefits	5	110,353,348
Bonus Based on 10% Net Benefits		11,035,335

¹¹Complete avoided cost savings table will be provided in the June 1 filing of the EECRF.

¹² Total Program Costs is inclusive of 2016 total spending for implementation of Energy Efficiency Programs, 2016 EM&V Expenses, and 2016 Rate Case Expenses.

Appendix A: Acronyms

CCET Center for the Commercialization of Electric Technologies

CLM Commercial Load Management

DR Demand Response

DSM Demand Side Management

EECRF Energy Efficiency Cost Recovery Factor

EEP Energy Efficiency Plan, which was filed as a separate document prior to April 2008

EEPR Energy Efficiency Plan and Report

EER Energy Efficiency Report, which was filed as a separate document prior to April 2008

ERCOT Electric Reliability Council of Texas

HERS Home Energy Ratings

HTR Hard-To-Reach

MTP Market Transformation Program

PUCT Public Utility Commission of Texas

RCx Retro-Commissioning

REP Retail Electrical Provider

RES Residential

RESNET Residential Energy Services Network

SCORE Schools Conserving Resources

SOP Standard Offer Program

SSP Sustainable Schools Program

Appendix B: Glossary

Please refer to the glossary defined in Substantive Rule § 25.181.

45

Appendix C
CenterPoint Energy Houston Electric, LLC Efficiency Programs
Energy Efficiency Programs
2016 Demond (RW) and Energy (RWh) Savings at Meter By County

Energy Efficiency Plan

* * * * * * * * * * * * * * * * * * *	. K. K. 12.	AMSOD:	APPENDIC										
	kW		380	717	814	175	6901			411	95		o.
Commercial SOP	FW)		152.065.0	\$961239	4354645	828.758	47 908 177			2.305 887	367 492		A0 785 CA
	7447			-	65	175				0	2/49	39	
Commercial MTP - Score	1.127%		1 102 538	202.90	146 201	707 5 CD 1.	Agr. 157.9			078.0	1 277 750	130 051	V2 303 \$1
	/M7		acrical'i	OSN'SS	317	4,010,037	20%			7,000	200	700000	a contract
Commercial MTP - Healthcare	KW)				7.236.863		4.809.430						7,046
Large Conneccial Load	ΥM		3.606	1001	5.457	175	58,695			47.	87		100119
Management SOP	KWh		21,638	6,563	32,740	1,050	592,170			23	522		654.7]
0.000	×W			9			483						
Retro-Commissioning	kWh			46.736			2,259,451						2,306,187
Dit (Commercial Codemon)	kw				0		637						
And (Commercial Companie)	KWh				26,986		2,642,431						2,669,417
Suspendent Subania	kW .		18		333		905.570			68		7	
Sustainance Schools	kwh .		40,955		729,330		L907,794,000	1		190.952		10.470	2.879.50
Total William Control of the Control	kW .				10		47			1	1		
row rump rrogram commercia	kWh				122,485		380,149	,		15.516	11,938		530,08
Procedure Contract	KW.						17.6					•	
DAKS CCENERS	kwh						8.274.684	-					8,274,68
	kW		826	104	5.294	135	6.421			758	23	1	13
Energy Star MLF	kwa		2,879,825	345,230	16,297,234	430,879	20,366,010			2,355,464	92619	_	19921.24
# CO	kW	\$	11	13		EI	81				2	-	
Kesi Ornhal SOF	KWħ	95271	25,345	35,723		32,264	186,735				4,447		98'562
Advanced Lighting Program	kW		(1)		422		1.888			87		•	1
(Residential)	kWh		613,710		2,246,114	715261	10.058.683			461.988			14,095
A AC Bistorikasan Danasan	kW	80	175	2	543	27	1,502			51	1	4	2
AC DISCIPLING FLOGIST	kWh	25,555	467,277	5,220	1,449,946	83,353	4,095,525			140.395	30,996	10,618	6,308,36
BEF (Besidential Coolsmen)	ΚW	7	153	15	842		2,439			242	₹	7	3
	kWħ	10.632	587,704	38.158	2,142,884	79.876	6204.573	2.730	1.434	362.003	35.045	17,070	9.282.109
REP (Efficiency Connection)	k₩	~		*	Ħ	4	92			7	1		
	KWb	2,611	40,118	5,421	114,281	21.690	154.130			38,046	2,815	3,228	99,698
RFF (Regidential Demand Response)		OI.	879	Ř	1.983	561	7.426	0	ā	474	ସ	_	11,
	KWB	93	5,270	826	11.831	1,158	44,50		٩	2.840	117	26	69,99
Energy Star Multi-Family Low Rise					203		ま			236			
MTP	kwh				1.186,332		510,858			1,182317			2,879.50
Mulú-Family Water & Space	ΚW						787						
Hearing MIP (RES)	KW1			Ī		,	1,260.915				1		1.200.1
Pool Pamo Programa Residential	KW		29	-	22		353			12	7		
	KW)		79,570	4,060	390,973	39,4	1242 382			62.848	4.763		1.824.01
Energy Wise Resource Action	KW.		90	Ī	08		(0)				7		
Program	кWh		100,089		725,217	61.466	616.200						1,000,97
Hard-To-Reach SOP	Α¥				124		215						
	kwh				259,136		369,859						628,995
Mark Samily Mary Arres	ΚW				86		1,983						2
WHITE STEEL STEEL	kWh				327,058		1,382,181						1,709.23
Maist Farmin Direct Inetell	ΚW				50		213						
					179,311		781,396						040,70
Energy Star Maiti-Family Low Rise													
MITP (HITK)												1	
Targeted Low income (Agencies in			a		7.1		3,045						3,1
Action MTP)			<u> </u>	1	126,468		4, 124,945						4,251,45
KEP (Kesidenda) Codsaver - Income	KW		17 304		010 00		162 301					Ī	191
Personal Transfer	2	2 - 1200 - 1200 - 1	90 . 5%	7 86 E	100 40 30	W 430 %	12 C 41 12	マージンがな	38 24.	25 25		2 1/2 1/2	231 11 11 11 11 11 11 11 11 11 11 11 11 1
Total kW Savings		46. /y:	- A-4	-			1000		,			- C	
		THE PERSON NAMED IN	7		PCROT	70 F7	一門 一	25. 25.		20 P. C.	35.55		28 %2 2867.40

STATE OF TEXAS §
COUNTY OF HARRIS §

AFFIDAVIT OF MICHELLE MARIE TOWNSEND

BEFORE ME, the undersigned authority, on this day personally appeared Michelle M

Townsend, who, having been placed under oath by me, did depose as follows:

- 1. "My name is Michelle M Townsend. I am over the age of eighteen and fully competent to make this affidavit. I am the Manager of Business Services Planning and Performance Management for CNP. My business address is 1111 Louisiana Street, Houston, Texas 77002.
- 2. I am responsible for ensuring that the costs incurred by Service Company are properly billed to each of the CenterPoint Energy, Inc. ("CNP") business units, including CenterPoint Energy Houston Electric, LLC ("CenterPoint Houston"). I am also responsible for providing Service Company information to the Regulatory Reporting Department to support regulatory filing requirements. I am familiar with the affiliate billings included in the Company's application in this proceeding, including Service Company's practices and billing methodologies and how other affiliate costs are charged to CenterPoint Houston.
- 3. Service Company provides a number of services to the various operating units within CNP, such as CenterPoint Houston or the Gas Operations regions within CenterPoint Energy Resources Corp. Service Company costs are billed to affiliates, including CenterPoint Houston, through either direct billings or by allocation. Direct billings represent costs for services incurred directly on behalf of a business unit. These costs are billed directly to the business unit automatically through the SAP accounting system.
- 4. During the 2016 energy efficiency program year, Service Company billed directly to CenterPoint Houston's energy efficiency department a total of \$82,838 in affiliate expense related to information technology services necessary to operate CenterPoint Houston's energy efficiency program and meet the requirements of PURA § 39.905 and 16 Tex. Admin. Code ("TAC") § 25.181. No adjustments have been made to these costs.
- 5. The Company's application does not include any affiliate costs that are deemed unrecoverable or prohibited by PURA or the Commission's rules, including contributions to political organizations or causes or legislative advocacy.
- 6. CenterPoint Houston would require the same types of services provided by its Service Company if it were a stand-alone business entity. Service Company services provided to CenterPoint Houston are necessary for CenterPoint Houston's operations regardless of whether the service is performed centrally, as is done at CNP, or on a decentralized basis and residing at the business unit level. These services are not duplicative of any of the services provided by CenterPoint Houston.

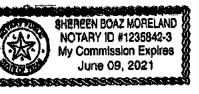
- 7. Affiliate costs directly billed to CenterPoint Houston are priced exactly the same as those provided to other affiliates. Each business unit is charged costs based on the same terms. Such equal treatment is necessary to ensure that all affiliates bear their appropriate costs. For services billed on the basis of time spent, each affiliate is charged the same rate per billable hour for the same service. To ensure all costs are billed each month, any residual unassigned amounts after billing service or billable hour units are billed to the affiliates based on planned activities. In addition, all transactions between Service Company and its affiliated business units are governed by the Service Level Agreements that are executed each year.
- 8. In preparing this case, the Company employed the same methods that it used to prepare its affiliate billing information in the Company's last general rate case, Docket No. 38339, Application of CenterPoint Energy Houston Electric, LLC for Authority to Change Rates. The nature of the directly billed costs and the methodologies by which those costs are determined have not changed since the Public Utility Commission of Texas ("Commission") approved them for CenterPoint Houston in Docket No. 38339.
- 9. For all of these reasons, CenterPoint Houston has complied with the statutory and regulatory standards used by the Commission to determine the reasonableness and necessity of expenses associated with affiliate transactions and their inclusion in rates. The affiliate costs charged to CenterPoint Houston are of the type enumerated in the definition of TAC § 25.272(c)(4) of 'corporate support services.' These costs are fully direct billed and otherwise comport with the applicable requirements of TAC § 25.272 and PURA § 36.058. The affiliate costs charged to CenterPoint Houston are reasonable and necessary and have been priced no higher than Service Company charges other affiliates for the same service. There is no preferential treatment among, or cross-subsidization of, affiliates.

Further affiant sayeth not.

MutuluuuM Michelle M Townsend

SUBSCRIBED AND SWORN TO BEFORE ME on this 3044 day of May 2017.

Notary Public in and for the State of Texas



STATE OF TEXAS §
COUNTY OF HARRIS §

AFFIDAVIT OF MARY A. KIRK

BEFORE ME, the undersigned authority, on this day personally appeared Mary A. Kirk, who having been placed under oath by me did depose as follows:

- 1. "My name is Mary A. Kirk. I am of sound mind and capable of making this affidavit. The facts stated herein are true and correct based on my personal knowledge.
- 2. I am Director of Financial Accounting for CenterPoint Energy, Inc. ("CNP"), which is the parent company of the applicant in this proceeding, CenterPoint Energy Houston Electric, LLC ("CenterPoint Houston" or the "Company"). I assumed this position effective July 16, 2012.
- 3. As Director of Financial Accounting for CNP, I am responsible for the accounting books and records of CNP's regulated gas and electric businesses, including financial accounting for these business units, regulatory reporting, property accounting, gas cost accounting, and revenue accounting. More specifically, I am responsible for the books and records that support the schedules used to develop CenterPoint Houston's Application for Approval of an Adjustment to its Energy Efficiency Cost Recovery Factor ("Application") in this proceeding. I am also responsible for ensuring that CNP has adequate staff, processes and systems in place to meet the Company's financial and regulatory accounting and reporting requirements as required by the Public Utility Commission of Texas.
- 4. The schedules supporting the Company's Application were prepared from the books and records of the Company and are accurate summaries of the business records upon which they are based.
- 5. The Company's books, accounts and records are kept in compliance with the FERC Uniform System of Accounts, as prescribed by Section 14.151 of the Public Utility Regulatory Act, and meet all applicable requirements of 16 TAC § 25.72."

Further affiant sayeth not.

Mary A. Kirk

SUBSCRIBED AND SWORN TO BEFORE ME on this <u>30</u> day of May, 2017.

Notary Public in and for the State of Texas

STATE OF TEXAS

888

COUNTY OF HARRIS

AFFIDAVIT OF RANDOLPH H SUTTON

BEFORE ME, the undersigned authority, on this day personally appeared Randolph H.

Sutton who having been placed under oath by me did depose as follows:

- 1. "My name is Randolph H Sutton. I am of sound mind and capable of making this affidavit. The facts stated herein are true and correct based upon my personal knowledge.
 - 2. I am the Manager of Compensation, at CenterPoint Energy Service Company, LLC ("Service Company"), which is a wholly-owned subsidiary of CenterPoint Energy Inc. ("CNP") that provides centralized support services to CNP's operating units, including CenterPoint Energy Houston Electric, LLC ("CenterPoint Houston" or the "Company"). In my current role, I manage the compensation programs for all CNP employees, executives, and board members.
- 3. CNP's compensation philosophy is to maintain the competitiveness as measured from a "total compensation" perspective. This means that we will measure all of the components that make up total compensation and benchmark against competitor companies to ensure that our compensation program is sufficient to recruit, retain and motivate the workforce needed to serve our customers.
- 4. By providing compensation and benefit opportunities comparable to those an employee could find in other companies, CNP is able to ensure its customers that experienced and capable employees will be on the job to provide the reliable and reasonably priced energy services they rely on.
- 5. The components of CNP's total compensation are base pay, short-term incentives, longterm incentives and benefits.
- 6. In order to monitor and determine market-based pay for its employees, CNP uses a variety of national, regional and local survey data. CNP relies on these types of surveys to establish pay levels that represent pay levels our peers and competitors provide for the positions we staff, and to ensure that we are receiving objective, confidential data reflective of a broad representation of the market.
- The Short Term Incentive Plan ("STI") provides for annual incentive pay based on the 7. attainment of annual key performance targets, including operating income, efficiency of operations, customer service and safety. This combination of goals provides benefits to all CNP stakeholders by encouraging a high level of customer service, expense management and operational efficiency among all employees, which are critical to limiting cost increases that would otherwise need to be recovered in rates.

- 8. CNP's benefits philosophy is to provide a comprehensive set of benefits to meet employees' welfare and financial security needs in an affordable and efficient manner with the overall value targeted at the midpoint of the marketplace, which is similar to its compensation philosophy.
- 9. CNP offers the following types of benefits as part of its comprehensive benefits plan: (1) Health and welfare plans; (2) Qualified and Non-qualified Retirement Plans; (3) Qualified and Non-qualified Savings Plans; (4) Postretirement Welfare Plans; (5) Postemployment Welfare Plans; and (6) Deferred Compensation Plan.
- 10. CNP leverages its size and the expertise of its HR staff to get the best value for its nine benefits expenditures. For instance, for all insured plans, CNP uses brokers to ensure that administrative services are competitively priced and periodically solicits third-party bids on all of its insured plans to ensure that its premiums are reasonable.
- 11. The compensation and benefits costs included in the Company's application are reasonable and necessary expenses to operate the Company's energy efficiency programs necessary to comply with the requirements of 16 TAC § 25.181. They are also necessary to provide safe, reliable and cost-effective service to the Company's customers.
- 12. The Company's compensation and benefit levels that have been approved in previous dockets before this Commission, most recently in PUC Docket No. 38339, have not changed substantively since they were last approved.

Further affiant sayeth not.

Randolph H Sutton

RSAN A Sutt

SUBSCRIBED AND SWORN TO BEFORE ME on this 2017 day of May, 2017.

Notary Public in and for the State of Texas



DOCINE NO	" —	
APPLICATION OF CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC FOR APPROVAL OF AN ADJUSTMENT TO ITS ENERGY EFFICIENCY COST RECOVERY FACTOR		PUBLIC UTILITY COMMISSION OF TEXAS
	D.	

DOCKET NO.

AFFIDAVIT OF MICKEY S. MOON

STATE OF TEXAS	8
	§
COUNTY OF HARRIS	8

Before me, the undersigned authority, on this day personally appeared Mickey S. Moon, who, having been placed under oath by me, did depose as follows:

- 1. My name is Mickey S. Moon. I am over the age of 18 and fully competent to make this affidavit.
- 2. I am employed by CenterPoint Energy Service Company, LLC as Assistant General Counsel.
- 3. I have a BA in Political Science from The University of Texas at Arlington and a JD from The University of Tulsa School of Law. I am licensed to practice law in Arkansas, Oklahoma and Texas. I am also licensed and have appeared in state and federal courts in Oklahoma as well as the United States Court of Appeals for the District of Columbia Circuit.
- 4. After graduation from law school, I was employed as an Assistant Attorney General for the State of Oklahoma for approximately five years, during which time I represented Oklahoma utility ratepayers primarily in proceedings before the Oklahoma Corporation Commission. I was also a captain in the United States Army Reserve and served as a lawyer in the Army's Judge Advocate General Corps for approximately six years after the September 11, 2001 terrorist attacks.
- 5. I have been employed by CenterPoint Energy Service Company, LLC as an attorney in its legal department for approximately 14 years. During the first few years of my career at CenterPoint Energy, I represented the company's natural gas utility business in Arkansas, Louisiana, Oklahoma, and Texas. I then represented the company's natural gas marketing and trading business for a number of years. I have represented the electric utility business, CenterPoint Energy Houston Electric, LLC ("CEHE"), for approximately the last two years.

- 6. Over the course of my entire career I have appeared, and hired and managed outside counsel and testifying and consulting experts, in numerous contested cases, rulemakings, investigations and routine matters before different state and federal administrative agencies, including the Federal Energy Regulatory Commission, the Commodity Futures Trading Commission, the Arkansas Public Service Commission, the Louisiana Public Service Commission, the Oklahoma Corporation Commission, the Railroad Commission of Texas, and the Public Utility Commission of Texas (the "PUCT").
- 7. As an attorney first for the State of Oklahoma and then for CenterPoint Energy Service Company, LLC, I have been responsible for reviewing and approving invoices from outside law firms and consultants.
- 8. As Assistant General Counsel for CenterPoint Energy Service Company, LLC, which is responsible for providing legal services to all business units of CenterPoint Energy, Inc., a Fortune 500 corporation, I am familiar with the rates of a broad range of lawyers, both those at small and large firms and solo practitioners, including the rates charged by such attorneys for work on PUCT matters.
- Based on the above experience, I have previously provided testimony before the Railroad Commission of Texas and the PUCT regarding the reasonableness of legal fees.
- 10. In the 2016 Application of CenterPoint Energy Houston Electric, LLC for Approval of an Adjustment to Its Energy Efficiency Cost Recovery Factor ("EECRF"), Docket No. 46014, CEHE was represented by outside counsel with the law firm Parsley Coffin Renner LLP ("PCR"). The PCR attorneys who worked on this matter have extensive experience representing utilities before the PUCT.
- 11. Mark Santos was the primary lawyer at PCR representing CEHE in its 2016 EECRF filing in Docket No. 46014. Mr. Santos has been one of CEHE's outside counsels in various PUCT proceedings for approximately 8 years. Moreover, CEHE is not the only utility client he represents before the PUCT. Mr. Santos is therefore knowledgeable of and skilled in PUCT practices and procedures.
- 12. Mr. Santos has also been the lead outside lawyer for CEHE in each of its previous annual EECRF filings since 2010. Of CEHE's outside counsel, he is the most knowledgeable concerning energy efficiency projects and EECRF issues.
- 13. The invoices to CEHE from PCR for work in Docket No. 46014 total \$39,098.30 and are attached. In addition, CEHE had to engage an expert consultant with Stratus Energy Group to prepare rebuttal testimony in Docket No. 46014 to address the City of Houston's challenge to CEHE's calculation of the performance bonus included in the EECRF, and the invoice for that work (also attached) was \$4,550.00. CEHE's total rate case expenses for Docket No. 46014,

therefore, was \$43,648.30. I have personally reviewed the invoices on behalf of CEHE.

- 14. I reviewed the above-referenced invoices taking into consideration the eight factors listed in Rule 1.04(b) of the Texas Disciplinary Rules of Professional Conduct:
 - (1) the time and labor required, novelty and difficulty of the questions involved and the skill requisite to perform the legal services properly;
 - (2) the likelihood that acceptance of employment will preclude other employment by the attorney;
 - (3) the customary fee charged in the locality for similar legal services;
 - (4) the amount of time involved and result achieved;
 - (5) time limitation imposed by the client or circumstances;
 - (6) the nature and length of the professional relationship with the client;
 - (7) the experience, reputation and ability of the lawyers involved; and
 - (8) whether the fee is fixed or contingent or uncertain of collection before the legal services are rendered.
- 15. I considered the factors delineated by the Third Court of Appeals in City of El Paso v. Public Utility Comm'n of Texas, 916 S.W.2d 515 (Tex. App.—Austin 1995, writ dism'd by agr.):
 - (1) time and labor required;
 - (2) nature and complexity of the case;
 - (3) amount of money or value of property or interest at stake;
 - (4) extent of responsibilities the attorney assumes;
 - (5) whether the attorney loses other employment because of the undertaking; and
 - (6) benefits to the client from the services.
- 16. I also considered the relevant criteria relating to the reasonableness of rate case expenses in 16 Tex, Admin. Code ("TAC") § 25.245(b):
 - (1) the nature, extent, and difficulty of the work done by the attorney or other professional in the rate case;
 - (2) the time and labor required and expended by the attorney or other professional;
 - (3) the fees or other consideration paid to the attorney or other professional for the services rendered;
 - (4) the expenses incurred for lodging, meals and beverages, transportation, or other services or materials;
 - (5) the nature and scope of the rate case, including:
 - (A) the size of the utility and number and type of consumers served:

- (B) the amount of money or value of property or interest at stake;
- (C) the novelty or complexity of the issues addressed;
- (D) the amount and complexity of discovery;
- (E) the occurrence and length of a hearing; and
- (6) the specific issue or issues in the rate case and the amount of ratecase expenses reasonably associated with each issue.
- 17. As noted above, I am familiar with the rates for utility regulatory work in Texas and elsewhere. Generally speaking, the rates charged by any individual lawyer typically vary based on the level of experience possessed by the lawyer performing the work, the size and reputation of the law firm in which the lawyer works, and the technical nature of the work performed. While the hourly rate charged by outside counsel for work in this case is an important factor, it is only one of many important factors to be considered. Equally important are factors such as the number of hours worked, the complexity of the issues involved, and the experience of the lawyers involved. That is, an experienced lawyer in a complex case with an hourly rate at the high end of the range may be able to more efficiently do the work than a less experienced lawyer with an hourly rate at the low- or mid-point of the hourly rate range, such that the total amount paid at the end of the day is reasonable, even if the hourly rates are at the high end of the range. Similarly, a lawyer working at an hourly rate at the low- or mid-point of the range may have spent so many hours on a matter that the total amount paid is not reasonable, even though the hourly rate is low.
- 18. I am familiar with many regulatory lawyers in the Texas bar, and the lawyers at PCR enjoy excellent reputations for providing a high level of quality work on both complex and routine appellate matters. PCR works on matters of significant importance to Fortune 500 clients. In my experience, the hourly rates of PCR for work done in Docket No. 46014 are consistent with other Texas lawyers performing similar work in Texas. Rates for lawyers at the PUCT, in my experience, have recently ranged, depending on the experience of the lawyer between just under \$300 to more than \$700 (and sometimes more for very specialized subject matters, like tax regulatory work). The rates for PCR's work in Docket No. 46014 are in the expected range.
- 19. The rates charged by PCR for Docket No. 46014 were the same hourly rates the law firm charged CEHE and its affiliates for other matters I am familiar with, including matters for which rate case expense reimbursement was not available.
- 20. In my opinion, the hourly rates charged by PCR in Docket No. 46014 are reasonable and in the range of rates charged in Texas by firms with the same level of depth and expertise. Similarly, in my opinion, the other expenses charged by PCR (i.e. copying, delivery service, etc.) are also reasonable and in line with costs charged by other law firms providing these types of legal services.

The Gulf Coast Coalition of Cities and the City of Houston intervened, and the Commission Staff requested a hearing, in Docket No. 46014. CEHE responded to multiple rounds of discovery from the Commission Staff and the intervenors before the parties agreed to a stipulation and settlement agreement.

- 21. With regard to 16 TAC § 25.245(b) and (c) that relate to the determination of the reasonableness and necessity of the rate case expenses CEHE seeks to recover, the following information is relevant:
 - (1)The rate case expense documentation CEHE is filing shows that the fees paid to, tasks performed by, and time spent on a task by an attorney, expert witness, or other professional in these cases is not extreme or excessive;
 - The rate case expense documentation CEHE is filing shows that the (2)expenses incurred for lodging, meals and beverages, transportation, or other services or materials were not extreme or excessive;
 - (3) CEHE's applications, testimony, and related materials in Docket No. 46014 as well as the rate case documentation CEHE is filing show there was no unnecessary duplication of services or testimony:
 - (4)CEHE's application, testimony and related materials show that CEHE's EECRF application has a reasonable basis in law, policy and fact and is warranted based on PUCT precedent in prior EECRF cases;
 - (5) CEHE's rate case expenses in Docket No. 46014 as a whole are not disproportionate, excessive or unwarranted in relation to the nature and scope of the rate case addressed by the evidence pursuant to 16 TAC § 25.245(b)(5) for the reasons noted above; and
 - (6) Given the rate case expense documentation CEHE is filing, CEHE did not fail to comply with the requirements for providing sufficient information pursuant to 16 TAC § 25.245(b).
- 22. Based on my experience and after considering the factors listed in paragraphs 14, 15 and 16 above, the \$43,648.30 in rate case expenses incurred by CEHE in Docket No. 46014 were reasonable and necessary for the work performed.

Mickey 8, Moon

SUBSCRIBED AND SWORN TO BEFORE ME by the said Mickey S. Moon on the 3/MEMAY, 2017.

day of May, 2017.



Notary Public, State of Texas

Parsley Coffin Renner LLP

P O Box 13366 Austin, TX 78711

Taxpayer I.D. # 27-0934461

Invoice Description:

2016 EEPR & EECRF

Invoice #: 6211

Matter #: 2016 1004

Invoice Date: 04/18/2016

Matter Desc: 2016 EEPR & EECRF

Invoice Total: \$738.00

Main Assignee: Bundage, Stephanie

Invoice Detail

Performed By	Date	Hours	Rate	Total	Description
Santos, Mark	03/16/2016	1.80	\$410.00	\$738.00	Review/Analyze draft EEPR
Matter Total	l:	1.80		\$738.00	

Lawyer Summary

Performed By	Rate	Hours	Total Fees
Santos, Mark	\$410,00	1.80	\$738.00
	Sum:	1.80	\$738.00

Expenses			
Date	Description		Amount
		Tatal Company	

Total Expenses:

Fees / Expense Summary

Fees: \$738.00 Expenses:

Total Amt Due: \$738.00

Parsley Coffin Renner LLP

P O Box 13366 Austin, TX 78711

Taxpayer I.D. # 27-0934461

Invoice Description:

2016 EEPR & EECRF

Invoice #: 6236

Matter #: 2016 1004

Invoice Date: 05/18/2016

Matter Desc: 2016 EEPR & EECRF

Invoice Total: \$410.00

Main Assignee: Bundage, Stephanle

Invoice Detail

Performed By	Date	Hours	Rate	Total	Description
Santos, Mark	04/08/2016	0.40	\$410.00	\$164.00	Review/Analyze draft affidavits and bonus issue
Santos, Mark	04/14/2016	0.60	\$410,00	\$246.00	Communicate with client A. Machtemes, et al. re filling status
Matter Total	.	1.00		\$410.00	

Lawyer Summary

Performed By	Rate	Hours	Total Fees
Santos, Mark	\$410.00	1.00	\$410.00
	Sum:	1.00	\$410.00

Expenses			
Date	Description		Amount
		,,,,,	
		THE	

Total Expenses:

Fees / Expense Summary

Fees: \$410.00 Expenses:

Total Amt Due: \$410.00

Parsley Coffin Renner LLP

P O Box 13366 Austin, TX 78711

Taxpayer I.D. # 27-0934461

Invoice Description:

2016 EEPR & EECRF

Invoice #: 6259

Matter#: 2016 1004

Invoice Date: 06/17/2016

Matter Desc: 2016 EEPR & EECRF

Invoice Total: \$5,724.10

Main Assignee: Bundage, Stephanie

Invoice Detail

Performed By	Date	Hours	Rate	Total	Description
Santos, Mark	05/17/2016	1.30	\$410.00	\$533,00	Review/Analyze S. Becezny draft testimony
Santos, Mark	05/18/2016	1.30	\$410.00	\$533.00	Review/Analyze draft testimony
Santos, Mark	05/20/2016	2.60	\$410,00	\$1,086.00	Draft/Revise application, notice and protective order
Santos, Mark	05/20/2016	1.80	\$410,00	\$738,00 ·	Review/Analyze draft affidavits and testimony
Santos, Mark	05/20/2016	1.10	\$410.00	-\$451.00	Review/Analyze draft testimony
Santos, Mark	05/24/2016	2.80	\$410.00	\$1,148.00	Review/Analyze draft testlmony
Santos, Mark	05/25/2016	0.40	\$410.00	\$164.00	Communicate with client A. Machtemes, et al. re draft application and testimony
Santos, Mark	05/25/2016	1,30	\$410.00	\$533.00	Draft/Revise application and notice
Santos, Mark	05/26/2016	0.60	\$410.00	\$246,00	Review/Analyze updated testimony
Matter Tota	f;	13,20		\$5,412.00	

Lawyer Summary

Performed By	Rate	Hours	Total Fees
Santos, Mark	\$410.00	13.20	\$5,412.00
	Sum:	13.20	\$5,412.00

Expenses

Date	Description	Amount
05/31/2016	Photocopies	\$312.10
		Total Expenses: \$312.10

Fees / Expense Summary

Fees:

\$5,412.00

Expenses:

\$312,10

Total Amt Due:

\$5,724.10

Parsley Coffin Renner LLP

P O Box 13366 Austin, TX 78711

Taxpayer I.D. # 27-0934461

Invoice Description:

2016 EEPR & EECRF

Invoice #: 6285

Matter #: 2016 1004

Invoice Date: 07/22/2016

Matter Desc: 2016 EEPR & EECRF

Invoice Total: \$4,227,60

Main Assignee: Bundage, Stephanie

Invoice Detail

Performed By	Date	Hours	Rate	Total	Description
Azarani, Emma	06/01/2016	1.50	\$175.00	\$262.50	Review/Analyze and finalize filing package
Santos, Mark	06/01/2016	2,70	\$410.00	\$1,107.00	Review/Analyze final filing package
Santos, Mark	06/03/2016	0.20	\$410.00	\$82.00	Communicate w/other external Staff re request for electronic schedules
Santos, Mark	06/03/2016	0.60	\$410.00	\$246.00	Review/Analyze order of referral/SOAH Order No. 1 and procedural schedule issues
Santos, Mark	06/08/2016	1.60	\$410,00	\$656.00	Review/Analyze procedural schedule issue re Staff's comments
Santos, Mark	06/09/2016	0.40	\$410.00	\$164.00	Appear for/attend Open Meeting re preliminary order
Santos, Mark	06/14/2016	0.70	\$410.00	\$287.00	Review/Analyze Staff position on procedural schedule
Santos, Mark	06/15/2016	0.30	\$410.00	\$123.00	Communicate with client A. Machtemes re case status and procedural schedule
Azarani, Emma	06/16/2016	1.00	\$175.00	\$175.00	Review/Analyze and finalize for filing Affidavit of Alice Hart
Santos, Mark	06/16/2016	0.40	\$410.00	\$164.00	Draft/Revise procedural schedule
Santos, Mark	06/17/2016	0.50	\$410.00	\$205.00	Communicate with client S. Becezny and A. Machtemes re draft discovery
Santos, Mark	06/20/2016	0.30	\$410.00	\$123.00	Review/Analyze Staff discovery
Santos, Mark	06/27/2016	0.40	\$410.00	\$164.00	Review/Analyze draft discovery responses

Fees

Performed By	Date	Hours	Rate	Total	Description
Azarani, Emma	06/28/2016	1.50	\$175.00	\$262.50	Review/Analyze and finalize for filing CenterPoint's responses to Staff 1st RFI, Statement of Confidentiality for Staff RFI 1-2, and confidential CDs
Santos, Mark	06/30/2016	0.30	\$410.00	\$123,00	Draft/Revise letter re errata
Matter Total	•	12,40		\$4,144,00	



Lawyer Summary

Performed By	Rate	Hours	Total Fees
Azarani, Emma	\$175.00	4.00	\$700.00
Santos, Mark	\$410.00	8.40	\$3,444.00
	Sum:	12,40	\$4,144.00

Expenses

Date	Description	 Amount
06/30/2016	Photocopies	\$83.60
•		

Total Expenses:

\$83,60

Fees / Expense Summary

Fees:

\$4,144.00

Expenses:

\$83.60

Total Amt Due:

\$4,227.60

Parsley Coffin Renner LLP P O Box 13366 Austin, TX 78711

Taxpayer I.D. # 27-0934461

Invoice Description:

2016 EEPR & EECRF

Invoice #: 6314

Matter #: 2016 1004

Invoice Date: 08/23/2016

Matter Desc: 2016 EEPR & EECRF

Invoice Total: \$6,648.70

Main Assignee: Bundage, Stephanie

Invoice Detail

Performed By	Date	Hours	Rate	Total	Description
Santos, Mark	07/06/2016	0,60	\$410.00	\$246.00	Review/Analyze Staff request for hearing
Santos, Mark	07/11/2016	0.30	\$410.00	\$123.00	Draft/Revise confidentiality statement for COH-1
Santos, Mark	07/11/2016	0,80	\$410.00	\$328.00	Review/Analyze discovery responses to City of Houston discovery
Santos, Mark	07/13/2016	0.20	\$410.00	\$82.00	Communicate w/other external Staff re settlement
Santos, Mark	07/18/2016	0.10	\$410.00	\$41.00	Communicate w/other external Staff re settlement
Santos, Mark	07/18/2016	0.80	\$410.00	\$328.00	Draft/Revise settlement agreement
Santos, Mark	07/19/2016	1.30	\$410.00	\$533.00	Draft/Revise settlement documents and proposed order
Santos, Mark	07/20/2016	0.40	\$410.00	\$164.00	Review/Analyze draft settlement documents
Santos, Mark	07/22/2016	0.40	\$410.00	\$164.0 0	Review/Analyze draft discovery responses
Santos, Mark	07/26/2016	0.90	\$410.00	\$369.00	Communicate with client A. Machtemes, et al. re settlement
Santos, Mark	07/26/2016	0.40	\$410.00	\$164.00	Communicate w/other external parties re settlement
Santos, Mark	07/26/2016	1.20	\$410.00	\$492.00	Review/Analyze precedent re City settlement position
Santos, Mark	07/27/2016	2.40	\$410.00	\$984.00	Review/Analyze S. Norwood and K. Nalepa testimony

Fees

Performed By	Date	Hours	Rate	Total	Description
Santos, Mark	07/28/2016	2.70	\$410.00	\$1,107.00	Review/Analyze K. Nalepa and S. Norwood testimony
Santos, Mark	07/29/2016	1.00	\$410.00	\$410.00	Communicate with client S. Bezecny, et al. re rebuttal issues
Santos, Mark	07/29/2016	0.10	\$410.00	\$41.00	Communicate w/other external S. Chang re settlement
Santos, Mark	07/29/2016	2.60	\$410.00	\$1,066.00	Review/Analyze issues for rebuttal testimony
Matter Tota	l:	16.20		\$6,642.00	



Lawyer Summary

	Sum:	16.20	\$6,642.0	00
Santos, Mark	\$410.00	16.20	\$6,642.0	
Performed By	Rate	Hours	Total Fees	Control of the Contro

Expenses

Date	Description		Amount
07/31/2016	Photocopies		\$6.70
		Total Expenses:	\$6,70

Fees / Expense Summary

Fees: \$6,642.00

Expenses: \$6.70

Total Amt Due: \$6,648.70

Parsley Coffin Renner LLP

P O Box 13366 Austin, TX 78711

Taxpayer I.D. # 27-0934461

Invoice Description:

Billing for Work in Connection with CenterPoint EECRF Filing, PUC Docket No.

46014

Invoice #: CNP-2016-1

Matter #: 2016 1004

Invoice Date: 09/09/2016

Matter Desc: 2016 EEPR & EECRF

Invoice Total: \$4,550.00 Main Assignee: Bundage, Stephanie

Invoice Detail

Performed By	Date	Hours	Rate	Total	Description
Totten, Jess K.	08/18/2016	13.00	\$350.00	\$4,550,00	

13.00

Lawyer Summary

Performed By	Rate	Hours	Total Fees
Totten, Jess K.	\$350.00	13.00	\$4,550.00
	Sum:	13.00	\$4,550.00

Expenses			
Date	Description	 	Amount
		Total Expenses:	·

Fees / Expense Summary

Fees:

\$4,550.00

Expenses:

Total Amt Due:

\$4,550.00



A: PO Box 1967 Austin, TX 78768 W: www.stratusenergy.com

INVOICE

Date: September 9, 2016

Invoice No. CNP-2016-1

To: CenterPoint Energy Houston Electric, LLC c/o Jason Ryan
Assistant General Counsel
CenterPoint Energy, Inc.
1111 Louisiana Street, Suite 4669
Houston, Texas 77002

2016 1004

Billing for Work in Connection with CenterPoint EECRF Filing, PUC Docket No. 46014

All work itemized below relates to the issue of the appropriate calculation of a performance bonus under Substantive Rule 25.181

Date	Description	Hours
August 11, 2016	Phone call with Mark Santos, review documents	1.5
August 12, 2016	Review documents	1
August 15, 2016	Review documents, draft testimony	4
August 16, 2016	Review documents, draft testimony	5
August 17, 2016	Review documents, draft testimony	1
August 18, 2016	Review documents, draft testimony	0.5
	Total hours	13
	Billing rate: \$350 per hour	
Total		\$4,550.00

Payment Instructions: Please submit payment to: Stratus Energy Group LLC, PO Box 1967, Austin, TX 78767. Tax Identification Number 27-1280199,

Questions: Please contact Jess Totten if there are any questions concerning this invoice. Phone: 521-800-2664.

512-800-2664

Parsley Coffin Renner LLP P O Box 13366 Austin, TX 78711

Taxpayer I.D. # 27-0934461

Invoice Description:

2016 EEPR & EECRF

Invoice #: 6331

Matter #: 2016 1004

Invoice Date: 09/21/2016

Matter Desc: 2016 EEPR & EECRF

Invoice Total: \$17,590.50

Main Assignee: Bundage, Stephanie

Invoice Detail

Performed By	Date	Hours	Rate	Total	Description
Santos, Mark	08/01/2016	0.80	\$410.00	\$328.00	Communicate with client A. Machtemes, et al. re settlement negotiations
Santos, Mark	08/01/2016	0.10	\$410.00	\$41.00	Communicate w/other external H. Wilcher re draft settlement
Santos, Mark	08/01/2016	1.80	\$410.00	\$738.00	Review/Analyze K. Nalepa and S. Norwood direct testimony
Santos, Mark	08/01/2016	1.60	\$410.00	\$656.00	Review/Analyze settlement options
Santos, Mark	08/02/2016	0.40	\$410.00	\$164.00	Communicate with client A. Machtemes, et al. re settlement and next steps
Santos, Mark	08/02/2016	0.40	\$410.00	\$164.00	Review/Analyze K. Nalepa and S. Norwood direct testimony
Santos, Mark	08/03/2016	0.30	\$410.00	\$123.00	Communicate w/other external J. Totten re possible rebuttal testimony
Santos, Mark	08/04/2016	0.20	\$410.00	\$82.00	Communicate with client A. Machtemes, et al. re case status
Santos, Mark	08/04/2016	0.30	\$410.00	\$123.00	Communicate with client A. Machtemes, et al. re next steps, errata and rebuttal testimony
Santos, Mark	08/04/2016	0.20	\$410.00	\$82.00	Communicate with client A. Machtemes re case status
Santos, Mark	08/04/2016	0.10	\$410.00	\$41.00	Communicate w/other external S. Chang re settlement/rebuttal
Santos, Mark	08/04/2016	0,70	\$410.00	\$287.00	Draft/Revise errata

Fees

Performed By	Date	Hours	Rate	Total	Description
Santos, Mark	08/05/2016	0.60	\$410.00	\$246.00	Communicate with client A. Machtemes, et al. re intervenor positions
Santos, Mark	08/05/2016	3.10	\$410.00	\$1,271.00	Review/Analyze GCCC questions/position and City of Houston bonus position
Santos, Mark	08/08/2016	5.70	\$410.00	\$2,337.00	Review/Analyze S. Bezecny draft rebuttal testimony
Santos, Mark	08/09/2016	0.40	\$410,00	\$164,00	Communicate w/other external City of Houston re settlement/bonus position
Santos, Mark	08/09/2016	4.70	\$410,00	\$1,927.00	Review/Analyze S. Bezecny draft rebuttal testimony
Santos, Mark	08/10/2016	0.50	\$410.00	\$205.00	Communicate with client A. Machtemes, et al. re settlement
Santos, Mark	08/10/2016	0.30	\$410.0 0	\$123.00	Communicate w/other external expert re rebuttal testimony
Santos, Mark	08/10/2016	0.30	\$410.00	\$123.00	Communicate w/other external GCCC re settlement
Santos, Mark	08/10/2016	0.30	\$410,00	\$123.00	Communicate w/other external J. Totten re draft rebuttal testimony
Santos, Mark	08/10/2016	1.30	\$410.00	\$533,00	Review/Analyze J. Totten rebuttal topics/issues
Santos, Mark	08/10/2016	1.30	\$410.00	\$533.00	Review/Analyze settlement options
Santos, Mark	08/11/2016	0.50	\$410.00	\$205.00	Communicate w/other external J. Totten re rebuttal testimony

Fees

Performed By	Date	Hours	Rate	Total	Description
Santos, Mark	08/11/2016	5.10	\$410.00	\$2,091.00	Review/Analyze draft rebuttal testimony
Santos, Mark	08/15/2016	0.30	\$410.00	\$123.00	Communicate with client A. Machtemes, et al. re rebuttal testimony
Santos, Mark	08/15/2016	0.40	\$410.00	\$164.00	Communicate with client A. Machtemes, et al. re settlement
Santos, Mark	08/15/2016	1.20	\$410.00	\$492.00	Review/Analyze GCCC settlement proposal
Santos, Mark	08/16/2016	1.90	\$410.00	\$779.00	Review/Analyze J. Totten draft rebuttal testimony
Santos, Mark	08/16/2016	0.90	\$410,00	\$369.00	Review/Analyze S. Bezecny draft rebuttal testimony
Santos, Mark	08/17/2016	1.30	\$410.00	\$533.00	Review/Analyze GCCC settlement position/ issues
Santos, Mark	08/18/2016	1.60	\$410.00	\$656.00	Draft/Revise settlement documents
Santos, Mark	08/18/2016	1,10	\$410.00	\$451.00	Review/Analyze J. Totten draft rebuttal testimony
Santos, Mark	08/19/2016	0.40	\$410.00	\$164.00	Communicate with client A. Machtemes, et al. re settlement
Santos, Mark	08/19/2016	0.50	\$410.00	\$205.00	Communicate w/other external parties re settlement
Santos, Mark	08/19/2016	0.20	\$410.00	\$82.00	Draft/Revise letter to ALJ re settlement

Fees

Performed By	Date	Hours	Rate	Total	Description
Santos, Mark	08/26/2016	0.10	\$410.00	\$41.00	Communicate with client A. Machtemes, et al. re Staff's proposed changes to proposed order
Santos, Mark	08/26/2016	0.20	\$410.00	\$82.00	Communicate w/other external parties re Staff's proposed changes to proposed order
Santos, Mark	08/26/2016	0.40	\$410.00	\$164.00	Review/Analyze Staff's proposed changes to proposed order
Santos, Mark	08/29/2016	0,20	\$410.00	\$82.00	Communicate with client A. Machtemes, et al. re settlement status
Santos, Mark	08/31/2016	1.20	\$410.00	\$492.00	Review/Analyze Staff questions on settlement
Matter Tota	al:	42.90		\$17,589.00	



Lawyer Summary

Performed By	Rate	Hours	Total Fees
Santos, Mark	\$410,00	42.90	\$17,589.00
	Sum:	42.90	\$17,589.00

Expenses

Date	Description	Amount
08/31/2016	Photocopies	\$1.50

Total Expenses:

\$1.50

Fees / Expense Summary

Fees:

\$17,589.00

Expenses:

\$1.50

Total Amt Due:

\$17,590.50

Parsley Coffin Renner LLP

P O Box 13366 Austin, TX 78711

Taxpayer I.D. # 27-0934461

Invoice Description:

2016 EEPR & EECRF

Invoice #: 6350

Matter #: 2016 1004

Invoice Date: 10/10/2016

Matter Desc: 2016 EEPR & EECRF

Invoice Total: \$2,406.40

Main Assignee: Bundage, Stephanie

Invoice Detail

Performed By	Date	Hours	Rate	Total	Description
Santos, Mark	09/01/2016	0.90	\$410,00	\$369,00	Communicate with client A. Machtemes and S. Bezecny re settlement calculation
Santos, Mark	09/01/2016	0.40	\$410.00	\$164.00	Communicate w/other external parties re settlement
Santos, Mark	09/02/2016	0.90	\$410.00	\$369.00	Communicate w/other external parties re final settlement documents
Santos, Mark	09/02/2016	0.30	\$410.00	\$123.00	Draft/Revise letter to ALJ re abatement
Santos, Mark	09/08/2016	1.30	\$410.00	\$533.00	Review/Analyze Commission comments re EECRF rate case expenses
Santos, Mark	09/09/2016	0.30	\$410.00	\$123.00	Communicate w/other external Commission Staff re rate case expense documentation
Santos, Mark	09/22/2016	0.80	\$410.00	\$328.00	Review/Analyze final orders from AEP and ETI dockets for settled proposed order w/Staff
Santos, Mark	09/26/2016	0.20	\$410,00	\$82,00	Communicate w/other external Staff re case status
Santos, Mark	09/27/2016	0.70	\$410.00	\$287.00	Communicate with client A. Machtemes, et al. re case status and next steps
Matter Tota	l:	5.80		\$2,378.00	



Lawyer Summary

Performed By	Rate	Hours	Total Fees
Santos, Mark	\$410,00	5.80	\$2,378.00
	Sum:	5.80	\$2,378.00

Expenses

Date	Description	Amount
09/30/2016	Photocopies	\$28.40

Total Expenses:

\$28.40

Fees / Expense Summary

Fees:

\$2,378.00

Expenses:

\$28,40

Total Amt Due:

\$2,406.40

Parsley Coffin Renner LLP

P O Box 13366 Austin, TX 78711

Taxpayer I.D. # 27-0934461

Involce Description:

2016 EEPR & EECRF

Invoice #: 6374

Matter #: 2016 1004

Invoice Date: 11/18/2016

Matter Desc: 2016 EEPR & EECRF

Invoice Total: \$1,353.00

Main Assignee: Bundage, Stephanie

Invoice Detail

Performed By	Date	Hours	Rate	Total	Description
Santos, Mark	10/03/2016	0.80	\$410.00	\$328.00	Review/Analyze Staff's proposed changes to proposed order
Santos, Mark	10/04/2016	0.10	\$410.00	\$41.00	Communicate with client A. Machtemes, et al. re proposed order
Santos, Mark	10/04/2016	0.20	\$410.00	\$82.00	Communicate w/other external Staff re proposed order
Santos, Mark	10/05/2016	1.10	\$410.00	\$451.00	Review/Analyze updated proposed order and Staff settlement pleading
Santos, Mark	10/07/2016	0.20	\$410.00	\$82.00	Communicate with client A. Machtemes, et al. re same
Santos, Mark	10/07/2016	0.30	\$410.00	\$123.00	Review/Analyze draft filing re proposed order
Santos, Mark	10/17/2016	0.60	\$410.00	\$246.00	Review/Analyze settlement issues for next Open Meeting
Matter Total	l:	3.30		\$1,353.00	



Lawyer Summary

Performed By	Rate	Hours	Total Fees
Santos, Mark	\$410.00	3.30	\$1,353.00
	Sum:	3.30	\$1,353.00

Expenses		
Date	Description	Amount
		Total Expenses:

Page 3 of 4

Fees / Expense Summary

Fees:

\$1,353.00

Expenses:

Total Amt Due:

\$1,353.00

WORKPAPERS OF JOHN R DURLAND

	Residential	Secondary < 10 kVA	Secondary > 10 kVA	Primary	Transmission	Total Line Loss Value
2016 kW Savings	41,660	2,000	85,986	36,564	1,492	
% of Total Savings	25%	1%	51%	22%	1%	1
Line Loss Value Approved in Docket 38339	_ 5.77%	5.77%	5.52%	3.49%	2.00%	1
Weighted Line Loss Value	1.43%	0.07%	2.83%	0.76%	0.02%	5.11%

	2013						2014			~	2015			~	2016	
	Actual	Actual Energy	1		Actual	Actual			Actual	Actual			Actual	Actual		
	Reduction (MW)	(MWH)	riogram Cost	lotal 3/kW	Reduction (MW)	Savings (WWH)	Program Cost	Total S/KW	Reduction	Savings	Program Cost	Total \$/kw	Reduction	Savings	Program Cost	Total \$/kW
TNMP	10.30	16,931	\$ 4,703,099	\$ 456.83	09.6	17,119	\$ 4,526,644.00	\$ 471.43	3.70	17,520	17,520 \$ 4,012,014,00	\$ 461.15	12.25	21,716	21.716 \$ 5.097.623.00	\$ 416.03
XCEL	5.10	306,7	\$ 2,172,000	\$ 425,88	5.01	11,962 \$	\$ 2,497,750.00 \$	\$ 498.55	8.17	14,537	\$ 3,225,000,00	\$ 394.86	8,40	14,040	\$ 3,309,953.00	\$ 393.95
El Paso	14,19	23,394	\$ 4,301,717	\$ 303.19	13.56	22,899	\$ 4,281,199.00	\$ 315.79	12.31	22,283	\$ 3,874,504,00	\$ 314.74	12.31	22,283	\$ 3,608,882,00	\$ 293,29
Entergy TX	19.10	36,996	\$ 8,466,000	\$ 443.25	17.20	39,214 \$	00.000,160,8 \$	\$ 470.41	18.10	39,721	\$ 7,147,000.00	\$ 394.86	19.74	45,044 \$	\$ 7,026,852.00	95.35E 2
Oncor	112.70	224,666	\$ 56,090,270	\$ 497.70	125.30		202,105 \$ 56,320,065.00 \$	\$ 449.48	115.81	178,908	178,908 \$ 47,305,992.00	\$ 408.48	128,83	198,742	\$ 53,869,937.00	\$ 418.15
SWEP8	14.07	18,778	\$ 4,764,800	*	12.58	17,494 \$	\$ 3,682,200.00	\$ 292.70	9.88	15,262	\$ 3,346,850,00	\$ 338.75	11.94	20,648	\$ 4,148,989.00	S
AEP North	6.93	5,067	\$ 2,705,070	\$ 390.34	8.15	11,867 \$	\$ 2,756,810,00	\$ 338.26	4.54	12,289	\$ 2,770,780.00	\$ 610.30	4.26	7,464	\$ 2,627,930.00	\$ 616.88
AEP Central	34.14	48,954	\$ 13,054,810 \$	\$ 382.39	39.83	63,815	63,815 \$ 13,694,880.00	\$ 343.83	43,78	68,507	\$ 13,508,120.00	\$ 308.55	39.41	68,278	\$ 13,647,287.00	\$ 346.27
Sharyland	2.67	1,022			0.38	1,791	\$ 510,022,00	\$ 1,342,16	0.60	\$ 825'2	\$ 629,097.00	\$ 1,048,50	09:0	2,432 \$	\$ 645,430.00	\$ 1,075.72
CenterPoint	193.67	160,107	\$ 34,773,368 \$	\$ 17.71	159.19		153,170 \$ 35,665,305.00	\$ 224.04	168.49	188,255	188,255 \$ 35,832,992,00	\$ 212.67	167.70	190,857	190,857 \$ 33,110,909.00	\$ 197.44

http://interchange.puc.texas.gov/WebApp/interchange/application/dbapps/filings/pgControl asp?TXT_UTIUTY_TYPE=A&TXT_CANTRL,NO=46907&TXT_ITEM_MATCH=1&TXT_NC=&TXT_N_RIE_PARTY=&TXT_DOC_TYPE=ALL&TXT_D_FROM=&TXT_D_EATXT_D_FROM=&

162

Workpaper JRDWP3 is confidential. A copy of this material will be provided pursuant to the protective order issued in this docket.

400 00 00 00 00 00 00 00 00 00 00 00 00	100 100		2 C C C C C C C C C C C C C C C C C C C	No. 10 N	2 11.24 2 11.24 2 12.24 2 1
### ##################################	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1	1 1 1 1 1 1 1 1 1 1	1 10,000
100 100	1	1	20000000000000000000000000000000000000	The state of the s	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	100 100		60 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
* NOTE BE CONT		[[[] 왕조 전 기 의 교 () 의 전 기 의 의 의 시 기 의 의 과 기 의 교 [] 의 의 의 의 의 의 의 의 의 의 의 의 의 의 의 의 의 의			1
100				1 2 1 1 1 1 1 1 1 1	1 2 3 3 3 3 3 3 3 3 3

1012.V Espenses 1 1,002 1 1,002 1 1,003 1 1,	9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	전 함께 역 작업을 되었었다. 이 이 이 이 이 이 이 이 이 이 이 이 이 이 이 이 이 이 이	1	### 1	20 20 20 20 20 20 20 20 20 20 20 20 20 2
100 Admin 100 Admin 10, 10, 10, 10, 10, 10, 10, 10, 10, 10,	A STATE OF THE PROPERTY OF THE	### ##################################	10 12 12 12 12 12 12 12 12 12 12 12 12 12	1977(2) 1978(2	TOURS TO STORY TO STO
A Control of the Cont		변경 (1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ALIGNAL STATES	10 12 12 12 12 12 12 12 12 12 12 12 12 12	ASSESSED OF THE PROPERTY OF TH
Preventing of Demond Switzs Mr Medicals	2007-10-10-10-10-10-10-10-10-10-10-10-10-10-	1000000000000000000000000000000000000	1900 1900	1	2.007. 2.007. 2.007. 2.007. 2.007. 2.007. 2.007. 2.007. 2.007. 2.007. 2.007. 2.007. 2.007.
Enimeral Ceerus Information (1988)	아마 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)			F 10 C C C C C C C C C C C C C C C C C C	900 81 81 81 81 81 81 81
Reported J. Vertified DAYA. 1,000 CT 1,0	(1982년) (1982년) (1982년) (1982년) (1982년) (1982년) (1982년) (1982년) (1982년) (1982년)	변경 (1 년 1년	69 17-7 60 17-7 18-10-18 18-10-18 19-10-18	(1997) (1	41 150 0 18.151 18.1
Repaired FVerible AVIII 1 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	0007 07751 0	15. 25. 25. 25. 25. 25. 25. 25. 25. 25. 2	ENERGY ENGINEERS OF THE PROPERTY OF THE PROPER	CHARGE CHARGE	100.000 (1) (100.000) (1) (100
Reported Virtual Report of Vir	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2.00	100 100 100 100 100 100 100 100 100 100	1817 1818 18	200 000 000 000 000 000 000 000 000 000
Separada Variation of Control of	<u> </u>			100 (100 (100 (100 (100 (100 (100 (100	10 10 10 10 10 10 10 10 10 10 10 10 10 1
Note Division International Control of the Control	The control of the co	Comment Comm	Internal Theory (Internal Theory (Intern	The last of the la	Controlled Con
Trapera Commercial to Commerc	200 Miles (1990) 200 Mi		P) (908)		

Hartel Printer B. Space Barbara Left (1865)	Mender	Variable	Verification V	Reported / Verified Kith	Version MAN	Distance Life	Demand Savings	hernites	Teleficial Administra	MAN Esperan	ğ	Total Programs Cort.	*114	1.144	Conf	Net Barerille	1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	i.e.	1,669		5 Pos C14	B 11-8	gr.	* KR R	4774	21 N-26'9	\$ 1,145	1 32	3 18,990	1 20 Mg	\$ 0378	£ 555,417	1 74/840	11077
	Om Continuation Marchin Statem	120	3	322 430.5	3,55	F	100	247	\$-218.4E	2017	_	94706	D0 100	4 0440	10.04	E Dr. ret	45,475
Exercise Star Mother Samily Long High SATTP	Повенилия	¥#¥	L	我においなんちゃ	12000.01	3	100	10.60	11.4CR.62	\$25	_	313,156	1.00	5 Haro 5	T PERSONAL T	1000341	10000
Month Samber Mary (BRS)	All Measure	1,386.4	ĸ	4,140,410,8	4,140,43	21.2	TOR MEN.	or the contract of	1000	\$12,494.04	3 1,144	544,169		*	3,744,473 1	3241,604 3	33.4
							din		· · · · · · · · · · · · · · · · · · ·				:		, ,,,,,	20	
Peel Nump Frequent Residential	Nea: Pump	3,000	0.30004	1,0240123	(2)40153)hut	COLUMN 4	440,594.5	A35RLT4	5 0,463	YAN'I S	36,335	*	I KEEU S	4 MCM4	38784	N.
			3	256 50 50					in the state of			110		Commission of			
Emergy When Recommend Aptions Programs	LED Lighting	46.RI		247,953,00	878	007	200	120,057	20,014 44	r	.,	\$	ĝ.		101,167	1,400	2.5
France With Responds Artifal Princes	Ehrhen Guser Asses 1.3 ppm	14.30	000	32,224.FG	32.29	1dp	Ę,	SONE.	1,444	\$.,		# HAT 25		4	2	g proper
Sampy Wite Research Astern Program	Sharehad 1.5 gran	47.74		01.314.10	SULIN	0.0	61.124	12,650	2076		_	_	THE S	S GHO S	20402	1 00/10	234,21
Exerg. Whe Resource Allows Program	Bullecon fined Avenue 1.0 grm	24.78	200	##;COP.E.CO	c KX	: 91	XXV.	245	0.00.15	_	2		2625	e e	200	100,270	8
Energy Wise Resource Action Program	(51) Seguen	200	_	4,170,044,1	1,000,00	17	101,00%	215206	10,407,44	22	***	110,011		-	104(4)	4 CMED	G211)
	Services of Associations of the Company of the Comp				í.												
Hand-To-Reach SOP	Air-Conditioning	2	uo.	355	13		n 12,	3	Ą			8	\$ MED 488		204	1	2.
Herd To Rosch Styl	France Star CPL Bulto-HTR	a P	×	F. 65	E d	11	100°4	2	23.9	,	֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓		8	200	3		₽ .
Hard-To-March Still	(Will Insulation	E		12003	1.14	S	-1.CE 0	ž	227.00		-	5	2 194750		202	2	E
Wart, To-Brach, SOP	Anic Peululen	315,81	_	420024	lo Livy	340	8	100	IID 657.9m		417	363,661	2 194750	2 0.00	74-121	26.65	20.00
Hard-Je-Reech SOP	[A]Lifequene	1,196,1	4C0	120021		SA.	INCRPS 3	245467	111,155.04	5 T,944	8	765,626		1	740,501	310,075	Đ
Marvell Off U.S.		CATTREE CONTRACTOR	0.750 × 7.75	ENGLES OF THE STATE OF THE		700 mg		777	1	3,67(3)	### / · · · ·	1,578,015,T	Mr. 1. 10. 1. 10. 1	G. 3377.45	D- 32/4 25.00	48 - 40 -	
the MTP (BYK)		23	T.	THE PERSON NAMED IN	ä			200	31.37.67	23	V N. N. S. S. S. S.	NINARESTE	300				, mm , mm
Maxi. Punite Woog & Space Hasting MTP GATE	Cas Combination Heraing System	5000	86.1	ONE THE		NU.	51,778, 5	570	35,1320	3 843;	£ 1	\$ 244,548	3 14150	2 6239 5	2 100,704	2383,905.\$	238,311
Machine Water & Space Hoston; MTP (HTR)	Tear Heart (Let): (ret)	000	900	25.00.3		:44	12.24	45,0	3,0447	\$ 1,389	121	14,398	S MESS	1 050	30,400 \$	4 50 50	42,246
Freque Silv Middle perily Low Bag MTP (FTR)	Committee	9		6,2	000	0.00	\$ Po;070	N. P. S.	•		•	20,457	\$ 100 100	2 0001 5		20,557	GH5
Markit-Burnity Dance Towel (MTB)	before CWL 13 W	30,510		101,181.0	21701	1251		2211.6	reme,t	1 111	Ç 1	935'95	772 EG1 S	2 041 5	101,331 \$	60,003 1	*
Medi-Family Direct Joseff (MTR)	Specially CHA 9 W. 76 W.	HEY CI	1 ton :	134134	117.40	. 8.5	\$ 1818	15774	2,518.70	5 500	25	5 75542	\$ 5473-19 1	2 1000 1	2 (20,700)	18040 S	2
Mail. Punite Direct hand (RTR)	Kilchen Faract Acrator	1.39%		721.0	21/2	a'or		17.6.7	11.17	3 W	Z 15	3,456	2 240 757	2 0300 2	4 W.100	1 7117	614
Med-Punity Dreed head (MTR)	Data Fuzzet Acrator	17,66,59		E-1484.2		D:Cl	1.451	50051	CHA?	1 160	# F	11.40	\$ 500.000		23.464.1	10,010 1	1,80
Machinis Direct Areal (MTR)	Fixed Stone Structure	300.00	L	ক স্মৃত্যু ক		υ¢ν	2.17	10.4	10,340.1R	1001	350	HCM: 1	20075	1 600	\$ 0.0000	\$ 950,559	10 36.0
Madic Family Divers Treats (FGTR)	Handrels Steameheate	OSET U	200	o N		ův:		7		3	0 *		SECOND S	2 cure 5	1 31	70 3	9
Matte-hamily Correct protest (HTR)	Phys Wines	15000		43		13,0			11.1	3 0	•	i .	48-62-	Ш	110	1 60	iĝi
NAME To MIN WHICH SAME PLANES AND THE HATE.	Vertexts	2,000.7		2,440,045.1	36.053.1			644 INT.A	40,010,02	\$30,679.00	196 ²) Y	\$ 415,614		•	1. 010 755	1 UKAN'S	OCT BASE
単 		\$1.00 X 1.00 X	201 . BX2 1410	350 350	S 250 52	1200	77.	V 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	100	20.00	100 W 100 W	200 750	W.	X.			٠. تن
Target Live fortune (Sectionies in Arriva VIII)	TICK FACES DON (LED)	4.2	102	*(0.0)	0,70	130	0.274	4791	27022	1		UPP CC	6	\$ 1970 \$	2 62 5	\$ 0467	X
Technical and facility (Acres in Acres 2777)	Ar Mishilan	'nG	900	0.000	W.S.C	011.	1,70%	1-2-84	3,4 (8.6)	76	261 2	085°01': \$	\$11.023	5 BMC 1	1 24/65	1 ((12.2)	2002
Tarretor Law barner (Agmeire In Arrion MTF)	Apply front of the	7		95,0459	414	21.0	لاجتب	1500	CO BESS	110	N S	\$ 32/02	90.00	I VAMA I	1 444	4,750 1	5
Technology Decome (Approved in Action MTP)	Owner AC	-8		Charles Charles	70,02	110	0,284 3	20.250	200.41	*	#	5	S 160 496	1 05-F	1 200/2	1 4224 1	0.696
Terretor Low Income (Apprecia) in Action MTF)	Deamil 78	1,717	201	SOZEZIRA	1040	410	45.6%	65.7.	304,442.63	1 (2,57)	3,000	2	2000		2 22 22	44244	01.750
Terphot Law Lective (Aprileiro), octon MTE)	المسترد إعادات	123		1,000	3231	130	D. C.	less'p	1,200 to	1 2	£ .	=	*	5 050	20,747	17.430	174
Tremes mr (prome (Agreems is Auton MTF)	Pipe in wheren	3		4000	160	130	t.DP°a	Ę	4 91	-		4	2		1		4
Temples Law Instant (Apprecia in Action MTF)	Nethberster Poplecoment		1	26,350	34.48	90	200	000	200			1000	8]	S .	2 27	O P
Terreta (un figure (Approximate In Action M 1 T)	Showen mad by	-		989	0.00	an a	100	¥ 4	1204		5	10.00			8. 22.2	4 4 4 4 4 4 4 4 4 4	
Target Car forms (Agnesis is Acton MT)	Edit Stran		l	10000	5 5	0.0	0.000		1 1 1 1	֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓	9 5						i
Period Law Drome Agenera in Acada M L	TALL ALL AND				TO		7 6 6	100	700	,		1			l	48.0	į
The base of the prome (Appropriate in Approximately)	Margon M.	2 2		100 MAY 134 M	4150 44		200.00	444.62	410.301.01	***	֭֭֚֚֓֞֞֜֜֓֝֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓	117444			20,000	178.700	41414
THE PARTY OF THE P	TANK THE PROPERTY OF THE PARTY			2 4 5 2 3 10 10 10 10 10 10 10 10 10 10 10 10 10		2000							Ş		100 mm 6 mm 75 m	28.5	100000
BET Chalden to Column Lance Couling	LOCTIONAL	2	1	14201241	162.02	9	The same	32146.0	2464.54	197.43	•	\$4136	1 31.62	1 0214 1	100	1000	5
E	ŀ					200			No. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10		: X					,	66161111
1	, S				**				1340300			1000 641		ľ		E LONG	
MAD					82												
Comments Total		1,40%	10%	102 521 4350	TECO-01			IN SALL LAND AL	1874,745,14			17,185,500		-	a Catalana	MACAZINE E THEORY OF	
Designation to Security Trans.		36.6130	Ž	\$0,420,024.0	HACCO GR			MI TIMO	1126 198.10			ENC.ON. III					
The Party		0200		2012/00/00	DE CEL			(10,415	ah lariði			(B) 700			Ş	messels Bases S	5,000,000,000
		10 to	100	Sec. Belle Bellicht.	248.084.3847	*2×300××300××	- W	W 2007 K. 22	1801 1811	779874	SALES OF	CONTRACTOR OF	F*		Residence & Small Commercial Bones	Transpired Berner 1	251.12.53

1	resent Wor		
EUL	kW	kW	
1.0	75.41	\$	0.048
2.0	146,49	\$_	0.093
3.0	213.49	\$	0.136
4.0	276.65	\$	0.176
5.0	336.18	\$	0.214
6.0	392.30	\$	0.250
7.0	445.19	\$	0.283
8.0	495.05	\$	0.315
9.0	542.05	\$	0.345
10.0	586.35	\$	0.373
11.0	628.11	\$	0.399
12.0	667.47	\$	0,425
13.0	704.58	\$	0,448
14.0	739.55	\$	0.470
15.0	772,52	\$	0,491
16.0	803.60	\$	0.511
17.0	832.89	\$	0.530
18.0	860.50	\$	0.547
19,0	886.52	\$	0.564
20.0	911.06	\$	0.579
21.0	934.18	\$	0.594
22.0	955,98	\$	0.608
23.0	976,53	\$	0.621
24.0	995,89	\$	0.633
25.0	1,014,15	\$	0.645
26.0	1,031.36	\$	0.656
27.0	1,047.58	\$	0.666
28.0	1,062.87	\$	0.676
29.0	1,077.28	\$	0.685
30.0	1,090.87	\$	0.694



Attorneys at Law Federal ID No. 72 0424362

September 7, 2016

Invoice Number: 904797

City of Houston, TX 900 Bagby, 4th Floor Houston, TX 77002

File Number: 024680-000007 Docket No. 46014: CenterPoint 2016 EECRF Appli.

Client Ref. No. 24680

Statement

For Professional Services Rendered in connection with the handling of the captioned matter, including the following:

08/03/16 A. Hall, Jr.

Telephone conference with YuShan Chang regarding boxus of the issues in CEHE's 2016 BECRF docket relating to administrative costs and how they should be handled review testimony and process. 1.40

TOTAL HOURS

1.40

Timekeeper Fee Summary

	Hours	Billed	
Timekeeper	Billed	Per Hour	Bill Amount
A. Hall, Jr.	1.40	\$425.00	\$595,00
Totals	1,40		\$595.00

CURRENT FEES TOTAL DUE THIS STATEMENT

Balance Remaining on the Contract

Current Balance:

\$68,668.06

Less Invoice # 904797

<u>-\$595.00</u>

Remaining Balance:

\$68,073.06

SEND PAYMENT: By Check By ACH Adams and Rease LLP Payee. Adams and Rease LLP

Bank: Regions Bank PO. Box 2153 Bl/mingham, AL 35267

Routing No.: 065403626 Account No.: 0200602817

By Comestle Wire Paydet Adams and Reese LLP Bank: Regions Bank ABA No.: 062005690 Account No.: 0200602817

By Foreign Wire Payee. Adams and Reese LLP Bank: Regions Bank SWIFT Code: UPNBUS44 Account No.: 0200602817

Alabama Florida Louisiana Mississippi South Carolina Tennessee Texas Washington, DC

Norwood Energy Consulting, L.L.C.

P. O. Box 30197 Austin, Texas 78755-3197 (512) 297-1889

Mr. Jack Pous Diversified Utility Consultants, Inc. 1912 W. Anderson Ln, 202 Austin, TX 78757

Date: 8-18-16 Tax ID#: 26-2374359 Invoice#: CEHEEECRF-0716

Re: Analysis of CEHE's Application for Approval of an Energy Efficiency Cost Recovery Factor for City of Houston in PUC Docket No. 46014

7-11-16	Reviewed RFI responses and CEHE's testimony	2.0 hrs
7-12-16	Reviewed prior EECRF case and rulemaking orders; reviewed RFI responses	7.0 hrs
7-13-16	Reviewed RFI responses and CEHE's EECRF testimony	4.0 hrs
7-19-16	Reviewed RFI responses; worked on outline of testimony	5.5 hrs
7-20-16	Reviewed RFI responses, worked on summary of issues; worked on testimony	7.0 hrs
7-21-16	Drafted testimony; reviewed RFI responses	6.5 hrs
7-22-16	Worked on testimony and exhibits	6.0 hrs
7-25-16	Worked on final testimony edits and exhibits; conference call to discuss issues	<u>5.0 hrs</u>
	Total hours:	43.0 hrs
	Total due: 43.0 hours at \$190 per hour = \$8,170	71110

Thank you for the opportunity to assist with this project.

Norwood Energy Consulting, L.L.C.

P. O. Box 30197 Austin, Texas 78755-3197 (512) 343-9077

Mr. Jack Pous Diversified Utility Consultants, Inc. 1912 W. Anderson Ln, 202 Austin, TX 78757

Date: 7-11-16 Tax ID#: 26-2374359

Invoice#: CEHEEECRF-0616

Re: Analysis of CEHE's Application for Approval of an Energy Efficiency Cost Recovery Factor for City of Houston in PUC Docket No. 46014

St	atement for professional services rendered 6-1-16 through 6-	30-16
6-23-16	Downloaded and reviewed CEHE's EECRF application	5.0 hrs
6-24-15	Reviewed CEHE's previous EECRF filings and related Orders and testimony	4.0 hrs
6-27-15	Reviewed CEHE's EECRF testimony and schedules; drafted RFIs	l 6.5 hrs
6-28-15	Reviewed testimony, drafted RFIs	5.0 hrs
6-29-15	Reviewed testimony and EECRF rules; reviewed prior EECRF orders; worked on RFIs	3.5 hrs
	Total hou	rs: 24.0 hrs

Total due: 24.0 hours at \$190 per hour = \$4,560

Thank you for the opportunity to assist with this project.

Norwood Energy Consulting, L.L.C.

P. O. Box 30197 Austin, Texas 78755-3197 (512) 297-1889

Mr. Jack Pous Diversified Utility Consultants, Inc. 1912 W. Anderson Ln, 202 Austin, TX 78757

Date: 9-12-16 Tax ID#: 26-2374359 Invoice#: CEHEEECRF-0816

Re: Analysis of CEHE's Application for Approval of an Energy Efficiency Cost Recovery Factor for City of Houston in PUC Docket No. 46014

St	atement for professional services rendered 8-1-16 through 8-31	-16
8-01-16	Reviewed EECRF case settlement issues	1.0 hrs
8-02-16	Reviewed EECRF case settlement issues	2.0 hrs
8-08-16	Reviewed memo on EECRF settlement options	2.0 hrs
8-09-16	Reviewed EECRF settlement issues	1.0 hrs
8-24-16	Reviewed and provided comments on proposed EECRF Order and settlement issues	2.0 hrs
	Total hours:	8.0 hrs

Total due: 8.0 hours at \$190 per hour = \$1,520

Thank you for the opportunity to assist with this project.

Reviewed Capproved

Docket No. 46014 - CenterPoint 2017 EECRF Cities Rate Case Expenses

			Billing	Through	Involce	Total Billed	
	Invoice Date	The latest deliveration of the latest and the lates	and everyobblish manifests.	Period	- Amount	to Date	
Lloyd Gosselink	7/12/16	97474623	6/1/16	6/30/16	\$2,188.17	\$2,188.17	
	8/11/16	97475093	7/1/16	7/31/16	\$2,463.16	\$4,651.33	
	9/13/16	97476186	8/1/16	8/31/16	\$5,197.00	\$9,848.33	
	10/10/16	97477036	9/1/16	9/30/16	\$170.00	\$10,018.33	
	11/29/16	97477831	10/1/16	10/31/16	\$575.00	\$10,593.33	
	12/7/16	97478272	11/1/16	11/30/16	\$80.00	\$10,673.33	
	· -						\$10,673.33
Resolved Energy	8/3/16	3804	6/1/16	7/31/16	\$3,354.00	\$3,354.00	
	9/7/16	3824	8/1/16	8/31/16	\$1,300.00	\$4,654.00	
							\$4,654.00
Andre State of the						STATE CARLES	
	7/12/16	97474623	6/1/16	6/30/16	\$2,188.17	\$2,188,17	
	8/11/16	97475093	7/1/16	7/31/16	\$5,817.16	\$8,005.33	
	9/13/16	97476186	8/1/16	8/31/16	\$6,497.00	\$14,502.33	
	10/10/16	97477036	9/1/16	9/30/16	\$170.00	\$14,672.33	
	11/29/16	97477831	10/1/16	10/31/16	\$575.00		
	12/7/16	97478272	11/1/16	11/30/16	\$80.00	\$15,327.33	
TOTAL							\$15,327.33



816 Congress Avenue, Suite 1900 Austin, Texas 78701 Telephone: (512) 322-5800 Facsimile: (512) 472-0532

www.iglawfirm.com

December 7, 2016

Gulf Coast Coalition of Cities c/o City of Alvin Attn Bobbi Kacz 216 West Sealy Street Alvin, TX USA 77511

Invoice:

97478272

Client:

1720

Matter:

30 TLB

Billing Attorney: T

INVOICE SUMMARY

For professional services and disbursements rendered through November 30, 2016:

RE: Docket No 46014 2017 CenterPoint EECRF

Professional Services Total Disbursements	\$ 80.00 \$.00
TOTAL THIS INVOICE	\$ 80.00
Previous Balance	<u>\$ 575.00</u>
TOTAL BALANCE DUE	<u>\$ 655.00</u>

Lloyd Gosselink Rochelle & Townsend, P.C.

Gulf Coast Coalition of Cities Docket No 46014 2017 CenterPoint BECRF I.D.1720-30-TLB December 7, 2016 Invoice: 97478272

PROFESSIONAL SERVICES RENDERED

Date	Atty	Description Of Services Rendered	Hours
11/04/16	HMW	Review final order to ensure it is consistent with stipulation and city's position.	.30
		(Administration/case management)	
11/15/16	TRL	Contact CenterPoint legal representative to determine the Company's preference of	.10
		disposing of the confidential information.	

TOTAL PROFESSIONAL SERVICES

\$80.00

SUMMARY OF PROFESSIONAL SERVICES

Name	Staff Level	Hours	Rate	Total
Hannah M Wilchar	Associate	.30	225.00	67.50
Tanya R Leisey	Paralegal	.10	125.00	12.50
TOTALS		.40		\$ 80.00

TOTAL THIS INVOICE

\$80.00

Lloyd Gosselink Rochelle & Townsend, P.C.

Gulf Coast Coalition of Cities Docket No 46014 2017 CenterPoint EECRF I.D.1720-30-TLB December 7, 2016 Invoice: 97478272

OUTSTANDING INVOICES

The state of the second second second in the second second	And the first control of the control of the first control of	The state of the s	The straight of a committee of the order for the straight of t	No graft to provide provide a place from property and provide an approximate for publication of
INVOICE	DATE	INVOICE	PAYMENTS	ENDING
NUMBER	,	TOTAL	RECEIVED	BALANCE
97477831	11/29/16	575.00	.00	575,00
		The second secon	i dan salam mengangkan pada pengangkan dan dalam dan pengangkan dan dan dan dan dan dan dan dan dan d	
	Pre	vious Balance		\$ 575.00

Balance Due This Invoice
TOTAL BALANCE DUE

\$ 655.00

\$ 80,00



816 Congress Avenue, Suite 1900 Austin, Texas 78701 Telephone: (512) 322-5800 Facsimile: (512) 472-0532

www.lglawfirm.com

November 29, 2016

Gulf Coast Coalition of Cities c/o City of Alvin Attn Bobbi Kacz 216 West Sealy Street Alvin, TX USA 77511

Invoice: 974

97477831

Client: Matter: 1720 30

Billing Attorney:

TLB

INVOICE SUMMARY

For professional services and disbursements rendered through October 31, 2016:

RE: Docket No 46014 2017 CenterPoint EECRF

Professional Services Total Disbursements \$ 575.00

\$.00

TOTAL THIS INVOICE

\$ 575.00

Lloyu Gosselink Rochelle & Townsenu, P.C.

Gulf Coast Coalition of Cities
Docket No 46014 2017 CenterPoint EECRF
I.D.1720-30-TLB

November 29, 2016 Invoice: 97477831

PROFESSIONAL SERVICES RENDERED

a recommendado do Santa Careca	A STATE OF THE PARTY OF THE PAR	the first of the control of the cont	Company of the Party
Date	Atty	Description Of Services Rendered	Hours
10/03/16	HMW	Review staff edits to proposed order. (Administration/case management)	1.00
10/05/16	HMW	Review and edit staff's draft pleading regarding consideration of revised proposed order (Administration/Case management).	.50
10/07/16	HMW	Review PUC's proposed order to ensure consistency with parties' filed proposed order and staff's draft letter regarding consideration of revisions to proposed order (Administration/Case management).	1.00
10/11/16	TRL	Revise rate case expense tracking spreadsheet with September invoice (Rate Case Expenses).	.10

TOTAL PROFESSIONAL SERVICES

\$ 575.00

SUMMARY OF PROFESSIONAL SERVICES

Name	Staff Level	Hours	Rate	Total
Hannah M Wilchar	Associate	2,50	225.00	562,50
Tanya R Leisey	Paralegal	.10	125.00	12.50
TOTALS		2.60		\$ 575.00

TOTAL THIS INVOICE

\$ 575.00



6 Congress Avenue, Suite 1900 Austin, Texas 78701 Telephone: (512) 322-5800 Facsimile: (512) 472-0532

www.lglawfirm.com

October 10, 2016

Gulf Coast Coalition of Cities c/o City of Alvin Attn Bobbi Kacz 216 West Sealy Street Alvin, TX USA 77511

Invoice:

97477036

Client:

1720

Matter:

30

Billing Attorney:

TLB

INVOICE SUMMARY

For professional services and disbursements rendered through September 30, 2016:

RE: Docket No 46014 2017 CenterPoint EECRF

Professional Services Total Disbursements \$ 170.00

\$.00

TOTAL THIS INVOICE

\$ 170.00

Lloya Josselink Rochelle & Townsena, J.C.

Gulf Coast Coalition of Cities Docket No 46014 2017 CenterPoint EECRF I.D.1720-30-TLB

October 10, 2016 Invoice: 97477036

PROFESSIONAL SERVICES RENDERED

			es establishment de la company
Date	Atty	Description Of Services Rendered	Hours
9/01/16	HMW	Provide feedback to company regarding final settlement documents.	.50
		(Administration/case management)	
9/02/16	HMW	Provide signature to stipulation for filing. (Administration/case management)	.20
9/15/16	TRL	Revise expense tracking spreadsheet with August invoice (Administration).	.10
and the second second			

TOTAL PROFESSIONAL SERVICES

\$ 170.00

SUMMARY OF PROFESSIONAL SERVICES

Name	Staff Level	Hours	Rate	Total
Hannah M Wilchar	Associate	.70	225,00	157.50
Tanya R Leisey	Paralegal	.10	125.00	12.50
TOTALS		.80		\$ 170.00

TOTAL THIS INVOICE

\$ 170.00



o Congress Avenue, Suite 1900 Austin, Texas 7870 I Telephone: (512) 322-5800 Facsimile: (512) 472-0532

www.lglawfirm.com

September 13, 2016

Gulf Coast Coalition of Cities c/o City of Alvin Attn Bobbi Kacz 216 West Sealy Street Alvin, TX USA 77511

Invoice:

97476186

Client:

1720 30

Matter: Billing Attorney:

TLB

INVOICE SUMMARY

For professional services and disbursements rendered through August 31, 2016:

RE: Docket No 46014 2017 CenterPoint EECRF

Professional Services Total Disbursements \$ 5,179.00

\$ 1,318.00

TOTAL THIS INVOICE

\$ 6,497.00

Lloyd Gosselink Rochelle & Townsend, P.C.

Gulf Coast Coalition of Cities
Docket No 46014 2017 CenterPoint EECRF
I.D.1720-30-TLB

September 13, 2016 Invoice: 97476186

PROFESSIONAL SERVICES RENDERED

Date	Atty	Description Of Services Rendered	Hours
8/01/16	HMW	Review and analyze communication from K. Nalepa regarding company's response	.50
		to cities' issues; discuss draft settlement term sheet with company counsel; confer	
•		with the city of Houston and PUC Staff about their positions on the draft term sheet.	
		(Administration/casemanagement)	
8/02/16	HMW	Prepare for and participate in conference call with other intervenors to discuss	1.40
		company's proposed term sheet and issues. (Administration/case management)	
8/03/16	HMW	Discuss case status with T. Brocato and company counsel. (Administration/case	.50
		management)	
8/03/16	TRL	Revise rate case expense tracking sheet with K. Nalepa's July invoice. (Rate case	.10
		expenses)	
8/04/16	HMW	Call with Company counsel to negotiate settlement. (Administration/case	.80
		management)	
8/08/16	HMW	Review and analyze staff's testimony and Company's administrative cost	2.00
		documentation. Energy efficiency expenses)	
8/10/16	HMW	Analyze company's offer and negotiate counter-offer with company counsel.	1.90
		(Administration/case management)	
8/15/16	HMW	Communications regarding settlement; negotiate with company regarding	3.30
		settlement terms; confer with city of Houston regarding settlement terms; review,	
		analyze and edit draft settlement term sheet and circulate among parties.	
		(Administration/case management)	
8/15/16	TRL	Revise expense tracking spreadsheet with July invoice information. (Rate case	.10
		expenses)	
8/16/16	HMW	Confer with city of Houston and draft communication to parties regarding	.80
		settlement approach; draft alternative settlement proposal per staff's request for a	
		non-blackbox settlement agreement. (Administration/case management)	
8/17/16	HMW	Review company's draft settlement agreement. (Administration/casemanagement)	3,60
8/23/16	HMW	Confer with city of Houston regarding proposed order; review and provide feedback	2.00
		to company regarding draft proposed order. (Administration/case management)	
8/26/16	HMW	Review staff's changes to proposed order and provide feedback to parties,	1.00
		(Administration/case management)	
8/30/16	HMW	Review final settlement documents; draft communication to client regarding	2.50
		settlement terms and recommended adoption of proposed settlement agreement.	
		(Administration/case management)	
8/31/16	TLB	Prepare client communication; review filings; review settlement issues.	1,60
		(Administration/case management)	
8/31/16	PAS	Paralegal assistant time.	.30

TOTAL PROFESSIONAL SERVICES

\$5,179.00

Lloyd Gosselink Rochelle & Townsend, r.C.

Gulf Coast Coalition of Cities Docket No 46014 2017 CenterPoint EECRF I.D.1720-30-TLB September 13, 2016 Invoice: 97476186

SUMMARY OF PROFESSIONAL SERVICES

Name	Staff Level	Hours	Rate	Total
Thomas L Brocato	Principal	1.60	360.00	576.00
Hannah M Wilchar	Associate	20.30	225.00	4,567.50
Tanya R Leisey	Paralegal	.20	125.00	25.00
Paralegal Assistant	Paralegal Asst.	.30	35.00	10.50
TOTALS		22.40		\$ 5,179.00

DISBURSEMENTS

Date	Description	Amount
8/16/16	Courier Depot Check # - 000031609 Courier, Courier Depot, 7/30/2016, 94724 -	18.00
	Courier Services 7/24/16-7/30/16	
8/31/16	ReSolved Energy Cons Voucher # - 000085638 Consultant Services, ReSolved	1,300.00
and Mindell Toley account and y	Energy Consulting, LLC, 9/7/2016, 3824 - For Professional Services Rendered	Section 2016 and Section 2016
	TOTAL DISBURSEMENTS	\$ 1,318.00
	TOTAL THIS INVOICE	\$ 6,497.00

Customer Number	ır
263	
Invoice Number	
94724	
tuvolca Onta	
7/30/2016	

On Demand

Date Re- Order Ty Deliver I	ypo	Order ID Caller	Origin	Dostinatio	on	References
7/27/2016 ASAP BIK	1:19 PM	788539	Lloyd Gossejink Rochelle & Towns		Iral Records Congress Avenue Re	1720-30 TRL
7/27/2016	1:57 PM	Pete Juare (612) 322-5800	Auslin TX 78701	Austin TX 7	78701	
			AS	AP Bikç	\$10,00	
POD:	Received		Orde	r-Total:	\$10.00	
7/27/2016 1 Hour Bil	2:04 PM	788539.01	PUC - Central Records 1701 North Congress Avenue Root	•	elink Rochelle & Tow ess Ave # 1800	1720-30 TRL
7/27/2016		Peto Juare . (512) 322-5860	Auslin TX 78701	Auslin TX 7	/8701	
			1 Hour Bike	Delivery	\$8.00	·····
PODt	Celeste		Orde	r Total:	\$8.00	
We an	preciale your l	iusinessi			Page 2	of 4

\$ 18.00

1920-30

Courier

ReSolved Energy Consulting, LLC

11044 Research Blvd., Suite A-420 Austin, Texas 78759 Phone (512) 331-4949

Invoice

DATE	INVOICE NUMBER	
9/7/2016	3824	

BILL TO

Thomas Brocato Lloyd Gosselink Lawfirm 816 Congress Ave, # 1900 Austin, Tx 78701

> PROJECT LG CEH 16 EECRF (46014)

	20 0211 10 22 014 (10V 1)		
DESCRIPTION	HOURS	RATE	AMOUNT
Consulting (K. Nalepa)	5	260.00	1,300,00
		j	
		•	
Work Completed thru - August 31, 2016	Total	'AL DUE	\$1,300.00

1720-30

pg/42

Monthly Recap

Kari Nalopa

Date	Task	Hours
August 1, 2016	Review settlement offer from CEHE. Emails and call with H. Wilcher to discuss City of Houston bonus	·
	issue and settlement offer.	0.80
August 2, 2016	Prepare for and participate on conference call with City of Houston and Staff to discuss intervenor	
	issues. Follow-up call with H. Wilcher to discuss.	1,30
August 4, 2018	Review CEHE errata filing, Emails with H. Wilchar to discuss.	0.30
August 8, 2018	Review CEHE revised administrative cost calculations.	0.20
August 8, 2016	Review Staff testimony. Prepare summary and sand to H. Wilcher for review.	1.20
August 10, 2016	Emails with H. Wilcher regarding status of negotiations.	0.30 0.20
August 22, 2016	Review latest filings.	0.20
August 23, 2016	Research rule and review draft stipulation.	0.70

5.00

LG CEH 18 EECRP

Recap_August 2016_KJN

pg d



816 Congress Avenue, Suite 1900 Austin, Texas 78701 Telephone: (512) 322-5800 Facsimile: (512) 472-0532

www.lglawfirm.com

August 11, 2016

Gulf Coast Coalition of Cities c/o City of Alvin Attn Bobbi Kacz 216 West Sealy Street Alvin, TX USA 77511

Invoice: 974

97475093

Client: Matter: 1720 30

Billing Attorney:

TLB

INVOICE SUMMARY

For professional services and disbursements rendered through July 31, 2016:

RE: Docket No 46014 2017 CenterPoint EECRF

Professional Services Total Disbursements \$ 2,297.50

<u>\$ 3,519.66</u>

TOTAL THIS INVOICE

\$ 5,817.16

Llo, d Gosselink Rochelle & Townsend, P.C.

Gulf Coast Coalition of Cities
Docket No 46014 2017 CenterPoint EECRF
I.D.1720-30-TLB

August 11, 2016 Invoice: 97475093

PROFESSIONAL SERVICES RENDERED

Date	Atty	Description Of Services Rendered	Hours
7/01/16	TLB	Review filings. (Administration/case management)	.70
7/05/16	TLB	Review filings and consultant issues. (Administration/case management)	.40
7/05/16	HMW	Coordinate upcoming filings. (Administration/case management)	.20
7/12/16	TRL	Prepare copy of confidential material to send to K. Nalepa for consultant review; update log of confidential information received; case/file management.	.40
7/20/16	TRL	Revise rate case expense tracking sheet with June invoice (.1 Administration).	.10
7/25/16	TLB	Call with City of Houston and K. Nalepa to discuss issues and settlement. (Administration/case management)	.70
7/26/16	HMW	Prepare for and participate in settlement conference call with all parties; confer with K. Nalepa regarding GCCC's issues; review and edit testimony. (Administration/case management)	4.10
7/26/16	TRL	Proofread testimony of K. Nalepa and prepare attachments. (Administration)	1.50
7/27/16	TRL	Finalize and file testimony of K. Nalepa. (Administration)	.70
7/29/16	HMW	Call with M. Santos to discuss the company's response to cities' issues and upcoming settlement offer; research precedent regarding bonus calculation issue; draft communication to K. Nalepa explaining call. (Administration/case management)	1.50
7/31/16	PAS	Paralegal assistant time.	.20

TOTAL PROFESSIONAL SERVICES

\$ 2,297.50

SUMMARY OF PROFESSIONAL SERVICES

Name	Staff Level	Hours	Rate	Total
Thomas L Brocato	Principal	1.80	360.00	648.00
Hannah M Wilchar	Associate	5.80	225.00	1,305.00
Tanya R Leisey	Paralega!	2.70	125.00	337.50
Paralegal Assistant	Paralegal Asst.	.20	35,00	7.00
TOTALS		10.50		\$ 2,297.50

DISBURSEMENTS

Date	Description	Amount
6/25/16	Courier Depot Check # - 000031417 Courier, Courier Depot, 6/25/2016, 94265 -	13.00
	Courier Services 6/19/16-6/25/16	
7/19/16	Courier Depot Check # - 000031473 Courier, Courier Depot, 7/16/2016, 94542 -	36.56
	Courier Services 7/10/16-7/16/16	

Lloyd Gosselink Rochelle & Townsend, P.C.

Gulf Coast Coalition of Cities Docket No 46014 2017 CenterPoint EECRF I.D.1720-30-TLB August 11, 2016 Invoice: 97475093

Date	Description	Amount
	Photocopying	116.10
7/31/16	ReSolved Energy Cons Voucher # - 000085318 Consultant Services, ReSolved	3,354.00
	Energy Consulting, LLC, 8/3/2016, 3804 - For Professional Services Rendered	kannan ang gadak sa mendalah kannan dalah s
	TOTAL DISBURSEMENTS	\$ 3,519.66
	TOTAL THIS INVOICE	\$ 5,817,16



uslin, TX 78709-30 (512) 892-1876

Invoice

Customer Number
263
Invoice Number
94265
Invoice Date
6/25/2016
Involce Pariod
6/19/2016-6/25/2016
Involce Amount
\$296,98

Date Read Order Tip Dollyer Da	96	Order ID Caller	Origin	Dostination	References
6/20/2016 : 4 Hour Bike		785576	Lloyd Gosselink Rochella & Towns: 816 Congress Ave # 1900	PUC - Central Records 1701 North Congress Aven	1720-30 TRL
8/20/2016	10:23 AM	Pote Juare (512) 322-5800	Austin TX 78701	Austin TX 78701	/
			4 Hour Bike (Delivery 56	1.00
POD:	Filed		Orde	r Total: \$6.4	00
720/2016	1:07 PM	785576.01	PUC - Central Records	Lloyd Gosselink Rochelle &	Tow 1720-30 TRL
2 Hour Bike	3 Delivery		1701 North Congress Avenue Root	816 Congress Ave # 1900	
3/20/2016	11:32 AM	Pele Juare (512) 322-5800	Austin TX 78701	Austin TX 78701	
			2 Hour Bike E	Pelivery S7	.00
POD:	Rodrigue		Grdos	Total: \$7.0	10

₩13.00

Customer Number	
263	
Invokce Number	
94542	
Involce Date	
7/16/2016	

On Demand

Date Read Order T pe Deliver Date	Order ID Caller	Origin	Destinati	on	References
7/12/2016 10:30 AM 1 Hour 7/12/2016 11:35 AM	787317 Pale Justo (512) 322-5800	Lloyd Gosselink Rochelle & Tow 816 Congress Ave # 1900 Austin TX 70701		search Bivd Sulle A-42	
POD: Stevens, N	(012) 022-0000		1 Hour Surcharge der Total:	\$18.75 1 \$2.81 \$21.66	

+ 15.00 (From next page)

\$36.56

Pourier p. 1 of 2

Customer Number	_
263	_
Invoice Number	
94542	_
Involce Date	_
7/16/2016	_

On Demand

Date Read Order T pe Deliver Date	Order ID Caller	Origin	<u>De</u> stination	n	References
7/16/2016 1:58 PM 1 Hour Bike Delivery 7/15/2016 2:27 PM	787690 Pete Juare (512) 322-5800	Lloyd Gosselink Rochelle & Towns 816 Congress Ave # 1900 Austin TX 78701		ral Records Congress Avenue Ro	YRL 1720-30
	, , , , , , ,	1 Hour Blke I	Délivery	\$5.00	
POD: Filed		Ordo	r Total;	\$8.00	
7/15/2016 2:58 PM 2 Hour Bike Delivery	787690.01	PUC - Central Records 1701 North Congress Avenue Roor		link Rochelle & Tow ss Ave # 1900	TRL 1720-30
7/15/2016 2:48 PM	Pote Juare (612) 322-5800	Auslin TX 78701	Austin TX 76		
		2 Hour Bike t	Delivery	\$7.00	
POD: Rodrulge		Ordo	r Total:	\$7.00	

Courier p. 2 of 2

1720:30 See Continue I and the See See See

Document Name - Date Printed - Process Hanse: Computer Mane - Proges Court as Sheets: Tool Units: 8 AV Units: 8 AV

Gust Coast Castline Tanya R Leisen Hilly

1161 copies x.10/page = 116.10

4716,10

195

ReSolved Energy Consulting, LLC

11044 Research Blvd., Suite A-420 Austin, Texas 78759 Phone (512) 331-4949

Invoice

DATE	INVOICE NUMBER		
8/3/2016	3804		

Thomas Brocato Lloyd Gosselink Lawfirm 816 Congress Ave, # 1900 Austin, Tx 78701

P	ROJECT
LG CBH 1	16 BECRE (46014)

	20 CDIT to BBOIR (1607-1)			
DESCRIPTION	HOURS	RATE	AMOUNT	
Consulting (K. Nalepa)	12,9	260.00	3,354.00	
	1			
		1		
•				
Work Completed thru - July 31, 2016	тот	AL DUE	\$3,354.00	

K- 6,10ts

Monthly Recap

Karl Nalepa

Date	Task	Hours
June 10, 2016	Download filing. Orders and discovery from interchange.	0.20
June 21, 2016	Review Interchange for updates.	0.30
Juno 22, 2016	Review filing and exhibits.	0,50
	Review responses to Staff discovery. Review errate.	0.70
July 6, 2016	Review PUC interchange for updated filings.	0,20
July 11, 2016	Review responses to discovery.	0.30
	Review additional responses to discovery and prepare discovery.	1,00
July 15, 2016	Complete discovery and send to T. Brocato for review.	0,50
July 20, 2016	Review filing and prepare adjustments.	0,50
July 21, 2016	Prepare adjustments.	0.70
July 22, 2016	Prepare and compile adjustments. Work on testimony.	2.50
July 25, 2016	Call with City of Housion to discuss proposed adjustments. Research rule regarding shareholder	
	bonus. Complete testimony and send to T. Broceto for review.	4.30
July 28, 2016	Prepare and send testimony attachment to T. Brocato. Participate on settlement call with parties.	1.20
	<u> </u>	بيبيب

12,90

LG CEH 18 BECRF

Recap_July 2016_ KJN

R-p.2 of 2



816 Congress Avenue, Sulte 1900 Austin, Texas 78701 Telephone: (512) 322-5800 Facsimile: (512) 472-0532

www.iglawfirm.com

July 12, 2016

Gulf Coast Coalition of Cities c/o City of Alvin Atm Bobbi Kacz 216 West Sealy Street Alvin, TX USA 77511

Invoice:

97474623

Client: Matter: 1720 30

Billing Attorney:

TLB

INVOICE SUMMARY

For professional services and disbursements rendered through June 30, 2016:

RE: Docket No 46014 2017 CenterPoint EECRF

Professional Services Total Disbursements

\$ 2,117.00 \$ 71.17

TOTAL THIS INVOICE

\$ 2,188.17

Lioya Gosselink Rochelle & Townsena, P.C.

Gulf Coast Coalition of Cities Docket No 46014 2017 CenterPoint EECRF I.D.1720-30-TLB July 12, 2016 Invoice: 97474623

PROFESSIONAL SERVICES RENDERED

Date	Atty	Description Of Services Rendered	Hours
6/07/16	TLB	Call with K. Nalepa regarding filing; prepare client communication regarding filing;	.60
		prepare motion to intervene; contact client regarding filing; prepare engagement	
		agreement with consultant. (Administration/case management)	
6/07/16	TRL	Draft motion to intervene; draft engagement agreement with K. Nalepa; prepare	.60
		protective order certification for signatures (.6 Administration).	
6/08/16	TLB	Review application; discuss issues with K. Nalepa; finalize protective orders.	.50
		(Administration/case management)	
6/08/16	HMW	Review draft procedural schedule from company and suggest changes; review and	1.80
		draft responses to Staff's 1st RFI to GCCC. (Administration/case management)	
6/08/16	TRL	Draft pleading to accompany Protective Order Certifications and file same with	.70
		PUC; communicate with Company Representative to receive confidential portions	
		of the Application (.7 Administration).	
6/09/16	HMW	Draft responses to Staff's 1st RFI. (Administration/case management)	2.00
6/09/16	TRL	Prepare confidential information log and update with recent confidential documents	.30
		received; prepare one copy of confidential information to send to K. Nalepa for	
		consultant review (.3 Administration).	
6/13/16	TRL	Setup physical case file; case/file management (.4 Administration).	.40
6/14/16	HMW	Communicate with parties regarding changes to proposed procedural schedule;	.50
		prepare attachments to response to Staff's 1st RFI. (Administration/case	
		management)	
6/14/16	TRL	Prepare Rate Case Expense affidavit for CenterPoint 2016 DCRF, PUC Docket No.	.30
		44783 (.3 Administration).	
6/21/16	TLB	Review application and discovery; discuss strategy and issues with consultant.	1.10
		(Administration/case management)	
6/22/16	TRL	Case/file management (.2 Administration),	.20
6/28/16	HMW	Manage and communicate with other parties regarding deadlines.	.20
		(Administration/case management)	
6/30/16	PAS	No Charge - Paralegal assistant time.	.20

TOTAL PROFESSIONAL SERVICES

\$ 2,117.00

SUMMARY OF PROFESSIONAL SERVICES

Name	Staff Level	Rate	Hours	Amount	N/C Hr	N/C \$
Thomas L Brocato	Principal Principal	360.00	2.20	792.00	.00	.00
Hannah M Wilchar	Associate	225.00	4.50	1,012.50	.00	.00
Tanya R Leisey	Paralegal	125.00	2.50	312.50	.00	.00
Paralegal Assistant	Paralegal A	.00.	.00	.00	.20	7.00
TOTALS			9.20	\$ 2,117.00	.20	\$ 7.00

Lloya Gosselink Rochelle & Townsend, P.C.

Gulf Coast Coalition of Cities Docket No 46014 2017 CenterPoint EECRF I.D.1720-30-TLB

July 12, 2016 Invoice: 97474623

DISBURSEMENTS

Date	Description	Amount
	Postage	.57
6/14/16	Courier Depot Check # - 000031318 Courier, Courier Depot, 6/11/2016, 94090 -	3.50
	Courier Services 6/5/2016 - 6/11/2016	
6/14/16	Courier Depot Check # - 000031318 Courier, Courier Depot, 6/11/2016, 94090 -	3.50
	Courier Services 6/5/2016 - 6/11/2016	
6/14/16	Courier Depot Check # - 000031318 Courier, Courier Depot, 6/11/2016, 94090 -	9.06
	Courier Services 6/5/2016 - 6/11/2016	
6/14/16	Courier Depot Check # - 000031318 Courier, Courier Depot, 6/11/2016, 94090 -	4.34
	Courier Services 6/5/2016 - 6/11/2016	
	Photocopying	50.20

TOTAL DISBURSEMENTS

\$71.17

TOTAL THIS INVOICE

\$ 2,188.17

Customer Number	 _
263	
Invoice Number	
94090	
Invokes Osto	•
6/11/2016	

On Demand

	Date Read Order T pe Deliver Date	Order ID Caller	Origin	Destination	References
	6/7/2016 1:43 PM 2 Hour Bike Delivery 6/7/2016 12:67 PM	784631.01 Pete Juarez (512) 322-5800	PUC - Central Records 1701 North Congress Avenue Rook Auslin YX 78701	Austin TX 78701	JBP JBP 1720-30/1669-37 (50,
	POD: Filed		2 Hour Sike (Orde	Delivery \$7.00 r Total: \$7.00	2 = +3,50
1/	6/8/2016 9:13 AM 4 Hour Bike Delivery 6/8/2016 10:30 AM	784708 Pele Juarez (512) 322-5800	Ugyd Gosseliak Rochelle & Tovns: 818 Congress Ave # 1800 Austin TX 78701 4 How Sike	1701 North Congress Avenue Re Austin TX 76701	TRL 1670-30 & 1669-37 & 710 To (SPLIT COST 1/3,1/3,1/3)
77	POD: Filed			r Tolsi: \$6.90	-5= 162,00
4	6/6/2016 1:13 PM 2 Hour Bike Delivery 6/6/2016 10:36 AM	784708.01 Péle Jusiez (612) 322-3800	PUC - Central Records 1701 North Congress Avenue Roos Austin TX 78701 2 Hour Bike	Austin TX 78701	TRL 1670-30 & 1659-37 & 7 (SPLIT COST 1/3,1/3,1/3)
	6/9/2016 1:51 PM 2 Hour 6/9/2016 2:41 PM POD: Nilta Stavens	784829 Pata Juarez (512) 322-5800	Auslin TX 78701 Fuel Sun	11044 Research Blvd Sulte A-42 Austin TX 78759 2 Hour \$15.76	1720-30 and 1669-37 TRL 2 = \$9.00
	6/7/2016 11:43 AM 2 Hour Bike Delivery 6/7/2016 12:28 PM POD: Filed	784631 Pate Jugrez (512) 322-5800	Lloyd Gosselink Rochelle & Towns 816 Congress Ave # 1900 Austin TX 78701 2 Hour Sike I Orde	1701 North Congress Avenue Ro Austin TX 78701	JBP

Clent Matter	Client Matter Client Matter Descr User	Printer	Document Name Date Printed	Date Printed	Process Name	Total Cost Job Type
Transion .	Golf Brasi Drallion I Salva BR Passor	Billndstorie	Espir Audii Touch	Uah 20 2016 06 6	lone Capar Audit Touch Jun 20, 2016 OBER Copy Audit Touch	STRUM Copy
1720-30	Gulf Coast Coalition Oce person	son BCE-SCAN	Copy Auch Touch	Jun 09, 2016 18:13	Copy Audit Touch	Copy Audi Teuch: Jun 09, 2016 18.11. Copy Audit Teuch
. 1720-30	Gulf Coast Coaltior Tanya R. Leisey Grindstone		Copy Audit Touch - Jen 08, 2016 09:04 Copy Audit Touch	Jun 08, 2016 09:04	Copy Audit Touch	\$3.40 Copy
1720-30	Gulf Coast Coalition: Tanya R. Leisey Grindstone	10.75	Copy Audit Touch	Jun 08, 2015 08:45	Copy Audit Touch	Copy Audi Toxol: Juri 08, 2015 08:46: Copy Audi Toxoh

Postage S.S

Photocopies

 $5020 \text{ copies } \times \$.10 / \text{pages} = \$.50.20$

Spending (\$) Incentives S	ኃስ ኃላሮ	OOF
Incentives \$	29,305	,905
Total Admin & R&D \$	3,805	,004
Administration	\$	3,482,
R&D	\$	322,
•		
mized Admin and R&D Expenses Labor	\$	2,235,302
•	<u>\$</u> \$	2,235,302 936,625
Labor	\$ \$ \$	936,625
Labor Consultants 89%	\$ \$ \$	936,625 230,227
Consultants 89% Contract Labor	\$ \$ \$ \$	936,625 230,227 225,983
Labor Consultants 89% Contract Labor R&D Project Costs	\$ \$	936,625 230,227 225,983 10,088
Labor Consultants 89% Contract Labor R&D Project Costs Sponsorships	\$ \$ \$ \$	
Labor Consultants 89% Contract Labor R&D Project Costs Sponsorships Expenses	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	936,625 230,227 225,983 10,088 48,701

Total Admin + IT

R&D with labor

Workpaper JRDWP8 is confidential. A copy of this material will be provided pursuant to the protective order issued in this docket.

APPLICATION OF CENTERPOINT	§	
ENERGY HOUSTON ELECTRIC,	§	PUBLIC UTILITY COMMISSION
LLC FOR APPROVAL OF AN	§	
ADJUSTMENT TO ITS ENERGY	§	OF TEXAS
EFFICIENCY COST RECOVERY	§	
FACTOR	§	

DOCKET NO. _____

DIRECT TESTIMONY OF

JOSEPH F. JERNIGAN

FOR

CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC

June 1, 2017

TABLE OF CONTENTS

I.	INTRODUCTION AND BACKGROUND	1
II.	SUMMARY OF ENERGY EFFICIENCY COST RECOVERY	3
III.	CALCULATION OF RIDER EECRF CHARGES	4
IV.	2018 PROGRAM COSTS ALLOCATION	5
V.	2017 & 2018 EM&V COSTS	7
VI.	PERFORMANCE BONUS	8
VII.	(OVER)/UNDER RECOVERY OF 2016 EECRF COSTS	9
VIII.	HISTORICAL PROGRAM COSTS	10
IX.	BILLING DETERMINANTS AND RATE DESIGN	11
X.	TARIFF FOR RETAIL DELIVERY SERVICE	12
XI.	SUMMARY AND RECOMMENDATIONS	13
	DOTTIME THE TELECONICE STATE OF COMMISSION OF COMISSION OF COMMISSION OF COMMISSION OF COMMISSION OF COMMISSION OF	,,,,,,,,,,,,,,,,,,

TABLE OF EXHIBITS

<u>Exhibit</u>	<u>Description</u>
Exhibit JFJ-1	Calculation of Rider EECRF Charges
Exhibit JFJ-2	Rider EECRF - Annotated
Exhibit JFJ-3	Rider EECRF – Clean Copy

1		DIRECT TESTIMONY OF JOSEPH F. JERNIGAN
2		I. <u>INTRODUCTION AND BACKGROUND</u>
3	Q.	PLEASE STATE YOUR NAME, POSITION, AND BUSINESS ADDRESS.
4	A.	My name is Joseph F. Jernigan. I am a Senior Regulatory Analyst for CenterPoint
5		Energy Service Company, LLC ("CenterPoint Energy"). My business address is
6		1111 Louisiana St., Houston, Texas 77002.
7	Q.	PLEASE SUMMARIZE YOUR EDUCATION AND PROFESSIONAL
8		EXPERIENCE.
9	A.	I am a graduate of Texas A&M University, with a Bachelor of Science Degree in
10		Agriculture Economics, and the University of Houston-Clear Lake, with a Bachelor
11		of Science Degree in Accounting and a Master of Business Administration. I have
12		been employed at CenterPoint Energy for eight years, working in Commercial Credit
13		and Collections for a year before moving into the Rates and Regulatory Department
14		as a Regulatory Analyst. In April 2014, I was promoted to Senior Regulatory
15		Analyst. Over the last six years, I have implemented the rate design for the Energy
16		Efficiency Cost Recovery Factor ("EECRF") on behalf of CenterPoint Energy.
17	Q.	WHAT ARE YOUR PRESENT RESPONSIBILITIES?
18	A.	My duties include the implementation of strategy around cost of service, cost
19		allocation, rate design, and tariffs for delivery rates in various electric and gas
20		jurisdictions across six different states. I also implement risk mitigation strategies
21		relating to revenues and costs. This includes review, analysis, and participation in the
22		formulation of law, rules, and policy at the state and federal level.

1	Q.	ON WHOSE BEHALF ARE YOU TESTIFYING?
2	A.	I am testifying on behalf of CenterPoint Energy Houston Electric, LLC ("CenterPoint
3		Houston" or the "Company").
4	Q.	HAVE YOU PREVIOUSLY FILED TESTIMONY BEFORE THE PUBLIC
5		UTILITY COMMISSION OF TEXAS ("COMMISSION")?
6	A.	Yes. I provided testimony on behalf of CenterPoint Energy on the Revisions to Rider
7		NDC Pursuant to PUCT Subst. R. §25.303(g)(3), Docket No. 41941, the Application
8		of CenterPoint Energy Houston Electric, LLC for Approval of an Adjustment to Its
9		Energy Efficiency Cost Recovery Factor, Docket No. 42560 and the Application of
10		CenterPoint Energy Houston Electric, LLC for Approval of an Adjustment to Its
11		Energy Efficiency Cost Recovery Factor, Docket No. 44783.
12	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?
13	A.	The purpose of my testimony is to explain and support: (1) the overall level of costs
14		in Rider EECRF to recover energy efficiency costs for 2018; (2) the calculation of
15		rates included in the Company's Rider EECRF for the various rate classes; and (3) the
16		Company's Rider EECRF tariff.
17	Q.	WHAT EXHIBITS HAVE YOU INCLUDED WITH YOUR TESTIMONY?
18	A.	I have included Exhibits JFJ-1 (Calculation of Rider EECRF Charges), JFJ-2 (Rider
19		EECRF - Annotated), and JFJ-3 (Rider EECRF - Clean Copy).
20	Q.	HOW DOES YOUR TESTIMONY RELATE TO THE DIRECT TESTIMONY
21		OF CENTERPOINT HOUSTON WITNESS JOHN R. DURLAND?

and the underlying calculations of the rates included in Rider EECRF. Mr. Durland's

23

- testimony discusses the Company's estimated 2018 program costs, programs designs, and historical program spending.
- 3 II. <u>SUMMARY OF ENERGY EFFICIENCY COST RECOVERY</u>
- 4 Q. WHAT LEVEL OF ENERGY EFFICIENCY COSTS IS CENTERPOINT
- 5 HOUSTON PROPOSING TO RECOVER THROUGH its RIDER EECRF IN
- 6 2018?
- A. In 2018, CenterPoint Houston is requesting to recover a total of \$46,397,825 through
 Rider EECRF. This amount includes 2018 program costs (with an adjustment of
 \$4,031 to remove administrative expenses), an amount related to 2016 over-recovery,
 the Company's earned performance bonus for 2016, 2016 EECRF rate-case expenses
 for both the Company and participating municipalities, and the Evaluation,
 Measurement & Verification ("EM&V") costs for 2017 & 2018 program years that
 were allocated to CenterPoint Houston by the Commission Staff.
- Q. PLEASE PROVIDE AN ACCOUNTING OF THE TOTAL EECRF COSTS BY
 CATEGORY.
- 16 A. Please see Table 1 below: **Table 1 EECRF COSTS**

2018 Program Costs	\$36,435,834
2016 (Over)/Under Recovery	(\$2,210,578)
2016 Earned Bonus	\$11,035,335
2017 & 2018 EM&V Costs	\$1,063,413
2016 EECRF Rate-case Expenses	\$73,821 ¹

¹ This amount includes both the Company's incurred expenses for its 2016 EECRF proceeding, 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), and the expenses incurred by municipalities that participated in that proceeding. It should also be noted that under 16 Tex. Admin. Code ("TAC") §25.181(i), EECRF proceeding expenses are considered administrative expense, which are included in the Company's 2018 program costs calculation; however, in its Application, the Company has presented these expenses separately so that they are more easily identifiable.

1	2016 Administrative Expense Adjustments	\$0 ²
2	Total:	\$46,397,825

2

3

III. CALCULATION OF RIDER EECRF CHARGES

- 4 Q. HOW DID YOU CALCULATE THE PROPOSED RIDER EECRF
- 5 CHARGES?
- 6 A. Consistent with 16 TAC §25.181, the Rider EECRF charges are the sum of: (1) the
- 7 Company's 2018 energy efficiency program costs (2) a credit for the over-recovery of
- 8 2016 energy efficiency program costs; (3) the 2016 energy efficiency program
- 9 performance bonus earned by the Company; (4) 2017 & 2018 EM&V costs; (5) 2016
- 10 EECRF rate-case expenses¹; and (6) a \$0 an administrative adjustment as it is already
- factored into the 2016 actual program cost as stated in John Durland's testimony.²
- 12 These cost categories comprise the total energy efficiency program revenue
- requirement, which is then divided by forecasted billing determinants for each rate
- 14 class in order to arrive at the specific rates for each class. The Company's total
- 15 EECRF revenue requirement request is \$46,397,825. The resulting proposed Rider
- EECRF charges are shown in Schedule A of Exhibit JFJ-1.
- 17 Q. ARE THE EECRF COSTS ASSIGNED OR ALLOCATED TO RATE
- 18 CLASSES REASONABLE AND CONSISTENT WITH PURA § 39.905(b)(4)
- 19 **AND 16 TAC §25.181?**
- 20 A. Yes. PURA § 39.905(b)(4) directs the Commission to provide oversight and adopt
- 21 rules for the energy-efficiency program, including ensuring that the costs associated
- with the program and any shareholder bonus are borne by the rate classes that receive

² Historically any administrative adjustment was reflected separately but in this application it is reflected in the 2016 actual program costs. See Direct Testimony of John Durland.

1		the services under the program. 16 TAC §25.181(f)(12)(D) directs the Commission
2		to address in findings of fact in an EECRF proceeding whether the costs assigned or
3		allocated to rate classes are reasonable. As discussed in my testimony, the costs
4		assigned or allocated to rate classes are reasonable and consistent with PURA and 16
5		TAC §25.181, and they should be approved by the Commission.
6		IV. 2018 PROGRAM COSTS ALLOCATION
7	Q.	WHAT IS THE TOTAL AMOUNT OF PROJECTED 2018 PROGRAM
8		COSTS THE COMPANY IS SEEKING TO RECOVER IN THIS
9		PROCEEDING?
10	A.	The Company is seeking to recover \$36,435,834 in program costs for its 2018
11		program year. This amount includes the projected cost of incentives and all actual or
12		allocated research and development and related administration costs related to the
13		Company's 2018 energy efficiency programs. In addition, the Company is requesting
14		recovery of \$73,821 for 2016 Company and municipal EECRF rate-case expenses,
15		which are considered administrative expenses under 16 TAC §25.181(i).
16	Q.	HOW DOES CENTERPOINT HOUSTON PROPOSE TO ALLOCATE ITS
17		2018 ENERGY EFFICIENCY PROGRAM COSTS AMONG THE VARIOUS
18		RATE CLASSES?
19	A.	16 TAC §25.181(f)(2) requires that EECRF costs be directly assigned to each rate
20		class that receives services under the programs to the maximum reasonably extent
21		possible. The Company has made a direct assignment of the costs of each of its 2018
22		energy efficiency programs to the appropriate rate classes to the maximum extent
23		reasonably possible. This calculation is provided in Exhibit JFJ-1, Schedule B.

1 Q.	PLEASE EXPLAIN	THE DIFFERENCE BET	WEEN A RATE CLASS AND A
-------------	----------------	--------------------	-------------------------

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

7 Q. HAVE 2018 PROGRAM COSTS BEEN DIRECTLY ASSIGNED AS

- 8 **REQUIRED BY THE RULE?**
- 9 A. Yes. All costs that are directly assignable to a specific rate class have been directly
- assigned.
- 11 Q. DOES THE COMPANY HAVE ANY PROJECTED 2018 PROGRAM COSTS
- 12 THAT ARE NOT DIRECTLY ASSIGNABLE TO A SPECIFIC RATE CLASS?
- 13 A. Yes. Most of the Company's administration expenses are not directly assignable to
- specific rate classes because they are not directly related to any specific program or
- rate class but, rather, are related to administration of the Company's entire energy
- 16 efficiency program.

17 Q. WHAT IS THE TOTAL ADMINISTRATIVE EXPENSE ASSOCIATED WITH

- 18 THE COMPANY'S 2018 ENERGY EFFICIENCY PROGRAMS?
- 19 A. The Company's total requested projected administrative expense for 2018 is
- 20 \$4,435,834.3 This includes all reasonable and necessary costs incurred by the
- Company to administer its programs as well as all related research and development
- costs. Additionally, the Company is requesting \$73,821 for 2016 Company and

³ See June 1, 2017, CNP Energy Efficiency Plan and Report, Table 6.

1		municipal EECRF rate-case expenses. The Company's rate-case expenses are
2		considered administrative expense under 16 TAC §25.181(i), but listed separately in
3		this Application so that they are more easily identifiable.
4	Q.	DOES THE RULE ADDRESS HOW TO ALLOCATE ADMINISTRATIVE
5		EXPENSES THAT ARE NOT DIRECTLY ASSIGNABLE TO A SPECIFIC
6		RATE CLASS?
7	A.	Yes. 16 TAC §25.181(i) states that any portion of a utility's administrative costs that
8		are not directly assignable to a specific program shall be allocated among the
9		programs in proportion to the program costs.
10	Q.	HAS THE COMPANY COMPLIED WITH 16 TAC §25.181(i) IN
11		ALLOCATING THESE ADMINISTRATIVE EXPENSES TO THE
12		APPROPRIATE RATE CLASSES?
13	A.	Yes. The non-assignable administrative expenses were allocated among the programs
14		in proportion to the Company's 2016 actual program costs, consistent with 16 TAC
15		§25.181(i). The allocation of the Company's administrative expense is shown in the
16		workpapers supporting the schedules attached as Exhibit JFJ-1 to my testimony.
17		V. 2017 & 2018 EM&V COSTS
18	Q.	HOW DOES 16 TAC §25.181 ADDRESS THE RECOVERY OF EM&V COSTS
19		THROUGH EECRF RATES?
20	A.	Per 16 TAC §25.181(q)(10), all utilities are assigned EM&V costs in proportion to
21		their annual program costs. Also, the 2013 and 2014 EM&V expenses outlined in the
22		EM&V contractor's budget "shall be recovered through the EECRFs approved by the
23		Commission in the EECRF proceedings initiated by the utilities in 2013." The same
24		process was used for the 2017 & 2018 EM&V expenses.

Direct Testimony of Joseph F. Jernigan CenterPoint Energy Houston Electric, LLC Energy Efficiency Cost Recovery Factor Filing

1	Q.	WHAT AMOUNT OF EM&V COSTS HAS BEEN ASSIGNED TO
2		CENTERPOINT HOUSTON FOR 2018?
3	A.	As noted in the testimony of Mr. Durland, the amount assigned to CenterPoint
4		Houston by Commission Staff for 2018 is \$1,063,413.
5	Q.	HAS THE COMPANY INCLUDED RECOVERY OF ITS ASSIGNED EM&V
6		AMOUNT IN THE PROPOSED RIDER EECRF?
7	A.	Yes.
8	Q.	HOW ARE THESE COSTS ALLOCATED TO THE VARIOUS RATE
9		CLASSES?
10	A.	These costs are allocated to the rate classes in proportion to actual program costs in
11		2016.
12		VI. <u>PERFORMANCE BONUS</u>
13	Q.	DID CENTERPOINT HOUSTON EARN A BONUS FOR ITS 2016 PROGRAM
14		PERFORMANCE?
15	A.	Yes. Consistent with the standard articulated in 16 TAC §25.181(h), the Company's
16		performance bonus for 2016 program performance is \$11,035,335. Calculation of the
17		Company's net benefits and performance bonus for the 2016 program year is shown
18		in Schedule E of Exhibit JFJ-1.
19	Q.	HAS THIS AMOUNT BEEN INCLUDED IN THE PROPOSED EECRE
20		CHARGES REQUESTED IN THIS APPLICATION?

21

A.

Yes.

- 1 Q. PLEASE DESCRIBE HOW THE PERFORMANCE BONUS IS ALLOCATED.
- 2 A. CenterPoint Houston has allocated its 2016 performance bonus of \$11,035,335 to rate
- 3 classes in proportion to the 2016 program costs associated with meeting the demand
- 4 and energy goals, per 16 TAC §25.181(h)(6).

5

VII. (OVER)/UNDER RECOVERY OF 2016 EECRF COSTS

- 6 Q. DID CENTERPOINT HOUSTON HAVE AN OVER- OR
- 7 UNDER-RECOVERY OF EECRF COSTS DURING 2015?
- 8 A. Yes. The Company over-recovered \$2,210,578 in EECRF revenue.
- 9 Q. PLEASE DESCRIBE THE CALCULATION FOR OVER-RECOVERY OF
 10 2016 PROGRAM COSTS.
- For 2016, the Company's EECRF rates were designed to recover \$37,645,874 in 11 Α. energy efficiency costs. This consisted of \$35,395,800 in forecasted program costs, a 12 performance bonus of \$6,640,550, a previous period over-recovery of \$5,020,922, 13 2015 & 2016 EM&V costs of \$549,065, 2014 historical administrative adjustment of 14 \$85,500, and rate-case expenses of \$166,881.⁴ These amounts were approved by the 15 Commission in Docket No. 44783.⁵ In 2016, the Company's actual program costs 16 17 were \$33,110,909 or approximately \$2.285 million less than authorized in the Commission's Final Order in Docket No. 44783. When taking into account the 18 program costs, the performance bonus, the previous period over-recovery, the EM&V 19 20 costs, the historical administrative adjustment, and the rate-case expenses, the Company's total actual energy efficiency-related program costs were \$35,360,983 in 21 22 2016. Total revenues collected through the EECRF Rider were \$37,571,561,

⁴ Application of CenterPoint Energy Houston Electric, LLC for Approval of an Adjustment to Its Energy Efficiency Cost Recovery Factor, Docket No. 44783 (Oct. 14, 2015).
⁵ Id.

1		resulting in an overall over-recovery of \$2,210,578. The calculation for
2		over-recovery of 2016 program costs is provided in Exhibit JFJ-1, Schedule H.
3	Q.	HOW HAS THE COMPANY ASSIGNED THE OVER-RECOVERY AMOUNT
4		TO THE VARIOUS RATE CLASSES?
5	A.	16 TAC §25.181(f)(2), an under- or over-recovery of costs shall be calculated as the
6		difference between actual EECRF revenues and actual costs for each specific rate
7		class. The Company has followed this methodology and allocated any under- or
8		over-recovery directly to the rate classes from which those costs were under- or
9		over-recovered in proportion to their actual program costs in 2016. The calculation is
0		provided in Exhibit JFJ-1, Schedule H, page 2.
1		VIII. HISTORICAL PROGRAM COSTS
12	Q.	WERE ANY OF THE COMPANY'S ENERGY EFFICIENCY PROGRAM
13		COSTS IN 2016 RECOVERED THROUGH BASE RATES?
14	A.	No. All of the Company's 2016 energy efficiency program costs were collected
15		through its EECRF.
16	Q.	HAS THE COMPANY ADJUSTED ITS COST RECOVERY REQUEST IN
17		THIS PROCEEDING TO REFUND ANY PARTICULAR HISTORICAL
18		COSTS COLLECTED FROM CUSTOMERS IN THE 2016 PROGRAM
19		YEAR?
20	A.	Yes. As noted in the testimony of Mr. Durland, the Company has determined that an
21		adjustment should be made to certain administrative historical costs for program year
22		2016. The Company is making an according adjustment to its request by including a
23		credit in the amount of \$4,031. This amount has been applied to the 2016 actual
24		program costs. See John Durland's Testimony.

Direct Testimony of Joseph F. Jernigan CenterPoint Energy Houston Electric, LLC Energy Efficiency Cost Recovery Factor Filing

1		IX. <u>BILLING DETERMINANTS AND RATE DESIGN</u>
2	Q.	WHAT BILLING DETERMINANTS ARE USED TO CALCULATE THE
3		PROPOSED RIDER EECRF CHARGES?
4	A.	I have designed the Company's 2018 EECRF charges on a per kWh (energy) basis.
5		The calculation of billing determinants for each rate class is included in Schedule G
6		of Exhibit JFJ-1.
7	Q.	OVER WHAT TIME PERIOD ARE THE BILLING DETERMINANTS
8		FORECASTED?
9	A.	I have designed Rider EECRF with an effective date of March 1, 2018, and used
10		forecasted billing units from March 2018 through February 2019. Schedule G of
11		Exhibit JFJ-1 provides forecasted billing units by month and the latest annual actual
12		billing units at the time of filing.
13	Q.	DID CENTERPOINT HOUSTON RECEIVE ANY OPT-OUT
14		APPLICATIONS FROM DISTRIBUTION-LEVEL INDUSTRIAL
14 15		APPLICATIONS FROM DISTRIBUTION-LEVEL INDUSTRIAL CUSTOMERS?
	A.	
15	A.	CUSTOMERS?
15 16	A.	CUSTOMERS? Yes. Pursuant to 16 TAC §25.181(w), industrial customers taking service at
15 16 17	A.	CUSTOMERS? Yes. Pursuant to 16 TAC §25,181(w), industrial customers taking service at distribution voltage may opt-out of participation in energy efficiency programs if they
15 16 17 18	A.	CUSTOMERS? Yes. Pursuant to 16 TAC §25.181(w), industrial customers taking service at distribution voltage may opt-out of participation in energy efficiency programs if they submit timely notice to the Company identifying the distribution accounts for which
15 16 17 18 19	A.	CUSTOMERS? Yes. Pursuant to 16 TAC §25.181(w), industrial customers taking service at distribution voltage may opt-out of participation in energy efficiency programs if they submit timely notice to the Company identifying the distribution accounts for which they elect to opt-out. A total of 52 industrial customers opted-out of participation in
15 16 17 18 19 20	A.	Yes. Pursuant to 16 TAC §25.181(w), industrial customers taking service at distribution voltage may opt-out of participation in energy efficiency programs if they submit timely notice to the Company identifying the distribution accounts for which they elect to opt-out. A total of 52 industrial customers opted-out of participation in the Company's 2016 energy efficiency programs through the identification notice
15 16 17 18 19 20 21	A.	Yes. Pursuant to 16 TAC §25.181(w), industrial customers taking service at distribution voltage may opt-out of participation in energy efficiency programs if they submit timely notice to the Company identifying the distribution accounts for which they elect to opt-out. A total of 52 industrial customers opted-out of participation in the Company's 2016 energy efficiency programs through the identification notice process provided in the rule. These customers are opted-out for three years before

1		Thus, a total of 124 industrial customers have opted-out for the 2018 energy
2		efficiency program year. These customers account for approximately 1.4 million
3		kWh per year.
4	Q.	HOW IS THE KWH ASSOCIATED WITH THESE OPT-OUT CUSTOMERS
5		REFLECTED IN THIS FILING?
6	A.	The load associated with these opt-out customers has been removed from the
7		calculation of the energy efficiency demand reduction goals. The Company has also
8		removed the associated kWh from the billing determinant forecasts used to establish
9		the EECRF rates.
10	Q.	WERE SYSTEM LOSSES OR LINE LOSSES USED IN CALCULATING THE
11		RIDER EECRF CHARGES?
12	A.	No. The proposed EECRF rates are based solely on energy usage at the meter and
13		require no adjustment for system losses or line losses.
14	Q.	IS THE COMPANY'S ESTIMATE OF ITS BILLING DETERMINANTS FOR
15		2018 REASONABLE?
16	A.	Yes. The Company's billing determinant forecast has used the methodology as in
17		each EECRF proceeding since 2009, and the Commission has found that its
18	•	calculation of billings determinants was reasonable in each case.
19		X. TARIFF FOR RETAIL DELIVERY SERVICE
20	Q.	HAVE YOU PREPARED AN UPDATED RIDER EECRF TO BE INCLUDED
21		IN THE TARIFF FOR RETAIL DELIVERY SERVICE?
22	A.	Yes. Exhibit JFJ-3 presents the updated Rider EECRF rate schedule, which shows the
23		Rider EECRF charges by rate class consistent with 16 TAC §25.181(f).

1 O.	WHAT IS THE	PROPOSED	EFFECTIVE DATE	OF	THE	UPDATED	RIDER
-------------	-------------	----------	----------------	----	-----	---------	-------

- 2 EECRF?
- 3 A. Pursuant to 16 TAC §25.181(f)(8), the Company proposes an effective date of March
- 4 1, 2018.
- 5 XI. <u>SUMMARY AND RECOMMENDATIONS</u>
- 6 Q. PLEASE SUMMARIZE YOUR TESTIMONY AND RECOMMENDATIONS.
- 7 A. The adjustments to Rider EECRF are consistent with the Commission's Substantive
- 8 Rules and the Commission's applicable decisions in previous CenterPoint Houston
- 9 EECRF cases. The proposed 2018 Rider EECRF is calculated correctly. I
- recommend approval of the adjusted Rider EECRF with an effective date of March 1,
- 11 2018.
- 12 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?
- 13 A. Yes.

AFFIDAVIT

The State of Texas §

County of Harris §

BEFORE ME, the undersigned notary public, this day personally appeared Joseph F. Jernigan, to me known, whom being duly sworn according to law, deposes and says:

"My name is Joseph F. Jernigan. 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."

Joseph F. Jernigan

SWORN TO AND SUBSCRIBED before me on the \mathcal{J}

lay of May, 2017.

Notary Public in and for the State of Texas

(SEAL)

Exhibit JFJ-1

CenterPoint Energy Houston Electric March 2018 Annual EECRF Filing

Docket No.

Schedules A - I

2018 Energy Efficiency Program Costs Calculation of 2018 Rider EECRF 2016 kWh Savings Schedule A Schedule B Schedule C

Schedule C WP1: 2016 kW and kWh savings breakout 2016 kW Savings Schedule D

Schedule E WP1; Calculation of Performance Bonus based on 2016 Performance Calculation of 2016 Performance Bonus (By Rate Class) Schedule E

Calculation of 2017 & 2018 EM&V Costs (By Rate Class) Schedule F PG2: Calculation of 2016 Rate Case Expenses (By Rate Class) Schedule F

Rider EECRF Billing Determinants (includes opt-out customers removed from the commercial class) Schedule F PG3: Calculation of 2016 Administrative Expense Adjustments (By Rate Class) Schedule G PG1-PG4

Calculation of Over/Under Amounts for Over/Under Recovery of Energy Efficiency Costs and Allocation to Rate Classes 2016 Actual Expenditures (By Rate Class) Schedule H PG1, PG2 Schedule I

CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC Calculation of Roler ECCR? (Garage, Eliferieny Cost Recovery Factor) Elifetive March 2018 - February 2019 Billing Mondey

	2018 Energy	2016	2016	2018	2018 - 2019	Preliminary	2017 & 2018	7016	2016	2016	2018	Total	Total	_
	Efficiency	Performance	(Over)-recovery	Rider EECRP	Billing	Rider EECRF	ENGEV	CENE Rate	Mani. Rate	Ą	Total	2013 - 2019	Ride EECRF	
	Costs	Bouns	of Program Costs	Roovery	Determinants	Charges	COSE	Case Expenses	Case Exp.	Expense	Ride EECRF	Billing	Charges Effective	
Customer Class		Recovery	and Revenue							Advertments :	Recovery	Descriptoris	March 1, 2018	
	(1)	(5)	(g)	(4) (5)+(3)+(3)	(5)	(5)/(p) (9)	(y)	(8)	(6)	(10)	(11) (4)+(3)+(4)+(40)	(13)	(13)	
Residental	\$ 18.611.68	s 5.308.675	\$ 18.611.681 \$ 5.308.675 \$ (1.752.245) \$	\$ 22.168.112	31,093,419,993	\$0,000713	\$ 461,198	s,	20,998 \$ 14,515	ş	- \$ 22,664,822	31,093,419,993	\$8,000729	per kWh
Scendary <=10 kVA	\$ 1,716,465 \$	S S 461,922 S	S (824,091) S	S 1,354,296	5 952,135,498	\$0.001422	\$ 52,925	\$ 1,827 \$	\$ 1,263 \$,	\$ 1,410,311	952,135,498	50,001481	Der kWh
Secondary > 10 kVA	\$ 14,315,201 \$	1 \$ 4,564,633 \$	\$ 452,924 \$	\$ 19,332,758	32,449,323,425	90:000296	\$ 490,194	\$ 13,055 \$	\$ 12,480 \$		- \$ 19,853,486	32,449,323,425	\$5,000612	per kWh
Primary Service	S 255,878,1 S	2 S 610,366 S	\$ (206,056) \$	\$ 2,077,862	3,800,970,320	\$0.000547	\$ 46,216	\$ 2,414 \$	5 1,669	'n	\$ 2.128,161	3.800,970,320	\$\$,000568	per kWh
Transmissing Non-Profit Coverimental	\$ 118.995	\$ 89,739 \$	\$ 068.811	\$ 127,564	1,220,000,000	\$0.000268	\$ 12,879	\$ 335 \$	\$ 245 \$	٠,	341,043	1,220,000,000	D87400.02	per kWh
Transmission Services	· •>			· •	18,808,039,829	\$0.00000		54	s	, ,	ا ند	18,808,039,829	50.303000	per kWb
Liphing	s	50	· •		200,348,677	\$0.000000			۰.	· •	•	200,388,677	Sectioning	ት የመጀመስ
Tetal	\$ 36,435,83	36,435,834 \$ 11,035,335 \$	\$ (2,210,578) \$	165'09'2'5# \$ 0	1 \$ 88.524.277,742		\$ 1.063,413	\$ 43,648	5 30.172	~	\$ 46.397.825	88,524,277,742		Ц
Chock	\$ 36,435,83	36.435.834 8 11.035.335 \$	3 (\$2310,578) S	\$ 065,050,590 \$	9 \$ 88.524.277,742		\$ 1,063,413 \$		43,648 \$ 30,172 \$		- \$ 46,397,825	88,524,277,742		_

' includes an Adminerative Adjustemen of SA,021 as described in John Durkands Direct Teritineny. * Historically any subminerative adjustment was reflected separately but in this septication it is included in the 2016 Over Code (column 3).

2018 Cost Clips per RWI (includes L.11% CPI).
1.11% CPI).
50,001.277 Senistractory.
51 S0,001.278 Sutisfactory.

2018 Energy Efficiency Program Costs - CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC	JINT ENERGY HC	JUSTON ELECTR	IIC, LLC				Schedule B
2018 EE Costs per Program for EECRF	Program Amount:	RESIDENTIAL	SECONDARY < 10 kVA	SECONDARY > 10 kVA	PRIMARY	TRANSMISSION	TOTAL
Commercial:	\$ 17,824,153						
Large Commercial SOP		- \$	\$ 1,260,304	\$ 5,781,013	\$ 299,162	\$ 73,765	\$ 7,414,243
Commercial MTP		- \$	\$ 448,262	\$ 5,009,844	\$ 125,718	- 3	\$ 5,583,824
Large Commercial Load Management SOP		- \$	0 \$	\$ 2,386,636	\$ 1,193,554	\$ 42,922	\$ 3,623,112
Retro-Commissioning		- \$	- \$	\$ 905,406	- \$	-	\$ 905,406
Retail Electric Provider MTP		-	\$ 4,885	\$ 102,683	- \$	- \$	\$ 107,568
R&D		-	\$ 3,014	\$ 129,619	\$ 55,118	\$ 2,248	\$ 190,000
Residential:	\$ 12,735,641						
New Homes MTP		\$ 3,940,131					\$ 3,940,131
Residential & SC SOP		\$ 594,319					\$ 594,319
Smart Thermostat Program (2018 Pilot)		\$ 297,500					\$ 297,500
Advanced Lighting Program (Residential)		\$ 1,089,426					\$ 1,089,426
A/C Distributor Program		\$ 2,079,490					\$ 2,079,490
REP (CoolSaver & Eff. Connection)		\$ 2,375,682					\$ 2,375,682
Residential Demand Response		\$ 972,800					\$ 972,800
Multi-Family MTP (RES, E*MF & Low Rise)		\$ 717,474					\$ 717,474
Smart Pool Pump Program		\$ 533,819					
R&D		\$ 135,000					\$ 135,000
Hard-to-Reach:	\$ 5,876,040						
Hard-To-Reach SOP		\$ 1,255,537					\$ 1,255,537
Multi-Family MTP (HTR)		\$ 717,474					\$ 717,474
Targeted Low Income MTP (Agencies in Action)		\$ 3,846,606					\$ 3,846,606
REP (Coolsaver Income Qualified)		\$ 56,423					\$ 56,423
TOTAL		\$18,611,681	\$1,716,465	\$14,315,201	\$1,673,552	\$118,935	\$36,435,834
Breakout of Planned 2018 Program Expenditures:	•						
		RESIDENTIAL	SECONDARY < 10 SECONDARY > 10 kVA	SECONDARY > 10 kva	PRIMARY VOLTAGE	TRANSMISSION VOLTAGE	
2018 TOTAL - ALL PROGRAMS		\$18,611,681	\$1,716,465	\$14,315,201	\$1,673,552		\$36,435,834
		21.08%	4.71%	39.29%	4.59%	0.33%	

2016 kWh Savings - CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC	GY HOUSTON ELECT	SIC, LLC			Schedule C
2016 kWh Savings	DECIDENTIAL	SECONDARY < 10	SECONDARY > 10	PRIMARY	TRANSMISSION
0	KESIDENTIAL	KVA	KVA	VULIAGE	VOLIAGE
Large Commercial					
Large Commercial SOP	ı	10,518,647	47,856,233	3,455,694	435,370.00
Commercial MTP - Score	•	1,587,981	20,825,644	533,810.00	1
Large Commercial Load Management SOP	•	0	431,275	215,680.20	7,756.10
Sustainable Schools	•	•	2,669,417	•	•
REP (Commercial Coolsaver)	-	134,474	2,740,529	•	•
Pool Pump Program Commercial	-	172,067	277,218	80,803.00	-
Data Centers	•	-	6,282,982	1,205,928.00	785,773.70
Retro-Commissioning	•	-	2,306,188	-	-
Residential and Small Commercial					
Customers:					
Advanced Lighting Program	14,095,756	•	-	-	-
Energy Star MTP	42,736,617	-	-	-	-
Residential SOP	295,868	-	-	-	-
Multi-Family MPT - RES	1,260,913	-	-	-	1
A/C Distributor Program	6,308,863	-	-	1	1
REP (Residential Coolsaver)	9,282,109	_	-	1	-
REP (Efficiency Connection)	869,663	-	-	-	-
Residential Demand Response Program	66,692				
Pool Pump	1,824,017				
Energy Wise Resource Action Program	1,000,971				
Energy Star Multi-Family Low Rise MTP	2,879,507	-	-	-	1
Hard-to-Reach Customers:					
Hard-To-Reach SOP	628,995	•	•	•	•
Multi-Family Water & Space Htg - HTR	1,709,239	•	-	-	-
Multi-Family Direct Install (HTR)	702,096				
REP (Residential Coolsaver -Income	ACC 653				
Qualified)	102,024				
Agencies in Action MT	4,251,437	1	1	•	•
TOTALS	88,333,377	12,413,169	83,389,486	5,491,915	1,228,900
		SECONDARY < 10	SECONDARY > 10	PRIMARY	TRANSMISSION
	RESIDENTIAL	kVA	kVA	VOLTAGE	VOLTAGE
2016 kWh Savings - ALL PROGRAMS	88,333,377	12,413,169	83,389,486	5,491,915	1,228,900
	46.28%	6.50%	43.69%	2.88%	0.64%
				kWh Sum:	190,856,847

2016 Savings and Breakout by Commercial Class - CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC	cial Class -	CENTERPOIN'	T ENERG	Y HOUSTON	ELECTRI	c, LLC							Schedule (Schedule C - Workpaper 1
			Seconda	ry < 10 kVA	Secondar	y > 10 kVA		Primary	Trans	mission	Secondary < 10 kVA	Secondary > 10 kVA	Primary	Transmission
	ΚW	Total kWh	kW 🕂	kWh	М×	kW kWb	kW	kWh	ΚW	kw kwb	%	%	%	%
Large Commercial Customers:	126,041	102,523,470												
Large Commercial SOP	154'6	62,265,944	1,607	10,518,647	7,369	47,856,233	381	3,455,694	94	435,370	17.0%	78.0%	4.0%	1.0%
Commercial MTP	3,974	22,947,435	319	186'285'1	3,566	20,825,644	86	533.810	0	0	8:0%	89.7%	2.3%	%0.0
Large Commercial Load Management	109,119	654,712	0	0	618,17	431.275	35.947	215.680	1.293	7,756	%0.0	%6'59	32.9%	1.2%
Sustainable Schools	637	2,669,417	0	0	637	2,669,417	0	0	0	0	0.0%	100.0%	%0:0	0.0%
REP (Commercial Coolsaver)	1,34]	2.875,003	61	134,474	1,280	2,740,529	0	0	0	0	4.5%	95.5%	0.0%	0.0%
Pool Pump Program Commercial	65	530,088	13	172,067	42	277.218	£	80.803	0	0	22.6%	72.2%	5.2%	0.0%
Data Centers	126	8,274,684	0	0	723	6,282,982	143	1,205,928	105	785,774	%0.0	74.4%	14.8%	10.8%
Retro-Commissioning	489	2.306.188	0	0	489	2,306,188	0	0	0	0	0.0%	100.0%	0.0%	0.0%
Residential and Small Commercial Customers:											1.6%	68,2%	29.0%	1.2%
Advanced Lighting Program	2,645	14.095,756												
New Homes MTP	13,671	42,736,617												
Residential SOP	125	295,868												
Multi-Family MTP- RES	782	1,260,913												
A/C Distributor Program	2322	6,308,863												
REP (Residential Coolsaver)	3,649	9,282,109												
Residential Demand Response Program	621'11	66,692												
Energy Star Mulfi-Family Low Rise MTP	528	2,879,507		-										
Energy Wise Resource Action Program	283	1,000,971												
Pool Pump	\$0\$	1,824,017												
REP (Efficiency Connection)	171	869,663												
Hard-to-Reach Customers:														
Hard-To-Reach SOP	338	628,995												- -
Multi-Family Water & Space Heating MTP (HTR)	2,069	1.709.239												
Multi-Family Direct Install (HTR)	262	960,707												
REP (Residential Coolsaver -Income Qualified)	64	162,024												
Targeted Low Income MTP (Agencies in Action)	3,114	4,251,437												

2016 kW Savings - CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC	STON ELECTRIC, L	TC			Schedule D
2016 kW Savings	RESIDENTIAL	SECONDARY < 10 kVA	SECONDARY > 10 kVA	PRIMARY	TRANSMISSION
Large Commercial Customers:					
Large Commercial SOP	1	1,606.54	\$ 7,369.22	381.35	94.03
Commercial MTP	-	319.03	\$ 3,565.76	89.48	-
Large Commercial Load Management SOP	1	0.01	\$ 71,879.18	35,946.69	1,292.69
Data Centers	1	•	\$ 722.93	143.29	104.93
Pool Pump Program Commercial	-	13,23	\$ 42.26	3.06	•
REP (Commercial Coolsaver)	•	16.09	\$ 1,280.44	-	•
Retro-Commissioning MTP	'	,	489	-	•
Sustainable Schools	1	-	637	-	1
Residential and Small Commercial Customers:					
Advanced Lighting Program	2,645	-	-	-	•
New Homes MTP	13,671	•	-	_	-
Residential SOP	125	-	•	-	•
Multi-Family MTP- RES	782				
Energy Star Multi-Family Low Rise MTP	528	•	•	•	-
A/C Distributor Program	2,322	-	-	_	•
REP (Residential Coolsaver)	3,649				
Residential Demand Response Program	11,129	-		-	ď
Energy Wise Resources Action Program	283		1	-	•
Pool Pump	508				
REP (Efficiency Connection)	171	-	-		•
Hard-to-Reach Customers:					
Hard-To-Reach SOP	338	•	-	_	•
Multi-Family MTP - HTR	2,069				
Multi-Family Direct Install (HTR)	262	-	-	•	•
REP (Residential Coolsaver -Income Qualified)	64				
Agencies in Action	3,114	1	-	-	
TOTAL	41,659.99	1,999.72	85,986.12	36,563.87	1,491.65
		SECONDARY <	SECONDARY >	PRIMARY	TRANSMISSION
	RESIDENTIAL	10 KVA	10 kVA	VOLTAGE	VOLTAGE
2016 kW Savings - ALL PROGRAMS	41,659.99	1,999.72	85,986.12	36,563.87	1,491.65
	24.84%	1.19%	51.27%	21.80%	0.89%
				Sum kW:	167,701.35

Calculation of 2016 Performance Bonus (By Rate Class)	Rate Class)	Schedule E
		2016
		Performance
Customer Class	% of 2016 Actual	Bonus
	EE Expenditures	\$11,035,335
Residential	48.11%	\$ 5,308,675.27
Secondary <=10 kVA	4.19%	\$ 461,921.97
Secondary > 10 kVA	41.36%	\$ 4,564,632.71
Primary	5.53%	\$ 610,365.85
Transmission Non-Profit Governmental	0.81%	\$ 89,739.14
Transmission - Industrial	0.00%	€
Lighting	0.00%	€ 5
Total	100.00%	\$ 11,035,335
Class	2016 Actual Energy Efficiency Expenditures	% of Total
Residential	\$15,928,385	48.11%
Secondary <= 10 kVA	\$1,385,971	4.19%
Secondary > 10 kVA	\$13,695,927	41.36%
Primary	\$1,831,369	5.53%
Transmission Non-Profit Governmental	\$269,257	0.81%
Transmission - Industrial	\$	0.00%
Lighting	0\$	%00.0
Total	\$33,110,909	100.00%

CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC	Schedule	Schedule E - Workpaper 1
Performance Incentive Calculation for Calendar Year 2016	кM	КАЛР
2016 Program Goals	59,400	104,314,000
2016 Program Savings	167,701	190,856,847
Reported/Verified Total (including HTR, measures with 10yr	105 531	278 988 OOL
Reported/Verified Hard-to-Reach	5,847	
Avoided Cost		
per kW		\$80
per kWh		\$0.051
Inflation Rate		2.0%
Discount Rate		8.21%
Total Avoided Cost (see avoided cost savings table)		\$144,087,143
2016 Program Costs		\$33,733,795
Net Benefits = Total Avoided Cost - Total Program Costs		
Net Benefits		\$110,353,348
Bonus based on 10% of Net Benefits		\$11,035,335

	Secondary < 10	ž	Secondary > 10					Total Commercial			:	!
	Υ _Λ Υ		KVA	1	Primary	Trummission	ą	Programs	ž	Residential	Total Total	Total All Programs
	Total 2016											
Residential Programs									S	15,928,585, \$	и	15,228,385
2 Large Connected SOP	\$ 1,056,916.68	44	5,541,578.01	v	259,480.48 \$	\$ 48,791.05	8	6,506.768			8	6,906,768
Large Commercial Lond Management SOP	\$ 0.25	4	2,384,638.83	v	0.25 \$ 2,282,628.83 \$ 1,104,147,17 \$	3 45.013.80 5	98	3,433,790			n	3,433,790
Retro-Commissioning	. \$	*	504,131.44	w	,	\$	- \$	504.131			8	504,131
6 Commercial MTP	\$ 268,204,76	×	268,204,76 \$ 3,651,649,81	*	88.358.18	\$	٠	4,008,213			и	4,008,213
Sustainable Schools	- 5	w	363,696.00	S		8	. 5	363.696			5	363.696
REP (Commercial Costrover)	\$ 15.938.62	×	414.834.97	v	٠	3	-	430,774		-	ъ.	430,734
Pool Pump Pregram Commercial	\$ 34,569.90	₩,	78,516.41	**	18,366.62	5	-	131.953			s	131.953
9 Data Centers		*	\$ 18,629,009	*	311,117,63	S 168,522.05 S	.05	1,080,270			S	1,036,250
10 R & D	\$ 10,340.99	•	256,261,51	s	49.398.73	\$ 6,923,39	39 \$	322,930	ŭ	-	'n	377.930
Total by Rate Class	87,285,817.20 \$ 13,685,926,64 \$ 1,831,163,61 \$ 05,178,585,1.29	\$ 13,	685,926.64	и	1,831,368.61	\$ 269,257	29	17,182,524	.,	15,928,385 \$ 33,110,909,00	\$ 33.1	10,909.00

	Scrondary < 10	Secondary > 10				
	KVA	WA	Primary	Transmission	Deck.	Residential
	Total 2016					
Lurge Connected 30F	15,30%	80,23%	3.76%	0.71%	100.00%	
Lurge Commercial Load Management SOP	\$600'0	66,53%	32,16%	1,31%	1D00001	
Retro-Commissioning	%DQ* 0	160,03%	6000	0.00%	100.00%	
Commercial MTP	926979	93,10%	%0c'z	9,000	100.00%	
Squitalizable Schools	%00'0	100,009	%00'0	0,00%	100.00%	
REP (Commercial Coobstrar)	3.70%	\$6.30%	\$300.0	0,000%	100.00%	
Pool Pump Program Commercial	\$102.92	\$9,36,65	14.30%	6,000%	9500'001	
Data Ceptera	9500'0	\$3,60%	\$\$08.8C	15.60%	100:00%	
R. & D (Commordal)	3,30%	79,36%	9:0€'S1	2,15%	100:00%	
Residential & Mard to Reach	%00°0	9,000	%00'0	\$300'0	0.00%	100.00%

		₹	Allocation Per												
		1	Totra Tech, EM&V	Secondary < 10		Secondary > 10									
Program	Sector	į	Cests 2017 & 2018	KVA	1	KVA		Primery	Transplain	ţ.	Reddential	1	Total	ŏ	
Large Commercial SOP	Norresidential	••	242,447,99	\$ 37,1	37,100.80	\$:94,525,78		9.108.53	7L' 9	712.78		•	242,447,59	÷	•
Large Commercial Load Management SOP	Norweck Count (p)	ю	34,271,08	s	80	\$ 22,801.83	w	11,019.98	₹ •	8200		49	34,271.08	•	•
Retre-coranteconing MTP	Normesidental	G	46,796.08	·s		\$ 49,786.06	•	•	•			•	49,786.06	*	
Commercial IATP	Novesidental	s	107,010,80	2,7	7,180,50	\$ 97,491,32	44	2,359,99	ı.	,			107,010,80	×	١
Systematics Schools Pilot	Nomesidenta	cra	33,527.22		1	\$ 93.527.22	4		•	,		•	33,527,22	÷	•
REP Program - Commercial	Monesidental	Į,	38,843.70	₽° \$	143E.07	\$ 37,454.63	•	•	•	,		4	38,893.70	и	•
R&O (Commercial)	Normatic (density)	ď	•	48	,		"		•	•		٠,	•	4	•
Pool Pump	Nonetcidental	60	27,578.27	5 7.2	1224.81	16,408.80	•	3,942.85	•				27,578,27	40	•
Date Contex	Nonesidental	v	68,701.57	4	,	\$ 38,198.07	"	19.788.05	\$ 10,717,44	7.44.1			68,701.57	4	•
NEW Young MTP	Residential	v	88,795,55	"	,	•	"		•	٠,	35	89,795,55	89,735,55	4	,
Residental SOP	Residential	v	26,701.61		,	•			**	,	83	20,701,51	29,701.61	鸣	,
Advanced Lighting	Regidental	ю	52,814,68	b	,	,	•		•	,	3	52,814,88 \$	52,614.66	D*	•
AC Clastibusy Program	Residential	ø,	30,498.61				ф		**		8	30,488,61	30,498.61	•	١
Muturally MTP	Residential	17	26,619.87	u 7	,	- 4	ĸ		•		ĸ	25,819.87	26,619,67	ьò	•
Pect Pump Pllat	Recidental	67	15,408.70	L/P	1	,	"		•	,	15,	15,408,70 \$	15,408,70	*	•
Retail Electric Provider Pilol MTP	Residential	69	51,964,53	•			40	٠	*	,	<u>ئة</u> ع	51,984.53	51,854,53	•	•
Residental Demand Response Program	Residential	'n	32.535.45	•		,	w		*	,	ક્ષ	32,836.48 \$	32,636,48	•	•
Energy Wise Resource Action Program	Rectdental	17	21,731,58	**	1	,	ıa		•	,	7.	21,731,59 5	21,731,59	**	
Marcho-Reach SOP Program	Hard-to-Reach	,,	32,730.21	**	•	•	en.		n		18	32,730.21 \$	32,730,21	÷	٠
Mailt-formly MTP	Hord-to-Reach	47	24,000,79	*			45		•	,	**	24,000.79 \$	24,603,79	•	١
Agencies in Action SQP	Hard-to-Roach	"	27,578,27	**	,		(19		*		2	27,578,27 \$	27,578,27	향	
REP (Codeaver) Income qualified	Hard-to-Reach	**	22,010,59	*			*		*		24.	24,919.59 \$	24,918.59		٠
Total		**	1,040,413.13	**	52,825.08 \$	\$ 4400,190,70 \$	*	48,216,48 \$		12,879.49 \$		198.48 \$	481,198.48 \$ 1,080,413.13 \$	49	•

Calculation of 2016 Kate Case Expenses (By Kate Class)	te Class)		Schedule F - Page 2
		2016	2016
		CEHE Rate Case	Muni. Rate Case
Customer Class	% of 2016 Actual	Expenses	Expenses
	EE Expenditures	\$43,648	\$30,172
Residential	48.11%	\$ 20,997.52	\$ 14,514,75
Secondary <=10 kVA	4.19%	\$ 1,827.05	\$ 1,262.97
Secondary > 10 kVA	41.36%	\$ 18,054.59	\$ 12,480.42
Primary	5.53%	\$ 2,414.19	\$ 1,668.84
Transmission Non-Profit Governmental	0.81%	\$ 354.95	\$ 245.36
Transmission - Industrial	%00.0	\$	- €
Lighting	%00.0	\$	₩
Total	100.00%	\$ 43,648	\$ 30,172

Calculation of 2016 Administrative Expense Adjustments (By Rate Class)	ustments (By Rate Class)	Schedule F - Page 3
		2016
		Administrative Expense
Rate Class	% of 2016 Actual	Adjustments ¹
	EE Expenditures	80
Residential	48.11%	. ←
Secondary <=10 kVA	4.19%	-
Secondary > 10 kVA.	41.36%	-
Primary	5.53%	5/3
Transmission Non-Profit Governmental	%18'0	- -
Transmission - Industrial	0.00%	· •
Lighting	%00:0	
Total	%00:001	· .

An admisitrative adjustment of \$4,031 has been applied to the 2016 actual program costs and is reflected in the over/under on Schedule H and therefore is not reflected here (See Direct Testimony of John Durland).

CENTERPOINT EMERGY HOUSTON ELECTRIC, LLC Ridge EECRF Billing Determinants	Actuals through February 2017. Forecast for remainder of 2017 and through Feb. 2019. From the 2017-21 Business Plen	ny 2017. Forecast fo	r remainder of 2017 o	nd through Feb. 2019.	From the 2017-21 Bus	iness Plan			Schechule G Page 1
	21 wel	21 402	71 M	A 16	31 .cc/V	71 441	71 7-1	71 vay	20 J
Raid Class Residential Service	1,957,894,426	166	1-	Apr-16 1,673,816,058	2,098,626,047	2.894,429.549	3,622,073,947	2,098,626,047 2,894,429.549 3,622,073,947 4,002,593,990 3,360,458,315	3,360,458,315
Secondary Service Less Than or Equal to 10 kVA	73,412,262	67,963,252	70,346,413	69,169,472	68,934,653	79,566,141	77,929,640	87,764,875	81,687,128
Secondary Service Greater Than 10 kVA	2,366,412,974	2,366,412,974; 2,227,044,537	2,321,014,334	2,419,554,439	2,481,947,573	2,909.116,517	3,005,667,027	2,481,947,573 2,909.116,517 3,005,667,027 3,171,830,580 3,080,508,827	3,080,508,827
Primary Service	281,152,167	278,724,065	278,446,682	306,549,632	300,273,013	347,095,262	354,325,550	346,608,423	370,807,254
Transmission Non-Profit/Governmental									
Transmission Service	1,551,302,049	1,580,981,018	1,551,302,049 1,580,981,018 1,591,938,423	1,697,063,804		1,740,284,493	1,645,151,721	1,789,481,132 1,740,284,493 1,645,151,721 1,710,858,214 1,720,481,948	1,720,481,948
Lighting Services	24.061.895	24,062,253	24,061,255	23,624,190	23,418,088	23,418,088 23,580.197 23,782,511	23,782,511	23,617,150	23,214,813
Total	6,254,235,772	5.845,666,115	6,254,235,772 5.845,666,115 5,878,108,533	6,189,777,595	ı	7,994,072,159	8,728,930,396	6,762,680,506 7,994,072,159 8,728,930,396 9,343,273,232 8,637,158,285	8,637,158,285

* Billing Determinants include the reduction in energy demand of 124 commercial customers that qualified under the opt-our provision in the amended energy efficiency rules.

						Forecast	Forecast	Fortcast	Forecast	Forecast	Schollule o Page 2 Forecast
) t-00	Nove-16	71	[av.]7	71- 4-3	Mar. 17	A 20 17	21 mg/K	- L	Fol. 17	Δ.υσ.17	Sen. 17
2,799,571,327	2,799,571,327 2,031,694,522	_	1,807,075,135 2,078,149,350 1,546,938,362 1,852,768,326 2,447,892,149 3,155,829,753 3,617,423,485 3,832,070,227 3,458,021,277	1,546,938,362	1,852,768,326	2,447,892,149	3,155,829,753	3,617,423,485	3,832,070,227	3,458,021,277	2,634,155,051
77,594,570	71,363,326	74,526,984	79,226,134	62,375,947	74,455,471	77,189,576	81,679,608	84,647,280	87,779,883	85,444,191	81,578,688
2,852,270,050	2,852,270,050 2,519,993,199		2,369,390,797 2,490,296,016 2,209,346,633 2,460,573,247 2,637,919,079 2,931,052,061 3,086,920,588 3,144,131,457 3,117,315,151 2,838,814,316	2,209,346,633	2,460,573,247	2,637,919,079	2,931,052,061	3,086,920,588	3,144,131,457	3,117,315,151	2,838,814,316
342,681,420	326,173,687	296,160,177	290,808,918	283,619,440	302,612,339	312,576,287	346,611,465	357,728,830	357,818,130	370,180,884	327,198,021
1,677,935,862	1,677,935,862 1,710,167,376		1,688,559,286 1,900,607,542 1,688,982,034 1,697,941,186 1,662,784,112 1,711,593,878 1,682,961,643 1,688,047,470 1,681,259,129 1,613,127,179	1,688,982,034	1,697,941,186	1,662,784,112	1.711,593,878	1,682,961,643	1.688,047,470	1,681,259,129	1,613,127,179
23,174,299	22,932,261	22,694,579	22,694,579 22,658,941 22,358,677 20,588,094 20,407,428 20,250,224	22,358,677	20,588,094	20,407,428	20,250,224		20,103,046 19,856,054 19,944,635	19,944,635	19,834,415
7,773,227,528	7 773 227 528 6.682 324 371		6.258 406 957 6.86 746 901 5.8 3 6.4 08 938 6644 7 1.58 768 630 8.247 016 989 8 849 784 872 9 129 703 222 8 732 165 268 7 7 14 707 671	5.813.621.093	6.408.938.664	7,158,768,630	8 247 016 989	8.849.784.872	9,129,703,222	8.732,165,265	7.514.707.671

										School of Page 5
Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast
Oct-17	Nov-17	Dec-17 Jan-18	Jan-18	Feb-18	Mar-18	Apr-18	Apr-18 May-18 Jun-18	Jun-18	Jul-18	Aug-18
2,048,177,781	2,048,177,781 1,850,843,593 1,954,914,546 1,827,920,721 1,718,477,955 1,897,668,923 2,506,520,024 3,230,508,095 3,701,987,659 3,920,564,261 3,536,915,002	1,954,914,546	1,827,920,721	1,718,477,955	1,897,668,923	2,506,520,024	3,230,508,095	3,701,987,659	3,920,564,261	3,536,915,002
78,393,987	77,284,051	78,270,577	73,761,177	72,290,107	74,008,288	76,802,032	81,354,765	84,394,486	87,597,377	85,354,401
2,583,950,049	2,583,950,049 2,438,556,632 2,482,583,754 2,351,182,975 2,332,347,642 2,469,216,727 2,645,908,683 2,939,302,284 3,093,909,275 3,149,800,757 3,121,627,596	2,482,583,754	2,351,182,975	2,332,347,642	2,469,216,727	2,645,908,683	2,939,302,284	3,093,909,275	3,149,800,757	3,121,627,596
311,322,914	290,205,825	275,400,474	290,205,825 275,400,474 288,292,744	286,965,641	301,138,355	310,818,098	344,688,132	355,796,347	355,562,874	367,856,747]
					92,718,140	106,017,112	103,827,195	106,875,203	105,085,195	105,405,377
1,624,441,704	1,624,441,704 1,623,263,731 1,559,182,023 1,468,778,010 1,424,234,982 1,642,527,832 1,602,641,758 1,648,962,236 1,615,056,299 1,629,708,209 1,623,572,544	1,559,182,023	1,468,778,010	1,424,234,982	1,642,527.832	1,602,641,758	1,648,962.236	1,615,056,299	1.629,708,209	1.623,572,544]
19,574,678	19,574,678 19,718,655 19,467,610 18,115,743 17,864,291 17,697,370 17,485,695 17,292,069 17,108,185 16,836,859 16,872,019	19,467,610	18,115,743	17,864,291	17,697,370	17,485,695	17,292,069	17,108,185	16,836,859	16,872,019
6,665,861,113	6.665.861.113 $6.299.872.487$ $6.369.818.985$ $6.028.051.370$ $7.852.180.617$ $6.494.975.636$ $7.266.193.402$ $8.365.934.777$ $8.975.127.454$ $9.265.155.331$ $8.857.603.686$	6,369,818,985	6,028,051,370	5,852,180,617	6,494,975,636	7,266,193,402	8,365,934,777	8,975,127,454	9,265,155,531	8,857,603,686

Forecast	Forecast	Forecast	Forecast	Forecast	Forecast		
Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Fcb-19	Total	
2,693,541,461	2,693,541,461 2,093,823,431	1,891,638,266	1,997.557,046	1,867,411.682	1.755.284,143	1,891,638,266 1,997,557,046 1,867,411,682 1,755,284,143 31,093,419,993 KWH	кмн
81,576,076	78,465,213	77,426,104	78,494,703	74,038,378	72,623,675	952,135,498 KWH	кмн
2,841,036,935	1,584,552,262	2,438,037,947	2,481,712,454	2,351,873,809	2,332,344,696	2,841,036,935 2,584,552,262 2,438,037,947 2,481,712,454 2,351,873,809 2,332,344,696 32,449,323,425 KWH	KWH
324,415,073	308,446,809	287,384,777	272,931,266	286,663,454	285,268,388	3,800,970,320 KWH	КМН
104,980,944	100,727,299	101,431,249	101,354,683	95,704,424		-95,873,179 1,220,000,000 KWH	КМН
1,562,434,351	1,557,549,344	1,562,487,341	1,470,086,924	1,468,778,010	1,424,234,982	1,562,434,351 1,557,549,344 1,562,487,341 1,470,086,924 1,468,778,010 1,424,234,982 18,808,039,829 KWH	KWH
16,733,929		16,470,920 16,581,207 16,346,387 15,579,455 15,384,583	16,346,387	15,579,455	15,384,583	200,388,677 KWH	KWH
7,624,718,768	6,740,035,278	6,374,986,892	6,418,483,464	6,160,049,210	5,981,013,646	7,624,718,768 6,740,035,278 6,374,986,892 6,418,483,464 6,160,049,210 5,981,013,646 88,524,277,742	

Schedule H Page 1	\$2,284,891	"Approved but not spent." CenterPoint Energy Revenue Statistics for 2016		(2.284,891.00) Under-Expenditures - "Approved but not spent" (74,312.52) Under-collection from approved revenue. 2.210,578.48 Total Over-recovery to be returned through 2018 EECRF
) Rate Classes	Approved EECRE Source 355,395,800 CEHE for 2016 Actual; 2016 Budget from EECRF filing \$6,640,550 \$166,881 \$549,065 (\$85,500) \$3,540,022		Total of above	N N N
2016 EECRF Estimated Over/Under Calculation and Allocation to Rate Classes Calculation of 2016 Over/Under Calculation		\$35,300,983 \$3,464,087.87 \$3,122,537.74	\$2,338,695.71 \$2,388,386.54 \$2,664,171,93 \$3,385,472.89 \$3,861,289.70 \$3,744,770.21 \$3,744,770.21 \$3,293,837.39 \$2,668,792.01 \$2,492,625.19	\$37,571,561.07 \$2,210,578.48 "Over-collection" Positive value represents over-collection
2016 EECRF Estimated Over/Under Calculs Calculation of 2016 Over/Under Calculation	Revenue Requirement 2016 Program Costs 2014 Bonus: 2014 Rate Case Expenses 2015 & 2016 EM&V Costs 2014 Historical Admin. Adjust. 2014 Over Recovery:	ioral <u>Revenue</u> EECRF January	March April May June July August September October November Total EBCRF	Total 2016 Revenue: EECRF Over/(Under):

¹ 2016 Actual Program costs includes an adminstrative adjustment of \$4.031 as described in John Durland's Direct Testimony.

Allocation of 2016 Over/Under Calculation to Rate Classes

Schedule H Page 2

Energy Efficiency Costs (includes Energy Efficiency Energy Efficiency Costs (includes Co		2016 Over/(Un	2016 Over/(Under)-Expenditure Class Calculation	sss Calculation	2016 Over/(U	2016 Over/(Under)-Collection Class Calculation	Calculation	Net True-Up
\$17,071,947 \$18,909,512 \$18,909,512 \$18,809,4192 \$(385,320) \$(385,	;	2016 Actual Energy Efficiency Expenditures (includes boaus, EM&V, over/under recovery, historical admin. adj., and rate case exp.)		2016 Over/ (Under) Expenditure	Approved 2016 EECRF Total Revenue Requirement Amount	2016 EECRF Acrual Recovery Amount	2016 EECRF Over / (Under) Collection of Revenue	Net 2016 Over/ (Under) Recovery
\$2,605,665 \$3246,525 (\$640,861) \$32,46,525 \$33,429,756 \$183,230 \$12,625,550 \$12,468,634 \$167,916 \$12,468,634 \$12,183,627 (\$285,008) \$12,636,550 \$12,468,634 \$167,916 \$12,468,634 \$12,183,627 (\$285,008) \$13,107,076 \$23,263,251 \$33,263,251 \$33,213,132 \$449,881 \$107,076 \$13,204,049 \$181,794 \$132,049) \$1179,145) \$562,904 \$100,000 \$	Class Residential	\$17,071,947	(2) \$18,909,512	(5) = (1) + (2) (\$1,837,565)	\$18,909,512	\$18,824,192	(\$85,320)	\$1,752,245
\$12,636,550 \$12,468,634 \$167.916 \$12,468,634 \$12,183,627 (\$2285,008) \$12,635,550 \$12,468,634 \$12,183,627 (\$2285,008) \$12,107,076 \$13,263,251 (\$156,175) \$13,263,251 \$13,132 \$13,132 \$10,000 \$1	Secondary <= 10 kVA	\$2,605,665	\$3,246,525	(\$640,861)	\$3,246,525	\$3.429,756	\$183,230	\$824,091
\$3,107,076 \$3,263.251 \$156,175 \$3,263,251 \$3,313,132 \$49,881 (\$60,256) -\$242,049 \$181.794 (\$242,049) (\$179,145) \$62,904 \$0 \$0 \$0 \$0.00 \$0 \$0 \$1 \$0 \$0 \$0 \$0 \$23,336,0983 \$37,545,873 \$37,571,561 (\$74,312)	Secondary > 10 kVA	\$12,636,550	\$12,468.634	\$167.916	\$12,468,634	\$12,183,627	(\$285,008)	(\$452,924)
\$60,256) -\$242,049 \$181.794 (\$242,049) (\$179,145) \$62,904 \$0 \$0,00 \$0,00 \$0 \$0 \$0 \$0 \$0,00 \$0,00 \$353.560,983 \$37,645,873 (\$2,284,890) \$37,645,873 \$37,571,561 (\$74,312) \$3	Primary	\$3,107,076	\$3,263.251	(\$156,175)	53,263,251	\$3,313,132	\$49,881	\$206,056
\$0 \$0 \$0.00 \$0.00 \$0 \$0 \$0 \$0.00 \$0.00 \$0 \$1 \$0 \$0 \$0 \$0 \$2.284,800 \$37,645,873 \$37,645,873 \$37,645,873 \$37,643,873	Fransmission Non-Profit Sovernmental	(\$60,256)	-\$242,049	\$181.794	(\$242,049)	(\$179,145)	\$62,904	(\$118,890)
\$0 \$0 \$0 \$0 \$0.00 \$0.00 \$0 \$35360.983 \$37,645.873 (\$2,284.800) \$7,645.873 \$37,571.561 (\$74.312)	Fransmission - Industrial	20	0\$	0\$	\$0.00	80.00	\$0	8
\$37,645,873 (\$2,284,890) \$37,645,873 (\$37,51,561 (\$74,312)	Lighting	\$0	20	0\$	\$0.00	80.00	\$0	20
	Fotal	\$35,360,983	\$37,645,873	(\$2,284,890)	\$37,645,873	\$37.571,561	(\$74,312)	\$2,210,578

Schedule 1

u	п
- 7	ı
- 1	u
-	_
-	=
- =	
-	
-	
π	7
- 2	=
- 1	
-	
- 5	Ц
-	Ξ,
- 1	4
- 6	٠
	П
ш	ш
_	
7	
9	Q
9	Q
?	Q
4	
4	
4	
404.12	
404	
Action	
L Action	
G Action	
16 Actual	
MG Action	
O46 Actual	
MANAGEST A	
2016 Actual	

Bonus 2014

\$2,605,665 \$12,636,550 \$3,107,076 \$0 \$0 \$35,360,983 Per/Class \$17,071,947 (\$60,256) Total (\$2,687,731) \$844,140 (\$3,737,681) \$902,119 (\$341,768) (\$5,020,922) & & (Over)/Under 2014 Hist. Admin. Adj. (\$45,447) (\$4,097) (\$31,338) (\$85,500) (\$202) (\$4,416) 2014 \$258,322 \$258,322 \$53,419 \$214,567 549,065 \$22,174 \$582 2015 & 2016 \$7,997 \$61,166 \$8,620 \$394 166,881 Rate Case Exp. \$88,704 2014 \$318,234 \$2,433,909 \$342,996 \$15,696 \$6,640,550 \$3,529,714

	20 10 Actual Expe
	2016
	Actual Exp.
Residential	\$15,928,385
Sec< 10	\$1,385,971
Sec >10	\$13,695,927
Primary	\$1,831,369
Frans, Non-Profit	\$269,257
Frans. Indus.	\$0
-ighting	0\$

\$33,110,909

Totals

	2014 Actual Energy		2014		2015 & 2016	
	Efficiency		Performance	2014 Rate Case	EM&V Costs Per	2014 Historical
Class	Expenditures	% of Total	Bonus	Expenses	Tetra Tech	Admin. Adj.
Residential	\$19,010,357	53.15%	\$3,529,714	\$88,704	\$258,322	(\$45,447)
Secondary <= 10 kVA	\$1,713,949	4.79%	\$318,234	\$7,997	\$53,419	(\$4,097)
Secondary > 10 kVA	\$13,108,565	36.65%	\$2,433,909	\$61,166	\$214,567	(\$31,338)
Primary	\$1,847,312	5.17%	\$342,996	\$8,620	\$22,174	(\$4,416)
Transmission Non- Profit/ Govt.	\$84,534	0.24%	\$15,696	\$394	\$582	(\$202)
Transmission - Industrial	\$0	0.00%	\$0	0\$	0\$	\$0
Lighting	80	0.00%	\$0	\$0	\$0	\$0
Total	\$35,764,717	100.00%	6,640,550	166,881	549,065	(85,500)

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	\$0.000729	Per kWh	- R
Secondary Service Less than or Equal to 10 kVA	\$0.001481	Per kWh	1
Secondary Service Greater than 10 kVA	\$0.000612	Per kWh	1 1
Primary Service	\$0.000560	Per kWh	R
Transmission Non-Profit Governmental	\$0.000280	Per kWh	I I
Transmission Service – Industrial	N/A		
Lighting Services	N/A		

NOTICE

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

Revision Number: 9th Effective: 3/1/18

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	\$0.000729	Per kWh
Secondary Service Less than or Equal to 10 kVA	\$0.001481	Per kWh
Secondary Service Greater than 10 kVA	\$0.000612	Per kWh
Primary Service	\$0.000560	Per kWh
Transmission Non-Profit Governmental	\$0.000280	Per kWh
Transmission Service – Industrial	N/A	
Lighting Services	N/A	

NOTICE

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

Revision Number: 9th Effective: 3/1/18