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APPLICATION OF CENTERPOINT ENERGY
HOUSTON ELECTRIC, LLC FOR APPROVAL
TO AMEND ITS DISTRIBUTION COST
RECOVERY FACTOR

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#### **DOCKET NO. 53442**

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

#### **April 5, 2022**

Contact: Denise Gaw
CenterPoint Energy Service Company, LLC
1111 Louisiana Street
Houston, Texas 77002
Tel No: (713) 207-5956
Fax: (713) 207-9840

email: denise.gaw@centerpointenergy.com

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FACTOR	§	

### APPLICATION OF CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC FOR APPROVAL TO AMEND ITS DISTRIBUTION COST RECOVERY FACTOR

CenterPoint Energy Houston Electric, LLC ("CenterPoint Houston" or the "Company") files this Application for Approval to amend its Distribution Cost Recovery Factor ("DCRF") pursuant to Section 36.210 of the Public Utility Regulatory Act ("PURA") and 16 Tex. Admin. Code ("TAC") § 25.243 and asks that its regulatory authorities, which include the Public Utility Commission of Texas ("Commission") and municipalities, approve CenterPoint Houston's Rider DCRF as filed.

#### I. INTRODUCTION

CenterPoint Houston's filing requests an update to the Company's current Rider DCRF to include additional distribution invested capital placed in service from January 1, 2019 to December 31, 2021 and is CenterPoint Houston's first DCRF filing since the Company's last comprehensive base rate proceeding in Docket No. 49421. As detailed below and in the Company's testimony, exhibits, and workpapers, CenterPoint Houston invested \$1,097,973,841 in net distribution system invested capital booked to FERC Accounts 303, 352, 353, 360-374, 391 and 397 from January 1, 2019 through December 31, 2021. In addition, pursuant to PURA § 39.918 the Company invested \$199,566,430 in temporary emergency electric energy ("mobile generation") facilities during the

<sup>&</sup>lt;sup>1</sup> Application of CenterPoint Energy Houston Electric, LLC for Authority to Change Rates, Docket No. 49421, Final Order (Mar. 9, 2020).

calendar year ending December 31, 2021. The total revenue requirement associated with allowed return, depreciation, income and other taxes on net distribution invested capital since the Company's last rate case is \$138,518,172 and \$59,903,845 for the mobile generation program, for a total of \$198,422,017. Adjusted for load growth, the resulting increase to the Company's current revenue requirement is \$145,680,810.

#### II. AUTHORIZED REPRESENTATIVES

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

Denise Gaw
CenterPoint Energy Service Company, LLC
1111 Louisiana Street
Houston, Texas 77002
713.207.5956
713.207.9840 (fax)
denise.gaw@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, 19<sup>th</sup> Floor
Houston, Texas 77002
713.207.7231
713.454.7197 (e-fax)
mickey.moon@centerpointenergy.com

Mark Santos State Bar No. 24037433 Kate Norman State Bar No. 24051121 Coffin Renner LLP P.O. Box 13366 Austin, TX 78711 512.879.0900 512.879.0912 (fax)

#### mark.santos@crtxlaw.com kate.norman@crtxlaw.com

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

#### III. JURISDICTION

CenterPoint Houston is an electric utility as that term is defined in PURA §§ 11.004(1) and 31.002(6) and a transmission and distribution utility as defined in PURA § 31.002(19). CenterPoint Houston operates solely within the Electric Reliability Council of Texas areas of Texas. The Company's distribution system covers approximately 5,000 square miles located in and around Houston, Texas, and is comprised of approximately 57,000 miles of overhead and underground distribution lines. The Company's electric distribution system also includes conductors and substations operating at voltages of 35-kV and less.

The Commission has exclusive original jurisdiction over this proceeding for areas outside municipalities pursuant to PURA §§ 32.001(a) and 36.210(a), and for those municipalities shown on Attachment A that have ceded their original jurisdiction to the Commission pursuant to PURA § 33.002(b). Further, the Commission has exclusive appellate jurisdiction under PURA § 32.001(b) to review *de novo* an order or ordinance of a municipality exercising original jurisdiction under PURA.

Pursuant to PURA §§ 36.210(a), 36.210(f)(4), and 33.001(a), municipalities that have not ceded their jurisdiction to the Commission have exclusive original jurisdiction over this filing as it affects service within their municipal boundaries. In recognition of this fact, CenterPoint Houston is filing this Application simultaneously with all municipal authorities that have retained jurisdiction over CenterPoint Houston's rates. Further, with regard to municipal proceedings on the Company's Application, CenterPoint Houston requests that it be deemed to have appealed the

filing to the Commission 60 days from the date of the municipal filing and that any interim or final orders issued by a municipality's governing body be suspended at the time such order took effect, pursuant to 16 TAC § 25.243(c)(1)(B).

#### IV. AFFECTED PERSONS AND TERRITORIES

CenterPoint Houston's 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 that the REPs choose to pass along those charges to their customers under the Company's DCRF Tariff. If the DCRF requested in this Application is approved, CenterPoint Houston's distribution revenues will increase by approximately \$145,680,810 on an annual basis for the period September 1, 2022 to August 31, 2023, as compared to the distribution revenues approved in its most recent base rate case, Docket No. 49421.

#### V. PROPOSED DCRF RIDER AND EFFECTIVE DATE

CenterPoint Houston's proposed Rider DCRF is attached to this Application as Attachment B. The filing date of CenterPoint Houston's Application complies with 16 TAC § 25.243(c)(2). Pursuant to PURA § 36.210(a)(1)(C) and 16 TAC § 25.243(e)(6)(C), the Company's proposed effective date for rates under Rider DCRF is September 1, 2022.

#### VI. SCOPE OF THE PROCEEDING

With regard to the scope of this proceeding, CenterPoint Houston requests that issues regarding the statutory determinations required under PURA §§ 36.053 and 36.058 and the reasonableness, necessity and prudence of the distribution system investment included in this filing not be addressed in this proceeding and, instead, be deferred until the Company's next comprehensive general base rate case. CenterPoint Houston's request is made in accordance with 16 TAC § 25.243(e)(5) and (f). To the extent the presiding officer determines that these issues

should be addressed in this proceeding, CenterPoint Houston expressly reserves its right to make supplemental filings to fully address those issues.

#### VII. OVERVIEW OF THE APPLICATION AND SUPPORTING DOCUMENTS

This Application contains the testimony of four witnesses. Company witness Brad A. Tutunjian describes and sponsors the distribution system capital investment projects included in this filing. Mr. Tutunjian's exhibits include descriptions of the capital projects placed in service for the period January 1, 2019 through December 31, 2021. Company witness Martin W. Narendorf Jr. provides testimony supporting the inclusion of mobile generation amounts in CenterPoint Houston's DCRF in accordance with Texas Utilities Code § 39.918. Company witnesses Mary A. Kirk and John R. Durland sponsor and support the Company's Rider DCRF revenue requirement and supporting schedules and workpapers required by the Application Form Instructions for DCRF filings. Mr. Durland supports the DCRF tariff. These four witnesses collectively demonstrate CenterPoint Houston's compliance with the standards for DCRF recovery set forth in PURA, 16 TAC § 25.243(e)(5), and the Commission's DCRF application form.

In addition, CenterPoint Houston includes as Attachment C to this Application the sworn statements of Brad A. Tutunjian, Martin W. Narendorf, Mary A. Kirk and John R. Durland affirming that the filing complies with the requirements of PURA §§ 36.210(a)(6) and §39.918 and 16 TAC § 25.243(e)(1). CenterPoint Houston has also included as Schedule K to this Application the Company's most recent annual earnings report filed with the Commission.

#### VIII. NOTICE AND INTERVENTION DEADLINE

CenterPoint Houston intends to provide notice of this proceeding as required by 16 TAC § 25.243(e)(2). Specifically, CenterPoint Houston will provide notice of this filing to all parties in CenterPoint Houston's last comprehensive base-rate proceeding no later than the day after CenterPoint Houston files this Application. CenterPoint Houston is also providing notice of this

Application to each municipality in its service area. Notice shall be accomplished by serving the aforementioned parties with a copy of this Application, including all accompanying materials. Proof of notice will be filed with the Commission upon completion of notice.

Pursuant to 16 TAC § 25.243(e)(2), the intervention deadline is 30 days from the date service of notice is completed.

#### IX. PROTECTIVE ORDER

CenterPoint Houston anticipates it may be necessary for the Company to furnish confidential material or for other parties to submit documents containing confidential material during this case. Accordingly, CenterPoint Houston has included as Attachment D of the Application a proposed protective order. The proposed protective order is similar to the protective order issued in Docket No. 49421 and other protective orders issued in recent DCRF proceedings before the Commission.

The Company requests approval of the proposed protective order included in Attachment D of the Application. Until a protective order is issued in this proceeding, the Company will provide access to the confidential information submitted with this Application to parties that agree in writing to be bound by the proposed protective order as if it had been issued by the Commission.

#### X. REQUEST FOR RELIEF AND INFORMAL DISPOSITION

Consistent with PURA §§ 36.210 and 39.918 CenterPoint Houston requests approval of its Application, as filed. CenterPoint Houston also requests that the Commission approve the proposed protective order. CenterPoint Houston further requests that the Commission defer consideration of issues involving PURA §§ 36.053 and 36.058 and the reasonableness, necessity and prudence of the distribution system investment included in this filing until the Company's next comprehensive general base-rate case. CenterPoint Houston submits that its Application is eligible

for informal disposition pursuant to 16 TAC § 25.243(e)(6)(D). Finally, CenterPoint Houston requests that it be granted such other relief to which it has shown itself entitled.

Respectfully submitted,

Mickey Moon '

State Bar No. 00791291

CenterPoint Energy Service Company, LLC

1111 Louisiana, 19<sup>th</sup> Floor Houston, Texas 77002

713.207.7231

713.454.7197 (e-fax)

mickey.moon@centerpointenergy.com

Mark A. Santos

State Bar No. 24037433

Kate Norman

State Bar No. 24051121

Coffin Renner LLP

P.O. Box 13366

Austin, TX 78711

512.879.0900

512.879.0912 (fax)

mark.santos@crtxlaw.com

kate.norman@crtxlaw.com

COUNSEL FOR CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC

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## **ATTACHMENT A**

### LIST OF CITIES WHICH HAVE CEDED ORIGINAL JURISDICTION TO THE PUBLIC UTILITY COMMISSION OF TEXAS

Arcola

Bayou Vista

Beasley

Village of Bonney

Brookshire

Cove

Galena Park

Hillcrest Village

Hilshire Village

Hitchcock

Humble

Iowa Colony

Jacinto City

Jamaica Beach Village

Katy

Kemah

Kendleton

Liverpool

Magnolia

Mont Belvieu

**Morgans Point** 

Nassau Bay

Needville

Old River-Winfree

Orchard

Pattison

Pine Island

Piney Point Village

Prairie View

San Felipe

Stagecoach

Tomball

Waller

Wallis

## **ATTACHMENT B**

CenterPoint Energy Houston Electric, LLC Applicable: Entire Service Area

#### 6.1.1.6.13 RIDER DCRF - DISTRIBUTION COST RECOVERY FACTOR

#### APPLICABILITY

Each Retail Customer connected to the Company's distribution system will be assessed a nonbypassable distribution service charge adjustment pursuant to this rider. The charges derived herein, pursuant to Substantive Rule §25.243, are necessitated by incremental distribution costs not included in the Company's last general rate case proceeding before the Commission.

#### **MONTHLY RATE**

The REP, on behalf of the Retail Customer, will be assessed this distribution service charge adjustment based on the monthly per unit cost (DCRF) multiplied times the Retail Customer's appropriate monthly billing determinant (kWh, Billing kVA, or 4 CP kVA).

The DCRF shall be calculated for each rate according to the following formula:

DCRF =

$$[((DIC_C - DIC_{RC}) * ROR_{AT}) + (DEPR_C - DEPR_{RC}) + (FIT_C - FIT_{RC}) + (OT_C - OT_{RC}) - \sum (DISTREV_{RC-CLASS} * \%GROWTH_{CLASS})] * ALLOC_{CLASS} / BD_{C-CLASS}$$

#### Where:

DIC<sub>C</sub> = Current Net Distribution Invested Capital.

DIC<sub>RC</sub> = Net Distribution Invested Capital from the last comprehensive base-rate proceeding.

RORAT = After-Tax Rate of Return as defined in Substantive Rule §25.243(d)(2).

DEPR<sub>C</sub> = Current Depreciation Expense, as related to Current Gross Distribution Invested Capital, calculated using the currently approved depreciation rates.

DEPR<sub>RC</sub> = Depreciation Expense, as related to Gross Distribution Invested Capital, from the last comprehensive base-rate proceeding.

FIT<sub>c</sub> = Current Federal Income Tax, as related to Current Net Distribution Invested Capital, including the change in federal income taxes related to the change in return on rate

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CenterPoint Energy Houston Electric, LLC Applicable: Entire Service Area

base and synchronization of interest associated with the change in rate base resulting from additions to and retirements of distribution plant as used to compute Net Distribution Invested Capital.

FIT<sub>RC</sub> = Federal Income Tax, as related to Net Distribution Invested Capital from the last comprehensive base-rate proceeding.

OT<sub>C</sub> = Current Other Taxes (taxes other than income taxes and taxes associated with the return on rate base), as related to Current Net Distribution Invested Capital, calculated using current tax rates and the methodology from the last comprehensive base-rate proceeding, and not including municipal franchise fees.

OT<sub>RC</sub> = Other Taxes, as related to Net Distribution Invested Capital from the last comprehensive base-rate proceeding, and not including municipal franchise fees.

DISTREV<sub>RC-CLASS</sub> (Distribution Revenues by rate class based on Net Distribution Invested Capital from the last comprehensive base-rate proceeding) = (DICR<sub>C-CLASS</sub> \* ROR<sub>AT</sub>) + DEPR<sub>RC-CLASS</sub> + FIT<sub>RC-CLASS</sub> + OT<sub>RC-CLASS</sub>.

 $%GROWTH_{CLASS}$  (Growth in Billing Determinants by Class) = (BDc-class - bdrc-class) / BDrcclass

DIC<sub>RC-CLASS</sub> = Net Distribution Invested Capital allocated to the rate class from the last comprehensive base-rate proceeding.

DEPR<sub>RC-CLASS</sub> = Depreciation Expense, as related to Gross Distribution Invested Capital, allocated to the rate class in the last comprehensive base-rate proceeding.

FIT<sub>RC-CLASS</sub> = Federal Income Tax, as related to Net Distribution Invested Capital, allocated to the rate class in the last comprehensive base-rate proceeding.

 $OT_{RC\text{-}CLASS}$  = Other Taxes, as related to Net Distribution Invested Capital, allocated to the rate class in the last comprehensive base-rate proceeding, and not including municipal franchise fees.

ALLOC<sub>CLASS</sub> = Rate Class Allocation Factor approved in the last comprehensive base-rate proceeding, calculated as: total net distribution plant allocated to rate class, divided by total net distribution plant. For situations in which data from the last comprehensive base-rate proceeding are not available to perform the described calculation, the Rate Class Allocation Factor shall be calculated as the total distribution revenue requirement allocated to the rate class (less any identifiable amounts explicitly unrelated to Distribution Invested Capital)

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CenterPoint Energy Houston Electric, LLC Applicable: Entire Service Area

divided by the total distribution revenue requirement (less any identifiable amounts explicitly unrelated to Distribution Invested Capital) for all classes as approved by the commission in the electric utility's last comprehensive base-rate case.

The Allocation Factor for each listed rate schedule is as follows:

Residential Service	57.4920%
Secondary Service Less Than or Equal to 10 kVA	1.5016%
Secondary Service Greater Than 10 kVA	30.4483%
Primary Service	2.3617%
Transmission Service	0.2494%
Street Lighting Service	7.9471%

BD<sub>C-CLASS</sub> = Rate Class Billing Determinants (weather-normalized and adjusted to reflect the number of customers at the end of the period) for the 12 months ending on the date used for purposes of determining the Current Net Distribution Invested Capital. For customer classes billed primarily on the basis of kilowatt-hour billing determinants, the DCRF shall be calculated using kilowatt-hour billing determinants. For customer classes billed primarily on the basis of demand billing determinants, the DCRF shall be calculated using demand billing determinants.

BD<sub>RC-CLASS</sub> = Rate Class Billing Determinants used to set rates in the last comprehensive base-rate proceeding.

### DCRF EFFECTIVE FOR SCHEDULED METER READ DATES ON AND AFTER SEPTEMBER 1, 2022

T

Rate Class	DCRF Charge	Billing Units
Residential Service	\$ 0.002758	per kWh
Secondary Service Less Than or Equal to 10 kVA	\$ 0.002499	per kWh
Secondary Service Greater Than 10 kVA	\$ 0.422682	per Billing kVA
Primary Service	\$ 0.273246	per Billing kVA
Transmission Service	\$ 0.009995	per 4CP kVA
Lighting Services	\$ 0.050782	per kWh

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Attachment B Sheet No. 6.14.10 Page 4 of 4

Chapter 6: Company Specific Items

CenterPoint Energy Houston Electric, LLC Applicable: Entire Service Area

#### DETERMINATION OF BILLING DEMAND FOR DISTRIBUTION SYSTEM CHARGES

<u>Secondary Service Greater Than 10 kVA - Determination of Billing kVA</u>. The Billing kVA applicable to the Distribution System Charge shall be the NCP kVA for the current billing month.

Determination of Billing kVA For loads whose maximum NCP kVA established in the 11 months preceding the current billing month is less than or equal to 20 kVA, the Billing kVA applicable to the Distribution System Charge shall be the NCP kVA for the current billing month. For all other loads, the Billing kVA applicable to the Distribution System Charge shall be the higher of the NCP kVA for the current billing month or 80% of the highest monthly NCP kVA established in the 11 months preceding the current billing month (80% ratchet). The 80% ratchet shall not apply to seasonal agricultural Retail Customers.

This rate schedule is subject to the Company's Tariff and Applicable Legal Authorities.

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## ATTACHMENT C

### STATE OF TEXAS COUNTY OF HARRIS

#### AFFIDAVIT OF BRAD A. TUTUNJIAN

BEFORE ME, the undersigned authority, on this day personally appeared Brad A. Tutunjian, who being by me first duly sworn, on oath, deposed and said the following:

- 1. "My name is Brad A. Tutunjian. 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 Vice President of Distribution Operations and Service Delivery for CenterPoint Energy Houston Electric, LLC ("CenterPoint Houston" or the "Company"). I am testifying on behalf of the applicant in this proceeding, CenterPoint Houston.
- 3. CenterPoint Houston has prepared an application for authority from the Public Utility Commission of Texas ("Commission") to amend a distribution cost recovery factor (the "Application").
- 4. The Application complies with 16 Tex. Admin. Code ("TAC") §25.243.
- 5. The distribution invested capital in the Application includes only costs (a) for plant that has been placed into service; (b) that comply with the Public Utility Regulatory Act ("PURA"), including PURA §§ 36.053 and 36.058; and (c) that are prudent, reasonable, and necessary.
- 6. The Application, my testimony, exhibits, schedules, and workpapers attached thereto, are true and correct to the best of my knowledge, information, and belief."

Further affiant sayeth not,

Brad A Tutuniian

SUBSCRIBED AND SWORN TO BEFORE ME on this Little day of March, 2022.

Notary Public in and for the State of Texas

KRISTI KEEL
Notary Public, State of Texas
Comm. Expires 03-14-2024
Notary ID 1190550-2

### STATE OF TEXAS § COUNTY OF HARRIS §

#### AFFIDAVIT OF MARTIN W. NARENDORF JR.

BEFORE ME, the undersigned authority, on this day personally appeared Martin W. Narendorf Jr., who being by me first duly sworn, on oath, deposed and said the following:

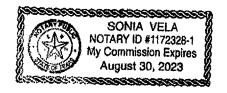
- 1. "My name is Martin W. Narendorf Jr. I am of sound mind and capable of making this affidavit. The facts stated herein are true and correct based on my personal knowledge.
- 2. I am Vice President of Electric Engineering and Asset Optimization for CenterPoint Energy Houston Electric, LLC ("CenterPoint Houston" or the "Company"). I am testifying on behalf of the applicant in this proceeding, CenterPoint Houston.
- 3. CenterPoint Houston has prepared an application for authority from the Public Utility Commission of Texas ("Commission") to amend a distribution cost recovery factor (the "Application").
- 4. The Application complies with 16 Tex. Admin. Code ("TAC") §25.243.
- 5. The distribution invested capital in the Application includes only costs for facilities that comply with the Public Utility Regulatory Act ("PURA"), including PURA § 39.918.
- 6. The Application, my testimony, exhibits, schedules, and workpapers attached thereto, are true and correct to the best of my knowledge, information, and belief."

Further affiant sayeth not.

Martin W. Narendorf Jr.

SUBSCRIBED AND SWORN TO BEFORE ME on this 16th day of March, 2022.

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 being by me first duly sworn, on oath, deposed and said the following:

- 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 Accounting for CenterPoint Energy Service Company, LLC ("CenterPoint Energy"). I am testifying on behalf of the applicant in this proceeding, CenterPoint Energy Houston Electric, LLC ("CenterPoint Houston" or the "Company").
- 3. CenterPoint Houston has prepared an application for authority from the Public Utility Commission of Texas ("Commission") to amend a distribution cost recovery factor (the "Application").
- 4. The Application complies with 16 Tex. Admin. Code ("TAC") §25.243.
- 5. The distribution invested capital in the Application includes only costs that comply with the Public Utility Regulatory Act ("PURA"), including PURA §§§ 36.053, 36.058, and 39.918.
- 6. The Application, my testimony, exhibits, schedules, and workpapers attached thereto, are true and correct to the best of my knowledge, information, and belief."

Further affiant sayeth not.

Mary A. Kirk

SUBSCRIBED AND SWORN TO BEFORE ME on this May

Notary Public in and for the State of Texas

NOTARY ID #130321-7 My Commission Expires July 17, 2023

## STATE OF TEXAS § COUNTY OF HARRIS §

#### AFFIDAVIT OF JOHN R. DURLAND

BEFORE ME, the undersigned authority, on this day personally appeared John R. Durland, who being by me first duly sworn, on oath, deposed and said the following:

- 1. "My name is John R. Durland. 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 Rates for CenterPoint Energy Service Company, LLC ("CenterPoint Energy"). I am testifying on behalf of the applicant in this proceeding, CenterPoint Energy Houston Electric, LLC ("CenterPoint Houston" or the "Company").
- 3. CenterPoint Houston has prepared an application for authority from the Public Utility Commission of Texas ("Commission") to amend a distribution cost recovery factor (the "Application").
- 4. The Application complies with 16 Tex. Admin. Code ("TAC") §25.243.

5. The Application, my testimony, exhibits, schedules, and workpapers attached thereto, are true and correct to the best of my knowledge, information, and belief."

Further affiant sayeth not.

Jøhn R. Durland

SUBSCRIBED AND SWORN TO BEFORE ME on this /

day of March, 2022.

Notary Public in and for the State of Texas

ALICE S HART
NOTARY ID #130321-7
My Commission Expires
July 17, 2023

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## ATTACHMENT D

DOCKET NO.	

APPLICATION OF CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC FOR APPROVAL TO AMEND ITS DISTRIBUTION COST RECOVERY FACTOR

# PUBLIC UTILITY COMMISSION OF TEXAS

#### PROTECTIVE ORDER

This Protective Order governs the use of all information deemed confidential (Protected Materials) or highly confidential (Highly Sensitive Protected Materials) filed or produced in discovery by a party in this proceeding, including information whose confidentiality is currently under dispute.

It is ORDERED that:

- 2. <u>Materials Excluded from Protected Materials Designation</u>. Protected Materials must 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 Public Information Act.<sup>1</sup> Protected Materials also must not include documents or information which at the time of, or prior to disclosure in, a proceeding is or was public

<sup>&</sup>lt;sup>1</sup> Tex. Gov't Code § 552.001-.353.

- 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 any party to this docket.
- Materials or Highly Sensitive Protected Materials. On or before the date the Protected Materials or Highly Sensitive Protected Materials are provided to the Commission, the producing party is required to 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:

  (a) any exemptions to the Public Information Act claimed to apply to the alleged Protected Materials; (b) the reasons supporting the producing 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 (c) that counsel for the producing 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 may access Protected Materials only through its "Reviewing Representatives" who have signed the Protective Order Certification Form (see Attachment A). 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 this proceeding. At the request of the PUC Commissioners, copies of Protected Materials may be produced by Commission Staff. The Commissioners and their staff must be informed of the existence and coverage of this Protective Order and will observe the restrictions of the Protective Order.
- 6. <u>Highly Sensitive Protected Material Described</u>. The term "Highly Sensitive Protected Materials" is a subset of Protected Materials and refers to documents or information that 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 specified herein) would expose a producing party to unreasonable risk of harm. Highly Sensitive Protected Materials include but are not limited to: (a) customer-specific information protected by § 32.101(c) of the Public Utility Regulatory Act;<sup>2</sup> (b) contractual information pertaining to contracts that specify that their terms are confidential or that are confidential pursuant to an order entered in litigation to which the producing party is a party; (c) market-sensitive fuel price forecasts, wholesale transactions information and/or market-sensitive marketing plans; and (d) business operations or financial information that is commercially sensitive. information so classified by a producing party must bear the designation "HIGHLY SENSITIVE PROTECTED MATERIALS PROVIDED PURSUANT TO PROTECTIVE ORDER ISSUED IN DOCKET NO. \_\_\_\_\_\_" (or words to this effect) and must be consecutively Bates Stamped. 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.

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 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. The Reviewing Party is required to maintain a record of all copies made of Highly Sensitive Protected Material and must send a duplicate of the

<sup>&</sup>lt;sup>2</sup> Public Utility Regulatory Act, Tex. Util. Code §§ 11.001-66.016 (PURA).

record to the producing party when the copy or copies are made. The record must specify the location and the person possessing the copy. Highly Sensitive Protected Material must be made available for inspection only at the location or locations provided by the producing party, except as specified by Paragraph 9. Limited notes may be made of Highly Sensitive Protected Materials, and such notes must 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.

Restricting Persons Who May Have Access to Highly Sensitive Protected Material. 8. With the exception of Commission Staff, the Office of the Attorney General (OAG), and the Office of Public Utility Counsel (OPC), and except as provided herein, the Reviewing Representatives for the purpose of access to Highly Sensitive Protected Materials may be persons who are (a) outside counsel for the Reviewing Party, (b) outside consultants for the Reviewing Party working under the direction of Reviewing Party's counsel, or (c) 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 must limit the number of Reviewing Representatives that review Highly Sensitive Protected Materials 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, must 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.

9. <u>Copies Provided of Highly Sensitive Protected Material</u>. A producing party is required to 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. Representatives of the Reviewing Party who are authorized to view Highly Sensitive Protected 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 Materials provided to a Reviewing Party may not be copied except as provided in Paragraph 7. The restrictions contained herein do not apply to Commission Staff, OPC, and the OAG when the OAG is a 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 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 control.
- 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 is required to 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) and the OAG (if the OAG is representing a party) and the OAG

voluminous material under the copying procedures specified herein.

- Delivery of the Copy of Highly Sensitive Protected Material to Commission 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 specified by Paragraph 15. After obtaining the agreement of the producing party, 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 it to the agreed, appropriate members of their outside consultants for review, provided such outside consultants first sign the certification in Attachment A.
- 13. Restriction on Copying by Commission Staff, OPC and the OAG. Except as allowed by 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. Commission Staff, OPC, and the OAG may make limited notes 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.
- Public Information Requests. 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 must, before

such inspection, agree in writing to the following certification found in Attachment A 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 must not be disclosed to anyone other than in accordance with the Protective Order and unless I am an employee of the Commission or OPC will 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 must not apply.

In addition, Reviewing Representatives who are permitted access to Highly Sensitive Protected Material under the terms of this Protective Order must, before inspection of such material, agree in writing to the following certification found in Attachment A 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.

The Reviewing Party is required to provide a copy of each signed certification to Counsel for the producing party and serve a copy upon all parties of record.

16. <u>Disclosures between Reviewing Representatives and Continuation of Disclosure 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 must 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 must be terminated and all notes, memoranda, or other information derived from the protected material must 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 is required to 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.

- Procedures for Making Additional Copies of Such Materials. Except for Highly Sensitive Protected Materials, which must be provided to the Reviewing Parties under Paragraph 9, and voluminous Protected Materials, the producing party is required to 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 according to this Protective Order, but a record must be maintained as to the documents reproduced and the number of copies made, and upon request the Reviewing Party is required to provide the party asserting confidentiality with a copy of that record.
- Procedures Regarding Voluminous Protected Materials. 16 Texas Administrative Code (TAC) § 22.144(h) will govern production of voluminous Protected Materials. 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. <u>Reviewing Period Defined</u>. The Protected Materials may be reviewed only during the Reviewing Period, which will commence upon entry of this Protective Order and continue

until the expiration of the Commission's plenary jurisdiction. The Reviewing Period will 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 in this Protective Order; provided, however, that before photographic, mechanical or electronic copies may be made, the Reviewing Party seeking photographic, mechanical or electronic copies must provide written confirmation of the receipt of copies listed on Attachment B of this Protective Order identifying each piece of Protected Materials or portions thereof the Reviewing Party will need.
- 21. Protected Materials to be Used Solely for the Purposes of These Proceedings.

  All Protected Materials must 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: (a) 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 (b) 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 must not be disclosed or used

by the Reviewing Party except as permitted and provided in this Protective Order. Information derived from or describing the Protected Materials must be maintained in a secure place and must 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 insure 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 must 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 must be marked "PROTECTED MATERIAL" and must 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: (a) must notify the party which provided the information within sufficient time so that the producing party may seek a temporary sealing order; and (b) must otherwise follow the procedures in Rule 76a, Texas Rules of Civil Procedure.
- 24. <u>Maintenance of Protected Status of Materials during Pendency of Appeal of Order</u>

  <u>Holding Materials are not Protected Materials</u>. 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 will 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 must 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 must 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 must 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 will 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 must 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 will 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 must 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 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 must 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 such proposed disclosure or change in designation should not be made. If the presiding officer determines that such proposed disclosure or change in designation should be made, disclosure must 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. <u>Maintenance of Protected Status during Periods Specified for Challenging Various</u>

  <u>Orders.</u> Any party electing to challenge, in the courts of this state, a Commission or

presiding officer determination allowing disclosure or a change in designation will have a period of ten (10) days from: (a) the date of an unfavorable Commission order; or (b) 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 will 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 will 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 must 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 in this paragraph.

- Other Grounds for Objection to Use of Protected Materials Remain Applicable.

  Nothing in this Protective Order precludes 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 the Commission or a court orders such additional disclosure, 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 must 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 Protected Materials. 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 prohibits 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 will remain subject to the provisions of this Protective Order.

32. <u>Applicability of Other Law</u>. This Protective Order is subject to the requirements of the Public Information Act, the Open Meetings Act,<sup>3</sup> the Texas Securities Act<sup>4</sup> and any

<sup>&</sup>lt;sup>3</sup> Tex. Gov't Code § 551,001-,146.

<sup>&</sup>lt;sup>4</sup> Tex. Rev. Civ. Stat. Ann. arts. 581-1 to 581-43.

other applicable law, provided that parties subject to those acts will notify the party asserting confidentiality, if possible under those acts, prior to disclosure pursuant to those acts. Such notice is not required where the Protected Materials are sought by governmental officials authorized to conduct a criminal or civil investigation that relates to or involves the Protected Materials, and those governmental officials aver in writing that such notice could compromise the investigation and that the governmental entity involved will maintain the confidentiality of the Protected Materials.

- 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: (a) Reviewing Party must notify the producing party of the order requiring the release of such information within five (5) calendar days of the date the Reviewing Party has notice of the order; (b) the Reviewing Party must notify the producing party at least five (5) calendar days in advance of the release of the information to allow the producing party to contest any release of the confidential information; and (c) the Reviewing Party must 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. The notice specified in this section is not required where the Protected Materials are sought by governmental officials authorized to conduct a criminal or civil investigation that relates to or involves the Protected Materials, and those governmental officials aver in writing that such notice could compromise the investigation and that the governmental entity involved will maintain the confidentiality of the Protected Materials.
- 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,

the written opinion of the Texas Attorney General sought in compliance with the Public Information Act, or the request of governmental officials authorized to conduct a criminal or civil investigation that relates to or involves the Protected Materials. 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. Provided, however, that no notice is required where the Protected Materials are sought by governmental officials authorized to conduct a criminal or civil investigation that relates to or involves the Protected Materials, and those governmental officials aver in writing that such notice could compromise the investigation and that the governmental entity involved will maintain the confidentiality of the Protected Materials.

- 35. <u>Notify Defined</u>. "Notify" for purposes of Paragraphs 32, 33 and 34 means 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 Protective Order, the producing party must tender the information for in camera review to the presiding officer within ten (10) calendar days of the request. At the same time, the producing party is required to file and serve on all parties its argument, including any supporting affidavits, in support of its position of non-disclosure. The burden is on the producing party to establish that the material should not be disclosed. The producing party must 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 non-disclosure must 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 will 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 16 TAC § 22. 161.
- 38. <u>Modification of Protective Order</u>. Each party will have the right to seek changes in this Protective Order as appropriate from the presiding officer.
- 39. Breach of Protective Order. 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, will be entitled to an injunction against such breach without any requirements to post bond as a condition of such relief. The producing party will not be relieved of proof of any element required to establish the right to injunctive relief. In addition to injunctive relief, the producing party will be entitled to pursue any other form of relief to which it is entitled.

### ATTACHMENT A

### **Protective Order Certification**

I certify my understanding that the Protected	Materials are provided to me pursuant to the
terms and restrictions of the Protective Order in this	s docket and that I have received 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 must not be disc	closed to anyone other than in accordance with
the Protective Order and unless I am an employee of	the Commission or OPC will 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	ed from independent public sources, the
understanding stated here will not apply.	
Signature	Party Represented
Printed Name	Date
I certify that I am eligible to have access to Highly S	ensitive Protected Material under the terms of
the Protective Order in this docket.	
Signature	Party Represented
Printed Name	Date
T TITLE OF T IMILIA	

# ATTACHMENT B

I request to view/copy the following documents:

Document Requested	# of Copies	Non-Confidential	Protected Materials and/or Highly Sensitive Protected Materials
	:		
Signature		Party Represented	
Printed Name		Date	

DOCKET NO.		
APPLICATION OF CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC FOR APPROVAL TO AMEND ITS DISTRIBUTION COST RECOVERY FACTOR	<i>\$</i> \$\text{\$\}\$}}}}}}}}}} \text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\tex{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$	PUBLIC UTILITY COMMISSION OF TEXAS

#### DIRECT TESTIMONY OF

#### **BRAD A. TUTUNJIAN**

FOR

CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC

**April 5, 2022** 

### TABLE OF EXHIBITS AND WORKPAPERS

<b>Exhibits</b>	<u>Description</u>
Exhibit BAT-1	Summary of Distribution Plant Additions for
·	Calendar Year 2019-2021
Exhibit BAT-2	2021 Distribution Plant Projects Greater
	Than \$100,000
Exhibit BAT-3	2020 Distribution Plant Projects Greater
	Than \$100,000
Exhibit BAT-4	2019 Distribution Plant Projects Greater
	Than \$100,000
Exhibit BAT-5	SAP Basics Training for Service Consultants
Exhibit BAT-6	Capital System Improvement Reliability
	Programs

Workpapers (as provided in DCRF-RFP	<u>Description</u>
Workpapers)	
WP comp3 trans det jan-dec 2021 DCRF	Workpaper to Exhibit BAT-2
WP comp3 trans det jan-dec 2020 DCRF	Workpaper to Exhibit BAT-3
WP comp3 trans Jan-Dec 2019	Workpaper to Exhibit BAT-4

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III.	DISTRIBUTION-RELATED CAPITAL ADDITIONS INCLUDED IN THE COMPANY'S DCRF FILING	3
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V.	CONCLUSION	.19

1		DIRECT TESTIMONY OF BRAD A. TUTUNJIAN
2		I. <u>INTRODUCTION</u>
3	Q.	PLEASE STATE YOUR NAME, POSITION AND BUSINESS ADDRESS.
4	Α.	My name is Brad A. Tutunjian. I am the Vice President of Distribution Operations
5		and Service Delivery for CenterPoint Energy Houston Electric, LLC ("CenterPoint
6		Houston", "CEHE" or the "Company"). My business address is 1111 Louisiana
7		St., Houston, Texas 77002.
8	Q.	PLEASE TELL US ABOUT YOUR EDUCATIONAL BACKGROUND AND
9		WORK EXPERIENCE.
10	A.	I graduated from Texas Tech University in 1997 with a Bachelor of Science Degree
11		in Mechanical Engineering. From my 1997 graduation to the present, I have been
12		employed by CenterPoint Energy, Inc. ("CNP") or one of its affiliates. My
13		positions with CNP have included Graduate Engineer, Distribution Designer,
14		Distribution Operations Manager, District Manager, Service Area Director, Electric
15		Distribution Operations, Division Vice President – Natural Gas Regional
16		Operations, Division Vice President - Regional Operations, and my present position
17		as Vice President of Distribution Operations and Service Delivery. I was named to
18		my present position in 2021, at which time I assumed responsibility for all electric
19		distribution operations in CenterPoint Houston's service territory.
20	Q.	WHAT ARE YOUR CURRENT RESPONSIBILITIES?
21	A.	As Vice President of Distribution Operations and Service Delivery, my
22		responsibilities include overseeing electric distribution operations for the entire

1		greater Houston area, which covers approximately 5,000 square miles and delivers
2		electricity to approximately 2.7 million meters.
3	Q.	ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?
4	A.	I am testifying on behalf of CenterPoint Houston.
5	Q.	HAVE YOU TESTIFIED PREVIOUSLY?
6	A.	Yes. I have filed testimony with the Minnesota Public Utilities Commission in
7		Docket Nos. G-008/GR-19-524 and G-008/GR-17-285.
8	Q.	AS A RESULT OF YOUR WORK EXPERIENCE AND
9		RESPONSIBILITIES, ARE YOU FAMILIAR WITH THE VARIOUS
10		TYPES OF DISTRIBUTION-RELATED CAPITAL PROJECTS THAT THE
11		COMPANY HAS IDENTIFIED FOR RECOVERY IN THIS FILING?
12	A.	Yes, I am.
13		
14		II. PURPOSE OF TESTIMONY
15	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY?
16	A.	The purpose of my testimony is to sponsor the distribution invested capital included
17		in the Company's Distribution Cost Recovery Factor ("DCRF") Application. In
18		addition, I affirm that the capital investment included in this filing has been placed
19		in service, is used and useful, that this investment was prudently incurred and is
20		reasonable and necessary to the Company's distribution system operations to its
21		customers.

Q.	WHAT EXHIBITS HAVE YOU INCLUDED WITH YOUR TESTIMONY?
A.	I have prepared or supervised the preparation of the exhibits listed in the table of
	contents.
Q.	ARE ANY OTHER COMPANY WITNESSES PROVIDING DIRECT
	TESTIMONY IN THIS DOCKET?
A.	Yes. Company witnesses Mary A. Kirk and John R. Durland sponsor the various
	schedules, as well as the calculation of the revenue requirement and the proposed
	rates for the DCRF. Company witness Martin W. Narendorf Jr. discusses the
	Company's temporary emergency electric energy distribution capital investments,
	which I refer to as "mobile generation".
	III. <u>DISTRIBUTION-RELATED CAPITAL ADDITIONS</u> <u>INCLUDED IN THE COMPANY'S DCRF FILING</u>
Q.	PLEASE DESCRIBE CENTERPOINT HOUSTON'S DISTRIBUTION
	SYSTEM.
A.	CenterPoint Houston is a transmission and distribution utility that operates solely
	within the Electric Reliability Council of Texas ("ERCOT"). The Company's
	distribution system covers approximately 5,000 square miles located in and around
	Houston, Texas and is comprised of approximately 57,000 miles of overhead and
	underground distribution lines. The Company's electric distribution system
	А. Q. Д.

1		includes conductors, equipment and substations operating at voltages less than
2		35 kV.
3	Q.	HAVE ANY EVENTS IMPACTED THE COMPANY'S SYSTEM AND ITS
4		NEED FOR DISTRIBUTION CAPITAL INVESTMENT SINCE THE
5		COMPANY'S LAST RATE CASE, DOCKET NO. 49421?
6		Yes, in addition to the normal factors that drive distribution capital investment, our
7		service area was severely impacted by the extreme winter weather event of
8		February 2021 (often referred to as "Winter Storm Uri"), which was a series of 3
9		winter storms that impacted south Texas and the greater Houston area for days. As
10		a result of the generation capacity shortfall related to the historic winter weather
11		event, ERCOT declared a statewide power generation shortfall emergency and
12		ordered utilities throughout ERCOT to shed their ratio share of load. By the end of
13		the winter weather event, CenterPoint Houston executed 59 load shed and load
14		restore orders issued by ERCOT. At its height, approximately 48.6% of generation
15		capacity throughout the state was unavailable, and approximately 1.4 million
16		CenterPoint Houston customers were without power at various times during the
17		event. The magnitude of the generation capacity shortfall and number of load shed
18		orders from ERCOT prevented the Company from executing its original plan of
19		rotating customer outages in intervals of less than an hour. Once sufficient
20		generation became available on Wednesday, February 17, the Company quickly
21		restored power to most customers within a 24-hour period. Fewer than 5% of the
22		outages experienced by CenterPoint Houston customers were attributable to
23		equipment issues, meaning 95% of the customer outages were due to the generation

shortfall. As a result of the winter event, 1,412 total electric circuits locked out, 1,254 total electric fuses went out, and four substations were out of service. In response to the event, more than 2,200 employees worked to restore service. Approximately 84,700 total hours were worked during the Emergency Operations Plan ("EOP") event (average of 38 hours per employee). Additionally, approximately 70 crew spokespersons were used, 30,000 meals were served, and more than 2,000 hotel room nights were utilized. From a distribution capital investment perspective (inclusive of additions and removals) the net impact of the event was approximately \$6.5 million.

Our service area was also impacted by hurricane Nicholas in September 2021, which was a significant wind-driven storm. Hurricane Nicholas made landfall as a Category 1 storm near Sargent Beach, Texas, with maximum sustained winds of 75 miles per hour. As a result of the event, 246 total electric circuits locked out, 3,060 total electric fuses went out, and one substation was out of service. Approximately 540,000 customers were impacted. In response to the event, more than 1,100 employees plus approximately 2,000 contractors and mutual assistance personnel from nine states worked to restore service. Four staging sites were utilized and approximately 26,800 total hours were worked during EOP event (average of 24 hours per employee). Approximately 62 crew spokespersons were used, 63,000 meals were served, and more than 8,500 hotel room nights were utilized. From a distribution capital investment perspective (inclusive of additions and removals) the net impact of the event was approximately \$22.0 million. Mr.

1		Narendorf addresses the use of mobile generation to supply power to the Lake
2		Jackson Civic Center during hurricane Nicholas.
3	Q.	WHAT FACTORS GENERALLY DRIVE THE COMPANY'S
4		DISTRIBUTION CAPITAL INVESTMENTS?
5	A.	The major factors necessitating distribution capital investments fall into the
6		categories of: load growth, system improvements for reliability, service restoration,
7		relocations for public improvements, smart grid investments, and general
8		equipment for operations support investments associated with the replacement of
9		deteriorated equipment and facilities. These costs by category are identified in
10		Exhibit BAT-1.
11	Q.	CAN YOU PROVIDE SOME EXAMPLES OF CAPITAL INVESTMENT
12		DRIVEN BY LOAD GROWTH?
13	A.	Capital investments driven by load growth include distribution development
14		projects, such as new overhead and underground distribution circuits, line
15		extensions, the reconfiguration of existing circuits to shift load, and the installation
16		and modification of capacitors to manage load. The capital additions typically
17		occur slightly in advance of population and business growth, so that the electrical
18		infrastructure will be in place to serve the demand. The Greater Houston area has
19		experienced continued residential and commercial growth. Also, redevelopment of
20		these areas is frequently denser than the original development, which requires an
21		upgrade to the electrical infrastructure.
22		Additionally, continued home building and the construction of associated
23		services that follow new residential construction, such as new retail and restaurant

1		facilities, schools, churches, and businesses, has necessitated new overhead service
2		installations and underground residential distribution ("URD") installations, as well
3		as new meters and drops and street lighting. CenterPoint Houston added over
4		64,000 metered customers on average over the last three years and installed over
5		2,500 miles of distribution lines since its last comprehensive rate case.
6	Q.	CAN YOU PROVIDE ANY EXAMPLES OF THE TYPE OF RELIABILITY
7		RELATED DISTRIBUTION SYSTEM IMPROVEMENT CAPITAL
8		INVESTMENTS THAT ARE INCLUDED IN THE COMPANY'S DCRF
9		FILING?
10	A.	Yes. To support system integrity, CenterPoint Houston utilizes several programs
11		to identify and proactively address probable electrical component failures and
12		address aging infrastructure. Approximately 29,753 circuit miles of overhead
13		distribution lines, 27,172 circuit miles of underground distribution lines, one
14		million poles and numerous other electrical components are used to provide safe,
15		reliable electrical service to customers within the Company's service territory. To
16		assist in proactively pinpointing probable overhead failure locations, CenterPoint
17		Houston performs a 10-year cycle pole inspection, to identify and replace poles and
18		other overhead components that are determined to be in unsatisfactory condition.
19		The work associated with actual pole replacement and bracing as a result of the
20		inspection is capitalized.
21		Additionally, CenterPoint Houston is continuing its 18-year underground
22		cable life extension program to locate and address underground residential
23		distribution equipment deficiencies. These programs, as well as others utilized by

1		the Company, provide a more efficient and cost-effective approach of identifying
2		and addressing specific locations with higher probability of failures, to ensure a
3		more reliable electrical distribution system.
4	Q.	CAN YOU PROVIDE A LIST OF CAPITAL SYSTEM IMPROVEMENT
5		PROGRAMS THAT ARE DESIGNED TO MAINTAIN OR IMPROVE
6		RELIABILITY?
7	A.	Yes. Programs to improve reliability often result in a capital improvement. These
8		programs include the Company's pole maintenance program, its URD Cable Life
9		Extension Program, the feeder inspection program, the power factor program, the
10		infra-red program, the root cause analysis program, and the hot fuse program.
11		Descriptions of these programs are included in Exhibit BAT-6.
12	Q.	CAN YOU PROVIDE SOME EXAMPLES OF THE TYPE OF SERVICE
13		RESTORATION CAPITAL INVESTMENTS THAT ARE INCLUDED IN
14		THE COMPANY'S DCRF FILING?
15	A.	Capital investments for service restoration have been made for URD, overhead,
16		weather related, major underground, and street lighting. Service Restoration costs
17		are non-discretionary in nature and are the result of equipment damage or failure
18		caused by events beyond the Company's control, such as poles being damaged due
19		to vehicle accidents, third-party cable cuts, and inclement weather. Street light
20		restoration costs are also non-discretionary in nature and are mainly the result of

1		equipment damage to streetlight systems due to severe storms or poles being					
2		damaged due to vehicle accidents.					
3	Q.	WHAT TYPES OF INVESTMENT RELATED TO RELOCATIONS FOR					
4		PUBLIC IMPROVEMENTS CAPITAL INVESTMENTS ARE INCLUDED					
5		IN THE COMPANY'S DCRF FILING?					
6	A.	Capital investments related to relocations for public improvements include road					
7		expansions, new roadways, right-of-way changes and changes in land use, which,					
8		in turn, require relocations to overhead facilities, streetlights and other changes to					
9		the existing distribution infrastructure to accommodate major road, highway, and					
10		freeway construction.					
11	Q.	CAN YOU PROVIDE EXAMPLES OF THE TYPE OF SMART GRID					
12		CAPITAL INVESTMENTS THAT ARE INCLUDED IN THE COMPANY'S					
13		DCRF FILING?					
13 14	Α.	DCRF FILING?  Smart grid capital investments support automation on the distribution system using					
	A.						
14	A.	Smart grid capital investments support automation on the distribution system using					
14 15	A.	Smart grid capital investments support automation on the distribution system using advances in technology and are designed to improve the Company's ability to					
<ul><li>14</li><li>15</li><li>16</li></ul>	A.	Smart grid capital investments support automation on the distribution system using advances in technology and are designed to improve the Company's ability to operate its electrical distribution system. These projects include the installation of					
<ul><li>14</li><li>15</li><li>16</li><li>17</li></ul>	A.	Smart grid capital investments support automation on the distribution system using advances in technology and are designed to improve the Company's ability to operate its electrical distribution system. These projects include the installation of Intelligent Grid Switching Devices ("IGSD") to enhance the switching capability					
<ul><li>14</li><li>15</li><li>16</li><li>17</li><li>18</li></ul>	A.	Smart grid capital investments support automation on the distribution system using advances in technology and are designed to improve the Company's ability to operate its electrical distribution system. These projects include the installation of Intelligent Grid Switching Devices ("IGSD") to enhance the switching capability of the distribution system, power line monitoring equipment, remote switches, and					
<ul><li>14</li><li>15</li><li>16</li><li>17</li><li>18</li><li>19</li></ul>	A.	Smart grid capital investments support automation on the distribution system using advances in technology and are designed to improve the Company's ability to operate its electrical distribution system. These projects include the installation of Intelligent Grid Switching Devices ("IGSD") to enhance the switching capability of the distribution system, power line monitoring equipment, remote switches, and other automated equipment that locates power line outages or issues in near real					

1		the Advanced Metering System ("AMS") and Advanced Distribution Managemen
2		System ("ADMS").
3	Q.	WHAT TYPES OF GENERAL EQUIPMENT FOR OPERATIONS
4		SUPPORT CAPITAL INVESTMENTS ARE INCLUDED IN THE
5		COMPANY'S DCRF FILING?
6	A.	General equipment for operations support capital investments include
7		miscellaneous capital expenses for the purchase of distribution computer hardware
8		premise equipment, tools, and test equipment, the cost of distribution materials and
9		services as provided by the Shops Department, the capital cost of vessel moves
10		which entails raising distribution lines to accommodate the moving of very large
11		vessels down city streets, and other capital investments such as capital tools,
12		climbing kits and salvage.
13	Q.	HAVE THERE BEEN ANY MATERIAL CHANGES TO THE COMPANY'S
14		DISTRIBUTION CAPITAL PROGRAMS SINCE THE COMMISSION
15		ISSUED ITS FINAL ORDER IN DOCKET NO. 49421?
16	A.	No.
17	Q.	WHAT IS THE TOTAL AMOUNT OF NET CAPITAL INVESTMENT FOR
18		DISTRIBUTION PROJECTS INCLUDED IN THE COMPANY'S DCRF
19		FILING?
20	A.	The net distribution capital investment that CenterPoint Houston seeks to recover
21		through Rider DCRF represents an increase in investment of \$1.1 billion since the

1		last rate case (Docket No. 49421). These figures can be found or derived from						
2		Schedule B of CenterPoint Houston's DCRF Application Form.						
3	Q.	PLEASE DESCRIBE THE INFORMATION PROVIDED ON EXHIBITS						
4		BAT-1 THROUGH BAT-4.						
5	A.	As required by the Commission's Distribution Cost Recovery Factor Filing						
6		Package ("DCRF-RFP") General Instruction No. 2, Exhibits BAT-2 through BAT-						
7		4 provide the following information by calendar year:						
8 9 10		• A list, by project number, of all completed distribution capital projects for each calendar year since the test-year end in Docket No. 49421, including their respective in-service dates; and						
11 12 13 14 15		• A description of all completed distribution capital projects greater than \$100,000 for each calendar year since the test-year end in Docket No. 49421.						
16		A summary of these investments is included as Exhibit BAT-1.						
17	Q.	PLEASE FURTHER DESCRIBE THE DETAILED SUMMARY PROJECT						
18		REPORTS PROVIDED FOR EACH CALENDAR YEAR INCLUDED IN						
19		THE COMPANY'S DCRF FILING.						
20	A.	The Summary Project Reports in Exhibits BAT-2 through BAT-4 are divided by						
21		project category and, for each project within a category, include the project number,						
22		a description of the distribution project, and the associated costs.						
23		associated with each project are broken out by additions and salvage/removal.						
24		Additionally, the project costs are provided by year that the costs shown were						
25		placed in service and used and useful.						

1	Q.	PLEASE FURTHER DESCRIBE THE INFORMATION INCLUDED IN								
2		EXHIBITS BAT-2 THROUGH BAT-4 FOR THE INDIVIDUAL								
3		DISTRIBUTION CAPITAL PROJECTS INCLUDED IN THE COMPANY'S								
4		FILING.								
5	Α.	As part of its identification of each distribution capital project included in the filing,								
6		the Company has included the following information under column headers from								
7		its enterprise management software system ("SAP"):								
8 9 10 11 12 13 14 15 16		<ul> <li>Company Code – The CNP company code in SAP associated with the transaction. CenterPoint Houston is company code 0003.</li> <li>Asset Class – The Federal Energy Regulatory Commission ("FERC") account the costs were placed in service.</li> <li>Asset Number – The SAP fixed asset number assigned to the costs placed in service.</li> <li>Asset Description – A short description of the SAP fixed asset number.</li> <li>Cost Center – The cost center assigned to the asset for depreciation</li> </ul>								
17 18 19 20 21 22 23		<ul> <li>purposes.</li> <li>Document Number – The SAP asset transaction document number.</li> <li>Posting Date – Date the costs were placed in service.</li> <li>Text – The text associated with the document number. The text will typically be the asset request number or the work order number.</li> <li>Work Order – Identifies the work order that costs were charged against. In those instances where costs do not accompany a work order, they are assigned a unique identifier.</li> </ul>								
24 25 26 27 28 29 30		<ul> <li>Plant in Service – The amount placed in service in the given year.</li> <li>Accumulated Reserve – The amount of depreciation accrued while the asset was in Completed Construction Not Classified ("CCNC"). This depreciation is transferred to Plant-in-Service upon unitization.</li> <li>Plant in Service Classification – Indicator of the type of Plant In Service activity occurring on the transaction (Additions, Retirements, Transfers, etc.).</li> </ul>								
31 32 33 34 35 36 37		<ul> <li>Reserve Classification – Indictor of the type of Reserve activity occurring on the transaction (Retirements, Transfers, Salvage, etc.).</li> <li>WBS – This is the work breakdown structure that is used to "group" multiple orders into a common program/project.</li> <li>WBS Description – Description of Work Breakdown Structure.</li> <li>DCRF Classification – This column indicates whether costs placed in service were both transmission and distribution (B) or distribution only (D)</li> </ul>								

1 2		for purposes of including in the DCRF application or Transmission Cost of Service filings.
3		• TCOS Classification – This column indicates whether costs placed in
4		service were both transmission and distribution (B) or distribution only (D)
5		for purposes of including in the DCRF application or Transmission Cost of
6		Service filings.
7		• Transmission % – Percentage of total cost allocated to transmission.
8		• Distribution % – Percentage of total cost allocated to distribution.
9		<ul> <li>Metering % – Percentage of total cost allocated to metering.</li> </ul>
10		• Customer Service % - Percentage of total cost allocated to customer
11		service.
12		• Total Distribution % - Total percentage includes Distribution %, Metering
13		%, and Customer Service %.
14		• Reason for Classification – Rationale for Transmission / Distribution
15		classification.
16		• Project Identifier – Identifies project/program that items were grouped into
17		for classification purposes.
18		• Total Distribution \$ (based on Plant in Service side) - Total of amounts
19		allocated to distribution, metering and customer service.
20		• Total Distribution \$ (based on Reserve side) - Total of amounts allocated
21		to distribution, metering and customer service.
22		• Transmission \$ (based on Plant in Service side) – Dollar amount allocated
23		to transmission.
24		• Transmission \$ (based on Reserve side) - Dollar amount allocated to
25		transmission.
26		<ul> <li>Adjusted Tab – Identifies true additions, salvage, removals/Asset Lifecycle</li> </ul>
27		Accounting ("ALA") net salvage, retirements, and transfers.
28		
29	Q.	HAVE ALL THE CAPITAL PROJECTS INCLUDED IN THE COMPANY'S
30		FILING BEEN PLACED IN SERVICE?
31	Α.	Yes. As required under the DCRF Rule, 16 Tex. Admin. Code §25.243 part (b) (3),
32		and consistent with Public Utility Regulatory Act § 36.053, each of the projects
33		shown on Exhibits BAT-1 through BAT-4 are distribution invested capital projects
34		that are used to provide service to retail metered customers in CenterPoint

1		Houston's service area. These projects were placed in service during the period					
2		January 1, 2019 through December 31, 2021.					
3	Q.	IS THIS DISTRIBUTION CAPITAL INVESTMENT REASONABLE AND					
4		NECESSARY TO SYSTEM OPERATIONS?					
5	A.	Yes. While I understand that a final determination of the costs associated with the					
6		capital investment that the Company seeks to recover through the DCRF will likely					
7		be deferred until the Company's next general base rate proceeding, these capital					
8		investments were prudently incurred and are reasonable and necessary to satisfy					
9		service area customer growth, reliability and resiliency improvements, service					
10		restoration, and other support activities that are needed as the distribution system					
11		grows and ages.					
12							
13 14 15		IV. PROCEDURES FOR CLASSIFYING CAPITAL PROJECTS AND PROPERLY ALLOCATING CAPITAL COSTS FOR JOINT TRANSMISSION AND DISTRIBUTION PROJECTS					
16	Q.	WHAT POLICIES OR GUIDELINES DETERMINE THE MANNER IN					
17		WHICH SPECIFIC PROJECTS ARE CAPITALIZED ON THE					
18		COMPANY'S BOOKS AND RECORDS?					
19	A.	The three primary policies that determine how project costs are to be either					
20		capitalized or expensed are: various FERC guidelines relating to capitalization and					
21		expenses; CNP's Capitalization Policy (which was developed consistent with the					
22		FERC guidelines); and CNP's Capitalization of Computer Software Policy (also					
23		developed consistent with FERC guidelines). CNP's Capitalization Policy and					
24		Capitalization of Computer Software Policy are attached to Ms. Kirk's testimony					

1		as Exhibit MAK-02 (Capitalization Policies). The various FERC guidelines are						
2		voluminous, but are generally publicly available at						
3		https://www.ferc.gov/enforcement/acct-matts.asp.						
4	Q.	HOW LONG HAVE CNP'S CAPITALIZATION POLICY AND						
5		CAPITALIZATION OF COMPUTER SOFTWARE POLICY BEEN IN						
6		PLACE?						
7	A.	The current versions of those policies have been in place since 2004, with minor						
8		updates over the years to incorporate amended FERC guidelines and industry						
9		practice changes.						
10	Q.	HAS THE COMPANY CONSISTENTLY FOLLOWED THESE POLICIES						
11		IN PREVIOUS RATE CASE PROCEEDINGS?						
12	A.	Yes. CenterPoint Houston has consistently applied these policies in its prior base						
13		rate proceedings in Docket Nos. 38339 and 49421, as well as in its prior DCRF and						
14		Transmission Cost of Service ("TCOS") adjustment cases.						
15	Q.	HOW DOES THE COMPANY ENSURE THAT THE CAPITALIZATION						
16		POLICIES ARE FOLLOWED AND THAT ITS BOOKS AND RECORDS						
17		ARE ACCURATE AND COMPLETE, CONSISTENT WITH THE						
18		POLICIES?						
19	A.	The Company uses work management software, SAP, to track each project on a						
20		work order basis. Service consultants and engineers are responsible for creating						
21		work orders based on design and load specifications. They are trained on work						
22		order creation, including specification of what defines capital work versus non-						
23		capital work and correct coding of work orders. The employee training material						

related to work order entry – SAP Basics Training for Service Consultants— is attached as Exhibit BAT-5. All work orders are reviewed multiple times throughout the work order lifecycle to ensure that the costs are accurately identified as capital.

#### 5 Q. PLEASE DESCRIBE THE REVIEW PROCESS FOR WORK ORDERS.

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Once a service consultant or engineer creates a work order, a peer, supervisor or manager reviews the order to ensure it has been properly created, including verifying if it is properly classified as capital versus expense based on the material and work planned. The order is then provided to the Operations Manager or Operations Supervisor, who performs a second review of the order before the work is performed. Once work has been completed, a third review is performed by the Service Area Assistant/Distribution Projects Coordinator to verify that the actual work completed still meets the qualifications of capital work, and the order is still properly coded. Moreover, prior to unitization of the asset, the ALA process within SAP will automatically identify and issue an exception notification for a work order that has been coded as capital but does not have capital material included on the order. This exception/error will remain until the order has been corrected. ALA will not allow the order to be unitized or closed until the proper work type is provided. Finally, prior to unitization, Property Accounting has a process in place to identify and flag completed work orders categorized as capital which do not include a retirement unit. These orders are researched and will not be

1	unitized/placed in service until the work is verified and determined to be eligible
2	for capitalization.

# Q. PLEASE DESCRIBE THE PROCESS THAT WAS UNDERTAKEN TO IDENTIFY THE CAPITAL INVESTMENT ELIGIBLE FOR INCLUSION IN THIS FILING.

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The project detail workpapers, included as part of the DCRF workpapers: WP comp3 trans det jan-dec 2021, WP comp3 trans det jan-dec 2020 DCRF, and WP comp3 trans Jan-Dec 2019 DCRF illustrate the process used to identify the capital investment eligible for inclusion in this filing. The verification process starts with a listing by FERC account of all costs placed in service to the Company's property records in the time period covered by the filing. We then identified the FERC accounts that are not included in the DCRF filing and marked those items for exclusion from this filing. The next step identifies those items that were or will be recovered via other mechanisms such as TCOS adjustment filings. These items are also marked for exclusion from this filing. The remaining items were then reviewed to determine if they should be totally allocated to distribution or partially allocated to other functions such as transmission. The items that are identified as partially allocated to distribution are then compared to other filings such as Docket No. 49421 or the Company's past TCOS filings to determine the correct allocation to distribution. This process is used for Additions, Removals, Retirements, and Salvage in order to arrive at the eligible capital investment.

1	Q.	HOW DOES THE COMPANY ALLOCATE CAPITAL COSTS BETWEEN
2		DISTRIBUTION AND TRANSMISSION FUNCTIONS FOR JOINT
3		TRANSMISSION AND DISTRIBUTION CAPITAL PROJECTS?
4	A.	With respect to FERC Accounts 303, 391 and 397, the allocation percentages used
5		in this filing are the same as used in Docket No. 49421. For FERC Accounts 352,
6		353, 361, and 362, the allocation percentage assigned to distribution is based on the
7		percentage of the value of the distribution equipment contained in the substation in
8		which the associated work was performed when the work involved supported both
9		the transmission and distribution function. This is consistent with the manner in
10		which such costs have been assigned in prior cases involving the Company and is
11		reasonable because the equipment replaced supported both transmission and
12		distribution assets within a particular substation.
13		Importantly, each substation may contain different percentages of
14		transmission equipment and distribution equipment. By allocating the equipment
15		that supports both transmission and distribution equipment using a specific
16		percentage for each substation based on the makeup of the existing assets in that
17		specific substation, the allocation accurately reflects the distribution portion of the
18		costs related to a particular project. This is the same allocation methodology used
19		for these FERC accounts in the Company's prior base rate case in Docket No.
20		49421 and in each of the Company's post-rate case TCOS filings. Once assigned,
21		the allocation percentages assigned to the distribution function are verified against

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the assigned allocators used in Docket No. 49421, as well as the Company's past

1		TCOS filings to ensure consistency with how the Company's transmission
2		investment has been allocated and reflected in existing rates.
3	Q.	WHY IS IT IMPORTANT TO CONSISTENTLY ALLOCATE COST
4		PERCENTAGES BETWEEN THE DISTRIBUTION AND TRANSMISSION
5		FUNCTIONS?
6	Α.	The use of consistent allocation percentages ensures that the capital costs associated
7		with the plant assets serving both functions are properly recovered under the
8		various rate mechanisms that authorize the recovery of those costs. For example,
9		if the Company were to use a different allocation percentage in this case for a plant
10		asset that is also eligible for recovery under the TCOS mechanism, there would be
11		a mismatch between recovery of transmission capital costs included in the TCOS
12		and distribution capital costs being recovered through the DCRF. This would, in
13		turn, result in less or more than 100% of the capital costs being recovered. In
14		contrast, allocating costs consistently between the distribution and transmission
15		functions ensures that only the actual original cost of the capital project is recovered
16		in rates.
17		
18		V. <u>CONCLUSION</u>
19	Q.	PLEASE SUMMARIZE YOUR DIRECT TESTIMONY.
20	A.	My direct testimony, supporting exhibits and workpaper demonstrate that the
21		Company has complied with the capital project requirements of 16 Tex. Admin.
22		Code §25.243 and the DCRF Rate Filing Package Instructions. My testimony also
23		confirms that the distribution invested capital included in this filing has been placed

- in service, that the capital costs associated with each capital project have been
- 2 properly allocated and recorded, and that the costs associated with these
- investments were reasonable, necessary and prudently incurred.
- 4 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?
- 5 A. Yes.

# Summary of Distribution Plant Additions 2019 - 2021

Project Category	Calendar 2019	Calendar 2020	Calendar 2021	<u>Total</u>
General Equipment	149,800,754	78,666,144	83,252,119	311,719,018
Load Growth	239,434,402	256,459,093	301,430,756	797,324,251
Public Improvements	16,511,134	28,671,759	24,181,676	69,364,568
Restoration	58,559,384	51,898,368	71,351,845	181,809,597
System Improvements	157,809,500	168,076,462	205,469,194	531,355,156
Smart Grid	21,196,916	10,818,795	7,175,356	39,191,067
Total Project List Greater than \$100,000	643,312,091	594,590,621	692,860,945	1,930,763,657
Total of Projects Less than \$100,000	1,463,003	(1,931,146)	1,440,858	972,714
Total of All Projects	644,775,093	592,659,475	694,301,803	1,931,736,371

Project Category	Project Number	Description	Additions	Salvage / Removal	Total	Project Category Total
Project Category Project Number Seneral Equipment		- Section 1				83,252,119
		HLPD - Meter & Communications Cap -			······································	
		This project captures labor costs incurred				
	13090056	to install meters.	1,927,595.80	-	1,927,595.80	
İ	13094063	Advance Finance Initiative	3,816,608.26	-	3,816,608.26	
Ì						
		HEB011 - Harden HANA Environments-				
		Enhance the current smart meter data				
		warehouse by enabling near real-time				
		reporting and a new simplified data				
		model. Additional reconciliation reporting				
		will be developed and existing				
		applications will be enhanced to support				
	13094409	the new data model.	709,317.22		709,317.22	
		ENITED AAA DAA AE Daardaan Aanaa Sal				
		ENTD144-RM- AF Regulatory Mgmt. Sol-				
		Develop and implement/deploy UI				
		Planner (regulatory mgmt. software).				
		Necessary updates to improve regulatory				
		accounting reporting and schedule				
	12001110	development associated with regulatory	4 0 44 0 7 4 2 7		4.044.054.27	
	13094449	proceedings and corresponding materials.	4,941,954.37	-	4,941,954.37	
		Equipment and Hardware - GIS				
		Replacement of computer hardware,				
		testing equipment and premise				
	12026102	equipment including copiers and printers	200 712 07		380,712.87	
	13096103	for GIS.	380,712.87	=	300,712,07	
		A AAA AA GEHE DIGT EA AA				
		Asset Mgmt for CEHE-DIST - Extend the				
		existing Asset Management Framework				
		with new enhancements and additional				
		development of new asset life cycle				
		analytics for distribution asset types, such				
		as Intelligent Grid Switching Devices				
	42000240	(IGSD), MUG transformers, and voltage	571,980.66		571,980.66	
	13096348	regulators.	5/1,980.00		371,380.00	
		Asset Mgmt for CEHE-SUBST - Extend the				
		existing Asset Management Framework				
		with new enhancements and additional				
		development of new asset life cycle				
		analytics for substation asset types, such				
		as substation transformers, batteries &				
	13096349	chargers, breakers, and relays.	215,031.46		215,031.46	
		HEB017-1-Advanced Data Mgmt.				
		Platform-Upgrades to the following				
		applications: Hadoop, HANA 2.0, VORA,				
	13096513	DLM, Bex, BOBJ	844,192.58	-	844,192.58	

				Salvage /		Project
<b>Project Category</b>	Project Number	Description	Additions	Removal	Total	Category Total
		HEBM017- DPD Continuous Improve				
		Road-Project is part of the Distributed				
		Operations program to provide				
		continuous improvement to their				
		analytical and reporting functions.				
		Project will be to design, build, and				
		implement new EDGE Situational				
		Awareness displays (Damage Assessment,				
		Estimated Time to Restore (ETR), Work				]
		Force Management, Crew Dispatch, Duty				
	13096515	Roster, SA Reliability	254,279.48	-	254,279.48	
		ENTB015-Data Center PS-Production	İ			
	13096518	Support for Data Center.	204,473.42	*	204,473.42	
		HEBM015RM4 - TRM Retail Mkt Trans Act				
		-Develop and Implement new capabilities				
		as needed to optimize Customer	İ			
	1	Interactions - i.e. New agent processes	I			
		and automation, correspondence	1			
		enhancements, bill print enhancements,	•			
		exception management automation,				
		credit & collections enhancements.	Ì			
		Implement any required Regulatory and				
		Business Mandatory changes for the				
	13096565	market	353,000.17	_	353,000.17	
	13030303	THU NGC	333,000.17		333,000.121	
		HEBM015TTE - TRM TEAMS				
		Enhancements -Develop and implement				
		Change Requests from TEAMS project				
		that were deferred, new capabilities to				
		SAP regional structure, exception mgmt.,				
		service order processing, automation of				
		manual processes, and enhancements to				
	13096566	sync process	1,965,158.60		1,965,158.60	
		Equipment and Hardware - Surveying:				
		Replacement of computer hardware,	-			
		testing equipment and premise				
		equipment including copiers and printers	4.57.505.5		467 600 50	
	13096912	for Land and Field Services Dept.	167,682.52	-	167,682.52	

Project Category	Project Number	Description	Additions	Salvage / Removal	Total	Project Category Total
				<u> </u>		
		ENTBM003R5 - Diversion Phase II -				
		Additional work on the Diversion				
		Reporting system to update existing				
		report/models and to create new models				
		to better predict households that are diverting electricity. This will update				
		existing types of reports with new logic to				
		make them better predictors of potential				
		electric diversion activities. New reports				
		will also be created to use different				
		means of attack on the problem to find				
		potential diversion cases, and to increase				
		the likelihood that diversion is actually occurring. This will reduce costs by				
		decreasing the number of truck rolls to				
		customer locations in search for proof of				
		electric diversion. Each valid case found				
		increases the amount of revenue				
		recovery that the company can perform,				
		which both reduces costs (with more				
		accurate truck rolls) along with increasing revenues through more cases of diversion				
	13096923	discovered and prosecuted.	134,183.39	_	134,183.39	
			,			
		EAO Premise Equipment: Replacement of				
		computer hardware, testing equipment				
		and premise equipment including copiers and printers for the Enginnering and				
	13097071	Asset Optimization Dept.	322,388.94		322,388.94	
		Premise Equipment Replacement CEHE IT				
		Admin cycle replacement of computer hardware, testing equipment and premise				
	13097122	equipment including copiers and printers.	761,954.68		761,954.68	
		Capital Mobile Data Computer	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
		Replacement -Replacement of computer				
		equipment for Distribution related mobile				
	13097123	data.	475,658.37	-	475,658.37	
		Enterprise Integration Program Project- EIP is a multi-year capital program to				
		integrate systems and processes across				
		CNP companies. Includes design,				
		development, testing and				
		implementation for core operations and				
	13097524	business systems.	18,771,272.00	_	18,771,272.00	
		ENTD160 - BTO-Business of Technology				
		Operations (BTO) multi-year program to				
		integrate IT back-end infrastructure,				
		security, end user tools, policies,				
		processes and procedure (PPP) to realize				
	10007505	the IT function and value synergies				
	13097626	associated with merger	231,135.02	~	231,135.02	

Project Category	Project Number	Description	Additions	Salvage / Removal	Total	Project Category Total
		ITD151 - SAP Software Licenses-Software				
		licenses for SAP landscape management,				
		information lifecycle management, cyber- security monitoring, dynamic tiering,				
		mobile access, data management and				
		data services, and Hybris billing. These				
		licenses support the following TO				
		initiatives/projects: SAP Operations				
		Optimization initiative, Security initiative,				
		Data Optimization initiative, SMART				
		migration project, CIS migration project,				
		and the CNP Continuous Process				
	13098003	Improvement initiative.	265,287.47		265,287.47	
		ITPM02E Identity Management				
		ITBM025 - Identity Management Migration-Application Development:				
		Upgrade SailPoint IIQ Compliance				
		Manager to 7.3Px, Migrate Identity				
		Lifecycle and Provisioning functions from				
		CA-IM to SailPoint IIQ Lifecycle Manager				
		and SailPoint IIQ Password Manager,				
		Migrate existing CA-IM integrations for				
		password web services, Contractor				
		Plugin, Password IVR, GINA (WCP), PWI				
		and SharePoint to SailPoint, Enable new				
		integrations between SailPoint and				
	1000001	CyberArk PAM, ServceNow, and SAP, SAP			F00 000 F0	
	13098004	HANA	593,829.58		593,829.58	
		ITB051 - IBM ELA-Capital component of				
	13098242	the IBM enterprise license agreement.	805,099.79		805,099.79	
		Facilities modifications including fencing,				
	AA80	shelving, furniture, etc.	572,312.34		572,312.34	
		Purchase of capital tools such as water				
		pumps to pump out manholes,				
		generators, hydraulic cable presses, cable				
		cutters, confined space air monitors, etc.				
		Also includes capital premise equipment			İ	
		such as printers, multifunction devices,				
	CA1E	projectors, monitors, etc.	293,816.44	-	293,816.44	
		Field Metering - Purchase of in-service			-	
	HXSF	meter equipment.	16,773,823.61	-	16,773,823.61	
		New V&D Radio System: Non production				
		Test System for the OpenSky Voice and	ļ			
		Mobile Data Radio System (VMDRS). This	1	İ	Ì	
		allows version upgrades and code	1	ļ		
į		changes to be tested before putting into	1			
	S/101392/CE/OPS	production. Also includes equipment for				-
	KY	repair of VMDRS.	268,219.16	-	268,219.16	
		Material and other services for items such				
	S/101392/CE/OTH	as test equipment for general support of				
	ER	various radio systems.	113,360.98	-	113,360.98	

Project Category	Project Number	Description	Additions	Salvage / Removal	Total	Project Category Total
	S/101710/CE/CELL					-
	RELAY	Deploy (Post DOE) existing cell relay-INS	22,588,527.37	(1,196.44)	22,587,330.93	
	B .	Replace Generators where repair is no				
	ER	longer a viable option.	868,668.39		868,668.39	
		AMS Communications-services and				
		materials needed to install, replace or				
		upgrade communications equipment at				
		existing SmartGrid/ AMS sites (post AMS				
	СОММ	project).	640,239.15	-	640,239.15	
		MPLS Network - replace routers and				
		related network equipment for the				
		Telecom communications system that are				
	S/101785/CE/MPL	End of Life, damaged and/or no longer				
	S	functioning to the necessary capacity.	729,261.14	**	729,261.14	
		Capture costs of upgrading (replacing)				
	C /4 04 70F /CF /Th 4	microwave (MW) radios at several				
	S/101785/CE/TM	existing locations. Removal of microwave	270.064.20		270 004 00	
	WSY	equipment at abandoned site(s).	379,964.20	-	379,964.20	
		Purchase and labor to install fiber optic				
		cable. Expand network infrastructure				
		requires increase in network to				
		geographically support expanding				
		backhaul infrastructure, establish fiber				
		footprint in locations microwave				
	R	communications may limit capacity.	297,546.27	-	297,546.27	
		Replacement of Routers, Battery Plants,				
		Switches, Network Clocks, Terminal				
		Servers, etc. as they approach End of				
	S	Life/Support.	324,230.92	-	324,230.92	
		Provide SCADA communication to new				
		electrical substations controlled,				
		managed, monitored by CNP. Services				
		provided by internal telecommunications				
		infrastructure or leased carrier services to	İ			
	S/101785/CN/SCA	fulfill new operational, business,	l			
	DA	compliance requirements.	483,590.65	-	483,590.65	
		This WBS/Cost Object is used to purchase	I			
		and install new Microwave radio and				
	S/101785/CN/TMS	related equipment/systems for the				
	Υ	Transport Network.	206,958.26	-	206,958.26	
oad Growth		Discount addition of the second secon		г		301,430,756
		Planned additions/improvements to the				
		12kV and 35kV overhead distribution				
		system feeder mains as called for in				
	1544	Planning Issued Distribution Development	40.000.000			
	AF1A	Plans.	40,835,723.32	6,355,130.45	47,190,853.77	
		Overhand namines to		1		
ļ		Overhead services to new customers or		1		
		adding facilities to accommodate	27.242.554.55	040 550 5	20.462.247.47	
	AF1H	additional load to an existing customer.	37,343,664.63	818,552.54	38,162,217.17	
		Indoppround residential distribution	-	ļ		
	A E 1 1 1	Underground residential distribution	41 541 400 30	427 204 74	44 000 704 00	
	AF1U	services to new customers.	41,541,499.38	127,204.71	41,668,704.09	

Project Category	Project Number	Description	Additions	Salvage / Removal	Total	Project Category Tot
		Only for the installation of overhead				
		service drops and meters to a new				
		customer or service drop replacement to				
		an existing customer adding load where				
	AF1Z	no other facilities are involved.	26,771,170.38	-	26,771,170.38	
		Unplanned additions/improvements to				
		the 12kV and 35kV overhead distribution				
		system feeder mains relating to area load				
		growth, in conjunction with providing				
	AF2A	service to customers.	17,742,413.35	1,021,468.78	18,763,882.13	
	AFZA	Overhead line extensions to new	17,742,413.33	1,021,400.70	10,703,002,13	
		1				
		underground residential distribution	•			
	AF2H	subdivisions.	3,282,348.15	130,512.43	3,412,860.58	
		Planned additions/improvements to the				
		12kV and 35kV distribution system that				
		requires underground feeder mains and				
		underground dips as called for in Planning				
	CE1 A	1 ,	1 105 221 20	8,469.25	1,193,790.54	
	CE1A	Issued Distribution Development Plans.	1,185,321.29	0,409.25	1,195,790.54	
		New major underground services to		i		
		customers that require three-phase				
		underground facilities to serve their				
	CF1R	electrical load.	13,525,749.31	(203,728.58)	13,322,020.73	
	DF1U	Streetlight New Installations	15,993,853.81	-	15,993,853.81	
		Wharton Sub: Add 7th 12kV Fdr-				
		Substation work to add a feeder to		1		
		Wharton substation to support load				
:	1110/00/0506	growth.	160,309.42		160,309.42	
	HLP/00/0596		100,303,42		100,303,42	
		Sandy PointBuild New 138/12KV Sub;:				
		Work to build new Sandy Point substation				
	HLP/00/0954	to support load growth.	591,183.52	-	591,183.52	
		Sandy Point Substation-Add 5th/6th				
		Feeders: Substation work to install		1		
		feeders at Sandy Point substation to				
	HLP/00/0965	support load growth.	469,670.87	_	469,670.87	
	, 00, 000	Flewellen Substation: Substation work to	,0,0,0,0		,	
		add 10th 35kV Feeder at Flewellen				
	UU D /00 /00 /	l l	2 002 022 04	!	2 002 022 04	
	HLP/00/0967	substation to serve load.	2,003,033.01	-	2,003,033.01	
	HLP/00/0996	Karsten to Manvel 69KV Conversion	305,133.42	-	305,133.42	
		Conversion of transmission and		1		
		substation facilites from 69kv to 138kv		1		
	111 100 /0007	<b>!</b>	606 207 22	160 461 75	064 040 60	
	HLP/00/0997	from Fort Bend to West Columbia	696,387.93	168,461.75	864,849.68	
		Major Underground Rehab - VLT Relay				
		Panels: Replacement of electro-		1		
		mechanical relay panels with				
		microprocessor relay panels to support				
	HLP/00/1011	system reliability.	276,253.17	24,532.79	300,785.96	
		Distribution Improvements at Grant				
	HLP/00/1021	Substation	1,210,953.97	-	1,210,953.97	
		Green Road Substation: Substation work				
		to add three feeders at Greens Road				
	HLP/00/1110	substation to serve load.	2,075,452.40	-	2,075,452.40	
		Rebuild transmission ckt 08G PSARCO to				
	HLP/00/1150	CROSBY	1,384,778.07	179,037.51	1,563,815.58	
						•

Project Category	Project Number	Description	Additions	Salvage / Removal	Total	Project Category Total
		Red Bluff Substation - Build new Red Bluff				
	HLP/00/1152	substation to support load growth.	1,245,905.39	_	1,245,905.39	
	112,700,1232	Substation to support load growth.	1,243,303.33		1,2,43,303.33	
		HOC Substation: Substation work to add 2				
	HLP/00/1159	feeders at HOC substation to serve load.	1,592,151.56	-	1,592,151.56	
		Waller- Add transformer and feeder at				
	HLP/00/1162	Waller substation to suport load growth	1,990,672.80	-	1,990,672.80	
		Gertie Substation: Substation work to add 10th Feeder at Gertie substation to serve	ŀ			
	HLP/00/1166	load.	309,536.02	_	309,536.02	
	FILF/00/1100	load.	303,330.02		303,330.02	
		Rittenhouse Substation: Substation work				
		to add 7th 12kV Feeder at Rittenhouse				
	HLP/00/1178	substation to serve load.	435,371.64	-	435,371.64	
		Underground distribution work at Jones	ļ			
	HLP/00/1198	Creek substation to support load growth	1,103,703.73	-	1,103,703.73	
	/ /	Lake Houston: Build new 35kv				
	HLP/00/1250	distribution substation	578,890.10	-	578,890.10	
		Northside Substation:Add 3rd				
		transformer and 2 feeders at Northside				
	HLP/00/1252	substation to support load growth	3,407,678.43	-	3,407,678.43	
	W-17007	- Tarker S Tark	5,151,751,5115		-,,,	
		Blodgett Substation: Add 3rd transformer				
		and 1 feeder at Blodgett substation to				
	HLP/00/1253	support load growth	518,355.65	-	518,355.65	
		Garth: Build new 12kv distribution				
	HLP/00/1266	substation	3,225,731.23		3,225,731.23	
		Almeda Substation: Add 3rd transformer				
		and 3 feeders at Almeda substation to				
	HLP/00/1284	support load growth	4,722,327.14	_	4,722,327.14	
	1121 7 007 220 1	Britmoore - Add transformer and 2	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		1,722,722,722	
	HLP/00/1286	feeders to support load growth	5,617,911.66	-	5,617,911.66	
		Missouri City - Add transformer and 2				
	HLP/00/1288	feeders to support load growth	2,840,768.06		2,840,768.06	
		Land purchase for new Stone Lake				
	HLP/00/1306	substation	5,052,209.02	-	5,052,209.02	
	LII D 100 14000	Build new Wortham substation to support	0.440.670.42		0.440.670.43	
	HLP/00/1308	load growth Scenic Woods Substation: Add	8,110,679.13		8,110,679.13	
		transformers and feeders at Scenic				
		Woods substation to support load				
	HLP/00/1312	growth.	2,033,553.63	(64,285.34)	1,969,268.29	
			.,,			
		Waller Substation: Add 4th 35kv feeder at				
	HLP/00/1315	Waller substation to support load growth.	134,440.71		134,440.71	
		Highlands Substation: Add 8th and 9th				
		12kv feeders at Highlands substation to				
	HLP/00/1341	support load growth	1,101,932.85	-	1,101,932.85	
	111 0 100 150 50	Distribution Improvements at Jordan	F20 (42 22	46.077.03	E40.000.00	
	HLP/00/1342	Substation  Distribution Improvements at LaBorta	528,442.29	(16,077.04)	512,365.25	
	HI D/00/13/13	Distribution Improvements at LaPorte substation	192,600.17	_	192,600.17	
	HLP/00/1343	Jones Creek - Build new Jones Creek 12KV	132,000.17		132,000.17	
	HLP/00/1344	distribution substation.	13,769,684.41	_	13,769,684.41	
	,00,20-1-1	1	20,, 00,00-11-12		20,, 00,00 11.72	1

Project Category	Project Number	Description	Additions	Salvage / Removal	Total	Project Category Total
- •		Limburg: Build new 35kv distribution				
	HLP/00/1345	substation	511,364.50	(34,595.97)	476,768.53	
	HLP/00/1346	Red Bluff - Add transformer and 3 feeders to support load growth	4,457,410.91	_	4,457,410.91	
	112770071340	Upgrade 69kV West Columbia Power	4,437,410.51		4,437,410.51	
	HLP/00/1359	Transformer to 138 kV	1,979,703.20	201,948.79	2,181,651.99	
		White Oak Substation: Add 15th feeder at				
		White Oak substation to support load				
	HLP/00/1398	growth	1,018,548.02	-	1,018,548.02	
		Jordan Substation: Add 5th and 6th 35kv				
	HLP/00/1402	feeders at Jordan substation to support load growth	3,276,308.78	(26,419.10)	3,249,889.68	
	HLP/00/1402	Spencer - Add 12kv feeder to support	3,270,306.76	(20,419.10)	3,243,883.08	
	HLP/00/1403	load growth	2,396,619.18	-	2,396,619.18	
	HLP/00/1405	Land Purchase for new Pleak substation	684,976.19	_	684,976.19	
	11670071403	Clodine - Add transfromer and 3 feeders	00-1,378.13		001,570.15	
	HLP/00/1407	to support load growth	4,770,112.87	-	4,770,112.87	
		Land purchase for new Twinwood				
	HLP/00/1417	substation	1,799,143.80		1,799,143.80	
		West Galveston Substation: Add 3rd				
	HLP/00/1444	50MVA transformer	1,928,022.11	-	1,928,022.11	
	HLP/00/1451	Clear Lake - Ad transformer and 2 feeders to support load growth	3,935,994.10	74,894.07	4,010,888.17	
Public Improvem		to support load growth	3,533,554.10	74,834.07	4,010,888.17	24,181,676
		The relocation of CEHE overhead				
		distribution facilities that are generally				
		less than five poles, due to customer				
		request, including city, state, and federal				
		government infrastructure improvement projects, such as road widening or				
	AD2D	roadway improvements.	4,921,469.16	249,579.69	5,171,048.85	
:			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
		The relocation of CEHE overhead				
		distribution facilities generally five poles				
		or more, due to customer request,				
		including city, state, and/or federal				
		government infrastructure improvement				
	AD3D	projects such as road widening or roadway improvements.	7,560,231.48	1,456,931.03	9,017,162.51	
	ADSD	roadway improvements.	7,500,251.46	1,456,951.05	9,017,102.51	
		Relocation of major underground facilities				
		for road widening, light rail, etc. Includes				
		relocation of overhead to underground at				
	CG1R	customer's request.	10,047,869.86	(54,405.58)	9,993,464.28	
Restoration		- T				71,351,845
		Positive conitalized replacement that				
		Reactive capitalized replacements that are made to the underground residential				
		distribution system requiring facility				
		replacement. Includes cable replacement,				!
		transformers, and other retirement units				
	AD06	and their related components.	16,380,022.56	3,587,673.51	19,967,696.07	
		Reactive capitalized replacements made				
		to the overhead distribution system	10 700 25		0.4.000 477.00	
	AD07	requiring facility replacement.	19,530,969.69	5,401,487.23	24,932,456.92	

Project Category	Project Number	Description	Additions	Salvage / Removal	Total	Project Category Tota
		Reactive capitalized replacements made				
		to the overhead distribution system				
		requiring facility replacement resulting				
		from the effects of adverse weather				
	AD86	conditions.	12,795,528.21	3,884,660.59	16,680,188.80	
		Reactive capitalized replacements made to the major underground system				
		requiring replacement of equipment,				
		cable or structures in response to "lights				
		out." Also includes replacement of system				
	CD1T	neutral associated with copper theft.	9,101,083.26	670,419.54	9,771,502.80	
ystem Improvei	nents					205,469,19
		Planned capital replacement or				
		rehabilitation of overhead distribution				
		system associated with reliability	***************************************			
		improvement. Includes target top 10% of				
		SAIDI circuits, outage-driven overhead				
	1510	rehab, recurring fuse outages, recurring	E 004 67E 04	604.246.26	C COE 002 40	
	AB1C	transformer outages, etc.	5,921,675.84	684,316.26	6,605,992.10	
		Replacement of CEHE-owned poles found				
		defective that are not part of the				
	AB1G	Groundline Inspection Program or trouble related.	5,583,690.61	981,862.33	6,565,552.94	
	ADIG	leiateu.	3,383,030.01	381,802.33	0,303,332.34	
		Planned underground residential				
		distribution cable replacement on a one-				
		span basis.				
	AB1S	Includes: spans referred from trouble	8,880,080.61	1,102,665.30	9,982,745.91	
	71020	malades spans reteriou nom grana	0,000,000,00			
		Planned underground residential				
		distribution cable replacement of 12kV				
		and 35kV partial and total loops.				
		includes: cable relocations, transformer				
		relocation/replacements, raising				
	AB1V	transformers, and pedestals.	6,506,813.45	487,298.27	6,994,111.72	
		Capacitor banks that include the				
		replacement of capital material such as	1			
		capacitor, vacuum switches, disconnects,				
	AB1X	controller, etc.	3,921,799.47	214,566.56	4,136,366.03	
		Penlacement of existing CND owned area				
		Replacement of existing CNP owned area lighting fixtures as a result of failure or				
	ADIV	damage. (Does not include streetlights).	445,604.81	35,679.71	481,284.52	
	AB1Y	damage. (Does not include streetiights).	445,004.61	33,013.11	401,204,32	
		Proactive routine capital replacements to				
	AB1Z	the overhead distribution system.	33,113,900.41	2,569,779.55	35,683,679.96	
	LUTT.	Distribution overhead reliability	33,113,300.71	2,000,1100	55,005,075,50	
	AB2C	improvement projects	16,698,724.38	830,599.66	17,529,324.04	
		Replacement of CEHE-owned poles based				
		on inspections for ground rotting— the				
	AB2G	Groundline Inspection Program.	14,707,123.72	3,072,246.81	17,779,370.53	

roject Category	Project Number	Description	Additions	Salvage / Removal	Total	Project Category Tot
	ABBC	Underground residential distribution	2 000 055 20	265 242 62	4.465.570.05	
	AB2S	proactive span replacement.	3,899,855.38	265,717.67	4,165,573.05	
	AB2V	Proactive URD loop replacement	2,402,932.33	557,304.96	2,960,237.29	
		Capital grid hardening work that does not				
	AB2Z	involve replacement of a rotten pole.	370,581.40	59,687.74	430,269.14	
		Install C-truss or other approved brace on				
		CEHE poles identified by the Groundline				
	AB48	Inspection Program.	4,946,898.36		4,946,898.36	
		Pole Treatment – Treatments that extend				
		the life of wood poles. This includes				
		1				
	AD 40	groundline treatment, insect and internal	F04 207 4C		F04 207 46	
	AB49	decay treatment, fumigation	584,297.46	-	584,297.46	
		Cable Life Extension Program - Testing the				
		condition of underground cable and				
		mitigating components of good cable				
	ABCA	with a high probability of failure.	8,221,470.93	-	8,221,470.93	
		Replacement of CEHE retirement units				
		when associated with the replacement of				
	ABP1	a non-CEHE owned pole.	4,120,623.59	112,954.24	4,233,577.83	
	AFNC	New Capacitor Installations	1,644,690.25	-	1,644,690.25	
		Proactive replacement of major				
	CE4 D	underground equipment, cable or	0.000.000.40	102 200 20	0.400.200.77	
	CE1B	structures.	8,008,080.49	182,300.28	8,190,380.77	
	DB16	Streetlight Rehabilitation/Relocations	1,030,150.41	86,793.18	1,116,943.59	
		Replacement of streetlight standards				
		and/or luminaires as a result of failure or				
	DB17	damage. Does not include area lighting.	7,106,222.74	493,360.05	7,599,582.79	
		Streetlight LED Replacement- Program	1			
		replacement of high pressure sodium,				
		metal halide, and mercury vapor	-			
		streetlight luminaires with LED streetlight		1		
	DB18	luminaires.	5,576,915.71	-	5,576,915.71	
	DB2H	Replacement of streetlight standards due to cable cuts.	12,678,904.71	1,316,039.60	13,994,944.31	
	DUZII	Unscheduled Substation Corrective	12,070,004.71	2,020,000.00	20,55-1,54-1,52	
		Projects- unscheduled corrective type				
		projects and unforeseen equipment				
		failures. These projects involve				
		replacement of equipment and or				
	HLP/00/0011	structures.	1,301,951.21	160,876.21	1,462,827.42	
	LIFE LOOLOGIT	Structures.	Tatectorie	100,070.21	2,402,021.42	
		Scheduled Substation Corrective Projects-				
		scheduled corrective projects. These				
		projects involve replacement of	1			
	HLP/00/0012	equipment and or structures.	1,050,900.24	95,369.14	1,146,269.37	
		Replace the logic cages in aging and/or			,	
		unreliable SCADA Remote Terminal Units				
	HLP/00/0014	(RTU's).	1,989,963.45	122,795.46	2,112,758.91	

Project Category	Project Number	Description	Additions	Salvage / Removal	Total	Project Category Total
		Substation Transformer Firewall Program - Install firewalls between power transformers in a manner that reduces				
	HLP/00/0072	the risk of fire spreading from a failed transformer to adjacent units.	806,907.51	-	806,907.51	
	HLP/00/0075	This project provides funding for replacement and repair of failed distribution and transmission transformers as well as replacement of failed transmission circuit breakers. (Transformers may be rewound and the rewind would be capitalized).	3,914,100.95	230,081.11	4,144,182.06	
	HLP/00/0484	Substation Security Upgrades - Installation of security equipment to control physical and cyber access to CNP substations. This includes: Plant separation fencing, security cameras, & cyber security equipment at various substations. These substations are selected based on risk, vuinerability, and impact as determined by CNP security policies and/or future regulatory requirements.	635,010.46	31,043.61	666,054.07	
	HLP/00/0491/000 6	WALLISVILLE: Elevate the control house at Wallisville substation for storm hardening	108,366.33	-	108,366.33	
	HLP/00/0909	Replace 35KV//12KV Breakers-This project includes replacement of older troublesome distribution breakers (mostly oil filled) at various substations with newer technology vacuum breakers.	1,084,489.15	65,078.77	1,149,567.92	
	HLP/00/0936	Substation improvements include conversion at Fannin substation and new feeder panel at Needville substation.	6,567,303.85	7,239.36	6,574,543.21	
	HLP/00/1013 HLP/00/1015	Fiber Duct & Cable- Replace underground fiber conduits (bituminous fiber pipe) with concrete encased PVC ductbanks.	126,323.68 516,863.86	8,706.53 326,240.14	135,030.21 843,104.00	
		Distribution line clearance corrections between transmission and distribution facilities to meet National Electrical Safety				
	HLP/00/1055	Code (NESC) requirements.  Substation Physical Security Enhancement: Replacement of substation facility fencing with more protective fencing to ensure our critical assets receive a greater level of protection.	299,742.38 54,001.83	85,304.77 389,461.59	385,047.15 443,463.42	
	HLP/00/1195	SUBSTATION NETWORK MODIFICATIONS - Physically isolate substation communications infrastructure	202,045.17	-	202,045.17	

Project Category	Project Number	Description	Additions	Salvage / Removal	Total	Project Category Total
r roject category	HLP/00/1232	Replace underground vault switches	461,843.09	123,185.72	585,028.81	3 ,
	7727 7 007 2202	Replace Underground network	(02)0 (0100			
	HLP/00/1282	connectors	3,649,279.14	62,910.28	3,712,189.42	
	HEI / OOJ ZEGE	Replace existing panels and cabinets	5,0 15,275121	02/020120	07. 111,1007.11	
		containing obsolete Allen Bradley and				
		Omron PLC's with CNP current standard				
	HLP/00/1356	PLC's	432,598.81	15,341.08	447,939.89	
	HLF/00/1330	F LC 3	432,330.01	13,341.00	747,555.05	
	HLP/00/1429	Replace 251 Relays in various substations	362,992.10	30,482.12	393,474.22	
	1117/00/1423	Rehab Underground vault single phase	302,332.10	30,402.12	333,474.22	
	HLP/00/1433	transformers	6,580,346.32	117,277.13	6,697,623.45	
	TILF /00/1433	Major Underground Control And	0,500,540.52	117,277,13	0,057,025.45	
	1110/00/4450	1 -	2 600 624 54		2 600 624 51	
	HLP/00/1458	Monitoring System	2,699,634.51		2,699,634.51	
		B. J. H. L				
		Replace Underground Network protectors				
		with new protectors. Protectors were				
		more than 20 years old and had been				
		flooded in various storms. Electric parts				
	HLP/00/1542	are largely unavailable	1,328,927.95		1,328,927.95	
ntelligent Grid						7,175,35
		Planned Upgrades or Replacements of				
		Communication Equipment supporting				
		Distribution Automation. (IGSD, DACs,				
	CG1E	Monitoring Systems, etc)	1,312,207.20	527.64	1,312,734.84	
		Intelligent Grid Project provides enhanced				
		monitoring, interrogation, and control				
		capability into the operations of the				
		distribution grid. The project consists of				
		installation and integration of the				
		Advanced Distribution Management				
	HLP/00/1000	System (ADMS) and inst	111,188.05	_	111,188.05	
	.,	Project to replace standard IDR meters				
	IDR	with AMS IDR meters	340,313.43	-	340,313.43	
		Planned/proactive IGSD device	,			
	IGSD	installations/replacements.	4,607,378.96	161,213,74	4,768,592.70	
	1,000	Replacement of capital	4,007,070,00	101,210,17	1,7 50,032.70	
		telecommunications equipment at				
		1				
	chorana ler her	Intelligent Grid sites. Replaced equipment	j			
	S/101392/CE/IGFI	i i	246 424 22	F00 F4	247 022 74	
	ELDDEV	antennas	216,434.23	599.51	217,033.74	
		Installation of Telecom boxes for				
		intelligent grid devices to support				
	SCIG	reliability.	425,493.19		425,493.19	
		Total Projects Greater than \$100,000	653 842 792	39,047,163	692,860,945	692,860,94
		Total Projects Greater than \$100,000	653,813,783	33,047,103	092,000,945	002,000,94
		Total of Projects Less than \$100,000	1,293,991	146,867	1,440,858	1,440,85
		Tatal of All During	CFF 407 770	20 404 000	604 204 602	COA 204 CO
		Total of All Projects	655,107,773	39,194,029	694,301,803	694,301,80

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Project			A 1 Pos	Salvage /	····	Project Categor
	Project Number	Description	Additions	Removal	Total	Total
seneral E	quipment	HLPD - Meter & Communications Cap -				78,666,144
		This project captures labor costs incurred				
	12000056	1 '	17 100 0EC 17		17 100 056 17	
	13090056	to install meters.	17,198,056.17	-	17,198,056.17	
	12001422	ENTD130 - Mainframe Migration App Dev-	746 594 66		716 501 66	
	13091422	MFM CIS Replacement	746,584.66	-	746,584.66	
		ENTB008-OE-OEM Enhancements -scope				
		of project to include: 1) Upgrade OEM to				
		use patch plan feature to automate				
		bundle patch, 2) Implement BI Publisher				
		and migrate existing report, 3) Automate				
		configuration comparison across Fusion	1			
		environments, 4) Develop script for the				
		start/stop of domain across			:	
		environments and move messages from				
		error queue to normal queue to simplify				
		maintenance activities, 5) Implement	ļ			
		Splunk for better log mining, and 6)				
		Implement environment provisioning to				
		speed up standing up environments more				
	13093086	quickly	215,327.66		215,327.66	
		ENTB005-SU - MW Server/Platform		-		
		Upgrades = scope of project to include: 1)				
		Java 7 upgrade, will provide improved				
		memory mgmt. and performance, 2) OS				
		upgrades provides enhanced				
		virtualization capability to provide				
		flexibility to support changing workload,				
		3) OEM upgrade to 13c provides the				
		capability to automate Fusion bundle				
	13093088	patches.	212,527.65		212,527.65	
		SAPBM-SSCL - Sourcing/CLM Upgrade-				
		Sourcing/CLM upgrade from Release 9 to				
		Release 11. Release 11 includes				
		enhancements and functionality covering				
		Price conditions, enhanced library (CNP				
	13093362	T&C)	343,774.78	-	343,774.78	
		HEBM017SRT-SAGD Reliability Trouble		,		
	13093462	&ETR	1,087,362.83		1,087,362.83	
		HED188-PDMS-Asset Mgmt for CEHE-				
	13093684	PDMS	1,593,649.04	-	1,593,649.04	
		ENTD144-CF - Advance Finance - Core-				
		Develop, implement, and deploy SAP	-			
	13094062	Hana Central Finance	109,298.29	-	109,298.29	
		ENTBM006IM-Ent Records Automation				
	13094284	Implem	1,406,432.00		1,406,432.00	
	13094352	ENTBM004A4-Analytics Data Foundations	1,119,164.04	-	1,119,164.04	

Project Category	Project Number	Description	Additions	Salvage / Removal	Total	Project Category Total
	13094353	HED193-DIS-Asset Mgmt for CEHE-DIST - Extend the existing Asset Management Framework with new enhancements and additional development of new asset life cycle analytics for distribution asset types, such as Intelligent Grid Switching Devices (IGSD), MUG transformers, and voltage regulators.	881,422.74	-	881,422.74	
	42004054	HED193-SUB-Asset Mgmt for CEHE-SUBST - Extend the existing Asset Management Framework with new enhancements and additional development of new asset life cycle analytics for substation asset types, such as substation transformers, batteries & chargers, breakers, and	244 450 70		244 450 70	
	13094354	relays.	311,450.79	-	311,450.79	
	13094375	ENTBM013-1- Online Customer Experience-Improve Customer Experience , Analytics, Single Sign On and Self Service capabilities to Electric and Gas Customers. 1) Power Alert Service- enhancements to PAS enrollment processes and reporting, 2) MAO/Preference Center- enhancements to Web and SAP to support processes for user and preference mgmt. features, 3) Web Optimization and Customer Experience-enhancements to CNP.com and MAO to support marketing opportunities for LOB offering, search engine optimization and improved user experience. ENTB017 - DataPower Appliance Refresh-	261,092.51	_	261,092.51	
		Refresh Data Power (an EAI appliance including hardware and software that supports critical applications, i.e. MAO, enterprise web services, OMS, MDM,				
	13096023	etc.)	271,789.86	-	271,789.86	
	13094406	ENTBM010-HANA BR for Situational Awareness-Provide business resiliency via design, building to existing Real Time Situational Awareness systems to allow for uninterrupted system use (SAGD for DVAL, Electric Ops, Gas Ops, Security, the TSCC, IG, and Telecoms). Project will also provide BR/HA for SAGD at ECDC/AOC.	875,413.66		875,413.66	

Project				Salvage /		Project Category
Category	Project Number	Description	Additions	Removal	Total	Total
Category	Project Number	ENTBM003R4 - OWP SMP BM- Development to support the Operational Data Warehouse (OWP) and the Advanced Data Management (Smart Meter - SMP) Data Warehouse assets. Includes analysis, design and build of new and modified reports, dashboards, and analytics KPI reporting to support multiple business functions and organizations. Includes critical support for Asset Analytics (CEHE), Customer Experience Dashboards, Distribution Power Delivery Dashboards & reports, ELM/TLM Load Management, Intelligent Grid & Telecoms Analytics, Situational Awareness for CEHE, IGSD, Telecoms, Tech Ops and TO Security, Safety, and Smart Meter Analytics. Enables new and existing systems designed to support better decision making through the use of analytical reporting and analysis.	Additions 812,965.19	Removal	Total	Total
	13094447	ENTB006-18 - MAO Optimization: enhance the application to easily scale and also extend capabilities to mobile: Enhance framework to MVC & generate Micro Services, Upgrade session management , Enable Native Mobile capability w/speech enablement	284,515.55	-	284,515.55	
		ENTD130-CF-MFM CIS Replace-			4 647 757 74	
	13094472	ControlFrameWo  HED198 - PEACS Enhancements to software to increase efficiencies in required reporting and functionality in different datasets and to analyze project interdependencies. Intended to increase efficiencies related to project execution and close-out through the building of new enhancements in HANA content, in order to improve operational and financial performance associated with	4,617,757.71	-	4,617,757.71	
	13095342	CEHE projects	129,270.18		129,270.18	

Droinet				Salvage /		Project Category
Project Category	Project Number	Description	Additions	Removal	Total	Total
	13095745	HED200 - Asset Mgmt - High Voltage - Extend the existing Asset Management Framework with new enhancements and additional development of new asset life cycle analytics for substation asset types, such as substation transformers, batteries & chargers, breakers, and relays.	422,280.94	-	422,280.94	
		ENTB006-19 - MAO Optimization - Optimize MAO , CSR and CSS application to decouple existing services and develop				
	13095773	new microservices.	354,491.99	-	354,491.99	
	13095778	ENTBM018 - Analytics Operational Warehouse-Enhance analytics capabilities for the Operational Data Warehouse and Smart Meter Data Warehouse through the analysis, design, building, testing, and deployment of new reports, dashboards, KPI's and functional intelligence. Example of this would be new call center dashboards, data loads, conversion from desktop to HANA Data Base and integration with existing dashboards	280,662.79		280,662.79	
	13033770	ENTBM019 - SSO - External Cust. Facing- Enhance Identity Management store for external applications from legacy store to Oracle IDCS for STL, CES Online, Builder	200)002173			
	13095779	Portal, EAP	104,898.63	••	104,898.63	
	13095782	HEBM015RM3-TRM-Retail Market Trans Act: Regulatory required functionality changes for Texas Retail Market and our applicable applications (multiple SAP modules, CRM CIS, CRIP, ILCA, DEIS, Service Suite and EAI/TMH). Examples of new functionality added are create new TMAT screens, LOA Audit report, NAESB Annual Review, control check file from BW to MIS	528,746.62		528,746.62	
	130957.82	ENTD153 - Mobile and Speech Enhancement-Create mobile (CNP phone book, My Account Online) and voice based applications. This project will include configuring, building, and deploying Intune and the mobile apps.	107,293.24	-	107,293.24	

Project Category	Project Number	Description	Additions	Salvage / Removal	Total	Project Category Total
						:
		ENTBM013-2 - Online Customer				
		Experience-Enhance following	Ì			
		applications: 1. Power Alert Service				
		(series of Web and SAP enhancements to				
		PAS enrollment processes and reporting,				
		including ability for the CNP to manage				:
		auto-enrollments and improved				
		customer experience to support self-				
		service enrollment and management.), 2.				
		MAO / Preference Center (Web and SAP enhancements to support processes for				
		user and preference management				
		features, including additional support for				
		C&I customers and CSR management.), 3.		-		
		WEB Optimization and Customer		Ī		
		Experience (enhancements to CNP.com		1		
		and MAO to support marketing				
		opportunities for LOB offerings, search				
		engine optimization, and improved user				
		experience, including changes in site		İ		
		hierarchy, UX (template) design, mobile				
		display, site performance, and		İ		
	13095943	business/content management capabilities.)	122,125.28	_	122,125.28	
	13093943	ENTB015 - Data Center Production	122,123.28		122,123.20	
	13096005	Support	996,376.99	_	996,376.99	
		This program provides for various				
		protection improvements on the				
		substation system. Work covered with				
		these amounts was associated with				
	/ /	replacement of transformer panels at			000 C40 OF	
	HLP/00/0672	Grant Substation.	277,645.95		277,645.95	
		HEBM022 - DER Application Phase 2- Implement new interface to allow E-Track				
		to validate & auto-populate custom DG				
	13096065	screen in SAP	469,694.54	-	469,694.54	
		Equipment and Hardware - GIS				
		Replacement of computer hardware,				
		testing equipment and premise				
		equipment including copiers and printers				
	13096103	for GIS.	379,567.34	-	379,567.34	
		CAUTINA DE LINA De Illent Cefanne				
		ENTD135-RS - IBM Resilient Software- Purchase software licenses for IBM		1		
		Resilient Incident Response Platform.				
		Software automates our security incident				
	13096104	response processes	185,936.82	_	185,936.82	
		Premise Equipment Replacement CEHE IT				
		Admin cycle replacement of computer		•		
		hardware, testing equipment and				
		premise equipment including copiers and				
	13096121	printers.	179,681.64		179,681.64	

oject egory	Project Number	Description	Additions	Salvage / Removal	Total	Project Category Total
		ENTBM021 - NICE Solution-Project will				
		develop, configure and install a new				
		Workforce Management business tool for				
		Customer Service. Customer Service will				
		use this developed tool for agent staffing				
		level forecasting based on historical				
		events. There will be an interface				
		developed and built on Genesys's system				
		called GPLUS adapter that will interface	1			
	13096185	with the NICE cloud based solution.	127,496.82	-	127,496.82	
		HED203 - QA Dashboard— Enhancements				
		to improve usability and review of service				
	13096422	consultant designs	181,655.57	_	181,655.57	
		ENTD130-IM - MFM CIS Replacement	,			
	13096564	Impleme	3,449,890.98	-	3,449,890.98	
		Security equipment for distribution				
	AA81	facilities.	2,276,993.94	-	2,276,993.94	
		Purchase and labor to install fiber optic				
		cable. Expand network infrastructure				
- 1		requires increase in network to				
		geographically support expanding				
- 1		backhaul infrastructure, establish fiber				
	S/101785/CN/FIBE	footprint in locations microwave				
	R	communications may limit capacity.	628,560.72	-	628,560.72	
Ī		Field Metering - Purchase of in-service				
	HXSF	meter equipment.	10,264,703.22	-	10,264,703.22	
	DB16	Streetlight Rehabilitation/Relocations	1,044,841.88	132,796.65	1,177,638.53	
İ	S/101710/CE/CELL					
	RELAY	Deploy (Post DOE) existing cell relay-INS	12,689,106.78	(22,656.46)	12,666,450.32	
		Design and deploy AMS/Smartgrid				
	S/101710/CN/CR-	remote infrastructure supporting the				:
	IDR	Interval Data Recorder Meter Project.	302,199.94	-	302,199.94	
		Optical Fiber Reactive Restoration.				
	S/101784/CE/FIRE	Planned rehabilitation/replacement of				
	R	fiber system (approx. 25 miles per year).	168,395.58	_	168,395.58	
	S/101784/CE/TOW	Replace Generators where repair is no	200,000.00		200,000.00	
- 1	ER	longer a viable option.	255,685.52	_	255,685.52	
		Purchase of the Video Wall Monitoring			.,	
		Expansion System for the Telecom				
		Control Center, which is used to monitor				
	S/101784/CG/MIS	and manage the Telecommunications				
1	С	Infrastructure.	285,269.91	_	285,269.91	
ļ	,,,,,	AMS Communications-services and		ľ		
		materials needed to install, replace or				
		upgrade communications equipment at				
	S/101785/CE/AMS	existing SmartGrid/ AMS sites (post AMS				
- 1	COMM	project).	2,992,091.79	_	2,992,091.79	

Project Category	Project Number	Description	Additions	Salvage / Removal	Total	Project Category Total
	S/101785/CE/MPL S	MPLS Network - replace routers and related network equipment for the Telecom communications system that are End of Life, damaged and/or no longer functioning to the necessary capacity.	358,231.97	-	358,231.97	
	S/101785/CE/TM WSY	Capture costs of upgrading (replacing) microwave (MW) radios at several existing locations. Removal of microwave equipment at abandoned site(s).	210,284.05	12,206.10	222,490.15	
	S/101785/CE/TOW ER	Design and deploy telecom microwave radio towers to support communications backhaul of SCADA, IT/Enterprise, Security, Smartgrid/AMS and Voice and Mobile Data Radio Systems	153,268.51	-	153,268.51	
	S/101785/CG/MIS C	Telecom Deliver Misc Projects - video walls, furniture, equipment, printers, and computers in support of the Technology Systems Control Center at Addicks Operations Center and Energy Control & Data Center.	187,130.59	-	187,130.59	
	S/101785/CN/AMS COMM	Design and deploy AMS/Smartgrid infrastructure including Take Out Point radio systems and associated equipment.	199,992.76	-	199,992.76	
	S/101785/CN/MPL S	Replacement of Routers, Battery Plants, Switches, Network Clocks, Terminal Servers, etc. as they approach End of Life/Support.	652,331.87		652,331.87	
	HED0 <b>7</b> 0	SPLUNK: project includes a software license, infrastructure hardware and implementation services. Splunk is a tool that can consume, retain and search application logs and other raw, unstructured data generated by AMS applications for performance monitoring and application troubleshooting purposes.	634,847.62	_	634,847.62	
	S/101785/CN/SCA	Provide SCADA communication to new electrical substations controlled, managed, monitored by CNP. Services provided by internal telecommunications infrastructure or leased carrier services to fulfill new operational, business,				
	DA S/101785/CN/TMS Y	compliance requirements.  This WBS/Cost Object is used to purchase and install new Microwave radio and related equipment/systems for the Transport Network.	2,401,269.66	-	2,401,269.66	

Project Category	Project Number	Description	Additions	Salvage / Removal	Total	Project Categor Total
Load Gro		1 Description	Auditions	itciniova:	l IOtai	256,459,093
		Planned additions/improvements to the				
		12kV and 35kV overhead distribution				
		system feeder mains as called for in				
		Planning Issued Distribution				
	AF1A	Development Plans.	35,693,083.51	8,898,659.97	44,591,743.48	
						ļ
		Overhead services to new customers or				
		adding facilities to accommodate				
	AF1H	additional load to an existing customer.	35,625,608.34	1,251,340.23	36,876,948.57	
		Underground residential distribution		4		
	AF1U	Underground residential distribution services to new customers.	AE 22E 1A2 16	2/2/100 62	45,568,341.78	
	AFIU	services to new customers.	45,325,143.16	243,198.62	45,506,541.76	
		Only for the installation of overhead				
		service drops and meters to a new				
		customer or service drop replacement to				
		an existing customer adding load where				
	AF1Z	no other facilities are involved.	9,772,300.76	_	9,772,300.76	
		Unplanned additions/improvements to				
		the 12kV and 35kV overhead distribution				
		system feeder mains relating to area load				
		growth, in conjunction with providing				
	AF2A	service to customers.	22,865,423.87	2,991,717.58	25,857,141.45	
		Overhead line extensions to new				
		underground residential distribution				
	AF2H	subdivisions.	4,331,075.19	253,831.72	4,584,906.91	
		Planned additions/improvements to the				
		12kV and 35kV distribution system that				
		requires underground feeder mains and				
		underground dips as called for in				
	CE1 A	Planning Issued Distribution	2 451 400 14	/10 177 42\	2 444 224 72	
	CE1A	Development Plans.  New major underground services to	3,451,409.14	(10,177.42)	3,441,231.72	
		customers that require three-phase		-		
		underground facilities to serve their				
	CF1R	electrical load.	16,030,382.57	(170,725.82)	15,859,656.75	
	DF1U	Streetlight New Installations	14,844,755.45	(298.07)	14,844,457.38	
		Wharton Sub: Add 7th 12kV Fdr-		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,	
		Substation work to add a feeder to	ļ			
		Wharton substation to support load	l	ŀ		
	HLP/00/0596	growth.	350,873.99	_	350,873.99	
		Knight Substation: Install 7th feeder- Add				
		feeder to Knight substation to support				
	HLP/00/0654	load growth.	301,667.54	-	301,667.54	
		WOODCREEK-Inst 3rd Trf & (2)35kV Fdr's:				
		Work to install transformer and feeder at	ĺ			
		Woodcreek substation to support load	l			
	HLP/00/0822	growth.	104,966.84	138,145.24	243,112.08	
		Sandy Point Substation-Add 5th/6th				
		Feeders: Substation work to install	ŀ			
		feeders at Sandy Point substation to	ļ			
	HLP/00/0965	support load growth.	230,246.63	-	230,246.63	

ject egory	Project Number	Description	Additions	Salvage / Removal	Total	Project Categor Total
		Intermediate-Upgrade 2 Transformers to				
		50MVA - Upgrade transformers at				
		Intermediate substation to support load				•
	HLP/00/0969	growth.	28,556.15	167,562.27	196,118.42	
		Conversion of transmission and				
		substation facilites from 69ky to 138ky		İ		
	HLP/00/0997	from Fort Bend to West Columbia	2,997,757.67	294,769.31	3,292,526.98	
	7721 7 007 0557	Major Underground Rehab - VLT Relay	2,557,757.07	25-1,703.51	3,232,320.30	
		Panels: Replacement of electro-		İ		
		mechanical relay panels with	İ			
		microprocessor relay panels to support				
	HLP/00/1011	system reliability.	433,225.10	83,331.82	516,556.92	
		Obrien-Add 3RD XFMR and 3 Feeders:				
		Work to add transformer and feeders to				
	un pilos tras	O'Brien substation for capacity increase				
	HLP/00/1027	to support load growth.	59,293.43	127,087.84	186,381.27	
İ		Holmes Substation: Add 11th and 12th				
	111 5 /00 /40 44	feeders at Holmes substation to support	4 407 300 04		4 407 200 04	
	HLP/00/1041	load growth.  Trinity Bay Substation: Substation work to	1,137,398.91		1,137,398.91	
		add 5th feeder at Trinity Bay substation	1	1		
	HLP/00/1060	to support load growth.	1,070,223.67	(38,546.27)	1,031,677.40	
	1121 7007 2000	KING-Add Feeder: Substation work to add	1,070,223.07	(38,340.27)	1,031,077.40	
		feeder at King substation to support load		***************************************		
	HLP/00/1092	growth.	143,160.01	-	143,160.01	
l					······································	
		HANEY - UPGRADES XFMRS/ADD				
l	,	5TH,6T,7TH FD: Work to replace				
	HLP/00/1107 &	transformers and add feeders at Haney	ļ			
-	HLP/00/1135	substation to support load growth.	120,287.94	50,717.00	171,004.94	
			1			
		South Lane: Add 2nd				
		Transformer/Feeder: Work to add				
ĺ	HLP/00/1109	transformer and feeder at South Lane substation to support load growth	84,444.46	168,860.24	253,304.70	
ŀ	ntr/00/1109	substation to support load growth	84,444.46	108,860.24	255,504.70	
		Red Bluff Substation - Build new Red Bluff				
	HLP/00/1152	substation to support load growth.	875,673.16	_	875,673.16	
İ	,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
		Bringhurst-Replace transformer and add				
		feeder: Work to replace transformer and				
		add feeder at Bringhurst substation to				
ļ	HLP/00/1157	support load growth.	48,822.02	113,042.94	161,864.96	
		Hidden Valley Substation -Add				
į	III D 100 14 + 0=	transformer and feeders to Hidden Valley	400		100 7117	
ŀ	HLP/00/1185	substation to support load growth	100,514.25		100,514.25	
		Hyde Park Sub - 3rd Transformer/2				
		Feeders:Substation work to add	***************************************			
- 1						
}		transformer and feeders to Hyde Park	1			

Project Category	Project Number	Description	Additions	Salvage / Removal	Total	Project Category Total
		Glenwood Sub - Upgrade Transformers & Add Feeder: Substation work to upgrade transformers to 50MVA and add a feeder		:		
	HLP/00/1223	at Glenwood substation to support load growth	12,628.84	116,148.73	128,777.57	
	HLP/00/1226	READING - INSTALL 35KV TRFS & FDRS - Add transformer and feeders to Reading substation to support load growth	7,004.38	145,087.69	152,092.07	
	111170071220	SPRINGWOODS-INSTALL 2 XFRS AND 6 FEEDERS- Add transformers and feeders to Springwoods substation to support	7,004.38	143,007.03	132,032.07	
	HLP/00/1249	load growth. Lake Houston: Build new 35kv	2,066,854.40	303,095.99	2,369,950.39	_
	HLP/00/1250	distribution substation	5,265,029.06		5,265,029.06	
		Northside Substation:Add 3rd transformer and 2 feeders at Northside		2 2 4 4		
	HLP/00/1252	substation to support load growth	3,877,990.70	-	3,877,990.70	
	HLP/00/1253	Blodgett Substation: Add 3rd transformer and 1 feeder at Blodgett substation to support load growth	2,840,623.65		2,840,623.65	
	HLF/00/1255	Parkway -Add Feeders: Substation work to add feeder at Parkway substation to	2,640,025.05		2,040,025.05	
	HLP/00/1259	support load growth.	190,196.74	-	190,196.74	
	HLP/00/1266	Garth: Build new 12kv distribution substation	8,211,518.84	<u>-</u>	8,211,518.84	***************************************
		Almeda Substation: Add 3rd transformer and 3 feeders at Almeda substation to				
	HLP/00/1284	support load growth Plaza Substation: Add 3rd transformer	3,723,155.99		3,723,155.99	
	HLP/00/1289	and 3 feeders at Plaza substation to support load growth	303,460.31	_	303,460.31	PR-101-101-101-101-101-101-101-101-101-10
	HLP/00/1294	Distribution Improvements at Brittmore Substation	92,124.98	8,211.11	100,336.09	
	HLP/00/1305	Tomball Substation- Add feeder at Tomball substation to support load growth	360,590.26	-	360,590.26	
	HLP/00/1341	Highlands Substation: Add 8th and 9th 12kv feeders at Highlands substation to support load growth	1,243,745.81	_	1,243,745.81	
		Distribution Improvements at Jordan		(120.020.03)		-
	HLP/00/1342 HLP/00/1345	Substation Limburg: Build new 35kv distribution substation	366,334.75 3,991,603.01	(129,828.03)	236,506.72 3,973,390.09	
		Needville -Add Feeders: Substation work to add feeders at Needville substation to	, , , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , , ,		
	HLP/00/1357	support load growth. Upgrade 69kV West Columbia Power	870,134.08	-	870,134.08	The second secon
	HLP/00/1359	Transformer to 138 kV	1,794,518.66	162,433.07	1,956,951.73	

Project	Dunit at New York	Describer	a daltet	Salvage /	Texal	Project Category
Category	Project Number	Description	Additions	Removal	Total	lotai
		White Oak Substation: Add 15th feeder at White Oak substation to support load				
	HLP/00/1398	growth	2,239,497.94	_	2,239,497.94	
	TIEP/00/1338	Friendswood Substation- Add feeder at	2,235,457.54		2,239,437.94	
		Friendswood substation to support load				
	HLP/00/1401	growth	286,216.21	_	286,216.21	
	,00,2.102	Jordan Substation: Add 5th and 6th 35ky				1
		feeders at Jordan substation to support				
	HLP/00/1402	load growth	4,968,040.06	-	4,968,040.06	
		Spencer - Add 12kv feeder to support				1
	HLP/00/1403	load growth	555,915.35	ü	555,915.35	
		Hyde Park Substation- Add 9th feeder at				
		Hyde Park substation to support load				
	HLP/00/1436	growth	193,154.35	-	193,154.35	
		West Galveston Substation: Add 3rd				
	HLP/00/1444	50MVA transformer	1,479,289.72	<u> </u>	1,479,289.72	
		College Substation- Add 8th feeder at				
	LU D (00 (4 4 4 C	College substation to support load	227 742 72		22774270	
ublic I	HLP/00/1446 provements	growth	237,743.79	-	237,743.79	28,671,759
upne mi	provements	<u> </u>				20,071,755
		The relocation of CEHE overhead				
	İ	distribution facilities that are generally				
		less than five poles, due to customer				
		request, including city, state, and federal				
		government infrastructure improvement				
		projects, such as road widening or				
	AD2D	roadway improvements.	3,949,861.51	772,319.72	4,722,181.23	
		The relocation of CEHE overhead				
		distribution facilities generally five poles				
		or more, due to customer request,				
		including city, state, and/or federal				
		government infrastructure improvement		1		
	AD2D	projects such as road widening or	12.005.444.40	2 000 440 04	15 003 563 34	
	AD3D	roadway improvements.	12,985,444.10	3,008,118.21	15,993,562.31	
		Relocation of major underground	İ			
		facilities for road widening, light rail, etc.				
		Includes relocation of overhead to				
	CG1R	underground at customer's request.	7,846,466.90	109,548.54	7,956,015.44	
estoratio			.,,		.,,	51,898,368
······································				1	***	
		Reactive capitalized replacements that		1		
		are made to the underground residential				
		distribution system requiring facility				
		replacement. Includes cable replacement,				
		transformers, and other retirement units				
	AD06	and their related components.	11,968,668.60	2,575,301.85	14,543,970.45	
		Reactive capitalized replacements made				
	4007	to the overhead distribution system	10 220 524 04	4 200 444 54	20 520 005 50	
	AD07	requiring facility replacement.	16,229,524.04	4,300,441.54	20,529,965.58	

Project Category	Project Number	Description	Additions	Salvage / Removal	Total	Project Category Total
		Reactive capitalized replacements made to the overhead distribution system requiring facility replacement resulting from the effects of adverse weather				
	AD86	conditions.	6,832,773.47	2,128,502.80	8,961,276.27	-
	CD1T	Reactive capitalized replacements made to the major underground system requiring replacement of equipment, cable or structures in response to "lights out." Also includes replacement of system neutral associated with copper theft.	7,140,423.47	722,732.57	7,863,156.04	
System In	provements					168,076,462
	AB1C	Planned capital replacement or rehabilitation of overhead distribution system associated with reliability improvement. Includes target top 10% of SAIDI circuits, outage-driven overhead rehab, recurring fuse outages, recurring transformer outages, etc.  Replacement of CEHE-owned poles found	13,413,379.17	3,915,573.79	17,328,952.96	
	AB1G	defective that are not part of the Groundline Inspection Program or trouble related.	3,138,574.33	816,279.02	3,954,853.35	
	AB1S	Planned underground residential distribution cable replacement on a one- span basis. Includes: spans referred from trouble	4,956,776.42	1,163,029.39	6,119,805.81	
	AB1V	Planned underground residential distribution cable replacement of 12kV and 35kV partial and total loops. Includes: cable relocations, transformer relocation/replacements, raising transformers, and pedestals.  Capacitor banks that include the	3,071,266.92	564,043.21	3,635,310.13	
	AB1X	replacement of capital material such as capacitor, vacuum switches, disconnects, controller, etc.	4,602,693.95	411,217.30	5,013,911.25	
	AB1Y	Replacement of existing CNP owned area lighting fixtures as a result of failure or damage. (Does not include streetlights).	488,354.65	86,449.25	574,803.90	
	AB1Z	Proactive routine capital replacements to the overhead distribution system.	9,159,881.30	3,569,916.94	12,729,798.24	
	AB2C	Distribution overhead reliabilty improvement projects	1,298,669.94	174,426.51	1,473,096.45	

roject tegory	Project Number	Description	Additions	Salvage / Removal	Total	Project Category Total
	AB2G	Replacement of CEHE-owned poles based on inspections for ground rotting the Groundline Inspection Program.	9,545,934.36	4,071,156.82	13,617,091.18	
	AB2S	Underground residential distribution proactive span replacement.	489,902.38	227,856.75	717,759.13	
	AB2V	Proactive URD loop replacement	4,431,451.69	1,119,870.80	5,551,322.49	
		Capital grid hardening work that does not				
	AB2Z	involve replacement of a rotten pole. Install C-truss or other approved brace on CEHE poles identified by the Groundline	80,704.15	31,426.06	112,130.21	
	AB48	Inspection Program.	2,870,859.29		2,870,859.29	
	ABCA	Cable Life Extension Program - Testing the condition of underground cable and mitigating components of good cable with a high probability of failure.	7,885,224.08	-	7,885,224.08	
	ABP1	Replacement of CEHE retirement units when associated with the replacement of a non-CEHE owned pole.	12,953,882.73	434,623.64	13,388,506.37	
		New Capacitor Installations	962,913.49	- 1	962,913.49	
		Proactive replacement of major underground equipment, cable or	302,020113			
	CE1B	structures.	8,165,578.75	379,202.07	8,544,780.82	
	S/101318/CG/TEST EQUIP	Purchase capital test equipment to be used for Substations	1,221,923.13	-	1,221,923.13	
	DB17	Replacement of streetlight standards and/or luminaires as a result of failure or damage. Does not include area lighting.	8,236,023.67	467,466.67	8,703,490.34	
		Streetlight LED Replacement- Program replacement of high pressure sodium, metal halide, and mercury vapor streetlight luminaires with LED streetlight				
	DB18	luminaires.	7,344,461.55		7,344,461.55	
	DB2H	Replacement of streetlight standards due to cable cuts.  Unscheduled Substation Corrective	8,572,192.93	2,213,608.43	10,785,801.36	
		Projects- unscheduled corrective type projects and unforeseen equipment failures. These projects involve replacement of equipment and or				
	HLP/00/0011	structures.	2,112,268.35	79,224.87	2,191,493.22	1
		Scheduled Substation Corrective Projects- scheduled corrective projects. These projects involve replacement of				
	HLP/00/0012	equipment and or structures. Replace the logic cages in aging and/or	977,747.73	121,157.89	1,098,905.62	
	HLP/00/0014	unreliable SCADA Remote Terminal Units (RTU's).	760,898.44	75,089.81	835,988.25	

Project Number	Description	Additions	Salvage / Removal	Total	Project Category Total
HLP/00/0072	Substation Transformer Firewall Program- Install firewalls between power transformers in a manner that reduces the risk of fire spreading from a failed transformer to adjacent units.	685,955.62	<u>-</u>	685,955.62	
	This project provides funding for replacement and repair of failed distribution and transmission transformers as well as replacement of failed transmission circuit breakers. (Transformers may be rewound and the		252 200 22	44.557.052.000	
HLP/00/00/5	WALLISVILLE: Elevate the control house	11,217,155.16	350,208.83	11,567,565.99	
HLP/00/0491/0006		1,390,957.22	-	1,390,957.22	
13094403	ENTB014 - STREAMS Hardware Refresh- Replace STREAMS software and hardware with new Hadoop or other vendor solution.	275,909.75	_	275,909.75	
	Replace 35KV//12KV Breakers-This project includes replacement of older troublesome distribution breakers (mostly oil filled) at various substations with newer technology vacuum breakers.	699,610.66	26,224.79	725,835.45	
HLP/00/0922	Distribution line clearance corrections between transmission and distribution facilities due to modifications or additions to CNP facilities.	(0.00)	150,428.78	150,428.78	
	Substation improvements include conversion at Fannin substation and new feeder panel at Needville substation.	2,569,368.17	28,456.05	2,597,824.22	
	Major Underground -automation of switching by adding relaying and either adding motor operators to existing switches or replacing the switches. This will automatically transfer customers load to an alternate circuit during an outage of their normal circuit. This will reduce outage duration in remote locations or areas with restricted access such as airports.	410.078.25	20.138.85	430.217.10	
		506,189.97	78,682.08	584,872.05	
	Fiber Duct & Cable- Replace underground fiber conduits (bituminous fiber pipe)		. 3,002.30		
	HLP/00/0072  HLP/00/0075  HLP/00/0491/0006  13094403	Substation Transformer Firewall Program-Install firewalls between power transformers in a manner that reduces the risk of fire spreading from a falled transformer to adjacent units.  This project provides funding for replacement and repair of falled distribution and transmission transformers as well as replacement of failed transmission circuit breakers. (Transformers may be rewound and the rewind would be capitalized).  WALLISVILLE: Elevate the control house at Wallisville substation for storm hardening  ENTB014 - STREAMS Hardware Refresh-Replace STREAMS software and hardware with new Hadoop or other vendor solution.  Replace 35KV//12KV Breakers-This project includes replacement of older troublesome distribution breakers (mostly oil filled) at various substations with newer technology vacuum breakers.  Distribution line clearance corrections between transmission and distribution facilities due to modifications or additions to CNP facilities.  Substation improvements include conversion at Fannin substation and new feeder panel at Needville substation.  Major Underground -automation of switching by adding relaying and either adding motor operators to existing switches or replacing the switches. This will automatically transfer customers load to an alternate circuit during an outage of their normal circuit. This will reduce outage duration in remote locations or areas with restricted access such as airports.  HLP/00/1010 MUG Rehab - VLT CI Interrupters  Fiber Duct & Cable- Replace underground fiber conduits (bituminous fiber pipe)	Substation Transformer Firewall Program- Install firewalls between power transformers in a manner that reduces the risk of fire spreading from a failed transformer to adjacent units.  This project provides funding for replacement and repair of failed distribution and transmission transformers as well as replacement of failed transmission circuit breakers. (Transformers may be rewound and the rewind would be capitalized).  HLP/00/0075  WALLISVILLE: Elevate the control house at Wallisville substation for storm HLP/00/0491/0006 hardening  ENTBO14 - STREAMS Hardware Refresh- Replace STREAMS software and hardware with new Hadoop or other vendor solution.  275,909.75  Replace 35KV//12KV Breakers-This project includes replacement of older troublesome distribution breakers (mostly oil filled) at various substations with newer technology vacuum breakers.  Distribution line clearance corrections between transmission and distribution facilities due to modifications or additions to CNP facilities.  (0.00)  HLP/00/0922  Additions to CNP facilities.  Wajor Underground -automation of switching by adding relaying and either adding motor operators to existing switches or replacing the switches. This will automatically transfer customers load to an alternate circuit during an outage of their normal circuit. This will reduce outage duration in remote locations or areas with restricted access HLP/00/1010  MUG Rehab - VLT CI Interrupters  Fiber Duct & Cable- Replace underground fiber conduits (bituminous fiber pipe)	Substation Transformer Firewall Program- Install firewalls between power transformers in a manner that reduces the risk of fire spreading from a failed transformer to adjacent units.  This project provides funding for replacement and repair of failed distribution and transmission transformers as well as replacement of failed transmission circuit breakers. (Transformers may be rewound and the rewind would be capitalized).  WALUSVILLE: Elevate the control house at Wallisville substation for storm HLP/00/0491/0006 ENTBOL4 - STREAMS Hardware Refresh- Replace STREAMS Software and hardware with new Hadoop or other vendor solution.  Replace 35KV/12KV Breakers-This project includes replacement of older troublesome distribution breakers (mostly oil filled) at various substations HLP/00/0909  Distribution line clearance corrections between transmission and distribution facilities due to modifications or additions to CNP facilities.  Substation improvements include conversion at Fannin substation and new feeder panel at Needwille substation.  Major Underground -automation of switching by adding relaying and either adding motor operators to existing switches or replacing the switches. This will automatically transfer customers load to an alternate circuit during an outage of their normal circuit. This will reduce outage duration in remote locations or areas with restricted access such as airports.  HLP/00/1010  MUG Rehab - VLT CI Interrupters  506,189.97  78,682.08  Fiber Duct & Cable- Replace underground fiber conduits (bituminous fiber pipe)	Substation Transformer Firewall Program- Install firewalls between power transformers in a manner that reduces the risk of fire spreading from a failed transformer to adjacent units.  This project provides funding for replacement and repair of failed distribution and transmission transformers as well as replacement of failed transmission circuit breakers. (Transformers may be rewound and the rewind would be capitalized).  HLP/00/0075  HALP/00/0075  HALP/00/0086  HALP/00/0086  HALP/00/0086  HALP/00/0086  HALP/00/0086  HALP/00/0086  HALP/00/0086  HALP/00/0086  HALP/00/0089  HILP/00/0089  Replace 35KV//12KV Breakers-This project includes replacement of older troublesome distribution breakers (mostly oil filled) at various substations with newer technology vacuum breakers. (mostly oil filled) at various substations with newer technology vacuum breakers.  Distribution line clearance corrections between transmission and distribution facilities due to modifications or additions to CNP facilities.  Major Underground -automation of switching by adding relaying and either adding motor operators to existing switches or replacing the switches. This will automatically transfer customers load to an alternate circuit during an outage of their normal circuit. This will reduce outage duration in remote locations or areas with restricted access such as airports.  HLP/00/1013  NUG Replace underground fiber conduts (bituminous fiber pipe)

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Project Category	Project Number	Description	Additions	Salvage / Removal	Total	Project Category Total
		PLAZA DUCT & CABLE- Provide alternate route for underground circuits from Plaza substation to the Texas Medical Center to mitigate congestion and single point of failure from existing single main ductbank				
	HLP/00/1017	system.	3,262,491.51	-	3,262,491.51	ļ
	HLP/00/1055	Distribution line clearance corrections between transmission and distribution facilities to meet National Electrical Safety Code (NESC) requirements.	323,987.28	135,210.93	459,198.21	
	HLP/00/1099	Substation Physical Security Enhancement: Replacement of substation facility fencing with more protective fencing to ensure our critical assets receive a greater level of protection.	1,669,118.59	96,362.47	1,765,481.06	
		SUBSTATION NETWORK MODIFICATIONS - Physically isolate substation				
	HLP/00/1195	communications Infrastructure MUG Rehab- VLT Ventilation: Rehab of	248,615.99		248,615.99	
		the ventilation system used to regulate transformer temperatures in electrical				
	HLP/00/1230	vaults.	354,466.85	60,071.72	414,538.57	
HLP/00/1232		Replace underground vault switches Replace Underground network	986,283.09	34,882.08	1,021,165.17	
	HLP/00/1282	connectors	1,451,645.21	16,794.02	1,468,439.23	
	HLP/00/1429	Replace 251 Relays in various substations	109,496.63	-	109,496.63	
	HLP/00/1433	Rehab Underground vault single phase transformers	2,758,104.02	124,029.14	2,882,133.16	
Intelligent	I					10,818,795
	13092945	HEB010 - Smart Meter Platform PS	2,078,552.93	-	2,078,552.93	
	CG1E	Planned Upgrades or Replacements of Communication Equipment supporting Distribution Automation. (IGSD, DACs, Monitoring Systems, etc)	1,162,427.69	10,541.09	1,172,968.78	
		Intelligent Grid Project provides enhanced monitoring, interrogation, and control capability into the operations of the distribution grid. The project consists of installation and integration of the Advanced Distribution Management				
	HLP/00/1000	System (ADMS) and inst	3,713,476.03	-	3,713,476.03	
	IDR	Project to replace standard IDR meters with AMS IDR meters	532,302.22	-	532,302.22	
	Planned/proactive IGSD device IGSD installations/replacements.		1,432,955.69	323,736.77	1,756,692.46	

Project Category	Project Number	Description	Additions	Salvage / Removal	Total	Project Category Total
		Demand Response Management System (DRMS) - E-curtailment product was purchased for AMS with the goal of				
	1	reducing customer demand at the meter	757 600 00		757 600 00	
	070	level. Installation of Telecom boxes for	757,680.98		757,680.98	
		Intelligent grid devices to support				
	scig	reliability.	807,121.39	-	807,121.39	

Total Projects Greater than \$100,000	544,271,154	50,319,467	594,590,621	594,590,621
Total of Projects Less than \$100,000	(2,894,970)	963,824	(1,931,146)	(1,931,146)
Total of All Projects	541,376,184	51,283,291	592,659,475	592,659,475

	Project Number	Description	Additions	Salvage / Removal	Total
General Equipm	ent				T
		HLPD - Meter & Communications Cap -			
		This project captures labor costs incurred			į
	13090056	to install meters.	5,450,850.38	-	5,450,850.38
		ENTD130 - Mainframe Migration App			
	13091422	Dev-MFM CIS Replacement	78,156,492.15		78,156,492.15
		Re-design current business process using			
		a mobile application with damage			
	13091963	assessment functionality	389,636.55	-	389,636.55
	13092762	Advance Finance Program	707,328.32	-	707,328.32
	13093083	Implement Fusion Security	167,471.04	-	167,471.04
		Enhancements to multiple environments			
		(HANA, HADOOP, NLS, and DT) to			
		support self-service data delivery and			
	13093222	data inquiry	333,005.75	-	333,005.75
	15055222	accompany	555,555775		
		Projects implements new capabilities to			
		Situational Awareness to optimize			
		dispatch for reactive orders and			
		enhances the ability of the current duty			
		roster to cover all resources and			
		changes/trades in shifts through both			
	13093463	desitop and mobile devices	508,769.90	-	508,769.90
	13093564	Retail Market Transactions activities	523,373.19	-	523,373.19
		Continuous improvment support			
		(streamline UI/visualizations, machine			
		learning algorithms,) and Enhancements			
		to various reports (electric usuage, zero			
	13093608	usuage)Business expenses	868,430.73		868,430.73
		Enhancements to multiple environments	1		
		with focus on Electric Commercial and			
		Industrial (ECI) to implement pre-billing			
		energy metric calculations and values,			
		controls and automated exception			
	13093942	handling	435,496.28	_	435,496.28
		ENTD144-CF - Advance Finance - Core-			
		Develop, implement, and deploy SAP			
	13094062	Hana Central Finance	11,253,739.85	_	11,253,739.85
	13034002	Traile Central Finance	11,255,7 65165		12,200,100,00
		Enhancements to multiple environments			
		with focus on Electric Commercial and			
		Industrial (ECI) to implement pre-billing			
	-	energy metric calculations and values,			
		controls and automated exception			
	13094342	handling	655,653.34		655,653.34
		Requirements for maintaining a dual data			
		center for capacity, growth and			
		expansion of the Second Data Center			
	13094373	(AOC).	583,768.79	-	583,768.79
		BM changes to HANA BI platform			
		including BW, Business Objects, and Data	l		
	13094448	Services.	289,741.50	-	289,741.50
		Building new reporting capabilities for			· · · · · · · · · · · · · · · · · · ·
		information requirements related to the			
	13094642	CEHE FRP's	178,954.92	_	178,954.92
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