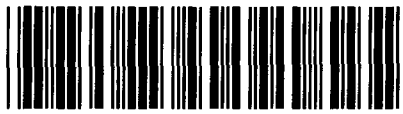
Control Number: 49421



Item Number: 264

Addendum StartPage: 0

SOAH DOCKET NO. 473-19-3864
PUC DOCKET NO. 49421

APPLICATION OF CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC FOR AUTHORITY TO CHANGE RATES	**§ § §**	**BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS**

May 20, 2019

Contact: Denise Hardcastle
CenterPoint Energy Houston Electric, LLC
1111 Louisiana Street
Houston, Texas 77002
Tel No: (713) 207-5767
Fax: (713) 207-9840
Denise.Hardcastle@CenterPointEnergy.com

TABLE OF CONTENTS

264

Errata 1 to

Direct Testimony of Kristie L. Colvin

Q. HOW WILL THE COMPANY RECORD POST TEST YEAR BAD DEBT RELATED TO REP DEFAULTS?

A. The Company will continue to record REP defaults net of collateral in a regulatory asset for recovery in a future rate proceeding.

4. Affiliate and Direct Wages

Q. PLEASE DESCRIBE THE ADJUSTMENT TO AFFILIATE WAGES FOR THE TEST YEAR.

A. The Company is proposing to adjust salary and short-term incentive ("STI") pay for affiliate billings to the Company similar to the adjustment discussed below for direct labor. This calculation is discussed in detail in the direct testimony of Company witness Michelle M. Townsend. The Affiliate Wage adjustment is an increase of $1.4 million to test year O&M and is functionalized following the original affiliate payroll billings in the test year.[9]

Q. PLEASE DESCRIBE THE ADJUSTMENTS TO DIRECT SALARIES AND WAGES FOR THE TEST YEAR.

A. The Company's test year level of salaries and wages consists of base pay, a competitive pay adjustment, and incentive compensation in the form of STI and long-term incentive ("LTI") pay. The test year level of salaries and wages is not representative of labor costs that are expected to exist when new rates will become effective. The Company has adjusted its test year direct labor expenses to annualize calendar year-end salaries and include a three percent increase to the cost of service for the competitive pay adjustment ("CPA") that will be effective on April 1, 2019, ^ March 20, 2019 and

[9] *See* WP/II-D-1 Adj 4 for the Affiliate Wages adjustment.

Q. HAS THE COMPANY ADJUSTED ITS EMPLOYEE BENEFIT EXPENSE?

A. Yes. The Company is proposing to update its test-year expenses for pension and other post-employment benefit ("OPEB") expense to reflect actual annual expenses as determined by the 2019 actuarial studies included as attachments to Schedule II-D-3.8.1. This Benefits adjustment results in a decrease of $8.3 million ^ and Schedule II-D-3.9.1 in pension and OPEB expense for the test year and has been functionalized to payroll.[30] The Company also included an adjustment to benefit expense of $0.2 million resulting from the salaries and wages and STI adjustments discussed previously in my testimony.[31]

6. Non-recoverable Costs

Q. PLEASE DESCRIBE THE ADJUSTMENT TO A&G TEST YEAR COSTS FOR NON-RECOVERABLE COSTS.

A. The adjustment for non-recoverable costs removes $0.2 million in costs that are not recoverable through rates under 16 TAC § 25.231(b)(2).[32]

7. Employee Expenses

Q. PLEASE DESCRIBE THE EMPLOYEE EXPENSES ADJUSTMENT IN A&G FOR THE TEST YEAR.

A. The Company is making an adjustment to remove certain employee-related travel, meals, and lodging costs and other employee expenses that are not being requested for recovery. Employee expenses were reviewed and analyzed in accordance with 16 TAC § 25.231(b)(1) for allowable expenses and subsection (b)(2) for

[30] *See* WP/II-D-2 Adj 6 for the Benefits adjustment.
[31] *See* Section III.A.4, Affiliate and Direct Wages.
[32] *See* WP/II-D-2 Adj 7 for the Non-Recoverable adjustment.

Q. HAVE ANY ADJUSTMENTS BEEN MADE TO TEST YEAR DEPRECIATION EXPENSE?

A. Yes. Depreciation related to test year AMS plant in service has been removed because costs for those assets are recovered under a separate tariff.[48] An adjustment has also been made to remove depreciation for certain Non-Utility Property not included in rate base.[49] An adjustment has also been made to reclass depreciation between asset classes.[50] Company witness Dane A. Watson supports other required adjustments to the Company's depreciation expense calculation based on the depreciation study he sponsors.[51]

Q. IS THE COMPANY PRESENTING A NEW DEPRECIATION STUDY WITH THIS FILING?

A. Yes. The Company's last depreciation study was prepared for and approved in Docket No. 38339, approximately 10 years ago.

Q. WHY ARE ADJUSTMENTS BEING MADE TO TEST YEAR DEPRECIATION EXPENSE AS A RESULT OF MR. WATSON'S DEPRECIATION STUDY?

A. Mr. Watson explains in his direct testimony the rationale for the proposed changes in depreciation rates and salvage values that should be implemented as a result of this case. The proposed depreciation rates are then applied to the adjusted gross plant balance at December 31, 2018, to arrive at the annual depreciation rates applicable to existing assets.

---

[48] *See* WP/II-E-1 Adj 3 for the AMS adjustment. and AMS Table tab.
[49] *See* WP/II-E-1 Adj 6 for the Non-Utility Property adjustment.
[50] *See* WP/II-E-1 Adj 7 for the Reclass adjustment.
[51] *See* WP/II-E-1 Adj 1 for the Depreciation Study adjustment.

Q. HOW HAS THE COMPANY ACCOUNTED FOR HURRICANE HARVEY RESTORATION COSTS?

A. Following the precedent set in Docket No. 32093 for Hurricane Rita restoration costs, Hurricane Harvey restoration costs have been capitalized or deferred in a regulatory asset to be recovered in this base rate proceeding.

Q. HAS THE COMPANY RECEIVED ANY INSURANCE PROCEEDS RELATED TO HURRICANE HARVEY RESTORATION?

A. Yes. The Company received $23.6 million, consisting of $12.3 million for capital and $11.3 million for O&M, in insurance proceeds for damage done to its system by Hurricane Harvey. The insurance proceeds the Company received have been recorded to the applicable regulatory asset and capital assets. The Company has settled all electric restoration insurance claims related to Hurricane Harvey and does not expect to receive additional insurance settlements.

Q. WHAT IS THE UNINSURED BALANCE IN THE HURRICANE HARVEY REGULATORY ASSET AS OF DECEMBER 31, 2018?

A. The regulatory asset balance related to Hurricane Harvey restoration cost as of December 31, 2018, was $64.4 million, which includes O&M costs, net of actual insurance proceeds. Additionally, the Company is requesting carrying costs through December 2018 and expects to continue to accrue carrying charges until the system restoration costs are included in base rates.

Q. IS THE COMPANY PROPOSING RECOVERY OF AND A RETURN ON COSTS NET OF INSURANCE RECOVERY ASSOCIATED WITH HURRICANE HARVEY IN THIS CASE?

A. Yes, the Company is seeking approval to include the regulatory asset in rate base and amortize uninsured storm restoration O&M costs. Consistent with other

year-end customer deposit balances included in rate base are shown on Schedule II-B-11.

Q. HOW HAVE CUSTOMER DEPOSITS BEEN FUNCTIONALIZED?

A. Customer deposits have been directly assigned as shown on Schedule II-B-11.

M. Regulatory Assets and Liabilities

Q. PLEASE DESCRIBE THE COMPANY'S REGULATORY ASSETS AND LIABILITIES INCLUDED IN RATE BASE.

A. ASC 980, *Regulated Operations*, allows utilities with cost-based rates established by a regulator to defer or capitalize certain costs or obligations for future ratemaking treatment. The regulatory assets and liabilities requested as part of the adjusted test year rate base balance are related to costs for bad debt, Hurricane Harvey, expedited switching, SMT, TMT, protected EDIT, Medicare Part D Subsidy, ~~Benefit Restoration Plan liability and~~ the pension deferral liability.[131] With the exception of the protected EDIT and Benefit Restoration Plan liability, these items are described in detail above in my testimony.

Q. WHY IS IT APPROPRIATE TO INCLUDE PROTECTED EDIT IN RATE BASE?

A. As discussed in Mr. Pringle's direct testimony, protected EDIT was derived from ADFIT that was previously funded by customers. Therefore, the regulatory liability for protected EDIT should be included in rate base.

[131] *See* WP/II-B-11 Adj 8 Pension BRP & Postretirement Adjustment, WP/II-B-11 Adj 9 Interest Rate Hedge Reclass, WP/II-B-12 Adj 10 Interest Rate Hedge Rate Base Removal, WP/II-B-12 Adj 2 Hurricane Harvey, WP/II-B-12 Adj 8 Interest Rate Hedges, WP/II-B-12 Adj 9 Interest Rate Hedge Removal, and WP/II-B-12 Adj 10 Margin Tax Adjustment.

unprotected may change. Due to the potential for significant changes to the UEDIT net liability, the Company is proposing to track the balance and record an over- or under-balance of amounts collected under the Rider UEDIT compared to the actual net UEDIT liability amount and to address this balance in the next base rate proceeding.

Q. HOW HAS THE COMPANY FUNCTIONALIZED UEDIT?

A. UEDIT functionalization ~~directly follows the associated tax item~~.

^is allocated following the rate model total cost of service amount for all customers. Please see Mr. Troxle's testimony Bates page 3038 for further discussions.

P. Rate of Return

Q. WHAT COST OF EQUITY DID THE COMPANY USE TO CALCULATE THE RATE OF RETURN COMPONENT OF THE REVENUE REQUIREMENT?

A. Relying on Mr. Hevert's testimony and recommendations for the cost of equity, the resulting overall required rate of return is 7.39%. The required rate of return is applied to the adjusted rate base to derive the Company's rate of return component of the revenue requirement. This calculation is shown on Schedule II-C-2.1 and Exhibit KLC-10.

Q. WHAT IS THE COMPANY'S COST OF DEBT?

A. The Company's proposed cost of debt, as a weighted average of all outstanding debt issuances, is 4.38% as explained by Mr. McRae. The calculation is shown on Schedule II-C-2.4a.

Errata 1 to

Direct Testimony of Shachella D. James

Errata 1

Figure 4. Cost Assignment of TO Services

Service	Direct Assignment Calculation
Desktop Data Device	This service is directly assigned to clients based upon the number of login IDs for a given client area. The number of login IDs is identified within CNP's Active Directory structure for Local Area Network Access.
Mainframe CPU Utilization	This service is directly assigned to clients based on the number of CPU seconds used. Snapshots of CPU usage are taken on a daily basis to capture mainframe usage by department billing point, totaled on a monthly basis, and billed to the appropriate business unit.
Data Management	This service is directly assigned to clients based upon the number of megabytes managed by each client. A snapshot of disk allocations is captured monthly and is matched to the cost centers in SAP to determine the owner of the storage.
Distributed Systems	Personnel, hardware and software charges for this service are specific to individual business units based on the client's specific use of the applications, platforms, and software, and are directly assigned to those business units.
Enterprise Applications Development and Support 67%	The costs of this service are directly assigned based upon the business unit's headcount ~~(67%~~ weighting) and operating expenses ~~(33%~~ weighting). 33%
Applications Development and Support	The costs of this service are directly assigned to each client utilizing the service. The charges are based upon billable hours of actual work effort required to support ongoing baseline operations activity and new projects solicited by clients to provide business solutions.
Telephony Service	Each telephone instrument, fax machine, or modem requires a dedicated port on the Private Branch Exchange ("PBX") switch. The total cost for this service is divided by the total number of end users supported by the PBX to determine the rate and multiplied by the number of end users to determine the directly assigned cost. While TO works with Purchasing & Logistics to structure CNP's long distance contract, the costs are invoiced directly to the CenterPoint Houston cost centers based on the minutes of actual long-distance usage reflected in the vendor invoice for those individuals in CenterPoint Houston.
Telecommunications Move/Add/Change	Charges are directly assigned and based upon billable hours.
Data and Cyber Security Management	This service is allocated to all business units based on total TO O&M spend.

Errata to

Errata 1 to

Direct Testimony of M. Shane Kimzey

Corporate Securities, Transactions and Governance. The lawyers and others on this team are responsible for (i) maintaining compliance with securities laws and regulations, including periodic filings with the Securities & Exchange Commission; (ii) representing the Company in corporate transactions such as mergers, acquisitions and financings; (iii) overseeing matters of corporate governance; (iv) maintaining accurate records relating to the legal entities in the CNP group of companies; (v) insider trading training and awareness; and (vi) advising on benefits plans and various other matters.

Litigation, Environmental, Land & Right of Way. The lawyers on this team are responsible for managing litigation and other disputes that CNP and its subsidiaries become involved in, as well as supporting CenterPoint Houston's and other entities' Land and Right of ~~Work~~, such as procuring easements and other such rights and working with landowners, and providing legal advice on various environmental matters, including litigation and regulatory proceedings.

← Replace "Work" with "Way"

Commercial. The Commercial Legal team of CNP's Legal Department is responsible for the legal aspects of the Company's commercial contracting process. Our commercial team (i) drafts, reviews, and negotiates contracts with customers and vendors; and (ii) provides guidance on commercial and contracting risks and issues more generally. This team is also responsible for the Company's intellectual property work.

Corporate Ethics and Compliance. Collectively, this team is responsible for (i) overseeing, supporting, and educating the organization on ethics and compliance with laws and regulations, and investigating and

Errata 1 to

Direct Testimony of Robert B. McRae

Q. DOES THE THREAT OF COSTLY HURRICANES SUPPORT A HIGHER DEGREE OF EQUITY IN CENTERPOINT HOUSTON'S CAPITAL STRUCTURE WHEN SETTING RATES?

A. Yes. The threat of costly hurricanes is certainly one factor that would justify a higher equity level. A higher equity percentage would better enable CenterPoint Houston to access the debt markets in order to rebuild should the need arise after a catastrophic event.

Q. TEXAS LAW ALLOWS UTILITIES THAT SUFFER HURRICANE DAMAGE TO RECOVER STORM RESTORATION COSTS AND TO OBTAIN SECURITIZATION FINANCING FOR THOSE COSTS.[19] DOES THAT COMPLETELY MITIGATE THE RISK OF HURRICANE DAMAGE FOR CENTERPOINT HOUSTON?

A. No. The ability to recover and securitize storm restoration costs is helpful, but it does not completely mitigate the risk to CenterPoint Houston because of the time lag inherent in obtaining the approvals required for securitization financing and in issuing the securitization bonds, and because securitization is limited to losses of at least $100 million.

Q. HOW MUCH TIME IS EXPECTED TO ELAPSE BETWEEN THE DATE A HURRICANE STRIKES CENTERPOINT HOUSTON'S SERVICE TERRITORY AND THE DATE THAT THE SYSTEM RESTORATION BONDS CAN BE ISSUED?

A. Assuming that CenterPoint Houston can obtain the two orders from the

39.301-39.306

[19] Tex. Util. Code §§ ~~39.401-39.406~~.

Errata 1 to

Direct Testimony of Julienne P. Sugarek

developers, and other groups requesting the installation of street lighting. Lighting Services provides for the installation, ownership, O&M of the necessary ornamental standard (if any) and fixtures, including the replacement of lamps. The majority of the cost for providing this service relates directly to CenterPoint Houston's capital investment, and O&M of the specific fixture and ornamental standard (if any). The Tariff contains the provisions governing the terms of service and the type of service, the Monthly Rate consisting of Transmission and Distribution Charge per lamp type (i.e., mercury vapor, high pressure sodium vapor, metal halide, or light emitting diode), and references to applicable service riders.

Q. WHAT CHANGES IS CENTERPOINT HOUSTON PROPOSING TO ITS LIGHTING SERVICES TARIFF?

A. The Company proposes to establish Light Emitting Diode ("LED") Luminaires as the new street light standard lamp type for Street Lighting Services and Miscellaneous Lighting Services under Lighting Services section 6.1.1.1.6 of the Tariff. Recent advances in LED technology and declining LED prices have resulted in LED for street lighting as an attractive alternative to existing street lighting options due to the potential customer and energy savings that could be achieved with more efficient light technology. CenterPoint Houston proposes ~~will continue~~ to install LED lighting in place of the other non-LED lamp types under its normal replacement cycle (i.e., as lights fail and reach the end of their useful lives). ~~Consequently, installation of a non-LED lamp type (e.g., metal halide, high pressure sodium) will be only in circumstances where LED lighting lamp~~

~~installation is not possible or cost effective.~~ Please see the direct testimony of Mr. Troxle for the tariff language proposed by the Company.

IX. CONCLUSION

Q. PLEASE SUMMARIZE YOUR TESTIMONY.

A. For the test year, the Power Delivery Solutions division O&M expenditures were $8.8 million. The O&M expenditures incurred by the Power Delivery Solutions division during the test year are reasonable and necessary expenses that should be recovered in the Company's rates. My testimony demonstrates that the Power Delivery Solutions division is properly structured to accomplish the goal of providing a reliable power delivery system at a reasonable cost. Costs associated with this organization are effectively managed and maintained at reasonable levels through the entire process of business planning, budget plan review and ongoing budget plan monitoring. These costs are reasonable, prudent and necessary. Moreover, the activities performed by the Power Delivery Solutions division are a reasonable and necessary part of providing electric utility service. Finally, the Company requests approval of its proposals related to voltage regulation batteries, DER interconnections, facilities extensions for EV charging stations, and street lighting services.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

Errata 1 to

Direct Testimony of Matthew A. Troxle

EXECUTIVE SUMMARY OF MATTHEW A. TROXLE

My testimony addresses four areas: (1) the twelve-month period ending December 31, 2018 Test Year ("Test Year") billing determinants used to design the proposed retail delivery service rates; (2) the allocation of costs among the rate classes; (3) the development of CenterPoint Energy Houston Electric, LLC's ("CenterPoint Houston" or the "Company") proposed retail and wholesale ~~delivery~~ transmission service tariff rate schedules, riders and various charges; and (4) other proposed changes to the Company's retail delivery service tariffs. Specifically, my testimony:

- explains the reasonable and necessary adjustments to the Test Year billing determinants that are necessary to make the Test Year billing and usage data more representative of conditions that are expected to exist once new rates go into effect;
- describes the two class cost of service studies used to allocate costs among the rate classes in accordance with the Federal Energy Regulatory Commission System of Accounts, the Public Utility Regulatory Act, the Public Utility Commission of Texas' rules and rate filing package instructions, and the principles of cost causation;
- explains, for both the retail delivery service tariff and the wholesale ~~delivery~~ transmission service tariff, how each rate schedule applies and how each delivery charge is calculated, and also demonstrates that these rate schedules and riders accurately recover the cost of service as described and supported in the rate filing package;
- introduces a new rider, Rider UEDIT – Unprotected Excess Deferred Income Tax, that refunds to customers the balance of unprotected excess deferred income taxes resulting from the Tax Cuts and Jobs Act of 2017 that changed the federal income tax rate in 2018;
- describes the Company's proposed additional charges and discretionary service charges and the methodology used to determine the present cost of providing these services; and
- summarizes other proposed changes to the Company's retail tariff.

WP - Acct. 366, WP - Acct. 367, and WP - Acct. 368 demonstrate how the Company proposes to allocate distribution costs in this proceeding.

Q. WHAT IS THE FINAL STEP IN PREPARING THE CCOSS?

A. The final step in preparing the CCOSS is applying the allocators derived in the previous step, as shown in the II-I-2 Schedules, to all of the FERC Account costs, expenses, and other revenues.

B. Demand-related Allocation Methodology

1. Transmission Cost

Q. PLEASE DESCRIBE THE METHOD USED TO ALLOCATE CAPACITY-RELATED TRANSMISSION COST.

A. CenterPoint Houston proposes to use the unadjusted 4CP allocation factor based on the ~~ERCOT~~ CEHE peak summer month periods to allocate capacity-related transmission costs. ~~This matches the use of the 4CP allocator the Commission uses for pricing wholesale transmission charges pursuant to PURA § 35.004(d) and is consistent with Commission rules and the Company's approved approach in Docket No. 38339.~~

2. Distribution Cost

Q. PLEASE DESCRIBE THE METHOD USED TO ALLOCATE DEMAND-RELATED DISTRIBUTION COST.

A. The methodology used for the demand-related distribution cost is based on the unadjusted average 4CP test year demand for electric power on CenterPoint Houston's distribution system at the time of ERCOT's peak summer month periods. This demand data is shown on Schedule II-H-1.3, sponsored by Dr. McMenamin. Furthermore, the allocation factors are determined at two points of service on the

distribution system: the substation and the overhead distribution lines. Since some customers are served exclusively on the underground ("UG") line distribution system and do not use the overhead line facilities, having the allocation factors determined at the substation and the overhead distribution line level allows certain costs of the UG line facilities to be allocated exclusively to those classes which have customers served from those facilities.

Q. WHY HAVE YOU ELECTED TO USE THE 4CP DEMAND METHODOLOGY FOR DEMAND-RELATED DISTRIBUTION COST?

A. The Company's distribution system is designed to serve the maximum load requirement of each individual retail customer at the same time. The Company's distribution system is strategically constructed to have the capability to reliably deliver the maximum load when demanded by the customer. CenterPoint Houston's customers' demand peaks are generally during the summer months of June, July, August, and September. All cost driven by system peak loads have been allocated to the classes based upon their contribution to the summer peak loads. The 4CP component of the Company's proposed allocator accomplishes this goal by isolating class contributions to system peak load during those four months. ~~The Company uses this 4CP component to allocate cost on the basis of class energy requirements (the average demand) and class contributions to system peak demand (the excess demand).~~ A 4CP demand allocation method captures the cost causation associated with the maximum coincident load of each rate class on the Company's distribution system.

Equal to 10 kVA rate schedules, both the Transmission and Distribution Delivery Charges are recovered on a per kWh basis. For the Secondary Service Greater Than 10 kVA rate schedule, the Distribution Delivery Charge will be based on Billing Demand, using NCP kVA. With respect to the Primary Service rate schedule, Distribution Delivery Charges will be based on the Billing kVA, which is defined as NCP kVA billing demand with an 80% ratchet. Seasonal agriculture customers are exempted from the distribution ratchet. For Transmission Service, the Distribution Delivery Charges will be based upon 4CP kVA. For the Secondary Service Greater Than 10 kVA and the Primary Service rate schedules, the Transmission Charge billing determinant depends upon the type of meter attributed to the customer. For those customers classified as having an IDR meter, the charges for retail transmission service are billed using the customer's 4CP kVA demand at the date and time coincident with the ~~ERCOT~~ CEHE 4CP. For customers classified as having a non-IDR meter, the Transmission Charge billing determinants are based on the customer's monthly maximum NCP kVA demand. For the Transmission Service rate schedule, the Transmission Charge billing determinants will be 4CP kVA.

Unlike most service under the other rate classes, Lighting Services are unmetered and do not have a Customer Charge or Metering Charge. The distribution and transmission charges for Lighting Services are stated on a per-fixture basis, based on the type of lamp and its configuration.

Errata 1 to

Direct Testimony of Dane A. Watson

Figure 1

Account	Description	Approved Life	Approved Curve	Proposed Life	Proposed Curve
E30302	Intangible Plant 5 year	5	SQ	5	SQ
E30302	Intangible Plant 7 year	7	SQ	7	SQ
E30302	Intangible Plant 10 year	10	SQ	10	SQ
E30302	Intangible Plant 15 year	NA	NA	15	SQ
E35002	Land Rights	75	R1	75	R1
E35201	Structures & Improvements	60	R4	60	R1.5
E35301	Station Equipment	47	R1	53	R0.5
E35401	Towers & Fixtures	60	R4	59	R2.5
E35501	Poles and Fixtures	40	R0.5	60	R0.5
E35601	O/H Conduct/Devices	50	R2	61	R1.5
E35701	Underground Conduit	60	R5	60	R5
E35801	U/G Conduct/Devices	40	R5	44	S6
E35901	Roads and Trails	58	S6	52	S6
E36002	Land Rights	55	R1	60	R1
E36101	Structures. & Improvements	56	R4	60	R4
E36201	Station Equipment	47	R1.5	48	R1
E36301	Battery Storage Equipment	NA	NA	10	SQ
E36401	Poles, Towers & Fixtures	35	R0.5	35	R0.5
E36501	O/H Conduct Devices	40	R0.5	38	R0.5
E36601	Underground Conduit	37	S6	62	R2.5
E36701	U/G Conduct/Devices	31	R0.5	38	R0.5
E36801	Line Transformers	28	R1	28	R1
E36901	Services	36	R0.5	46	R0.5
E37001	Meters	27	R2	21	R3
E37001	AMS Meters	7	SQ	20	R2
E37301	Street Light/Signal Systems	36	R1	39	R1
E37401	Security Lighting	36	R1	39	R1
E38902	Land Rights	50	R2	55	R2
E39001	Structures & Improvements	40	R2	50	R4
E39101	Office F/F	24	SQ	24	SQ
E39201	Transportation Equipment	12	R1.5	13	L2
E39301	Stores Equipment	19	SQ	19	SQ
E39401	Tools, Shop & Garage Equipment	18	SQ	18	SQ
E39501	Laboratory Equipment	25	SQ	25	SQ
E39601	Power Operated Equipment	21	L1.5	18	L2
E39701	Microwave Equipment	24	SQ	22	R2
E39702	Computer Equipment	8	SQ	8	SQ
E39801	Miscellaneous. Equipment	20	SQ	20	SQ

Figure 2

Account	Description	Approved Net Salvage	Proposed Net Salvage
E30302	Intangible Plant 5 year	0%	0%
E30302	Intangible Plant 7 year	0%	0%
E30302	Intangible Plant 10 year	0%	0%
E30302	Intangible Plant 15 year	NA	0%
E35002	Land Rights	0%	0%
E35201	Structures. & Improvements	0%	-5%
E35301	Station Equipment	-5%	-10%
E35401	Towers & Fixtures	-15%	-30%
E35501	Poles and Fixtures	-35%	-50%
E35601	O/H Conduct/Devices	-74%	-100%
E35701	Underground Conduit	0%	-5%
E35801	U/G Conduct/Devices	-2%	-5%
E35901	Roads and Trails	0%	0%
E36002	Land Rights	0%	0%
E36101	Structures & Improvements	-10%	-10%
E36201	Station Equipment	0%	-10%
E36301	Battery Storage Equipment	NA	0%
E36401	Poles, Towers & Fixtures	-45%	-45%
E36501	O/H Conduct Devices	-23%	-30%
E36601	Underground Conduit	-20%	-30%
E36701	U/G Conduct/Devices	-13%	-35%
E36801	Line Transformers	-2%	-15%
E36901	Services	-20%	-60%
E37001	Meters	0%	0%
E37003	AMS Meters	0%	0%
E37301	Street Lighting/Signal Systems	-40%	-30%
E37401	Security Lighting	-40%	-30%
E38902	Land Rights	0%	0%
E39001	Structures. & Improvements	0%	-5%
E39101	Office F/F	0%	0%
E39201	Transportation Equipment	9%	10%
E39301	Stores Equipment	0%	0%
E39401	Tools, Shop & Garage Equipment	0%	0%
E39501	Laboratory Equipment	0%	0%
E39601	Power Operated Equipment	8%	6%
E39701	Microwave Equipment	0%	2%
E39702	Computer Equipment	0%	0%
E39801	Miscellaneous. Equipment	0%	0%

Implementation of this approach did not affect the annual expense accrued by CenterPoint Houston and provides for the timely retirement of assets and the simplification of accounting for general property. Both the FERC and the Public Utility Commission of Texas ("PUCT") have approved this approach. The decreased expense in General Amortized Plant is due to the recognition of changes in lives, not the continued use of Vintaged Group Amortization, as shown in Appendix E-4. A summary of the existing and proposed annual accrual rates are listed below.

CenterPoint Houston
Current and Requested Depreciation Rates

	Description	Existing Accrual Rate	Proposed Accrual Rate
	Intangible Plant		
303	Intangible Plant 5 Year Life	20.00%	20.00%
303	Intangible Plant 7 Year Life	14.29%	14.29%
303	Intangible Plant 10 Year Life	10.00%	10.00%
303	Intangible Plant 15 Year Life	NA	6.67%
	Transmission Plant		
350	Land Rights	1.32%	1.31%
352	Structures and Improvements	1.65%	1.74%
353	Station Equipment	2.21%	2.05%
354	Towers and Fixtures	1.89%	2.15%
355	Poles and Fixtures	3.35%	2.47%
356	Overhead Conductors and Devices	3.34%	3.21%
357	Underground Conduit	1.64%	1.73%
358	Underground Conductors and Devices	2.45%	2.35%
359	Roads and Trails	1.71%	1.90%
	Distribution Plant (Excluding Meters)		
360	Land Rights	1.42%	1.55%
361	Structures and Improvements	1.62%	1.68%
362	Station Equipment	1.84%	2.14%
363	Battery Storage Equipment	NA	10.00%
364	Poles, Towers and Fixtures	3.64%	3.84%
365	Overhead Conductors and Devices	2.74%	3.24%
366	Underground Conduits	2.53%	1.96%
367	Underground Conductors and Devices	3.27%	3.34%
368	Line Transformers	3.07%	3.71%
369	Services	2.97%	3.76%
370	Meters	4.66%	3.32%
370.3	Smart Meters	14.29%	4.77%
373 & 374	Street Lighting and Signal Systems	3.46%	3.09%
	General Plant (Excluding General Plant Amortized)		
389	Land Rights	2.01%	1.80%

LIFE ANALYSIS

Account 303 Intangible Plant **(5 year, 7 year, 10 year, and 15 year)**

This account consists of intangible plant such as computer software. As utilities have become more dependent on technology, CenterPoint's investment in intangible plant has increased to $294.7 million at December 31, 2018. AMS related software is depreciated over a 7-year life. Other software is depreciated over a 5- or 10-year life depending on the purpose of the system. As a part of this depreciation study, we reviewed the current systems and planned future additions to that account. Company Subject Matter Experts ("SMEs) reviewed each project in service and divided the investment into different live groups based on the SME's understanding of the useful life for each individual software program: 5-year, 7-year, 10-year, and 15-year. All AMS assets installed during the AMS surcharge period have a 7-year life per PUC rule in Docket 35369.

(in use prior to 2014) being unable to provide sufficient information to perform the calculation.

For each plant account, the pro forma consisted of dividing projects between removal-only projects where all costs for the project are recorded as removal cost versus those projects where there is both replacement and removal cost activity. The book removal cost for replacement projects over the last four years was adjusted based on the new allocation percentage. This adjusted removal cost was recombined with the removal-only project removal costs and subsequently used in the Study's net salvage analysis. In most accounts, this resulted in a reduction in the negative net salvage percentage found in the net salvage analysis over the last 4 years as compared to the amount found on the Company's books. This reduction was taken into consideration when recommending the net salvage percentages in this Study.

Account 303 Intangible Plant **(0 % net salvage)**

intangible plant such as

This account consists of gross salvage and cost of removal for computer software. Currently, all software uses 0 percent net salvage. There is no expectation, either from the company or from Alliance's experience, that software systems would incur removal cost or receive any salvage at retirement. Based on Company experience and judgment, this study recommends 0 percent net salvage for all software accounts.

Exhibit 1

CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC
COMPARISON OF DEPRECIATION ACCRUAL INTANGIBLE PLANT
AT EXISTING VS PROPOSED RATES
AT DECEMBER 31, 2018

Account	Description	Original Cost at 12/31/18	Existing Accrual Rate	Annual Accrual at Existing Rates	Proposed Accrual Rate	Annual Accrual at Proposed Rates	Difference Proposed vs Existing
Intangible Plant Current Groupings							
E30302	Intangible Plant 5 YEAR	133,888,854.40	20.00%	26,777,770.88	20.00%		
E30302	Intangible Plant 7 YEAR	77,256,845.17	14.29%	11,040,003.17	14.29%		
E30302	Intangible Plant 10 YEAR	83,593,909.77	10.00%	8,359,390.98	10.00%		
E30302	Intangible Plant 15 YEAR	0.00	10.00%	0.00	6.67%		
Total Intangible Plant accrual rates		294,739,609.34		46,177,165.03			
Intangible Plant Proposed Groupings							
E30302	Intangible Plant 5 YEAR	74,410,485.77	20.00%		20.00%	14,882,097.15	
E30302	Intangible Plant 7 YEAR	104,341,336.40	14.29%		14.29%	14,910,376.97	
E30302	Intangible Plant 10 YEAR	96,273,816.47	10.00%		10.00%	9,627,381.65	
E30302	Intangible Plant 15 YEAR	19,713,970.67	10.00%		6.67%	1,314,921.84	
Total Intangible Plant accrual proposed rates		294,739,609.31				40,734,777.62	
	Difference Intangible Accrual						(5,442,387.42)
	Total Transmission Distribution and General			322,112,171.85		325,286,250.39	3,174,078.53
	Total Intangible and TDG			368,289,336.88		366,021,028.00	(2,268,308.88)

Final

CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC
COMPARISON OF APPROVED AND PROPOSED
DEPRECIATION PARAMETERS
AT DECEMBER 31, 2017

Asset Class	Description	Approved Life	Approved Curve	Approved Net Salvage %	Proposed Life	Proposed Curve	Proposed Net Salvage
Intangible Plant							
E30302	Intangible Plant 5 YEAR	5	SQ	0.00%	5	SQ	0.00%
E30302	Intangible Plant 7 YEAR	7	SQ	0.00%	7	SQ	0.00%
E30302	Intangible Plant 10 YEAR	10	SQ	0.00%	10	SQ	0.00%
E30302	Intangible Plant 15 YEAR	NA	NA	NA	15	SQ	0.00%
Transmission							
E35002	LAND RIGHTS	75	R1	0.00%	75	R1	0.00%
E35201	STRUCT. & IMPROVEMTS	60	R4	0.00%	60	R1.5	-5.00%
E35301	STATION EQUIPMENT	47	R1	-5.00%	53	R0.5	-10.00%
E35401	TOWERS & FIXTURES	60	R4	-15.00%	59	R2.5	-30.00%
E35501	POLES AND FIXTURES	40	R0.5	-35.00%	60	R0.5	-50.00%
E35601	O/H CONDUCT/DEVICES	50	R2	-74.00%	61	R1.5	-100.00%
E35701	UNDERGROUND CONDUIT	60	R5	0.00%	60	R5	-5.00%
E35801	U/G CONDUCT/DEVICES	40	R5	-2.00%	44	S6	-5.00%
E35901	ROADS AND TRAILS	58	S6	0.00%	52	S6	0.00%
Distribution							
E36002	LAND RIGHTS	55	R1	0.00%	60	R1	0.00%
E36101	STRUCT. & IMPROVEMTS	56	R4	-10.00%	60	R4	-10.00%
E36201	STATION EQUIPMENT	47	R1.5	0.00%	48	R1	-10.00%
E36301	BATTERY STORAGE EQUIPMENT	NA	NA	NA	10	SQ	0.00%
E36401	POLES,TOWERS,FIXTURE	35	R0.5	-45.00%	35	R0.5	-45.00%
E36501	O/H CONDUCT DEVICES	40	R0.5	-23.00%	38	R0.5	-30.00%
E36601	UNDERGROUND CONDUIT	37	S6	-20.00%	62	R2.5	-30.00%
E36701	U/G CONDUCT/DEVICES	31	R0.5	-13.00%	38	R0.5	-35.00%
E36801	LINE TRANSFORMERS	28	R1	-2.00%	28	R1	-15.00%
E36901	SERVICES	36	R0.5	-20.00%	46	R0.5	-60.00%
E37001	METERS	27	R2	0.00%	21	R3	0.00%
E37003	AMS METERS	7	SQ	0.00%	20	R2	0.00%
E37301	STREET LT/SIGNAL SYS	36	R1	-40.00%	39	R1	-30.00%
E37401	SECURITY LIGHTING	36	R1	-40.00%	39	R1	-30.00%
General							
E38902	LAND RIGHTS	60	R2	0.00%	55	R2	0.00%
E39001	STRUCT. & IMPROVEMTS	40	R2	0.00%	50	R4	-5.00%
E39101	OFFICE F/F	24	SQ	0.00%	24	SQ	0.00%
E39201	TRANSPORTATION EQUIP	12	R1.5	9.00%	13	L2	10.00%
E39301	STORES EQUIPMENT	19	SQ	0.00%	19	SQ	0.00%
E39401	TOOLS,SHOP,GAR EQUIP	18	SQ	0.00%	18	SQ	0.00%
E39501	LAB EQUIPMENT	25	SQ	0.00%	25	SQ	0.00%
E39601	POWER OPERATED EQUIP	21	L1.5	8.00%	18	L2	6.00%
E39701	MICROWAVE EQUIPMENT	24	SQ	0.00%	22	R2	2.00%
E39702	COMPUTER EQUIPMENT	6	SQ	0.00%	6	SQ	0.00%
E39801	MISC. EQUIPMENT	20	SQ	0.00%	20	SQ	0.00%

CERTIFICATE OF SERVICE

I hereby certify that on this 20th day of May 2019, a true and correct copy of the foregoing document was served on all parties of record in accordance with 16 Tex. Admin. Code § 22.74.