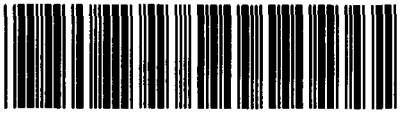

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PUC DOCKET NO. 49421

APPLICATION OF CENTERPOINT	**§**	**PUBLIC UTILITY COMMISSION**
ENERGY HOUSTON ELECTRIC, LLC	**§**	
FOR AUTHORITY TO CHANGE RATES	**§**	**OF TEXAS**

REBUTTAL TESTIMONY

OF

RANDAL M. PRYOR

ON BEHALF OF

CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC

June 2019

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LIST OF EXHIBITS

REBUTTAL TESTIMONY OF RANDAL M. PRYOR

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND POSITION.

A. My name is Randal M. Pryor and I am employed by CenterPoint Energy Houston Electric, LLC ("CenterPoint Houston" or the "Company") as Vice President of Distribution Operations.

Q. ARE YOU THE SAME RANDAL M. PRYOR THAT OFFERED DIRECT TESTIMONY IN THIS PROCEEDING?

A. I am.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

My rebuttal testimony responds to certain intervenor and Public Utility Commission of Texas ("Commission") Staff positions that seek disallowances related to distribution capital projects or other investment and reasonable and necessary operations and maintenance ("O&M") expenses. Specifically, I rebut the direct testimony of City of Houston/Houston Coalition of Cities ("COH/HCC") witness Scott Norwood, and his suggested disallowance related to the Company's Underground Cable Assessment and Life Extension Program ("Underground Cable Life Extension Program"). I also explain that Mr. Norwood's proposal to normalize a large portion of the Company's test year O&M expense should be rejected because the test year expense requested by the Company is representative of expectations for O&M expense moving forward. In addition, I rebut Gulf Coast Coalition of Cities ("GCCC") witness Karl Nalepa's challenges to four distribution capital projects and the Company's test year vegetation management expenses. I also address Staff witness Blake Ianni's vegetation management arguments.

Q. HAVE YOU INCLUDED ANY EXHIBITS WITH YOUR TESTIMONY?

A. Yes. I have prepared or supervised the preparation of the exhibits listed in the table of contents.

II. DESCRIPTION OF INTERVENOR ARGUMENTS

Q. DO OTHER COMPANY WITNESSES ALSO RESPOND TO THE POSITIONS TAKEN BY MR. NORWOOD AND MR. NALEPA?

A. Yes. Mr. Norwood proposes three adjustments to the Company's plant in service to remove costs associated with the Company's Underground Cable Life Extension Program, Major Underground Rehabilitation Program, and his mistaken belief that the Company has included "indirect corporate costs" in distribution projects. While I address his position specific to CenterPoint Houston's Underground Cable Life Extension Program, Company witness Martin Narendorf addresses Mr. Norwood's claim regarding the Major Underground Rehabilitation Program, and Company witnesses Michelle Townsend and Kristi Colvin addresses his proposal related to "indirect corporate costs." Mr. Norwood also proposes to normalize a large portion of the Company's test year O&M expense. I address the reasonableness and necessity of the Company's O&M request and explain that it is consistent with the Company's expectations for O&M expense moving forward. Similarly, Mr. Nalepa proposes five adjustments related capital projects. Ms. Colvin addresses why the capital projects are properly booked to plant in service based on the Federal Energy Regulatory Commission ("FERC") Uniform System of Accounts ("USOA"). Ms. Colvin also addresses Mr. Ianni's proposal to disallow the land costs of properties that do not yet contain energized electric facilities. I address the nature of work performed in Mr. Nalepa's first proposed capital adjustment for

projects ABIZ, and Mr. Narendorf addresses projects HLP/00/0011 and HLP/00/0012.

Q. SHOULD ANY OF THE INTERVENOR POSITIONS DESCRIBED ABOVE BE ADOPTED BY THE COMMISSION?

A. No. As my testimony discusses below, each of the capital projects challenged by Mr. Norwood and Mr. Nalepa was prudently constructed and managed. These projects are necessary for system safety and reliability and, as such, the Company should be allowed to recover its costs associated with the investment. As to challenges related to the Company's O&M expense request, neither Mr. Norwood nor Mr. Nalepa challenges the reasonableness of any Company activities or operations or the Company's need to perform these activities to provide safe and reliable service. Instead, both Mr. Norwood and Mr. Nalepa propose to normalize the Company's O&M expense. The Company explained in its direct testimony, through discovery, and I will again explain below, the primary drivers of increased operations and maintenance expense.

III. RESPONSE TO INTERVENOR CAPITAL PROJECT ARGUMENTS

A. CenterPoint Houston's Asset Investment Strategy ("AIS") Tool

Q. HAVE YOU REVIEWED MR. NORWOOD'S CRITICISM OF THE AIS TOOL AND PROPOSAL TO REMOVE CAPITAL INVESTMENT ASSOCIATED WITH THE COMPANY'S UNDERGROUND CABLE LIFE EXTENSION PROGRAM AND MAJOR UNDERGROUND REHABILITATION PROGRAM?

A. Yes. As explained in Mr. Narendorf's rebuttal testimony, Mr. Norwood appears to misunderstand how the Company uses its AIS tool. He also fails to recognize the substantial benefits provided by these programs.

B. Capital Prudence

Q. MR NORWOOD CLAIMS THAT CENTERPOINT HOUSTON HAS NOT PROVIDED SUFFICIENT DOCUMENTATION TO JUSTIFY RECOVERY OF THE INVESTMENT ASSOCIATED WITH THE UNDERGROUND CABLE LIFE EXTENSION PROGRAM.[1] DO YOU AGREE?

A. No, I do not. I provided a detailed discussion in my direct testimony, pages 35-37, regarding the value and importance of the Company's Underground Cable Life Extension program. In addition, it is worth noting that the City of Houston has intervened, and Mr. Norwood has filed testimony, in each of the Company's Distribution Cost Recovery Factor ("DCRF") proceedings. The Company's Underground Cable Life Extension Program was presented for recovery in its first DCRF in Docket No. 44572. In Docket No. 44572, extensive discovery regarding the program was conducted by intervening parties, and the Company filed detailed

[1] Direct Testimony of Scott Norwood at 14.

testimony explaining the program. Thus, the City of Houston has been aware of the program and its benefits since at least 2015.

Q. WHAT FACTORS LED CENTERPOINT HOUSTON TO IMPLEMENT THE UNDERGROUND CABLE ASSESSMENT PROGRAM?

A. Unlike other distribution facilities, the underground cable system is unique and does not lend itself to routine testing and maintenance because of the inability to visually inspect the cables and associated equipment which are installed below ground. As a result, the Company's approach prior to the Underground Cable Life Extension Program was reactive in nature. What I mean by this is that prior to the program, CenterPoint Houston could not identify potential underground cable failure issues until after the cable had faulted and customers had experienced a service interruption. As a result of the cable fault, crews would be dispatched and would temporarily isolate the faulted span, if possible, to restore the customers' service. Most often, a follow-up order was required to replace the entirety of the damaged span and return the underground loop to its normal configuration. The Underground Cable Life Extension Program offers the opportunity to be proactive rather than reactive in identifying underground cable failure issues.

Q. WHY DOES CENTERPOINT HOUSTON BELIEVE IT IS IMPORTANT TO IDENTIFY POTENTIAL UNDERGROUND CABLE FAILURES BEFORE THEY OCCUR?

A. CenterPoint Houston has over 20,669 underground residential distribution ("URD") loops comprised of over 9,947 miles of cable and associated distribution equipment. Pad-mounted transformers, terminal poles, terminators, elbows and other equipment are additional components of the URD system. Currently, 36% of

these loops have cable in excess of 35 years of age, and these older loops cause a disproportionately higher number of failures relative to all URD outages. In short, the URD cables over 35 years of age have the highest probability of failure within CenterPoint Houston's service territory.

Since 7,477 loops have cable that is currently over 35 years in age, CenterPoint Houston could not continue to simply replace 35 loops per year and address all of the probable failures and aging URD infrastructure. As a result, CenterPoint Houston began piloting the cable assessment program in 2012. Positive results followed, indicated by the fact that CenterPoint Houston can assess and address 636 loops annually by utilizing the Underground Cable Life Extension Program.

Q. HAS THE UNDERGROUND CABLE LIFE EXTENSION PROGRAM CHANGED THE COMPANY'S APPROACH TOWARD ADDRESSING UNDERGROUND CABLE ISSUES?

A. Yes. This program takes a proactive approach toward identifying potential failures before they occur in underground cable that is nearing the end of its expected original life. Where before activities were driven by specific cable failures and singularly addressed, under this program the Company performs a one-time assessment of its loops that are greater than 35 years of age and takes whatever actions are necessary to rehabilitate it to manufacturer specifications.

Q. IS THE COMPANY'S DECISION TO UTILIZE ITS UNDERGROUND CABLE LIFE EXTENSION PROGRAM UNIQUE TO CENTERPOINT HOUSTON?

A. No. For years electric utilities have been concerned with the reliability issues surrounding aging underground cables and many have adopted proactive programs to rehabilitate underground cable before it fails. It is my understanding that the IMCORP system is utilized by several other utilities, including Duke Energy, Kansas City Power and Light, Southern California Edison and Public Service of New Mexico.

Q. WHAT BENEFIT DO CUSTOMERS RECEIVE FROM THE UNDERGROUND CABLE LIFE EXTENSION PROGRAM?

A. The benefit provided by the program is the life extension of the cable system. Once spans have been assessed and the appropriate corrective actions have been completed, all of the spans within the entire loop are guaranteed to perform to the original manufacturer's standards and thereby, serve to extend the useful life of the cable system by curing or replacing cables near or in imminent risk of failure. Importantly, the Company's contractor, IMCORP, provides a 15-year life extension guarantee for unjacketed or XLPE cable or a 20-year life extension guarantee for jacketed or TRXLPE cable. This guarantee applies to all underground cable subject to the program.

Q. MR. NORWOOD SUGGESTS THAT IN ORDER TO JUSTIFY RECOVERY OF THE COSTS ASSOCIATED WITH THE UNDERGROUND CABLE LIFE EXTENSION PROGRAM THE COMPANY MUST DEMONSTRATE A MATERIAL IMPROVEMENT IN ITS EXISTING LEVEL OF SERVICE RELIABILITY. DO YOU AGREE?

A. No. It is not possible to calculate the direct benefit to SAIDI for customer reliability of projects or programs that are proactive and predictive in nature. Proactive work resolves a problem before the problem occurs – the URD loop doesn't fail – therefore, no service interruption from which to calculate reliability metrics such as SAIDI has occurred, and no customers have unnecessarily experienced outages due to equipment that has been allowed to "run to failure." However, there is certainly a positive and direct reliability impact for these and similar proactive programs, such as proactive pole replacement, it just cannot be *directly* calculated. The Company for some time now has committed to understanding its system and making appropriate proactive replacements. The Company should not forgo proactive inspection and replacement of equipment simply because it can't "directly" calculate the SAIDI impact.

Q. MR NORWOOD ALSO CLAIMS THAT CENTERPOINT HOUSTON HAS NOT JUSTIFIED ITS UNDERGROUND CABLE LIFE EXTENSION PROGRAM AND THAT RELIABILITY BENEFITS OF THE PROGRAMS WOULD NOT BE NOTICED BY CUSTOMERS. DO YOU AGREE?

A. No. My direct testimony, at pages 35-37, explains the value and importance of the program. Customers receive enhanced reliability because the program allows for the proactive replacement of cable and other underground equipment, especially

since outages of this type can result in outage times for customers ranging from three to five hours. The proactive outage that is taken in the course of testing the URD cable is a "planned" outage with a shorter duration, and the customer is notified.

Q. IS THE COMPANY'S UNDERGROUND CABLE LIFE EXTENSION PROGRAM REASONABLE AND NECESSARY?

A. Yes. As I've discussed, past loop failures have indicated that URD loops over 35 years old have the highest probability of failure within CenterPoint Houston's distribution system. As part of the program activities undertaken, CenterPoint Houston has been able to assess and extend the life of more than 10 times as many loops as it had been replacing annually, while significantly reducing costs and improving system reliability through innovative and affordable means. In addition, once spans have been assessed and the appropriate corrective actions have been completed, all spans within the entire loop are guaranteed to perform to the original manufacturer's standards and the Company's contractor, IMCORP, provides a 15-year or 20-year life extension guarantee for the Company's cable system on all assessed loops. In short, the Cable Life Extension Program is systematically reducing the backlog of aging 35-year-old cable and related systems. In addition, by identifying the risk of potential failures, CenterPoint Houston can make wise and prudent investments and ultimately better serve its customers by preventing future outages where they are most likely.

C. Capitalized Assets

Q. ON PAGE 36 OF HIS TESTIMONY, MR. NALEPA STATES THAT THE CAPITAL PROJECTS ASSOCIATED WITH WBS ABIZ (PROACTIVE ROUTINE CAPITAL REPLACEMENTS TO THE OVERHEAD DISTRIBUTION SYSTEM) SHOULD BE EXPENSED RATHER THAN CAPITALIZED BECAUSE THESE PROJECTS ARE ROUTINE OR CORRECTIVE IN NATURE, AND ARE INTENDED TO MAINTAIN A CAPITAL ASSET. IS THIS APPROPRIATE?

A. No. Mr. Nalepa fails to mention that the project descriptions included in the 27 voluminous WP-RMP-2 files to my direct testimony clearly describe the work performed in these projects to include "replacement of equipment and or structures," all of which are capital-related activities. Moreover, as Ms. Colvin notes in her rebuttal testimony, the Company is required by the FERC USOA to account for these projects as capital investment. In addition, Mr. Nalepa fails to acknowledge that the Company, as part of discovery, was willing to make available each of the work orders on which the capital project descriptions are based. Nevertheless, Mr. Nalepa simply states that "these projects are routine or corrective in nature, and are intended to maintain a capital asset"[2] which suggests that he did not review the work orders that contain additional information that indicate the nature of the projects.

[2] Direct Testimony of Karl Nalepa at 36.

Q. SHOULD LANGUAGE IN THE PROJECT DESCRIPTION BE A REASON TO DISALLOW PROPERLY RECORDED CAPITAL INVESTMENT?

A. No. The language used for the project descriptions is intended to provide a general description of the work performed – no more, no less. The project description is not an indicator used to determine if a project is treated as capital or O&M. Whether the project should be capitalized is driven by the FERC USOA, which, as Ms. Colvin testifies, the Company is required to follow. Mr. Nalepa does not dispute that the projects at issue are required to be capitalized by the FERC USOA. In fact, his testimony ignores those instructions all together.

Q. ARE THERE SEPARATE ABIZ WBS ACCOUNTS FOR CAPITAL AND EXPENSE?

A. Yes. There are two AB1Z WBS accounts, Capital ABIZ and O&M ABIZ. As a precaution to ensure that work orders settle to the correct WBS, the system verifies whether capital materials are installed and/or removed. If a capital order is created, but capital items are not used or removed, the system will reject the order and require the costs to be transferred to an expense order.

Q. CAN YOU PROVIDE AN EXAMPLE OF HOW WORK ORDER INFORMATION IS USED TO VERIFY THE INCLUSION OF A PROJECT FOR CAPITAL RECOVERY IN THE DCRF FILING?

A. Yes. While the project description may superficially raise a question of whether a specific project is a capital project, a review of the associated work orders confirms the capital activity. For example, for Project AB1C, work order 83307305 (contained in my direct testimony as WP-RMP-2) captured costs for removing a stepdown bank and converting everything behind it to 35kV. The poles, wire, and

transformers are retirement units that qualify for capital treatment. Exhibit R-RMP-3 shows the relevant pages from work order 83307305 demonstrating that the wire, transformers and poles were replaced as part of this work. This work order is only one of many contained in Project AB1C. In each instance, the Company confirmed capital activity by conducting a review of each of the Company's work orders and projects to ensure that the costs for the projects identified on WP-RMP-2 were eligible for recovery through the DCRF, rather than simply relying on the description language for the project.

Q. DID MR. NALEPA CONDUCT A REVIEW OF THE COMPANY'S WORK ORDERS AND INVOICES TO SUPPORT HIS CLAIM?

A. No. Despite the Company's standing offer to review detailed work orders with Intervenors, Mr. Nalepa failed to accept the Company's offer to review the details of the work orders at issue. Instead, Mr. Nalepa recommends arbitrary disallowances of project costs that he alleges *might* include O&M.

Q. HAS THE COMPANY INCLUDED ANY "CAPITALIZED O&M" COSTS IN THIS FILING?

A. No. The Company does not capitalize O&M costs. A project is either capital *or* O&M, not both. As Ms. Colvin explained in her direct testimony and explains again in her rebuttal testimony, the Company's on-going internal processes and procedures ensure that projects are properly capitalized or expensed according to the Company's capitalization policy, which provide for the cost of the repair and/or replacement to be capitalized only when the project encompasses the repair and/or replacement of the retirement unit in its entirety.

Q. IS THE PROJECT INFORMATION PROVIDED BY THE COMPANY IN THIS CASE CONSISTENT WITH THAT PROVIDED IN OTHER RATE SETTING PROCEEDINGS?

A. Yes. The information provided in the Company's filing and supporting workpapers identifies every single capital project reflected on the Company's books and records during the time period at issue. Based on this information, the Company analyzed each capital project to determine its eligibility for inclusion in plant and service. Those project costs are summarized in the Company's schedules and workpapers and the individual costs are included in individual work orders and invoices related to each capital project. The Company's preparation of this filing and the information produced in support of the filing are no different than the information produced to support the Company's DCRF filings and its interim TCOS proceedings.

Q. SHOULD ANY OF MR. NORWOOD'S OR MR. NALEPA'S PROPOSED CAPITAL DISALLOWANCES BE ADOPTED BY THE COMMISSION?

A. No. My testimony and the testimonies of Mr. Narendorf demonstrate that each of the challenged capital projects was prudently and necessarily incurred. Ms. Colvin and Ms. Townsend further confirm that the expenses were properly recorded as capital costs and that no indirect corporate costs were included in the Company's DCRF filings.

IV. RESPONSE TO INTERVENOR AND STAFF O&M ADJUSTMENT ARGUMENTS

Q. DO YOU HAVE ANY GENERAL RESPONSES TO INTERVENOR AND STAFF ARGUMENTS THAT THE COMPANY'S TEST YEAR O&M EXPENSES ARE TOO HIGH?

A. Yes. As a general matter, Mr. Norwood's proposal to normalize a large portion of the Company's test year O&M expense, as well as Mr. Nalepa's and Mr. Ianni's proposal to adopt a multi-year average expense for vegetation management, should be rejected because it does not represent the level of O&M expense required to operate and maintain the Company's system and it is not representative of the Company's O&M expense needs moving forward. As noted in my direct testimony, the Company's annual O&M expense has been increasing. This increase has been driven by customer growth and other pressures that demonstrate that its test year level of expense is representative of CenterPoint Houston's on-going costs.

Q. IN ADDITION TO GROWTH, WHAT OTHER FACTORS ARE IMPACTING CENTERPOINT HOUSTON'S ONGOING O&M EXPENSE?

A. One example is labor costs. As referenced in my direct testimony, there is a growing industry shortage of electric utility line skills, due to the aging work force and increased electric utility work in Texas and across the United States. A more recent example of this shortage of resources is in response to the work associated with the wild fires in California from last year. Utilities have been aggressively recruiting union line skilled talent from across the nation in order to support a multi-year initiative to inspect and upgrade their infrastructure. They are offering

compensation packages above the local and national market in an effort to attract a significant number of employees with this skill. As a result, utilities across the country, including CenterPoint Houston, are experiencing a loss of internal and contractor employees to this recruitment. Just for the first half of 2019, CenterPoint Houston has seen a loss of approximately 100 line skills from our internal and contractor resources to date in 2019. The Company is concerned that this type of disruption will continue to impact the availability of line skills and impact the cost within the labor market.

Q. WHAT CUSTOMER GROWTH HAS THE COMPANY SEEN SINCE DOCKET NO. 38339?

A. As stated in my direct testimony, when the growth of the Houston metro area is considered for just the past seven years, it ranks No. 4 in the nation.[3] CenterPoint Houston serves much of this fast-growing area. The population in and around Houston grew from approximately 5.9 million in 2010 to nearly 6.9 million in 2017, an increase of more than 16 percent. Among the Houston area's 10 counties, two—Harris and Fort Bend— ranked among the top 15 nationwide for largest population gains in 2017.[4] As a result, the Company has experienced the addition of 359,525 new residential customers and 41,991 new commercial customers from January 1, 2010 through December 31, 2018.

From an infrastructure perspective, over the past four years, overhead distribution pole miles (feeder-main and laterals) have increased an average of 171

[3] Source: https://www.bizjournals.com/houston/news/2018/03/23/houstons-population-keeps-popping-but-growth-is.html.
[4] *Id.*

miles per year, while URD circuit miles have increased an average of 257 miles per year. As Company witness Dale Bodden's direct testimony also notes, necessary infrastructure to support economic growth within the City of Houston and surrounding areas has resulted in the need to build or install approximately 221 new substation feeder positions to accommodate new distribution feeders, 55 new substation transformers, size upgrades for 12 substation transformers, and 6 new distribution substations. Naturally, this growth has required the Company to spend more on a day-to-day basis in certain O&M expense categories.

Q. REGARDING O&M EXPENDITURES, MR. NORWOOD ARGUES THAT THE CENTERPOINT HOUSTON CUSTOMER AND SALES GROWTH SINCE 2010 HAS BEEN JUST OVER 2.1% PER YEAR AND THAT IT DOES NOT JUSTIFY A 4.6% INCREASE IN O&M EXPENSES PER YEAR SINCE 2010.[5] IS MR. NORWOOD'S COMPARISON OF CUSTOMER AND SALES GROWTH AND O&M EXPENSE APPROPRIATE?

A. No. Along with customer growth, the Company has experienced system growth, which includes more distribution lines and more transformers. Also, growth in the Houston economy and competition in the local job market has produced a corresponding impact on the Company's labor costs. The Company has seen an increase in labor costs for both internal labor and external contractors. In fact, the National Compensation Survey demonstrates that for the occupational group Trade, Transportation and Utilities, total compensation for workers changed 2.4%, 2.4%, 2.0%, 2.7%, 2.6%, 2.0%, 2.8%, 3.0%, and 3.4% for the 12 months ending

[5] Direct Testimony of Scott Norwood at 7-8.

December for 2010 through 2018, respectively, for an average of 2.6% per year. This represents a total increase of 4.7% (2.1% customer count and 2.6% labor costs), not including the additional distribution lines and additional transformers, and compares favorably to the 4.6% increase in O&M per year for CenterPoint Houston.

This survey is available at https://www.bls.gov/web/eci/echistrynaics.pdf.

Q. CAN YOU SUMMARIZE WHY CENTERPOINT HOUSTON'S O&M COSTS ARE INCREASING?

A. Yes. In summary, CenterPoint Houston's O&M costs are increasing due to customer growth, increased circuit miles (both overhead and underground circuits), increased number of transformers, and increasing labor costs, as well as pressure from outside sources for skilled linemen.

Q. MR. NORWOOD ARGUES THAT THE TEST YEAR LEVEL OF EXPENSE IN ACCOUNTS 580, 588, 593, AND 594 ARE NOT REASONABLE WHEN COMPARED TO PRIOR YEARS. HOW DO YOU RESPOND?

A. All suggestions by Mr. Norwood that the 2018 expenses for various FERC accounts be based on 2017 or the average of 2014-2017 are inappropriate. As Ms. Colvin testifies, the Company's request is based on actual test year expenses – which is the standard used by the Commission to set the Company's cost of service. The test year in this case is the 12 months ended December 31, 2018, and it serves as the most appropriate and reasonable measure of the Company's O&M expenses. This alone provides a basis to reject Mr. Norwood's proposal to establish the Company's O&M expense based on a multi-year average. Importantly, Mr. Norwood does not dispute the need for or reasonableness of any of the Company's test year O&M

activities, including those reflected in Accounts 580, 588, 593, and 594. He simply believes they are too high as compared to prior years. His conclusion, however, ignores the facts that are driving these costs and the reality that these costs are representative of on-going activities and the expense associated with those activities. Mr. Narendorf and Ms. Townsend address the reasonableness of the O&M expense in the other FERC accounts shown in Mr. Norwood's Table 3.

Q. PLEASE DESCRIBE THE COSTS CAPTURED IN THE O&M ACCOUNTS 580, 588, 593, and 594.

A. Account 580 is for Distribution Operations Supervision and Engineering. This account includes O&M costs associated with operations supervision, engineering and technology. This includes service center operational supervisors such as directors, managers, and support staff; costs associated with engineering; and technology/Control System related costs that are not capital. The technology costs expenses include costs related to improvements, upgrades and maintenance of system equipment and software, as well as cyber security enhancements. Account 588 is for Miscellaneous Distribution Expenses. This account includes costs associated with environmental, training, meetings, facilities maintenance, and distribution software maintenance. Account 593 is for Distribution Maintenance of Overhead Lines-Primary. This account includes O&M costs associated with the maintenance of OH lines, including Vegetation Management, Field Corrective Maintenance, Guy Wire Assessment and Remediation, Pole Inspections, and OH Restoration. Account 594 is for Distribution Maintenance of Underground Lines-Primary. This account includes O&M costs associated with the maintenance of the underground portions of our system, including three phase major underground

preventable maintenance inspections and underground trouble restoration.

Q. PLEASE EXPLAIN WHAT DROVE 2018 COSTS IN ACCOUNTS 580, 588, 593, AND 594 TO BE HIGHER THAN IN PRIOR YEARS.

A. As explained in GCCC RFI No. 2-20, the increase in the amounts recorded to Account 580 in 2018 was primarily due to increases in technology costs. The majority of these cost increases were related to improvements, upgrades and maintenance of system equipment and software, but also included additional costs for cyber security enhancements. CenterPoint Houston expects to continue to incur costs upgrading and maintaining the technology systems in the future and that costs for cyber security will continue to increase.

As explained in GCCC RFI No. 2-24, the increase in the amounts recorded to Account 588 in 2018 is primarily due to environmental costs for disposal and clean-up of transformers. As our system ages, CenterPoint Houston expects this cost to continue to increase. Account 588 also saw an increase in 2018 due to Advanced Distribution Management System (ADMS) software maintenance. A new software maintenance agreement went into effect in 2018 and the cost for this agreement is expected to continue. Costs to maintain and repair Heating Ventilation, Air Conditioning (HVAC) equipment at service centers also contributed to the increased amounts in Account 588.

As explained in GCCC RFI No. 2-25, the increase in the amounts recorded to Account 593 in 2018 is primarily due to vegetation management associated with the maintenance of overhead lines. Contractor costs to perform vegetation management have increased significantly over recent years. In addition to vegetation management, costs for rotten pole replacement increased in 2018.

As explained in GCCC RFI No. 2-26, the increase in the amounts recorded to Account 594 in 2018 is due to contractor work related to our preventative maintenance inspection program for single source three phase pad mounted transformer installations utilized for major underground installations. This work was not performed in 2017 because of resource constraints, however, the program was highly successful in 2018 and is expected to continue. It was deemed successful because it identified conditions that required immediate repairs that avoided outages and possible equipment damage, and provided valuable data that allowed other corrective repairs.

Q. DOES CENTERPOINT HOUSTON MONITOR CHANGES IN COMPANY COSTS, INCLUDING THOSE BOOKED TO ACCOUNTS 580, 588, 593, AND 594?

A. Yes. While Mr. Norwood complains that the Company does not perform O&M variance analysis by FERC account, the Company does maintain internal management reporting that is performed on a GAAP basis and employs various controls and processes to ensure that management has proper ongoing control over O&M expenses. I discuss these cost controls and processes in my direct testimony.

Q. ARE THE TEST YEAR COSTS BOOKED TO ACCOUNTS 580, 588, 593, AND 594 REASONABLE AND NECESSARY?

A. Yes. These costs are reflective of reasonable and necessary activities performed by Distribution Operations Division for CenterPoint Houston during the test year and are reflected of the level of activities that will continued to be provided in the future based on the existing organizational structure.

Q. MR. NORWOOD ALSO ARGUES THAT GIVEN CENTERPOINT HOUSTON'S INVESTMENTS TO THE GRID, THE COMPANY SHOULD BE HELD ACCOUNTABLE FOR EXPLAINING PROMISED O&M SAVINGS HAVE NOT MATERIALIZED. HOW DO YOU RESPOND TO MR. NORWOOD'S ARGUMENT?

A. First, Mr. Norwood offers no support for his contention that the Company has "promised O&M savings." Second, Mr. Norwood disregards the primary factor driving the need for capital investment in the Company's system, which is growth. The Company's direct testimony is clear that CenterPoint Houston's large capital investments have been focused on new distribution and transmission lines and new substations, both of which were necessary for load growth. The purpose of these investments was to serve new load, which has no correlation to "O&M savings" as Mr. Norwood suggests.

Q. MR. NALEPA ARGUES THAT THE COMPANY'S VEGETATION MANAGEMENT EXPENSE SHOULD BE SET AT $28.126 MILLION, WHICH IS THE AVERAGE OF 2015-2017.[6] MR. IANNI PROPOSES TO SET VEGETATION MANAGEMENT EXPENSE AT $31.6 MILLION BASED ON A THREE-YEAR AVERAGE (2016-2018).[7] ARE EITHER PROPOSALS APPROPRIATE?

A. No. The vegetation management expense requested by the Company is the amount that the Company actually spent during the test year and vegetation management costs and expenditures are continuing to go up as the Company's service territory grows.

[6] Direct Testimony of Karl Nalepa at 7-11.
[7] Direct Testimony of Blake Ianni at 11.

Q. WHY ARE THE COMPANY'S EXPENDITURES FOR DISTRIBUTION VEGETATION MANAGEMENT INCREASING?

A. CenterPoint Houston experienced a 50% increase in contractor bid prices on a per mile basis from 2014 to 2017 for proactive tree trimming. Additionally, over the past four years, overhead pole miles (feeder-main and laterals) have increased an average of 171 miles per year. With more miles of distribution line to maintain, the Company's costs associated with tree trimming have increased.

Q. HAS CENTERPOINT HOUSTON SPENT MORE ON REACTIVE TREE TRIMMING?

A. Yes. The Company increased the spend every year for the past four years on reactive tree trimming to address customer outages by spot tree trimming between proactive cycles. Vegetation growth driven by an increase in rainfall for the past several years has also increased the Company's required tree trimming activities.

Q. HAS THE COMPANY TAKE STEPS TO CONTROL THE COST OF TREE TRIMMING IN LIGHT OF THE INCREASING CONTRACTOR COSTS?

A. Yes. As noted in my direct testimony, in 2017, the Company divided its system into seven regions to better distribute the work and to provide an opportunity for the contractors to bid on a larger scope of tree trimming work in order to make the required work more attractive to bidding contractors. Previously, bids were awarded on a circuit by circuit basis. Under the new approach, all work for a region was packaged together in an effort to reduce pricing based on the scale of the work to be performed.

Based on the bid prices for the circuits in each region, the seven regions were awarded to four contractors. While the Company's cost per mile did not

decrease, the strategy was effective in halting the annual increase in costs. In addition, by bidding and awarding a full year of work earlier in the year, the Company afforded contractors the opportunity to better plan their staffing resources. Moreover, in a further effort to make this work even more attractive to contractors in 2018, CenterPoint Houston divided the system into eight regions, which were awarded to four contractors.

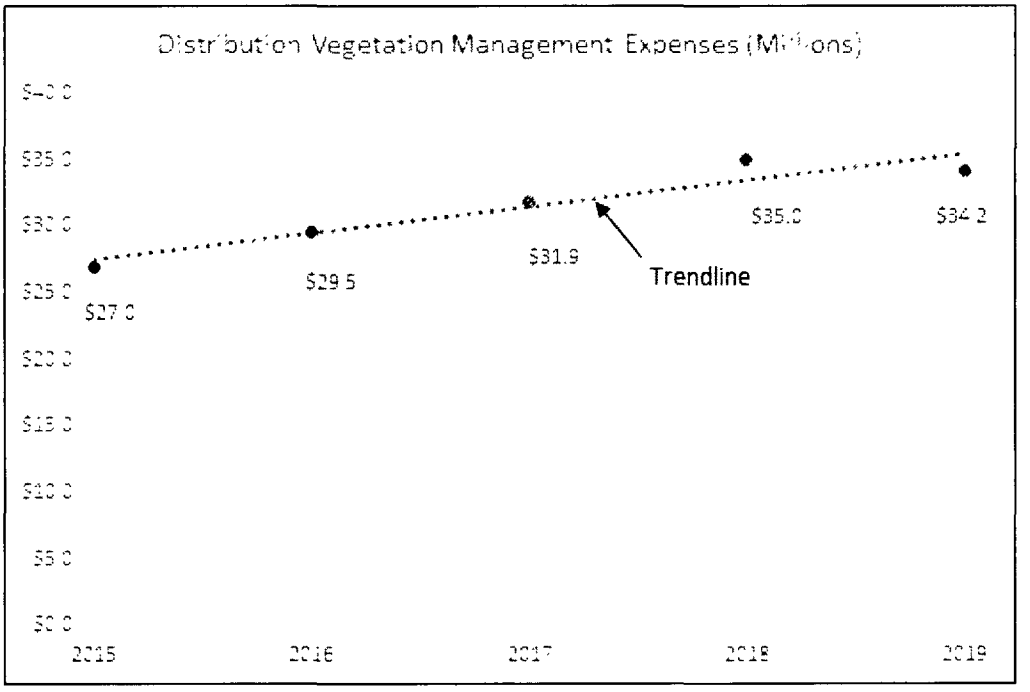
Q. DO EXPENDITURES FOR TREE TRIMMING RESULT IN BENEFITS FOR THE DISTRIBUTION SYSTEM?

A. Yes. Proactive tree trimming, reactive tree trimming and hazard tree removal will improve day-to-day reliability, as well as reduce the impact of extreme storms.

Q. DOES THE COMPANY ANTICIPATE THAT VEGETATION MANAGEMENT EXPENDITURES FOR THE DISTRIBUTION SYSTEM WILL CONTINUE TO INCREASE IN THE FUTURE?

A. Yes. The amount of proactive tree trimming work that has already been released to contractors for 2019 ($27.1 million) is very similar to the total amount spent for proactive tree trimming in 2018 ($28.0 million). Additional year end work could still be released. If the projected expenditures for reactive tree trimming and hazard tree work are included, the projected 2019 total for distribution system management is $34.033 million. The budgeted amount for 2019 is $34.23 million was provided in COH RFI No. 8-13, which is included with my testimony as Exhibit R-RMP-01. This is very similar to the total for 2018, which is $35.022 million. Moreover, as can be seen in the graph below, vegetation management costs have been trending upward.

Figure RMP-1



Further, while vegetation management expenses for 2017 were $27.90 million, it is important to recognize that 1.5 months of vegetation management activities were lost due to Hurricane Harvey. If Hurricane Harvey had not occurred, the expected level of distribution vegetation management expense would have been $31.89 million for 2017.

Q. HAVE YOU IDENTIFIED ANY ADDITIONAL ISSUES WITH MR. NORWOOD'S AND MR. NALEPA'S PROPOSAL TO NORMALIZE VEGETATION MANAGEMENT COSTS?

A. Yes. Both Mr. Nalepa's and Mr. Ianni's cost averaging proposal understates the costs CenterPoint Houston must incur to support its vegetation management program. Furthermore, the circuit miles trimmed in 2018 is comparable to the miles trimmed in three prior years: 2011 – 5,606 miles, 2013 – 5,074 miles, and 2014 – 5,139 miles. See COH RFI No. 8-04, which is included with my testimony as Exhibit R-RMP-02.

Q. DOES MR. NALEPA OR MR. IANNI SUGGEST THAT THE COMPANY SHOULD BE CONDUCTING FEWER VEGETATION MANAGEMENT ACTIVITIES?

A. No. They do not question the reasonableness or necessity of the Company's need to properly maintain and continue its current vegetation management program.

Q. SHOULD THE COMMISSION ADOPT ANY OF THE O&M PROPOSALS OFFERED BY MR. NORWOOD, MR. NALEPA, OR MR. IANNI?

A. No. These proposals are inconsistent with the Commission's standard for using test year costs to set rates and the proposals ignore the actual driving factors behind the Company's cost of service. Most importantly, they unreasonably understate the actual O&M expense required to operate the Company's transmission and distribution system.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes, it does.

STATE OF Texas §
§
COUNTY OF Harris §

AFFIDAVIT OF RANDAL M. PRYOR

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

1. "My name is Randal M. Pryor. I am of sound mind and capable of making this affidavit. The facts stated herein are true and correct based upon my personal knowledge.

2. I have prepared the foregoing Rebuttal Testimony and the information contained in this document is true and correct to the best of my knowledge."

Further affiant sayeth not.

Randal M. Pryor

SUBSCRIBED AND SWORN TO BEFORE ME on this 18th day of June, 2019.

Notary Public in and for the State of Texas

ALICE S HART
Notary Public, State of Texas
My Commission Expires 07-17-2019

My commission expires: 07/17/2019

Exhibit R-RMP-1

CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC
2019 CEHE RATE CASE
DOCKET 49421-SOAH DOCKET NO. 473-19-3864
CITY OF HOUSTON
REQUEST NO.: COH08-13

QUESTION:
Vegetation Management:

Please provide CenterPoint's vegetation management budget for 2019 and 2020 in the format of the table on WP RMP-1, page 2 of 3, separately identifying amounts for transmission and distribution.

ANSWER:
See attachment COH08-13 Costs for 2019 and 2020 (Confidential).xlsx for the vegetation management costs for 2019 in the format of the table on WP RMP-1, page 2 of 3. Consistent with a clarification received by counsel for the City of Houston, this response includes data only for distribution. As stated in COH01-27, the Company has not conducted an analysis to forecast future 2020 expenditures related to tree-trimming.

The attachment is confidential and is being provided pursuant to the Protective Order issued in Docket No. 49421.

SPONSOR:
Randal Pryor (Randal Pryor)

Responsive Documents:
COH08-13 Costs for 2019 and 2020 (confidential).xlsx

COH08-13 Costs for 2019 and 2020 (Confidential).xlsx

Dollars in millions

Program Description	2019	2020
Proactive Tree Trimming*	**27.10**	No Forecast
Hazard Tree Removal **	**0.75**	No Forecast
Unplanned Hazard Tree Removal	0 33	No Forecast
Proactive Hazard Tree Removal	0 42	No Forecast
Subtotal for Proactive Trimming & Hazard Trees	**27.85**	No Forecast
Reactive Tree Trimming	**6.38**	No Forecast
Total Proactive Trimming, Hazard Trees & Reactive	**34.23**	No Forecast

* Proactive Tree Trimming includes circuit trim, beneficial removals in easement & hazard tree removals that are found in the course of the circuit trim.

** Hazard Tree Removal includes proactive hazard tree removal and unplanned hazard tree removal not associated with circuit trim.

Exhibit R-RMP-2

CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC
2019 CEHE RATE CASE
DOCKET 49421-SOAH DOCKET NO. 473-19-3864
CITY OF HOUSTON
REQUEST NO.: COH08-04

QUESTION:
Vegetation Management:

Please refer to the table on WP RMP-1, page 2 of 3, and provide the miles of transmission and distribution lines trimmed each year from 2011 through 2018.

ANSWER:
The miles of distribution lines trimmed each year from 2011 through 2018 is shown below. Consistent with a clarification received by counsel for the City of Houston, this response includes data only for distribution.

Year	2011	2012	2013	2014	2015	2016	2017	2018
Miles	5,606	4,328	5,074	5,139	4,662	4,437	3,922	5,357

SPONSOR:
Randal Pryor (Randal Pryor)

Responsive Documents:
None

Exhibit R-RMP-3

Display CEHE Dist: Construction Rebuild/Improve 83307305: Header Data

Status

Order	HDC2 83307305	RNON_Remove Stepdown S2104_Conv to 35KV		Notification	1404257137
System Status	CLSD CSER GMPS MANC MSCP PPRT PRC SETC		User Status	GISS MRCC TTC FCAE CTCC QAA MOBL COR *	
PMActType	81 Distribution - Reliability				

Header Data | Operations | Components | Costs | Partner | Objects | Add'l Data | Location | Planning | Control | Enhancement

```
RNON_Remove Stepdown S2104_Conv to 35KV
08/23/2017 07:20:00 CST Gary Braxton (00013695) Phone 7139454583
REMOVE STEPDOWN BANK S2104 AND CONVERT EVERYTHNG BEHIND IT TO 35KV.
NACK 100118 0808 Invalid order number 'S000083307305'.
```

Order address | Obj. address

Sold-to party	
Street/Hse No.	
Location	
Telephone	Fax

Display CEHE Dist: Construction Rebuild/Improve 83307305: Add'l Data

Status

Order	HDC2 83307305	RNON_Remove Stepdown S2104_Conv to 35KV		Notification	1404257137
System Status	CLSD CSER GMPS MANC MSCP PPRT PRC SETC		User Status	GISS MRCC TTC FCAE CTCC QAA MOBL COR *	
PMActType	81 Distribution - Reliability				

Header Data | Operations | Components | Costs | Partner | Objects | Location | Planning | Control | Enhancement

Organization

Company Code	0003 CNP Houston Electric, LLC	Controlling Area	COAR CNP Controlling Area
		Profit Center	1101230 SPRING BRANCH AREA
Responsible CCtr	CA700453 SPB OH Rel AB1C	Tax Jurisdiction	USTX7704150131
Object Class	Overhea..	Processing group	0
Functional Area	1070 Constr Work in Prog	Project Definition	S/101627/C
WBS Element	S/101627/CE/AB1CI-1 OH RELIABILITY INSTALL-1		
Subnetwork Of	/		

Display CEHE Dist: Construction Rebuild/Improve 83307305: Components

Status

Order HDC2 83307305 RNON_Remove Stepdown S2104_Conv to 35KV Notification 1404257137
System Status CLSD CSER GMPS MANC MSCP PPRT PRC SETC User Status GISS MRCC TTC FCAE CTCC QAA MOBL COR *
PMActType 81 Distribution - Reliability

Header Data | Operations | Costs | Partner | Objects | Add'l Data | Location | Planning | Control | Enhancemer

Item	Component	Description	L...	Reqmt Qty	UM	IC	S..	SLoc	Plnt	Op...	Batch	Proc. Category
0010	100011	POLE,WOOD,50',CLASS 2,PINE,CREOSO..		27	EA	L			1006	0010		Reservation for O
0020	102609	CROSSARM, D.E., GALV, 6' LONG		1	EA	L			1006	0010		Reservation for O
0030	107997	WIRE, TIE WIRE,6 CU SOL SD		0.600	LB	L			1006	0010		Reservation for O
0040	107999	CABLE,BARE CU,#4 SOL SD,0.204"DIA		5.500	LB	L			1006	0010		Reservation for O
0050	108002	WIRE, 2 AAAC,0.316"		465.324	LB	L			1006	0010		Reservation for O
0060	108016	WIRE,4/0 AAAC		234.810	LB	L			1006	0010		Reservation for O
0070	108022	WIRE,#4 COPPER CLAD/COPPERWELD		40.500	LB	L			1006	0010		Reservation for O
0080	108027	WIRE,600MCM AAC,MEADOWSWEET,0.8..		1,710.326	LB	L			1006	0010		Reservation for O
0090	108203	COVERED WIRE, #4 CU, 7 STRND		55	FT	L			1006	0010		Reservation for O
0100	108239	COVERED WIRE, #4 AL 7 STRD		2	LB	L			1006	0010		Reservation for O
0110	108241	COVERED WIRE, 4/0 AL 7 STRD		70	LB	L			1006	0010		Reservation for O
0120	108886	CLAMP, # 2 DE SHOE		8	EA	L			1006	0010		Reservation for O
0130	108890	STRAIN CLAMP,4/0-336AAC,STRGHT		1	EA	L			1006	0010		Reservation for O
0140	108891	STRAIN CLAMP, 600AAC, STRGHT L		3	EA	L			1006	0010		Reservation for O
0150	109220	INSLTR, POLY, DE, DS46, CLVS-TNG, 30 ..		7	EA	L			1006	0010		Reservation for O
0160	109240	INSLTR, PORC, POST, 57-2, F-NECK, 180...		36	EA	L			1006	0010		Reservation for O
0170	109254	INSLTR, PIN,1" HOLE,F-NECK,ANSI CL 55 .		22	EA	L			1006	0010		Reservation for O
0180	109255	INSULATOR, GUY STRAIN, 15000LB		20	EA	L			1006	0010		Reservation for O
0190	109271	BRACKET,INSULATOR POST 35KV(TURK...		30	EA	L			1006	0010		Reservation for O
0200	109272	BRACKET,DOWN LEAD 18" LENGTH		54	EA	L			1006	0010		Reservation for O
0210	109288	BRACKET "L" TYPE FOR MTGING AR		11	EA	L			1006	0010		Reservation for O
0220	109289	BRCKT-HEX NUT,FUSE MTGNG-11"		13	EA	L			1006	0010		Reservation for O

Display CEHE Dist: Construction Rebuild/Improve 83307305: Components

Status

Order HDC2 83307305 RNON_Remove Stepdown S2104_Conv to 35KV Notification 1404257137
System Status CLSD CSER GMPS MANC MSCP PPRT PRC SETC User Status GISS MRCC TTC FCAE CTCC QAA MOBL COR *
PMActType 81 Distribution - Reliability

Header Data | Operations | Costs | Partner | Objects | Add'l Data | Location | Planning | Control | Enhancem

Item	Component	Description	L...	Reqmt Qty	UM	IC	S..	SLoc	Plnt	Op...	Batch	Proc. Category
0230	109369	BRACKET,VERTICAL,POST INSLTR 18"		4	EA	L			1006	0010		Reservation for
0240	109420	BOLT,HEX-HD,1/2"X3/4",A307 W/1 HX N .		22	EA	L			1006	0010		Reservation for
0250	110589	WASHER,SPRING,3/4"		199	EA	L			1006	0010		Reservation for
0260	110592	BOLT,STUD,3/4"X3&11/16" W/1HX NT&...		34	EA	L			1006	0010		Reservation for
0270	110602	WASHER,SPLIT-LOCK,1/2" GALV		2	EA	L			1006	0010		Reservation for
0280	110640	BOLT,HEX-HD,1/2"X1&1/2",A307 W/1 H...		2	EA	L			1006	0010		Reservation for
0290	110893	BOLT,SQ-HEAD,5/8"X8",C135.1,W/1 SQ....		2	EA	L			1006	0010		Reservation for
0300	110895	BOLT,SQ-HEAD, 5/8"X12",C135.1,W/1 S .		163	EA	L			1006	0010		Reservation for
0310	110896	BOLT,SQ-HEAD,5/8"X14",C135.1 W/1 S...		28	EA	L			1006	0010		Reservation for
0320	110901	BOLT,SQ-HEAD,3/4"X14",C135.1 W/1 S..		6	EA	L			1006	0010		Reservation for
0330	110919	Helx Eye, ASSMBLY,TRIPLEYE GUYING R...		1	EA	L			1006	0010		Reservation for
0340	111075	POLE EYE PLATE/GUY HOOK COMBINATI..		7	EA	L			1006	0010		Reservation for
0350	111090	GUARD, GUY 8' LENGTH, PLASTIC		5	EA	L			1006	0010		Reservation for
0360	111095	ANCHOR,SCREW 10" DIA.		4	EA	L			1006	0010		Reservation for

0370	111103	PIN, POLE TOP, 1" HEAD, 18" LONG	22	EA	L	1006 0010	Reservation for
0380	111109	ANCHOR,SCREW MULTI HELIX, 7'	1	EA	L	1006 0010	Reservation for
0390	111111	ROD,EXTNSN 1&1/2"SQX5'	1	EA	L	1006 0010	Reservation for
0400	111127	TIE,TOP FOR F NECK INSLTR&#2AA	18	EA	L	1006 0010	Reservation for
0410	111139	TIE,SIDE LINE INSULATOR,#2AAAC	18	EA	L	1006 0010	Reservation for
0420	111244	SIDE TIE "F" NECK 600AAC CNDCTR	12	EA	L	1006 0010	Reservation for
0430	111246	TIE,TOP LINE INSULATOR #4/0AAA	4	EA	L	1006 0010	Reservation for
0440	111268	WIRE,GUY,GALV STEEL,3/8",7 STRAND	308	FT	L	1006 0010	Reservation for

Display CEHE Dist: Construction Rebuild/Improve 83307305: Components

Status

Order HDC2 83307305 RNON_Remove Stepdown S2104_Conv to 35KV Notification 1404257137
System Status CLSD CSER GMPS MANC MSCP PPRI PRC SETC User Status GISS MRCC TTC FCAE CTCC QAA MOBL COR *
PMActType 81 Distribution - Reliability

Header Data | Operations | [illegible] | Costs | Partner | Objects | Add'l Data | Location | Planning | Control | Enhancement

Item	Component	Description	L...	Reqmt Qty	UM	IC	S..	SLoc	Plnt	Op...	Batch	Proc. Category
0450	112422	ARRESTER,SURGE,DIST,HD,27KV		11	EA	L			1006	0010		Reservation for Order
0460	112432	CUTOUT, LINKBREAK, 35KV, 150KV BIL, ..		2	EA	L			1006	0010		Reservation for Order
0470	112432	CUTOUT, LINKBREAK, 35KV, 150KV BIL, .		11	EA	L			1006	0010		Reservation for Order
0480	112956	FUSE,LIMITING,CURRENT,12K,BACK-UP,T..		11	EA	L			1006	0010		Reservation for Order
0490	131778	TRF, 1PH 25KVA 19920-120/240V NT		3	EA	L			1006	0010		Reservation for Order
0500	131779	TRF, 1PH 50KVA 19920-120/240V NT		5	EA	L			1006	0010		Reservation for Order
0510	131780	TRF, 1PH 75KVA 19920-120/240V NT		3	EA	L			1006	0010		Reservation for Order
0520	230265	WIRE,#6 COPPER, 7-STRAND BARE WIRE		15	LB	L			1006	0010		Reservation for Order
0530	247052	BOLT, STUD, 3/4" X 14"		2	EA	L			1006	0010		Reservation for Order
0540	259821	INSULATOR, GUY, 21000 LB		7	EA	L			1006	0010		Reservation for Order
0550	100001	POLE,WOOD,45',CLASS 2,PINE,CREOSO..		5-EA		L			1099	0020		Reservation for Order
0560	100304	POLE,WOOD,40',CLASS 2,PINE,CREOSO...		22-EA		L			1099	0020		Reservation for Order
0570	102579	WOODBRACE,26"		2-PR		L			1099	0020		Reservation for Order
0580	102605	CROSSARM, DEAD ENDING, 4' GALV		1-EA		L			1099	0020		Reservation for Order
0590	107991	WIRE, TIE WIRE,4 AL		52-LB		L			1099	0020		Reservation for Order
0600	107994	WIRE,4/0 ACSR,PENGUIN,0.563"DIA		772.054-LB		L			1099	0020		Reservation for Order
0610	107997	WIRE, TIE WIRE,6 CU SOL SD		0.300-LB		L			1099	0020		Reservation for Order
0620	107999	CABLE,BARE CU,#4 SOL SD,0.204"DIA		8-LB		L			1099	0020		Reservation for Order
0630	108001	CABLE,ELECT,#4,7 STR,BARE,CU,HD DRN		2-LB		L			1099	0020		Reservation for Order
0640	108002	WIRE, 2 AAAC,0.316"		394.503-LB		L			1099	0020		Reservation for Order
0650	108022	WIRE,#4 COPPER CLAD/COPPERWELD		124.200-LB		L			1099	0020		Reservation for Order
0660	108203	COVERED WIRE, #4 CU, 7 STRND		120-FT		L			1099	0020		Reservation for Order

Display Settlement Rule: Overview

Order 83307305 RNON_Remove Stepdown S2104_Conv to 35KV
Actual settlement

Distribution rules

Cat	Settlement Receiver	Receiver Short Text	%	Equivalence no.	Amount	A..	Se...	S...	No.	S...	Fro...	From...	To ...	To Fi...	First Us
FXA	8596179-0	CONDUCTOR, COPPER, B	0.01	0	0.00		PER	90	1		0	0			
FXA	8596193-0	CONDUCTOR, COPPER, B	0.01	0	0.00		PER	80	2		0	0			
FXA	8596194-0	CONDUCTOR, COPPER, B	0.01	0	0.00		PER	10	3		0	0			
FXA	8596179-0	CONDUCTOR, COPPER, B	0.01	0	0.00		PER	50	4		0	0			
FXA	8596194-0	CONDUCTOR, COPPER, B	0.01	0	0.00		PER	15	5		0	0			012/38

FXA	8596179-0	CONDUCTOR, COPPER, B	0.01	0	0.00	PER	55	6	0	0	011/2(
FXA	8596179-0	CONDUCTOR, COPPER, B	0.01	0	0.00	PER	15	7	0	0	012/2(
FXA	8596179-0	CONDUCTOR, COPPER, B	0.01	0	0.00	PER	10	8	0	0	
FXA	8596194-0	CONDUCTOR, COPPER, B	0.01	0	0.00	PER	50	9	0	0	
FXA	8596194-0	CONDUCTOR, COPPER, B	0.01	0	0.00	PER	55	10	0	0	011/2(
FXA	8596190-0	CONDUCTOR, ALUMINU	0.01	0	0.00	PER	55	11	0	0	011/2(
FXA	8596194-0	CONDUCTOR, COPPER, B	0.01	0	0.00	PER	90	12	0	0	
FXA	7905550-0	CONDUCTOR, COPPER, B	0.01	0	0.00	PER	10	13	0	0	
FXA	7905550-0	CONDUCTOR, COPPER, B	0.01	0	0.00	PER	15	14	0	0	012/2(
FXA	8596190-0	CONDUCTOR, ALUMINU	0.01	0	0.00	PER	50	15	0	0	
FXA	7905550-0	CONDUCTOR, COPPER, B	0.01	0	0.00	PER	50	16	0	0	
FXA	7905550-0	CONDUCTOR, COPPER, B	0.01	0	0.00	PER	55	17	0	0	011/2(
FXA	7905550-0	CONDUCTOR, COPPER, B	0.01	0	0.00	PER	90	18	0	0	
FXA	8596190-0	CONDUCTOR, ALUMINU	0.01	0	0.00	PER	15	19	0	0	012/2(
FXA	8596190-0	CONDUCTOR, ALUMINU	0.01	0	0.00	PER	10	20	0	0	
FXA	8596190-0	CONDUCTOR, ALUMINU	0.01	0	0.00	PER	90	21	0	0	
FXA	7905545-0	CONDUCTOR, ALUMINU	0.02	0	0.00	PER	10	22	0	0	

Order 83307305 RNON_Remove Stepdown S2104_Conv to 35KV
Actual settlement

Distribution rules