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| **APPLICATION OF CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC FOR APPROVAL TO AMEND ITS DISTRIBUTION COST RECOVERY FACTOR** | **§ § § § §** | **BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS** |

# DIRECT TESTIMONY

# OF

# CHRIS HENDRIX

**ON BEHALF OF**

**TEXAS ENERGY ASSOCIATION FOR MARKETERS AND ALLIANCE FOR RETAIL MARKETS**

**SEPTEMBER 16, 2022**

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# DIRECT TESTIMONY OF CHRIS HENDRIX

## I. INTRODUCTION

**Q. PLEASE STATE YOUR NAME, OCCUPATION, AND BUSINESS ADDRESS.**

A. My name is Chris Hendrix. I am the Chief Executive Officer of Demand Control 2 Services, LLC, and my business address is 2402 Avenue L, Galveston, TX 77550.

**Q. PLEASE BRIEFLY DESCRIBE YOUR PROFESSIONAL BACKGROUND.**

A. I have over 30 years of experience in the competitive electric and natural gas industries. In 2019, I co-founded Demand Control 2 Services, LLC to provide consulting services and assist companies with procurement strategies to facilitate self-supply of electricity. My curriculum vitae is provided as Attachment CH-1.

**Q. HAVE YOU PREVIOUSLY PROVIDED TESTIMONY IN A PROCEEDING BEFORE THE PUBLIC UTILITY COMMISSION OF TEXAS (COMMISSION)?**

A. Yes. I have previously provided testimony in Docket No. 53601.[1] Attachment CH-1 also includes a list of testimony I have provided in other states.

[1] Ap*plication of Oncor Electric Delivery Company for Authority to Change Rates*, Docket No. 53601 (pending).

## II. SCOPE AND PURPOSE OF DIRECT TESTIMONY

**Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?**

A. I am testifying on behalf of the Texas Energy Association for Marketers (TEAM) and the Alliance for Retail Markets (ARM). Both TEAM and ARM are non-profit industry associations whose members are retail electric providers (REPs) operating in the areas of the Electric Reliability Council of Texas (ERCOT) power region that are open to retail electric competition. Each association has members operating in CenterPoint Energy Houston Electric, LLC's (CenterPoint) service territory.

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

A. My testimony addresses CenterPoint's request for recovery in connection with its short-term and long-term leases for facilities that provide temporary emergency electric generation (mobile generation facilities) pursuant to PURA[2] § 39.918. My testimony also addresses CenterPoint's requested amendment to Chapter 6 of its Tariff for Retail Delivery Service to add a provision specific to mobile generation.

**Q. WAS THIS TESTIMONY PREPARED BY YOU OR UNDER YOUR SUPERVISION?**

A. Yes, it was.

[2] Public Utility Regulatory Act, Tex. Util. Code §§ 11.001–66.016 (PURA).

## III. SUMMARY OF RECOMMENDATIONS

**Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS REGARDING CENTERPOINT'S REQUESTS RELATED TO MOBILE GENERATION FACILITIES.**

A. I recommend the following:

- The disallowance of the full amount of CenterPoint's request for costs incurred to lease mobile generation facilities under PURA § 39.918(b)(1). If, however, the Commission is inclined to grant some level of recovery, CenterPoint's recovery should be limited to reasonable and necessary costs, excluding carrying costs, associated with up to 11 megawatts (MW) of mobile generation facilities provided CenterPoint demonstrates that these facilities were procured through a competitive bid process and commits to developing a plan that demonstrates how it will meet the applicable statutory requirements and any corresponding Commission rules.
- The approval of CenterPoint's request to amend Chapter 6 of its Tariff for Retail Delivery Service to add a provision addressing the lease and operation of facilities that provide temporary emergency electric generation pursuant to PURA § 39.918 and the addition of language sunsetting this provision on the effective date of any Commission revisions to the Pro Forma Tariff for Retail Delivery Service that are adopted to address this issue.

## IV. COSTS INCURRED UNDER PURA § 39.918

**Q. IS CENTERPOINT REQUESTING TO RECOVER COSTS UNDER PURA § 39.918?**

A. Yes. CenterPoint has requested recovery for expenditures totaling approximately $199,566,430 pursuant to PURA § 39.918 to lease 19 mobile generators with a total capacity of 345 MW,[3] which equates to an annual revenue requirement of $56,584,169.[4] The requested recovery is for the period ending December 31, 2021[5] and includes costs to lease the mobile generation facilities, operational costs for mobilizing/demobilizing, transporting, interconnecting, and testing these facilities, and fuel costs.[6] The revenue impact of the request, by customer class,[7] is as follows:

| Class | TEEEF Revenue | Rate |
|---|---|---|
| Residential | $32,531,382 | $0.001071 per kWh |
| Secondary <= 10 | $849,663 | $0.000971 per kWh |
| Secondary > 10 | $17,228,921 | $0.164175 per Billing kVa |
| Primary | $1,336,331 | $0.106132 per Billing kVa |
| Transmission | $141,094 | $0.003882 per 4CP kVa |
| Lighting | $4,496,778 | $0.019724 per kWh |

[3] Amended Direct Testimony of Martin W. Narendorf, Jr. at bates 117 (Jul. 1, 2022) (Amended Narendorf Direct); Amended Application of CenterPoint Energy Houston Electric, LLC to Amend its Distribution Cost Recovery Factor at 6 (Jul. 1, 2022) (Amended Application).

[4] Amended Application at 6.

[5] Currently, CenterPoint is leasing mobile generators with capacity totaling [redacted] MW.

[6] Amended Narendorf Direct at 10.

[7] Amended Application at Schedule J. TEEEF – Summary of Revenue Requirement by Class.

## A. Scope of PURA § 39.918 and Related Policy Considerations

**Q. PLEASE DESCRIBE THE TYPES OF COSTS RECOVERABLE UNDER PURA § 39.918.**

A. Costs associated with two distinct types of facilities are recoverable under PURA § 39.918(b). Under PURA § 39.918(b)(1), a transmission and distribution utility (TDU) may request the recovery of reasonable and necessary costs incurred to:

> lease and operate facilities that provide temporary emergency electric energy to aid in restoring power to the utility's distribution customers during a widespread power outage in which:
>
> (A) the independent system operator has ordered the utility to shed load; or
>
> (B) the utility's distribution facilities are not being fully served by the bulk power system under normal operations.[8]

Under PURA § 39.918(b)(2), a TDU may also request to recover reasonable and necessary expenses incurred to "procure, own, and operate . . . transmission and distribution facilities that have a lead time of at least six months and would aid in restoring power to the utility's distribution customers following a widespread power outage."[9] CenterPoint's request in this proceeding is made under PURA § 39.918(b)(1), not (b)(2). A widespread power outage is defined as a loss of power event that entails three elements: (1) affects a significant number of a TDU's distribution customers; (2) lasts for, or is expected to last for, at least eight hours; and (3) is a risk to public safety.[10] It is important to note that these three elements are cumulative requirements—all of them must be present to justify utilization of mobile

[8] PURA § 39.918(b)(1) and (h)(1).

[9] PURA § 39.918(b)(2).

[10] PURA § 39.918(a).

generation under PURA § 39.918(a), and the presence of only one or two of the statutory criteria is insufficient.

**Q. WHAT DOES IT MEAN FOR THE INDEPENDENT SYSTEM OPERATOR TO ORDER A UTILITY TO SHED LOAD?**

A. Load shed is an emergency measure used by ERCOT when the demand for electricity on the grid exceeds the supply of available electricity. There are very specific protocols that define the procedures for ERCOT to follow if it is necessary for ERCOT to order utilities to implement load shed. When ERCOT orders a TDU to shed load, the TDU must implement controlled power outages to reduce the demand on the grid.

A load shed order pertains to load on the distribution system. In a load shed event, ERCOT will instruct a TDU to reduce a certain number of MW of load in its service area. ERCOT does not dictate how a TDU must shed load; thus, the TDU has discretion to determine how to meet ERCOT's required load reduction. For example, a TDU could decide to rotate outages so that no particular customer is without electricity for more than a certain length of time. Such rotations can be manually or automatically done. TDUs are required to inform REPs of their procedures for implementing involuntary load shed initiated by ERCOT so that REPs can adequately inform their customers about the TDU's procedures.[11]

**Q. WHAT IS THE "BULK POWER SYSTEM?"**

A. Most simply put, the bulk power system is the electrical network comprised of generation facilities and transmission facilities. The North American Energy

[11] PURA § 17.003(d-1)(1).

Reliability Corporation (NERC) Glossary of Terms describes the bulk power system as: "(A) facilities and control systems necessary for operating an interconnected electric energy transmission network (or any portion thereof); and (B) electric energy from generation facilities needed to maintain transmission system reliability. *The term does not include facilities used in the local distribution of electric energy*."[12] Of particular relevance in this case is the "transmission system," which the Commission defines as "the transmission facilities at or above 60 kilovolts (kV) owned, controlled, operated, or supported by a transmission service provider or transmission service customer that are used to provide transmission service."[13] CenterPoint has not provided any testimony or discovery responses that conflict with or contest the use of the term "bulk power system" to generally refer to the transmission system and to exclude the distribution system.

**Q. IS THERE A CLEAR LINE OF DEMARCATION BETWEEN THE DISTRIBUTION SYSTEM AND THE TRANSMISSION SYSTEM FOR ALL TDUS?**

A. Yes. As I stated previously, the Commission defines transmission as facilities at a voltage of 60kV or above. The distinction between transmission and distribution facilities is made throughout a TDU's system. Each TDU asset is classified for accounting and operation purposes as either transmission or distribution.

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[12] NERC Glossary of Terms, available at https://www.nerc.com/pa/Stand/Glossary%20of%20Terms/Glossary_of_Terms.pdf (last visited Aug. 25, 2022). A similar exemption is made in the definition of Bulk Electric System, which is described as: "Unless modified by the lists shown below, all Transmission Elements operated at 100 kV or higher and Real Power and Reactive Power resources connected at 100 kV or higher. *This does not include facilities used in the local distribution of electric energy*." (emphasis added).

[13] 16 Tex. Admin. Code § 25.5(142) (TAC).

**Q. HOW DOES PURA § 39.918 FIT INTO THE LARGER REGULATORY SCHEME FOR THE AREAS OF THE ERCOT POWER REGION OPEN TO COMPETITION?**

A. PURA provides for three distinct categories of primary market participants: REPs, TDUs, and power generation companies (PGCs).[14] A REP sells electricity to retail customers but may not own or operate generation assets.[15] A TDU owns or operates for compensation equipment or facilities to transmit or distribute electricity, other than facilities necessary to interconnect a generation facility with the transmission or distribution network or a facility that is not dedicated to public use.[16] Since January 1, 2002, a TDU is prohibited from selling electricity or otherwise participating in the market for electricity except for the purpose of buying electricity to serve its own needs.[17] A PGC generates electricity that is intended to be sold at wholesale.[18] To qualify as a PGC, a company may not own a transmission or distribution facility other than an essential interconnecting facility or a facility that is not dedicated to public use.[19]

A TDU like CenterPoint owns and operates both transmission facilities and distribution facilities and serves customers who receive power at both transmission-level voltage and distribution-level voltage (less than 60kV). PURA § 39.918(b)(1)

[14] PURA § 39.051(b).

[15] 16 TAC § 25.5(114).

[16] 16 TAC § 25.5(137).

[17] PURA § 39.105.

[18] 16 TAC § 25.5(82)(A).

[19] 16 TAC § 25.5(82)(B).

creates a limited exception to this fundamental market precept of separation between TDUs and PGCs in order to allow a TDU to lease generation facilities for use *only* under an independent system operator load shed order or when wider conditions on the bulk power system interfere with the normal operations of its distribution system to the point of qualifying as a "widespread power outage." A s noted previously, there are three cumulative requirements to satisfy the definition of a "widespread power outage," and an outage that might otherwise meet the definition of widespread power outage, but is attributable only to issues with a TDU's distribution facilities, does not qualify under the narrow exception provided in PURA § 39.918(a) and (b).

**Q. WHY IS IT IMPORTANT TO CONSIDER THE LARGER REGULATORY SCHEME IN ERCOT WHEN EVALUATING EXPENDITURES MADE UNDER PURA § 39.918?**

A. The competitive electric market in Texas is built around the separation of the three foundational market segments—generation (PGCs), transmission and distribution, and retail (i.e., REPs). Generation creates the electric energy that customers consume. If a customer seeks back-up generation because they are concerned that an outage could interrupt the delivery of their electricity, they can purchase such service from the competitive market (e.g., small gas-powered generators, battery devices). Different customers will have different needs for backup generation, and by extension, a different willingness to pay for that backup—but the value of the backup is directly accrued by that customer. By contrast, PURA § 39.918 essentially allows the TDU to provide back-up generation services in limited, specifically delineated circumstances and socializes the costs for that service to all ratepayers, regardless of whether or not the

customer directly benefits from it. To ensure that the costs uplifted to ratepayers are minimized and that the structure of the competitive market is not compromised, the TDU must only deploy mobile generation in accordance with the parameters established by PURA § 39.918.

**Q. ARE THERE ANY COMPONENTS OF THE REGULATORY SCHEME THAT ARE OF SPECIFIC SIGNIFICANCE IN THIS PROCEEDING?**

A. Yes. The TDU segment is governed under a largely cost-of-service scheme of regulation, as evidenced by this ratemaking proceeding. By contrast, the other two segments (generation and retail) have the rates for their service largely determined by competitive forces. The type of resources and the scale of resources that a TDU might procure under PURA § 39.918 could instead be invested in by a generator, or even by a retailer or customer for behind-the-meter usage. If a TDU is allowed to be unreasonable in the scale of its mobile generation procurement, that will have the effect of ultimately causing providers of mobile generation to design their business model for use by the TDU rather than the competitive market. It may also cause inequities among large retail customers (e.g., grocery stores) that have made strategic investments in onsite generation as part of their business model and create undesirable incentives for customers' future investment decisions. These customers will not need service from their TDU's mobile generators because of the investments they have made through the competitive market, but nevertheless will be paying for the lease and operation of those generators in addition to what they have already spent on their own facilities. In general, the overarching scheme for generation competition and retail competition is intended to avoid these types of market interferences.

While PURA § 39.918 creates a limited exception for TDU-operated mobile generation, it is wisely bounded by many requirements on TDU conduct, and it is also governed by the classical principles of utility ratemaking—namely, that expenses, such as leases, must be prudently incurred, and that rates must be just and reasonable. Cost-of-service regulation is a proxy for competition. Thus, it is necessary to consider whether a TDU's expenditures on mobile generation represent the prudence and business acumen that one would expect to be brought to bear in a competitive landscape.

**Q. HAS THE COMMISSION ADOPTED A RULE TO IMPLEMENT PURA § 39.918?**

A. No. As I mentioned previously, the Commission has opened a rulemaking to implement PURA § 39.918 in Project No. 53404,[20] but a final rule has yet to be adopted. As of the filing of this testimony, no discussion draft or proposal for publication has been made publicly available for comment. CenterPoint provided a document in response to Texas Competitive Power Advocates' Request for Information (RFI) No. 2-1.d. acknowledging that the Commission [redacted].[21]

[20] *Restoration of Electric Service After a Widespread Power Outage*, Project No. 53404 (pending).

[21] CenterPoint Energy Houston Electric, LLC's Responses to Texas Competitive Power Advocates' Second Set of RFIs at TCPA 2-1_Board Resolution_TEEE Proposal (HSPM) (Jun. 29, 2022) (Attachment CH-2).

### B. CenterPoint's Bidding Process for Mobile Generation

**Q. DID CENTERPOINT USE A COMPETITIVE BIDDING PROCESS TO LEASE ITS MOBILE GENERATION FACILITIES?**

A. While CenterPoint did use a bidding process, it does not appear that process could be characterized as competitive. CenterPoint issued a request for pricing (RFP) for a short-term lease for up to three mobile generators providing a minimum of 30 MW each and up to five mobile generators providing a minimum of 5 MW each.[22] The RFP was issued to three vendors, one of which declined to bid.[23] CenterPoint issued a second RFP for a long-term lease for one or more mobile generators providing 2 MW or more each with a target total capacity of 500 MW.[24] The RFP was issued to 15 vendors, 11 of which declined to bid.[25] Additionally, one of the four bids submitted [redacted] [redacted][26]

CenterPoint witness Martin Narendorf did not opine as to whether it was possible to develop the RFPs to foster a *competitive* bidding process, and it is unclear whether there was something about the criteria in the RFP that resulted in less than one-third of the vendors bidding on the long-term lease. CenterPoint also failed to address

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[22] Amended Narendorf Direct, Exhibit MWN-4 at 136–37.

[23] CenterPoint Energy Houston Electric, LLC's Responses to Houston Coalition of Cities' Eighth Set of RFIs at HCC 8-7.c (Aug. 12, 2022) (Attachment CH-3); Amended Narendorf Direct at 110. Mr. Narendorf's testimony states that 3 bidders responded to the RFP, but the summary of the bids provided in response to discovery conflicts with this statement. CenterPoint Energy Houston Electric, LLC's Responses to Houston Coalition of Cities' Eighth Set of RFIs at HCC 8-7.b. (Confidential).

[24] Amended Narendorf Direct, Exhibit MWN-5 at 109; Amended Narendorf Direct at 157.

[25] Attachment CH-3 at HCC 8-7.c (Aug. 12, 2022); Amended Narendorf Direct at 110. Mr. Narendorf's testimony states that 15 bidders responded to the RFP, but the summary of the bids provided in response to discovery conflicts with this statement. Attachment CH-3 at HCC 8-7.b. (Confidential).

[26] Attachment CH-3 at HCC 8-7_LongTermSummary (Confidential).

whether the detailed combination of technical requirements listed in the RFP—specifying items like the desired frequency, operating voltage, and power factor for the mobile generators as well as operating requirements such as flex-fuel capability, maximum noise level, and automatic voltage control—are widely-available in the mobile generation marketplace.[27] Another notable criterion included in the RFPs were the tight in-service deadlines of August 16, 2021 for the short-term lease, which was issued on August 3, 2021[28] and January 31, 2022 for the long-term lease, which was issued on October 5, 2021.[29] [redacted].[30] As a result of the RFPs, CenterPoint selected Life Cycle Power as the vendor for both leases.[31]

**Q. HOW DID CENTERPOINT DETERMINE THE AMOUNT OF CAPACITY IT WOULD PROCURE UNDER THE LONG-TERM LEASE?**

A. CenterPoint's decision appears to be based almost exclusively on the amount of load it was ordered to shed during Winter Storm Uri (between February 15, 2021 and February 19, 2021). CenterPoint states that approximately 500 MW of mobile generation combined with other options would have been sufficient to meet the load shed demands

[27] Amended Narendorf Direct, Exhibit MWN-5 at 158-89.

[28] Amended Narendorf Direct, Exhibit MWN-4 at 136.

[29] Amended Narendorf Direct, Exhibit MWN-5 at 157.

[30] Attachment CH-2 at TCPA-2-1_JUSTIFICATION FORM (HSPM).

[31] Amended Narendorf Direct at 107.

during that period.[32] The assessments underlying this conclusion were done verbally in meetings and no written assessment or analysis was performed.[33]

**Q. DID CENTERPOINT CONSIDER ANY BIDS IN RESPONSE TO THE RFP FOR THE LONG-TERM LEASE THAT WERE FOR LESS THAN 500 MW?**

A. Not exactly. Although CenterPoint received bids totaling [redacted],[34] the quantitative comparison presented to the Board [redacted] for both a 5-year and 7.5-year lease term.[35] These options included [redacted].[36] The lowest-cost options presented the board were estimated at [redacted] for a 5-year term and [redacted] for a 7.5-year term.[37]

**Q. DID CENTERPOINT RE-EVALUATE ITS TARGET CAPACITY OF 500 MW AFTER RECEIVING BIDS IN RESPONSE TO THE RFPS IN AN EFFORT TO BRING DOWN THE COST?**

A. No.[38]

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[32] Amended Narendorf Direct at 111.

[33] CenterPoint Energy Houston Electric, LLC's Response to Texas Energy Association for Marketers First Set of RFIs at TEAM 1-7 (Aug. 22, 2022) (Attachment CH-4).

[34] Attachment CH-3 at HCC 5-1_Long Term Summary (Confidential).

[35] Attachment CH-2 at TCPA 2-1_Board Resolution_TEEE Proposal (HSPM).

[36] *Id.*

[37] *Id.*

[38] Attachment CH-4 at TEAM 1-8 and 1-9.

**Q. WAS THE DECISION TO PROCURE 500 MW OF MOBILE GENERATION REASONABLE GIVEN THE INFORMATION OR ALTERNATIVES AVAILABLE TO CENTERPOINT?**

A. No. I do not believe it was reasonable because the annual revenue requirement associated with this 500 MW is certain, while the benefit to customers is not. The events caused by Winter Storm Uri that led to the load shed orders from ERCOT were extraordinary. To illustrate how extraordinary, the table below provides a comparison to the three most recent load shed events in ERCOT prior to Winter Storm Uri.

**Table CH-1**[39]

| Date | CenterPoint Load Shed Obligation | Duration of Load Shed Event |
|---|---|---|
| December 1989 | 132 MW | 30 minutes |
| April 2006 | 250 MW | 2 hours |
| February 2011 | 1,000 MW | 7.5 hours |
| February 2021 | 5,000 MW | 55 hours |

In response, the Legislature passed measures designed to mitigate such an extraordinary set of events in the future, and efforts to implement those measures are well under way at the Commission, ERCOT, and the Railroad Commission. The narrow exceptions to the ERCOT regulatory framework contained in PURA § 39.918 were a small part of these mitigating measures and are only intended to be temporary, as evidenced by the expiration of this provision on September 1, 2029.[40]

[39] Attachment CH-3 at HCC 8-2.a. and 8-2.b.

[40] PURA § 39.918(k).

CenterPoint's long-term lease is for a term of 7.5 years, which puts the termination date just a few months before September 1, 2029.[41] While it may theoretically have been reasonable for CenterPoint to lease the amount of capacity it purports to need in a Uri-scale load shed event initially, the reasonableness of leasing 500 MW of mobile generation diminishes as time passes and more market reforms and other mitigating measures take effect. CenterPoint is seeking to recover more than $56 million per year to lease this capacity even though it has no way of knowing if there will be another load shed event that will necessitate the use of the full 500 MW. And, as more time passes and more market reforms and mitigating measures are implemented, the possibility of another Uri-level event decreases.

Nevertheless, the only benefit to customers that CenterPoint has identified is reduction in outage duration.[42] But CenterPoint has not drawn any sort of connection between the 500 MW of leased mobile generation capacity and reductions in outage durations. It has only stated its conclusion, supported by undocumented verbal analyses, that 500 MW of mobile generation combined with other options would have been sufficient to meet the load shed demands during Winter Storm Uri.[43]

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[41] Amended Narendorf Direct at 112.

[42] CenterPoint Energy Houston Electric LLC's Response to Alliance for Retail Markets' and Texas Competitive Power Advocates' Frist Requests for Information at ARM-TCPA 1-3 (Sept. 12, 2022) (Attachment CH-5).

[43] Amended Narendorf Direct at 111; Attachment CH-4 at TEAM 1-7.

**Q, DO YOU HAVE ANY OTHER CONCERNS WITH THE DECISION TO PROCURE 500 MW?**

A. Yes. CenterPoint will earn a return on the costs incurred to lease the mobile generation facilities. This in and of itself is unusual because a TDU normally earns a return on assets that are used and useful in providing service to ratepayers under normal operations. Here, CenterPoint is earning a return on assets that may or may not ever provide service to customers because they are only authorized for use in very specific circumstances. Based on the response to ARM-TCPA RFI No. 1-5, it also appears that CenterPoint is highlighting mobile generation as a key piece of its capital plan.[44] This is inconsistent with the temporary nature of the statute.

**Q. ARE THERE ANY OTHER COSTS INCLUDED IN CENTERPOINT'S REQUESTED RECOVERY THAT ARE OF CONCERN?**

A. Yes. Because CenterPoint forged ahead with no Commission rule to guide it, CenterPoint asserts that it will accrue an estimated $68,528,919 in carrying costs ($64,107,805 for the long-term lease only) prior to recovery of the mobile generation costs in rates.[45] Although CenterPoint did not know what this amount would ultimately be at the time it executed the lease, it knew that it would be accruing carrying costs and would be requesting recovery of those costs as part of its application in this proceeding. In other words, CenterPoint's decision to rush into the leases in question could cost

[44] Attachment CH-5 at ARM-TCPA 1-5_SP 2022 Presentation (discussing mobile generation under the heading "Successful Execution of Capital Plan").

[45] Amended Direct Testimony of Jeff W. Garmon at 220–21 (Jul. 1, 2022).

ratepayers approximately $68.5 million in carrying costs if the Commission were to approve CenterPoint's requested relief.

Additionally, the long-term lease includes a [redacted][46].

**Q. DOES CENTERPOINT HAVE THE OPTION TO DECREASE THE AMOUNT OF CAPACITY IT IS LEASING?**

A. CenterPoint has the option to decrease the amount of its lease under the specific conditions described in Article I(c)2.a. discussed later in my testimony. Absent those conditions, it is locked in at the 500 MW level.

**Q. WAS THE DECISION TO ISSUE THE RFP FOR THE LONG-TERM LEASE IN OCTOBER 2021 REASONABLE GIVEN THE INFORMATION OR ALTERNATIVES AVAILABLE TO CENTERPOINT?**

No. The authority to lease and operate mobile generation pursuant to PURA § 39.918 is permissive, and CenterPoint was under no obligation to enter into a long-term lease for mobile generation as quickly as it did. Even CenterPoint has characterized its deployment of mobile generation as "accelerated."[47] Because the costs CenterPoint incurs under PURA § 39.918 are subject to Commission approval, the weight

[46] Amended Application, Exhibit MWN-2 at Part 1 of Appendix A - Table 3 (HSPM).

[47] Attachment CH-5 at ARM-TCPA 1-5_SP 2022 Presentation (citing "~$100M of incremental CapEx in 2021 and $200M of accelerated CapEx in 2022 primarily due to accelerated deployment of mobile generation" as a notable component of the successful execution of CenterPoint's Capital Plan).

CenterPoint gave to its ability to delay when it would start incurring those costs is important to determining the reasonableness of its decision-making.

CenterPoint's rush[48] to issue an RFP and execute a lease well in advance of a Commission rule implementing PURA § 39.918 compounds the uncertainty of the benefits to ratepayers, while adding costs. As I discuss in more detail in response to the next question, it appears that CenterPoint plans to use mobile generation facilities when the only portion of its system that is failing to operate normally are distribution facilities.[49] This use is incompatible with PURA § 39.918(b)(1)(B), which would only permit the use of mobile generation if there is damage to the bulk power system, which in turn prevented the normal operation and the full service of CenterPoint's distribution facilities.

Had CenterPoint waited for the Commission to adopt a rule (or at least issue a proposal for publication) implementing PURA § 39.918(b)(1), CenterPoint would have known if it was reasonable to rely on distribution-only damage as an additional use for deployment of its mobile generation facilities. Instead, CenterPoint chose to obligate ratepayers to cover the cost of mobile generation facilities that it may not be able to use for one of the two primary purposes for which they were procured. This decision is akin to paying for an insurance policy without asking what is excluded from coverage.

[48] The RFP was issued just over a month after the September 1, 2021 effective date of PURA § 39.918, and the lease was executed just under four months after the effective date.

[49] Attachment CH-4 at TEAM 1-6.

**Q. DOES CENTERPOINT HAVE THE OPTION TO TERMINATE THE LONG-TERM LEASE?**

A. Yes. [redacted][50] [redacted][51] In response to TEAM RFI No. 1-28, CenterPoint stated that it negotiated this term in case of the event that the Commission disallowed recovery of the lease costs in this proceeding.[52]

**Q. DOES THE CONTRACTUAL PROVISION YOU DESCRIBE ABOVE MITIGATE THE FINANCIAL IMPACT TO CENTERPOINT IF THE COMMISSION WERE TO DISALLOW CENTERPOINT'S REQUESTED RECOVERY FOR MOBILE GENERATION COSTS?**

A. For the most part, yes. The term described above would allow CenterPoint to terminate the long-term lease and [redacted][53] CenterPoint has represented that these contractual terms were "prudently negotiated",[54] which indicates to me that CenterPoint sought to decrease its financial risk.

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[50] Amended Narendorf Direct, Exhibit MWN-2 at 2 (HSPM).

[51] *Id.*

[52] Attachment CH-4 at TEAM 1-28.

[53] Amended Narendorf Direct, Exhibit MWN-2 at 2 (HSPM).

[54] Attachment CH-4 at TEAM 1-28.

### C. CenterPoint's Use of Mobile Generation Facilities

**Q. HAS CENTERPOINT DEMONSTRATED THAT IT WILL LEASE AND OPERATE ITS MOBILE GENERATION FACILITIES IN A MANNER THAT IS CONSISTENT WITH PURA § 39.918(B)(1)?**

A. No. To the contrary, several of CenterPoint's discovery responses make it clear that CenterPoint plans to lease and operate its mobile generation facilities for purposes that are outside the limited scope of PURA § 39.918(b)(1). These responses also demonstrate that CenterPoint's decision-making process specific to the deployment of mobile generation does not take into account the parameters laid out in PURA § 39.918(b)(1)(B).

When asked directly to identify how CenterPoint determines whether an event qualifies for use of mobile generation and to describe the parameters and scope of each qualifying event, CenterPoint simply cited to PURA § 39.918(b)(1).[55] When asked to unpack how CenterPoint will determine whether PURA § 39.918(b)(1)(B) applies, CenterPoint responded that this determination is dependent on the relevant facts and circumstances of a given situation and listed some examples of what it considers relevant to a determination that its distribution facilities are not being fully served by the bulk power system.[56] Included in that list was "physical damage to the utility's distribution facilities."[57] However, damage to the distribution system alone is not a valid consideration because the distribution system is not part of the bulk power system.

[55] Attachment CH-3 at HCC 1-1.a.

[56] Attachment CH-4 at TEAM 1-5.

[57] *Id.*

Interestingly, CenterPoint's response did not mention the [redacted][58] may not be the only factor determinative of whether an abnormal condition on the bulk power system has prevented full service to CenterPoint's distribution facilities, on its face it sounds like it would be a relevant circumstance.

It appears that one of the primary intended purposes for CenterPoint's use of mobile generation is to restore power while CenterPoint repairs damage to its distribution system following hurricanes. In response to TEAM RFI No. 1-6, CenterPoint witness Mr. Narendorf admitted that his testimony discussing the impact of hurricanes on CenterPoint's distribution system is in reference to situations where (a) the bulk power system is operating normally and (b) customers are experiencing an interruption in service due to an operational issue that is limited to CenterPoint's distribution system.[59] This testimony is in response to the question: "What does CenterPoint hope to accomplish by leasing and operating mobile generation facilities?"[60] Based on this information, it appears that one of the two main drivers for CenterPoint's expenditures on mobile generation encompasses uses under circumstances that are beyond the limited circumstances enumerated in PURA

[58] Attachment CH-3 at HCC 8-1 CEHE-002 EMG-001 Emergency Operating Plans CEII (HSPM).

[59] Attachment CH-4 at TEAM 1-6.

[60] Amended Narendorf Direct at 104-05.

§ 39.918(b)(1). This conclusion is further supported by the circumstances surrounding CenterPoint's deployment of a mobile generator in September 2021 discussed later in my testimony.

Based on the response to HCC 1-5I, it appears that the criterion CenterPoint applies to determine whether it will deploy mobile generation facilities are limited to the aspects of a widespread power outage—lasting/expected to last more than eight hours, affecting a significant number of distribution customers, and posing a risk to public safety. Specifically, the flow chart for notifying key stakeholders and deploying mobile generation only references a [redacted][61] and the strategy used to determine locations and deploy mobile generation references [redacted][62] Neither process references either of the mandatory criteria in PURA § 39.918(b)(1), i.e., an ERCOT load shed order or when wider conditions on the bulk power system interfere with the normal operations of the TDU's distribution system.

While it is possible this flow chart and deployment strategy come into play only after CenterPoint has determined that one of two conditions set forth in PURA § 39.918(b)(1) have been satisfied, I could not locate information suggesting that is the case. As discussed above, CenterPoint has had the opportunity to provide information about the processes and procedures used to determine whether an issue on the bulk power system is preventing normal operations of that system such that CenterPoint's distribution facilities are not being fully served and has provided only generalizations.

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[61] Attachment CH-3 at HCC 1-5I_Tiger Team Lease Flow Chart for EOP (Confidential).

[62] Attachment CH-3 at HCC 1-5I_ver1.7Mobile Generation Process_Draftver1.7 (Confidential).

**Q. TO DATE, HAS CENTERPOINT DEPLOYED ANY OF ITS MOBILE GENERATION FACILITIES?**

A. Yes. Hurricane Nicholas, which made landfall on September 13, 2021, caused a widespread power outage.[63] CenterPoint deployed a mobile generator to the Lake Jackson Civic Center on September 15, 2021; the generator remained in operation for 70 hours.[64]

**Q. WAS CENTERPOINT'S DEPLOYMENT TO THE LAKE JACKSON CIVIC CENTER WITHIN THE SCOPE OF PURA § 39.918?**

A. No. A load shed order from ERCOT was not in place at any time during September 2021, so PURA § 39.918(b)(1)(A) was not applicable. CenterPoint witness Mr. Narendorf did not describe any issues with the bulk power system that prevented its normal operation such that CenterPoint's distribution facilities were not being fully served during the period the mobile generator was in use. CenterPoint witness Brad Tutunjian described the damage to CenterPoint's system caused by Hurricane Nicholas as follows: "246 electrical circuits locked out, 3,060 total electric busses went out, one substation was out of service."[65]

When asked to elaborate on how the deployment met the criteria in subsection (b)(1), CenterPoint referred to the description in Mr. Tutunjian's testimony and offered the conclusory statement that "[t]hese damages prevented a significant portion of its

[63] Amended Narendorf Direct at 115.

[64] *Id.*

[65] Amended Direct Testimony of Brad A. Tutunjian at 35 (Jul. 1, 2022) (Amended Tutunjian Direct).

distribution facilities from being fully served by the bulk power system…"[66] In response to TEAM RFI No. 1-13, CenterPoint identified the distribution circuit that feeds Lake Jackson Civic Center, and downed wires or wires affected by tree limbs along a nearby street, as the equipment or facilities that failed.[67] In response to HCC RFI No. 8-8, which asked for the name and location of substations that could not receive power from the transmission gird for more than eight hours following Hurricane Nicholas, CenterPoint stated that "[n]o substations were out of power but the damages from the hurricane resulted in several distribution facilities not receiving power from the bulk power system."[68] Without any evidence of conditions preventing the normal operation of the bulk power system that in turn prevented service to CenterPoint's distribution facilities, I cannot conclude that the deployment fell within PURA § 39.918(b)(1)(B). At a minimum, CenterPoint should be able to describe how it plans to inspect its transmission system to determine if it is not operating normally, and therefore, failing to fully serve some portion of CenterPoint's distribution facilities.

**Q. WHAT DOES PURA § 39.918(C) REQUIRE?**

A. PURA § 39.918(c) requires a TDU that leases and operates facilities pursuant to § 39.918(b)(1) to "not sell electric energy or ancillary services from those facilities."

[66] Attachment CH-4 at TEAM 1-12.

[67] Attachment CH-4 at TEAM 1-13.

[68] Attachment CH-3 at HCC 8-8.b.

**Q. HAS CENTERPOINT DEMONSTRATED THAT IT WILL NOT SELL ELECTRIC ENERGY OR ANCILLARY SERVICES FROM ANY OF THE MOBILE GENERATION FACILITIES IN ACCORDANCE WITH PURA § 39.918(C)?**

A. No. Mr. Narendorf did not mention this aspect of PURA § 39.918 in his discussion of the statute,[69] and I could not locate any other witness testimony addressing the issue.

**Q. WHAT DOES PURA § 39.918(D)(2) REQUIRE?**

A. PURA § 39.918(d)(2) requires that mobile generation facilities may not be included in ERCOT's "(A) locational marginal pricing calculations; (B) pricing; or (C) reliability models."

**Q. HAS CENTERPOINT DEMONSTRATED THAT IT WILL EXCLUDE THE MOBILE GENERATION FACILITIES FROM ERCOT'S LOCATIONAL MARGINAL PRICING CALCULATIONS, PRICING, AND RELIABILITY NEEDS IN ACCORDANCE WITH PURA § 39.918(D)(2)?**

A. No. Mr. Narendorf did not mention this aspect of PURA § 39.918 in his discussion of the statute,[70] and I could not locate any other witness testimony addressing the issue.

**Q. WHAT DOES PURA § 39.918(E) REQUIRE?**

A. PURA § 39.918(e) requires that a TDU that leases and operates mobile generation facilities, "shall ensure, to the extent reasonably practicable, that retail customer usage

[69] Amended Narendorf Direct at 100.

[70] *Id.*

during operation of those facilities is adjusted out of the usage reported for billing purposes by the retail customer's retail electric provider."

**Q. HAS CENTERPOINT DEMONSTRATED THAT, TO THE EXTENT REASONABLY PRACTICABLE, RETAIL CUSTOMER USAGE DURING OPERATION OF THE MOBILE GENERATION FACILITIES WILL BE ADJUSTED OUT OF THE USAGE REPORTED TO REPS FOR BILLING PURPOSES IN ACCORDANCE WITH PURA § 39.918(E)?**

A. CenterPoint has stated an intent to do so, but that is not a concrete demonstration, so my response is limited to the current application only. CenterPoint witness John Durland testified that the use of mobile generation facilities did not impact billing determinants because the usage reported to REPs excluded usage of the mobile generation facilities and that CenterPoint would use a manual process to remove usage for operation of the mobile generation facilities from usage reported for billing purposes.[71]

**Q. ARE THE COSTS CENTERPOINT INCURRED TO LEASE AND OPERATE ITS MOBILE GENERATION FACILITIES REASONABLE AND NECESSARY?**

A. No. CenterPoint's application does not support the conclusion that its expenditures to lease and operate its mobile generation facilities are reasonable and necessary because CenterPoint has not adequately justified the timing of its decision to issue its RFPs or execute its long-term lease, or the decision to procure 500 MW of capacity. In addition,

[71] Amended Direct Testimony of John R. Durland at 275–76 (Jul. 1, 2022) (Amended Durland Direct).

CenterPoint's discovery responses have shown that it plans to use, and indeed has already used, the mobile generation facilities even if ERCOT has not ordered load shed and the bulk power system is operating normally (and CenterPoint's distribution facilities are being fully served). In other words, CenterPoint has used and plans to continue using the mobile generation facilities for purposes outside of the narrow confines of PURA § 39.918.

### D. Comparison With Other Utilities

**Q. HAVE ANY OTHER ERCOT TDUS SOUGHT RECOVERY FROM THE COMMISSION FOR MOBILE GENERATION EXPENDITURES UNDER PURA § 39.918?**

A. Yes. To my knowledge, only one other ERCOT TDU, Oncor Electric Delivery Company LLC (Oncor), has sought recovery from the Commission for mobile generation expenditures under PURA § 39.918.

**Q. ARE YOU FAMILIAR WITH ONCOR'S REQUEST FOR RECOVERY?**

A. Yes. I provided testimony on behalf of TEAM and ARM in Docket No. 53601, *Application of Oncor Electric Delivery Company LLC for Authority to Change Rates*. Part of my testimony responded to Oncor's requested recovery for the lease and operation of mobile generation facilities. In preparation, I reviewed the application filed by Oncor, applicable statutes and rules, selected responses to discovery, and Annex G to Oncor's Emergency Operations Plan filed in Project No. 53385.[72]

[72] *Project to Submit Emergency Operations Plans and Related Documents Under 16 TAC § 25.53*, Project No. 53385, Oncor Electric Delivery Company's Emergency Operations Plan and Executive Summary (Apr. 13, 2022).

**Q. HOW DOES THE SCALE OF ONCOR'S EXPENDITURES IN MOBILE GENERATION COMPARE TO CENTERPOINT'S?**

A. Oncor's mobile generation scale and expenditures are significantly smaller than CenterPoint's. In Docket No. 53601, Oncor is requesting to recover a total rate base of approximately $3.1 million pursuant to PURA § 39.918. These expenditures were made to lease seven mobile generation units and equate to a revenue requirement of $769,171.[73] Since the end of Oncor's December 31, 2021 test year, Oncor has leased eight additional mobile generation units for a total of 15 units with capacity equal to approximately 11 megawatts (MW).[74]

By contrast, CenterPoint is seeking recovery for expenditures totaling approximately $199,566,430 to lease 19 mobile generators with a total capacity of 345 MW. However, to date, CenterPoint has leased additional mobile generators, bringing its total leased capacity to [redacted] MW.[75] Thus, CenterPoint's leased mobile generation is over 30 times more than Oncor's (when comparing requested recovery) and over 50 times more (when comparing total available leased capacity to date). This is an inverse relationship given each TDU's relative size—Oncor serves approximately 13 million customers in Texas,[76] whereas CenterPoint serves approximately 2.5 million.[77]

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[73] Docket No. 53601, Response of Oncor Electric Delivery Company LLC to Commission Staff's Tenth Request for Information at Staff 10-4 (Aug. 4, 2022).

[74] Docket No. 53601, Direct Testimony of Keith Hull at 26 (May 13, 2022).

[75] Attachment CH-2 at TCPA 2-5 (Confidential).

[76] Home/Contact Us, https://www.oncor.com/content/oncorwww/us/en/home/contact-us.html (last visited Sept. 15, 2022).

[77] Home | Our Operations: Electric Utility, https://www.centerpointenergy.com/en-us/residential/services/electric-utility?sa=ho (last visited Sept. 15, 2022).

**Q. WHAT DO YOU CONCLUDE REGARDING CENTERPOINT'S EXPENDITURES FOR LEASED MOBILE GENERATION RELATIVE TO ONCOR'S?**

A. Because the operation of mobile generation facilities allows CenterPoint to erode the foundational lines established in the ERCOT competitive market between power generator, TDU, and REP, I believe that CenterPoint's expenditures are not reasonable absent a compelling reason for having such a disproportionately large amount of leased mobile generation capacity. I have been unable to locate a compelling reason in the record.

**E. Recommendation**

**Q. WHAT DO YOU RECOMMEND REGARDING CENTERPOINT'S REQUEST FOR RECOVERY UNDER PURA § 39.918?**

A. I recommend denial of CenterPoint's request at this time because CenterPoint has not shown that it is prepared to comply with the requirements set forth in PURA § 39.918 for the lease and operation of mobile generation. Compliance with these requirements is essential to preserving the very narrow exception to the bright line between generator and TDU that has been part of the foundation of the ERCOT regulatory framework from the beginning of competition. CenterPoint has also failed to demonstrate that its decision to lease 500 MW well in advance of a Commission rulemaking was reasonable given the alternatives available to it. Not only did CenterPoint decide not to re-evaluate the decision to procure 500 MW after receiving bids demonstrating the cost associated with this target, the only options for the long-term lease that were presented to the Board for approval were for the full 500 MW.

Weighing the hefty price tag customers will pay against the vastly uncertain benefits these mobile generation facilities will provide, I recommend a full disallowance. With that said, if the Commission desires to grant some level of recovery, I recommend that CenterPoint's recovery be limited to reasonable and necessary costs, which should not include carrying costs, associated with up to 11 MW of mobile generation facilities if CenterPoint can demonstrate that these facilities were procured through a competitive bidding process. This 11 MW limitation is in line with the total current leased mobile generation capacity of an ERCOT TDU (Oncor) with a service territory that is significantly larger than CenterPoint.

## V. TARIFF REVISIONS

**Q. PLEASE DESCRIBE THE TARIFF AMENDMENT CENTERPOINT IS REQUESTING IN THIS PROCEEDING?**

A. CenterPoint is requesting to add a provision addressing the lease and operation of mobile generation facilities to Chapter 6 of its tariff.[78] This language request is for a different part of Chapter 6 than the proposed TEEEF rider itself, and would create a new Section 6.2.3.[79]

[78] Amended Durland Direct at 263.

[79] Amended Durland Direct at Exhibit JRD-5.1 (Rider TEEEF); Amended Durland Direct at bates 278.

**Q. WHAT KIND OF INFORMATION IS INCLUDED IN CHAPTER 6 OF CENTERPOINT'S TARIFF?**

A. Chapter 6, as well as Chapter 2, includes information that reflects individual utility characteristics and rates.[80] In contrast Chapters 1, 3, 4, and 5, have language applicable to all TDUs operating in areas of ERCOT open to retail competition, with the language required to be used as written by the Commission.[81] The "Pro Forma Tariff" for Retail Delivery Service adopted by rule includes Chapters 1, 3, 4, and 5, as well as 6.1.2, 6.1.2.1, 6.1.3, 6.1.4, and Appendix A.

**Q. HAS CENTERPOINT EXPLAINED WHAT MAKES THE AMENDMENT IT IS REQUESTING COMPANY-SPECIFIC?**

A. No.

**Q. IS PURA § 39.918 APPLICABLE TO ONLY CENTERPOINT?**

A. No. This statute is applicable to any TDU operating in ERCOT, such as Oncor Electric Delivery Company LLC, AEP Texas Inc., and Texas-New Mexico Power Company.

**Q. WHAT IS THE PROCESS TO AMEND THE PRO FORMA TARIFF?**

A. Under 16 TAC § 25.214(c), the Pro Forma Tariff can only be changed through a Commission rulemaking.

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[80] 16 TAC § 25.214(c) permits TDUs to only add to or modify Chapters 2 and 6 as specified in the rule. (For example, Section 6.1.2.1 may only be modified to include rates set by the Commission).

[81] 16 TAC § 25.214(b)-(d).

**Q. HAS THE COMMISSION INITIATED A RULEMAKING TO AMEND THE PRO FORMA TARIFF TO INCORPORATE FACILITIES LEASED AND OPERATED UNDER PURA § 39.918?**

A. No. I am not aware of any rulemaking that has been opened to make any necessary amendments to the Pro Forma Tariff. As I mentioned previously, Project No. 53404 has been opened to implement PURA § 39.918, but it is unknown at this time whether it will encompass revisions under 16 TAC § 25.214.

**Q. ARE THERE ANY ASPECTS OF PURA § 39.918 WHERE UNIFORMITY ACROSS TDUS IS OF PARTICULAR IMPORTANCE?**

A. Yes. Most critical to maintaining standardized retail service is PURA § 39.918(e), which requires a TDU to adjust retail customer usage during the operation of mobile generation out of the usage reported for billing purposes by the retail customer's REP. This is important because the metered retail customer usage information collected by the TDU is transmitted to ERCOT and utilized for settlement. In a widespread power outage, where wholesale costs are likely at or near the wholesale price cap, metering load that is not served by the bulk power system would result in significant and inappropriate wholesale cost allocation. In turn, that settlement impact would interfere with ERCOT's statutory obligation under PURA § 39.151(a)(4) to "ensure that electricity production and delivery are accurately accounted for among the generators and wholesale buyers and sellers in the region." It is critical that all TDUs utilize the same billing transactions and procedures to satisfy this requirement to minimize the administrative burden on REPs because this would ensure consistent treatment across the ERCOT market, which would in turn help ensure that customers and their REPs are

not impacted differently based on TDU service territory. In response to discovery, CenterPoint stated its intention to engage with stakeholders on this issue to the extent possible.[82]

Additionally, subsections (c) and (d)(1) of PURA § 39.918 demand uniformity because they place restrictions on the operation of mobile generation that are intended to isolate the impacts of these operations from the ERCOT wholesale market. This is important for the settlement reasons noted above and because TDUs do not and should not directly engage in the ERCOT wholesale or retail markets because their role is limited to the delivery of power over transmission and distribution lines.

Notably, CenterPoint's requested amendment does not directly address the requirements in PURA § 39.918(c), (d)(1), or (e).

**Q. WHAT IS YOUR RECOMMENDATION REGARDING CENTERPOINT'S REQUESTED TARIFF AMENDMENT?**

A. I recommend the approval of CenterPoint's proposed amendment on an interim basis and including language sunsetting all tariff provisions approved in the proceeding effective on the date the Commission adopts revisions to the Pro Forma Tariff relevant to PURA § 39.918.

## VI. CONCLUSION

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

A. Yes, it does.

[82] Attachment CH-4 at TEAM 1-27.

STATE OF New York )
)
COUNTY OF Westchester )

**AFFIDAVIT OF CHRIS HENDRIX**

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

1. "My name is Chris Hendrix. 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 direct testimony and the attached exhibit offered by me are true and correct to the best of my knowledge."

Further affiant sayeth not.

Chris Hendrix

SUBSCRIBED AND SWORN TO BEFORE ME by the said Chris Hendrix this 16 day of September, 2022.

Notary Public, State of NY

My Commission Expires: 10/19/2025

JEFF R BALGOBIN
NOTARY PUBLIC-STATE OF NEW YORK
No 01BA6364104
Qualified in Westchester County
My Commission Expires 10-19-2025

# Christopher ("Chris") Hendrix

## Education

**MBA,** Concentrations in Finance and International Business, University of Houston, 1994.
**BBA, Accounting,** University of Houston, 1991 (Magna Cum Laude).

## Career History

**Demand Control 2 Services, LLC,** 2019 to present

**Chief Executive Officer & Co-Founder,** 2019 to present. Develop business plans and report to the Demand Control 2 (DC2) Board of Directors. Direct and manage the company's energy trading and financial risk management. Overall corporate strategy and oversight of day-to-day operations with ultimate responsibility for managing DC2's risks associated with wholesale energy, profitability, weather, credit product design, sales and marketing.

**Walmart,** 2003 to 2019

**Director of Markets & Compliance,** 2009 to 2019.

**General Manager -- Texas Retail Energy,** 2004 to 2009. Responsible for all aspects of launching a successful retail energy company in the United Kingdom and Texas competitive markets to serve all applicable Wal-Mart entities (>1,000 accounts & > $350 million annual spend) with a team of 7 associates to perform all of the necessary functions. Accountable for the strategic direction, general management, and control of the affairs of the retail electric provider in Texas.

**Manager of Energy Procurement,** 2003 to 2004. Oversaw team of two associates which negotiate and enter into electricity and natural gas transactions in competitive energy markets throughout the United States. Analyze legislation, regulatory rules, and ISO/Utility tariffs to develop appropriate deal structures that balance risk and savings.

**TXU Energy,** 2002 to 2003.

**Manager—Retail Pricing,** 2002 to 2003. Supervised and led team of eight analysts to price transactions for all sizes of customers primarily focusing on the Texas market (ERCOT).

**Enron Energy Services,** 1997 to 2001.

**Manager—Target Markets,** 2001.

**Manager—Product Development/Structuring,** 1999 to 2001.

**Senior Specialist (Rates & Tariffs),** 1997 to 1999.

**Tenneco Energy,** 1990 to 1997.

**Senior Rate Analyst and Accounting Analyst,** 1990 to 1997.

## Industry Organizations – Texas Related

**Electric Reliability Council of Texas (ERCOT)**

| | |
|---|---|
| Technical Advisory Committee - TAC | March 2021 – present |
| | 2004 – 2006 |
| Retail Market Subcommittee - TAC | Jan 2021 – present |

**Texas Energy Association for Marketers (TEAM)**
**Board Member**
January 2022 to present

## Regulatory Testimony

***2017***

Arizona Docket No. E-01345A-16-0036: In The Matter Of The Application Of Arizona Public Service Company For A Hearing To Determine The Fair Value Of The Utility Property Of The Company For Ratemaking Purposes, To Fix A Just And Reasonable Rate Of Return Thereon, To Approve Rate Schedules Designed To Develop Such Return.

Washington Docket No. UE-161123: Puget Sound Energy – Revises Tariff WN U-60, adding Schedule 451, implementing a new retail wheeling service for large non-core customers and to request approval of the signed Service Agreement and the Power Supply Stranded Cost Charge agreed to within that Service Agreement.

***2016***

Arizona Docket No. E-01933A-15-0322: In The Matter of the Application of Tucson Electric Power Company for the Establishment of Just and Reasonable Rates and Charges Designed To Realize a Reasonable Rate of Return On the Fair Value of the Properties of Tucson Electric Power Company Devoted to Its Operations Throughout the State of Arizona, and for Related Approvals.

***2015***

Arizona Docket No. E-04204A-15-0142: In the Matter of the Application of UNS Electric, Inc. for the Establishment of Just and Reasonable Rates and Charges Designed to Realize a Reasonable Rate of Return on the Fair Value of the Properties of UNS Electric, Inc. Devoted to its Operations Throughout the State of Arizona, and for Related Approvals.

***2012***

Arizona Docket No. E-01345A-11-0224: In the Matter of the Application of Arizona Public Service Company for a Hearing to Determine the Fair Value of the Utility Property of the Company for Ratemaking Purposes, to Fix a Just and Reasonable Rate of Return Thereon, and to Approve Rate Schedules Designed to Develop Such Return.

***1998***

Oklahoma Corporation Commission Cause No. PUD 980000177: Joint Application of Oklahoma Natural Gas Company, A Division of Oneok, Inc., Oneok Gas Transportation, a Division of Oneok, Inc., and Kansas

Gas Service Company, a Division of Oneok, Inc., for Approval of Their Unbundling Plan for Natural Gas Services Upstream of the Citygates or Aggregation Points.

# TCPA 2-1_Board Resolution_TEEE Proposal is Highly Sensitive Protected Material and is being filed under seal.

# TCPA 2-1_JUSTIFICATION FORM is Highly Sensitive Protected Material and is being filed under seal.

# TCPA 2-5 is Confidential and is being filed under seal.

**CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC**
**PUC DOCKET NO. 53442**
**SOAH NO. DOCKET NO. 473-22-2353**

**Houston Coalition of Cities**
**REQUEST NO.: HCC-RFI01-01**

**QUESTION:**

Please refer to Mr. Martin W. Narendorf Jr.'s testimony and answer the following:

a. Identify all events that the Company considers qualified for the use of the mobile generation facilities. Include in your answer the parameters and scope for each of the qualifying events, identifying how the Company determines an event is a qualifying event for mobile generation use and how the Company determines the length of time the mobile generation facility will be used.
b. Please refer to page 13. Explain in detail how the Company determined 125-130 MW of mobile generation capacity for the short-term lease, and 500 MW of mobile generation capacity for the long-time lease, are needed. Include in your answer the research conducted and corresponding results.
c. Please refer to page 15. Identify the number of distribution substations in which the leased mobile generation facilities are located and connected. For each distribution substation, identify the location of the substation and whether the substation serves residential, commercial, and/or industrial customers.
d. Please refer to page 16. Explain in detail how the Company isolates the feeders and substations that host the leased mobile generation from CenterPoint's transmission system and whether the load served by the feeders and substations are/will be disconnected from the Company's transmission system and, therefore, also from the ERCOT transmission system?

**ANSWER:**

a. PURA § 39.918(b)(1) states the criteria for the use of mobile generation facilities by transmission and distribution utilities. The Company uses that criteria to determine if an event qualifies for the use of mobile generation. The length of time that mobile generation will be used during a qualifying event depends on the application of the PURA § 39.918(b)(1) criteria to the specific facts of the event.
b. As explained in the Direct Testimony, 125-130 MW of mobile generation facilities for the short-term lease was determined based on the market availability of these facilities for deployment during the 2021 hurricane season. The decision to procure approximately 500 MW of mobile generation for long-term lease was based on CenterPoint Energy's load conditions and load shed obligation during Winter Storm Uri. ERCOT directed transmission distribution utilities (TDU) to drop a total of 20,000 MW during Winter Storm Uri. Based on existing ERCOT requirements, each TDU is required to drop its share of load based on ERCOT's system peak load from each year. CenterPoint Energy had a load share of 25% based on 2021 ERCOT peak load. Thus, total load shed share for CenterPoint Energy was 5,000 MW. However, based on the actual load during the event, CenterPoint Energy's total load was only 16% of that of ERCOT's system load. This disparity in loads between winter load and system peak load resulted in an added burden of 1,800 MW to be shed by CenterPoint Energy and exceeded CenterPoint Energy's automated load rotation capabilities. CenterPoint Energy has since identified several initiatives to boost its load shed capabilities, should a similar event occur resulting in a disproportionate burden on its customers. These include use of manual load shed schemes, distribution circuit level switching, use of available reserve load from underfrequency load shed blocks and leased mobile generation. Approximately 500 MW leased mobile generation capacity along with the other initiatives would allow CenterPoint Energy to meet the additional 1,800 MW requirement for load shed while keeping the outage duration within the 12-hour time frame set by the Commission at the end of Winter Storm Uri.
c. Leased mobile generation facilities are currently located in twenty different distribution substations. These are identified in the map provided in Exhibit MWN-3 included with Mr. Martin W. Narendorf Jr.'s Direct Testimony. These substations currently serve commercial, industrial, and residential loads through distribution circuits. The amount of load served in each category

# HCC 1-5I_Tiger Team Lease Flow Chart for EOP is Confidential and is being filed under seal.

# HCC 1-5I_Mobile Generation Process_Draftver1.7 is Confidential and is being filed under seal.

# HCC 5-1_LongTermSummary is Confidential and is being filed under seal.

# HCC 8-1 CEHE-002 EMG-001 Emergency Operating Plans CEII is Highly Sensitive Protected Material and is being filed under seal.

**CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC**
**PUC DOCKET NO. 53442**
**SOAH NO. DOCKET NO. 473-22-2353**

**Houston Coalition of Cities**
**REQUEST NO.: HCC-RFI08-02**

**QUESTION:**

Please refer to Mr. Martin W. Narendorf Jr. 's Testimony, page 18, line 17, identifying four ERCOT load-events since 1989 and provide the following information:

a. Details regarding the load shed event in terms of impact to CEHE;

b. Projected duration of the event, as defined by ERCOT;

c. Map or area description of the customer's impact and substations and feeders impacted within map or area;

d. MW interruption at the time of the individual load shed;

e. The date, start time, end time, and duration; and

f. Any information provided to ERCOT and/or the PUCT regarding the load shed event.

**ANSWER:**

a. During each of the four ERCOT load-events since 1989, ERCOT ordered its transmission companies, including CEHE, to reduce demand on the electric system. As such, CEHE shed our share of the amount of load that ERCOT determined needs to be shed to preserve the reliability of the electric system as a whole. Regarding the four ERCOT load-events since 1989, they were:

   - December 21-24, 1989 – Cold Weather Event – ERCOT directed 500 MW of firm load shed. CEHE's obligation was approximately 132 MW.
   - April 17, 2006 – ERCOT directed 1,000 MW of firm load shed. CEHE's obligation was approximately 250 MW.
   - February 2-6, 2011 Cold Weather Event – ERCOT directed 4,000 MW of firm load shed. CEHE's obligation was approximately 1,000 MW.
   - February 15-19, 2021 Winter Storm Uri – ERCOT directed 20,000 MW of firm load shed. CEHE's obligation was approximately 5,000 MW.

b. ERCOT did not provide a projected duration prior to the initiation of the event, but approximate actual durations for each event are listed below:

   - December 21-24, 1989 – Cold Weather Event – Load shed event lasted ~30 minutes
   - April 17, 2006 Cold Weather Event – Load shed event lasted ~2 hours
   - February 2-6, 2011 Cold Weather Event – Load shed event lasted ~7.5 hours
   - February 15-19, 2021 Winter Storm Uri – Load shed event lasted ~55 hours

c. Please refer to attachments included in response to HCC-RFI08-01 for a map of areas impacted during Winter Storm Uri. CEHE does not have maps for impacted areas for the three previous events listed.

d. See response to HCC-RFI08-02 a.

e. Date, start time, end time and duration of events are listed below

   - December 21-24, 1989 – Cold Weather Event – First load shed instruction issued on

# HCC 8-7_LongTermSummary is Confidential and is being filed under seal.

**CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC**
**PUC DOCKET NO. 53442**
**SOAH NO. DOCKET NO. 473-22-2353**

**Houston Coalition of Cities**
**REQUEST NO.: HCC-RFI08-07**

**QUESTION:**

Please refer to Mr. Martin W. Narendorf Jr.'s Testimony, page 10, lines 2 to 3, and answer the following:

a. Explain in detail how the delivery time requirement was determined by the Company for inclusion in the request for proposal (RFP);

b. For each bidder, provide the bidder's identified delivery date and bid details; and

c. Identify each bidder by entity/individual name that declined to bid the RFP.

**ANSWER:**

a. Delivery time requirement for the short term lease was chosen to have the mobile generation facilities available for the 2021 Hurricane season. Delivery time requirement for the long term lease was chosen to ensure mobile generation facilities were available beginning 2021/2022 winter months when there is a higher probability of lower generation reserves in ERCOT.

b. Attached documents "HCC-RFI08-07 ShortTermSummary Confidential.pdf" and "HCC-RFI08-07 LongTermSummary Confidential.pdf" provides bid details and delivery dates for each bidder.

c. For short term lease, APR Energy declined to bid the RFP.

   For long term lease, the following entities declined to bid the RFP.

   - APR Energy
     General Electric
     MESA Solutions Powecore
     Enchanted Rock
     Dynamis Power Solutions
     Sunbelt Rentals
     Siemmens AG
     Worldwide Power Products
     Mobile Energy Solution
     Aggreko
     Milton Cat
     ERS

**The attachments are confidential and are being provided pursuant to the protective order issued in this docket**

**SPONSOR (PREPARER):**
Martin Narendorf

**RESPONSIVE DOCUMENTS:**
HCC-RFI08-07_ShortTermSummary_Confidential.pdf
HCC-RFI08-07_LongTermSummary_Confidential.pdf

# HCC 8-7.b. is Confidential and is being filed under seal.

**CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC**
**PUC DOCKET NO. 53442**
**SOAH NO. DOCKET NO. 473-22-2353**

**Houston Coalition of Cities**
**REQUEST NO.: HCC-RFI08-08**

**QUESTION:**

Please refer to Mr. Martin W. Narendorf Jr.'s Testimony, page 6, lines 9 to 10, providing the Company has power outages during hurricanes, including Hurricane Harvey and Hurricane Nicholas, and provide the following for each hurricane:

a. State whether the event is a widespread outage as used in PUCT 39.918

b. The name and location of substations that could not receive power from the transmission grid for more than 8 hours

1. For each substation listed, provide the total outage time at the substation prior transmission service was restored

**ANSWER:**

a. Hurricane Nicholas resulted in widespread outage as used in PURA 39.918. PURA 39.918 did not exist during Hurricane Harvey and for prior hurricanes.

b. Hurricane Nicholas – No substations were out of power but the damages from hurricane resulted in several distribution facilities to not receive power from the bulk power system.

Hurricane Harvey – See list below for name and location of CEHE substations. These substations were "not being fully served by the bulk power system under normal operations" for periods exceeding 8 hours.

| Substation | Address | Outage Start | Outage End | Duration |
|---|---|---|---|---|
| West Columbia | 503 Oil Field Rd, West Columbia, TX | 8/26/2017 18:30 | 9/13/2017 17:24 | ~18 days |
| Britmoore | 1317 Britmoore Rd, Houston TX | 8/29/2017 20:07 | 8/30/2017 18:07 | ~22 hours |
| Addicks | 2105 Britmoore Rd, Houston TX | 8/30/2017 1:03 | 8/30/2017 17:49 | ~16 hours |
| Memorial | 655 Nottingham Oak Tr, Houston TX | 8/28/2017 18:03 | 9/5/2017 | ~8 days |
| Brays | 4211 S Braeswood Blvd, Houston TX | 8/27/2017 11:09 | 9/4/2017 12:00 | ~8 days |
| Parkway | 12070 Beaumont Hwy, Houston TX | 8/28/2017 18:06 | 8/31/2017 23:00 | ~3 days |
| Brazos Valley | 4325 FM 723, Richomd TX | 8/29/2017 3:00 | 9/3/2017 19:00 | ~5 days |
| North Belt | 15330 Chaplin Dr, Houston TX | 8/27/2017 21:18 | 8/30/2017 23:59 | ~3 days |
| Wallisville | 7618 Wallisville Rd, Houston TX | 8/27/2017 1:07 | 8/30/2017 17:00 | ~3 days |
| Pledger | 17400 FM 1301, Pledger TX | 8/29/201 13:33 | 9/4/2017 18:00 | ~6 days |

1. See response to b.

**CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC**
**PUC DOCKET NO. 53442**
**SOAH NO. DOCKET NO. 473-22-2353**

**Texas Energy Association for Marketers**
**REQUEST NO.: TEAM01-05**

**QUESTION:**

**Mobile Generation**
Reference CenterPoint's response to subpart a. of HCC 1-1, which references PURA § 39.918(b)(1). Please describe how CenterPoint determines that: (1) the bulk power system is not operating normally; and (2) the failure of the bulk power system to operate normally is preventing full service to CenterPoint's distribution facilities.

**ANSWER:**

1. The determination of when a "utility's distribution facilities are not being fully served by the bulk power system under normal operations," as stated in PURA § 39.918(b)(1)(B), is a determination that is made based on the relevant facts and circumstances attendant to each situation and is done so in consultation with Operations, Engineering, Regulatory, and Legal. Examples of such facts and circumstances may include, but are not limited to, under-frequency or under-voltage situations on the ERCOT transmission system, physical damage to the ERCOT transmission system, and physical damage to the utility's distribution facilities.

2. See response above.

**SPONSOR (PREPARER):**
Martin Narendorf

**RESPONSIVE DOCUMENTS:**
None

**CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC**
**PUC DOCKET NO. 53442**
**SOAH NO. DOCKET NO. 473-22-2353**

**Texas Energy Association for Marketers**
**REQUEST NO.: TEAM01-06**

**QUESTION:**

**Mobile Generation**
Reference the Amended Direct Testimony of Martin Narendorf at Bates pages 104-05, which states: "The intensity and duration of these storms have often resulted in widespread damage to the Company's distribution facilities, preventing them from delivering power from the bulk power system and taking a considerable amount of time to rebuild facilities and restore power from the bulk power system to our customers." Please admit or deny that this statement is describing a situation where the bulk power system is operating normally such that CenterPoint's customers would not be experiencing an interruption in service but for an operational issue that is limited to CenterPoint' s distribution system. If anything other than an unqualified admit, please explain.

**ANSWER:**

Admit.

**SPONSOR (PREPARER):**
Martin Narendorf

**RESPONSIVE DOCUMENTS:**
None

**CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC**
**PUC DOCKET NO. 53442**
**SOAH NO. DOCKET NO. 473-22-2353**

**Texas Energy Association for Marketers**
**REQUEST NO.: TEAM01-07**

**QUESTION:**

**Mobile Generation**
Reference the Amended Direct Testimony of Martin Narendorf at Bates page 111. Please provide a copy of the "assessments" referenced in the following statement: "In its assessments, the Company identified that having approximately 500 MW of mobile generation facilities, along with other options the Company is pursuing, would have been sufficient to meet the load shed demands caused by Winter Storm Uri."

**ANSWER:**

Assessments were done in a meeting in the form of verbal discussions. During the discussions it was determined that, based on the loading conditions that existed during winter storm Uri and the amount of load shed directed by ERCOT, the 500MW mobile generation capacity can provide the additional load shed capability needed to rotate customers evenly. No drafted assessments or analysis were performed.

**SPONSOR (PREPARER):**
Martin Narendorf

**RESPONSIVE DOCUMENTS:**
None

**CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC**
**PUC DOCKET NO. 53442**
**SOAH NO. DOCKET NO. 473-22-2353**

**Texas Energy Association for Marketers**
**REQUEST NO.: TEAM01-08**

**QUESTION:**

**Mobile Generation**
After receiving responses to the RFP for the short-term lease, did CenterPoint re-evaluate the total MW of mobile generation it sought to procure in an effort to bring down the cost?

**ANSWER:**

No.

**SPONSOR (PREPARER):**
Martin Narendorf

**RESPONSIVE DOCUMENTS:**
None

**CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC**
**PUC DOCKET NO. 53442**
**SOAH NO. DOCKET NO. 473-22-2353**

**Texas Energy Association for Marketers**
**REQUEST NO.: TEAM01-09**

**QUESTION:**

**Mobile Generation**
After receiving responses to the RFP for the long-term lease, did CenterPoint re-evaluate the total MW of mobile generation it sought to procure in an effort to bring down the cost?

**ANSWER:**

No.

**SPONSOR (PREPARER):**
Martin Narendorf

**RESPONSIVE DOCUMENTS:**
None

**CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC**
**PUC DOCKET NO. 53442**
**SOAH NO. DOCKET NO. 473-22-2353**

**Texas Energy Association for Marketers**
**REQUEST NO.: TEAM01-12**

**QUESTION:**

**Mobile Generation**
Reference the Amended Direct Testimony of Martin Narendorf at Bates page 115. Please explain how the widespread outage during Hurricane Nicholas that resulted in the deployment of a mobile generation facility to the Lake Jackson Civic Center met the criteria in PURA § 39.918(b)(1).

**ANSWER:**

Hurricane Nicholas, which made landfall on the night of September 13, 2021, was a significant wind-driven storm that resulted in damages to several CenterPoint distribution facilities in Lake Jackson and surrounding areas. As stated in Brad A Tutunjian's Amended Direct Testimony, 246 total electric circuits locked out, 3,060 total electric fuses went out, and approximately 540,000 customers were impacted as a result of the hurricane. These damages prevented a significant portion of its distribution facilities from being fully served by the bulk power system, which further caused a large number of CenterPoint's distribution customers to experience power outages that lasted or were expected to last for at least eight hours and created a risk to public safety. These conditions satisfied the criteria of PURA § 39.918(b)(1).

**SPONSOR (PREPARER):**
Martin Narendorf

**RESPONSIVE DOCUMENTS:**
None

**CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC**
**PUC DOCKET NO. 53442**
**SOAH NO. DOCKET NO. 473-22-2353**

**Texas Energy Association for Marketers**
**REQUEST NO.: TEAM01-13**

**QUESTION:**

**Mobile Generation**
Reference the Amended Direct Testimony of Martin Narendorf at Bates page 115, which states: "In addition, the damage to the Company's facilities meant that they were not capable of being served by the bulk power system." Please describe the conditions on the bulk power system preventing its normal operation such that CenterPoint's distribution facilities near the Lake Jackson Civic Center would not have been fully served had they not been damaged. Please identify each piece of equipment or facilities that are part of the bulk power system that failed in this situation.

**ANSWER:**

Refer to response on TEAM01-12 describing the impacts for Hurricane Nicholas which resulted in a widespread power outage. Distribution circuit that feeds Lake Jackson Civic Center was impacted and locked out on 9/13/2021. Upon inspections, crews found wire down as well as tree limbs on wires along Plantation Court street preventing restoration of power to Lake Jackson Civic Center. The wires were repaired and circuit was restored on 9/18/2021.

**SPONSOR (PREPARER):**
Martin Narendorf

**RESPONSIVE DOCUMENTS:**
None

**CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC**
**PUC DOCKET NO. 53442**
**SOAH NO. DOCKET NO. 473-22-2353**

**Texas Energy Association for Marketers**
**REQUEST NO.: TEAM01-27**

**QUESTION:**

**Mobile Generation**
Reference the Amended Direct Testimony of John Durland at Bates pages 275-76, which discusses the process CenterPoint will use to remove customer usage during the operation of mobile generation facilities from the usage reported to REPs for billing purposes. Please explain whether the manual removal process will require CenterPoint to provide estimated meter reads for the billing period in which the mobile generation facilities were operated, to issue a cancel/rebill for an ESIID to after the usage is manually removed, or perform some other action that would result in the customer's REP having to adjust the customer's bill.

**ANSWER:**

While it is our preference and intention to develop a process that does not utilize estimates and/or cancels/rebills, we cannot at this time rule out the possibility that estimates or cancels/rebills may be required in certain instances in order to comply with the requirement to remove usage. To the extent possible, the Company will be engaged with stakeholders during the Commission's planned rulemaking project to implement PURA § 39.918

**SPONSOR (PREPARER):**
John Durland

**RESPONSIVE DOCUMENTS:**
None

**CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC**
**PUC DOCKET NO. 53442**
**SOAH NO. DOCKET NO. 473-22-2353**

**Texas Energy Association for Marketers**
**REQUEST NO.: TEAM01-28**

**QUESTION:**

**Mobile Generation**
Reference Highly Sensitive Exhibit MWN-2. Please explain why the term in Article 1(c)2.a. was included in this lease.

**ANSWER:**

The Company prudently negotiated the right to terminate the lease in the event that the Commission disallowed recovery of the lease costs in this proceeding or in the event of any other "Ruling or Regulatory Event [that] creates a material adverse condition."

**SPONSOR (PREPARER):**
Martin Narendorf

**RESPONSIVE DOCUMENTS:**
None

**CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC**
**PUC DOCKET NO. 53442**
**SOAH NO. DOCKET NO. 473-22-2353**

**Alliance for Retail Markets' and Texas Competitive Power Advocates**
**REQUEST NO.: ARM-TCPA01-03**

**QUESTION:**

Please provide any numeric analysis performed to demonstrate the value or benefit to customers of the mobile generation facilities performed (a) before the RFP and (b) after the RFP.

**ANSWER:**

CEHE did not perform any numerical analysis to demonstrate the value or benefit to customers of the mobile generation facilities. Mobile generation facilities will be used to aid in restoration following a widespread power outage or during ERCOT initiated load shed. Benefit to impacted customers comes from reduction in outage duration.

**SPONSOR (PREPARER):**
Martin Narendorf

**RESPONSIVE DOCUMENTS:**
None

*Establishing a path towards*

# PREMIUM

**Through Sustainable Growth…**

## FOURTH QUARTER 2021
## S&P UPDATE

**March 14, 2022**

CenterPoint Energy

# Strategic Highlights

# Premium Value Proposition: Tracking Delivery

CenterPoint Energy

| CNP Value Proposition | 10-Year Plan Deliverables | Progress |
|---|---|---|
| Sustainable Growth for Shareholders | Targeting **industry-leading growth** of 8% non-GAAP EPS annually through 2024 and mid to high-end of 6%-8% annually through 2030 (1) | ✓ **7** quarters of meeting/exceeding expectations |
| | Increasing 5-year Capital plan to $19.2B (2), and executing **10-year Capital plan** of $40B+ (2), with more potential beyond our 10-year horizon | ✓ **Year 1** of 10-yr plan completed |
| | Utilizing >$3B in expected proceeds (3); **No external equity issuance** planned through 2030 (4) | ✓ **No** issuance since May 2020 (4) |
| Sustainable, Resilient, and Affordable Service for Customers | Becoming a **Pure-play** Regulated Utility with a consistent **track record** of delivery | ✓ **On track** |
| | ~70% of ET stake sold in 2021 (5); Plan to **fully exit midstream well within year end 2022 target** | ✓ **On track** |
| | Maintaining balance sheet health; long term **FFO/Debt** (6) target **of 14%-15%** through 2030 | ✓ **On track** |
| Sustainable Positive Impact on our Environment | **Keeping rates affordable** through maintained O&M (7) discipline and customer growth (8) | ✓ **Year 1** of 10-yr plan completed |
| | Focused on achieving **Net Zero Scope 1 emissions by 2035** target; nearly 15 years ahead of peer average (9); Additional disclosure led to better ESG score | ✓ **On track** |

(1) Refers to non-GAAP EPS annual growth rate for 2022E – 2030E
(2) Refers to 5-year capital plan from 2021E to 2025E and 10-year capital plan from 2021E-2030E
(3) Refers to expected proceeds from announced transactions, coal asset securitization, and cash savings from repairs tax deduction
(4) Not including small issuance through employee incentive plan and employee savings plan
(5) Refers to units received from ENBL and ET merger
(6) Consistent with Moody's methodology; FFO is a non-GAAP measure
(7) Inclusive of Electric and Natural Gas business segments. Excluding utility costs to achieve, severance costs and amounts with revenue offsets
(8) Internal projection through 2030
(9) Peer group includes operators owning large scale generation, including CMS, AEE, D, DTE, DUK, LNT, PPL, SO, WEC, XEL as of Analyst Day 2021

# Takeaways....

CenterPoint Energy

## Fourth Quarter and Full Year 2021 Results; Reaffirmed 2022 Guidance

Delivered non-GAAP Utility EPS [1] of $0.27 for fourth quarter and $1.27 for full year 2021;
Moving to consolidated non-GAAP EPS for 2022 with reaffirmed guidance range of $1.36 - $1.38

## Successful Execution of Capital Plan

~$100M of incremental CapEx in 2021 and $200M of accelerated CapEx in 2022 [2] primarily due to accelerated deployment of mobile generation; Collaborated with the City of Houston to develop Master Energy Plan which may lead to incremental investments

## Focus on Net Zero Target and Improved ESG Strategy

Improved ESG score from Sustainalytics due to announced ESG targets and additional disclosure; Aligning management long-term incentive compensation with carbon emission reduction targets beginning in 2022

## Constructive Regulatory Environment

Received financing order for gas cost securitization in TX; Interim rates in-place for ongoing rate case in Minnesota;
No other rate cases anticipated until 2023

## Significant Step Toward Full Midstream Exit

Executed on sale of 75% of ET common units and 50% of ET Series G preferred units shortly after ET-ENBL merger close; Plan to exit the remaining stake well within year end 2022 target

## Continued O&M [3] Management Effort to Support Growth

1% - 2% annual average O&M [3] savings can be re-injected into the business; 1% savings in 2021 vs 2020 includes over $25M of accelerated O&M

....EXTENDING TRACK RECORD OF EXECUTION

(1) GAAP diluted EPS was $1.01 for fourth quarter and $2.28 for full year 2021. Refer to slide 14 and slide 15 for reconciliation of non-GAAP measures to GAAP measures.
(2) Includes incremental and accelerated investments in 2021 and 2022 related to capital leases for mobile generation units above 2021 Analyst Day estimates. Exact amount for mobile generation subject to certain regulatory treatments.
(3) Inclusive of Electric and Natural Gas business. Excluding utility costs to achieve, severance costs and amounts with revenue offsets.

# Capital Expenditures by Segment….

| | Current 5-Yr Plan (1) | | | 10-Yr Plan (2) |
|---|---|---|---|---|
| | FY 2021 | FY 2022E (3) | 5-YR Plan | 10-YR Plan |
| **Electric** (4) | ~$2.1B | ~$2.4B | **$11.2B** | **$23B+** |
| **Natural Gas** | ~$1.4B | ~$1.4B | **$7.6B** | **$16B+** |
| **Corporate and other** | ~$40M | ~$10M | **$0.1B** | **$0.2B** |
| **Total CapEx (2021 Analyst Day)** | ~$3.5B | ~$3.8B | **$18B+** | **$40B+** |
| ***Incremental Spend above Analyst Day*** (5) | *~$100M increase* | *~$200M accelerated* | *~$300M increase* | *~$300M increase* |
| **Total Capital Expenditures** (5) | ~$3.6B | ~$4.0B | **~$19.2B** | **$40B+** |

## CapEx Plan Update

- Incremental to Analyst Day: accelerated and increased mobile generation - 500 MW
- Potential Incremental Capital: "Master Energy Plan" collaboration with City of Houston could lead to further investments; Similar initiatives ongoing with other cities in our Electric footprint

**….SUCCESSFUL EXECUTION OF ACCELERATED CAPEX PLAN WITH UPSIDES**

(1) Refers to capital plan from 2021E to 2025E
(2) Refers to capital plan from 2021E to 2030E
(3) Represents 2022 capital estimated as of 12/31/2021
(4) Includes estimated investments related to TX legislation namely capital leases for mobile generation units as of 2021 Analyst Day of approximately $600M spread across 2021 - 2023
(5) Includes incremental and accelerated investments in 2021 and 2022 related to capital leases for mobile generation units above 2021 Analyst Day estimates and incremental CapEx in 2023 to offset the accelerated investments related to mobile generation. Exact amount for mobile generation subject to certain regulatory treatments.

# Key Regulatory Updates….

## Rate Case Updates

- **Minnesota Rate Case:**
  - Filed 11/1/2021
  - $67.1M Revenue increase
  - 10.2% ROE / 51.00% Equity / 7.06% ROR
  - $42M Interim rates went into effect 1/1/2022

## Indiana IRP Update

- **Electric CPCNs:**
  - ✓ **400 MW Solar:** Approved in October 2021
    - BTA downsizing from 300 MW to 200 MW
    - PPA remains at 100 MW
  - **460 MW Gas CT**: Order expected Q2/Q3 2022
  - **335 MW Solar:** Order expected Q1/Q2 2022
- **Next IRP filing – target 2023**

## Winter Storm Uri Updates

- **AR and OK $398M** (1)
  - ✓ Received through AR and OK gas LDC sale process
  - ✓ Paid down $425M of floating rate notes in January
- **TX $1.1B (remaining balance)**
  - ✓ Financing order approved
  - Expected securitization by mid-2022
- **MN $379M (remaining balance)** (2)
  - ✓ Recovery over 63 months, started September 2021
  - On going prudence case

**Estimated remaining balance ~$520M** (3) (4)
*excluding expected proceeds from TX gas cost securitization*

**….CONSTRUCTIVE ACROSS OUR FOOTPRINT**

BTA – Build-Transfer Agreement; PPA – Power Purchase Agreement; CPCN – Certificate of Public Convenience and Necessity; CT – Combustion Turbine; IRP – Integrated Resource Plan

(1) Represents unrecovered winter storm gas cost balance in Arkansas and Oklahoma as of 12/31/2021

(2) Full amount of $409M is subject to ongoing prudence review

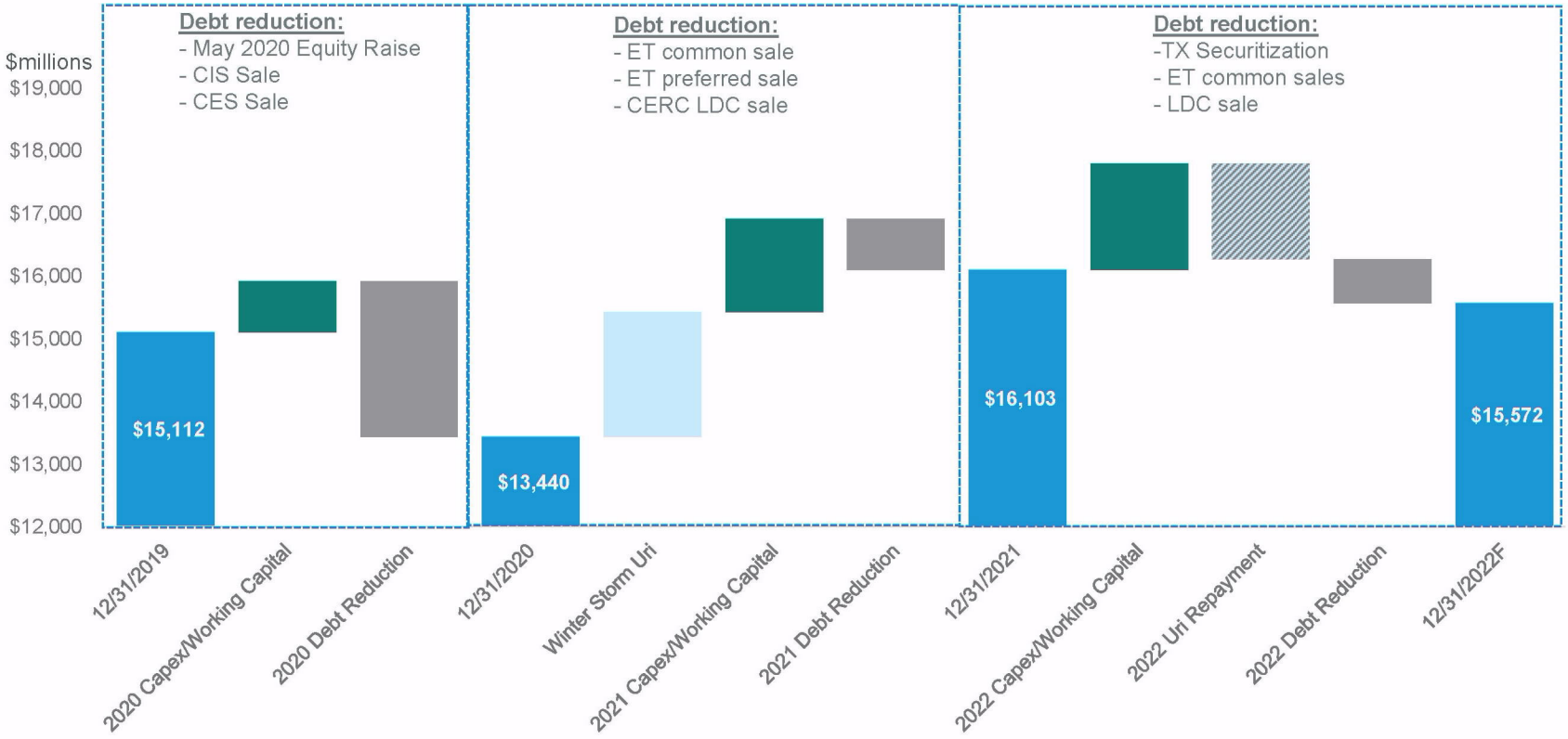
(3) Assumes current cost recovery mechanisms in place and excludes amount to be received through securitization of winter storm-related gas costs in Texas. Actual amount, timing and the duration of the recovery may vary. Recovery in all jurisdictions subject to customary prudency reviews which may impact amounts recovered.

(4) Recovery status for the remaining states: Indiana, Mississippi, South Louisiana – recovery through existing cost recovery mechanisms over 12 months; North Louisiana – recovery through existing cost recovery mechanism over 3 years with carrying costs.

CenterPoint Energy

# Balance sheet / Credit updates

# Commitment to Strong Balance Sheet




….Reduced parent debt and grown rate base through recycled capital

# Treasury dashboard

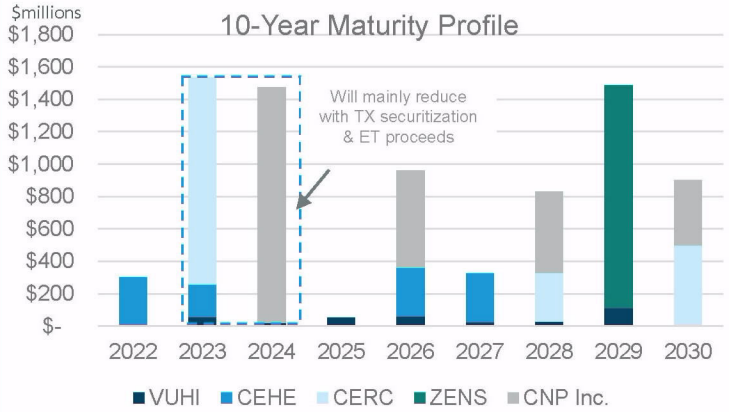
## 2022 Radar

- Issue **$1.2B CEHE** mortgage bonds ($800mm issued), **$900M CERC** notes and **$775M SIGECO** mortgage bonds at rates in line with plan
- Execute VUHI restructuring and notes exchange
- Complete securitization of Texas Uri gas costs
- Amend Revolving Credit Facilities (RCF) post-restructuring
- Publish Sustainability-Linked Financing Framework

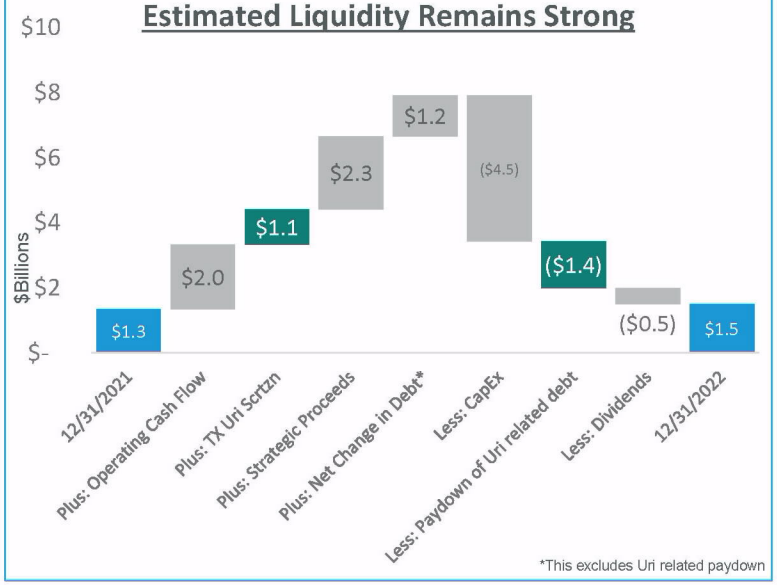
## Credit Outlook

- Focus on core regulated business and exit of midstream has improved CNP's business risk, gas cost recovery risk is diminishing
- Asset sales and efficient regulatory recovery supports deleverage and improves financial ratios, partially offset by increased capital investment

## Focused on Near-term Debt Maturities



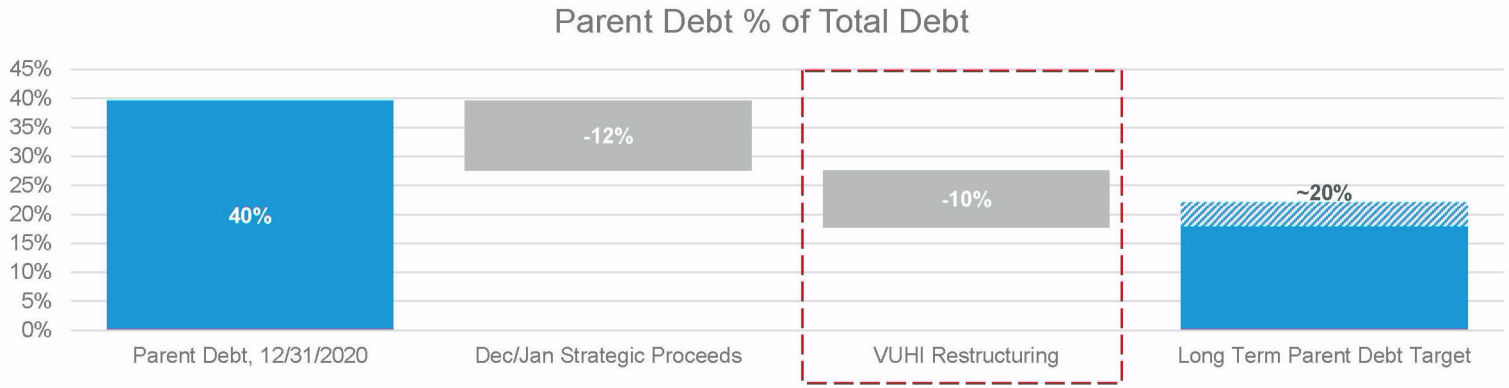

## Estimated Liquidity Remains Strong




*This excludes Uri related paydown

**Active 2022 financing calendar; Corporate restructuring in focus for 1st half of year; liquidity remains strong**

# VUHI Restructuring Update

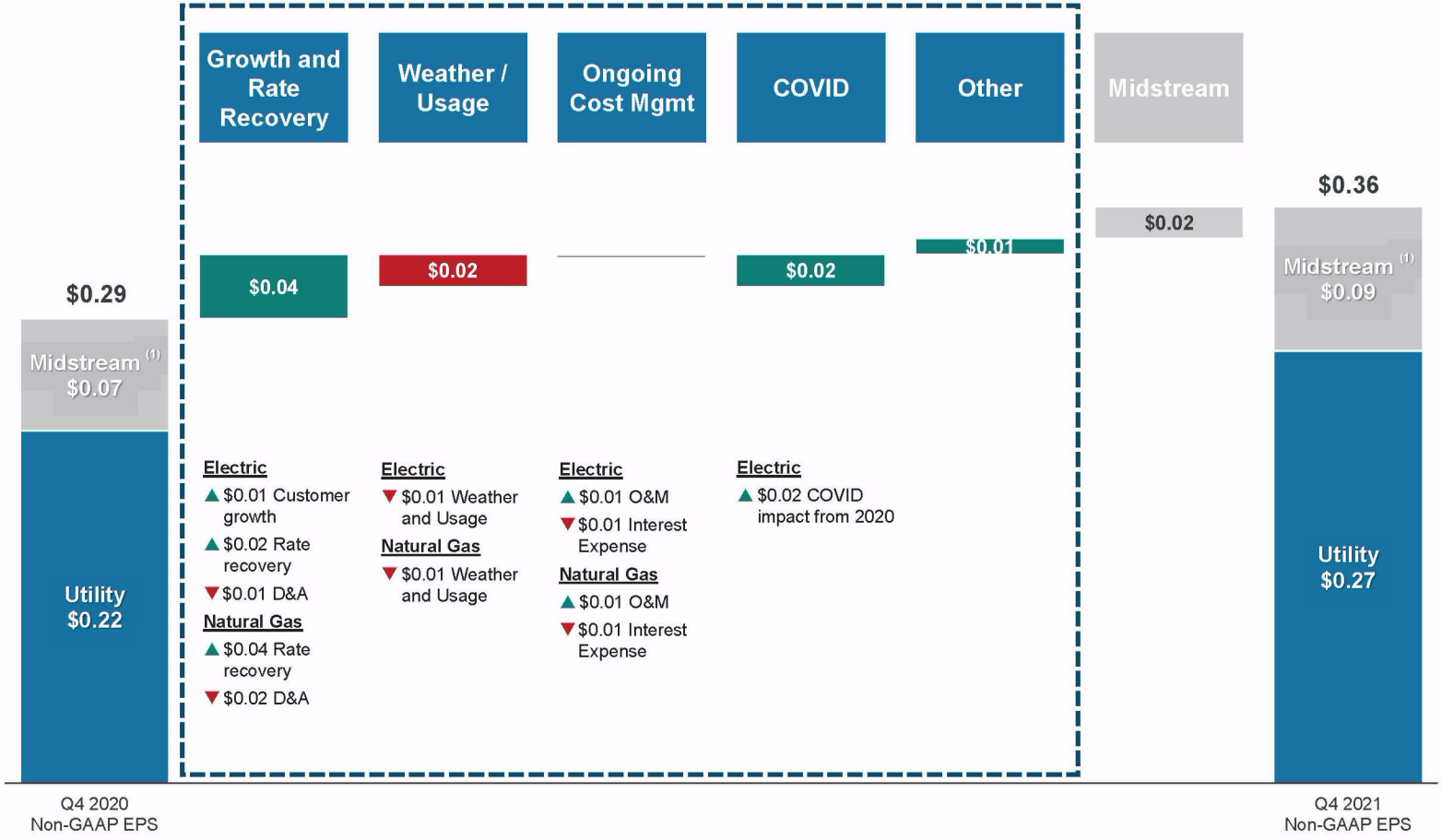



- ✓ Combined with recent strategic proceeds, VUHI restructuring will allow CNP to achieve its parent debt to total debt target of ~20%
- ✓ All regulatory approvals for VUHI restructuring required have been received
  - Indiana and Ohio Commission support restructure strategy and approve amortization of exchange fees
  - Notifications in other states completed as required
- Next steps:
  - Launch formal consent/exchange offer in March after 10-K is filed
  - Assuming successful consent/exchange offer, issue new CERC and SIGECO debt to recapitalize

CenterPoint Energy

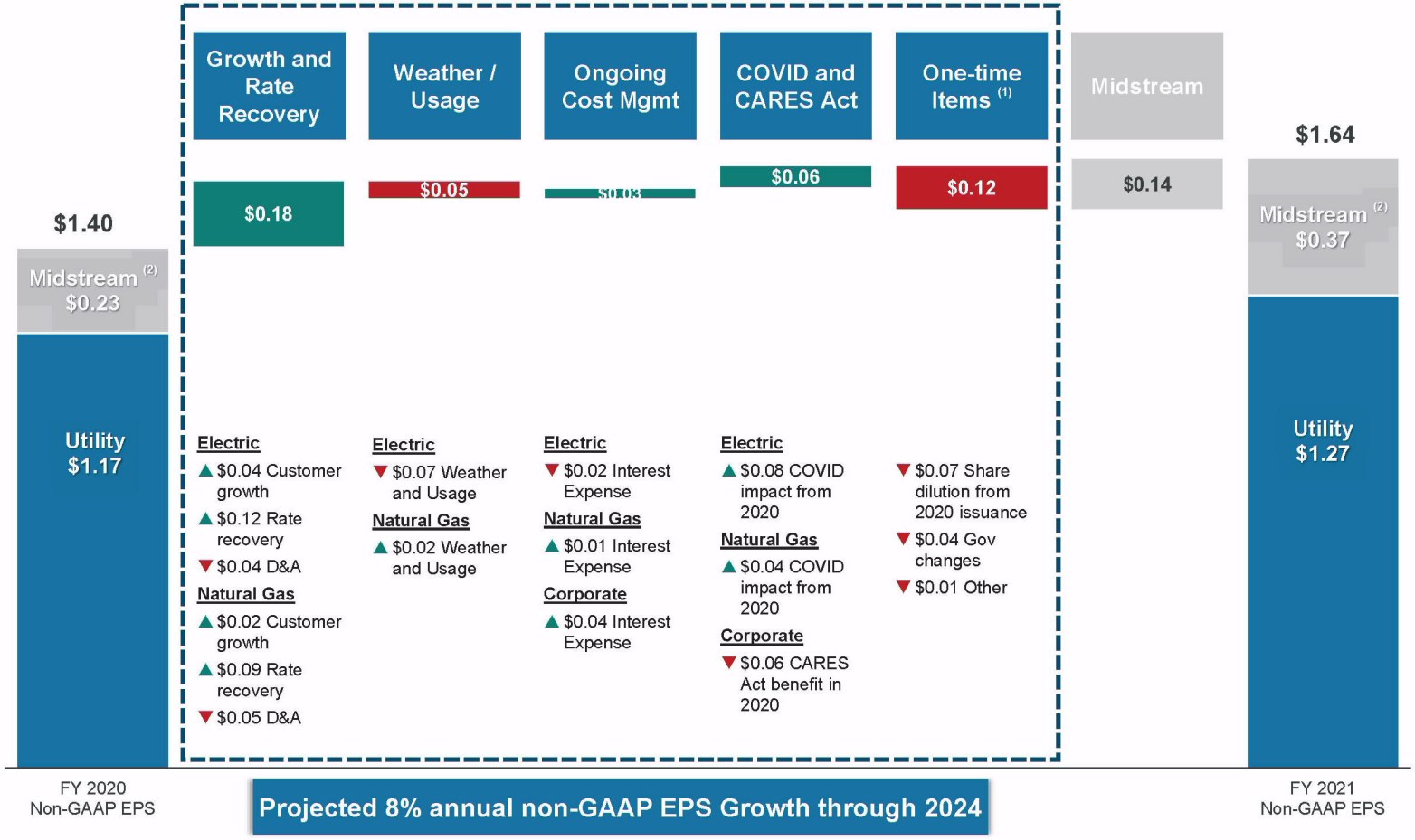
# Appendix

# Q4 2021 v Q4 2020 Non-GAAP EPS Primary Drivers




(1) Reference Energy Transfer 2021 Form 10-K and fourth quarter 2021 earnings materials dated February 16, 2022. Includes the effect of share dilution and associated allocation of Corporate & Other based upon relative earnings contribution. Reported under Discontinued Operations.

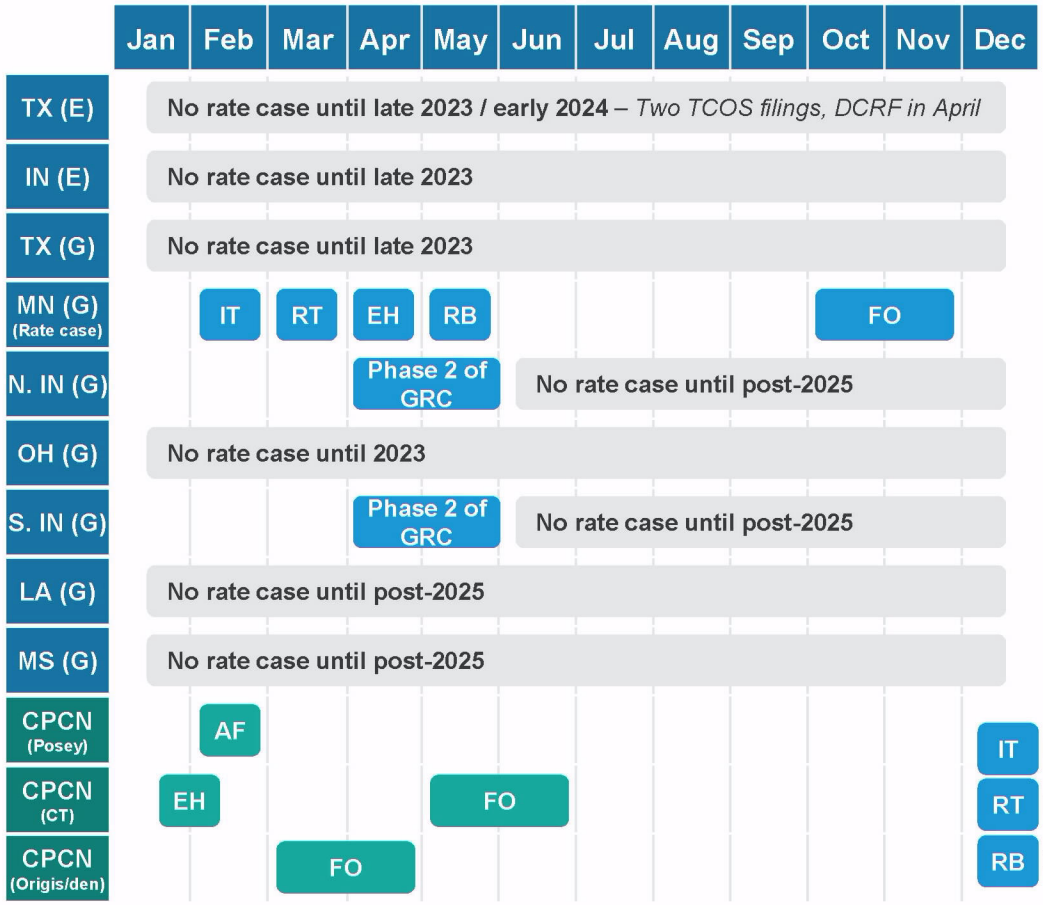
# FY 2021 v FY 2020 Non-GAAP EPS Primary Drivers




(1) Includes one-time lump sum payment associated with board-implemented governance change announced in July 2021 and share dilution from May 2020 equity issuance
(2) Reference Energy Transfer 2021 Form 10-K and fourth quarter 2021 earnings materials dated February 16, 2022. Includes the effect of share dilution and associated allocation of Corporate & Other based upon relative earnings contribution. Reported under Discontinued Operations.

# Regulatory Schedule

## Limited regulatory risk in the near term




| | Revenue Requirement | ROE / Equity Ratio | Estimated '21 Rate Base |
|---|---|---|---|
| TX (E) | N/A | 9.40% / 42.5% | $8.7B |
| IN (E) | N/A | 10.40% / 43.5% | $2.1B |
| TX (G) | N/A | 9.69% / 55.6% (1) | $1.7B |
| MN (G) (Rate case) | $67.1M (2) | 10.2% / 51.0% (2) | $1.6B |
| N. IN (G) | N/A | 9.80% / 46.2% | $1.6B |
| OH (G) | N/A | N/A | $1.0B |
| S. IN (G) | N/A | 9.70% / 45.7% | $0.5B |
| LA (G) | N/A | 9.95% / 52.0% | $0.3B |
| MS (G) | N/A | 9.29% / 50.0% | $0.2B |

| | | | |
|---|---|---|---|
| IT | Intervenor Testimony | FO | Final Order |
| RT | Rebuttal Testimony | AF | Amendment Filing |
| RB | Reply Briefs | EH | Evidentiary Hearing |

TCOS – Transmission cost of service adjustment; DCRF – Distribution cost recovery factor; GRC – General rate case
(1) TX Gas regulatory metrics reflect jurisdictional average
(2) Represent requested metrics per the latest rate case filing

# Weather and Throughput Data

## Electric

| | | FY 2021 | FY 2020 | 2021 vs 2020 |
|---|---|---|---|---|
| Throughput (in GWh) | Residential | 32,067 | 32,630 | (2)% |
| | Total | 103,000 | 98,647 | 4% |
| Metered customers [1] | Residential | 2,493,832 | 2,433,474 | 2% |
| | Total | 2,814,859 | 2,749,116 | 2% |
| Weather [2] | Cooling degree days | 108% | 109% | (1)% |
| | Heating degree days | 82% | 76% | 6% |
| | *Houston Cooling degree days* | *109%* | *110%* | *(1)%* |
| | *Houston Heating degree days* | *80%* | *70%* | *10%* |

## Natural Gas

| | | FY 2021 | FY 2020 | 2021 vs 2020 |
|---|---|---|---|---|
| Throughput (in Bcf) | Residential | 241 | 237 | 2% |
| | Commercial and Industrial | 428 | 439 | (3)% |
| | Total | 669 | 676 | (1)% |
| Metered customers [1] | Residential | 4,372,428 | 4,328,607 | 1% |
| | Commercial and Industrial | 354,602 | 349,725 | 1% |
| | Total | 4,727,030 | 4,678,332 | 1% |
| Weather [2] | Heating degree days | 91% | 91% | - |
| | *Texas Heating degree days* | *87%* | *77%* | *10%* |

Note: Data as of 12/31/2021
(1) End of period number of metered customers
(2) Percentage of normal weather for service area. Normal weather is based on past 10-year weather in service area.

# Regulatory Information

| Information | Location |
|---|---|
| **Electric**<br>▪ Estimated 2020 year-end rate base by jurisdiction<br>▪ Authorized ROE and capital structure by jurisdiction<br>▪ Definition of regulatory mechanisms<br>▪ Projected regulatory filing schedule | Regulatory Information – Electric |
| **Natural Gas**<br>▪ Estimated 2020 year-end rate base by jurisdiction<br>▪ Authorized ROE and capital structure by jurisdiction<br>▪ Definition of regulatory mechanisms<br>▪ Projected regulatory filing schedule | Regulatory Information – Gas |
| Estimated amortization for pre-tax equity earnings related to Houston Electric's securitization bonds | Regulatory Information – Electric (Pg. 5) |
| Rate changes and Interim mechanisms filed | Form 10-K – *Rate Change Applications* section |

# Financial Forecast

# CenterPoint Energy, Inc.
# Consolidated

CenterPoint Energy

| Income Statement | 2022 | 2023 | 2024 |
|---|---|---|---|
| Total Revenues | $ 7,902.6 | $ 7,955.0 | $ 8,286.5 |
| Natural Gas/Fuel & Purchased Power | 1,844.8 | 1,633.9 | 1,635.7 |
| Operation and Maintenance | 2,643.3 | 2,666.0 | 2,729.0 |
| Taxes Other Than Income | 533.4 | 564.4 | 592.5 |
| Depreciation and Amortization | 1,281.1 | 1,361.0 | 1,488.0 |
| Operating Income | 1,600.1 | 1,729.7 | 1,841.3 |
| Gain (Loss) on Time Warner/ZENS | - | - | - |
| Equity in earnings of unconsolidated affiliates (1) | 11.7 | - | - |
| Other Income (2) | 402.7 | 21.5 | 24.0 |
| EBIT | 2,036.6 | 1,773.9 | 1,888.8 |
| Securitization Interest | 13.4 | 7.6 | 2.7 |
| Other Interest | 470.7 | 514.6 | 561.6 |
| EBT | 1,552.5 | 1,251.7 | 1,324.5 |
| Tax Expense (2) | 628.5 | 266.0 | 267.1 |
| Net Income Available to Common Shareholders | $ 875.0 | $ 942.1 | $ 1,021.4 |
| Basic Shares | 629.6 | 631.4 | 634.0 |
| Basic EPS Reported | $ 1.39 | $ 1.49 | $ 1.61 |
| Diluted Shares | 634.3 | 636.4 | 638.6 |
| Diluted EPS Reported | $ 1.38 | $ 1.48 | $ 1.60 |
| Diluted EPS Per Guidance (Excluding Merger Impacts) | $ 1.37 | $ 1.48 | $ 1.60 |

(1) Earnings equal to Energy Transfer distributions
(2) 2022 Includes pre-tax gain on sale of gas LDC's $388M and associated tax expense of $386M

# CenterPoint Energy, Inc.
# Consolidated

CenterPoint Energy

## Cash Flows

| | 2022 | 2023 | 2024 |
|---|---|---|---|
| Net Income | $ 924.0 | $ 985.7 | $ 1,057.4 |
| Depreciation and Amortization | 1,281.1 | 1,361.0 | 1,488.0 |
| Amortization of Deferred Financing Costs | 25.2 | 20.1 | 19.9 |
| Deferred Taxes | (563.4) | 403.6 | 413.9 |
| Funds From Operations | 1,666.8 | 2,770.5 | 2,979.2 |
| Changes in Working Capital | 1,400.6 | 534.1 | (76.8) |
| Operating Cash Flow | 3,067.4 | 3,304.6 | 2,902.4 |
| Capital Expenditures | (4,228.3) | (4,470.9) | (3,737.2) |
| Other Investing Activities (1) | 2,253.2 | - | - |
| Investing Cash Flow | (1,975.1) | (4,470.9) | (3,737.2) |
| Increase (decrease) in Inventory Financing | - | - | - |
| Increase (decrease) in Commercial Paper Borrowings | (630.0) | 579.2 | (618.4) |
| Increase (decrease) in Securitization Debt | (165.7) | (145.9) | (118.3) |
| Increase (decrease) in Other Long Term Debt | 193.1 | 1,269.3 | 2,140.4 |
| Issuance (repurchase) of Stock (Common & Preferred) | - | - | - |
| Dividends (Common & Preferred) | (489.7) | (536.3) | (568.8) |
| Other Financing Activities | - | - | - |
| Financing Cash Flow | (1,092.3) | 1,166.3 | 834.8 |
| Total Cash Flow | $ (0.0) | $ - | $ 0.0 |

(1) 2022 Includes proceeds on sale of gas LDC's $1.654B, Energy Tansfer Unit $427M and MES $173M

# CenterPoint Energy, Inc.
# Consolidated

CenterPoint Energy

## Balance Sheet

| | 2022 | 2023 | 2024 |
|---|---|---|---|
| **ASSETS** | | | |
| Cash/Temporary Investments (excl. Bond Companies) | $ 7.4 | $ 7.4 | $ 7.4 |
| Investment in ZENS related stock | 822.1 | 822.1 | 822.1 |
| Other Current Assets | 1,849.1 | 1,933.9 | 1,999.0 |
| PP&E, net | 27,732.8 | 31,042.8 | 33,508.5 |
| Goodwill | 4,696.5 | 4,696.5 | 4,696.5 |
| Securitized Regulatory Assets | 254.2 | 108.4 | - |
| Other Assets | 550.1 | (41.3) | (73.2) |
| Total Assets | $ 35,912.2 | $ 38,569.9 | $ 40,960.4 |
| **LIABILITIES AND EQUITY** | | | |
| Commercial Paper Borrowings | $ 2,018.8 | $ 2,598.0 | $ 1,979.6 |
| Inventory Financing | 24.0 | 24.0 | 24.0 |
| Other Current Liabilities | 2,399.6 | 2,452.9 | 2,492.8 |
| Total Current Liabilities | 4,442.5 | 5,075.0 | 4,496.5 |
| Non-Recourse Securitization Debt | 368.4 | 222.6 | 104.4 |
| Other Long Term Debt | 13,161.0 | 14,441.3 | 16,592.9 |
| Deferred Income Taxes | 3,252.1 | 3,655.7 | 4,069.6 |
| Other Liabilities | 4,901.1 | 4,938.7 | 4,972.0 |
| Total Liabilities | 26,125.1 | 28,333.4 | 30,235.4 |
| Common Equity | 9,787.1 | 10,236.5 | 10,725.1 |
| Total Equity | 9,787.1 | 10,236.5 | 10,725.1 |
| Total Liabilities and Equity | $ 35,912.2 | $ 38,569.9 | $ 40,960.4 |