

Filing Receipt

Received - 2021-08-12 02:19:14 PM Control Number - 52322 ItemNumber - 136

DOCKET NO. 52322

§

\$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$

APPLICATION OF THE ELECTRIC
RELIABILITY COUNCIL OF TEXAS,
INC. FOR A DEBT OBLIGATION
ORDER TO FINANCE UPLIFT
BALANCES UNDER PURA,
CHAPTER 39, SUBCHAPTER N, FOR
AN ORDER INITIATING A
PARALLEL DOCKET, AND FOR A
GOOD CAUSE EXCEPTION

BEFORE THE PUBLIC UTILITY COMMISSION OF TEXAS

DIRECT TESTIMONY

of

MATHEW PARKER

on behalf of Intervenors

TXU ENERGY RETAIL COMPANY LLC

AMBIT TEXAS, LLC

LUMINANT ET SERVICES COMPANY LLC

TRIEAGLE ENERGY LP

AND

VALUE BASED BRANDS LLC DBA 4CHANGE ENERGY, EXPRESS ENERGY, AND VETERAN ENERGY

August 12, 2021

TABLE OF CONTENTS

TABLE OF CONTENTSii		
I.	INTRODUCTION	1
II.	OVERVIEW OF TESTIMONY	2
III.	NATURE OF UPLIFT COSTS	3
IV.	EXPOSURE OF EACH TXU LSE TO THE UPLIFT COSTS	.11
V.	TXU LSES BEAR THEIR OWN UPLIFT EXPOSURE	.12
VI.	CONCLUSION	.12
AFFIDAVIT		

DIRECT TESTIMONY OF MATHEW PARKER

1		I. INTRODUCTION
2	Q.	Please state your name, title, and business address.
3	A.	My name is Mathew Parker. I am Senior Vice President and Chief Risk Officer for
4		TXU Energy Retail Company LLC (TXU Energy), Ambit Texas, LLC (Ambit),
5		Luminant ET Services Company LLC (ETS), TriEagle Energy LP (TriEagle), and
6		Value Based Brands LLC dba 4Change Energy, Express Energy, and Veteran Energy
7		(VBB) (collectively, the TXU load-serving entities or TXU LSEs).
8	Q.	What are your current job responsibilities?
9	A.	As Chief Risk Officer, I lead a team responsible for assessment, communication, and
10		management of the risks inherent in the businesses. Specifically, this includes market
11		risk, credit risk, operational risk, modeling and valuation, and regulatory reporting.
12	Q.	Please describe your educational background.
13	A.	I have an undergraduate degree in Electrical Engineering from the University of Texas
14		at Dallas, and an MBA from Emory University.
15	Q.	Please describe your work experience.
16	A.	I have been involved in the wholesale energy business and risk management since
17		1997, and in the role of Chief Risk Officer since 2008. A majority of my early career
18		was in Risk Management at GenOn and predecessor companies (Mirant and Southern
19		Company Energy Marketing), beginning in 1999 and as the Chief Risk Officer from
20		2008 continuing until the purchase of the company by NRG in 2012. From January
21		2013 until April 2018, I was the Chief Risk Officer of Dynegy. Since the merger of
22		Vistra and Dynegy in 2018, I have been the Chief Risk Officer of Vistra.

Q. Have you previously testified in any regulatory proceedings before the
 Commission?

3 A. No, I have not.

4

II. OVERVIEW OF TESTIMONY

5 Q. What is the purpose of your direct testimony in this proceeding?

6 I am testifying on behalf of the TXU LSEs. My purpose is to (1) explain the nature of A. 7 the costs that make up the "uplift balance" that is eligible for securitization, (2) explain 8 why and how retail electric providers (REPs) like the TXU LSEs incur those costs, 9 (3) describe the calculation methodology by which each load-serving entity in the 10 Electric Reliability Council of Texas, Inc. (ERCOT) can and should calculate its 11 exposure, in a non-discriminatory and uniform manner based on ERCOT data, and (4) 12 detail the actual exposure to uplift balance costs experienced by each of the TXU 13 LSEs.

14 Q. What are your recommendations in this proceeding?

15 A. I recommend that the Public Utility Commission of Texas (Commission) follow the 16 statute's directive to determine each load-serving entity's individual exposure to uplift 17 balance costs and to remit bond proceeds to each load-serving entity accordingly. I 18 provide in my testimony detailed steps to accomplish the necessary calculations to 19 determine each load-serving entity's exposure. Each load-serving entity can do the 20 calculation for itself, following the methodology I outline, using data obtained from 21 ERCOT. Because each load-serving entity's exposure to uplift balance costs can thus 22 be determined in a consistent and non-discriminatory way, using ERCOT data, I 23 recommend that the Commission adopt my recommended calculations and direct that

1		the proceeds from the debt obligation bonds be issued to each load-serving entity based
2		upon the calculation of LSE-specific exposure that I describe in my testimony.
3		III. NATURE OF UPLIFT COSTS
4	Q.	What are uplift costs?
5	A.	In the ERCOT market, "uplift" is a term that is used to describe an allocation of costs
6		outside of the ERCOT-determined price for energy. In many instances, "uplift" is
7		modified or defined to mean costs allocated on a "load ratio share"-that is, costs that
8		are spread out to load-serving entities based on the amount of energy consumed by the
9		retail customers those load-serving entities serve. Uplift via load ratio share can be
10		calculated over any period of time, such as by 15-minute settlement interval, by hour,
11		or by month.
12		Uplift costs in the context of House Bill No. 4492 (HB 4492) and Public Utility
13		Regulatory Act (PURA) Chapter 39 Subchapter N, which that bill established, include
14		Ancillary Services (AS) costs above the system-wide offer cap and certain reliability
15		deployment price adder (RDPA) costs. These costs are referred to as uplift costs
16		because they were assigned based on load-serving entities' load ratio share due to
17		energy consumption during the February 12 through February 20, 2021 Period of
18		Emergency (as defined by PURA Section 39.652(3)). The uplift costs exclude amounts
19		securitized by electric cooperatives under different statutory provisions, and the RDPA
20		uplift costs specifically exclude amounts that were included in energy settlement
21		prices.

Q. How is a load-serving entity's load ratio share calculated? 2 A. First, as a general matter, a load-serving entity's load ratio share is basically the ratio 3 of the consumption of energy by the load-serving entity's customers divided by the total consumption by all customers in ERCOT. To arrive at a load-serving entity's 4 5 detailed load ratio share under the ERCOT Nodal Protocols (Protocols), one starts with 6 Protocol § 2.1, which provides a number of relevant definitions: 7 Load Ratio Share: "[t]he ratio of an Entity's AML to total ERCOT AML for • an interval." 8 9 Adjusted Metered Load (AML): "Retail Load usage data that has been adjusted 10 for Unaccounted for Energy (UFE), Transmission Losses, Distribution 11 Losses, and Direct Current Tie (DC Tie) exports (except for the Oklaunion 12 Exemption)." 13 Load: "the amount of energy in MWh delivered at any specified point or points • 14 on a system." 15 Working from those definitions, each load-serving entity's load ratio share can be 16 calculated for each settlement interval (or across a different time period by summing 17 relevant intervals) by using specific data obtained from ERCOT and accessible to all 18 load-serving entities: 19 First, the interval-level consumption data for each load-serving entity for each ٠ 20 operating day is available in the ERCOT Real-Time Market Consolidated 21 Operating Day Extract ("CODE"), in the LSEGUFE Bill Determinant Code 22 (UIDBILLDETERMINANT 355) data and the LLSOUTPUTINTERVAL 23 table.

1

1		• Second, the interval-level consumption data for all customers in ERCOT is
2		available in the corresponding RTAMLTOT Bill Determinant Code
3		(UIDBILLDETERMINANT 6599) from the Real-Time Market Market [sic]
4		Operating Day (MODE) Extract in the AGGOUTPUT table;
5		• Third, the former number should be divided by the latter number to determine
6		a load-serving entity's load ratio share for each settlement interval or other
7		relevant time period (i.e., LSEGUFE / RTAMLTOT).
8	Q.	Can you explain in more detail what ancillary service costs above the system-wide
9		offer cap are?
10	A.	There are four types of operating ancillary services (AS) that ERCOT procures to
11		support reliability: Regulation-Up (Reg-Up), Regulation-Down (Reg-Down),
12		Responsive Reserve Service (RRS), and Non-Spinning Reserve Service (Non-Spin).
13		These are all reserved in ERCOT's Day Ahead Market (DAM), which sets a marginal
14		clearing price of capacity for each service for each hour of the next operating day. The
15		volume of each AS procured is based on an AS Plan that ERCOT establishes in the
16		preceding year, though ERCOT can procure additional AS if deemed necessary.
17		Adjustments are made after the operating day to arrive at a "Final AS Obligation" and
18		"Final AS Price" for each AS. (Protocol § 6.7.4.) The system-wide offer cap was
19		\$9,000 per MW per hour during the Period of Emergency. Under the ERCOT
20		Protocols, prices for each AS cleared at times during the Period of Emergency higher
21		than \$9,000. I have included a table below summarizing AS costs during this time:

Ancillary Service	Min Price	Max Price	Mean Price	# (%) Hours Priced > \$9,000
Reg-Up	\$3.00	\$24,992.90	\$9,063.51	87 (40%)
Reg-Down	\$0.01	\$17,925.10	\$3,350.45	15 (7%)
RRS	\$4.00	\$25,674.30	\$11,643.16	121 (56%)
Non-Spin	\$1.25	\$12,866.70	\$4,955.85	10 (5%)

1 Q. How are ancillary services costs uplifted to load-serving entities?

A. These AS costs are assigned to each load-serving entity on an hourly load ratio share
basis. This allocation is a multi-step process, but the basis for the cost uplift lies in
ERCOT's assignment of its AS Plan through what is called the AS Obligation. This
means that ERCOT maps an amount of the AS Plan for each AS service by hour
"based on its Load Serving Entity (LSE) Load Ratio Shares (LRSs)[.]" (Protocol §
4.2.1.2(1)). In sum, each hour, ERCOT assigns the amount of AS (MWs) to loadserving entities on a load-ratio share basis.

9 Q. How should a load-serving entity's exposure to ancillary services costs be 10 calculated?

A. The simplest, most objective, and least discriminatory way to calculate the AS cost is
to use the ERCOT clearing price for each AS in each hour. In other words, the Final
AS Obligation (in MWs) should be multiplied by the Final AS Price for each hour. I
believe the Final AS Obligation and Final AS Price calculations under Protocol § 6.7.4
are preferable to the DAM AS calculations in Protocol § 4.6.4.2 because the DAM AS
Obligation calculations use a prior period's load ratio share, whereas Protocol § 6.7.4's
Final AS Obligation calculations update failed and supplemental AS quantities, as well

as update the allocation based on the load-serving entities' actual load ratio share for
the corresponding operating hour. Thus, the Final AS Obligations and Final AS Prices
are the appropriate metrics by which to determine a load-serving entity's exposure to
"ancillary services costs in excess of the commission's system-wide offer cap" and
were "uplifted to load-serving entities on a load ratio share basis due to energy
consumption *during the period of emergency*," as required by Subchapter N. (PURA
Section 39.652(4) (emphasis added)).

8 Each load-serving entity's exposure to uplift balance costs can be calculated 9 based on its contribution to the Final AS Obligation, using the Final AS Price. An objective way to calculate a load-serving entity's exposure to the Final AS Obligation 10 11 is using the load-serving entity's load ratio share of the ERCOT-wide load. The 12 approach would be efficient and promote standardization, which would streamline 13 validations to ensure that proceeds received by each load-serving entity is 14 commensurate with its actual exposure. Although ERCOT does not publish the 15 market-wide totals for each Final AS Obligation, the totals can be calculated based on 16 ERCOT data (as explained in the example below).

17 An example is helpful to illustrate. The Protocols calculate each AS separately, 18 but follow the same formulaic structure, so the approach for one is representative of 19 the approach for others. Focusing on Reg-Up as the example, a load-serving entity can 20 find the final price for Reg-Up as defined in Protocol § 6.7.4 in the RTMOUTPUT table 21 of MODE Bill Determinant the Extract as the RUPR 22 (UIDBILLDETERMINANT 6601). The applicable final quantity can be calculated as 23 the sum of the total Reg-Up Quantity and the total Reg-Up Self-Arranged Quantity

1 (together called the "Reg-Up Total Quantity"). The total Reg-Up Quantity's Bill 2 Determinant is RUQTOT (UIDBILLDETERMINANT 6642) and the total Reg-Up Bill Determinant 3 Self-Arranged Ouantity's is SARUQTOT (UIDBILLDETERMINANT 7178), both in the MODE RTMOUTPUT table. 4 5 Accordingly, the ERCOT-wide Reg-Up value for each hour is calculated as the 6 Reg-Up final price times the Reg-Up Total Quantity for that hour. Because the AS costs at issue are only those that exceed \$9,000, the ERCOT-wide Reg-Up "exposure" 7 would then be defined as $Max{RUPR - 9000,0} * (RUQTOT + SARUQTOT)$, since 8 9 the exposure as defined in PURA Sections 39.651(d) and 39.652(4) is limited to prices 10 above the system wide offer cap (which was \$9,000 MW/h during the Period of 11 Emergency). A load-serving entity's exposure can in turn be determined by 12 multiplying this figure by the load-serving entity's load ratio share, like this: (LSEGUFE / RTAMLTOT) * (Max{RUPR - 9000,0} * (RUQTOT + SARUQTOT). 13 14 As I have shown, all the relevant values can be determined by doing some math 15 with available ERCOT data. Some totals are not available as a discrete published 16 number, so consistency and verifiability could be enhanced if ERCOT were to provide 17 a single reference data set that contains the aggregate AS Obligation and AS Price for 18 each AS, as well as the ERCOT-wide AML. Then each load-serving entity can 19 calculate its exposure based on its own AML. 20 **Q**. Can you explain in more detail what reliability deployment price adder costs are? 21 The Real-Time Reliability Deployment Price Adder (RDPA), as described in Protocol Α. 22 § 6.5.7.3.1, is intended to counteract the estimated price-reversal impacts of non-23 market resources deployed by ERCOT for reliability needs, such as Emergency

1 Response Service, Reliability Unit Commitment, and Reliability Must-Run resources, 2 emergency block load transfers and DC tie flows, and certain demand response programs. ERCOT calculates the RDPA every time it executes its Security 3 Constrained Economic Dispatch (SCED) process (which is ERCOT's centralized 4 5 generation dispatch and pricing function) and a reliability deployment is made. 6 Specifically, a second SCED run is executed that adjusts for the reliability actions 7 taken, and the RDPA is the delta between the second SCED run and the original SCED 8 run (though it is capped so as not to push prices above the system wide offer cap). This 9 calculated amount is then added to the settlement prices for energy, along with the 10 Operating Reserve Demand Curve (ORDC) adder. RDPA is critical to ensure that 11 generators are indifferent to being dispatched for energy or held as reserves. The 12 RDPA is paid to generators and certain load resources for capacity that is available but 13 not dispatched for energy, with some exceptions as described in Protocol § 6.7.5. The 14 cost of making generators indifferent flows through a process called the "Ancillary 15 Service imbalance" for each settlement interval. During the Period of Emergency 16 ERCOT maintained significantly higher reserves than normal, resulting in the 17 significant Ancillary Service imbalance cost.

18 Q. How are reliability deployment price adder costs uplifted to load-serving entities?

A. The costs of the Ancillary Service imbalance are recovered from load-serving entities
 through uplift on a load ratio share basis for each interval. Thus, like AS costs, these
 RDPA costs are assigned to each load-serving entity on a load ratio share basis.

Q. How should a load-serving entity's exposure to reliability deployment price adder costs be calculated?

3 A. The simplest, most objective, and least discriminatory way to calculate a load-serving 4 entity's exposure to RDPA costs is by using data from ERCOT available to all load-5 serving entities. The specific charge code for this process that is relevant to HB 4492 6 and to this proceeding is the "Load Allocated Reliability Deployment Ancillary 7 Service Imbalance Revenue Neutrality Amount" (LARDASIRNAMT) (defined in 8 Protocol § 6.7.6). Because there were no Real-Time Reliability Deployment RUC 9 Ancillary Service Reserve (RTRDRUCRSVAMTTOT) charges during the Period of 10 Emergency, the RDPA costs assigned to each load-serving entity for each interval can 11 be calculated as the Real-Time Reliability Deployment Ancillary Service Imbalance 12 Market Total Amount (RTRDASIAMTTOT) (i.e., ERCOT-wide total) multiplied by 13 the load-serving entity's load ratio share.

14 Because this approach calculates each load-serving entity's exposure to RDPA 15 uplift costs by using the load-serving entity's load ratio share of the ERCOT-wide 16 load, it is efficient and promotes standardization, which would streamline validations 17 to ensure that proceeds received by each load-serving entity is commensurate with its 18 actual exposure. Each load-serving entity can use its own AML to calculate its 19 exposure to "reliability deployment price adder charges" that were "uplifted to load-20 serving entities on a load ratio share basis due to energy consumption during the period 21 of emergency," as required by Subchapter N. (PURA Section 39.652(4)).

1		IV. EXPOSURE OF EACH TXU LSE TO THE UPLIFT COSTS
2	Q.	Were any TXU LSEs exposed to uplift costs?
3	A.	Yes. TXU Energy, Ambit, ETS, TriEagle, and VBB were each exposed to uplift costs.
4	Q.	Why were TXU LSEs exposed to uplift costs?
5	A.	As detailed above, ERCOT allocates uplift costs on a load ratio share basis. TXU LSEs
6		serve retail customers and that customer load is directly responsible for allocations of
7		both AS and RDPA uplift (as described earlier in my testimony), which are
8		collectively the uplift balance costs defined by PURA Section 39.652(4). The
9		economic effects of these costs are borne by each TXU LSE.
10	Q.	How can each TXU LSE determine its exposure to uplift costs?
11	A.	Each TXULSE can individually determine its exposure to costs that make up the uplift
12		balance by using the methods I described earlier in my testimony based on data
13		available from ERCOT.
14	Q.	What is the approximate dollar amount of TXU Energy's uplift cost exposure?
15	A.	The uplift cost exposure of TXU Energy is currently estimated at \$642 million.
16	Q.	What is the approximate dollar amount of each of the other TXU LSE's uplift
17		cost exposure?
18	A.	The uplift cost exposure of the other TXU LSEs is currently estimated at:
19		Ambit: \$119 million
20		Luminant ET Services: \$2 million
21		TriEagle: \$40 million
22		VBB: \$47 million

1		V. TXU LSES BEAR THEIR OWN UPLIFT EXPOSURE
2	Q.	Does each TXU LSE bear its own uplift exposure?
3	A.	Yes.
4	Q.	Why does each TXU LSE bear its own uplift exposure?
5	A.	There are several reasons why each TXU LSE bears its own uplift exposure. First,
6		each TXU LSE is a separate company, having its own corporate existence. Second,
7		each TXU LSE has its own financial obligations, which are documented and tracked
8		individually. Third, these exposures are accounted for separately for each TXU LSE-
9		any affiliated power generation company's or power marketer's revenues are entirely
10		separate from each TXU LSE's revenues or obligations. And fourth, no affiliated
11		power generation company or power marketer pays for a TXU LSE's uplift exposure.
12	Q.	Are there any other reasons you believe each TXU LSE should bear its own uplift
13		exposure and concomitantly receive bond proceeds that reflect that individual
14		exposure?
15	A.	Yes. They are explained by witnesses Amanda J. Frazier and James Spindler in their
16		testimony in this proceeding.
17		VI. CONCLUSION
18	Q.	Please summarize your recommendations in this case.
19	A.	I recommend that the Commission follow the statute's directive to determine each
20		load-serving entity's individual exposure to uplift balance costs and to remit bond
21		proceeds to each load-serving entity accordingly. I further recommend that the
22		Commission direct that load-serving entities follow the steps outlined above to

- 1 calculate their exposure to ancillary services costs in excess of the commission's
- 2 system-wide offer cap and reliability deployment price adder charges.

3 Q. Does this conclude your direct testimony?

4 A. Yes.

AFFIDAVIT

STATE OF Texas § COUNTY OF Tarsant §

MATHEW PARKER, first being sworn on his oath, states:

I am the witness identified in the preceding testimony. I have read the testimony and the accompanying exhibit(s) and am familiar with the contents. Based upon my personal knowledge, the facts stated in the testimony are true. In addition, in my judgment and based upon my professional experience, the opinions and conclusions stated in the testimony are true, valid, and accurate.

MATHEW PARKER

Subscribed and sworn to before me this 12 day of August 2021 by Mathew Parker.



Notary Public, State of

My Commission Expires: 10,24, 2022