



Control Number: 50871



Item Number: 1

Addendum StartPage: 0

DC ENERGY TEXAS, LLC'S	)	
COMPLAINT AND APPEAL	)	PUBLIC UTILITY COMMISSON
OF THE DECISION OF THE	)	OF TEXAS
ELECTRIC RELIABILITY	)	
COUNCIL OF TEXAS	)	

**DC ENERGY TEXAS, LLC'S COMPLAINT AND APPEAL OF  
THE DECISION OF THE ELECTRIC RELIABILITY COUNCIL OF TEXAS**

Pursuant to P.U.C. Proc. R. 22.251, DC Energy Texas, LLC ("DC Energy") hereby files the instant complaint and appeal ("Complaint") of the decision in an Alternative Dispute Resolution ("ADR") proceeding with the Electric Reliability Council of Texas ("ERCOT") regarding ERCOT's resettlement of certain Point-to-Point ("PTP") Obligations at prices more than \$0.01/MWh above DC Energy's Not-to-Exceed bid prices, in violation of sections 4.4.6 and 4.5.1(13) of ERCOT's Protocols.

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## II. IDENTITY OF THE PARTIES AND CONTACT INFORMATION

DC Energy is the Complainant. Complainant requests that copies of correspondence, pleadings, briefs, and other documents be served on the following authorized representatives:

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General Counsel  
Justin R. Cockrell  
Assistant General Counsel  
DC Energy  
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ERCOT is the Respondent. To the best of DC Energy's knowledge, ERCOT's authorized representatives are:

Chad V. Seely  
Vice President & General Counsel  
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## III. STATEMENT OF THE CASE

In December 2019, ERCOT resettled its Day-Ahead Market ("DAM") for September 16-23, 2019 to correct for a software error that had previously affected prices on those Operating Days. When ERCOT resettled the DAM, it set prices for certain PTP Obligations at prices more

than \$0.01/MWh above their Not-to-Exceed bid prices, in violation of sections 4.4.6 and 4.5.1(13) of ERCOT's Protocols. DC Energy seeks redress of the economic penalty it suffered due to ERCOT's resettlement of DC Energy's PTP Obligations at DAM prices more than \$0.01/MWh above DC Energy's Not-to Exceed bid prices. DC Energy does not seek a suspension of ERCOT's conduct at this time. DC Energy seeks a payment that would put it in the same position economically that it would have been in if ERCOT had honored the terms of its Not-to-Exceed bid prices on all of its PTP Obligations when ERCOT resettled the DAM.

DC Energy followed the ERCOT Protocols applicable to resolution of the instant dispute as required by P.U.C. Proc. R. 22.251(c). DC Energy filed a series of eight settlement disputes with ERCOT on December 18, 2019, pursuant to Protocols section 9.14.2.1 regarding the resettlement of certain PTP Obligations.<sup>1</sup> ERCOT rejected each of the settlement disputes on January 9, 2020. DC Energy then submitted a request for Alternative Dispute Resolution to ERCOT pursuant to Protocol sections 20.1(1) and 20.4 on January 27, 2020.<sup>2</sup> ERCOT and DC Energy held an Initial Meeting pursuant to Protocol section 20.5 via teleconference on March 19, 2020. ERCOT issued a Market Notice denying DC Energy's requested relief on April 17, 2020.<sup>3</sup>

There are no other prior or pending proceedings related to this matter between DC Energy and ERCOT. There are no entities or classes of entities that would be directly affected by a decision concerning the specific PTP Obligations at issue. DC Energy, however, did receive

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<sup>1</sup> Each of the PTP Obligations at issue are listed in the CSV file included herein as Appendix C.

<sup>2</sup> Included herein as Appendix A.

<sup>3</sup> *Resolution of ADR Proceeding between ERCOT and DC Energy Texas, LLC*, ADR No. 2020-DCE-01(issued Apr. 17, 2020) (*Market Notice*), available at: [http://www.ercot.com/services/comm/mkt\\_notices/archives/4511](http://www.ercot.com/services/comm/mkt_notices/archives/4511) (Included herein as Appendix B).

Market Notices indicating that two other market participants submitted ADR requests similar to DC Energy's disputing the resettlement of other PTP Obligations from the same period, which were both denied.<sup>4</sup>

The Public Utility Commission of Texas ("Commission") has jurisdiction over this appeal pursuant to PURA sec. 39.151 and P.U.C. Proc. R. 22.251.

#### IV. STATEMENT OF THE ISSUES

- A. Did ERCOT violate its Protocols defining PTP Obligations and how they clear in the DAM when it resettled DC Energy's PTP Obligations at prices more than \$0.01/MWh above their Not-to-Exceed bid prices?
- B. Does ERCOT have the authority to grant DC Energy's requested relief?

#### V. STATEMENT OF THE FACTS

On December 10, 2019, the ERCOT Board of Directors ("Board") approved a DAM price correction for Operating Days September 16-23, 2019, pursuant to ERCOT Protocol Section 4.5.3(5), after determining that prices on those days were significantly affected by a software error. ERCOT then resettled the DAM for the relevant Operating Days pursuant to this authorization by re-solving the DAM with the software error corrected and then applying the resulting prices to the MW volumes originally awarded in the DAM.

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<sup>4</sup> *Resolution of ADR Proceeding between ERCOT and Monterey TX LLC*, ADR No. 2020-MON-01 (issued Apr. 17, 2020) available at: [http://www.ercot.com/services/comm/mkt\\_notices/archives/4512](http://www.ercot.com/services/comm/mkt_notices/archives/4512); *Resolution of ADR Proceeding between ERCOT and Peak Energy Capital LP*, ADR No. 2020-PEC-01 (issued Apr. 30, 2020) available at: [http://www.ercot.com/services/comm/mkt\\_notices/archives/4529](http://www.ercot.com/services/comm/mkt_notices/archives/4529); *see also, Resolution of ADR Proceeding between ERCOT and Lonestar Generation LLC*, ADR No. 2019-LGN-01 (issued Apr. 10, 2020) (regarding the same error and price restatement at issue in this proceeding) available at: [http://www.ercot.com/services/comm/mkt\\_notices/archives/4505](http://www.ercot.com/services/comm/mkt_notices/archives/4505).

As a result, DC Energy received Resettlement Statements that included net charges for certain PTP Obligations that it had been awarded in the DAM for Operating Days September 16-23, 2019 that were resettled at prices more than \$0.01/MWh above their Not-to-Exceed bid prices. Specifically, DC Energy was charged \$285,436.54 for PTP Obligations that resettled in the DAM at prices more than \$0.01/MWh above DC Energy's Not-to-Exceed bid prices; however, the settlement of these same positions in the Real-Time Market generated \$16,153.32 in offsetting revenue for DC Energy, for a total net charge to DC Energy of \$269,283.22.<sup>5</sup>

## VI. ARGUMENT

### A. Did ERCOT violate its Protocols defining PTP Obligations and how they clear in the DAM when it resettled DC Energy's PTP Obligations at prices more than \$0.01/MWh above their Not-to-Exceed bid prices?

ERCOT violated its Protocols defining PTP Obligations and how they clear in the DAM when it resettled DC Energy's PTP Obligations at prices more than \$0.01/MWh above their Not-to-Exceed bid prices. Protocol section 4.4.6 defines a PTP Obligation bid as "a bid that specifies the source and sink, a range of hours, and a maximum price that the bidder is willing to pay ('Not-to-Exceed Price')." Protocol section 4.5.1(13) defining the DAM clearing process mandates that "PTP Obligation bids shall not be awarded where the DAM clearing price for the PTP Obligation is greater than the PTP Obligation bid price plus \$0.01/MW per hour." The DAM

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<sup>5</sup> See Appendix C (listing all of PTP Obligations that were left awarded to DC Energy at resettled prices exceeding their Not-to-Exceed bid prices by more than \$0.01/MWh and providing the values to support DC Energy's calculation of their total net value). DC Energy's Request for Alternative Dispute Resolution included here as Attachment A states the amount of requested relief as \$269,283.22 in the body of the dispute description and a slightly different value at the end of the document as the "amount of compensation requested." The \$269,283.22 value is correct; the other value at the end of the document was an error.

clearing price for a PTP Obligation is the difference in the Settlement Point Price of its source and sink points in the DAM pursuant to Protocol section 4.6.3.<sup>6</sup> Thus, PTP Obligations cannot clear or otherwise be awarded at settlement prices above their Not-to-Exceed bid prices.

For example, in Hour Ending 23 on Operating Day September 16, 2019, DC Energy submitted a PTP Obligation bid sourcing at BASTEN\_CCU and sinking at LZ\_AEN with a Not-to-Exceed bid price of up to \$1.60/MWh for the highest priced portion of volume in its bid. This bid originally cleared 163.5MWs for \$0.21/MWh. Upon resettlement, this path repriced at \$270.50/MWh, and DC Energy was charged at this new price for the same cleared volume, despite bidding with a Not-to-Exceed Price capped at \$1.60/MWh. The resettled price is over 1,000 times higher than the original clear price and over 100 times higher than DC Energy's Not-to-Exceed bid price. This price resettlement of the originally awarded volume represents an egregious violation of the principles of a voluntary marketplace, the foundations of Locational Marginal Prices in ERCOT's nodal market, and a clear violation of the essential terms of DC Energy's PTP Obligations, which by definition were submitted with Not-to-Exceed bid prices pursuant to Protocol section 4.4.6.<sup>7</sup>

In its *Market Notice*, ERCOT asserted that "Protocol Section 4.5.1(13) does not apply to" price corrections because price corrections are made "*after* awards are made in the DAM

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<sup>6</sup> A PTP Obligation is similar to an incremental offer at one location (i.e., the source) paired with a decremental bid at another location (i.e., the sink) in the DAM that settles on Real-Time LMPs. A PTP Obligation is bid into the DAM, clears based on the DAM settlement prices of its component source and sink locations, and then itself settles based on the Real-Time LMPs of its component source and sink locations. The principal difference is that the PTP Obligation is a spread contract based on the difference between its source and sink rather than the exact prices of both locations, as would be the case with an incremental offer paired with a separate decremental bid.

<sup>7</sup> In addition, maintaining awarded volumes when resettling prices introduces an out of market risk that DC Energy and other market participants cannot accurately anticipate and price into their bids and offers. As demonstrated by the example, the dollars at risk in a price resettlement can be much greater than the dollars at risk in the participant's position in the market.

clearing process.”<sup>8</sup> This bifurcation between “during” and “after” the initial clearing process has no basis in the Protocols and allows ERCOT an inappropriate and unreasonable amount of discretion to ignore provisions governing the processing of DAM inputs when it calculates corrected prices, such as the Protocol provisions defining the essential character of PTP Obligations. When ERCOT reprocessed the DAM inputs without the software error in order to arrive at its corrected prices, it should have honored each term in the applicable Protocols, including Protocol section 4.4.6 defining PTP Obligation bids as having Not-to-Exceed bid prices.

ERCOT must construe its Protocols as a collective whole and honor the meaning of each provision of each section where possible.<sup>9</sup> ERCOT does not have unlimited discretion to decide which provisions to uphold and which to violate when reprocessing DAM inputs to arrive at resettled prices. Otherwise, the provisions in Protocol section 4.4.6 stating that PTP Obligations have Not-to-Exceed bid prices and Protocol sections 4.5.1(13) and 4.6.3 stating that PTP Obligations should not be awarded when settlement prices are more than \$0.01/MWh above their bid prices have no meaning when ERCOT corrects prices.

To justify its position that it had to maintain PTP Obligation award volumes when it corrected prices in this instance, ERCOT erroneously relies on the fact that the language in Protocol section 4.5.3(5) authorizing price corrections does not explicitly state that ERCOT has the authority to correct previously awarded volumes. This Protocol section’s silence on the

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<sup>8</sup> *Market Notice* at 2 (emphasis in the original).

<sup>9</sup> See Ron Beal, *The Art of Statutory Construction: Texas Style*, 64 BAYLOR L. REV. 339, 374–76 (2012) (reviewing precedent finding that statutes must be construed as a whole and statutory language must not be read as a nullity in Texas). For ERCOT market participants, the Protocols are analogous to a statute.



matter cannot overcome the clear language of Protocol section 4.4.6 defining PTP Obligations as having Not-to-Exceed bid prices.

To support its position, ERCOT cited the fact that there was a past Nodal Protocol Revision Request ("NPRR") where ERCOT itself proposed amending Protocol section 4.5.3(5) to clarify that it is ERCOT's practice to not correct prices when it would create an inconsistency with awarded volumes and to the fact that this NPRR did not move forward.<sup>10</sup> The fact that ERCOT made this proposal indicates that ERCOT recognizes that correcting prices while leaving awarded volumes the same is inappropriate and unreasonable. The fact that this NPRR did not result in a Protocol amendment does not mean that ERCOT is not required to properly recognize PTP Obligations as having Not-to-Exceed bid prices.

Although ERCOT's proposed Protocol amendment did not move forward, ERCOT must apply an appropriate and fair practice to PTP Obligations under price restatement, because maintaining consistency among prices and volumes is required for PTP Obligations pursuant to Protocol sections 4.4.6, 4.5.1(13), and 4.6.3. These Protocol sections establish that PTP Obligations have explicit Not-to-Exceed bid prices, cannot clear at prices more than \$0.01/MWh above their Not-to-Exceed bid prices, and must clear at prices that are equal to the settlement prices of their component source and sink locations.

In its *Market Notice*, ERCOT stated that it could "find no basis in the Protocols for allowing PTP Obligation award quantities to be changed as part of a DAM price correction when

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<sup>10</sup> See *Market Notice* at 3, n.6, citing NPRR-807, *Day-Ahead Market Price Correction* (withdrawn Jun. 6, 2018). ERCOT initially proposed to clarify that it would only correct prices "if accurate prices can be determined and awards are not affected." NPRR-807, *Initial Nodal Protocol Revision Request* (Nov. 14, 2016) available at: <http://www.ercot.com/mktrules/issues/NPRR807#keydocs>.

other types of DAM awards cannot be given such treatment.”<sup>11</sup> ERCOT fails to recognize, however, that PTP Obligation bids are in fact unique. No other type of bid or offer in the DAM is defined by an explicit Not-to-Exceed price. In addition, no other bid or offer in the DAM is defined by an explicit requirement that it cannot clear at a price more than \$0.01/MWh above its bid price. ERCOT itself has previously recognized in its *North Maple ADR* that it is “apparent that the language in Section 4.4.6, which requires Market Participants to submit bids with ‘Not-to-Exceed’ prices, was intended to be a mechanism that would allow a Market Participant to limit its liability in the DAM for awarded PTP Obligations to the sum of its [Not-to-Exceed] bid prices.”<sup>12</sup>

In its *Market Notice*, ERCOT attempted to distinguish the *North Maple ADR* precedent by pointing to the fact that the *North Maple ADR* arose in the context of an initial award of a PTP Obligation at a price above its Not-to-Exceed bid in the DAM clearing process, as opposed to the current case where prices were restated after the initial award.<sup>13</sup> The fact that prices were restated in the instant case does not change the essential characteristics of PTP Obligations as defined in the Protocols. PTP Obligations are limited liability instruments submitted in the DAM with unique Not-to-Exceed bids. It is, therefore, a violation of Protocol section 4.4.6 defining PTP Obligations for ERCOT to maintain a PTP Obligation award when a price correction sets the clearing price of that PTP Obligation at more than \$0.01/MWh above the awardee’s Not-to-Exceed bid price.

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<sup>11</sup> *Market Notice* at 3.

<sup>12</sup> *Resolution of ADR Proceedings between ERCOT and North Maple Energy, LLC*, ADR No. 2017-NMW-01 (issued Sep. 8, 2017) (“*North Maple ADR*”) available at: [http://www.ercot.com/services/comm/mkt\\_notices/archives/1495](http://www.ercot.com/services/comm/mkt_notices/archives/1495).

<sup>13</sup> *Market Notice* at 2, n.2.

**B. Does ERCOT have the authority to grant DC Energy's requested relief?**

ERCOT has the authority to grant DC Energy's requested relief. DC Energy seeks a payment that would put it in the same position economically that it would have been in if ERCOT had honored the terms of its Not-to-Exceed bids on all of its PTP Obligations when ERCOT resettled the DAM for Operating Days September 16-23, 2019. ERCOT mistakenly claims it cannot provide such relief because there is no "uplift mechanism" or "language in the Protocols that would dictate who in the market should bear those costs."<sup>14</sup>

Protocol section 20.10.1(2), however, clearly provides ERCOT with the authority to address a violation of its Protocols with a payment to the aggrieved market participant after a successful ADR request when resettlement is impracticable. This Protocol section actually requires ERCOT to make a special adjustment, stating "ERCOT *shall* make the adjustments through a separate ADR Invoice that is produced outside of normal Settlement Invoices." The cost is then recovered via uplift from "all impacted Market Participants." Protocol section 20.10.1(2) provides:

If a resettlement is not practicable to address an adjustment required by an ADR resolution, ERCOT shall make the adjustments through a separate ADR Invoice that is produced outside of normal Settlement Invoices. The appropriate payments and charges, along with settlement quality information, shall be supplied to all impacted Market Participants.

In this instance, further resettlement is not practicable. DC Energy, can and should be put in the same position it would have been in economically if it had not been charged or credited for PTP Obligations that were re-priced at prices more than \$0.01/MWh above their Not-to-Exceed bids with a special ADR Invoice. This approach would not disturb the settled

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<sup>14</sup> Market Notice at 3.

volumes of non-PTP Obligation positions that were awarded without Not-to-Exceed bids and that otherwise make resettling the DAM another time impracticable.

As ERCOT stated in its *Market Notice*, “to reimburse DC Energy for the increased charges it incurred for its PTP Obligations as a result of the DAM price correction, ERCOT would have to uplift those costs to the market in order to maintain revenue neutrality.”<sup>15</sup> This may be true, but the fact that other market participants will incur some additional uplift should not prohibit a market participant from receiving payment in relief of an otherwise meritorious ADR request. Successful ADR requests have resulted in payment to the requester funded by uplift on the basis of Monthly Load Ratio Shares pursuant to Protocol section 20.10.1(2). For example, in the *North Maple ADR*, a market participant challenged the settlement of its PTP Obligations at prices more than \$0.01/MWh above their Not-to-Exceed bid prices and was granted relief via a payment supported in this manner.<sup>16</sup>

ERCOT’s assertion that there must be an “uplift mechanism” with “language in the Protocols that would dictate who in the market should bear those costs,” puts any market participant that incurs a charge due to a Protocol violation in an impossible situation; unless, there is a preexisting manner in which to allocate the specific type of additional costs that it incurred. In DC Energy’s case, ERCOT’s position makes ADR a nullity because by definition the process offers no prospect of meaningful relief.

Furthermore, ERCOT’s position that “[t]he absence of such an uplift mechanism in the Protocols further supports the conclusion that ERCOT properly implemented the DAM price

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<sup>15</sup> *Market Notice*, at 3.

<sup>16</sup> *See, e.g., North Maple ADR.*

correction”<sup>17</sup> is based on circular reasoning. ERCOT posits that it could not have violated its Protocols because its Protocols do not have a specifically-defined remedy to address the alleged violation, so as a result, no violation by ERCOT could have occurred. However, this ignores ERCOT’s broad authority under Protocol section 20.10.1(2) to make adjustments through ADR Invoices, so there is in fact, a remedy available under the Protocols.

ERCOT violated the Protocol sections defining PTP Obligations when it charged DC Energy for PTP Obligations resettled at prices more than \$0.01/MWh above their Not-to-Exceed bids, because ERCOT failed to recognize that PTP Obligations are unique in ERCOT’s DAM. ERCOT did not foresee violating its Protocols in this manner, so it never implemented a specific mechanism for addressing the issue. DC Energy submitted an ADR request seeking redress through a payment to put it in the same position economically as if the violation never occurred. ERCOT has broad authority under Protocol section 20.10.1(2) to make adjustments through a separate ADR Invoice that is produced outside of normal Settlement Invoices, in order to address Protocol violations following a successful ADR request.

## VII. QUESTIONS OF MATERIAL FACT

There are no questions of material fact that require an evidentiary hearing. The issues raised in the instant Complaint solely concern the interpretation of ERCOT’s Protocols.

## VIII. CONCLUSION AND RELIEF SOUGHT

DC Energy respectfully requests that the Commission (1) find that ERCOT violated its Protocols defining PTP Obligations when it resettled DC Energy’s PTP Obligations at prices more

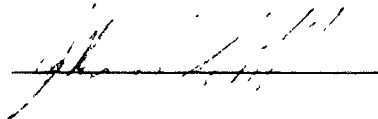
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<sup>17</sup> *Market Notice* at 3.

than \$0.01/MWh above their Not-to-Exceed bid prices and (2) order ERCOT to provide DC Energy with its requested relief pursuant to Protocol section 20.10.1(2).

DC Energy seeks redress of the economic penalty it suffered due to ERCOT's resettlement of DC Energy's PTP Obligations at DAM prices more than \$0.01/MWh above DC Energy's Not-to Exceed bid prices via a payment to put it in the same position economically that it would have been in if ERCOT had not violated the terms of its Not-to-Exceed bid prices when ERCOT resettled the DAM for Operating Days September 16-23, 2019. Specifically, DC Energy paid a total net charge of \$269,283.22 for PTP Obligations that resettled in the DAM at prices more than \$0.01/MWh above DC Energy's Not-to-Exceed bid prices. This total net charge consists of \$285,436.54 in gross charges minus \$16,153.32 in offsetting payments that these same positions generated for DC Energy in the Real-Time Market.<sup>18</sup>

Respectfully submitted,



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<sup>18</sup> See Appendix C (listing all of PTP Obligations that were left awarded to DC Energy at resettled prices exceeding their Not-to-Exceed bid prices by more than \$0.01/MWh and providing the values to support DC Energy's calculation of their total net value).

## **CERTIFICATE OF SERVICE**

DC Energy has filed the required number of copies of the foregoing Complaint with the Commission, in accordance with P.U.C. Proc. R. § 22.71. Complainant has served copies of the foregoing Complaint, in accordance with P.U.C. Proc. R. § 22.74, on ERCOT's General Counsel and the Office of Public Utility Counsel this 21st day of May, 2020.

Justin R. Cockrell



Justin R. Cockrell  
Assistant General Counsel  
DC Energy  
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cockrell@dc.energy.com

### **Affidavit of Sadao Milberg**

I, Sadao Milberg, first being duly sworn, do hereby state as follows:

- "1. I am over the age of 18 and am competent to make the instant affidavit.
2. My name is Sadao Milberg. I am employed as a Director of DC Energy Management, LP, Manager of DC Energy Texas, LLC ("DC Energy"). I affirm that I have reviewed DC Energy Texas, LLC's Complaint and Appeal of the Decision of the Electric Reliability Council of Texas ("Complaint"). I further affirm that I have personal knowledge of the facts stated in the Complaint based on my employment, and that I have the authority to verify the factual statements in the Complaint on behalf of DC Energy.
3. I certify that the factual statements contained within the Complaint and the Appendices to the Complaint are true and accurate to the best of my knowledge, information, and belief, and that all documents attached to the Complaint are true and correct copies of the originals."

Further Affiant sayeth not

  
\_\_\_\_\_  
Sadao Milberg

Given under my hand and seal of office this 21 day of May, A.D., 2020.

  
\_\_\_\_\_  
Notary Public in and for the State of Texas

My Commission Expires On: 04/09/2024



## Appendix A

## ALTERNATIVE DISPUTE RESOLUTION (ADR) REQUEST FORM

A Market Participant who desires to submit a request for ADR may complete this form and submit it, together with any other additional supporting materials, in order to begin the ADR process. This form contains the requirements pursuant to Protocol Section 20.4, *Initiation of ADR Proceedings*.

Please fill out this form electronically and submit it, together with any other additional supporting materials, via email to [adr@ercot.com](mailto:adr@ercot.com).

The date on which ERCOT receives the completed ADR written request shall be the ADR initiation date. No later than seven (7) days after the ADR initiation date, ERCOT shall determine, and provide Notice to, all parties directly involved in the dispute. Such Notice shall include the ADR file number and the designation of the ERCOT senior dispute representative.

<b>Name of Disputing Market Participant</b>	DC Energy Texas, LLC
<b>Description of Relief Sought</b>	Compensation to put DC Energy Texas, LLC in the position it would have been in if it was not awarded Point-to-Point Obligations over Not-to-Exceed bid prices
<b>Detailed Description of the Grounds for Relief and the Basis of Each Claim<sup>1</sup></b>	<p>DC Energy Texas, LLC ("DC Energy") disputes ERCOT's resettlement of certain Point-to-Point ("PTP") Obligations at prices more than \$0.01MW/h above DC Energy's Not-to-Exceed bid prices, in violation of Sections 4.4.6 and 4.5.1(13) of the Nodal Protocols. More specifically, DC Energy disputes the resettlement of each of the PTP Obligations listed in the CSV file included as Appendix A to the instant ADR Request.</p> <p>DC Energy filed a series of eight settlement disputes pursuant to Nodal Protocols section 9.14.2.1 regarding these resettlements on December 18, 2019, which ERCOT rejected on January 9, 2020. In denying DC Energy's settlement disputes, ERCOT stated that resettlement was necessary due to a software error and asserted that it implemented the price corrections appropriately pursuant to Protocol Section 4.5.3(5), because the Protocols "do not authorize ERCOT to change MW quantity awards when ERCOT corrects prices under Protocol Section 4.5.3." The language in Protocol Section 4.5.3 explicitly authorizes price corrections due to software errors and is silent on changing MW quantity awards; it does not prohibit ERCOT from doing so.</p> <p>Meanwhile, Protocol Section 4.4.6 defines a PTP Obligation bid as "a bid that specifies the source and sink, a range of hours, and a maximum price that the bidder is willing to pay ('Not-to-Exceed Price')." As ERCOT previously stated in response to a similar ADR Request disputing the award of PTP Obligations at prices above their Not-to-Exceed bids prices, "the language in Section 4.4.6, which describes the PTP Obligation NTE bid price as the 'maximum price that the bidder is willing to pay,' must be given effect so that this Protocol language is not rendered mere surplusage." See Resolution of ADR Proceedings between ERCOT and North Maple Energy LLC (ADR No. 2017-NME-01) (Notice Date Sep. 8, 2017) available at: <a href="http://www.ercot.com/services/comm/mkt_notices/archives/1495">http://www.ercot.com/services/comm/mkt_notices/archives/1495</a>. ERCOT</p>

<sup>1</sup> Identify which statute(s), rule(s), Protocol Section(s), Other Binding Document(s), Agreement(s) or other law(s) are alleged to have been violated.

	<p>further found it “apparent that the language in Section 4.4.6, which requires Market Participants to submit bids with ‘Not-to-Exceed’ prices, was intended to be a mechanism that would allow a Market Participant to limit its liability in the DAM for awarded PTP Obligations to the sum of its NTE bid prices.” Id.</p> <p>In addition, Protocol Section 4.5.1(13) defining the DAM clearing process mandates that “PTP Obligation bids shall not be awarded where the DAM clearing price for the PTP Obligation is greater than the PTP Obligation bid price plus \$0.01/MW per hour.” ERCOT rendered this Protocol language mere surplusage and violated the parameter on DAM clearing that it embodies when it resettled DC Energy’s PTP Obligations more than \$0.01/MWh above their Not-to-Exceed bid prices.</p> <p>In response to North Maple Energy’s (“NME’s”) ADR Request, ERCOT “grant[ed] NME relief that puts NME back in the position it would have been had it never been awarded any PTP Obligations over stated NTE bid prices.” Id. DC Energy seeks the same relief in the instant ADR Request.</p> <p>For example, in HE23 for Operating Day September 16, 2019, DC Energy submitted a PTP Obligation bid from BASTEN_CCU to LZ_AEN with a Not-to-Exceed bid price of \$1.60/MWh and originally cleared 163.5MWs for \$0.21/MWh. Upon resettlement, this path repriced at \$270.50/MWh, and DC Energy was charged at this new price for the same cleared volume, despite bidding at a Not-to-Exceed Price capped at \$1.60/MWh. Instead, pursuant to Protocol Sections 4.4.6 and 4.5.1(13), this PTP Obligation (and every other PTP Obligation that resettled at a price more than \$0.01/MWh above DC Energy’s Not-to-Exceed Price) must be unwound because the resettled price was more than \$0.01/MWh above the “maximum price that the bidder [was] willing to pay.”</p> <p>DC Energy seeks redress of the economic penalty it suffered due to ERCOT’s resettlement of DC Energy’s PTP Obligations at DAM prices above DC Energy’s Not-to Exceed bid prices. DC Energy was charged \$285,436.54 for PTP Obligations that resettled in the DAM at prices more than \$0.01/MWh above DC Energy’s Not-to-Exceed bid prices; however, the settlement of these same positions in the Real-Time Market generated \$16,153.32 in offsetting revenue for DC Energy, for a total net charge to DC Energy of \$269,283.22. Please find attached as Appendix A a CSV file listing all of PTP Obligations that were left awarded to DC Energy at resettled prices exceeding their Not-to-Exceed bid prices by more than \$0.01/MWh and providing the values to support DC Energy’s calculation of their total net value.</p>
<b>List of All Other Parties Affected by the Dispute</b>	N/A
<b>Senior Dispute Representative</b> <i>(name, address, telephone number and email address)</i>	Seth Cochran 8065 Leesburg Pike, Fifth Floor Vienna, Virginia 22182 512.971.8767 seth.cochran@dc-energy.com
<b>If seeking a monetary resolution, please check box and complete the following:</b> <input checked="" type="checkbox"/>	
<b>Operating Day(s) Involved in the Dispute</b>	September 16, 2019 to September 23, 2019



<b>Settlement Dispute Number(s) (if applicable)</b>	1-214777031, 1-214277041, 1-214777051, 1-214777061, 1-214777071, 1-214777081, 1-214777091, and 1-214777111
<b>Amount of Compensation Requested</b>	\$263,346.91

## Appendix B

**LONG DESCRIPTION:** Upon ERCOT's determination of the disposition of an Alternative Dispute Resolution (ADR) proceeding, ERCOT Protocol Section 20.9 requires ERCOT to issue a Market Notice providing a brief description of the relevant facts, a list of the parties involved in the dispute, and ERCOT's disposition of the proceeding and reasoning in support thereof.

Parties: ERCOT and DC Energy Texas, LLC (DC Energy)

Relevant Facts:

On December 10, 2019, the ERCOT Board of Directors (Board), pursuant to ERCOT Protocol Section 4.5.3(5), approved a price correction for the Day-Ahead Market (DAM) for Operating Days (ODs) September 16-23, 2019. Specifically, the Board: (1) determined that the Day-Ahead Locational Marginal Prices (LMPs), Day-Ahead Settlement Point Prices (SPPs) and Market Clearing Prices for Capacity (MCPCs) for ODs September 16-23, 2019, were significantly affected by a software error; and (2) authorized ERCOT staff to implement a DAM price correction for those ODs.<sup>1</sup> Protocol Section 4.5.3(5)(b) provides that the "ERCOT Board may review and change DAM LMPs, MCPCs, or Settlement Point Prices if ERCOT gave timely notice to Market Participants and the ERCOT Board finds that such prices are significantly affected by an error."

Following the Board's decision to correct prices, ERCOT resettled the DAM by applying the corrected LMPs, MCPCs, and SPPs to the quantities originally awarded in the DAM, and issued Resettlement Statements to impacted Market Participants. DC Energy received Resettlement Statements for Point-to-Point (PTP) Obligations it had been awarded in the DAM for ODs September 16-23, 2019. As a result of the DAM price correction, DC Energy was charged for certain PTP Obligations for ODs September 16-23, 2019, at prices that were above the "Not-to-Exceed" (NTE) bid prices submitted by DC Energy.

In its ADR request, DC Energy asserts that it would never have been awarded these PTP Obligations for ODs September 16-23, 2019, based on the corrected DAM prices. DC Energy cites Protocol Section 4.5.1(13), which provides that "PTP Obligation bids shall not be awarded where the DAM clearing price for the PTP Obligation is greater than the PTP Obligation bid price plus \$0.01/MW per hour." DC Energy also cites ERCOT Protocol Section 4.4.6(1), which defines a PTP Obligation bid as "a bid that specifies the source and sink, a range of hours, and a maximum price that the bidder is willing to pay ('Not-to-Exceed Price')," and ERCOT Protocol Section 4.6.3, which defines the clearing price for a PTP Obligation as the difference between the Settlement Point Price of its source and sink points. DC Energy argues that ERCOT violated these Protocols by issuing Resettlement Statements that charged DC Energy for PTP Obligations in excess of the NTE bid prices.

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<sup>1</sup> For details regarding the process used by ERCOT to correct prices in the DAM, see the presentation *Day-Ahead Market Price Correction for Operating Days September 16-23, 2019*, as presented to the ERCOT Board on December 10, 2019, available at [http://www.ercot.com/content/wcm/key\\_documents/lists/161483/9.1\\_Day-Ahead\\_Market\\_Price\\_Correction\\_for\\_Operating\\_Days\\_September\\_16-23\\_2019.pdf](http://www.ercot.com/content/wcm/key_documents/lists/161483/9.1_Day-Ahead_Market_Price_Correction_for_Operating_Days_September_16-23_2019.pdf).

DC Energy claims it should be reimbursed \$269,283.22, which it states is the net charge it incurred for the PTP Obligations that were charged in excess of their NTE bid prices for ODs September 16-23, 2019, due to the price correction.

ERCOT's Disposition/Reasoning:

Pursuant to ERCOT Protocol Section 20.1(1), a Market Participant may seek relief through the ADR process by making a claim that "ERCOT has violated or misinterpreted any law," including an ERCOT Protocol. In this ADR proceeding, ERCOT has determined that the appropriate disposition is to deny DC Energy's request for relief because ERCOT did not violate or misinterpret the ERCOT Protocols.

Although DC Energy argues that ERCOT violated Protocol Section 4.5.1(13), that Protocol section does not apply here. Protocol Section 4.5.1(13) imposes a limitation on how PTP Obligations must be awarded in the DAM clearing process. For ODs September 16-23, 2019, the clearing prices for the PTP Obligations awarded to DC Energy during the DAM clearing process were below the NTE bid prices submitted by DC Energy, in conformance with Protocol Section 4.5.1(13).<sup>2</sup> Protocol Section 4.5.1(13) does not apply to events that occur *after* awards are made in the DAM clearing process, such as price corrections authorized by the ERCOT Board under Protocol Section 4.5.3(5). Therefore, while the DAM price correction did result in some previously-awarded PTP Obligations being charged to DC Energy at prices above the NTE bid price, that was not a violation of Protocol Section 4.5.1(13).

By its plain terms, Protocol Section 4.5.3(5) only authorizes the ERCOT Board to approve changes to LMPs, MCPCs, and SPPs when performing a DAM price correction—no authority is granted in the Protocols to change the quantities previously awarded in the DAM when performing a price correction.<sup>3</sup> The revision history of Protocol Section 4.5.3 reflects that it has always been made clear to stakeholders that a DAM price correction involves only the substitution of corrected *prices*, and that the entire DAM is not "rerun" and quantities are not re-awarded when a DAM price correction is performed.<sup>4</sup> In light of this, ERCOT acted in conformance with Protocol Section 4.5.3(5) when it implemented the DAM price correction for ODs September 16-23, 2019, by

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<sup>2</sup> For this reason, this matter is distinguishable from the *Resolution of ADR Proceedings between ERCOT and North Maple Energy LLC* ([http://www.ercot.com/services/comm/mkt\\_notices/archives/1495](http://www.ercot.com/services/comm/mkt_notices/archives/1495)). In that matter, ERCOT found that it was contrary to Protocols to award PTP Obligations above the NTE bid price *as part of the DAM clearing process*. Because no PTP Obligations were awarded above the NTE bid price as part of the DAM clearing process in this matter, ERCOT's resolution of the North Maple Energy LLC ADR does not control resolution of this dispute.

<sup>3</sup> The presentation to the Board in December 2019 made clear when discussing the impact of the price correction that "[q]uantities (awarded MWs) do not change; only prices." See Slide 5 of Item 9.1: Day-Ahead Market Price Correction for Operating Days September 16-23, 2019, at [http://www.ercot.com/content/wcm/key\\_documents\\_lists/161483/9.1\\_Day-Ahead\\_Market\\_Price\\_Correction\\_for\\_Operating\\_Days\\_September\\_16-23\\_2019.pdf](http://www.ercot.com/content/wcm/key_documents_lists/161483/9.1_Day-Ahead_Market_Price_Correction_for_Operating_Days_September_16-23_2019.pdf).

<sup>4</sup> See ERCOT Comments to NPPR 279, *Resolution of Alignment Item A144 - Clarify Posting of MCPC for DAM and SASM* (filed October 4, 2010) at 3 (explaining that in performing a DAM price correction the market is not "rerun" and that only "[p]rices will be substituted") available at [http://www.ercot.com/content/mktrules/issues/nppr/276-300/279/keydocs/279NPPR-08\\_ERCOT\\_Comments\\_100410.doc](http://www.ercot.com/content/mktrules/issues/nppr/276-300/279/keydocs/279NPPR-08_ERCOT_Comments_100410.doc).

issuing Resettlement Statements using the same quantities originally awarded and only substituting in corrected LMPs, MCPCs, and SPPs.

ERCOT cannot act beyond its authority in Protocol Section 4.5.3(5) by changing PTP Obligation awards quantities as part of the DAM price correction, even if the price correction results in a previously awarded PTP Obligation being resettled at a price above the NTE bid price. In order to reimburse DC Energy for the increased charges it incurred for its PTP Obligations as a result of the DAM price correction, ERCOT would have to uplift those costs to the market in order to maintain revenue neutrality. However, there is no language in the Protocols that would dictate who in the market should bear those costs. The absence of such an uplift mechanism in the Protocols further supports the conclusion that ERCOT properly implemented the DAM price correction for the relevant ODs under Protocol Section 4.5.3(5) by changing only prices and not award quantities.<sup>5</sup>

Because a DAM price correction involves only the correction of prices and not award quantities, other types of awarded DAM bids (such as an awarded energy bid) could also be resettled at prices above the awarded bid price when the DAM price correction is implemented. Given the nature of an awarded DAM energy bid, it is not functionally possible to change the quantity of such an award when performing a DAM price correction after the operative OD. ERCOT can find no basis in the Protocols for allowing PTP Obligation award quantities to be changed as part of a DAM price correction when other types of DAM awards cannot be given such treatment.

Finally, ERCOT notes that it has previously raised the issue of DAM price corrections causing price/award inconsistencies and has sponsored Protocol revisions to address this issue.<sup>6</sup> To date, however, stakeholders have yet to approve any such revisions.<sup>7</sup> If stakeholders wish to prohibit DAM price corrections that could result in inconsistencies between corrected prices and bid prices, that should be made clear through revisions to Protocol Section 4.5.3.

In conclusion, ERCOT did not violate any statute, rule, Protocol, Other Binding Document, or Agreement in implementing the DAM price correction for ODs September 16-23, 2019. Therefore, DC Energy's request for relief is denied.

This Market Notice serves to conclude the ADR proceedings between ERCOT and DC Energy.

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<sup>5</sup> For example, the Protocols include a methodology for uplift related to certain make-whole payments. *See, e.g.*, ERCOT Protocol Section 5.7.4.2, RUC Make-Whole Uplift Charge. No such mechanism exists here to address the necessary uplift charges that would be associated with awarding DC Energy the relief it seeks.

<sup>6</sup> *See* NPPR 807, *Day-Ahead Market Price Correction* (withdrawn June 6, 2018).

<sup>7</sup> A currently-pending NPPR, NPPR981, *Day-Ahead Market Price Correction Process*, does propose revisions to ERCOT Protocol Section 4.5.3 that, if approved, could alter the manner in which ERCOT performs DAM price corrections. Further, NPPR991, *Day-Ahead Market (DAM) Point-to-Point (PTP) Obligation Bid Clearing Price Clarification*, is also currently pending and proposes to add clarifying language to ERCOT Protocol Section 4.5.1(13).



## Appendix C

Date	Hour Ending	source_name	sink_name	Not-To-Exceed Price (\$/MWh)	Bid Volume (MWh)	Clear Price	Resettle Price	Awarded Volu	DAM Settlement	RTM Settlement (\$)
9/16/19	7	HHGT_KENDAL	LZ_CPS	1	6.6	1	1.05	3.8	3.99	0
9/16/19	7	OLIN_OLING_2	STEAM_STEAM_1	0.5	4.4	0.47	0.93	4.4	4.09	0
9/16/19	7	OLIN_OLING_2	STEAM_STEAM_3	0.5	3.9	0.46	0.93	3.9	3.63	0
9/16/19	8	HB_HOUSTON	AZ_ALL	0.5	5.5	0.25	0.55	5.5	3.03	0
9/16/19	8	HB_HOUSTON	SL_PUN2	0.5	4	0.25	0.56	4	2.24	0
9/16/19	8	WAP_WAP_G8	BYU_BYU_G8	1	1.8	0.81	1.8	1.8	3.24	0
9/16/19	8	WAP_WAP_G8	BYU_PUN3	1	1.1	0.81	1.8	1.1	1.98	0
9/16/19	8	WAP_WAP_G8	TXCTY_CTB	2	7.9	1.36	2.98	7.9	23.54	0
9/16/19	8	HB_HOUSTON	TXCTY_CTB	1.36	12.5	1.18	2.55	12.5	31.88	0
9/16/19	8	HB_HOUSTON	TXCTY_ST	1.36	12.5	1.18	2.55	12.5	31.88	0
9/16/19	8	HB_HOUSTON	TXCTY_CTB	1.17	12.5	1.18	2.55	0.6	1.53	0
9/16/19	8	HB_HOUSTON	TXCTY_ST	1.17	12.5	1.18	2.55	0.6	1.53	0
9/16/19	9	HB_HOUSTON	AZ_ALL	0.5	5.5	0.36	0.54	5.5	2.97	-0.01
9/16/19	9	HB_HOUSTON	SL_PUN2	0.5	4	0.36	0.54	4	2.16	-0.01
9/16/19	9	HB_HOUSTON	TXCTY_CTB	1.75	12.5	1.64	2.39	12.5	29.88	0.03
9/16/19	9	HB_HOUSTON	TXCTY_ST	1.75	12.5	1.64	2.39	12.5	29.88	0.03
9/16/19	9	WAP_WAP_G8	TXCTY_CTB	2	7.9	1.93	2.88	7.9	22.75	-0.02
9/16/19	10	OLIN_OLING_2	STEAM_STEAM_3	2	5.9	2.01	2.02	0.2	0.4	0
9/16/19	10	DDPEC_GT6	BYU_PUN4	0.5	2.1	0.48	0.69	2.1	1.45	0.04
9/16/19	10	ECLIPSE_UN1	DC_5	5	2.5	4.96	5.79	2.5	14.48	0.03
9/16/19	11	BASTEN_CCU	LZ_AEN	1.53	12.5	1.53	1.59	12.5	19.87	-111.59
9/16/19	11	CHEDPW_GT2	AZ_ALL	0.5	4.4	0.45	0.75	4.4	3.3	0.2
9/16/19	11	DDPEC_GT6	BYU_PUN4	1	2.1	0.81	1.29	2.1	2.71	0.05
9/16/19	11	WAP_WAP_G8	BYU_BYU_G8	5	1.3	3.45	5.35	1.3	6.96	-0.05
9/16/19	11	WAP_WAP_G8	BYU_PUN3	5	1.7	3.45	5.35	1.7	9.1	-0.06
9/16/19	11	HB_HOUSTON	AZ_ALL	1	5.5	0.99	1.52	5.5	8.36	-0.11
9/16/19	11	HB_HOUSTON	SL_PUN2	1	4	1	1.53	4	6.12	-0.07
9/16/19	12	MLSES_UNIT1	LZ_RAYBN	1	3.9	0.41	1.05	3.9	4.09	0.2
9/16/19	12	TGCCS_ALL	LZ_RAYBN	1	7.2	0.4	1.05	7.2	7.56	0.4
9/16/19	12	FRNYPP_1_CCU	LHSES_UNIT2	0.5	10	0.18	1	10	10	0.05
9/16/19	12	SCSES_UNIT2	LZ_RAYBN	0.5	1.1	0.38	1	1.1	1.1	0.07
9/16/19	12	MLSES_UNIT1	LZ_RAYBN	0.5	3.9	0.41	1.05	3.9	4.09	0.2
9/16/19	12	TGCCS_ALL	LZ_RAYBN	0.5	7.2	0.4	1.05	7.2	7.56	0.4
9/16/19	13	FRNYPP_1_CCU	STEAM_STEAM_2	5	7.8	5	5.08	5.5	27.94	0.04
9/16/19	13	FRNYPP_2_CCU	STEAM_ENG123	5	1	5	5.08	0.7	3.56	0.01
9/16/19	13	HB_HOUSTON	TXCTY_CTB	1.72	12.5	1.71	1.95	12.5	24.38	1.53
9/16/19	13	HB_HOUSTON	TXCTY_ST	1.72	12.5	1.71	1.95	12.5	24.38	1.53
9/16/19	14	TRSES_UNIT6	LZ_NORTH	1	3	0.92	1.19	3	3.57	0.29
9/16/19	14	TYLRWIND_RN	LZ_NORTH	1	5	0.51	1.19	5	5.95	-0.42
9/16/19	14	HB_HOUSTON	TXCTY_CTB	1.46	12.5	1.19	1.72	12.5	21.5	5.13
9/16/19	14	HB_HOUSTON	TXCTY_ST	1.46	12.5	1.19	1.72	12.5	21.5	5.13
9/16/19	14	CPSES_UNIT2	HLSES_UNITS	0.5	3.6	0.35	0.83	3.6	2.99	-0.2
9/16/19	14	FRNYPP_1_CCU	STEAM_STEAM_2	2	7.8	1.51	2.49	7.8	19.42	0.12
9/16/19	14	FRNYPP_2_CCU	STEAM_ENG123	2	1	1.51	2.49	1	2.49	0.01
9/16/19	14	HB_HOUSTON	TXCTY_CTB	1.19	12.5	1.19	1.72	3.6	6.19	1.48
9/16/19	14	HB_HOUSTON	TXCTY_ST	1.19	12.5	1.19	1.72	3.6	6.19	1.48
9/16/19	15	DECKER_DPG1	LZ_AEN	0.5	6	0.45	0.54	6	3.24	-1.07
9/16/19	15	SANDHSYD3_4	LZ_AEN	1	10	0.84	1.07	10	10.7	-5.97
9/16/19	15	TYLRWIND_RN	LZ_NORTH	3.9	5	2.27	4.12	5	20.6	0.28
9/16/19	15	FRNYPP_1_CCU	STEAM_STEAM_2	1	5.2	0.59	1.25	5.2	6.5	-0.04
9/16/19	15	FRNYPP_2_CCU	STEAM_ENG123	1	1.3	0.59	1.25	1.3	1.62	-0.01
9/16/19	15	TYLRWIND_RN	LZ_NORTH	3.59	5	2.27	4.12	5	20.6	0.28
9/16/19	15	TRSES_UNIT6	LZ_NORTH	2	4.5	1.82	2.84	4.5	12.78	-0.41
9/16/19	16	SANDHSYD3_4	LZ_AEN	1	10	0.65	1.14	10	11.4	-8.85
9/16/19	16	TRSES_UNIT6	LZ_NORTH	5	4.5	2.57	5.53	4.5	24.88	-2.33
9/16/19	16	FRNYPP_1_CCU	STEAM_STEAM_2	1	5.2	1.01	1.71	4.3	7.35	-0.27
9/16/19	16	FRNYPP_2_CCU	STEAM_ENG123	1	1.3	1.01	1.71	1.1	1.88	-0.07
9/16/19	16	LPCCS_CT21	VLSSES_UNIT3	2	5.2	2	2.79	0.2	0.56	-0.01
9/16/19	16	TYLRWIND_RN	LZ_NORTH	6.42	5	4.88	7.32	5	36.6	1.86
9/16/19	16	MIL_MILG1_2	TEN_CT1_STG	5.26	4.5	0.5	6.26	4.5	28.17	4.22
9/16/19	16	TYLRWIND_RN	LZ_NORTH	6.04	5	4.88	7.32	5	36.6	1.86
9/16/19	16	MIL_MILG1_2	TEN_CT1_STG	4.13	4.5	0.5	6.26	4.5	28.17	4.22
9/16/19	16	MIL_MILG1_2	TEN_CT1_STG	3.42	3	0.5	6.26	3	18.78	2.81
9/16/19	16	MIL_MILG1_2	TEN_CT1_STG	3.13	3	0.5	6.26	3	18.78	2.81
9/16/19	17	SANDHSYD3_4	LZ_AEN	0.87	10	0.87	0.91	8.2	7.46	-5.74
9/16/19	17	CPSES_UNIT1	HLSES_UNIT4	7.07	18.7	6.32	7.79	18.7	145.67	-82.98
9/16/19	17	CPSES_UNIT2	HLSES_UNITS	7.05	3.6	6.32	7.79	3.6	28.04	-15.98
9/16/19	17	LPCCS_CT12	DC_E	5	9.7	5	5.79	6.9	39.95	-0.19
9/16/19	17	CPSES_UNIT2	HLSES_UNITS	6.65	3.6	6.32	7.79	3.6	28.04	-15.98
9/16/19	17	MIL_MILG1_2	TEN_CT1_STG	6.62	4.5	3.98	7.94	4.5	35.73	-1.84
9/16/19	17	MIL_MILG1_2	TEN_CT1_STG	5.21	4.5	3.98	7.94	4.5	35.73	-1.84
9/16/19	17	MIL_MILG1_2	TEN_CT1_STG	4.37	3	3.98	7.94	3	23.82	-1.23
9/16/19	17	MIL_MILG1_2	TEN_CT1_STG	4.05	3	3.98	7.94	3	23.82	-1.23
9/16/19	18	CPSES_UNIT2	HLSES_UNITS	0.5	3.6	0.49	0.52	3.6	1.87	-26.01
9/16/19	18	HAYSEN3_4	MAR_MARSFOG	5	1.6	5	5.03	1.6	8.05	-10.77
9/16/19	19	TGCCS_ALL	LZ_RAYBN	0.5	10	0.46	0.52	10	5.2	0.05
9/16/19	19	HB_HOUSTON	TXCTY_CTB	0.97	12.5	0.97	1	0.1	0.1	-0.01
9/16/19	19	HB_HOUSTON	TXCTY_ST	0.97	12.5	0.97	1	0.1	0.1	-0.01

9/16/19	20 LGW_UNIT_ALL	BR_VHB6CT5_6	1	3	0.96	1.05	3	3.15	36.82
9/16/19	21 WAP_WAP_G8	BYU_BYU_G8	1	1.8	0.86	1.07	1.8	1.93	0.02
9/16/19	21 WAP_WAP_G8	BYU_PUN3	1	1.1	0.86	1.07	1.1	1.18	0.01
9/16/19	21 HB_HOUSTON	TXCTY_CTB	0.97	12.5	0.98	1.24	9.4	11.66	-0.14
9/16/19	21 HB_HOUSTON	TXCTY_ST	0.97	12.5	0.98	1.24	9.4	11.66	-0.14
9/16/19	23 CPSES_UNIT2	LZ_NORTH	1	10	0.85	1.03	10	10.3	0
9/16/19	23 WHCCS2_4	LZ_NORTH	1	14	0.92	1.11	1.4	1.55	0
9/16/19	23 SPNC_SPNCE_4	PANDA_S_ST1	1	4	0.61	1.47	4	5.88	0
9/16/19	23 HB_HUBAVG	THW_THWGT5X	2	8.1	0.28	2.66	8.1	21.55	-0.1
9/16/19	23 HB_HUBAVG	THW_THWGT5X	1	5.4	0.28	2.66	5.4	14.36	-0.07
9/16/19	23 HB_HUBAVG	THW_THWGT5X	0.5	5.4	0.28	2.66	5.4	14.36	-0.07
9/16/19	23 HB_SOUTH	LZ_SOUTH	5	33	0.76	9.99	33	329.67	-1.32
9/16/19	23 HB_SOUTH	BRAUNIG_VHB2	5	9.3	2.55	11.88	9.3	110.48	-0.37
9/16/19	23 HB_SOUTH	LZ_SOUTH	2	33	0.76	9.99	33	329.67	-1.32
9/16/19	23 HB_SOUTH	LZ_SOUTH	1	22	0.76	9.99	22	219.78	-0.88
9/16/19	23 BASTEN_CCU	LZ_AEN	1.6	12.5	0.21	270.5	12.5	3381.25	-15.38
9/16/19	23 BASTEN_CCU	LZ_AEN	1.49	12.5	0.21	270.5	12.5	3381.25	-15.38
9/16/19	23 BASTEN_CCU	LZ_AEN	1.38	12.5	0.21	270.5	12.5	3381.25	-15.38
9/16/19	23 BASTEN_CCU	LZ_AEN	1.27	12.5	0.21	270.5	12.5	3381.25	-15.38
9/16/19	23 BASTEN_CCU	LZ_AEN	1.16	12.5	0.21	270.5	12.5	3381.25	-15.38
9/16/19	23 BASTEN_CCU	LZ_AEN	1.06	12.5	0.21	270.5	12.5	3381.25	-15.38
9/16/19	23 BASTEN_CCU	LZ_AEN	0.95	12.5	0.21	270.5	12.5	3381.25	-15.38
9/16/19	23 BASTEN_CCU	LZ_AEN	0.84	12.5	0.21	270.5	12.5	3381.25	-15.38
9/16/19	23 BASTEN_CCU	LZ_AEN	0.74	12.5	0.21	270.5	12.5	3381.25	-15.38
9/16/19	23 BASTEN_CCU	LZ_AEN	0.64	12.5	0.21	270.5	12.5	3381.25	-15.38
9/16/19	23 BASTEN_CCU	LZ_AEN	0.53	12.5	0.21	270.5	12.5	3381.25	-15.38
9/16/19	23 BASTEN_CCU	LZ_AEN	0.42	12.5	0.21	270.5	12.5	3381.25	-15.38
9/16/19	23 BASTEN_CCU	LZ_AEN	0.32	12.5	0.21	270.5	12.5	3381.25	-15.38
9/16/19	23 BASTEN_CCU	LZ_AEN	0.21	12.5	0.21	270.5	1	270.5	-1.23
9/16/19	24 HAYSEN3_4	CALAVER_OWS1	2	9.9	1.69	2.13	9.9	21.09	0
9/16/19	24 SPNC_SPNCE_4	PANDA_S_ST1	0.5	4	0.02	0.71	4	2.84	0
9/16/19	24 HB_HUBAVG	THW_THWGT5X	1	5.4	0.14	1.45	5.4	7.83	0
9/16/19	24 HB_SOUTH	LZ_SOUTH	5	33	0.7	5.56	33	183.48	0
9/16/19	24 HB_HUBAVG	THW_THWGT5X	0.5	5.4	0.14	1.45	5.4	7.83	0
9/16/19	24 HB_SOUTH	BRAUNIG_VHB2	5	9.3	1.65	7.07	9.3	65.75	0
9/16/19	24 HB_SOUTH	LZ_SOUTH	2	33	0.7	5.56	33	183.48	0
9/16/19	24 HB_SOUTH	LZ_SOUTH	1	22	0.7	5.56	22	122.32	0
9/16/19	24 HB_SOUTH	BRAUNIG_VHB2	2	9.3	1.65	7.07	9.3	65.75	0
9/16/19	24 BASTEN_CCU	LZ_AEN	1.53	12.5	0.18	165.98	12.5	2074.75	0
9/16/19	24 BASTEN_CCU	LZ_AEN	1.43	12.5	0.18	165.98	12.5	2074.75	0
9/16/19	24 BASTEN_CCU	LZ_AEN	1.32	12.5	0.18	165.98	12.5	2074.75	0
9/16/19	24 BASTEN_CCU	LZ_AEN	1.22	12.5	0.18	165.98	12.5	2074.75	0
9/16/19	24 BASTEN_CCU	LZ_AEN	1.11	12.5	0.18	165.98	12.5	2074.75	0
9/16/19	24 BASTEN_CCU	LZ_AEN	1	12.5	0.18	165.98	12.5	2074.75	0
9/16/19	24 BASTEN_CCU	LZ_AEN	0.9	12.5	0.18	165.98	12.5	2074.75	0
9/16/19	24 BASTEN_CCU	LZ_AEN	0.79	12.5	0.18	165.98	12.5	2074.75	0
9/16/19	24 BASTEN_CCU	LZ_AEN	0.69	12.5	0.18	165.98	12.5	2074.75	0
9/16/19	24 BASTEN_CCU	LZ_AEN	0.59	12.5	0.18	165.98	12.5	2074.75	0
9/16/19	24 BASTEN_CCU	LZ_AEN	0.49	12.5	0.18	165.98	12.5	2074.75	0
9/16/19	24 BASTEN_CCU	LZ_AEN	0.39	12.5	0.18	165.98	12.5	2074.75	0
9/16/19	24 BASTEN_CCU	LZ_AEN	0.29	12.5	0.18	165.98	12.5	2074.75	0
9/16/19	24 BASTEN_CCU	LZ_AEN	0.19	12.5	0.18	165.98	12.5	2074.75	0
9/17/19	1 HB_SOUTH	LZ_SOUTH	0.5	24.4	0.47	0.53	24.4	12.93	0
9/17/19	2 HB_SOUTH	LZ_SOUTH	0.5	24.4	0.46	0.52	24.4	12.69	0
9/17/19	3 HB_SOUTH	LZ_SOUTH	0.5	24.4	0.5	0.57	5.1	2.91	0
9/17/19	4 HB_SOUTH	LZ_SOUTH	0.5	24.4	0.5	0.61	17.3	10.55	0
9/17/19	7 HB_HOUSTON	TXCTY_CTB	0.9	12.5	0.76	1.12	12.5	14	0
9/17/19	7 HB_HOUSTON	TXCTY_ST	0.9	12.5	0.76	1.12	12.5	14	0
9/17/19	8 HB_HOUSTON	TXCTY_CTB	0.94	12.5	0.95	1.15	8	9.2	0
9/17/19	8 HB_HOUSTON	TXCTY_ST	0.94	12.5	0.95	1.15	8	9.2	0
9/17/19	9 HB_HOUSTON	TXCTY_CTB	2.04	12.5	1.77	2.07	12.5	25.87	0
9/17/19	9 HB_HOUSTON	TXCTY_ST	2.04	12.5	1.77	2.07	12.5	25.87	0
9/17/19	9 HB_HOUSTON	DIB_PUN2	0.5	2.5	0.45	0.53	2.5	1.33	0
9/17/19	9 MIAMI1_G1_G2	LZ_NORTH	1.26	50	1.26	1.45	19.9	28.86	0
9/17/19	9 GRANDVW1_A_E	LZ_NORTH	1.26	50	1.26	1.45	17.5	25.38	0
9/17/19	9 HRFDWIND_ALL	LZ_NORTH	1.26	50	1.26	1.45	16.1	23.35	0
9/17/19	9 BRISCOE_WIND	LZ_NORTH	1.26	50	1.26	1.45	14.9	21.61	0
9/17/19	9 SPLAIN1_RN	LZ_NORTH	1.26	50	1.26	1.45	9.3	13.49	0
9/17/19	9 WAKEWE_ALL	LZ_NORTH	1.26	50	1.26	1.45	3.4	4.93	0
9/17/19	9 HB_HOUSTON	TXCTY_CTB	1.77	12.5	1.77	2.07	9.2	19.04	0
9/17/19	9 HB_HOUSTON	TXCTY_ST	1.77	12.5	1.77	2.07	9.2	19.04	0
9/17/19	10 GID_GIDEONG3	DECKER_GT	0.5	1.3	0.48	0.59	1.3	0.77	0
9/17/19	11 HB_HUBAVG	THW_2_CCU	1	1	0.81	1.04	1	1.04	-0.03
9/17/19	11 HB_HOUSTON	AZ_ALL	2	15	1.74	2.59	15	38.85	0
9/17/19	11 HB_HOUSTON	SL_PUN1	2	5.9	1.76	2.62	5.9	15.46	0
9/17/19	11 HB_HOUSTON	SL_PUN2	2	2.5	1.76	2.62	2.5	6.55	0
9/17/19	11 LOS_LOSTPGT2	LZ_LCRA	5	1.7	4.84	5.89	1.7	10.01	0
9/17/19	11 HB_HOUSTON	DIB_PUN2	2	3.8	1.98	2.95	3.8	11.21	0
9/17/19	11 FPPYD_FPP_G3	LZ_LCRA	5	14.3	5	6.1	12.1	73.81	0

9/17/19	11	HB_HOUSTON	SJS_SJS_G1	5	1.1	4.66	6.99	1.1	7.69	0
9/17/19	12	BRA_AVR_CST1	LZ_CPS	2	6.9	1.84	2.05	6.9	14.15	-0.55
9/17/19	12	HAYSEN3_4	BR_VHB6CT7_8	2	6	1.92	2.26	6	13.56	-2.25
9/17/19	12	HB_HOUSTON	AZ_ALL	1	10	0.72	1.31	10	13.1	0.03
9/17/19	12	HB_HOUSTON	DDPEC_ST1	2	3.5	1.3	2.32	3.5	8.12	-0.04
9/17/19	12	HB_HOUSTON	SL_PUN1	1	3.9	0.73	1.33	3.9	5.19	0.01
9/17/19	12	HB_HOUSTON	SL_PUN2	1	1.7	0.73	1.33	1.7	2.26	0
9/17/19	12	HB_HOUSTON	DIB_PUN2	1	2.5	0.82	1.49	2.5	3.72	0
9/17/19	12	LGW_UNIT_ALL	BR_VHB6CT7_8	1	3.1	1.01	1.58	0.2	0.32	-0.28
9/17/19	12	HB_HOUSTON	SJS_SJS_G1	2	1.1	1.93	3.41	1.1	3.75	-0.04
9/17/19	13	HAYSEN1_2	BR_VHB6CT7_8	2	8.5	1.92	2.28	8.5	19.38	-1.19
9/17/19	13	HAYSEN3_4	CALAVER_OWS1	2	1.7	1.97	2.34	1.7	3.98	-0.23
9/17/19	13	LGW_UNIT_ALL	BR_VHB6CT5_6	1	3.4	0.9	1.35	3.4	4.59	-2.21
9/17/19	13	HHGT_KENDAL	LZ_CPS	2	1.7	2	2.42	1.5	3.63	-0.24
9/17/19	13	DDPEC_GT3	TXCTY_CTA	2	7.4	1.51	2.99	7.4	22.13	-0.07
9/17/19	14	CBY_CBY_G2	CAL_PUN1	0.5	2.3	0.5	0.52	1	0.52	-0.28
9/17/19	14	DDPEC_GT3	TXCTY_CTA	2	7.4	1.46	2.06	7.4	15.24	-3.22
9/17/19	14	HB_HOUSTON	THW_THWGT_1	1	1.9	1	1.07	0.4	0.43	-0.12
9/17/19	14	LGW_UNIT_ALL	BR_VHB6CT5_6	1	3.4	0.63	1.18	3.4	4.01	-2.84
9/17/19	14	CBY_CBY_G1	DIB_DIB_G4	2	9.9	2	2.38	8.1	19.28	-5.77
9/17/19	14	HB_HOUSTON	TXCTY_CTB	2.11	2.5	1.99	3.19	2.5	7.98	0.62
9/17/19	14	HB_HOUSTON	TXCTY_ST	2.11	2.5	1.99	3.19	2.5	7.98	0.62
9/17/19	15	HHGT_KENDAL	LZ_CPS	1	1.1	0.75	1.07	1.1	1.18	-0.39
9/17/19	15	FREC_2_CCU	LZ_NORTH	2	6	1.96	2.08	6	12.48	-7.94
9/17/19	15	HB_HOUSTON	THW_THWGT_1	1	1.9	0.79	1.27	1.9	2.41	-2.17
9/17/19	15	HAYSEN1_2	BR_VHB6CT7_8	0.5	5.7	0.5	0.81	5.7	4.62	0.37
9/17/19	15	HHGT_KENDAL	CALAVER_OWS1	0.5	8.8	0.5	0.87	8.8	7.66	-3.15
9/17/19	15	LGW_UNIT_ALL	BR_VHB6CT5_6	1.56	3.4	1.12	1.95	3.4	6.63	-6.16
9/17/19	15	LGW_UNIT_ALL	BR_VHB6CT5_6	1.27	3.4	1.12	1.95	3.4	6.63	-6.16
9/17/19	16	HHGT_KENDAL	LZ_CPS	1.1	1.1	0.89	1.12	1.1	1.23	0.19
9/17/19	16	HB_HOUSTON	THW_THWGT_1	0.5	1.9	0.14	0.58	1.9	1.1	-3.57
9/17/19	16	EXN_PUN1	SL_PUN2	1	1.8	0.81	1.08	1.8	1.94	-2.02
9/17/19	16	EXN_PUN3	SL_PUN1	1	3.8	0.81	1.08	3.8	4.1	-4.27
9/17/19	16	EXN_PUN3	SL_PUN2	1	2.1	0.81	1.08	2.1	2.27	-2.36
9/17/19	16	DUP_PUN2	VISTRON_TG2	1.33	3.1	1.28	1.44	3.1	4.46	2.02
9/17/19	16	HAYSEN1_2	BR_VHB6CT7_8	2	8.5	1.7	2.26	8.5	19.21	0.57
9/17/19	16	HAYSEN3_4	CALAVER_OWS1	2	1.7	1.76	2.33	1.7	3.96	0.1
9/17/19	16	FRNYPP_2_CCU	OLIN_OLING_1	2	11.5	2	2.35	1.1	2.58	0.02
9/17/19	16	HB_HOUSTON	TXCTY_CTB	2.04	12.5	1.25	2.95	12.5	36.88	18.56
9/17/19	16	HB_HOUSTON	TXCTY_ST	2.04	12.5	1.25	2.95	12.5	36.88	18.56
9/17/19	16	HB_HOUSTON	TXCTY_CTB	1.77	12.5	1.25	2.95	12.5	36.88	18.56
9/17/19	16	HB_HOUSTON	TXCTY_ST	1.77	12.5	1.25	2.95	12.5	36.88	18.56
9/17/19	16	CBY_CBY_G1	DIB_DIB_G4	5	9.9	3.53	6.43	9.9	63.66	-45.42
9/17/19	16	HB_HOUSTON	TXCTY_CTB	1.51	12.5	1.25	2.95	12.5	36.88	18.56
9/17/19	16	HB_HOUSTON	TXCTY_ST	1.51	12.5	1.25	2.95	12.5	36.88	18.56
9/17/19	16	HB_HOUSTON	TXCTY_CTB	1.24	12.5	1.25	2.95	5.2	15.34	7.72
9/17/19	16	HB_HOUSTON	TXCTY_ST	1.24	12.5	1.25	2.95	5.2	15.34	7.72
9/17/19	16	WHCCS_CT1_ST	HLSES_UNIT4	13.88	6.2	12.29	22.16	6.2	137.39	-29.93
9/17/19	16	WHCCS_CT1_ST	HLSES_UNIT4	13.41	6.2	12.29	22.16	6.2	137.39	-29.93
9/17/19	16	WHCCS_CT1_ST	HLSES_UNIT4	12.94	6.2	12.29	22.16	6.2	137.39	-29.93
9/17/19	16	WHCCS_CT1_ST	HLSES_UNIT4	12.46	6.2	12.29	22.16	6.2	137.39	-29.93
9/17/19	17	CAPRIDG4_CR4	LGD_LANGFORC	6.21	1.1	5.59	6.34	1.1	6.97	-5.67
9/17/19	17	LGW_UNIT_ALL	BR_VHB6CT5_6	2.7	3.4	1.87	2.91	3.4	9.89	-6.87
9/17/19	17	CBY4_ALL	THW_THWGT_1	2	1.5	1.67	2.24	1.5	3.36	-16.57
9/17/19	17	LGW_UNIT_ALL	BR_VHB6CT5_6	2.27	3.4	1.87	2.91	3.4	9.89	-6.87
9/17/19	17	HB_HOUSTON	TXCTY_CTB	2.11	2.5	1.91	2.98	2.5	7.45	5.1
9/17/19	17	HB_HOUSTON	TXCTY_ST	2.11	2.5	1.91	2.98	2.5	7.45	5.1
9/17/19	17	CBY_CBY_G1	DIB_DIB_G4	5	9.9	3.36	7	9.9	69.3	-62.94
9/17/19	18	CBY_CBY_G2	PSG_PSG_GT3	1	4.8	0.83	1.07	4.8	5.14	-4.49
9/17/19	18	HHGT_KENDAL	LZ_CPS	1.45	1.1	1.27	1.52	1.1	1.67	0.07
9/17/19	18	CBY_CBY_G2	CAL_PUN1	1	2.3	0.78	1.08	2.3	2.48	-1.91
9/17/19	18	HAYSEN1_2	BR_VHB6CT7_8	1.09	5.7	1.02	1.19	5.7	6.78	0.13
9/17/19	18	HAYSEN3_4	CALAVER_OWS1	1.1	1.1	1.08	1.24	1.1	1.36	0.01
9/17/19	18	CBY_CBY_G1	DIB_DIB_G4	5	9.9	2.06	5.15	9.9	50.98	-21.21
9/17/19	18	EXN_PUN1	SL_PUN2	0.5	1.8	0.31	0.88	1.8	1.58	-0.95
9/17/19	18	EXN_PUN3	SL_PUN1	0.5	3.8	0.31	0.88	3.8	3.34	-2
9/17/19	18	EXN_PUN3	SL_PUN2	0.5	2.1	0.31	0.88	2.1	1.85	-1.11
9/17/19	18	CBY4_ALL	THW_THWGT_1	1	1	0.93	1.63	1	1.63	-3.73
9/17/19	18	CBY4_ALL	PR_PR_G2	2	1.1	1.62	2.7	1.1	2.97	-1.83
9/17/19	18	DDPEC_GT3	TXCTY_CTA	2	7.4	2	3.21	2.2	7.06	-2.92
9/17/19	18	HB_HOUSTON	TXCTY_CTB	2.11	2.5	1.6	3.49	2.5	8.73	1.77
9/17/19	18	HB_HOUSTON	TXCTY_ST	2.11	2.5	1.6	3.49	2.5	8.73	1.77
9/17/19	18	CBY_CBY_G1	CAL_PUN1	2	5	1.95	3.45	5	17.25	-12.01
9/17/19	18	HB_HOUSTON	TXCTY_CTB	1.84	2.5	1.6	3.49	2.5	8.73	1.77
9/17/19	18	HB_HOUSTON	TXCTY_ST	1.84	2.5	1.6	3.49	2.5	8.73	1.77
9/17/19	19	CBY_CBY_G1	DIB_DIB_G4	0.5	6.6	0.5	0.82	2.9	2.38	-1.7
9/17/19	19	DDPEC_GT3	TXCTY_CTA	2	7.4	1.73	2.4	7.4	17.76	-2.72
9/17/19	20	HB_HOUSTON	THW_THWGT_1	0.5	1.9	0.5	0.52	1.2	0.62	-0.64
9/17/19	20	HB_HOUSTON	TXCTY_CTB	2.15	2.5	1.72	2.23	2.5	5.58	1.51

9/17/19	20	HB_HOUSTON	TXCTY_ST	2.15	2.5	1.72	2.23	2.5	5.58	1.51
9/17/19	20	HB_HOUSTON	TXCTY_CTB	1.88	2.5	1.72	2.23	2.5	5.58	1.51
9/17/19	20	HB_HOUSTON	TXCTY_ST	1.88	2.5	1.72	2.23	2.5	5.58	1.51
9/17/19	21	HB_HOUSTON	DDPEC_ST1	0.5	2.3	0.36	0.55	2.3	1.27	3.35
9/17/19	21	HB_HOUSTON	TXCTY_CTB	1.32	2.5	0.92	1.4	2.5	3.5	1.36
9/17/19	21	HB_HOUSTON	TXCTY_ST	1.32	2.5	0.92	1.4	2.5	3.5	1.36
9/17/19	21	HB_HOUSTON	TXCTY_CTB	1.04	2.5	0.92	1.4	2.5	3.5	1.36
9/17/19	21	HB_HOUSTON	TXCTY_ST	1.04	2.5	0.92	1.4	2.5	3.5	1.36
9/18/19	2	HB_HOUSTON	TXCTY_CTB	0	12.5	-0.01	0.05	12.5	0.62	0.03
9/18/19	2	HB_HOUSTON	TXCTY_ST	0	12.5	-0.01	0.05	12.5	0.62	0.03
9/18/19	3	RSK_RN	CALAVER_OWS2	1	1.6	0.98	1.02	1.6	1.63	0
9/18/19	4	RSK_RN	BR_VHB6CT7_8	0.94	4.4	0.91	0.97	4.4	4.27	0
9/18/19	6	HB_HOUSTON	TXCTY_CTB	0	12.5	0.01	0.05	3.8	0.19	0
9/18/19	6	HB_HOUSTON	TXCTY_ST	0	12.5	0.01	0.05	3.8	0.19	0
9/18/19	7	HB_HOUSTON	TXCTY_CTB	0.31	10	0.22	0.33	10	3.3	0
9/18/19	7	HB_HOUSTON	TXCTY_ST	0.31	10	0.22	0.33	10	3.3	0
9/18/19	7	HB_HOUSTON	TXCTY_CTB	0.23	10	0.22	0.33	10	3.3	0
9/18/19	7	HB_HOUSTON	TXCTY_ST	0.23	10	0.22	0.33	10	3.3	0
9/18/19	8	HB_HOUSTON	TXCTY_CTB	0.35	10	0.26	0.37	10	3.7	0
9/18/19	8	HB_HOUSTON	TXCTY_ST	0.35	10	0.26	0.37	10	3.7	0
9/18/19	8	HB_HOUSTON	TXCTY_CTB	0.26	10	0.26	0.37	3.8	1.41	0
9/18/19	8	HB_HOUSTON	TXCTY_ST	0.26	10	0.26	0.37	3.8	1.41	0
9/18/19	9	HB_HOUSTON	TXCTY_CTB	0.37	10	0.21	0.44	10	4.4	0
9/18/19	9	HB_HOUSTON	TXCTY_ST	0.37	10	0.21	0.44	10	4.4	0
9/18/19	9	ANACACHO_ANA	DC_S	2	6	2	2.15	0.5	1.07	0
9/18/19	9	HB_HOUSTON	TXCTY_CTB	0.28	10	0.21	0.44	10	4.4	0
9/18/19	9	HB_HOUSTON	TXCTY_ST	0.28	10	0.21	0.44	10	4.4	0
9/18/19	10	LOS_LOSTPGT1	WEBBER_WS_T	1	1.2	0.76	1.24	1.2	1.49	0
9/18/19	10	HB_HOUSTON	TXCTY_CTB	0.83	2.5	0.67	1.08	2.5	2.7	0
9/18/19	10	HB_HOUSTON	TXCTY_ST	0.83	2.5	0.67	1.08	2.5	2.7	0
9/18/19	10	HB_HOUSTON	TXCTY_CTB	0.7	10	0.67	1.08	10	10.8	0
9/18/19	10	HB_HOUSTON	TXCTY_ST	0.7	10	0.67	1.08	10	10.8	0
9/18/19	11	WAP_WAP_G6	THW_THWGT5X	0.5	6.7	0.37	0.59	6.7	3.95	-0.03
9/18/19	11	WAP_WAP_G6	THW_1_CCU	0.5	3.2	0.39	0.61	3.2	1.95	-0.02
9/18/19	11	HB_HOUSTON	TXCTY_CTB	2.4	2.5	1.69	2.55	2.5	6.37	0
9/18/19	11	HB_HOUSTON	TXCTY_ST	2.4	2.5	1.69	2.55	2.5	6.37	0
9/18/19	11	HB_HOUSTON	TXCTY_CTB	2.09	2.5	1.69	2.55	2.5	6.37	0
9/18/19	11	HB_HOUSTON	TXCTY_ST	2.09	2.5	1.69	2.55	2.5	6.37	0
9/18/19	11	HB_HOUSTON	TXCTY_CTB	1.78	2.5	1.69	2.55	2.5	6.37	0
9/18/19	11	HB_HOUSTON	TXCTY_ST	1.78	2.5	1.69	2.55	2.5	6.37	0
9/18/19	12	HB_HOUSTON	TXCTY_CTB	1.47	2.5	0.95	1.53	2.5	3.82	0
9/18/19	12	HB_HOUSTON	TXCTY_ST	1.47	2.5	0.95	1.53	2.5	3.82	0
9/18/19	12	HB_HOUSTON	TXCTY_CTB	1.16	2.5	0.95	1.53	2.5	3.82	0
9/18/19	12	HB_HOUSTON	TXCTY_ST	1.16	2.5	0.95	1.53	2.5	3.82	0
9/18/19	12	MIRASOLE_GEN	FAL_FALCONG1	2	2.6	2	2.48	1.1	2.73	-0.04
9/18/19	12	MIRASOLE_GEN	FAL_FALCONG2	2	3.7	2	2.48	1.6	3.97	-0.06
9/18/19	12	COL_COLETOG1	LZ_SOUTH	5	1.1	3.24	8.25	1.1	9.08	-0.19
9/18/19	12	RAYB_G78910	RAYBURN_G1_2	5	4.2	4.13	12.07	4.2	50.69	0.06
9/18/19	13	MIRASOLE_GEN	FAL_FALCONG1	2	2.6	1.46	2.22	2.6	5.77	-0.51
9/18/19	13	MIRASOLE_GEN	FAL_FALCONG2	2	3.7	1.46	2.22	3.7	8.21	-0.73
9/18/19	13	LV3_UNIT1	FAL_FALCONG1	2	1	1.65	2.68	1	2.68	0
9/18/19	13	LV3_UNIT1	FAL_FALCONG3	2	1	1.65	2.68	1	2.68	0
9/18/19	13	COL_COLETOG1	LZ_SOUTH	5	1.1	3.64	7.07	1.1	7.78	-17.23
9/18/19	13	RAYB_G78910	RAYBURN_G1_2	5	4.2	3.83	9.66	4.2	40.57	-40.8
9/18/19	14	REDFISH_ALL	DUKE_GST1CCU	5	3.4	5	5.25	2.3	12.08	-45.98
9/18/19	14	NUE_NUECESG8	OXY_OXY_CCG1	0.5	2.5	0.3	0.76	2.5	1.9	5.47
9/18/19	14	B_DAVIS_4	OXY_OXY_CCG1	0.5	2.9	0.28	0.91	2.9	2.64	1.34
9/18/19	14	ANACACHO_ANA	DC_S	2	6	2	2.45	0.9	2.2	-43.16
9/18/19	14	MIRASOLE_GEN	FAL_FALCONG1	2	2.6	1.89	3.73	2.6	9.7	-1.19
9/18/19	14	MIRASOLE_GEN	FAL_FALCONG2	2	3.7	1.89	3.73	3.7	13.8	-1.69
9/18/19	15	HB_HOUSTON	TXCTY_CTB	0.3	10	0.3	0.33	2.1	0.69	-4.06
9/18/19	15	HB_HOUSTON	TXCTY_ST	0.3	10	0.3	0.33	2.1	0.69	-4.06
9/18/19	15	CALAVER_JKS1	CALAVER_OWS2	1	10	1	1.25	4.1	5.12	-4.33
9/18/19	15	MIRASOLE_GEN	FAL_FALCONG1	2	2.6	1.25	2.33	2.6	6.06	3.78
9/18/19	15	MIRASOLE_GEN	FAL_FALCONG2	2	3.7	1.25	2.33	3.7	8.62	5.37
9/18/19	15	BTE_PUN1	PSA_PSA_G1	1	1.1	0.94	1.36	1.1	1.5	0.12
9/18/19	15	BTE_PUN1	PSA_PUN1	1	2.8	0.94	1.36	2.8	3.81	0.29
9/18/19	15	CBY_CBY_G1	EXN_PUN3	1	6	1	1.45	0.2	0.29	-0.01
9/18/19	15	LV3_UNIT1	FAL_FALCONG1	2	1	1.33	2.82	1	2.82	1.57
9/18/19	15	LV3_UNIT1	FAL_FALCONG3	2	1	1.33	2.82	1	2.82	1.57
9/18/19	15	COL_COLETOG1	LZ_SOUTH	5	1.1	4.28	9.23	1.1	10.15	-28.99
9/18/19	15	RAYB_G78910	RAYBURN_G1_2	5	4.2	4.01	10.72	4.2	45.02	-14.58
9/18/19	15	VIC_VICTORG6	RAYBURN_G1_2	5	4.7	4.57	14.87	4.7	69.89	-35.5
9/18/19	16	LPCCS_CT11	VLSES_UNIT3	0.5	1.9	0.5	0.55	1.8	0.99	-3.08
9/18/19	16	HB_HOUSTON	TXCTY_CTB	0.1	10	0.07	0.17	10	1.7	-40.83
9/18/19	16	HB_HOUSTON	TXCTY_ST	0.1	10	0.07	0.17	10	1.7	-40.83
9/18/19	16	SANDHSYD_5AC	AUSTPL_ALL	0.5	4	0.44	0.81	4	3.24	-142.12
9/18/19	16	FRNYPP_2_CCU	STEAM_ENG123	2	8	2	2.39	2.3	5.5	-9.52
9/18/19	16	FRNYPP_2_CCU	STEAM_STEAM_2	2	2.9	2	2.39	0.8	1.91	-3.31

9/18/19	16 LV3_UNIT1	FAL_FALCONG1	2	1	1.59	2 47	1	2 47	3 41
9/18/19	16 LV3_UNIT1	FAL_FALCONG3	2	1	1.59	2.47	1	2.47	3.41
9/18/19	16 RAYB_G78910	RAYBURN_G1_2	5	4.2	2.96	9 8	4.2	41.16	-290.93
9/18/19	16 VIC_VICTORG6	RAYBURN_G1_2	5	4.7	3.26	13.66	4.7	64 2	-648 91
9/18/19	17 FRNYPP_2_CCU	LZ_RAYBN	2	2.8	1.25	2.04	2.8	5 71	-4.41
9/18/19	17 FRNYPP_2_CCU	STEAM_ENG123	2	8	1.11	2.1	8	16.8	-12.32
9/18/19	17 FRNYPP_2_CCU	STEAM_STEAM_2	2	2.9	1.11	2.1	2.9	6 09	-4 47
9/18/19	17 TYLRWIND_RN	PANDA_S_ST1	1 13	3.5	1.07	1 28	3.5	4 48	3.98
9/18/19	17 BORDAS_345	EXGNSND_RN	1.16	3.3	0.94	1.48	3.3	4 88	12.89
9/18/19	17 MIRASOLE_GEN	FAL_FALCONG1	2	2.6	1.72	2 4	2.6	6.24	6.74
9/18/19	17 MIRASOLE_GEN	FAL_FALCONG2	2	3.7	1.72	2 4	3.7	8 88	9.59
9/18/19	17 NUE_NUECESG7	CCEC_PUN1	0.5	4	0	1.01	4	4 04	0.02
9/18/19	17 BORDAS_345	EXGNSND_RN	0.95	3.3	0.94	1.48	3.3	4 88	12.89
9/18/19	17 LV3_UNIT1	FAL_FALCONG1	2	1	1.9	2.94	1	2 94	2 72
9/18/19	17 LV3_UNIT1	FAL_FALCONG3	2	1	1.9	2.94	1	2.94	2.72
9/18/19	17 COL_COLETOG1	LZ_SOUTH	5	1.1	4.79	8 65	1.1	9.52	-56 26
9/18/19	17 RAYB_G78910	RAYBURN_G1_2	5	4.2	3.49	9.13	4.2	38.35	-2 5
9/18/19	17 VIC_VICTORG6	RAYBURN_G1_2	5	4.7	4.04	12 75	4.7	59 92	-15 02
9/18/19	18 MIL_MILG1_2	HLSES_UNIT4	1	5.2	0.86	1.03	5.2	5.36	14 1
9/18/19	18 KEECHI_U1	LZ_NORTH	1	1.3	0.82	1 05	1.3	1 36	4 47
9/18/19	18 CBY_CBY_G1	PSA_PUN3	0.5	2.8	0.31	0.64	2.8	1 79	-0 45
9/18/19	18 LOS_LOSTPGT2	RHESS_1	2	2	2	2.94	1.1	3 23	70 23
9/18/19	18 RAYB_G78910	RAYBURN_G1_2	5	4.2	2.89	7 36	4.2	30 91	-3.28
9/18/19	18 VIC_VICTORG6	RAYBURN_G1_2	5	4.7	4.22	10.45	4.7	49 12	-14.32
9/18/19	19 VIC_VICTORG6	RAYBURN_G1_2	2	4.7	2 01	2 51	1.1	2 76	0 41
9/18/19	21 REDFISH_ALL	DUKE_GST1CCU	5 79	3.4	4 72	5 84	3.4	19 86	0 16
9/18/19	22 HB_HOUSTON	TXCTY_CTB	0 19	10	0 09	0 28	10	2 8	-0 62
9/18/19	22 HB_HOUSTON	TXCTY_ST	0 19	10	0 09	0 28	10	2 8	-0 62
9/18/19	22 HB_HOUSTON	TXCTY_CTB	0 09	10	0 09	0 28	4 3	1 2	-0 27
9/18/19	22 HB_HOUSTON	TXCTY_ST	0 09	10	0 09	0 28	4 3	1 2	-0 27
9/19/19	1 REDFISH_ALL	SIL_SILAS_10	1	7.7	1	1 15	3.1	3 56	-0 05
9/19/19	1 REDFISH_ALL	SIL_SILAS_9	1	2.2	1	1.15	0.9	1.03	-0 01
9/19/19	1 HB_SOUTH	LZ_SOUTH	5	27.7	0 63	5.17	27.7	143.21	-8.79
9/19/19	1 CEDROHI_CHW1	FAL_FALCONG1	5.58	1	5.42	5 86	1	5 86	0 02
9/19/19	1 EXGNWTL_1	FAL_FALCONG2	5.58	3.7	5.42	5 86	3.7	21 68	0 06
9/19/19	1 EXGNWTL_1	FAL_FALCONG3	5.58	3.7	5.42	5 86	3.7	21 68	0.06
9/19/19	1 HB_SOUTH	BRAUNIG_VHB2	5	9	1.22	6.22	9	55.98	-1.15
9/19/19	1 HB_SOUTH	LZ_SOUTH	2	27.7	0.63	5.17	27.7	143 21	-8 79
9/19/19	1 HB_SOUTH	LZ_SOUTH	1	18.5	0.63	5 17	18.5	95 65	-5 87
9/19/19	1 HB_SOUTH	BRAUNIG_VHB2	2	9	1.22	6 22	9	55 98	-1 15
9/19/19	1 HB_SOUTH	DC_S	5	6	5	9.34	0.7	6.54	-3 16
9/19/19	1 BASTEN_CCU	LZ_AEN	1.85	25	0	154.38	25	3859.5	1 25
9/19/19	1 BASTEN_CCU	LZ_AEN	1.59	25	0	154.38	25	3859.5	1.25
9/19/19	1 BASTEN_CCU	LZ_AEN	1.32	25	0	154.38	25	3859.5	1 25
9/19/19	1 BASTEN_CCU	LZ_AEN	1.06	25	0	154.38	25	3859.5	1.25
9/19/19	1 BASTEN_CCU	LZ_AEN	0.79	25	0	154.38	25	3859.5	1 25
9/19/19	1 BASTEN_CCU	LZ_AEN	0.53	25	0	154.38	25	3859.5	1 25
9/19/19	1 BASTEN_CCU	LZ_AEN	0.26	25	0	154.38	25	3859.5	1 25
9/19/19	1 BASTEN_CCU	LZ_AEN	0	25	0	154.38	15 4	2377 45	0.77
9/19/19	2 REDFISH_ALL	SIL_SILAS_10	1	7 7	1	1.07	6.8	7.28	0
9/19/19	2 REDFISH_ALL	SIL_SILAS_9	1	2 2	1	1 07	1 9	2 03	0
9/19/19	2 EXGNWTL_1	EXGNSND_RN	2	2	1 73	2 18	2	4 36	-0 01
9/19/19	2 CEDROHI_CHW1	SIL_SILAS_6	1.5	2.5	1.25	1.71	2.5	4.28	0 01
9/19/19	2 CEDROHI_CHW1	FAL_FALCONG1	1.66	1.4	1.56	2.02	1 4	2.83	0
9/19/19	2 EXGNWTL_1	FAL_FALCONG2	1.66	2.5	1.56	2.02	2 5	5 05	0
9/19/19	2 EXGNWTL_1	FAL_FALCONG3	1.66	2.5	1.56	2.02	2 5	5.05	0
9/19/19	2 HB_SOUTH	BRAUNIG_VHB2	5	9	1 08	5 55	9	49 95	-0.02
9/19/19	2 HB_SOUTH	LZ_SOUTH	2	27.7	0.5	5	27 7	138.5	-0.28
9/19/19	2 HB_SOUTH	BRAUNIG_VHB2	2	9	1.08	5 55	9	49 95	-0.02
9/19/19	2 HB_SOUTH	LZ_SOUTH	1	18 5	0.5	5	18.5	92.5	-0.19
9/19/19	2 HB_SOUTH	LZ_SOUTH	0 5	18 5	0.5	5	16.4	82	-0 16
9/19/19	2 BASTEN_CCU	LZ_AEN	1.78	25	-0.01	139 28	25	3482	0
9/19/19	2 BASTEN_CCU	LZ_AEN	1.53	25	-0.01	139 28	25	3482	0
9/19/19	2 BASTEN_CCU	LZ_AEN	1.27	25	-0.01	139 28	25	3482	0
9/19/19	2 BASTEN_CCU	LZ_AEN	1.02	25	-0.01	139 28	25	3482	0
9/19/19	2 BASTEN_CCU	LZ_AEN	0.76	25	-0.01	139 28	25	3482	0
9/19/19	2 BASTEN_CCU	LZ_AEN	0.51	25	-0.01	139.28	25	3482	0
9/19/19	2 BASTEN_CCU	LZ_AEN	0.25	25	-0.01	139.28	25	3482	0
9/19/19	2 BASTEN_CCU	LZ_AEN	0	25	-0.01	139 28	25	3482	0
9/19/19	3 REDFISH_ALL	SIL_SILAS_10	1	7 7	0 89	1.08	7 7	8 32	0
9/19/19	3 REDFISH_ALL	SIL_SILAS_9	1	2 2	0.89	1.08	2 2	2.38	0
9/19/19	3 HB_SOUTH	DC_S	9 51	4	6.13	10 38	4	41.52	-0.89
9/19/19	3 HB_SOUTH	DC_S	9.04	4	6.13	10.38	4	41.52	-0.89
9/19/19	3 BASTEN_CCU	LZ_AEN	1.76	25	0	164 25	25	4106 25	0 12
9/19/19	3 BASTEN_CCU	LZ_AEN	1.51	25	0	164.25	25	4106 25	0.12
9/19/19	3 BASTEN_CCU	LZ_AEN	1.26	25	0	164 25	25	4106 25	0.12
9/19/19	3 BASTEN_CCU	LZ_AEN	1	25	0	164.25	25	4106 25	0.12
9/19/19	3 BASTEN_CCU	LZ_AEN	0.75	25	0	164 25	25	4106 25	0.12
9/19/19	3 BASTEN_CCU	LZ_AEN	0 5	25	0	164 25	25	4106.25	0.12

9/19/19	3 BASTEN_CCU	LZ_AEN	0.25	25	0	164.25	25	4106.25	0.12
9/19/19	3 BASTEN_CCU	LZ_AEN	0	25	0	164.25	25	4106.25	0.12
9/19/19	4 HB_SOUTH	LZ_SOUTH	5	27.7	0.91	5.05	27.7	139.88	0
9/19/19	4 HB_SOUTH	BRAUNIG_VHB2	5	9	1.08	5.1	9	45.9	0
9/19/19	4 EXGNWTL_1	FAL_FALCONG2	0.5	2.5	0.5	0.92	2.5	2.3	0
9/19/19	4 EXGNWTL_1	FAL_FALCONG3	0.5	2.5	0.5	0.92	2.5	2.3	0
9/19/19	4 HB_SOUTH	DC_S	5.45	6	4.77	8.47	6	50.82	-0.1
9/19/19	4 HB_SOUTH	LZ_SOUTH	2	27.7	0.91	5.05	27.7	139.88	0
9/19/19	4 HB_SOUTH	BRAUNIG_VHB2	2	9	1.08	5.1	9	45.9	0
9/19/19	4 HB_SOUTH	LZ_SOUTH	1.26	18.5	0.91	5.05	18.5	93.42	0
9/19/19	4 HB_SOUTH	BRAUNIG_VHB2	1.28	6	1.08	5.1	6	30.6	0
9/19/19	4 HB_SOUTH	LZ_SOUTH	1.03	18.5	0.91	5.05	18.5	93.42	0
9/19/19	4 BASTEN_CCU	LZ_AEN	1.78	25	-0.01	134.49	25	3362.25	0
9/19/19	4 BASTEN_CCU	LZ_AEN	1.52	25	-0.01	134.49	25	3362.25	0
9/19/19	4 BASTEN_CCU	LZ_AEN	1.27	25	-0.01	134.49	25	3362.25	0
9/19/19	4 BASTEN_CCU	LZ_AEN	1.01	25	-0.01	134.49	25	3362.25	0
9/19/19	4 BASTEN_CCU	LZ_AEN	0.76	25	-0.01	134.49	25	3362.25	0
9/19/19	4 BASTEN_CCU	LZ_AEN	0.5	25	-0.01	134.49	25	3362.25	0
9/19/19	4 BASTEN_CCU	LZ_AEN	0.25	25	-0.01	134.49	25	3362.25	0
9/19/19	4 BASTEN_CCU	LZ_AEN	0	25	-0.01	134.49	25	3362.25	0
9/19/19	5 SPLAIN1_RN	LZ_NORTH	0.76	200	0.76	0.8	20.7	16.56	-0.1
9/19/19	5 EXGNWTL_1	FAL_FALCONG2	0.5	2.5	0.46	0.59	2.5	1.48	0
9/19/19	5 EXGNWTL_1	FAL_FALCONG3	0.5	2.5	0.46	0.59	2.5	1.48	0
9/19/19	5 HB_SOUTH	BRAUNIG_VHB2	5	9	0.92	5.42	9	48.78	-0.02
9/19/19	5 HB_SOUTH	LZ_SOUTH	2	27.7	0.63	5.01	27.7	138.78	-0.14
9/19/19	5 HB_SOUTH	DC_S	5	6	4.2	8.36	6	50.16	-0.46
9/19/19	5 HB_SOUTH	BRAUNIG_VHB2	2	9	0.92	5.42	9	48.78	-0.02
9/19/19	5 HB_SOUTH	LZ_SOUTH	1	18.5	0.63	5.01	18.5	92.69	-0.09
9/19/19	5 HB_SOUTH	BRAUNIG_VHB2	1	6	0.92	5.42	6	32.52	-0.01
9/19/19	5 BASTEN_CCU	LZ_AEN	1.83	25	-0.01	141.55	25	3538.75	0
9/19/19	5 BASTEN_CCU	LZ_AEN	1.57	25	-0.01	141.55	25	3538.75	0
9/19/19	5 BASTEN_CCU	LZ_AEN	1.31	25	-0.01	141.55	25	3538.75	0
9/19/19	5 BASTEN_CCU	LZ_AEN	1.05	25	-0.01	141.55	25	3538.75	0
9/19/19	5 BASTEN_CCU	LZ_AEN	0.78	25	-0.01	141.55	25	3538.75	0
9/19/19	5 BASTEN_CCU	LZ_AEN	0.52	25	-0.01	141.55	25	3538.75	0
9/19/19	5 BASTEN_CCU	LZ_AEN	0.26	25	-0.01	141.55	25	3538.75	0
9/19/19	5 BASTEN_CCU	LZ_AEN	0	25	-0.01	141.55	25	3538.75	0
9/19/19	6 HB_SOUTH	LZ_SOUTH	5	27.7	0.6	10.01	27.7	277.28	-0.28
9/19/19	6 HB_SOUTH	BRAUNIG_VHB2	5	9	1.06	10.68	9	96.12	-0.02
9/19/19	6 HB_SOUTH	LZ_SOUTH	2	27.7	0.6	10.01	27.7	277.28	-0.28
9/19/19	6 HB_SOUTH	DC_S	5	6	4.38	13.45	6	80.7	-0.99
9/19/19	6 HB_SOUTH	BRAUNIG_VHB2	2	9	1.06	10.68	9	96.12	-0.02
9/19/19	6 HB_SOUTH	LZ_SOUTH	1	18.5	0.6	10.01	18.5	185.19	-0.19
9/19/19	6 BASTEN_CCU	LZ_AEN	1.96	25	-0.01	268.88	25	6722	0
9/19/19	6 BASTEN_CCU	LZ_AEN	1.68	25	-0.01	268.88	25	6722	0
9/19/19	6 BASTEN_CCU	LZ_AEN	1.4	25	-0.01	268.88	25	6722	0
9/19/19	6 BASTEN_CCU	LZ_AEN	1.12	25	-0.01	268.88	25	6722	0
9/19/19	6 BASTEN_CCU	LZ_AEN	0.84	25	-0.01	268.88	25	6722	0
9/19/19	6 BASTEN_CCU	LZ_AEN	0.56	25	-0.01	268.88	25	6722	0
9/19/19	6 BASTEN_CCU	LZ_AEN	0.28	25	-0.01	268.88	25	6722	0
9/19/19	6 BASTEN_CCU	LZ_AEN	0	25	-0.01	268.88	25	6722	0
9/19/19	8 BASTEN_CCU	LZ_AEN	1.23	25	1.23	1.38	3.8	5.24	-264.03
9/19/19	9 TRINITY_ALL	DC_S	4.72	5	4.73	4.99	2.7	13.47	0
9/19/19	10 BASTEN_CCU	LZ_AEN	2.21	25	2.21	2.32	20.2	46.86	0
9/19/19	10 LOS_LOSTPGT2	WAP_WAP_G4	2	5.7	1.13	2.78	5.7	15.85	0
9/19/19	10 FPPYD_FPP_G3	WAP_WAP_G3	2	8.8	1.41	2.94	8.8	25.87	0
9/19/19	10 FPPYD_FPP_G3	WEBBER_WS_T	2	6.1	1.08	2.94	6.1	17.93	0
9/19/19	11 BASTEN_CCU	LZ_AEN	4.16	18.7	4.16	4.4	12.4	54.56	0
9/19/19	12 FPPYD_FPP_G3	WEBBER_WS_T	5	6.1	4.99	5.15	6.1	31.41	-0.02
9/19/19	12 BASTEN_CCU	LZ_AEN	4.63	18.7	4.63	4.92	16.6	81.67	-0.08
9/19/19	13 NUE_NUECESG8	OXY_PUN2	0.5	1.8	0.4	0.53	1.8	0.95	-0.01
9/19/19	15 BAFFIN_ALL	RN_SR_WIND1	1	4.9	0.87	1.02	4.9	5	-14.22
9/19/19	16 BSF_PUN1	LZ_HOUSTON	1	3	0.96	1.15	3	3.45	-1.04
9/19/19	17 FRNYPP_1_CCU	STEAM_STEAM_3	0.5	7.2	0.5	0.53	2.7	1.43	-1.46
9/19/19	17 BTE_PUN1	LZ_HOUSTON	2	2.6	1.94	2.11	2.6	5.49	0.48
9/19/19	18 BSF_PUN1	LZ_HOUSTON	1	3	0.88	1.04	3	3.12	0.3
9/19/19	18 BVE_UNIT2	THW_1_CCU	0.5	10	0.5	0.54	10	5.4	-0.07
9/19/19	18 HB_HOUSTON	THW_THWGT_1	1	3	1	1.06	2.4	2.54	-0.01
9/19/19	18 BASTEN_CCU	LZ_AEN	6.66	6.2	5.97	6.91	6.2	42.84	-29.84
9/19/19	18 HB_SOUTH	PEARSA_1_24	4.1	2.6	3.37	4.39	2.6	11.41	-60.66
9/19/19	19 BASTEN_CCU	LZ_AEN	5.23	6.6	5.1	5.43	6.6	35.84	-4.97
9/19/19	19 BASTEN_CCU	LZ_AEN	5.09	18.7	5.1	5.43	2.6	14.12	-1.96
9/19/19	21 GUADG_CCU2	CALAVER_OWS2	5	4.4	5	5.06	0.5	2.53	-3.26
9/19/19	21 VIC_VICTORG6	RAYB_G78910	0.5	5.9	0.09	0.68	5.9	4.01	-0.99
9/19/19	21 BASTEN_CCU	LZ_AEN	4.1	18.7	4.09	4.4	18.7	82.28	-36.93
9/19/19	22 RN_OCI_ALAMO	LEONLCPCT1_2	1	7.5	0.95	1.04	7.5	7.8	-0.54
9/19/19	22 BASTEN_CCU	LZ_AEN	3.21	18.7	3.05	3.31	18.7	61.9	-2.76
9/19/19	22 VIC_VICTORG6	RAYB_G78910	0.5	4.8	-0.06	0.74	4.8	3.55	-0.83
9/19/19	22 NED_NEDIN_G3	DC_R	1	5	0.49	1.27	5	6.35	-0.82

9/19/19	22 NED_NEDIN_G3 DC_R	0.5	5	0.49	1 27	5	6.35	-0.82
9/19/19	22 LGD_LANGFORD AMISTAD_ALL	10 05	5.9	10.05	12.21	0.4	4.88	0.22
9/19/19	24 LGD_LANGFORD ANACACHO_AN/	2 25	3.5	2.26	2.59	1.4	3 63	-26.89
9/20/19	5 CEDROHI_CHW1 FAL_FALCONG1	2.15	2.5	2.15	2 34	1.2	2.81	0
9/20/19	5 EXGNWTL_1 LZ_SOUTH	2.47	1.6	2.47	2 85	1.5	4 28	0.02
9/20/19	6 HHGT_KENDAL LZ_CPS	1	1.4	1	1.03	0.8	0.82	-0 02
9/20/19	8 LOS_LOSTPGT2 DECKER_GT	0.5	8 2	0 5	0 53	7 3	3 87	-0.13
9/20/19	13 TYLRWIND_RN LZ_NORTH	0.5	7 9	0.47	0.52	7 9	4 11	-0.22
9/20/19	13 DOWGEN_PUN1 TC_PUN2	1	2 7	0 74	1.15	2.7	3 1	-0.16
9/20/19	13 DOWGEN_PUN2 LZ_HOUSTON	1	1	0.95	1 34	1	1 34	-0.05
9/20/19	13 DOWGEN_PUN1 TXCTY_CTC	1	1	0.58	1 56	1	1 56	-0.07
9/20/19	14 DOWGEN_PUN2 LZ_HOUSTON	2	1.5	1 75	2.07	1.5	3.1	-0.37
9/20/19	14 DOWGEN_PUN1 TXCTY_CTC	1	1	0.79	1.07	1	1 07	-0.23
9/20/19	15 BSF_PUN2 WAP_WAP_G5	0.5	4.2	-0.92	0.71	4.2	2 98	-3.24
9/20/19	15 DOWGEN_PUN1 TC_PUN2	1	2 7	-0.72	1.25	2 7	3.38	-2.82
9/20/19	15 DOWGEN_PUN2 LZ_HOUSTON	1	1	-0.6	1.41	1	1.41	-1.12
9/20/19	15 BSF_PUN1 LZ_HOUSTON	0.5	1.4	-0.68	0.99	1.4	1 39	-1.46
9/20/19	15 DOWGEN_PUN1 TXCTY_CTC	1	1	-0.6	1 56	1	1 56	-0.92
9/20/19	15 DOWGEN_PUN1 TC_PUN2	0.5	2.7	-0.72	1.25	2.7	3.38	-2.82
9/20/19	15 DOWGEN_PUN2 LZ_HOUSTON	0.5	1	-0.6	1.41	1	1.41	-1.12
9/20/19	15 DOWGEN_PUN1 TXCTY_CTC	0.5	1	-0.6	1.56	1	1 56	-0.92
9/20/19	16 HB_HOUSTON THW_THWGT_1	0.5	3	0.49	0 55	3	1.65	-0.13
9/20/19	16 BSF_PUN1 LZ_HOUSTON	1	1.4	-0.39	1 13	1.4	1 58	-1.82
9/20/19	16 TGW_T1_T2 LZ_SOUTH	8.92	38 2	8.58	9 13	38.2	348 77	-333 49
9/20/19	16 DOWGEN_PUN1 TC_PUN2	1	2 7	-0.61	1 23	2.7	3.32	-3.3
9/20/19	16 BOSQ_BSQSJ_5 MDANP_CT3_4	2	2.4	1 73	2 39	2.4	5 74	-37 55
9/20/19	16 BSF_PUN2 WAP_WAP_G5	0.5	4.2	-0.63	0 97	4.2	4 07	-4.02
9/20/19	16 DOWGEN_PUN1 TXCTY_CTC	0.5	1	-0.55	0.97	1	0.97	-1.07
9/20/19	16 DOWGEN_PUN2 LZ_HOUSTON	1	1	-0.27	1 6	1	1.6	-1.31
9/20/19	16 BSF_PUN1 LZ_HOUSTON	0.5	1.4	-0.39	1.13	1.4	1 58	-1.82
9/20/19	16 DOWGEN_PUN1 TC_PUN2	0.5	2 7	-0.61	1 23	2 7	3.32	-3 3
9/20/19	16 DOWGEN_PUN2 LZ_HOUSTON	0.5	1	-0.27	1.6	1	1.6	-1.31
9/20/19	17 DOWGEN_PUN2 LZ_HOUSTON	2	1.5	0.47	2 41	1.5	3 61	-2 6
9/20/19	17 BSF_PUN2 WAP_WAP_G5	1	4.2	-0.02	1.57	4.2	6.59	-5 3
9/20/19	17 DOWGEN_PUN1 TXCTY_CTC	1	1	0.02	1 65	1	1 65	-1.4
9/20/19	17 BSF_PUN1 LZ_HOUSTON	1	1.4	0.31	1 91	1.4	2 67	-2 38
9/20/19	17 DOWGEN_PUN1 TC_PUN2	1	2.7	0.08	1.95	2 7	5 27	-4 36
9/20/19	17 BSF_PUN2 WAP_WAP_G5	0.5	4.2	-0.02	1 57	4.2	6 59	-5.3
9/20/19	17 DOWGEN_PUN1 TXCTY_CTC	0.5	1	0.02	1 65	1	1 65	-1.4
9/20/19	17 BSF_PUN1 LZ_HOUSTON	0.5	1.4	0.31	1 91	1.4	2.67	-2.38
9/20/19	17 DOWGEN_PUN2 LZ_HOUSTON	1	1	0.47	2.41	1	2.41	-1.73
9/20/19	17 DOWGEN_PUN1 TC_PUN2	0.5	2 7	0.08	1.95	2 7	5 27	-4 36
9/20/19	17 DOWGEN_PUN2 LZ_HOUSTON	0.5	1	0.47	2 41	1	2.41	-1.73
9/20/19	18 CBY_CBY_G1 EXN_PUN3	1	3.3	0 72	1 88	3 3	6 2	0.02
9/20/19	19 DOWGEN_PUN1 TXCTY_CTC	0.5	1	0.48	0 52	1	0.52	-0.23
9/20/19	19 DOWGEN_PUN2 LZ_HOUSTON	0.5	1	0.45	0 63	1	0.63	-0.25
9/20/19	24 NUE_NUECESG7 NUE_NUECESG5	0.5	4.3	0.43	0 57	4.3	2 45	-0.01
9/21/19	1 CEDROHI_CHW1 DC_R	5	12 2	5.01	5 46	9 1	49 69	6 53
9/21/19	6 CEDROHI_CHW1 DC_R	0.99	8 1	0.96	1 01	8.1	8.18	0 36
9/21/19	8 BOSQ_BSQS_34 LZ_SOUTH	5	2 5	4 9	5 02	2.5	12 55	-0.66
9/21/19	9 HB_HUBAVG THW_1_CCU	1.45	10	1.44	1 47	10	14 7	-12 02
9/21/19	9 HB_HUBAVG THW_THWGT_1	1.47	3	1 47	1 5	3	4.5	-3.71
9/21/19	9 HB_HUBAVG GBY_GT	1.51	2	1.51	1 55	2	3 1	-2.58
9/21/19	9 HB_HUBAVG TXCTY_CTC	1.67	3 5	1.65	1.72	3 5	6 02	-5 1
9/21/19	10 OGSSES_2 THW_THWGT5X	1.35	2.6	1.31	1 38	2.6	3.59	-5.78
9/21/19	10 HB_HUBAVG TXCTY_CTC	2 37	3 5	2.02	2.63	3.5	9 21	-10 18
9/21/19	11 HB_HUBAVG GBY_GT	2	3	1 99	2 07	3	6 21	-12.92
9/21/19	11 WEBBER_WS_T1 DECKER_GT	1	2.8	1	1 17	0.8	0.94	-0.1
9/21/19	13 BASTEN_CCU LZ_AEN	5.09	15 6	5.05	5.4	15 6	84 24	9 91
9/21/19	13 HB_HUBAVG TXCTY_CTC	5	5.2	4 89	6.1	5 2	31 72	-36 96
9/21/19	14 HB_HOUSTON TC_PUN2	0 5	4.1	0 5	0 53	4 1	2 17	0 49
9/21/19	14 BASTEN_CCU LZ_AEN	6.25	15 6	6.25	6 47	8.9	57 58	-10.32
9/21/19	15 TRINITY_ALL OKLA_OKLA_G1	0 5	10	0.46	0 52	10	5 2	-59.18
9/21/19	15 BASTEN_CCU LZ_AEN	6.03	9.9	6 03	6.11	4 9	29 94	0.51
9/21/19	16 HB_SOUTH LZ_SOUTH	5	25 5	5.01	5 35	0.3	1.6	0.5
9/21/19	17 VIC_VICTORG5 DUP_PUN1	2.34	1.2	2 11	2 5	1 2	3	1 11
9/21/19	19 BASTEN_CCU LZ_AEN	5.18	15.6	5.18	5 73	10 2	58.45	-6.22
9/21/19	20 BASTEN_CCU LZ_AEN	6 27	15 6	5.83	6 35	15.6	99.06	-9.4
9/21/19	20 FPPYD_FPP_G3 WIPOPA_3_4	5	1.4	4.98	6.46	1.4	9 04	-0.16
9/21/19	21 BASTEN_CCU LZ_AEN	5 69	15.6	5 69	5 91	15.6	92.2	-7.22
9/21/19	23 EXGNSND_RN DC_R	0 5	1.3	0 41	0 67	1 3	0 87	0.07
9/21/19	24 WCPP_ST1 LZ_NORTH	1	10	1	1 03	6.3	6.49	-0.28
9/22/19	2 HB_BUSAVG THW_THWGT5X	1	4 6	1.01	1 03	2.5	2.57	-0.17
9/22/19	2 WND_WHITNEY BAC_RN_ALL	1.67	1 3	1.65	1 72	1 3	2 24	-0.13
9/22/19	3 HB_BUSAVG THW_THWGT_1	1	1 8	0 99	1 02	1 8	1 84	-0.12
9/22/19	4 HHGT_KENDAL LZ_CPS	17 73	18 7	17.73	17 76	4 7	83.47	-0.15
9/22/19	8 HHGT_KENDAL LZ_CPS	15	18.7	15 01	15 32	0.8	12 26	-0.03
9/22/19	11 HB_SOUTH LZ_SOUTH	2.29	13.3	1 9	2.31	13 3	30 72	-14 66
9/22/19	11 COL_COLETG1 LZ_SOUTH	1.61	1 8	1 26	1.86	1 8	3 35	5 67



9/22/19	11 COL_COLETOG1	DC_R	2	2.1	1.82	2.37	2.1	4.98	0.54
9/22/19	11 HB_SOUTH	LZ_SOUTH	1.91	13.3	1.9	2.31	13.3	30.72	-14.66
9/22/19	11 COL_COLETOG1	LZ_SOUTH	1.31	1.8	1.26	1.86	1.8	3.35	5.67
9/22/19	12 LV5_UNIT1	DC_R	0.64	10	0.55	0.74	10	7.4	2.9
9/22/19	12 LV5_UNIT1	DC_R	0.55	10	0.55	0.74	4.8	3.55	1.39
9/22/19	12 RAYB_G78910	RAYBURN_G1_2	5	9	5.01	8.71	3	26.13	0.16
9/22/19	13 CBY4_ALL	CAL_PUN1	0.5	5.7	0.5	0.52	3.3	1.72	-0.01
9/22/19	13 CBECII_1	TXCTY_CTC	1	3.8	0.78	1.33	3.8	5.05	0.17
9/22/19	13 DDPEC_ST1	TXCTY_CTB	0.5	1	0.4	0.93	1	0.93	-0.01
9/22/19	14 DDPEC_ST1	TXCTY_CTB	0.5	1	0.43	0.9	1	0.9	0.01
9/22/19	15 CBY_CBY_G2	AZ_ALL	0.5	9.2	0.46	0.52	9.2	4.78	0
9/22/19	15 BTE_PUN2	PSG_PSG_ST1	1	4.9	0.89	1.25	4.9	6.12	0
9/22/19	16 CBY_CBY_G2	AZ_ALL	0.5	9.2	0.49	0.55	9.2	5.06	-385.94
9/22/19	16 BTE_PUN2	PSG_PSG_ST1	1	4.9	0.88	1.06	4.9	5.19	700.26
9/22/19	17 RAYB_G78910	RAYBURN_G1_2	5	9	4.85	5.02	9	45.18	2.65
9/22/19	17 COL_COLETOG1	DC_R	6.9	2.1	6.71	6.94	2.1	14.57	3.07
9/22/19	17 COL_COLETOG1	LZ_SOUTH	5	2.8	4.9	5.04	2.8	14.11	-7.46
9/22/19	17 ETCES_CCU	MDANP_CT1_2	1.69	10	1.69	1.84	0.9	1.66	-23.93
9/22/19	17 CBY4_ALL	SL_PUN1	1	4.2	1	1.36	0.6	0.82	-120.48
9/22/19	18 LV1A_LV1B	DC_R	2	2.5	2	2.07	0.8	1.66	-1.69
9/22/19	18 BTE_PUN1	THW_2_CCU	1	1	0.8	1.14	1	1.14	-241.67
9/22/19	19 CBY4_ALL	CAL_PUN1	0.5	5.7	0.49	0.52	5.7	2.96	-7.7
9/22/19	19 BTE_PUN1	THW_2_CCU	0.5	1	0.28	0.55	1	0.55	-3.67
9/23/19	3 LOS_LOSTPGT1	CBEC_ALL	0.5	3.4	0.47	0.73	3.4	2.48	0
9/23/19	3 VIC_VICTORG6	RAYBURN_G1_2	0.5	6	0.46	0.76	6	4.56	0
9/23/19	4 LOS_LOSTPGT1	CBEC_ALL	0.5	3.4	0.49	0.76	3.4	2.58	0
9/23/19	4 VIC_VICTORG6	RAYBURN_G1_2	0.5	6	0.51	0.81	1.5	1.21	0
9/23/19	6 BUCHAN_ALL	INKS_INKS_G1	2	2.7	2.01	2.02	1.2	2.42	0
9/23/19	6 LOS_LOSTPGT1	CBEC_ALL	0.5	3.4	0.37	0.87	3.4	2.96	0
9/23/19	6 VIC_VICTORG6	RAYBURN_G1_2	0.5	6	0.43	1.01	6	6.06	0
9/23/19	7 BUCHAN_ALL	INKS_INKS_G1	2	2.7	2.01	2.88	0.1	0.29	0
9/23/19	9 RIONOG_CT3	LZ_CPS	2	2.3	1.99	2.02	2.3	4.65	0
9/23/19	12 SC2SES_UNIT1	LZ_NORTH	5	1.7	5	5.07	1.5	7.6	-0.27
9/23/19	14 TTWEC_G1	GUNMTN_NODE	1	2	0.81	1.06	2	2.12	0.01
9/23/19	14 HHOLLW4_WND	MCDLD_FCSBW1	0.5	6.6	0.45	0.6	6.6	3.96	0.68
9/23/19	14 TRSES_UNIT6	FREC_1_CCU	5	1.6	4.95	5.14	1.6	8.22	-3.21
9/23/19	15 WHCCS_CT1_ST	HLSES_UNIT4	4.11	6.2	3.43	4.15	6.2	25.73	-13.53
9/23/19	15 CPSES_UNIT1	HLSES_UNIT4	4.09	12.5	3.45	4.17	12.5	52.12	-27.69
9/23/19	15 TRSES_UNIT6	FREC_1_CCU	5	1.6	4.74	5.09	1.6	8.14	-4.27
9/23/19	15 DDPEC_GT6	BYU_PUN2	5	1.6	4.62	5.15	1.6	8.24	-9.23
9/23/19	15 WHCCS_CT1_ST	HLSES_UNIT4	3.88	6.2	3.43	4.15	6.2	25.73	-13.53
9/23/19	15 CPSES_UNIT1	HLSES_UNIT4	3.88	12.5	3.45	4.17	12.5	52.12	-27.69
9/23/19	15 CPSES_UNIT1	HLSES_UNIT4	3.67	12.5	3.45	4.17	12.5	52.12	-27.69
9/23/19	15 WHCCS_CT1_ST	HLSES_UNIT4	3.63	6.6	3.43	4.15	6.6	27.39	-14.4
9/23/19	15 DDPEC_GT1	SIS_SIS_G1	5	7.7	5	5.61	0.5	2.81	-2.72
9/23/19	15 CPSES_UNIT1	HLSES_UNIT4	3.45	12.5	3.45	4.17	0.6	2.5	-1.33
9/23/19	15 WHCCS_CT1_ST	HLSES_UNIT4	3.43	6.2	3.43	4.15	2.3	9.54	-5.02
9/23/19	15 MIL_MILG345	TEN_CT1_STG	2	1.5	1.25	4.14	1.5	6.21	-2.16
9/23/19	15 WEBBER_WS_T1	DECKER_GT	5	6	3.31	15.66	6	93.96	0.18
9/23/19	16 PSG_PSG_ST1	LZ_HOUSTON	1	9.9	0.95	1.08	9.9	10.69	-305.56
9/23/19	16 TTWEC_G1	GUNMTN_NODE	1.01	2	0.78	1.18	2	2.36	5.98
9/23/19	16 TTWEC_G1	GUNMTN_NODE	0.83	2	0.78	1.18	2	2.36	5.98
9/23/19	16 MDANP_CT1_2	MDANP_CT5_6	0.5	6.6	0.08	0.98	6.6	6.47	3.04
9/23/19	16 TRSES_UNIT6	FREC_1_CCU	5	1.6	4.68	5.62	1.6	8.99	-6.68
9/23/19	16 DECKER_DPG2	LZ_AEN	2	9	0.24	2.67	9	24.03	105.79
9/23/19	16 REDFISH_ALL	SIL_SILAS_10	3.26	2	3.09	3.95	2	7.9	-211.31
9/23/19	16 WHCCS_CT1_ST	HLSES_UNIT4	12.24	6.2	7.19	13.15	6.2	81.53	-509.58
9/23/19	16 MIRASOLE_GEN	FAL_FALCONG1	7.33	1	7.33	8.33	0.1	0.83	-0.04
9/23/19	16 MIRASOLE_GEN	FAL_FALCONG2	7.33	3.7	7.33	8.33	0.5	4.17	-0.19
9/23/19	16 MIRASOLE_GEN	FAL_FALCONG3	7.33	3.7	7.33	8.33	0.5	4.17	-0.19
9/23/19	16 CPSES_UNIT1	HLSES_UNIT4	12.01	12.5	7.26	13.2	12.5	165	-1031.97
9/23/19	16 LGW_UNIT_ALL	BULLCRK_1_2	2.84	13.3	2.5	4.45	13.3	59.19	56.72
9/23/19	16 DECKER_DPG2	LZ_AEN	1	6	0.24	2.67	6	16.02	70.53
9/23/19	16 DECKER_DPG2	LZ_AEN	0.5	6	0.24	2.67	6	16.02	70.53
9/23/19	16 WHCCS_CT1_ST	HLSES_UNIT4	10.67	6.2	7.19	13.15	6.2	81.53	-509.58
9/23/19	16 CPSES_UNIT1	HLSES_UNIT4	10.6	12.5	7.26	13.2	12.5	165	-1031.97
9/23/19	16 FPPYD_FPP_G3	WIPOPA_3_4	5	8.3	4.8	8.81	8.3	73.12	48.56
9/23/19	16 CPSES_UNIT1	HLSES_UNIT4	9.2	12.5	7.26	13.2	12.5	165	-1031.97
9/23/19	16 WHCCS_CT1_ST	HLSES_UNIT4	9	6.6	7.19	13.15	6.6	86.79	-542.45
9/23/19	16 CPSES_UNIT1	HLSES_UNIT4	7.79	12.5	7.26	13.2	12.5	165	-1031.97
9/23/19	17 MDANP_CT1_2	MDANP_CT5_6	0.5	6.6	-0.08	0.75	6.6	4.95	-3.56
9/23/19	17 WHCCS_CT1_ST	HLSES_UNIT4	8.15	6.6	7.4	8.4	6.6	55.44	-1063.05
9/23/19	17 OLIN_OLING_1	STEAM_ENG123	2	5	1.9	3.04	5	15.2	0.1
9/23/19	17 OLIN_OLING_4	STEAM_ENG123	2	3	1.9	3.04	3	9.12	0.06
9/23/19	17 OLIN_OLING_4	STEAM_STEAM_2	2	5	1.9	3.04	5	15.2	0.1
9/23/19	18 DECKER_DPG2	AUSTPL_ALL	1	4	0.99	1.12	4	4.48	24.46
9/23/19	18 WHCCS_CT1_ST	HLSES_UNIT4	5.2	6.2	4.21	5.69	6.2	35.28	-447.7
9/23/19	18 CPSES_UNIT1	HLSES_UNIT4	5.14	12.5	4.24	5.71	12.5	71.38	-906.19
9/23/19	18 WHCCS_CT1_ST	HLSES_UNIT4	4.97	6.2	4.21	5.69	6.2	35.28	-447.7

9/23/19	18	CPSES_UNIT1	HLSES_UNIT4	4.91	12.5	4.24	5.71	12.5	71.38	-906.19
9/23/19	18	WHCCS_CT1_ST	HLSES_UNIT4	4.74	6.2	4.21	5.69	6.2	35.28	-447.7
9/23/19	18	CPSES_UNIT1	HLSES_UNIT4	4.69	12.5	4.24	5.71	12.5	71.38	-906.19
9/23/19	18	WHCCS_CT1_ST	HLSES_UNIT4	4.51	6.2	4.21	5.69	6.2	35.28	-447.7
9/23/19	18	CPSES_UNIT1	HLSES_UNIT4	4.46	12.5	4.24	5.71	12.5	71.38	-906.19
9/23/19	18	WHCCS_CT1_ST	HLSES_UNIT4	4.29	6.2	4.21	5.69	6.2	35.28	-447.7
9/23/19	18	CPSES_UNIT1	HLSES_UNIT4	4.24	12.5	4.24	5.71	0.7	4	-50.75
9/23/19	19	MIL_MILG345	TEN_CT1_STG	2	1.5	1.88	2.1	1.5	3.15	-8.82
9/23/19	19	TRSES_UNIT6	FREC_1_CCU	0.5	1.1	0.16	0.62	1.1	0.68	0.03
9/23/19	19	FPPYD_FPP_G3	WIPOPA_3_4	5	8.3	5	5.54	6.9	38.23	3.95
9/23/19	21	ETCCS_CCU	MCSES_UNIT7	2	1.4	1.83	2.04	1.4	2.86	-1.58
9/23/19	21	FPPYD_FPP_G3	WIPOPA_3_4	5	8.3	5	5.06	3.2	16.19	0.62
9/23/19	21	FREC_2_CCU	LEG_LEG_G1	0.5	5.2	0.5	0.64	5.2	3.33	1.33
9/23/19	21	TRSES_UNIT6	MCSES_UNIT7	5	2.7	4.75	5.51	2.7	14.88	-5.98
9/23/19	22	DDPEC_ST1	SJS_SJS_G1	0.5	5	0.5	0.52	3.5	1.82	0

## ALL-PURPOSE ACKNOWLEDGMENT

State/Commonwealth of TEXAS )

☐ City ☒ County of Bexar )

On 05/21/2020 before me, Christina Mabry,  
*Date* *Notary Name*

personally appeared Sadao Milberg  
*Name(s) of Signer(s)*

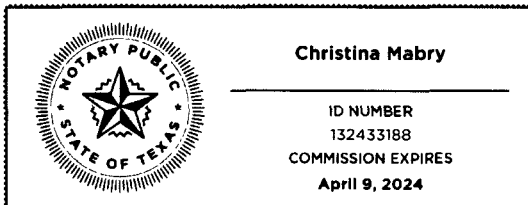
☐ personally known to me -- OR --

☐ proved to me on the basis of the oath of \_\_\_\_\_ -- OR --  
*Name of Credible Witness*

☒ proved to me on the basis of satisfactory evidence: driver license  
*Type of ID Presented*

to be the individual(s) whose name(s) is (are) subscribed to the within instrument, and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies) and by proper authority, and that by his/her/their signature(s) on the instrument, the individual(s), or the person(s) or entity upon behalf of which the individual(s) acted, executed the instrument for the purposes and consideration therein stated.

WITNESS my hand and official seal.



Notary Public Signature: Christina Mabry

Notary Name: Christina Mabry

Notary Commission Number: 132433188

Notary Commission Expires: 04/09/2024

*Notarized online using audio-video communication*

### DESCRIPTION OF ATTACHED DOCUMENT

Title or Type of Document: Affidavit

Document Date: 05/21/2020 Number of Pages (w/ certificate): 1 (page 15)

Signer(s) Other Than Named Above: N/A

#### **Capacity(ies) Claimed by Signer(s)**

Signer's Name: Sadao Milberg

☐ Corporate Officer Title: \_\_\_\_\_

☐ Partner – ☐ Limited ☐ General

☐ Individual ☐ Attorney in Fact

☐ Trustee ☐ Guardian of Conservator

☐ Other: \_\_\_\_\_

Signer Is Representing: \_\_\_\_\_

#### **Capacity(ies) Claimed by Signer(s)**

Signer's Name: \_\_\_\_\_

☐ Corporate Officer Title: \_\_\_\_\_

☐ Partner – ☐ Limited ☐ General

☐ Individual ☐ Attorney in Fact

☐ Trustee ☐ Guardian of Conservator

☐ Other: \_\_\_\_\_

Signer Is Representing: \_\_\_\_\_