

Control Number: 47472



Item Number: 100

Addendum StartPage: 0

COMMISSION STAFF'S PETITION
TO DETERMINE REQUIREMENTS
FOR SMART METER TEXAS

§
§
§

BEFORE THE
PUBLIC UTILITY COMMISSION
OF TEXAS

PUBLIC UTILITY COMMISSION
FILING CLERK

**JOINT MOTION TO ADMIT STIPULATION, AFFIDAVIT OF NOTICE, AND
SUPPORTING TESTIMONY INTO EVIDENCE;
REQUEST FOR DECISION ON REMAINING UNRESOLVED ISSUE; AND
JOINT MOTION FOR APPROVAL OF PROPOSED ORDER**

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EXHIBITS:

Exhibit A	Stipulation (including Proposed Order)
Exhibit B	Affidavit Attesting to Provision of Notice
Exhibit C	Direct Testimony in Support of Stipulation of Therese Harris
Exhibit D	Supplemental Direct Testimony in Support of Stipulation of Michele Gregg
Exhibit E	Supplemental Direct Testimony in Support of Stipulation of Donny R. Helm
Exhibit F	Supplemental Direct Testimony in Support of Stipulation of Mona Tierney-Lloyd

Exhibit G Supplemental Direct Testimony in Support of Stipulation of Kevin
Boudreaux

Exhibit H Supplemental Direct Testimony in Support of Stipulation of John Schatz

SOAH DOCKET NO. 473-18-0708

DOCKET NO. 47472

COMMISSION STAFF'S PETITION	§	BEFORE THE
TO DETERMINE REQUIREMENTS	§	PUBLIC UTILITY COMMISSION
FOR SMART METER TEXAS	§	OF TEXAS

**JOINT MOTION TO ADMIT STIPULATION, AFFIDAVIT OF NOTICE, AND
SUPPORTING TESTIMONY INTO EVIDENCE;
REQUEST FOR DECISION ON REMAINING UNRESOLVED ISSUE; AND
JOINT MOTION FOR APPROVAL OF PROPOSED ORDER**

**TO THE HONORABLE PUBLIC UTILITY COMMISSION OF TEXAS AND THE
HONORABLE ADMINISTRATIVE LAW JUDGE ELIZABETH DREWS:**

COME NOW the Staff ("Staff") of the Public Utility Commission of Texas ("Commission"); Office of Public Utility Counsel; AEP Texas Inc. ("AEP Texas"), CenterPoint Energy Houston Electric, LLC ("CenterPoint"), Oncor Electric Delivery Company LLC ("Oncor"), and Texas-New Mexico Power Company ("TNMP") (AEP Texas, CenterPoint, Oncor, and TNMP are collectively the "Joint TDUs"); Alliance for Retail Markets; Texas Energy Association for Marketers; Steering Committee of Cities Served by Oncor; EnerNOC, Inc.; MP2 Energy Texas, LLC; Brasovan Energy's Electricity Users Group ("BEEC"); Engie Resources LLC; Mission:data Coalition, Inc.; Texas Advanced Energy Business Alliance; and The Energy Professionals Association (hereinafter, collectively referred to as "Joint Movants") and file this Joint Motion to Admit Stipulation, Affidavit of Notice, and Supporting Testimony into Evidence; Request for Decision on Remaining Unresolved Issue; and Joint Motion for Approval of Proposed Order ("Joint Motion").¹ Joint Movants have all executed an agreed stipulation that resolves all but one issue in this proceeding ("Stipulation") (attached hereto as Exhibit A).

One remaining party to this proceeding – Orcutt Enterprises, LLC – has not taken a position on the Stipulation.

In support of this Joint Motion, Joint Movants show the following:

¹ Counsel for Oncor has communicated with the Joint Movants, and they have authorized Oncor to make this filing on their behalf.

**I. JOINT MOTION TO ADMIT STIPULATION, AFFIDAVIT OF NOTICE, AND
SUPPORTING TESTIMONY INTO EVIDENCE**

After significant negotiation and compromise, the Joint Movants have agreed to the Stipulation. The Joint Movants agree that a negotiated resolution of this proceeding based on the Stipulation is in the public interest, will conserve the parties' and the public's resources, and will eliminate controversy.

A. Description of Stipulation

The Stipulation resolves all but one issue in this proceeding. It includes an agreed upon set of Business Requirements for the next version (version 2.0) of the Smart Meter Texas ("SMT") web portal. These SMT 2.0 Business Requirements were developed after careful analysis and consideration of the features that have been utilized by customers since the inception of SMT, the features that have not been utilized and have not proven to be useful to customers, and the features and functionalities requested by the parties to this proceeding.

One noteworthy component of the Stipulation is the new process by which a customer affirms an agreement to share its SMT data with a Competitive Service Provider ("CSP"). Under this new process, the customer will no longer be required to establish an SMT account before being able to share his or her SMT data with a CSP. This change is intended to simplify the process by which a customer can grant access to its SMT data to CSPs. These and other important terms of the Stipulation are further described in the testimony submitted in support of the Stipulation and attached hereto as Exhibits C through H.

Another important component of the Stipulation is the agreement that the Joint TDUs should enter into amendments to the current service contracts with IBM, the vendor who developed SMT and who hosts and maintains SMT. IBM has committed to provide SMT consistent with the terms of the Stipulation and the SMT 2.0 Business Requirements at an annual price that is lower than the current contract amount once the amendments are executed. The Supplemental Direct Testimony in Support of Stipulation of Donny R. Helm filed herewith further discusses the process of obtaining IBM's cost proposal for SMT 2.0 and the cost savings that will be realized under the revised IBM service contracts.

Once the Commission issues its final order in this case, Joint Movants will work diligently to prepare and submit a compliance filing containing the final version of the SMT

2.0 Business Requirements that will include any necessary changes to reflect the Commission's decision on the single unresolved issue stated in Section II of this Joint Motion, as well as required SMT customer disclosure emails that will be sent by SMT to a customer each time (i) the customer is sent an email by SMT requesting the customer to affirm or reject that the customer authorizes SMT to share data with a CSP for a specified term or to report the email as spam, and (ii) the customer is sent a follow-up email notice by SMT after the customer has authorized SMT to share data with a CSP for a specified term.

B. Request for Admission of Stipulation, Affidavit of Notice, and Supporting Testimony into Evidence

Joint Movants request that the Honorable Administrative Law Judge ("ALJ") admit the following into evidence: (1) the Stipulation (Exhibit A attached hereto); (2) Commission Staff's Affidavit Attesting to the Provision of Notice (including attachments) filed on August 22, 2017 (Exhibit B attached hereto); (3) the Direct Testimony in Support of Stipulation of Therese Harris (Exhibit C attached hereto); (4) the Supplemental Direct Testimony in Support of Stipulation of Michele Gregg (Exhibit D attached hereto); (5) the Supplemental Direct Testimony in Support of Stipulation of Donny R. Helm (Exhibit E attached hereto); (6) the Supplemental Direct Testimony in Support of Stipulation of Mona Tierney-Lloyd (Exhibit F attached hereto); (7) the Supplemental Direct Testimony in Support of Stipulation of Kevin Boudreaux (Exhibit G attached hereto), and (8) the Supplemental Direct Testimony in Support of Stipulation of John Schatz (Exhibit H attached hereto).

II. REQUEST FOR DECISION ON REMAINING UNRESOLVED ISSUE

Joint Movants respectfully request that the ALJ consider the briefs of the parties to be filed in this proceeding, issue a proposal for decision ("PFD") on the one remaining issue that was not resolved in the Stipulation, and then remand this case to the Commission for consideration of the Stipulation and the PFD, and for issuance of a final order. Specifically, the one remaining issue that was not resolved in the Stipulation is whether SMT should allow a Residential Customer or a Business Customer that is not a Large Business Customer to grant a CSP access to the Customer's SMT data for a term longer than 12 months. As stated in Section II of the Stipulation, all but one of the Joint Movants have taken the position that such a Customer should be permitted to grant a CSP access to the customer's SMT data for a term not to exceed 12 months, while the one remaining party – BEEC – has taken the position that the

maximum term length should be 36 months. Therefore, the Joint Movants request that the ALJ issue a PFD on this issue and that the Commission decide this one unresolved issue as part of a final order entered in this case.

III. JOINT MOTION FOR APPROVAL OF PROPOSED ORDER

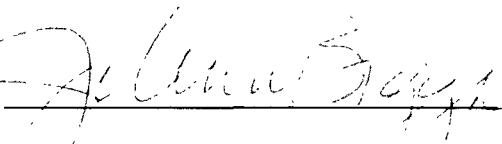
Upon remand, Joint Movants respectfully request that the Commission review and approve the Stipulation (including the SMT 2.0 Business Requirements attached as Attachment 1 to Exhibit A) and memorialize it in an order consistent in all material respects with the Proposed Order attached to the Stipulation (Attachment 2 to Exhibit A). The Joint Movants further respectfully request that the Commission consider the PFD and the related filings of all parties, make a determination on the one remaining issue based on those documents, and include that determination in its final order in this case.

IV. PRAYER

WHEREFORE, PREMISES CONSIDERED, Joint Movants respectfully request (i) that the ALJ issue an order admitting in evidence the items set forth above; (ii) that the ALJ issue a PFD on the one unresolved issue described above and remand this case to the Commission for entry of a final order; (iii) that upon remand, the Commission enter a final order consistent with the Proposed Order attached to the Stipulation and include a determination of the one remaining issue not resolved by the Stipulation; and (iv) that the Commission grant the Joint Movants such additional relief to which they are entitled.

Respectfully submitted,

**Oncor Electric Delivery Company LLC
On Behalf of the Joint Movants**

By: 

Jo Ann Biggs
State Bar No. 02312400
Lauren Freeland
State Bar No. 24083023
VINSON & ELKINS LLP
2001 Ross Avenue
Suite 3700
Dallas, Texas 75201
214.220.7735
214.999.7735 (fax)
jbiggs@velaw.com
lfreeland@velaw.com

**ATTORNEYS FOR ONCOR ELECTRIC
DELIVERY COMPANY LLC**

CERTIFICATE OF SERVICE

It is hereby certified that a copy of the foregoing has been hand delivered or sent via overnight delivery or first class United States mail, postage prepaid, to all parties of record in this proceeding, on this the 21st day of January, 2018.

William Vega

**SOAH DOCKET NO. 473-18-0708
DOCKET NO. 47472**

COMMISSION STAFF'S PETITION TO DETERMINE REQUIREMENTS FOR SMART METER TEXAS	§ § §	BEFORE THE PUBLIC UTILITY COMMISSION OF TEXAS
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STIPULATION

TO THE HONORABLE PUBLIC UTILITY COMMISSION OF TEXAS:

As of December 21, 2017, certain parties to this docket have reached a settlement concerning the Staff of the Public Utility Commission of Texas' ("Commission Staff's") Petition filed to initiate this proceeding. Based upon that settlement, the following parties joined in this comprehensive Stipulation ("Stipulation") regarding all but one issue¹ in this docket: Commission Staff; Office of Public Utility Counsel ("OPUC"); AEP Texas Inc. ("AEP Texas"), CenterPoint Energy Houston Electric, LLC ("CenterPoint"), Oncor Electric Delivery Company LLC ("Oncor"), and Texas-New Mexico Power Company ("TNMP") (AEP Texas, CenterPoint, Oncor, and TNMP are collectively the "Joint TDUs"); Alliance for Retail Markets; Texas Energy Association for Marketers; Steering Committee of Cities Served by Oncor; EnerNOC, Inc.; MP2 Energy Texas, LLC; Brasovan Energy's Electricity Users Group ("BEEC"); Engie Resources LLC; Mission:data Coalition, Inc.; Texas Advanced Energy Business Alliance; and The Energy Professionals Association (hereinafter collectively referred to as "Signatories"). Orcutt Enterprises, LLC has not taken a position on this Stipulation.

The Signatories agree that the negotiated resolution of this proceeding on the basis set forth in this Stipulation and the related Smart Meter TexasTM ("SMT") 2.0 Business Requirements set forth in this Stipulation and in Attachment 1 to this Stipulation is in the public interest, will conserve the parties' and the public's resources, and eliminate controversy. Accordingly, the Signatories request (a) approval of this Stipulation by the Public Utility Commission of Texas ("Commission") and entry of an order (including findings of fact and conclusions of law) as set out in Attachment 2 hereto; (b) approval of the proposed SMT 2.0 Business Requirements for the SMT portal as set out in Attachment 1 hereto; and (c) a decision by the Commission on the remaining issue as described in Section II, *infra*.

¹ This issue is fully described in Section II, *infra*.

I.

By this Stipulation, the Signatories resolve all but one issue among them related to this proceeding and hereby stipulate and agree as follows and request that the Commission enter the proposed final order (“Order”) attached hereto as Attachment 2 that reflects the following:

- A. **Term Sheet:** On December 21, 2017, the Signatories agreed to a Term Sheet that settled all but one issue in Docket No. 47472 and that included a set of Business Requirements for the next version of SMT (“Term Sheet”). As part of that Term Sheet, the Signatories agreed to finalize a full and comprehensive Stipulation. The Signatories agree that this Stipulation incorporates the terms of, and is fully consistent with, the Term Sheet.
- B. **Applicability:** The provisions of this Stipulation apply to SMT and to all users of SMT, including all Competitive Service Providers (“CSPs”), which include Aggregators, Brokers, Consultants, and Retail Electric Providers (“REPs”) acting as a third-party service provider.
- C. **Extension of IBM Service Contracts:** The current service contracts with IBM through which the Joint TDUs provide SMT expire on December 31, 2019 (the “IBM Service Contracts”). To develop the next version of SMT, the Joint TDUs presented the Term Sheet (including the SMT 2.0 Business Requirements) to IBM. After reviewing the Term Sheet and after negotiations with the Joint TDUs, IBM offered to provide SMT consistent with the Term Sheet and its included SMT 2.0 Business Requirements at an annual price that was lower than its previous contract amount. Therefore, the Signatories agree that the Joint TDUs should enter into amendments to the current IBM Service Contracts under which IBM will provide SMT consistent with the Term Sheet (including the SMT 2.0 Business Requirements) for the time period of 2018 (upon issuance of the Commission’s final order in Docket No. 47472) through December 2023. The Signatories further agree that the annualized cost under the IBM Service Contracts, as amended, shall be less than the annualized costs of the IBM Service Contracts prior to the initiation of this proceeding.
- D. **SMT 2.0 Business Requirements:**
 - 1. Attachment 1 to this Stipulation includes the same SMT 2.0 Business Requirements that were provided in Attachment A to the Term Sheet as well as the SMT 2.0 Business Requirements that were listed in the body of the Term Sheet.
 - 2. The Signatories agree that no later than January 1, 2020, the SMT portal should be redesigned to be consistent with the SMT 2.0 Business Requirements included in this Stipulation and in Attachment 1 to this Stipulation.
 - 3. The Signatories agree that to the extent that any of the SMT 2.0 Business Requirements can be implemented earlier than January 1, 2020, then those SMT 2.0 Business Requirements should be implemented at such earlier time.

4. The SMT 2.0 Business Requirements set forth in this Stipulation and in Attachment 1 to this Stipulation contain all of the detailed specifications for the SMT portal agreed upon by the Signatories.

E. The Signatories' Agreed Upon Terms for SMT:

1. CSP registration requirements with SMT include the following:
 - a. the CSP provides its DUNS number and contact information to SMT; and
 - b. the CSP agrees to SMT terms of service, including (i) an acknowledgement that the CSP shall promptly terminate a data access agreement with SMT after the termination or expiration of any contract upon which access to data was granted by the customer, with access to the customer's prospective meter data ending no later than two weekdays after the termination or expiration of the contract and access to historical meter data, including re-versioned historical meter data, ending 45 days after such termination or expiration date (failure to do so shall be considered a "red flag" behavior), and (ii) an acknowledgement of the SMT Management Committee's² authority to immediately suspend or revoke access to SMT data based on the behavioral thresholds and security threats defined in the SMT's Website Terms and Conditions.
2. Required customer authentication information for CSP access and/or customer account creation shall include the Electric Service Identifier ID ("ESIID"), meter number, and REP of Record ("ROR") certificate number. The required ROR certificate number and name will be provided in a drop-down list for customers and CSPs on the Graphical User Interface ("GUI").
3. A CSP seeking access to customer data must send the authentication information specified above in Section I, Paragraph E.2 to SMT, and SMT will then authenticate the premises based on the information provided.
4. The CSP must provide the email address of the customer to SMT for initial customer affirmation of a data sharing agreement between the customer and the CSP and for renewals of that agreement.
 - a. For renewals, SMT will send two renewal emails prior to the expiration of that agreement:
 - i. one email will be sent 30 days prior to expiration of the agreement with the CSP, and
 - ii. a second email will be sent 15 days prior to expiration of the agreement with the CSP if the customer has not responded to the first email.
 - b. The CSP will receive a separate email at the same time that the customer receives the initial and renewal emails.
5. The customer affirmation process is as follows:

² The SMT Management Committee was formed by the Joint TDUs to manage SMT design, operations, and costs on behalf of the Joint TDUs.

- a. The customer will receive an email from SMT with a request to affirm the customer's agreement to share data with a CSP for a specified term. The email will be sent within a specific period of time and measured for performance metrics.
 - b. The customer shall acknowledge the required SMT customer disclosures.
 - c. Large Commercial Customers (identified as commercial customers whose maximum monthly kWh for the prior 12 months meets or exceeds 15,000 kWh) may agree to a term for data sharing up to 36 months, which shall be renewable for an additional term equal to the original term (renewal to occur via an affirmative email consent accomplished through one click by the customer, with no additional verification required).
 - d. All customers shall affirmatively opt-in to sharing data with a CSP.
 - e. The customer shall have the options to opt-out or report the email as spam.
 - f. The customer affirmation email link shall time out in five weekdays.
 - g. The opt-in email confirmation shall be subject to machine language protection technology.
6. The customer will not be required to establish an SMT account in order to authorize CSP data sharing. The customer may create an account on SMT to access its own data or to terminate an agreement with a CSP.
 7. The data contained in the authorization request emails will be subject to encryption in transit, such as HTTP/TLS.
 8. The process for providing notice to the customer about (i) the revocation process for a data sharing agreement with a CSP and (ii) the customer's acknowledgement of risk will be as follows:
 - a. Upon acceptance of the customer affirmation email, SMT will send a follow-up email notice to the customer, including:
 - i. required SMT customer disclosures,
 - ii. information on the ability for the Residential Customer or Business Customer, independent of the CSP, to terminate the agreement between the Residential Customer or Business customer and the CSP by creating an SMT account or contacting SMT Customer Support for assistance in creating an SMT account, and
 - iii. notice that the Residential Customer or Business Customer can terminate the agreement between the Residential Customer or Business customer and the CSP by contacting the CSP and directing them to terminate the agreement.
 - b. The CSP will receive notice from SMT, via a separate email, of the customer's acceptance or rejection of the CSP's request to access the customer's usage data.
 9. A move-out transaction ends all data sharing for the premises. A CSP's or ROR's access to prospective meter data shall end immediately upon a move-out transaction. Access to historical meter data, including re-versioned historical meter data, shall end 45 days after a move-out transaction.

10. Required SMT customer disclosures will be submitted by the Signatories in a compliance filing after the Commission issues its final order in this case. The required SMT customer disclosures will be provided to the customer each time (i) the customer is sent an email by SMT requesting the customer to affirm or reject that the customer authorizes SMT to share data with a CSP for a specified term or to report the email as spam, and (ii) the customer is sent a follow-up email notice by SMT after the customer has authorized SMT to share data with a CSP for a specified term.
11. SMT shall authenticate required customer information and retain records of all customer affirmations.
12. Criteria shall be established for monitoring CSP agreements, including, at a minimum:
 - a. monitoring unique IP addresses to eliminate mass enrollments/acknowledgements by a CSP;
 - b. monitoring rejections, including differentiating between a customer's failure to acknowledge an authorization and a customer affirmatively rejecting authorization;
 - c. ongoing controls regarding inappropriate behavior; and
 - d. monitoring attempts by CSPs to authenticate customer information.
13. The SMT Management Committee shall immediately suspend or revoke data access based upon Commission approved standards of "red flag" behaviors. The SMT Management Committee shall notify a CSP of its suspension, but not revocation, based on information provided in the CSP's registration with SMT. Examples of potential "red flag" behaviors include, but are not limited to, the following:
 - a. interfering with or falsifying customer affirmation;
 - b. receiving customer data that has not been authorized by the customer;
 - c. falsifying IP addresses;
 - d. failure to terminate data access at customer direction or customer termination;
 - e. sharing, selling or distributing customer data without customer authorization; and
 - f. modifying or altering customer data.
14. The Commission may direct the SMT Management Committee by and through Oncor, CenterPoint, AEP Texas, or TNMP to suspend or terminate a CSP's access to SMT after notice and appropriate Commission procedure.
 - a. In order to be able to restore a CSP's access to SMT if the Commission orders the restoration of a CSP's access to SMT, SMT will maintain the most recent customer authorizations for a CSP.
 - b. Customarily, SMT will be able to restore the CSP's authorizations within three weekdays and issue renewal notices within five weekdays to those authorizing customers whose prior authorization expired during the period of suspension or termination.

15. The SMT Management Committee shall work with Commission Staff and/or OPUC regarding any customer complaints based on information from SMT. Commission Staff shall in good faith attempt to consult with the CSP.
16. A CSP will receive notification of all emails that SMT sends to the CSP's customers regarding data sharing. In addition, some notifications may, upon request, be coalesced into a daily digest email.
17. As reflected in the SMT 2.0 Business Requirements, technical changes shall be made to the SMT portal, including:
 - a. elimination of the Home Area Network ("HAN") functionality, with the understanding that any HAN device that is paired to a meter and in use at the time SMT 2.0 is implemented will remain functional until such time that the device is (i) disconnected from that meter (due to the removal of the meter, action taken by the HAN device owner, or otherwise), or (ii) no longer functioning as desired;
 - b. SMT will support, via the SMT GUI and an API, two on-demand reads per hour per ESIID, 24 on-demand reads per day per ESIID, and 3,000 total on-demand reads per TDU per day subject to network traffic (including but not limited to market orders, interval data collection, planned and unplanned outages);
 - c. generation data will be made available to distributed generation customers through the portal;
 - d. modification of existing APIs to support Representational State Transfer ("REST") web service;
 - e. elimination of portlet functionality;
 - f. establishment of a daily digest in the ROR and the CSP File Transfer Protocol Secure ("FTPS") of re-versioned interval data containing meter number, ESIID, re-version number, and re-version date; and
 - g. for CSPs, SMT will provide: (i) a one-time historical set of energy usage data for each new ESIID for which the CSP has authorization using the Green Button format; and (ii) daily energy usage for that customer and any revisions to previous days' energy usage data for that customer using the Green Button format.
18. The Joint TDUs shall continue existing reporting for SMT and adopt service level agreements ("SLAs") as reflected in the SMT 2.0 Business Requirements, Attachment 1.
19. The premise/meter attributes list has been modified as reflected in the SMT 2.0 Business Requirements, Attachment 1.
20. Periodic reports will be available on the SMT website and filed in a Commission project. Reporting will be consistent with the SMT 2.0 Business Requirements, Attachment 1.
21. SMT will continue to have Green Button Download My Data functionality.

22. The API data format and API specification used by SMT will be compliant with the Green Button standard as of 2017.
23. Except as specifically set out in this Stipulation, there is no commitment that SMT will implement the full Green Button Connect My Data specification.
24. SMT will have AMS usage data (consumption and generation) available online in the GUI for a maximum of 24 months.
- F. **Recovery of SMT Costs by the Joint TDUs:** The Signatories agree that each of the Joint TDUs will seek to recover the SMT costs incurred under the amendments to the IBM Service Contracts as appropriate. The Signatories will not oppose in any Commission or court proceeding the level of expense stated in the amendments to the IBM Service Contracts described in Section I, Paragraph C as a reasonable and necessary level of expense for the administration of SMT, except that Signatories may assert in a future Commission or court proceeding that Joint TDUs' management of the IBM Service Contracts was not reasonable or prudent. The Signatories further agree that in all future AMS reconciliation proceedings filed by any of the Joint TDUs, there is a presumption that costs spent in accordance with the amendments to the IBM Service Contracts are reasonable and necessary pursuant to 16 TAC § 25.130(k)(6).
- G. **Good Cause Exception:** Upon implementation of the new SMT 2.0 Business Requirements reflected in this Stipulation and in Attachment 1 to this Stipulation, the Signatories agree that SMT will no longer be providing certain features or functionalities currently required in 16 TAC § 25.130 and the Commission's Orders in Docket Nos. 35718, 42214, 38306, 43239, 36928, 35639, 38339, 40261, and 42084. For this reason, in the event this Stipulation is approved by the Commission, then the Signatories request that each of the Joint TDUs be granted a good cause exception to both 16 TAC § 25.130(g)(1)(j) and the related Commission Orders as part of a final order issued in this case so that the Joint TDUs will not be in non-compliance with any such requirements.
- H. **Limitation of Liability:** The Signatories agree that their usage of SMT will be subject to the following conditions: (1) neither SMT, the Joint TDUs, nor RORs are individually or collectively responsible for the statements, actions, or policies of any CSP to which a customer grants access to SMT data, (2) neither SMT nor the Joint TDUs will be individually or collectively liable for any damages, whether direct or consequential, including, without limitation, loss of profits or loss of revenue, related to SMT, SMT data, interruptions of SMT, or the release of customer information through SMT pursuant to the affirmation and access processes and procedures agreed to herein and approved by the Commission in a final order issued in this case, and (3) any customer usage information accessed through SMT shall be on an "as is" basis without any express or implied warranties made by the Joint TDUs, either collectively or individually, respecting the information, including without limitation any implied warranties of merchantability and fitness for a particular purpose. The Signatories further agree not to oppose the adoption of the above SMT conditions in an application filed by any one of the Joint TDUs to include the above SMT conditions in a tariff filed

with the Commission unless such a future application is inconsistent with statute or the Commission's rules.

II.

The single issue that has not been resolved by the Signatories as part of this Stipulation is the maximum length of time that a Residential Customer or a Smaller Commercial Customer (identified as a commercial customer whose maximum monthly kWh for the prior 12 months is less than 15,000 kWh) can grant a CSP access to the customer's SMT data before the customer will be required to affirmatively renew the grant of access to the CSP. All but one of the Signatories have taken the position that a Residential Customer or Smaller Commercial Customer should be permitted to grant a CSP access to the customer's SMT data for a term not to exceed 12 months before the customer will be required to affirmatively renew the data sharing agreement. The one remaining party – BEEC – has taken the position that a Residential Customer or Smaller Commercial Customer should be permitted to grant a CSP access to the customer's SMT data for a term not to exceed 36 months before the customer will be required to affirmatively renew the data sharing agreement. Because the Signatories have not reached an agreement on this one remaining issue, the Signatories request that the Commission decide as part of a final order issued in this case the maximum permitted length of access that can be granted by a Residential Customer or a Smaller Commercial Customer to a CSP during which time such customer will not be required to affirmatively consent to the CSP's continued access to the customer's SMT data. Once the Commission issues its final order in this case, the Joint TDUs will work diligently to prepare and submit a compliance filing containing the approved SMT 2.0 Business Requirements for SMT that will incorporate the Commission's decision on this single unresolved issue.

III.

The Signatories agree that the terms of this Stipulation are fair, reasonable, and in the public interest. The Signatories further stipulate to the facts contained in the proposed Order attached hereto as Attachment 2 and will take all reasonable efforts to obtain the prompt adoption of an order by the Commission consistent with Attachment 2 to this Stipulation. The Signatories further agree to support and defend the terms of this Stipulation as set forth herein.

IV.

This Stipulation has been drafted by all Signatories and is the result of negotiation, compromise, settlement, and accommodation. The Signatories agree that the terms and conditions herein are interdependent. The various provisions of this Stipulation are not severable. None of the provisions of this Stipulation shall become fully operative unless the Commission shall have entered a final order approving this Stipulation consistent with the proposed Order. If the Commission does not accept this Stipulation as presented, or issues an order inconsistent with the terms of this Stipulation or the proposed Order, the Signatories agree that any Signatory adversely affected by that alteration has the right to withdraw from this Stipulation, thereby becoming released from its obligations arising hereunder, and to proceed as otherwise permitted by law to exercise all rights available under the law. The right to withdraw must be exercised by providing the other Signatories written notice within 20 calendar days of the date the Commission order acting on this Stipulation is filed. Failure to provide such notice within the specified time period shall constitute a waiver of the right to withdraw and acceptance of the changes to this Stipulation made by the Commission.

V.

This Stipulation is binding on each of the Signatories only for the purpose of settling the issues as set forth herein and for no other purposes. The matters resolved herein are resolved on the basis of a compromise and settlement. Except to the extent that this Stipulation expressly governs a Signatory's rights and obligations for future periods, this Stipulation shall not be binding or precedential on a Signatory outside of this proceeding except for a proceeding to enforce the terms of this Stipulation. The Signatories agree that a Signatory's support of the resolution of this docket in accordance with this Stipulation may differ from its position or testimony regarding contested issues of law, policy, or fact in other proceedings before the Commission or other forum. Because this is a Stipulation, a Signatory is under no obligation to take the same position as set out in this Stipulation in other proceedings not referenced in this Stipulation whether those dockets present the same or a different set of circumstances. Notwithstanding any other provision herein, a Signatory's agreement to entry of a final order of the Commission consistent with this Stipulation should not be regarded as an agreement to the appropriateness or correctness of any assumptions, methodology, or legal or regulatory principle that may have been employed in reaching this Stipulation.

VI.

This Stipulation contains the entire agreement among the Signatories. Moreover, this Stipulation supersedes all other written and oral exchanges or negotiations among the Signatories or their representatives with regard to the subjects contained herein. The Signatories hereby waive the right to an evidentiary hearing in this proceeding and waive cross-examination of all witnesses except as to the single unresolved issue described in Section II, *supra*.

VII.

Each person executing this Stipulation represents that he or she is authorized to sign this Stipulation on behalf of the party represented. Facsimile or emailed copies of signatures are valid for purposes of evidencing this Stipulation, which may be executed in multiple counterparts.

VIII.

WHEREFORE, PREMISES CONSIDERED, the Signatories respectfully request that this Honorable Commission enter an order consistent with the terms of this Stipulation.

AGREED:

AEP TEXAS INC.

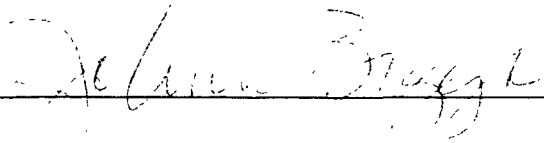
BY: Theresa A. Chapp
Theresa A. Chapp
-ME

CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC.

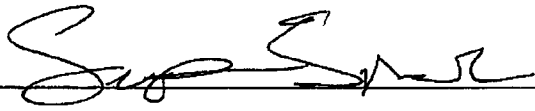
BY: *[Handwritten Signature]*

[Faint handwritten text, possibly a date or reference number]

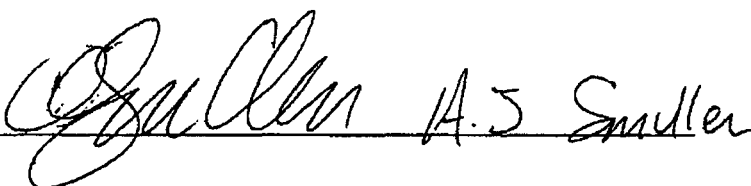
ONCOR ELECTRIC DELIVERY COMPANY LLC

BY: 

TEXAS-NEW MEXICO POWER COMPANY

BY:  _____

STAFF OF THE PUBLIC UTILITY COMMISSION OF TEXAS

BY:  William A. Smoller

OFFICE OF PUBLIC UTILITY COUNSEL

BY: Lauri Barker

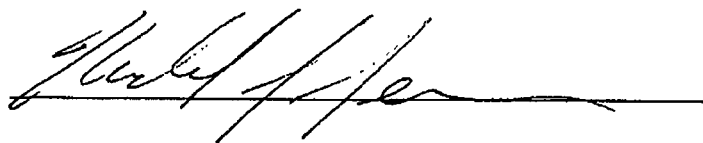
ALLIANCE FOR RETAIL MARKETS

BY: STN QDU

TEXAS ENERGY ASSOCIATION FOR MARKETERS

BY: Catherine J. Webking

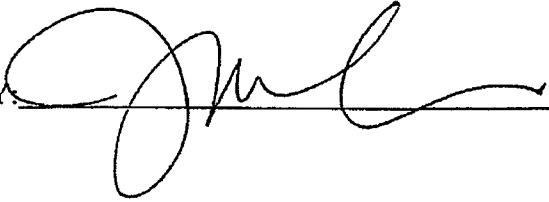
MP2 ENERGY TEXAS, LLC

BY: _____

ENERNOC, INC.

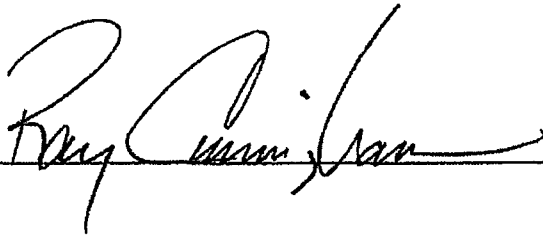
BY:  _____

STEERING COMMITTEE OF CITIES SERVED BY ONCOR


BY:  _____

ENGIE RESOURCES LLC

BY:

A handwritten signature in black ink, appearing to read "Ray Cunningham", is written over a horizontal line.

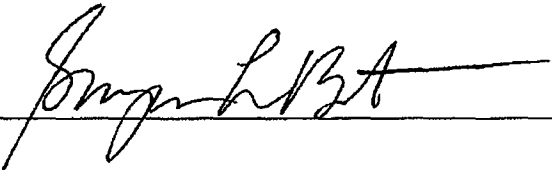
BRASOVAN ENERGY'S ELECTRICITY USERS COALITION

BY: 
Mike Brasovan, President, Brasovan Energy Solutions

MISSION:DATA COALITION, INC.

BY: ME Muraw

TEXAS ADVANCED ENERGY BUSINESS ALLIANCE

BY: 

THE ENERGY PROFESSIONALS ASSOCIATION

BY: J. Kay Postle 1-25-18

Attachment 1

SMT 2.0 Business Requirements

1. Ability for an SMT user (e.g., Retail Electric Provider of Record (“ROR”), Transmission and Distribution Service Provider (“TDSP”), Competitive Services Provider - a party that is not the customer’s ROR, such as another Retail Electric Provider or an aggregator, broker, consultant, etc. (“CSP”), Business Customer (non-residential), Residential Customer, the Electric Reliability Council of Texas (“ERCOT”), or the Public Utility Commission of Texas (“PUCT”)) to request a temporary password when the original password is corrupt, forgotten, etc.
2. Ability for any SMT user (e.g., ROR, TDSP, CSP, Business Customer, Residential Customer, ERCOT, or PUCT) to restore their access to SMT when their user ID and / or password have been forgotten.
Note:
 - The password reset will be initiated only after answering one or more security questions.
 - For a forgotten user ID: User will enter the email address they registered with and if there is a match, their user ID will be emailed to this email address.
If multiple user IDs are associated with an email address, all associated user IDs will be sent to the email address.
3. Ability for any SMT user (e.g., ROR, TDSP, CSP, Business Customer, Residential Customer, ERCOT, or PUCT) to reset their password.
4. Ability to authenticate the initial SMT user administrator (e.g., ROR, TDSP, CSP, Business Customer, ERCOT, or PUCT) who is requesting access to SMT actually represents the SMT user.
5. Ability for an SMT user administrator (e.g., ROR, TDSP, CSP, Business Customer, ERCOT, or PUCT) to grant, suspend or revoke access for users and other administrators in their organizational entity.
6. Ability for an SMT user (e.g., ROR, CSP, TDSP, Business Customer, Residential Customer, ERCOT, or PUCT) to display and update user specific profile attributes, which includes the ability for SMT to provide an email notification to the SMT user that the profile has been updated.
7. Ability for each SMT user administrator (e.g., ROR, TDSP, CSP, Business Customer, ERCOT, or PUCT) within each organizational entity to have the same access and capability (e.g. no super administrators).
8. Ability to send a notification to the appropriate SMT user administrator (e.g., ROR, CSP, TDSP, Business Customer, ERCOT, or PUCT) for approval of a new SMT user as part of the SMT registration process.

9. Ability for an SMT user administrator (e.g., ROR, TDSP, CSP, Business Customer, ERCOT or PUCT) to accept or reject the SMT user request to register.
10. Ability for SMT user administrator (e.g., ROR, TDSP, CSP, Business Customer, ERCOT, or PUCT) to view all permissions associated with SMT user IDs in their organizational entity.
11. Ability for each SMT user administrator account (e.g., ROR, CSP, Business Customer, ERCOT, or PUCT) to be associated with multiple DUNS and for the TDSP to validate that the DUNS match the ROR, CSP, Business Customer, ERCOT, or PUCT.
12. Ability for SMT to automatically log off SMT users after 15 minutes of inactivity.
13. Ability for SMT to stage the processing order of ad-hoc batch requests based on criteria.
14. Ability for any SMT user (e.g., ROR, CSP, TDSP, Business Customer, Residential Customer, ERCOT, or PUCT) to initiate an ad-hoc request for retrieval of the AMS usage data (consumption and generation) for any or all of the Electric Service Identifier IDs ("ESIIDs") that the SMT user has authorization to access via File Download (e.g., CSV or Green Button Download My Data), API, or API and File Transfer Protocol Secure ("FTPS").
 The following services are currently available to support this requirement:
 - ESIID usage data via Graphical User Interface ("GUI") File Download (e.g., CSV, Green Button Download My Data), SOAP API, or SOAP API and FTPS).
 The following services will be added to support this requirement:
 - ESIID usage data via Representational State Transfer ("REST") API, or REST API and FTPS
 - ESIID usage data via REST API using the Green Button Extensible Markup Language ("XML") format that is also defined in the Green Button Download My Data standard.
15. Ability for any SMT user (e.g., ROR, CSP, TDSP, Business Customer, Residential Customer, ERCOT, or PUCT) to request AMS usage information (consumption and generation) for a specific date range and specific usage data interval, for which the meter is configured, for an ESIID that an SMT user has authorization to access, up to a maximum of 24 months.
16. Ability for SMT to notify requestor of exceptions to queries and reason for exceptions including negative reports indicating no data was available for the parameters specified.
17. Ability for SMT to acknowledge to the requestor receipt of the request for data retrieval.
18. Ability for any SMT user (e.g., ROR, CSP, TDSP, Business Customer, Residential Customer, ERCOT, or PUCT) to view the AMS 15-minute interval usage data (consumption and generation) with time stamp and the daily meter reading for up to a maximum of 24 months for the ESIIDs that the SMT user has authorization to access. The units will be recorded in kWh with 3 significant digits to the right of the decimal.

19. Ability for any SMT user (e.g., ROR, CSP, TDSP, Business Customer, Residential Customer, ERCOT, or PUCT) to display / export / download / transfer (e.g., API or API and FTPS interface) meter attribute information:
 - Meter multiplier
 - Last meter test date
 - Phases
 - Meter class (ampacity)
 - Date Meter was Installed
 - Initial Provision Date (date the meter becomes part of the AMS system)
 - Instrument Rated (e.g. Current Transformer / Potential Transformer)
 - Meter configuration (which capabilities are enabled and how)
 - Interval setting (how often the meter is recording usage)
 - kWh received and delivered kW
 - kVA
 - Remote disconnect / connect
20. Ability for any SMT user (e.g., ROR, CSP, TDSP, Business Customer, Residential Customer, ERCOT, or PUCT) to display / export / download / transfer (e.g., API or API and FTPS interface) premise information.
 - Premise address (service address – house number, street name, city, state, zip)
 - ESIID
 - Meter number
 - Service Voltage (primary / secondary / transmission)
 - Meter Status –energized / de-energized
 - Premise Status – Active / inactive
 - TDSP Rate Code
21. Ability to populate SMT with the daily VEE 15-minute interval usage (consumption and generation) and the meter register reading ending at 23:59:59, no later than 23:59:59 of the calendar day after the usage data is recorded (for meters provisioned in the AMS system).

Note: The TDSPs will make their best effort to provide this data as early as possible. The market would like to have this data by noon on the calendar day after the data is recorded.
22. Ability to report usage values in kWh with 3 significant digits to the right of the decimal (mathematically 0.000 means zero).
23. Ability for the TDSP to revise historical AMS usage data and store the date / time stamp of the revision.
24. Ability to maintain a maximum of 24 months of SMT usage data online. The AMS usage data will be made available to all SMT users via the GUI, API, and FTPS.
25. Ability to provide, to all users, an announcement on the SMT web portal that the web portal is not available, during down times.

Note: This is different than the standard internet message that the URL cannot be accessed.

26. Ability for the SMT web portal host owner to post a notification on the web portal home page regarding web portal outages, maintenance periods, etc.
27. Ability for the SMT Host to retain the extract for 10 calendar days and then purge the extract.
28. Ability to use a secure internet protocol (e.g. HTTPS, etc.) for all functions on the SMT web portal.
29. The SMT help desk operating hours will be 7:00 AM Central Prevailing Time to 7:00 PM Central Prevailing Time on an AMS Operational Day as defined in the Joint TDUs' respective tariffs.
30. Ability for all SMT users (e.g., ROR, CSP, TDSP, Business Customer, Residential Customer, ERCOT, or PUCT) to navigate to all pre-determined user interfaces through a central location (i.e., home page).
31. Ability to have online help on the SMT web portal that explains how to use functions of the web portal.
32. Ability to maintain and display (add, modify) SMT web portal specific FAQs.
33. Ability to maintain and display (add, modify) the contact information listed in the help for SMT web portal access and technical help only.
34. Ability for the SMT web portal host owner to role play across any user type in order to trouble shoot issues associated with questions about what a user is seeing on the web portal.
35. Ability for the SMT web portal to provide to the Commission, upon request, a history of who is accessing the portal data.
36. Ability to block access to a user and force a password reset, via email, if they enter the incorrect password 4 times within 5 minutes.
37. Ability to require a user to respond to a confirmation email, sent to the user's e-mail address they are registering with, to validate the email address is correct before allowing them to move forward with the registration process. (e.g., send and receive a confirmation).
38. Ability to restrict TDSP access only to data associated with the ESI IDs within that TDSPs territory (e.g., meter data, premise data, usage data).
39. Ability to grant and/or block access to certain data based on the appropriate role-based

security level.

40. Ability to allow ROR access to usage data, meter attributes, and premise information for ESIIDS that are currently served by that REP.
41. Ability to allow a minimum of at least 6 characters and no more than 24 characters letters and numbers, case sensitive, in the password. Additionally, the password cannot be the user name.
42. Ability to set up and store a user specified password security question and answer.
43. Ability to allow up to a minimum of five and a maximum of 100 alphas / numbers / special characters, except slashes and single and double quotes, in the user ID.
44. Ability for a SMT GUI User to be re-directed to a correct "login" page following a session timeout.
45. Ability for an SMT GUI User to toggle between 15-minute reads and Daily reads without having to reset the date range.
46. Ability for an ROR to manually request from SMT their customer(s) historical usage information.
47. Ability for an ROR to subscribe with SMT to automatically receive 12-months of historical customer usage information via FTPS following a customer-initiated market switch.
48. Ability to improve the ROR search criteria during the Customer SMT GUI registration process.
49. Ability to keep the selected ROR visible during the Customer SMT GUI registration process.
50. Ability to restrict in the SMT GUI validation of a customer's account registration and meter "adds" to the current ROR.
51. SMT is expected to successfully process over 99.5 percent of all account registrations attempted.
52. SMT's planned maintenance window shall be limited to the third Saturday of every month from 12:01 AM Central Prevailing Time to 12:01 PM Central Prevailing Time.
53. The availability of SMT's GUI is targeted to be over 99.5 percent. This availability should be measured as a percentage of minutes that the service is available compared to the total number of minutes in a given period of time, excluding planned maintenance outage time.

54. The availability of SMT's API is targeted to be over 99.5 percent. This availability will be measured as a percentage of minutes that the service is available compared to the total number of minutes in a given period of time, excluding planned maintenance outage time.
55. The availability of the SMT's FTP sites is targeted to be over 99.5 percent. This availability will be measured as a percentage of minutes that the service is available compared to the total number of minutes in a given period of time, excluding planned maintenance outage time.
56. The availability of SMT's data download functionality is targeted to be over 99.5 percent. This availability will be measured as a percentage of minutes that the service is available compared to the total number of minutes in a given period of time, excluding planned maintenance outage time.
57. The availability of customers' electric usage data to RORs via SMT's FTP sites is targeted to be no later than 1 hour after SMT receives such data from the Joint TDSPs. This availability should be measured as a percentage of instances that the data is available no later than 1 hour after the SMT receives such data compared to the total number of instances that SMT receives such data, excluding planned maintenance time.
58. The availability of customers electric usage data to customers and all authorized parties via SMT's GUI, APIs, and CSP FTP interfaces is targeted to be no later than 8 hours after SMT receives such data from the Joint TDSPs. This availability should be measured as a percentage of instances that the data is available within 8 hours after SMT receives such data compared to the total number of instances that SMT receives such meter data, excluding planned maintenance outage time.
59. SMT is expected to correctly process over 99.5 percent of all CSP agreement transactions attempted by SMT users.
60. SMT is expected to correctly process over 99.5 percent of all on-demand reads attempted by SMT users.
61. SMT's average monthly response time to SMT users' calls/emails to the SMT Call Center/Help Desk should not exceed 60 seconds.
62. SMT's help desk abandon call rate should be less than 6 percent.
63. SMT's maintenance incident ticket type 1 resolution time should be no greater than 4 hours.
64. SMT's maintenance incident ticket type 2 resolution time should be no greater than 24 hours.
65. SMT's maintenance incident ticket type 3 resolution time should be no greater than 7

days.

66. No later than 15 calendar days following the end of a calendar month, a report should be provided on SMT (to be accessible with or without an SMT account) and filed in a compliance project opened by the Commission showing SMT's performance in comparison to each of the performance standards identified above during the previous calendar month. If SMT's performance does not meet a minimum performance in a particular month, then the Joint TDSPs should provide a detailed explanation on SMT based on root cause analysis methods and plans to meet the standard.
67. No later than 45 calendar days following the end of the prior calendar year, an annual report should be provided on SMT (to be accessible with or without an SMT account) and filed in a compliance project opened by the Commission showing SMT's performance in comparison to each of the performance standards identified above during the previous calendar year. If SMT's performance does not meet a minimum performance standard in a particular year, then the Joint TDSPs should provide on a quarterly basis a detailed explanation on SMT based on root cause analysis methods and plans to meet the standard. That quarterly explanation will be provided on SMT (to be accessible with or without an SMT account) and filed in a compliance project.
68. No later than 15 calendar days following the end of a calendar month, a report should be provided on SMT (to be accessible with or without an SMT account) and filed in a compliance project opened by the Commission detailing operating day + 1 daily LSE file deliveries by TDSP during the previous calendar month. The report will include the time the LSE files were delivered to SMT, the number of 15-minute intervals received by SMT for the previous day's consumption, and the number of estimated intervals for the previous day's consumption by customer class.
69. No later than 15 calendar days following the end of a calendar month, a report should be provided on SMT (to be accessible with or without an SMT account) and filed in a compliance project opened by the Commission detailing by TDSP and cumulative the total number of ESIIDs and meters currently stored and managed in SMT; the numbers of Residential Customers, Business Customers, RORs, and CSPs registered on SMT; the number of new customer registrations processed by SMT during the previous calendar month; the number of active CSP agreements in SMT as of the end of the previous calendar month; SMT's end-to-end file processing completeness percentages during the previous calendar month; the percentage availabilities of the SMT GUI, SMT APIs, and SMT FTPS during the previous calendar month; the number of on-demand reads processed by SMT during the previous calendar month; the number of calls received by the SMT Help Desk (cumulative only) during the previous calendar month; the number of help desk tickets created by SMT during the previous calendar month; the number of help desk tickets resolved by SMT at the level one call center help desk versus those required to be sent to level two support during the previous calendar month; the categories of the help desk tickets received.
70. No later than 15 calendar days following the end of a calendar month, a report should be

provided on SMT (to be accessible with or without an SMT account) and filed in a compliance project opened by the Commission detailing the number of users accessing the SMT website via the SMT GUI on a daily basis during the previous calendar month including user identification (Residential Customers, Business Customers, RORs, and CSPs), the amount of time accessed, and the functions accessed.

71. No later than 45 calendar days following the end of the prior calendar year, a report should be provided on SMT (to be accessible with or without an SMT account) and filed in a compliance project opened by the Commission of SMT's prior-year expenditures broken out by category that includes a comparison of actual and budgeted costs with an explanation of any variance of more than 10 percent.
72. No later than 30 calendar days following the end of the prior calendar year, a projected SMT budget should be provided on SMT (to be accessible with or without an SMT account) and filed in a compliance project opened by the Commission for the current year.

New CSP Data Access Process

73. Ability for an SMT user (e.g., ROR, TDSP, CSP, Business Customer, Residential Customer, ERCOT, or PUCT) to electronically set up and maintain a user ID and password for accessing SMT.
74. For SMT account registration, the ability to authenticate a new SMT user (e.g., ROR, TDSP, CSP, Business Customer, Residential Customer, ERCOT, or PUCT) through either a manual or electronic process. SMT will validate each SMT user type using the following processes:
 - ROR – SMT will validate registration with the Commission and DUNS
 - TDSP – SMT will validate registration with the Commission
 - CSP – SMT will validate DUNS
 - Business Customer – SMT will validate the ESIID, associated meter number, and ROR for the premises provided by the customer via the SMT GUI
 - Residential Customer – SMT will validate the ESIID, meter number, and ROR provided by the customer via the SMT GUI
 - ERCOT – SMT will validate with ERCOT
 - PUCT – SMT will validate with the Commission
75. Ability to establish up to four administrators per organizational entity (i.e. ROR, TDSP, CSP, Business Customer, ERCOT, or PUCT)
76. A CSP will have access to the accounts it is authorized to access similar to all other SMT users (e.g., GUI, API, FTPS)
77. Ability for SMT to query the SMT database on a monthly basis to determine for each SMT Business Customer if that Business Customer's monthly billed usage during the previous 12 months ever equaled or exceeded 15,000 kWh.

78. Ability for SMT to create a monthly internal list of premises associated with Business Customers whose monthly billed usage during the previous 12 months ever equaled or exceeded 15,000 kWh (the “Large Business Customer List”).
79. Ability for SMT to require a CSP to submit the following when registering for an SMT account:
- The CSP’s Name
 - The CSP’s Business Address
 - The CSP’s Valid Business Phone Number
 - The CSP’s Valid Email Address
 - The CSP’s contact person
 - The CSP’s DUNS number
 - An acknowledgement by the CSP to agree with and abide by all SMT Terms and Conditions
 - An acknowledgment by the CSP that the CSP shall promptly terminate a data access agreement created in SMT between the CSP and a Residential Customer or Business Customer after the termination or expiration of any contract upon which access to data was granted by the Residential Customer or Business Customer, with access to the customer’s prospective meter data ending no later than two weekdays after the termination or expiration of the contract and access to historical meter data, including re-versioned historical meter data, ending 45 days after such termination or expiration date (failure to do so shall be considered a “red flag” behavior)
 - An acknowledgement by the CSP that move-out transactions end all data sharing for the premises, with access to prospective meter data ending immediately upon a move-out transaction, and access to historical meter data, including re-versioned historical meter data, ending 45 days after a move-out transaction
 - An acknowledgement by the CSP of the SMT Management Committee’s¹ (the Joint TDSPs) authority to immediately suspend or revoke the CSP’s access to a Residential Customer’s or Business Customer’s usage data based on defined behavioral thresholds and security threats
80. Ability for SMT to monitor for “red flag” behavior and security threats by a CSP. “Red flag” behavior includes actions such as those described in Business Requirements 79 and 176 herein, and may include, but not be limited to, the following: (a) interfering with or falsifying customer affirmation; (b) receiving customer data that has not been authorized by the customer; (c) falsifying IP addresses; (d) failure to terminate data access at customer direction or customer termination; (e) sharing, selling or distributing customer data without customer authorization; and (f) modifying or altering customer data.
81. Ability for SMT to suspend or revoke a CSP’s access to SMT.
82. Ability for SMT to notify a CSP, via email, that their account has been suspended.

¹ The SMT Management Committee was formed by the Joint TDUs to manage SMT design, operations, and costs on behalf of the Joint TDUs.

83. Ability for SMT to (i) maintain the most recent customer authorizations of a CSP's access to SMT in order to restore a CSP's access to SMT if the Commission orders the restoration, and (ii) restore the CSP's authorizations within three weekdays and issue renewal notices within five weekdays to those authorizing customers whose prior authorization expired during the period of suspension or termination.
84. Ability for a CSP to view, via the SMT GUI, a list of all of the ESIIDs they are authorized to view.
85. Ability for a CSP to request, via an API or API and FTPS combination, a report of all of the ESIIDs they are authorized to view.
86. Ability for a CSP to terminate, via the SMT GUI or an API, its ability to view a Residential Customer's or Business Customer's usage data (consumption and generation) contained in SMT, and for SMT to notify the Residential Customer or Business Customer, via email, of such termination by the CSP.
87. Ability for a CSP to electronically submit, via the SMT GUI or an API, a Customer Authorization Request to SMT. The Customer Authorization Request must include:
 - Residential Customer's or Business Customer's Valid Email Address
 - Residential Customer's or Business Customer's ESIID
 - Residential Customer's or Business Customer's Meter Number
 - Residential Customer's or Business Customer's ROR's PUCT certificate number (the ROR's name and PUCT certificate number will be contained in a drop down box via the GUI on SMT)
 - The length of time the Residential Customer or Business Customer has authorized the CSP to access its usage data
88. Ability for SMT, via the SMT GUI or an API, to reject a submitted Customer Authorization Request that does not contain all of the required information and to notify the CSP of such rejection with a message such as "The Customer Authorization Request you submitted does not contain all of the required information. Please resubmit with the required information."
89. Ability for SMT to validate that the Residential Customer's or Business Customer's ESIID, Meter Number, and ROR PUCT certificate number submitted by a CSP via a Customer Authorization Request matches the ESIID, Meter Number, and ROR PUCT certificate number contained in SMT for that respective Residential Customer or Business Customer.
90. Ability for SMT to reject a submitted Customer Authorization Request for which the Residential Customer's or Business Customer's ESIID, Meter Number, and ROR PUCT certificate number submitted via a Customer Authorization Request does not match the ESIID, Meter Number, and ROR PUCT certificate number contained in SMT for that respective Residential Customer or Business Customer, and to notify the CSP, via the SMT GUI or an API, of such rejection with the message "The customer's ESIID, Meter

Number, and REP of Record PUCT certificate number you submitted on the Customer Authorization Request does not match the ESIID, Meter Number, and REP of Record PUCT certificate number contained in SMT for that respective customer. Please resubmit with the correct information.”

91. Ability for SMT to allow a Residential Customer or Business Customer that is not on the Large Business Customer List to enter into a usage data sharing agreement with a CSP for a term not to exceed 12 months (a “Small Customer Data Sharing Agreement”).² Note: The Residential Customer or Business Customer is not required to create an SMT account for itself.
92. Ability for SMT to allow a Business Customer that is on the Large Business Customer List to enter into a usage data sharing agreement with a CSP for a term not to exceed 36 months (a “Large Customer Data Sharing Agreement”). Note: The Business Customer is not required to create an SMT account for itself.
93. Ability for SMT to notify a Residential Customer or Business Customer for which the Residential Customer’s or Business Customer’s ESIID, Meter Number, and ROR PUCT certificate number submitted by a CSP via a Customer Authorization Request matches the ESIID, Meter Number, and ROR PUCT certificate number contained in SMT for that respective Residential Customer or Business Customer via a secure email that the Residential Customer’s or Business Customer’s usage data (consumption and generation) contained in SMT will be shared with the requesting CSP for the term included in the submitted Customer Authorization Request and providing any required SMT customer disclosures. The email shall be sent by SMT within 60 seconds of the time in which SMT has validated that the Residential Customer’s or Business Customer’s ESIID, Meter Number, and ROR PUCT certificate number submitted by a CSP via a Customer Authorization Request matches the ESIID, Meter Number, and ROR PUCT certificate number contained in SMT for that respective Residential Customer or Business Customer. SMT will send a non-executable copy of the customer’s email to the CSP.
94. Ability for a Residential Customer or Business Customer who is notified via email that the Residential Customer’s or Business Customer’s usage data (consumption and generation) contained in SMT will be shared with the requesting CSP for the term included in the submitted Customer Authorization Request to affirmatively acknowledge the required SMT customer disclosures contained in the email and affirmatively agree to share its data with the CSP, by clicking an “Accept” link in the email, to allow the CSP access to the Residential Customer’s or Business Customer’s usage data (consumption and generation) contained in SMT. The email containing the “Accept” link shall be subject to machine language protection technology. Only one click of the Residential Customer or Business Customer shall be required. SMT will undertake reasonable efforts for the email containing the “Accept” link to be concise and usable across multiple devices.

² All of the Signatories to the Stipulation filed in PUCT Docket No. 47472 agree with this 12-month maximum term length with the exception of Brasovan Energy’s Electricity Users Group.

95. Ability for SMT to notify, via separate emails, the Residential Customer or Business Customer and requesting CSP that the Residential Customer or Business Customer has agreed to allow the requesting CSP access to the Residential Customer's or Business Customer's usage data (consumption and generation) contained in SMT for the term included in the submitted Customer Authorization Request, and allow the authorized access. The acceptance email shall include:
 - The required SMT customer disclosures
 - Information on the ability for the Residential Customer or Business Customer, independent of the CSP, to terminate the agreement between the Residential Customer or Business customer and the CSP by creating an SMT account or contacting the SMT Help Desk (provide contact information) for assistance
 - Notice that the Residential Customer or Business Customer can terminate the agreement between the Residential Customer or Business customer and the CSP by contacting the CSP and directing them to terminate the agreement
96. Ability for SMT to provide a CSP, via an API, a one-time historical set of usage data based on the Green Button data format for each new ESIID for which the CSP has entered into a data sharing agreement with a Residential Customer or Business Customer. The CSP will receive re-versioned usage data as described below.
97. Ability for a Residential Customer or Business Customer who is notified via email that the Residential Customer's or Business Customer's usage data (consumption and generation) contained in SMT will be shared with the requesting CSP for the term included in the submitted Customer Authorization Request to affirmatively reject, by clicking a "Reject" link in the email, the CSP's access to the Residential Customer's or Business Customer's usage data (consumption and generation) contained in SMT.
98. Ability for SMT to consider a Residential Customer's or a Business Customer's failure to affirmatively respond to an email notification from SMT that the Residential Customer's or Business Customer's usage data (consumption and generation) contained in SMT will be shared with the requesting CSP for the term included in the submitted Customer Authorization Request after a period of five weekdays as a failure to acknowledge the authorization by the Residential Customer or Business Customer.
99. Ability for SMT to notify, via separate emails, the Residential Customer or Business Customer and requesting CSP that the Residential Customer or Business Customer has rejected the requesting CSP's access to the Residential Customer's or Business Customer's usage data (consumption and generation) contained in SMT.
100. For Residential Customers or Business Customers that have entered into a Small Customer Data Sharing Agreement, the ability for SMT to notify the Residential Customer or Business Customer and the CSP, via separate emails, 30 days prior to the termination date of the agreement that the agreement between the Residential Customer or Business Customer and the CSP is nearing its termination date. The version of the email sent to the Residential Customer or Business Customer will include a "Renew" link allowing the Residential Customer or Business Customer to affirmatively renew the

agreement between the Residential Customer or Business Customer and the CSP for a term equivalent to the term of the original Small Customer Data Sharing Agreement. The email containing the “Renew” link shall be subject to machine language protection technology. Only one click of the Residential Customer or Business Customer shall be required. SMT will make reasonable efforts for the email containing the “Renew” link to be concise and usable across multiple devices.

101. For Residential Customers or Business Customers that have entered into a Small Customer Data Sharing Agreement that has not been renewed pursuant to the 30-day email, the ability for SMT to notify the Residential Customer or Business Customer and the CSP, via separate emails, 15 days prior to the termination date of the agreement that the agreement between the Residential Customer or Business Customer and the CSP is nearing its termination date. The version of the email sent to the Residential Customer or Business Customer will include a “Renew” link allowing the Residential Customer or Business Customer to affirmatively renew the agreement between the Residential Customer or Business Customer and the CSP for a term equivalent to the term of the original Small Customer Data Sharing Agreement. The email containing the “Renew” link shall be subject to machine language protection technology. Only one click of the Residential Customer or Business Customer shall be required. SMT will make reasonable efforts for the email containing the “Renew” link to be concise and usable across multiple devices.
102. Ability for SMT to terminate a Small Customer Data Sharing Agreement that is not renewed by affirmative action of a Residential Customer or Business Customer.
103. For Business Customers that have entered into a Large Customer Data Sharing Agreement, the ability for SMT, on each annual anniversary date of a Large Customer Data Sharing Agreement to send an email to the Business Customer reminding them that a CSP has access to that Business Customer’s usage data (consumption and generation) contained in SMT.
104. For Business Customers that have entered into a Large Customer Data Sharing Agreement, the ability for SMT to notify the Business Customer and the CSP, via separate emails, 30 days prior to the termination date of the agreement that the agreement between the Business Customer and the CSP is nearing its termination date. The version of the email sent to the Business Customer will include a “Renew” link allowing the Business Customer to affirmatively renew the agreement between the Business Customer and the CSP for a term equivalent to the term of the original Large Customer Data Sharing Agreement.
105. For Business Customers that have entered into a Large Customer Data Sharing Agreement that has not been renewed pursuant to the 30-day email, the ability for SMT to notify the Business Customer and the CSP, via separate emails, 15 days prior to the termination date of the agreement that the agreement between the Business Customer and the CSP is nearing its termination date. The version of the email sent to the Business Customer will include a “Renew” link allowing the Business Customer to affirmatively

renew the agreement between the Business Customer and the CSP for a term equivalent to the term of the original Large Customer Data Sharing Agreement.

106. Ability for SMT to terminate a Large Customer Data Sharing Agreement that is not renewed by affirmative action of a Residential Customer or Business Customer.
107. Ability for a Residential Customer or Business Customer to view via the SMT GUI a list of all CSPs that are authorized to view their usage data (consumption and generation) contained in SMT.
108. Ability for a Residential Customer or Business Customer to terminate, via the SMT GUI, a CSP's access to that Residential Customer's or Business Customer's usage data (consumption and generation) contained in SMT, and to notify the CSP, via email, of such termination by the Residential Customer or Business Customer.
109. Ability for SMT to terminate an ROR's and CSP's access to a Residential Customer's or Business Customer's usage data (consumption and generation) contained in SMT when that Residential Customer or Business Customer vacates the premise (identified by a market move-out transaction) for which the Residential Customer or Business Customer had previously granted the CSP access, and to notify the CSP, via email, of such termination due to the Residential Customer or Business Customer vacating the premise. Such emails shall include (i) the ESIID(s) and meter number(s), (ii) the effective date and time of termination, and (iii) a short description of the reason for termination, *i.e.*, due to a market move-out transaction.
110. Ability for CSPs to have access to SMT user information guides.
111. Ability for SMT to retain all transactions with Residential Customers, Business Customers, and CSPs regarding CSPs' access to data contained in SMT for audit purposes.

Re-versioned Usage Data Submitted to SMT by the TDSPs

112. Ability for SMT to provide to a ROR or CSP, via an SMT FTPS, a daily digest of re-versioned interval data delivered to SMT by a TDU containing meter number, ESIID, re-version number, and re-version date for all ESIIDs that the ROR or CSP has authorization to access.
113. Ability for SMT to provide a CSP, via an API, daily re-versioned interval data based on the Green Button data format for each ESIID for which the CSP has entered into a data sharing agreement with a Residential Customer or Business Customer. Access to historical meter data, including re-versioned historical meter data, shall end no later than 45 days after a move-out transaction or the expiration or termination of any contract upon which access to data was granted by the customer.

Home Area Network Services

114. All Home Area Network services currently provided by SMT will be discontinued. Existing BRs 86 – 137 are deleted.

Friends and Family Services

115. All Friends and Family services currently provided by SMT will be discontinued. Existing BR 73 is deleted.

On-Request Poll for Power Status and On-Demand Read Services

116. Existing BRs 154 through 156 are deleted.
117. Ability for an authorized user to obtain, via the SMT GUI and SMT APIs, immediate access to the near real-time register read with a date and time stamp of the read for one ESID at a time. This functionality will be limited to two on-demand reads per hour per ESID, 24 on-demand reads per day per ESID, and 3,000 on-demand reads per TDU per day, subject to TDU network traffic (including but not limited to market orders, interval data collection, and planned and unplanned outages).
118. Ability for SMT to administer (e.g., grant, revoke or suspend, etc.) any SMT user's ID and password for access to SMT, in accordance with the SMT Website Terms and Conditions. The rights can be administered at the user level or group of users.
- Includes the ability to reset an SMT user's password, by emailing a temporary one-time password to the email address the user ID is registered to.
 - Includes the ability to reverse a suspended SMT user's ID only at the TDSP discretion.
 - Includes the ability to revoke the registration of a SMT user ID or group of SMT user IDs. This is non-reversible revocation.
 - Includes the ability to maintain an audit trail of who is completing the administration action.
119. Ability for any SMT user (e.g., ROR, TDSP, CSP, Business Customer, Residential Customer, ERCOT, or PUCT) to select and retain a language preference as part of their profile.
120. Ability for any SMT user (e.g., ROR, TDSP, CSP, Business Customer, Residential Customer, ERCOT, or PUCT) to change a language preference as part of their profile.
121. Ability for any SMT user (e.g., ROR, CSP, TDSP, Business Customer, Residential Customer, ERCOT, or PUCT) to download / export / transfer the meter and premise attribute information for any or all of the ESIDs that the SMT user has authorization to access via a File Download (e.g., Comma Separated Value ("CSV"), Web Service (e.g., Application Programming Interface ("API"), or a combination of the API and File Transfer (e.g., File Transfer Protocol Secure ("FTPS"))).
- The following services are currently available to support this requirement:

- Meter Information via CSV, SOAP API, or SOAP API and FTPS,
 - Meter Information Acknowledgement via SOAP API,
 - Premise Information via CSV, SOAP API, or SOAP API and FTPS, and
 - Premise Information Acknowledgement via SOAP API
 - The following services will be added to support this requirement:
 - Meter Information via REST API, or REST API and FTPS
 - Meter Information Acknowledgement via REST API
 - Premise Information via REST API, or REST API and FTPS
 - Premise Information Acknowledgement via REST API
122. Ability to make available to any SMT user (e.g., ROR, CSP, TDSP, Business Customer, Residential Customer, ERCOT, or PUCT) via an API, or a combination of API and FTPS, or download through the SMT GUI “on demand” extracts of AMS usage information (e.g., 15-minute interval consumption and generation data, daily meter reads, and monthly billed) for any or all of the ESIIDs that the SMT user has authorization to access.
 123. Ability for any SMT user (e.g., ROR, CSP, TDSP, Business Customer, Residential Customer, ERCOT, or PUCT) to request in one API request and receive the AMS usage data for any or all of the ESIIDs that the SMT user has authorization to access.
 124. Ability for any SMT user (e.g., ROR, CSP, TDSP, Business Customer, Residential Customer, ERCOT, or PUCT) the authorized user to export viewable data to a commonly accepted standard format (e.g. Excel) for any or all of the ESIIDs that an SMT user has authorization to access. Note: the common format will be a CSV file or Green Button Download My Data.
 125. Ability for any SMT user (e.g., ROR, CSP, TDSP, Business Customer, Residential Customer, ERCOT, or PUCT) to submit data queries through a programmatic interface in support of ad hoc batch requests for any or all of the ESIIDs that an SMT user has authorization to access.
 126. Ability for SMT to send results to batch queries.
 127. Ability to use a secure data transport methodology with the use of static IPs for integrating with SMT, for all the machine to machine interfaces (e.g., API or FTPS only). NOTE: This does not include SMT support for machine to GUI interfacing (which is prohibited by the SMT terms and conditions) due to the associated security risks.
 128. Ability for any SMT user (e.g., ROR, CSP, TDSP, Business Customer, Residential Customer, ERCOT, or PUCT) to view information for one ESIID at a time.
 129. Ability to change viewable parameters (e.g. select the time period to be displayed, ESIID).
 130. Ability to retrieve and export usage information for multiple ESIIDs at a time.

131. Ability to display the usage data in graphical format.
132. Ability to print the viewable usage data.
133. Ability to print the viewable usage data graph.
134. Ability for any SMT authorized user (e.g., ROR, CSP, TDSP, Business Customer, Residential Customer, ERCOT, or PUCT) to view and export up to the most recent 24 months of ESIID / meter AMS billed usage data for user selected dates.
Note: This requirement is intended to allow the user to see usage data relevant to a billed cycle(s).
135. Ability for any SMT user (e.g., ROR, CSP, TDSP, Business Customer, Residential Customer, ERCOT, or PUCT) to view and export the AMS historical usage data for the ESIIDs that the SMT user has authorization to access.
136. Ability for any SMT user (e.g., ROR, CSP, TDSP, Business Customer, Residential Customer, ERCOT, or PUCT) to view AMS monthly billed usage information for one ESIID at a time for up to a maximum of 24 months.
137. Ability for any SMT user (e.g., ROR, CSP, TDSP, Business Customer, Residential Customer, ERCOT, or PUCT) to change viewable parameters for monthly billed kWh usage data (e.g., select the time period to be displayed, ESIID).
138. Ability for any SMT user (e.g., ROR, CSP, TDSP, Business Customer, Residential Customer, ERCOT, or PUCT) to retrieve and export monthly billed kWh usage data for multiple ESIIDs at a time.
139. Ability to print the viewable monthly billed kWh usage data.
140. Ability to print the viewable monthly billed kWh usage graph.
141. Ability for any SMT user (e.g., ROR, CSP, TDSP, Business Customer, Residential Customer, ERCOT, or PUCT) to download / transfer (e.g., API or API and FTPS) the AMS usage data (consumption and generation) for a given period of time based on a supplied date to see all of the updates that have occurred to the data.
142. Ability for any SMT user (e.g., ROR, CSP, TDSP, Business Customer, Residential Customer, ERCOT, or PUCT) to download / transfer (e.g., API or API and FTPS) current and one prior revision of meter or premise attributes.
143. Ability to distinguish missing data from an actual zero value for a read, so that the REPs will know that there is a communication issue or power outage, rather than the read being skipped or inadvertently missed.
Note: This only applies for the time period the AMS meter was there.

Note: the VEE process does not typically produce a null value, however there may be some points in time in which a null value may be transmitted.

144. Ability to indicate whether the 15-minute interval usage data is an actual value or an estimate.
145. Ability for a Residential Customer or Business Customer that elects to register on SMT to associate one or more ESIIDs with one Residential Customer's or Business Customer's logon user id and password.
146. Ability for SMT to validate the list of ESIIDs and send a real-time error message for each ESIID that failed validation.
147. Ability to prevent an ESIID from being assigned to more than one Residential Customer or Business Customer.
148. Ability for SMT to actively accept a terms of use disclosure from any SMT user (e.g., ROR, CSP, TDSP, Business Customer, Residential Customer, ERCOT, or PUCT) on initial registration and when selecting a new ESIID.
149. Ability for the Residential Customer or Business Customer to upload a list of ESIIDs (one or more) and associated meter numbers to become associated with one user ID and password.
Note: May include the ability for the consumer to browse their computer/network to locate the text file from browse button on the SMT web portal.
150. Ability for the Residential Customer or Business Customer to manually input one or more ESIIDs.
151. Ability for the Residential Customer or Business Customer to delete an ESIID associated with their account.
152. Ability for SMT to make available, on an FTPS site, daily extracts of SMT usage information added to the common data repository since the last extract for all usage data of the ROR's or CSP's ESIIDs.
153. Ability to provide any information displayed to all SMT users (e.g., ROR, CSP, TDSP, Business Customer, Residential Customer, ERCOT, or PUCT) in English or Spanish.
154. Ability to provide customer education on the portal in English or Spanish and display based on the language preference in the profile.
155. Ability to have English be the default language upon initial login.
156. Ability to provide ADA compliant Customer web portal user interfaces.

157. Ability to conform to the ADA section 508 accessibility standard.
Note: Utilize WCAG 2.0.
158. Ability to have web portal host owner functionality.
159. Ability to provide customer help functions on the SMT web portal in English or Spanish and display based on the language preference in the profile.
160. Ability to print help material that is displayed on the SMT web portal.
161. Ability to search for a particular help topic.
162. Ability to download the help material information.
163. Ability to link to other outside sources to display help information.
164. Ability to give the Customer an on-line list of steps detailing how to create the text file for uploading multiple ESIIDs that are going to be associated with one user account.
165. Ability for REP of record access to all the functions associated with the ESIID to be automatically revoked when the REP is no longer the REP of Record due to a switch or move out.
166. Ability to terminate a Business Customer's or Residential Customer's access, along with all Business Customer or Residential Customer CSP authorizations, to premise and meter specific information on SMT whenever the TDSP is notified via a Texas SET transaction that a Business Customer or Residential Customer has moved out of a premise, and notify each affected CSP of the termination.
167. Ability to require the first administrator who registers for an organizational entity to provide a single, common e-mail address to be used to send messages for notifications (e.g., REP user requesting access to the portal, etc.)
Note: This is one outbound communication point that can be updated.
168. Ability to require each SMT user (admin and non-admin) to have a unique user id for access to the SMT GUI (e.g., there cannot be two rsmith user ids).
169. Ability to manage SMT users via the appropriate role-based access controls.
170. Ability to require a user to change their temporary password after the first log-in with their temporary password.
171. Ability to purge any user ID after a period of 13 months of inactivity (i.e., not logged on to the web portal). Includes all user ID types.
172. Ability to establish and maintain security controls associated with SMT access for SMT

users.

173. Ability to utilize appropriate security procedures and controls during the user's initial registration.
174. Ability to provide appropriate level of security depending on who is accessing the ESID data on the SMT web portal.
175. Ability to adhere to best practices, where appropriate, as defined by the Commission, industry standards, NERC, NIST, FIPPS, etc.
176. CSP registration requirements with SMT include the following:
 - a. the CSP provides its DUNS number and contact information to SMT; and
 - b. the CSP agrees to SMT terms of service, including (i) an acknowledgement that the CSP shall promptly terminate a data access agreement with SMT after the termination or expiration of any contract upon which access to data was granted by the customer, with access to the customer's prospective meter data ending no later than two weekdays after the termination or expiration of the contract and access to historical meter data, including re-versioned historical meter data, ending 45 days after such termination or expiration date (failure to do so shall be considered a "red flag" behavior), and (ii) an acknowledgement of the SMT Management Committee's authority to immediately suspend or revoke access to SMT data based on the behavioral thresholds and security threats defined in the SMT's Website Terms and Conditions.
177. Required customer authentication information for CSP access and/or customer account creation include the ESID, meter number, and ROR certificate number. The required ROR certificate number and name will be provided in a drop-down list for customers and the CSPs on the GUI.
178. The CSP must send the authentication information specified above in BR 177 to SMT, and SMT will then authenticate the premises based on the information provided.
179. The CSP must provide the email address of the customer to SMT for initial customer affirmation of a data sharing agreement between the customer and the CSP and for renewals of that agreement.
 - a. For renewals, SMT will send two renewal emails prior to the expiration of that agreement:
 - i. one email will be sent 30 days prior to expiration of the agreement with the CSP, and
 - ii. a second email will be sent 15 days prior to expiration of the agreement with the CSP if the customer has not responded to the first email.
 - b. The CSP will receive a separate email at the same time that the customer receives the initial and renewal emails.
180. The customer affirmation process is as follows:

- a. The customer will receive an email from SMT with a request to share data with a CSP for a specified term. The email will be sent within a specific period of time and measured for performance metrics.
 - b. The customer shall acknowledge the required SMT customer disclosures.
 - c. Large Commercial Customers (identified as commercial customers whose maximum monthly kWh for the prior 12 months meets or exceeds 15,000 kWh) shall agree to a term for data sharing up to 36 months, which shall be renewable for an additional term equal to the original term (renewal to occur via an affirmative email consent accomplished through one click by the customer, with no additional verification required).
 - d. All customers shall affirmatively opt-in to sharing data with a CSP.
 - e. The customer shall have the options to opt-out and report the email as spam.
 - f. The customer affirmation email link shall time out in five weekdays.
 - g. The opt-in email confirmation shall be subject to machine language protection technology.
181. The customer will not be required to establish an SMT account in order to authorize CSP data sharing. The customer may create an account on SMT to access its own data or to terminate an agreement with a CSP.
182. The data contained in the authorization request emails will be subject to encryption in transit, such as HTTP/TLS.
183. The process for providing notice to the customer about (i) the revocation process for a data sharing agreement with a CSP and (ii) the customer's acknowledgement of risk will be as follows:
- a. Upon acceptance of the customer affirmation email, SMT will send a follow-up confirmation email to the customer, including:
 - i. required SMT customer disclosures,
 - ii. information on the ability for the Residential Customer or Business Customer, independent of the CSP, to terminate the agreement between the Residential Customer or Business customer and the CSP by creating an SMT account or contacting SMT Customer Support for assistance in creating an SMT account, and
 - iii. notice that the Residential Customer or Business Customer can terminate the agreement between the Residential Customer or Business customer and the CSP by contacting the CSP and directing them to terminate the agreement.
 - b. The CSP will receive notice from SMT, via a separate email, of the customer's acceptance or rejection of the CSP's request to access the customer's usage data.
184. A move-out transaction ends all data sharing for the premises. A CSP's or ROR's access to prospective meter data shall end immediately upon a move-out transaction. Access to historical meter data, including re-versioned historical meter data, shall end 45 days after a move-out transaction.
185. The required SMT customer disclosures will be provided to the customer each time (i)

the customer is sent an email by SMT requesting the customer to affirm or reject that the customer authorizes SMT to share data with a CSP for a specified term or to report the email as spam, and (ii) the customer is sent a follow-up email notice by SMT after the customer has authorized SMT to share data with a CSP for a specified term.

186. SMT shall authenticate required customer information and retain records of all customer affirmations.
187. A CSP will receive notification of all emails that SMT sends to the CSP's customers regarding data sharing. Some notifications could be coalesced into a daily digest email.
188. Technical changes shall be made to the SMT portal, including:
 - a. elimination of the Home Area Network ("HAN") functionality, with the understanding that any HAN device that is paired to a meter and in use at the time SMT 2.0 is implemented will remain functional until such time that the device is (i) disconnected from that meter (due to the removal of the meter, action taken by the HAN device owner, or otherwise), or (ii) no longer functioning as desired;
 - b. SMT will support, via the SMT GUI or an API, two on-demand reads per hour per ESIID, 24 on-demand reads per day per ESIID, and 3,000 total on-demand reads per TDU per day subject to network traffic (including but not limited to market orders, interval data collection, planned and unplanned outages);
 - c. generation data will be made available to distributed generation customers through the portal;
 - d. modification of existing APIs to support REST web service;
 - e. elimination of portlet functionality;
 - f. establishment of a daily digest in the ROR and the CSP FTPS of re-versioned interval data containing meter number, ESIID, re-version number, and re-version date; and
 - g. for CSPs, SMT will provide: (i) a one-time historical set of energy usage data for each new ESIID for which the CSP has authorization using the Green Button format; and (ii) daily energy usage for that customer and any revisions to previous days' energy usage data for that customer using the Green Button format.
189. The API data format and API specification used by SMT will be compliant with the Green Button standard as of 2017.
190. SMT will have AMS usage data (consumption and generation) available online in the GUI for a maximum of 24 months.

ATTACHMENT 2
PROPOSED FINAL ORDER

DOCKET NO. 47472

COMMISSION STAFF'S PETITION	§	BEFORE THE
TO DETERMINE REQUIREMENTS	§	PUBLIC UTILITY COMMISSION
FOR SMART METER TEXAS	§	OF TEXAS

ORDER

On August 16, 2017, the Staff of the Public Utility Commission of Texas (“Commission Staff”) filed a petition to initiate this proceeding in order to address outstanding issues related to Smart Meter Texas (SMT). SMT is currently operated by several transmission and distribution utilities that have entered into a Joint Development and Operations Agreement (JDOA), which provides for the joint ownership, development, operation, and maintenance of SMT. The petition requested that the Commission determine what changes, if any, should be made to the requirements for the continued operation of SMT under the JDOA. On January 29, 2018, the following parties to the docket filed a Stipulation (Stipulation) resolving all but one issue in this proceeding: Commission Staff; Office of Public Utility Counsel (OPUC); AEP Texas Inc. (AEP Texas), CenterPoint Energy Houston Electric, LLC (CenterPoint), Oncor Electric Delivery Company LLC (Oncor), and Texas-New Mexico Power Company (TNMP) (AEP Texas, CenterPoint, Oncor, and TNMP are collectively the Joint TDUs); Alliance for Retail Markets (ARM); Texas Energy Association for Marketers (TEAM); Steering Committee of Cities Served by Oncor (Cities); EnerNOC, Inc. (EnerNOC); MP2 Energy Texas, LLC (MP2T); Brasovan Energy’s Electricity Users Group (BEEC); Engie Resources LLC (Engie); Mission:data Coalition, Inc. (Mission:data); Texas Advanced Energy Business Alliance (TAEBA); and The Energy Professionals Association (TEPA) (hereinafter collectively referred to as Signatories). The one remaining party—Orcutt Enterprises, LLC—has not taken a position on the Stipulation. The Stipulation requested that the Commission make a determination on the one remaining issue that was not resolved by the Signatories. The Stipulation is hereby approved, and the Commission makes its determination herein on the one remaining issue that was not resolved in the Stipulation. Consistent with all of the terms of the Stipulation, the Commission adopts the following findings of fact and conclusions of law:

I. Findings of Fact

Introduction and Procedural History

1. SMT is an interoperable, web-based information system that currently (a) stores electric usage data in increments of 15-minute intervals recorded by advanced meters deployed pursuant to Texas Public Utility Regulatory Act § 39.107 and in accordance with 16 Tex. Admin. Code (TAC) § 25.130; (b) provides secure access to that data to end-use customers, Retail Electric Providers (REPs) of Record, other parties authorized by end-use customers to have access to their data, and the Electric Reliability Council of Texas (ERCOT) via various user interfaces; and (c) enables secure communications with customer home area network (HAN) devices.
2. SMT was jointly established and is jointly maintained by the Joint TDUs.
3. The Joint TDUs entered into the JDOA dated December 31, 2008 to govern the development and use of SMT.
4. The Joint TDUs entered into service contracts with IBM in 2009 (the IBM Service Contracts), pursuant to which IBM designed, developed, and deployed SMT and has continually hosted and maintained the SMT portal in accordance with the existing business requirements developed by the Advanced Metering Implementation Team (AMIT) in 2010 and the subsequent ERCOT Advanced Metering Working Group (AMWG) change requests that were implemented. The IBM Service Contracts are set to expire on December 31, 2019.
5. On August 16, 2017, Commission Staff filed the *Commission Staff's Petition to Determine Requirements for Smart Meter Texas*. The petition requested that the Commission determine what changes, if any, should be made to the requirements for the continued operation of SMT under the JDOA.
6. On August 18, 2017, Order No. 1 was issued approving Commission Staff's method of notice and setting an intervention deadline of September 15, 2017.
7. On August 22, 2017, Commission Staff filed its proof of notice attesting to the provision of notice of Commission Staff's petition by mail on each party that participated in Project Nos. 46204 and 46206.
8. On September 13, 2017, Order No. 2 was issued granting the following parties intervention: TEAM, Cities, Oncor, TNMP, and OPUC.

9. On September 25, 2017, Order No. 3 was issued granting the following parties intervention: AEP Texas, TEPA, CenterPoint, TAEBA, ARM, EnerNOC, MP2T, Engie, Mission:data, and BEEC.
10. On September 29, 2017, Order No. 4 was issued requiring the parties to file a joint proposed procedural schedule on or before October 13, 2017.
11. On September 29, 2017, Commission Staff filed an agreed proposed procedural schedule, agreed motion for protective order, and agreements regarding procedural and discovery matters on behalf of all parties to the proceeding.
12. On September 29, 2017, Commission Advising and Docket Management filed an order requesting that Commission Staff and any interested party file with the Commission a list of issues to be addressed in this docket by October 13, 2017.
13. On October 9, 2017, Order No. 5 was issued providing a protective order to govern the use of confidential materials in this docket.
14. The first technical conference among the parties was held on October 12, 2017. Prior to that date, several parties pre-filed lists of questions to be discussed at the first technical conference.
15. On October 13, 2017, proposed lists of issues were filed by the following parties: OPUC, Joint TDUs, Mission:data, ARM, and Commission Staff.
16. On October 13, 2017, Commission Staff filed an agreed notification regarding proposed procedural schedule and regarding procedural and discovery matters on behalf of all the parties to the proceeding.
17. On October 18, 2017, Order No. 6 was issued adopting certain agreements proposed by Commission Staff on behalf of all the parties in Commission Staff's September 29, 2017 and October 13, 2017 filings and establishing a procedural schedule.
18. On October 19, 2017, direct testimony was filed by the following parties: TEPA, OPUC, EnerNOC, MP2T, Mission:data, Joint TDUs, ARM/TEAM, and Engie.
19. On October 19, 2017, TAEBA filed a statement of position, and Oncor filed a statement of position and request for good cause exception.
20. On October 20, 2017, AEP Texas filed a motion to amend the hearing date adopted in Order No. 6, requesting that the hearing be set on December 4-5, 2017.

21. A second technical conference among the parties was conducted telephonically on October 23, 2017.
22. A third technical conference among the parties was held on October 26, 2017.
23. On October 26, 2017, this proceeding was referred to the State Office of Administrative Hearings (SOAH).
24. On October 26, 2017, the Commission issued a preliminary order setting forth the issue to be addressed in this docket.
25. On October 30, 2017, Orcutt Enterprises, LLC (Orcutt) filed a motion to intervene.
26. On October 31, 2017, BEEC filed direct testimony, and Commission Staff filed a statement of position in lieu of direct testimony.
27. On November 13, 2017, SOAH Order No. 2 was issued granting Orcutt's motion to intervene.
28. On November 14, 2017, rebuttal testimony was filed by the following parties: OPUC, MP2T, Mission:data, Joint TDUs, TEPA, ARM/TEAM, and EnerNOC.
29. On November 14, 2017, Cities and Commission Staff filed statements of position, and TNMP filed a statement of position and request for good cause exception.
30. On November 15, 2017, BEEC filed rebuttal testimony.
31. On November 21, 2017, Commission Staff filed a notice that the parties had begun settlement discussions and expected that it would be possible to reach an agreement regarding all of the issues in this proceeding or, at a minimum, reducing the number of contested issues to be addressed at the hearing on the merits in this proceeding. The notice stated that the parties intended to meet for further settlement discussions on November 27, 2017 and December 1, 2017.
32. On December 4-5, 2017, the hearing on the merits was held.
33. On December 11, 2017, SOAH Order No. 3 was issued setting forth post-hearing filing deadlines and requirements and setting forth the record close date of January 19, 2018.
34. On December 28, 2017, the parties (with the exception of Orcutt) filed a letter stating that a unanimous agreement of the signatory parties had been reached resolving all but one issue in this docket. The letter requested that the SOAH ALJ issue an order suspending the current briefing deadlines contained in SOAH Order No. 3 and set the date by which the

parties are to file a revised briefing schedule for the one remaining issue not resolved by the unanimous agreement.

35. On December 28, 2017, SOAH Order No. 4 was issued suspending the post-hearing briefing deadlines contained in SOAH Order No. 3 and setting January 5, 2018 as the date by which the parties were to file a proposed revised briefing schedule for the one remaining issue not resolved by the unanimous agreement announced on December 28, 2017.
36. On January 5, 2018, the parties (with the exception of Orcutt) filed a letter proposing a briefing schedule for the one remaining issue that was not resolved by the unanimous agreement. The letter proposed that initial briefs be due on January 29, 2018, and that reply briefs be due on February 7, 2018.
37. On January 9, 2018, SOAH Order No. 5 was issued adopting the parties' proposed briefing schedule filed on January 5, 2018 for the one remaining contested issue that was not resolved by the unanimous agreement and setting January 31, 2018 as the deadline to file Redlined Decision Point Lists, Proposed Findings of Fact and Conclusions of Law, and Ordering Paragraphs.
38. On January 11, 2018, the parties submitted a letter indicating their intent to file a Stipulation and testimony supporting the Stipulation no later than January 29, 2018, and confirming their understanding that SOAH Order No. 5's requirement to file Redlined Decision Point Lists, Proposed Findings of Fact and Conclusions of Law, and Ordering Paragraphs by January 31, 2018 pertained solely to the one remaining contested issue.
39. A Stipulation was filed on January 29, 2018. The Stipulation is signed by all parties except for Orcutt. Orcutt has not taken a position on the Stipulation.
40. By Order No. __, filed _____, 2018, the Commission admitted into evidence the following: (a) the Stipulation, filed January 29, 2018; (b) Commission Staff's Affidavit Attesting to the Provision of Notice (including attachments), filed August 22, 2017; (c) the Direct Testimony in Support of Stipulation of Therese Harris, filed January 29, 2018; (d) the Supplemental Direct Testimony in Support of Stipulation of Michele Gregg, filed January 29, 2018; (e) the Supplemental Direct Testimony in Support of Stipulation of Donny R. Helm, filed January 29, 2018; (f) the Supplemental Direct Testimony in Support of Stipulation of Mona Tierney-Lloyd, filed January 29, 2018; (g) the Supplemental Direct Testimony in Support of Stipulation of Kevin Boudreaux, filed

January 29, 2018; and (h) the Supplemental Direct Testimony in Support of Stipulation of John Schatz, filed January 29, 2018.

41. On January 29, 2018, the following parties filed initial briefs on the one remaining issue not resolved by the parties' unanimous agreement: _____; on February 7, 2018, the following parties filed reply briefs on that issue: _____.

The Stipulation

42. As discussed in finding of fact 39, a Stipulation was filed on January 29, 2018 that memorializes the Signatories' agreements as to the changes that should be made to the requirements for the continued operation of SMT.
43. The Stipulation is supported by the Direct Testimony in Support of Stipulation of Therese Harris, the Supplemental Direct Testimony in Support of Stipulation of Michele Gregg, the Supplemental Direct Testimony in Support of Stipulation of Donny R. Helm, the Supplemental Direct Testimony in Support of Stipulation of Mona Tierney-Lloyd, the Supplemental Direct Testimony in Support of Stipulation of Kevin Boudreaux, and the Supplemental Direct Testimony in Support of Stipulation of John Schatz, all of which was filed on January 29, 2018.
44. The agreements reached by the Signatories to the Stipulation are accepted by the Commission and reflected in findings of fact 45 through 77 of this Order.
45. The provisions of the Stipulation and this Order apply to SMT and to all users of SMT, including all Competitive Service Providers (CSPs), which include Aggregators, Brokers, Consultants, and REPs acting as a third-party service provider.

46. The current IBM Service Contracts through which the Joint TDUs provide SMT expire on December 31, 2019. To develop the next version of SMT, the Joint TDUs presented a term sheet (including the SMT 2.0 Business Requirements) agreed upon by the Signatories (Term Sheet) to IBM. After reviewing the Term Sheet and after negotiations with the Joint TDUs, IBM offered to provide SMT consistent with the Term Sheet and its included SMT 2.0 Business Requirements at an annual price that was lower than its previous contract amount. Therefore, the Joint TDUs will enter into amendments to the current IBM Service Contracts under which IBM will provide SMT consistent with the Term Sheet (including the SMT 2.0 Business Requirements) for the time period of 2018 (upon issuance of this Order) through December 2023.
47. Attachment 1 to the Stipulation includes the same SMT 2.0 Business Requirements that were agreed upon by the Signatories as well as the SMT 2.0 Business Requirements that were listed in the body of the Term Sheet.
48. No later than January 1, 2020, the SMT portal will be redesigned to be consistent with the SMT 2.0 Business Requirements included in the Stipulation and in Attachment 1 to the Stipulation.
49. To the extent that any of the SMT 2.0 Business Requirements can be implemented earlier than January 1, 2020, then those SMT 2.0 Business Requirements will be implemented at such earlier time.
50. The SMT 2.0 Business Requirements set forth in the Stipulation and in Attachment 1 to the Stipulation contain all of the detailed specifications for the SMT portal agreed upon by the Signatories and ordered by the Commission.
51. CSP registration requirements with SMT include the following:
 - a. the CSP provides its DUNS number and contact information to SMT; and
 - b. the CSP agrees to SMT terms of service, including (i) an acknowledgement that the CSP shall promptly terminate a data access agreement with SMT after the termination or expiration of any contract upon which access to data was granted by the customer, with access to the customer's prospective meter data ending no later than two weekdays after the termination or expiration of the contract and access to historical meter data, including re-versioned historical meter data, ending 45 days after such termination or expiration date (failure to do so shall be considered a "red flag")

behavior), and (ii) an acknowledgement of the SMT Management Committee's¹ authority to immediately suspend or revoke access to SMT data based on the behavioral thresholds and security threats defined in the SMT's Website Terms and Conditions.

52. Required customer authentication information for CSP access and/or customer account creation include the Electric Service Identifier ID (ESIID), meter number, and REP of Record (ROR) certificate number. The required ROR certificate number and name will be provided in a drop-down list for customers and CSPs on the Graphical User Interface (GUI).
53. A CSP seeking access to customer data must send the authentication information specified above in Finding of Fact No. 52 to SMT, and SMT will then authenticate the premises based on the information provided.
54. The CSP must provide the email address of the customer to SMT for initial customer affirmation of a data sharing agreement between the customer and the CSP and for renewals of that agreement.
 - a. For renewals, SMT will send two renewal emails prior to the expiration of that agreement:
 - i. one email will be sent 30 days prior to expiration of the agreement with the CSP, and
 - ii. a second email will be sent 15 days prior to expiration of the agreement with the CSP if the customer has not responded to the first email.
 - b. The CSP will receive a separate email at the same time that the customer receives the initial and renewal emails.
55. The customer affirmation process is as follows:
 - a. The customer will receive an email from SMT with a request to share data with a CSP for a specified term. The email will be sent within a specific period of time and measured for performance metrics.
 - b. The customer shall acknowledge the required SMT customer disclosures.
 - c. Large Commercial Customers (identified as commercial customers whose maximum monthly kWh for the prior 12 months meets or exceeds 15,000 kWh) may agree to a

¹ The SMT Management Committee was formed by the Joint TDUs to manage SMT design, operations, and costs on behalf of the Joint TDUs.

term for data sharing up to 36 months, which shall be renewable for an additional term equal to the original term (renewal to occur via an affirmative email consent accomplished through one click by the customer, with no additional verification required).

- d. All customers shall affirmatively opt-in to sharing data with a CSP.
 - e. The customer shall have the options to opt-out or report the email as spam.
 - f. The customer affirmation email link shall time out in five weekdays.
 - g. The opt-in email confirmation shall be subject to machine language protection technology.
56. The customer will not be required to establish an SMT account in order to authorize CSP data sharing. The customer may create an account on SMT to access its own data or to terminate an agreement with a CSP.
57. The data contained in the authorization request emails will be subject to encryption in transit, such as HTTP/TLS.
58. The process for providing notice to the customer about (i) the revocation process for a data sharing agreement with a CSP and (ii) the customer's acknowledgement of risk will be as follows:
- a. Upon acceptance of the customer affirmation email, SMT will send a follow-up email notice to the customer, including:
 - i. required SMT customer disclosures,
 - ii. information on the ability for the Residential Customer or Business Customer, independent of the CSP, to terminate the agreement between the Residential Customer or Business customer and the CSP by creating an SMT account or contacting SMT Customer Support for assistance in creating an SMT account, and
 - iii. notice that the Residential Customer or Business Customer can terminate the agreement between the Residential Customer or Business customer and the CSP by contacting the CSP and directing them to terminate the agreement.
 - b. The CSP will receive notice from SMT, via a separate email, of the customer's acceptance or rejection of the CSP's request to access the customer's usage data.

59. A move-out transaction ends all data sharing for the premises. A CSP's or ROR's access to prospective meter data shall end immediately upon a move-out transaction. Access to historical meter data, including re-versioned historical meter data, shall end 45 days after a move-out transaction.
60. Required SMT customer disclosures shall be submitted by the Signatories in a compliance filing within 60 days after the issuance of this Order. The required SMT customer disclosures will be provided to the customer each time (i) the customer is sent an email by SMT requesting the customer to affirm or reject that the customer authorizes SMT to share data with a CSP for a specified term or to report the email as spam, and (ii) the customer is sent a follow-up email notice by SMT after the customer has authorized SMT to share data with a CSP for a specified term.
61. SMT shall authenticate required customer information and retain records of all customer affirmations.
62. Criteria shall be established for monitoring CSP agreements, including, at a minimum:
- a. monitoring unique IP addresses to eliminate mass enrollments/acknowledgements by a CSP;
 - b. monitoring rejections, including differentiating between a customer's failure to acknowledge an authorization and a customer affirmatively rejecting authorization;
 - c. ongoing controls regarding inappropriate behavior; and
 - d. monitoring attempts by CSPs to authenticate customer information.
63. The SMT Management Committee shall immediately suspend or revoke data access based upon Commission approved standards of "red flag" behaviors. The SMT Management Committee shall notify a CSP of its suspension, but not revocation, based on information provided in the CSP's registration with SMT. Examples of potential "red flag" behaviors include, but are not limited to, the following:
- a. interfering with or falsifying customer affirmation;
 - b. receiving customer data that has not been authorized by the customer;
 - c. falsifying IP addresses;
 - d. failure to terminate data access at customer direction or customer termination;
 - e. sharing, selling or distributing customer data without customer authorization; and
 - f. modifying or altering customer data.

64. The Commission may direct the SMT Management Committee by and through Oncor, CenterPoint, AEP Texas, or TNMP to suspend or terminate a CSP's access to SMT after notice and appropriate Commission procedure.
- a. In order to be able to restore a CSP's access to SMT if the Commission orders the restoration of a CSP's access to SMT, SMT will maintain the most recent customer authorizations for a CSP.
 - b. Customarily, SMT will be able to restore the CSP's authorizations within three weekdays and issue renewal notices within five weekdays to those authorizing customers whose prior authorization expired during the period of suspension or termination.
65. The SMT Management Committee shall work with Commission Staff and/or OPUC regarding any customer complaints based on information from SMT. Commission Staff shall in good faith attempt to consult with the CSP.
66. A CSP will receive notification of all emails that SMT sends to the CSP's customers regarding data sharing. In addition, some notifications may, upon request, be coalesced into a daily digest email.
67. As reflected in the SMT 2.0 Business Requirements, technical changes shall be made to the SMT portal, including:
- a. elimination of the Home Area Network (HAN) functionality, with the understanding that any HAN device that is paired to a meter and in use at the time SMT 2.0 is implemented will remain functional until such time that the device is (i) disconnected from that meter (due to the removal of the meter, action taken by the HAN device owner, or otherwise), or (ii) no longer functioning as desired;
 - b. SMT will support, via the SMT GUI and an API, two on-demand reads per hour per ESIID, 24 on-demand reads per day per ESIID, and 3,000 total on-demand reads per TDU per day subject to network traffic (including but not limited to market orders, interval data collection, planned and unplanned outages);
 - c. generation data will be made available to distributed generation customers through the portal;
 - d. modification of existing APIs to support Representational State Transfer (REST) web service;

- e. elimination of portlet functionality;
 - f. establishment of a daily digest in the ROR and the CSP File Transfer Protocol Secure (FTPS) of re-versioned interval data containing meter number, ESIID, re-version number, and re-version date; and
 - g. for CSPs, SMT will provide: (i) a one-time historical set of energy usage data for each new ESIID for which the CSP has authorization using the Green Button format; and (ii) daily energy usage for that customer and any revisions to previous days' energy usage data for that customer using the Green Button format.
68. The Joint TDUs shall continue existing reporting for SMT and adopt service level agreements (SLAs) as reflected in the SMT 2.0 Business Requirements, Stipulation Attachment 1.
69. The premise/meter attributes list has been modified as reflected in the SMT 2.0 Business Requirements, Stipulation Attachment 1.
70. Periodic reports will be available on the SMT website and filed in a Commission project. Reporting will be consistent with the SMT 2.0 Business Requirements, Stipulation Attachment 1.
71. SMT will continue to have Green Button Download My Data functionality.
72. The API data format and API specification used by SMT will be compliant with the Green Button standard as of 2017.
73. Except as specifically set out in the Stipulation, there is no commitment that SMT will implement the full Green Button Connect My Data specification.
74. SMT will have AMS usage data (consumption and generation) available online in the GUI for a maximum of 24 months.
75. Each of the Joint TDUs will seek to recover the SMT costs incurred under the amendments to the IBM Service Contracts as appropriate. In all future AMS reconciliation proceedings filed by any of the Joint TDUs, there is a presumption that costs spent in accordance with the amendments to the IBM Service Contracts are reasonable and necessary pursuant to 16 TAC § 25.130(k)(6).
76. Upon implementation of the new SMT 2.0 Business Requirements reflected in Attachment 1 of the Stipulation, SMT will no longer be providing certain features or functionalities currently required in 16 TAC § 25.130 and the Commission's Orders in Docket Nos. 35718,

42214, 38306, 43239, 36928, 35639, 38339, 40261, and 42084. For this reason, each of the Joint TDUs are granted a good cause exception to both 16 TAC § 25.130(g)(1)(j) and the related Commission's Orders in Docket Nos. 35718, 42214, 38306, 43239, 36928, 35639, 38339, 40261, and 42084 so that the Joint TDUs will not be in non-compliance with any such requirements.

77. The Signatories' usage of SMT is subject to the following conditions: neither SMT, the Joint TDUs, nor RORs are individually or collectively responsible for the statements, actions, or policies of any CSP to which a customer grants access to SMT data. Neither SMT nor the Joint TDUs will be individually or collectively liable for any damages, whether direct or consequential, including, without limitation, loss of profits or loss of revenue, related to SMT, SMT data, interruptions of SMT, or the release of customer information through SMT pursuant to the affirmation and access processes and procedures approved by the Commission herein. Any customer usage information accessed through SMT shall be on an "as is" basis without any express or implied warranties made by the Joint TDUs, either collectively or individually, respecting the information, including without limitation any implied warranties of merchantability and fitness for a particular purpose.
78. The terms of the Stipulation are fair, reasonable, and in the public interest.

Commission Approval of the Stipulation

79. Considered in light of direct and rebuttal testimony filed by various Signatories and admitted into evidence at the hearing, in which the parties took positions significantly different from one another, the Stipulation is the result of compromise from each party, and these efforts, as well as the overall result of the Stipulation viewed in light of the record evidence as a whole, support the reasonableness and benefits of the terms of the Stipulation.
80. The Stipulation, taken as a whole and including the SMT 2.0 Business Requirements attached as Attachment 1 thereto, is a just and reasonable resolution of the issues, is supported by a preponderance of the evidence, is consistent with the relevant provisions of PURA, is in the public interest, and should be approved.

Length of CSP Access to Data for Residential Customers or Smaller Commercial Customers

81. The single issue that was not resolved by the Signatories as part of the Stipulation was the maximum length of time that a Residential Customer or a Smaller Commercial Customer

(identified as a commercial customer whose maximum monthly kWh for the prior 12 months is less than 15,000 kWh) can grant a CSP access to the customer's SMT data before the customer will be required to affirmatively renew the grant of access to the CSP.

82. All but one of the Signatories took the position that a Residential Customer or Smaller Commercial Customer should be permitted to grant a CSP access to the customer's SMT data for a term not to exceed 12 months before the customer will be required to affirmatively renew the data sharing agreement.
83. The one remaining party – BEEC – took the position that a Residential Customer or Smaller Commercial Customer should be permitted to grant a CSP access to the customer's SMT data for a term not to exceed 36 months before the customer will be required to affirmatively renew the data sharing agreement.
84. Because the Signatories did not reach an agreement on this one remaining issue, the Signatories requested that the Commission decide as part of a final order issued in this case the maximum permitted length of access that can be granted by a Residential Customer or a Smaller Commercial Customer to a CSP during which time such customer will not be required to affirmatively consent to the CSP's continued access to the customer's SMT data.
85. The Commission finds that a Residential Customer or Smaller Commercial Customer should be permitted to grant a CSP access to the customer's SMT data for a term not to exceed ____ [months/years] before the customer will be required to affirmatively renew the data sharing agreement.

II. Conclusions of Law

1. Each of the Joint TDUs is an electric utility as defined by PURA § 31.002(6).
2. The Commission has jurisdiction over the Joint TDUs and the subject matter of this case pursuant to PURA § 39.107(h).
3. Commission Staff's provision of notice in this proceeding complies with 16 TAC § 22.55.
4. This docket was processed in accordance with the requirements of PURA, the Administrative Procedure Act, TEX. GOV'T CODE ANN. Chapter 2001, and Commission rules.
5. The Commission's consideration of the Stipulation complies with PURA § 14.054 and 16 TAC § 22.206.

6. The terms of the Stipulation are supported by a preponderance of the evidence and comply with the requirements of 16 TAC § 25.130.
7. The Stipulation is a reasonable resolution of all but one issue in this case, and it is supported by the record and is consistent with the relevant provisions of PURA.
8. Consistent with the Stipulation and 16 TAC § 25.130, the costs spent by each of the Joint TDUs in accordance with the amendments to the IBM Service Contracts are to receive a presumption that those costs are reasonable and necessary in all future AMS reconciliation proceedings filed by any of the Joint TDUs.

III. Ordering Paragraphs

In accordance with these findings of fact and conclusions of law, the Commission issues the following orders:

1. Consistent with the Stipulation, the SMT 2.0 Business Requirements contained in Attachment 1 to the Stipulation are approved and shall govern the continued operation of SMT, subject to the Commission's determination regarding length of access stated in finding of fact 85.
2. Consistent with the Stipulation, the Joint TDUs shall enter into amendments to the IBM Service Contracts under which IBM will provide SMT, for the time period of early 2018 through December 2023, consistent with the SMT 2.0 Business Requirements contained in Attachment 1 to the Stipulation and the Commission's determination regarding length of access stated in finding of fact 85.
3. The Joint TDUs shall submit an updated list of business requirements for SMT 2.0 reflecting the approval granted by this Order, as well as the Commission's determination regarding length of access stated in finding of fact 85, within 60 days of the date this Order is entered.
4. Each of the Joint TDUs is hereby granted a good cause exception to both 16 TAC § 25.130(g)(1)(j) and the requirements contained in AMS-related Commission's Orders concerning HAN devices in Docket Nos. 35718, 42214, 38306, 43239, 36928, 35639, 38339, 40261, and 42084.
5. The entry of this Order consistent with the Stipulation does not indicate the Commission's endorsement of any principle or methodology that may underlie the Stipulation. Entry of this Order shall not be regarded as precedent as to the appropriateness of any principle or methodology underlying the Stipulation.

6. All other motions, requests for entry of specific findings of fact and conclusions of law, and any other requests for general or specific relief, if not expressly granted, are denied.

SIGNED AT AUSTIN, Texas on the _____ day of _____, 2018.

PUBLIC UTILITY COMMISSION OF TEXAS

DEANN T. WALKER, CHAIRMAN

BRANDY MARTY MARQUEZ, COMMISSIONER

ARTHUR C. D'ANDREA, COMMISSIONER

DOCKET NO. 47472

RECEIVED

2017 AUG 22 PM 2:38

COMMISSION STAFF'S PETITION TO
DETERMINE REQUIREMENTS FOR
SMART METER TEXAS

§
§
§
§

PUBLIC UTILITY COMMISSION
OF TEXAS

COMMISSION STAFF'S PROOF OF NOTICE

COMES NOW the Staff (Staff) of the Public Utility Commission of Texas, representing the public interest, and files this Proof of Notice, which consists of the attached Affidavit of Linda Stapleton, attesting to the provision of notice of Staff's Petition.

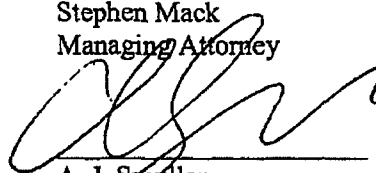
Date: August 22, 2017

Respectfully Submitted,

**PUBLIC UTILITY COMMISSION OF TEXAS
LEGAL DIVISION**

Margaret Uhlig Pemberton
Division Director

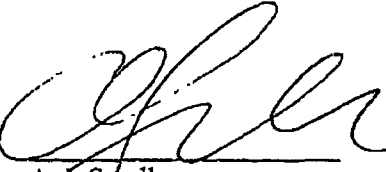
Stephen Mack
Managing Attorney



A. J. Smullen
State Bar No. 24083881
(512) 936-7289
1701 N. Congress Avenue
P.O. Box 13326
Austin, Texas 78711-3326
(512) 936-7268 (facsimile)
aj.smullen@puc.texas.gov

DOCKET NO. 47472
CERTIFICATE OF SERVICE

I certify that a copy of this document will be served on all parties of record on August 22, 2017 in accordance with 16 TAC § 22.74.



A. J. Smullen

DOCKET NO. 47472

Commission Staff's Petition to Determine Requirements for Smart Meter Texas

AFFIDAVIT OF MS. LINDA STAPLETON


August 22, 2017

THE STATE OF TEXAS

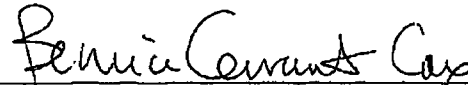
COUNTY OF TRAVIS

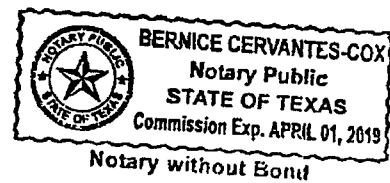
ON THIS DAY, before me, the undersigned authority, personally appeared Linda Stapleton who on her oath states as follows:

1. My name is Linda Stapleton. I am employed as a Legal Secretary in the Legal Division of the Public Utility Commission of Texas (Commission).
2. I am at least 21 years of age, fully competent to make this statement, and authorized to make the statements herein. Additionally, I have personal knowledge of the facts stated herein, and they are true and correct to the best of my knowledge.
3. On August 16, 2017, the Staff of the Commission (Staff) filed its Petition to Determine Requirements for Smart Meter Texas (Petition). The proceeding was assigned Commission Docket No. 47472.
4. As proposed in Staff's Petition, on August 16, 2017, Staff served a copy of its filed Petition by mail on each party that participated in Project Nos. 46204 and 46206. A list of those parties is attached to this affidavit.
5. Thereby, through the aforementioned notice, I hereby verify that Staff completed the provision of notice in the above-referenced proceeding as set forth in Staff's Petition.


Linda Stapleton
Legal Secretary-Legal Division
Public Utility Commission of Texas

SUBSCRIBED AND SWORN TO before me, on this the 22 day of August, 2017.


NOTARY PUBLIC in and for the State of Texas



**SERVICE LIST
MAIL**

DOCKET NO: 47472

PARTIES	REPRESENTATIVE/ADDRESS
	INTERAGENCY: OFFICE OF PUBLIC UTILITY COUNSEL MICHELE GREGG 17012 NORTH CONGRESS AVE SUITE 9-180 AUSTIN TX 78701 512-936-7525 FAX
	SUZANNE L BERTIN TEXAS ADVANCED ENERGY BUSINESS ALLIANCE P O BOX 301151 AUSTIN TX 78703 no fax, just email suzanne.bertin@texasadvancedenergy.org
STEERING COMMITTEE OF CITIES SERVED BY ONCOR	THOMAS BROCATO LLOYD GOSSELINK ROCHELLE & TOWNSEND, P.C. 816 CONGRESS AVE SUITE 1900 AUSTIN TX 78701 Facsimile: (512) 472-0532 tbrocato@lglawfirm.com

PARTIES	REPRESENTATIVE/ADDRESS
	<p>MICHAEL HAYS ZACK KORMAN AWESOME POWER, INC. 2215 CEDAR SPRINGS RD APT 1814 DALLAS TX 75201</p> <p><u>zack.korman@awesomepowertexas.com</u> <u>michael.hays@awesomepowertexas.com</u></p> <p>No fax or address, just email and website</p>
<p>JOINT TRANSMISSION AND DISTRIBUTION UTILITIES</p>	<p>MELISSA LONG GAGE AEP 400 WEST 15 ST SUITE 1520 AUSTIN TX 78701</p> <p>(512) 481-4591 (fax) <u>malong@aep.com</u></p>
<p>TEXAS ENERGY ASSOCIATION FOR MARKETERS</p>	<p>CATHERINE J WEBKING SCOTT DOUGLASS & MCCONNICO LLP 303 COLORADO ST SUITE 2400 AUSTIN TX 78701</p> <p>512.495.6399 (facsimile)</p>
	<p>STEPHEN J DAVIS LAW OFFICES OF STEPHEN J. DAVIS, P.C. 301 CONGRESS AVE SUITE 1050 AUSTIN TX 78701</p> <p>(512) 479-9996 (Fax) <u>davis@sjdlawoffices.com</u></p>
<p>MP2 ENERGY</p>	<p>MICHAEL JEWELL JEWELL & ASSOCIATES PLLC 506 WEST 7TH ST SUITE 1 AUSTIN TX 78701-1834</p> <p>512-236-5170 (Fax) <u>michael@jewellandassociates.com</u></p>

PARTIES	REPRESENTATIVE/ADDRESS
EARTH NETWORKS CONNECTED SAVINGS AND OHM CONNECT On behalf of: Earth Networks Connected Savings 12410 Milestone Center Drive Suite 300 Germantown, MD 20876 Ohm Connect 350 Townsend St., Suite 320 San Francisco, CA 94107	ROBE KING GOOD COMPANY ASSOCIATES 3103 BEE CAVE ROAD SUITE 135 AUSTIN TX 78746
	JOHN HALL ENVIRONMENTAL DEFENSE FUND, INC 301 CONGRESS AVE SUITE 1300 AUSTIN TX 78701 jhall@edf.org (512) 478-5161
	MICHAEL MURRAY MISSION:DATA COALITION, INC 1752 NW MARKET ST #1513 SEATTLE WA 98107 michael@missiondata.org no fax
	ROBERT BEVILL SPEER SOUTHCENTRAL PARTNERSHIP FOR ENERGY EFFICIENCY AS A RESOURCE 3103 BEE CAVE ROAD SUITE 135 AUSTIN TX 78746 Phone: 512-279-0750 no fax

Verified: 10/6/14 RDH; 10/9/14 sh

SOAH DOCKET NO. 473-18-0708

DOCKET NO. 47472

COMMISSION STAFF'S PETITION	§	BEFORE THE STATE OFFICE
TO DETERMINE REQUIREMENTS	§	OF
FOR SMART METER TEXAS	§	ADMINISTRATIVE HEARINGS



DIRECT TESTIMONY IN SUPPORT OF STIPULATION

THERESE HARRIS

INFRASTRUCTURE & RELIABILITY DIVISION

PUBLIC UTILITY COMMISSION OF TEXAS

JANUARY 26, 2018

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EXHIBITS

Exhibit TH-1 List of Dockets

1 **I. STATEMENT OF QUALIFICATIONS**

2 **Q. Please state your name, occupation and business address.**

3 A. My name is Therese Harris. I am employed by the Public Utility Commission of Texas
4 (PUC or Commission) as a Senior Infrastructure Analyst in the Infrastructure and
5 Reliability Division. My business address is 1701 N. Congress Avenue, Austin, TX
6 78711-3326.

7
8 **Q. Please briefly outline your educational and professional background.**

9 A. I have a Bachelor of Science Degree in Geology and a Master of Arts Degree in Energy
10 and Mineral Resources from the School of Engineering at the University of Texas at
11 Austin. My professional experience includes advanced regulatory and program
12 development work analyzing policy and economic issues associated with the functioning
13 of a competitive electric market as well as participating in market design and policy
14 development activities associated with the development of a Smart Grid. In addition, I
15 have experience identifying, analyzing, providing recommendations, and preparing
16 testimony on policy and cost issues regarding Energy Efficiency Cost Recovery Factor
17 (EECRF) applications and fuel related issues; and making recommendations for needed
18 amendments to PUC Substantive Rules that affect utilities. I have been employed with
19 the Commission for seven years.

20

1 **Q. Have you previously testified or provided memoranda in lieu of testimony before**
2 **this Commission?**

3 A. Yes, a list of the proceedings in which I have testified or provided memoranda in lieu of
4 testimony as well as a list of EECRF Dockets where I was a Commission analyst appears
5 as Attachment TH-1.

6

7 **II. INTRODUCTION**

8 **Q. What is the purpose of your testimony?**

9 A. The purpose of my testimony is to support the Stipulation and Agreement (Stipulation)
10 that parties have reached in this proceeding.¹ The Stipulation addresses Signatories'
11 agreement on a broad range of issues concerning the Smart Meter Texas portal (SMT)
12 that includes the SMT 2.0 Business Requirements (Business Requirements) that
13 encompass all the detailed specifications for SMT,² and agreement that the transmission
14 and distribution utilities that own and operate SMT (Joint TDUs)³ should enter into
15 amendments to the current service contracts for operation of SMT at an annual price that
16 is lower than the current contract amount. In particular, my testimony supports the

¹ *Commission Staff's Petition to Determine Requirements for Smart Meter Texas*, Docket No. 47472 (Aug. 16, 2017). The following parties filed a Stipulation resolving all but one issue in this proceeding: Commission Staff; Office of Public Utility Counsel (OPUC); AEP Texas Inc. (AEP Texas), CenterPoint Energy Houston Electric, LLC (CenterPoint), Oncor Electric Delivery Company LLC (Oncor), and Texas-New Mexico Power Company (TNMP); Alliance for Retail Markets (ARM); Texas Energy Association for Marketers (TEAM); Steering Committee of Cities Served by Oncor (Cities); EnerNOC, Inc. (EnerNOC); MP2 Energy Texas, LLC (MP2); Brasovan Energy's Electricity Users Group (BEEC); Engie Resources LLC (Engie); Mission:data Coalition, Inc. (Mission:data); Texas Advanced Energy Business Alliance (TAEBA); and The Energy Professionals Association (TEPA) (collectively referred to as Signatories).

² See the Stipulation, Attachment 1, for a complete list of the SMT 2.0 Business Requirements that incorporate the agreed terms for SMT.

³ AEP Texas, CenterPoint, Oncor, and TNMP are collectively the Joint TDUs.

1 Signatory parties' agreement regarding some of the customer protection to be provided
2 by SMT, and also supports the sunset of current requirements pertaining to home area
3 networks (HAN).

4
5 **Q. Was SMT created in response to requirements in a Commission rule?**

6 A. Yes. SMT was created through a collaborative stakeholder process pursuant to the
7 requirement in 16 Tex. Admin. Code (TAC) § 25.130 that a utility use a web portal to
8 make metering data available to certain persons. SMT is operated by the TDUs that
9 formed the SMT Management Committee to manage SMT design, operations and cost on
10 behalf of the Joint TDUs. Customers, retail electric providers (REPs), and certain other
11 third parties known as Competitive Service Providers (CSPs) have access to information
12 that is made available through SMT.

13
14 **Q. Please provide a summary of your recommendations.**

15 A. I recommend that the Commission approve the Stipulation as a reasonable resolution of
16 the issues in this proceeding.

17
18 **III. PROCEDURAL HISTORY OF PROCEEDING**

19 **Q. Please provide a brief description of Commission Staff's petition in this proceeding.**

20 A. Commission Staff filed a petition to initiate this proceeding pursuant to the direction of
21 the Commissioners at the July 28, 2017 open meeting. The purpose of this proceeding is

1 to determine what changes, if any, should be made to the existing requirements for SMT.
2 In response to Commission Staff's petition, stakeholders filed testimony or position
3 statements and held technical conferences and settlement meetings. In December 2017,
4 following the hearing on the merits, parties compiled a Term Sheet to document
5 Signatories' unanimous agreement to resolve all but one issue in this proceeding.

6

7 **Q. What is the remaining contested issue in this proceeding?**

8 A. The one remaining issue is whether SMT should allow a residential customer or a
9 business customer that is not a large business customer (less than 15,000 kWh monthly
10 maximum for prior 12 months) to grant a CSP access to the customer's SMT data for
11 longer than 12 months before the customer must affirmatively renew grant of access to
12 the CSP.⁴

13

14 **Q. Have all parties expressed unanimous support or non-opposition to the Stipulation?**

15 A. Yes. One party, Orcutt Enterprises, LLC, has not taken a position on the Stipulation and
16 is not a signatory. No parties expressed opposition to the Stipulation.⁵ Furthermore, the
17 Stipulation resolves all but one issue in the proceeding.

18

19 **Q. Does the Stipulation reflect a reasonable resolution of Commission Staff's petition?**

⁴ Stipulation at 7.

⁵ *Id.* at 1.

1 A. Yes. The settlement terms constitute a negotiated compromise to which the parties
2 agreed after lengthy and detailed discussions. As such, any changes to the Stipulation
3 could undermine its purpose, result in the withdrawal from the Stipulation of Signatories
4 negatively impacted by the changes, and create additional litigation and costs.

5

6 **IV. DISCUSSION OF KEY PROVISIONS OF THE STIPULATION**

7 **Q. What are some of the major provisions of the Stipulation?**

8 A. The Stipulation includes among its major provisions the following agreements:

- 9 • CSP registration requirements that include acknowledgement of the SMT
10 Management Committee's authority to suspend or revoke access to SMT data
11 under certain conditions;
12
- 13 • A process for customer authentication and authorization of CSP access to
14 customer data;
15
- 16 • Provision of customer disclosures regarding the process to terminate a CSP data
17 sharing agreement and inform customers that neither SMT or any regulatory
18 agency has reviewed the privacy statements, practices or policies of any CSP the
19 customer grants access to their usage data;
20
- 21 • A requirement for SMT to monitor CSP agreements and criteria that permits SMT
22 to suspend or revoke CSP access to data;
23
- 24 • Minimum performance standards for certain SMT functionalities;
25
- 26 • Reporting requirements relating to performance and cost;
27
- 28 • Technical changes reflected in the Business Requirements that include sunset of
29 HAN functionality, support for 24 on-demand reads per day per Electric Service
30 Identifier (ESIID), generation data made available to distributed generation
31 customers, and provision of re-versioned interval data;
32

- 1 • Continuation of Green Button Download My Data⁶ functionality and use of an
2 application programming interface (API) compliant with the Green Button
3 standard as of 2017; and
4
- 5 • 24 months of historical Advanced Metering System (AMS) usage data available
6 to customers, REPs-of-record (RORs) and CSPs.
7

8 **Q. What are some benefits of the Stipulation?**

9 A. The Stipulation benefits customers, RORs, Joint TDUs and CSPs in a variety of ways that
10 includes, but is not limited to: a reduced annual cost for operation of SMT; a streamlined
11 process for a customer to provide a CSP access to their usage data; an improved method
12 of data delivery to RORs and CSPs; protection of customer data with recourse if
13 problematic CSP behavior is discovered; required minimum performance standards;
14 transparency regarding SMT performance and annual expenditures; and elimination of
15 rarely used SMT functions.
16

17 **V. CUSTOMER PROTECTION**

18 **Q. Why did Signatories agree to include customer protection measures in in SMT?**

19 A. Public Utility Regulatory Act (PURA)⁷ and the Commission's rules emphasize customer
20 privacy and customer ownership of their meter data. For example, PURA § 39.107(b)
21 establishes customer ownership of "[a]ll meter data, including all data generated,
22 provided, or otherwise made available, by advanced meters and meter information

⁶ The Green Button data standard is based on the Energy Services Provider Interface (ESPI) data standard released by the North American Energy Standards Board (NAESB) (<https://energy.gov/data/green-button>).

⁷ Public Utility Regulatory Act, Tex. Util. Code §§ 11.001–58.303 (West 2016 & Supp. 2017), §§ 59.001–66.017 (West 2007 & Supp. 2017) (PURA).

1 networks....” Furthermore, PURA § 39.107(k) provides that “[t]he commission shall
2 allow an electric utility or transmission and distribution utility to share information with
3 an affiliated corporation, or other third-party entity, if the information is to be used only
4 for the purpose of providing electric utility service to the customer or other customer-
5 approved services.” In addition, 16 TAC § 25.130(j)(5) provides that “A customer may
6 authorize its data to be available to an entity other than its REP.”

7 However, only third parties (CSP’s) that are registered with the Commission as REPs or
8 aggregators are subject to the Commission’s customer protection rules.⁸ Signatories,
9 therefore, agreed that it would be prudent to provide customer protection relating to CSP
10 access to customer data in SMT.

11
12 **Q. Do you believe that the customer protection provided by SMT is adequate?**

13 A. Yes. Parties were careful to ensure that adequate customer protection be included in the
14 Business Requirements. This includes the process for customer authentication and
15 authorization of CSP access to customer data; the required disclosures to the customer;
16 the requirement for SMT to monitor CSP agreements; and ability for the SMT
17 Management Committee to suspend or revoke CSP access to data if certain Commission
18 approved criteria exist.⁹

19

⁸ Cross-Rebuttal Testimony of John Schatz, ARM Ex. 2 at 9 (discussing the Commission’s regulatory authority over certain CSPs).

⁹ Every user of SMT must also agree to abide by SMT’s Terms and Conditions that include the appropriate use of SMT and remedies for noncompliance. A draft of the SMT Terms and Conditions are attached to the Testimony in Support of Stipulation of Donny R. Helm, Witness for the Joint TDUs.

1 **Q. Briefly explain the customer protection related to customer authentication and**
2 **authorization of CSP access to customer usage data.**

3 A. To provide reasonable assurance that a request to grant a CSP access to a customer's
4 usage data originates from the customer that owns the data, the Stipulation would require
5 that three pieces of authentication information, particular to that customer, be provided in
6 the request: the customer's ESIID, the customer's meter number and the customer's
7 ROR's certificate number (REP certificate number). All three pieces of information must
8 be consistent with what SMT has on record for that customer in order for SMT to
9 approve the authorization request.

10

11 **Q. Why were these three pieces of information chosen to authenticate an authorization**
12 **request for CSP access to usage data?**

13 A. SMT can only authenticate authorization requests by comparing it to customer
14 information that it maintains. The Joint TDUs, who own and operate SMT, maintain
15 only a limited amount of information on the customers they serve. In addition, the ESIID
16 and the REP certificate number are readily available to the customer on the customer's
17 electric bill. In many cases, the ROR also includes the meter number, which is also
18 physically displayed on the customer's meter, on the bill.

19

1 **Q. How does this compare to the information a customer is required to provide using**
2 **SMT's current authentication process?**

3 A. The current customer authentication process also requires three substantively similar
4 pieces of information: the ESIID number, meter number, and ROR name. However,
5 requiring the ROR name rather than the ROR's REP certificate number for authentication
6 has caused significant confusion for customers because a number of REPs operate under
7 several names. The proposed process is improved because each ROR has only one REP
8 certificate number despite the number of names it operates under.

9

10 **Q. Why are ESIID numbers required in the authentication process if these numbers**
11 **are readily available on certain publicly accessible websites if a customer's address**
12 **is known?**¹⁰

13 A. The combination of ESIID number and meter number assure that the usage data from the
14 correct meter is provided to the CSP. The Joint TDUs have deployed over 7.3 million
15 advanced meters. An incorrectly transcribed meter number in an authorization request
16 could result in data usage from another meter being provided to a CSP.

17

18 **Q. Why is the REP certificate number required in the customer authentication process**
19 **when the combination of ESIID and meter together provide assurance that usage**
20 **data from the correct customer meter is provided to the CSP?**

¹⁰ Several publically accessible websites provide ESIID lookup services upon furnishing a valid street address and zip code.

1 A. Requiring the ROR's REP certificate number provides an extra level of assurance that the
2 customer is authorizing CSP access to its usage data. Because ROR customer lists are
3 not publically available, the selection of the appropriate REP certificate number increases
4 this assurance.

5

6 **Q. Besides the information required to authenticate a customer's request to authorize**
7 **CSP access to their data, what additional information is required in the**
8 **authorization request sent to SMT?**

9 A. An authorization request must also include the customer's valid email address and the
10 length of time the customer has authorized the CSP to access its usage data.

11

12 **Q. Why is this information required?**

13 A. Requiring the customer's email address provides another layer of protection for the
14 customer. Once SMT confirms that the customer's information matches the information
15 that SMT has on file for that particular customer, an email is sent to the customer to
16 request that the customer affirmatively acknowledge that they have chosen to share their
17 usage data with the CSP for the duration of time selected in the authorization request.
18 The customer must affirmatively agree to allow the CSP to access their data for access to
19 be granted. If the customer declines the request, or does not respond to the email within a
20 certain period of time, the request is rejected. If SMT receives affirmative agreement
21 from the customer, a confirmation email is sent. Together the emails also inform the

1 customer that it is their sole responsibility to review the CSP's privacy policy, and
2 explain the methods for terminating CSP access to their data.¹¹

3

4 **Q. In spite of the protection built into the authentication and authorization process, is**
5 **it still possible that a CSP could gain unauthorized access to a customer's meter**
6 **data?**

7 A. Yes, no system can be secured with absolute certainty. In response to this concern,
8 Signatories agreed that criteria for monitoring CSP agreements to thwart unauthorized
9 access to customer data and to identify potentially inappropriate behavior on the part of
10 the CSP be established. This includes, but is not limited to: monitoring unique IP
11 addresses to eliminate mass enrollments and acknowledgements; and monitoring attempts
12 by CSPs to authenticate customer information.

13

14 **Q. What action can the SMT Management Committee take if SMT uncovers certain**
15 **problematic or "red flag" behaviors?**

16 A. Signatories agreed that if certain Commission approved "red flag" behaviors are observed
17 the SMT Management Committee shall immediately suspend or revoke CSP access to
18 customer data. The SMT Management Committee may also be directed to suspend or
19 revoke access at the direction of the Commission. Potential "red flag" behaviors include,
20 but are not limited to: interfering with or falsifying customer affirmation; receiving
21 customer data that has not been authorized by the customer; falsifying IP addresses;

¹¹ OPUC witness Michele Gregg provides additional testimony in support of the Stipulation and describes the customer disclosures in more detail.

1 failure to terminate data access at customer direction or customer termination; sharing,
2 selling or distributing customer data without customer authorization; and modifying or
3 altering customer data.

4
5 **VI. HOME AREA NETWORK FUNCTIONALITY**

6 **Q. What is the HAN?**

7 A. The HAN allows customers to provision devices to interact with the AMS meters
8 installed at their premises, including viewing real-time data and receiving automatic
9 messages, as required by 16 TAC § 25.130(g)(1)(J). When SMT was initially developed,
10 stakeholders anticipated that the HAN would be the primary means of communicating
11 with devices and providing customer control. However, several of these HAN functions
12 can be executed over the Internet, and customers rarely take advantage of these HAN
13 functions.

14
15 **Q. Does SMT currently fulfill the Commission requirement in 16 TAC § 25.130(g)(1)(J)**
16 **that a utility's AMS allow devices at the customer's premises to communicate**
17 **through a HAN with the advanced meter at the premises?**

18 A. Yes. SMT provides HAN support that includes the ability to connect and disconnect
19 HAN devices to the customer's HAN and send messages to HAN devices for general
20 information, pricing information, and demand response, including device control.

1 **Q. What prompted Signatories to agree to sunset SMT's HAN requirements?**

2 A. Widespread use of HAN never materialized. In 2017, SMT reported approximately
3 8,000 HAN devices connected to customers' advanced meters. In other words, out of the
4 approximately 7.3 million advanced meters deployed by the Joint TDUs, less than 0.11%
5 are connected to a HAN device.¹² Furthermore, the market is not utilizing HAN
6 messaging. The direct testimony of OPUC witness Michele Gregg states the following
7 regarding SMT's HAN messaging functionality:

8 The HAN messaging business requirements allow the HAN to communicate with
9 in-home devices and appliances. I recommend that this business requirement be
10 deleted because this functionality has become obsolete. When SMT was initially
11 being developed, stakeholders anticipated that the HAN would be the primary
12 means of communicating with devices and providing customer control. However,
13 since that time, the market place has developed in a different direction with the
14 internet serving as the primary vehicle for these communications. This
15 functionality is not used and is, therefore, also not reasonable, necessary or
16 effective.¹³

17
18 **Q. If SMT discontinues HAN functionality when SMT 2.0 is implemented, what will**
19 **happen to the HAN devices currently paired to advanced meters?**

20 A. Signatories agreed that HAN devices paired to the meter when SMT 2.0 is implemented
21 will remain functional until the device is either disconnected from the meter or is no
22 longer functioning as desired. Oncor witness Donny R. Helm provides additional
23 testimony in support of the Stipulation and describes in further detail how specifically the
24 parties propose to sunset the HAN.

¹² See the Advanced Metering Working Group (AMWG) Monthly Market Reports Through December 2017, posted on the Electric Reliability Council of Texas (ERCOT) website.

¹³ Direct Testimony of Michele Greg at 12-13 (Oct. 19, 2017).

1 **Q. Will the Joint TDUs need to receive a good cause exception to 16 TAC §**
2 **25.130(g)(1)(J) and various Commission orders¹⁴ in order to discontinue provision**
3 **of HAN functionality?**

4 A. Yes.

5

6 **Q. Do you believe the Signatories agreement to discontinue provision of HAN**
7 **functionality is reasonable?**

8 A. Yes. SMT became operational in 2010. Since that time, customer interest in connecting
9 their in-home devices to the advanced meter at their premises has been negligible.¹⁵
10 Furthermore, the HAN messaging functionality has not been utilized. Therefore, I
11 believe eliminating the requirement for SMT to provide HAN functionality is reasonable
12 and benefits customers by keeping the cost of SMT focused on functions with the most
13 value to the market.

14

15 **Q. Do you recommend that the Commission grant a good cause exception to the extent**
16 **necessary to implement the stipulations relating to the HAN?**

17 A. Yes.

18

¹⁴ Stipulation at 7. The Joint TDUs request good cause exception to 16 TAC § 25.130 and the Commission Orders in Docket Nos. 35718, 42214, 38306, 43239, 36928, 35639, 38339, 40261, and 42084.

¹⁵ Rebuttal Testimony of Donny R. Helm, Joint TDUs Ex. 2 at 11. Donny Helm indicates that it is the lack of customer interest and not the inability to attract interest or investment from HAN manufacturers that has contributed to low customer adoption of HAN in their premises.

1 **VII. CONCLUSION AND RECOMMENDATION**

2 **Q. Do you conclude that the terms of the Stipulation are fair and reasonable?**

3 A. Yes. I believe that implementation of the terms in the Stipulation will result in a fair and
4 reasonable outcome for affected stakeholders. The Stipulation not only provides
5 certainty on the resolution of a variety of issues, I believe that it also ensures an outcome
6 that, in its entirety, is at least equal to, or possibly better than, what would result from
7 continued litigation of this proceeding.

8

9 **Q. What is your recommendation in this proceeding?**

10 A. In my opinion, the Stipulation represents an agreement between the parties that results in
11 an acceptable resolution to this proceeding that is consistent with the public interest. I
12 also believe that the terms of the Stipulation provide an acceptable degree of certainty to
13 all parties that would not be assured if litigation of this proceeding were to continue. Due
14 to the certainty provided by stakeholder agreement and the broad range of issues the
15 Stipulation addresses, I recommend that the Commission adopt the Stipulation in its
16 entirety.

17

18 **Q. Does this conclude your testimony?**

19 A. Yes.

Exhibit TH-1
List of Dockets

PUC Docket Number	Description
40343	<i>Application of El Paso Electric Company for Approval to Revise its Energy Efficiency Cost Recovery Factor and Request to Establish Revised Goals and Cost Caps</i>
40358	<i>Application of Southwestern Electric Power Company to Adjust Energy Efficiency Cost Recovery Factor and Related Relief</i>
40360	<i>Application of Entergy Texas, Inc. for Authority to Redetermine Rates for the Energy Efficiency Cost Recovery Factor Tariff</i>
40436	<i>Tariff Compliance Filing of CenterPoint Energy Houston Electric, LLC for Amendments to PUCT Substantive Rules §25.214 and §25.474 in Project No. 38674</i>
40627	<i>Petition by Homeowners United for Rate Fairness to Review Austin Rate Ordinance No. 20120607-055</i>
41496	<i>Application of Texas New Mexico Power for Approval of an Energy Efficiency Cost Recovery Factor</i>
41446	<i>Application of Southwestern Public Service Company to Adjust its Energy Efficiency Cost Recovery Factor</i>
41444	<i>Application of Entergy Texas, Inc. for Authority to Redetermine rates for Energy Efficiency Cost Recovery Factor</i>
41403	<i>Application of El Paso Electric Company for Approval to Revise its Energy Efficiency Cost Recovery Factor and Request to Establish revised Cost Caps</i>
41791	<i>Application of Entergy Texas, Inc. for Authority to Change Rates and Reconcile Fuel Costs</i>
41852	<i>Application of El Paso Electric Company to Reconcile Fuel Costs</i>
42004	<i>Application of Southwestern Public Service Company for Authority to Change Rates and to Reconcile Fuel and Purchased Power Costs for the Period July 1, 2012 Through June 30, 2013</i>
42449	<i>Application of El Paso Electric Company for Approval to Revise its Energy Efficiency Cost Recovery Factor and Request to Establish Revised Cost Cap</i>
42454	<i>Application of Southwestern Public Service Company to Adjust its Energy</i>

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List of Dockets

	<i>Efficiency Cost Recovery Factor</i>
42485	<i>Application of Entergy Texas, Inc. to Adjust its Energy Efficiency Cost Recovery Factor</i>
42486	<i>Application of Sharyland Utilities, LP. to Adjust its Energy Efficiency Cost Recovery Factor</i>
42527	<i>Application of Southwestern Public Service Company for Authority to Reconcile Fuel Costs</i>
43695	<i>Application of Southwestern Public Service Company for Authority to Change Rates</i>
44677	<i>Application of El Paso Electric Company for Approval to Revise its Energy Efficiency Cost Recovery Factor and Request to Establish a Revised Cost Cap</i>
44698	<i>Application of Southwestern Public Service Company to Adjust its Energy Efficiency Cost Recovery Factor</i>
45885	<i>Application Of El Paso Electric Company For Approval To Adjust Its Energy Efficiency Cost Recovery Factor And Request For Revised Cost Cap</i>
45915	<i>Application Of Entergy Texas, Inc. To Adjust Its Energy Efficiency Cost Recovery Factor</i>
45916	<i>Application Of Southwestern Public Service Company To Adjust Its Energy Efficiency Cost Recovery Factor</i>
46013	<i>Application Of Oncor Electric Delivery Company LLC To Adjust Its Energy Efficiency Cost Recovery Factor</i>
46025	<i>Application Of Southwestern Public Service Company For Authority To Reconcile Fuel And Purchased Power Costs</i>
46076	<i>Application Of Entergy Texas, Inc. For Authority To Reconcile Fuel And Purchased Power Costs</i>
46308	<i>Application of El Paso Electric Company to Reconcile Fuel Costs</i>
46831	<i>Application of El Paso Electric Company to Change Rates</i>
47115	<i>Application of Entergy Texas, Inc. for Authority to Redetermine Rates for the Energy Efficiency Cost Recovery Factor</i>
47125	<i>Application of El Paso Electric Company for Approval to Revise its Energy Efficiency Cost Recovery Factor and Request to Establish Revised Cost Cap</i>
47235	<i>Application of Oncor Electric Delivery Company LLC to Adjust its Energy Efficiency Cost Recovery Factor</i>
46936	<i>Application of Southwestern Public Service Company for: A Certificate of Convenience and Necessity Authorizing Construction and Operation of Wind Generation and Associated Facilities in Texas and New Mexico, and Related Ratemaking Principles; and Approval of a Purchased Power Agreement to Obtain Wind-Generated Energy</i>