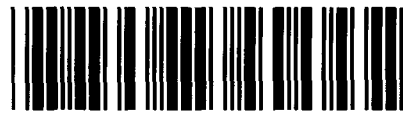


Control Number: 47472



Item Number: 2

Addendum StartPage: 0

**DOCKET NO. 47472**

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

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

**COMES NOW** the Staff (Staff) of the Public Utility Commission of Texas (Commission), representing the public interest, to submit this Petition to Determine Requirements for Smart Meter Texas (SMT).

**I. BACKGROUND**

At the July 28, 2017 open meeting, the Commission directed Staff to close Project No. 46204, *Rulemaking Regarding Third Party Access to Smart Meter Texas Data*, and Project No. 46206, *Rulemaking Regarding Governance, Performance, and Funding of Smart Meter Texas*, and initiate a contested case proceeding to address outstanding issues relating to SMT.<sup>1</sup> In response to the Commission's direction, Staff filed a memorandum in both Project Nos. 46204 and 46206 informing parties of the Commission's direction and the impending closure of those projects. Staff now files this petition to initiate this contested case proceeding, pursuant to the Commission's direction.

Staff has included with this petition as Attachment A the currently effective requirements for SMT, which is reflected in a document titled "Smart Meter Texas Business Requirements – November 2013,"<sup>2</sup> so that the present business requirements for SMT will be available to parties that may participate in this proceeding.

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<sup>1</sup> Open Meeting Tr. at 72–73 (Jul. 28, 2017).

<sup>2</sup> See *Repository of Advanced Metering Implementation Documents*, Project No. 41171, Memorandum of Christine Wright (Jan. 17, 2014).

## **II. PURPOSE AND JURISDICTION**

The purpose of this proceeding is to determine what changes, if any, should be made to the existing requirements for SMT. This proceeding is initiated pursuant to the direction of the Commissioners at the July 28, 2017 open meeting.<sup>3</sup> The Public Utility Regulatory Act (PURA) sets out general requirements for advanced metering.<sup>4</sup> Consistent with these requirements, the Commission's rules require that Staff, using a stakeholder process and subject to Commission approval, shall determine when and how advanced metering information shall be made available on an electric utility's web portal.<sup>5</sup>

SMT is a web portal that was created through a collaborative stakeholder process pursuant to the requirement in 16 TAC § 25.130 that a utility use a web portal to make metering data available to certain persons. SMT is 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. Customers, retail electric providers (REPs), and certain other third parties have access to information that is made available through SMT.

In this proceeding, Staff requests that the Commission determine what changes, if any, should be made to the requirements for the continued operation of SMT under the JDOA.

## **III. AFFECTED PARTIES**

This proceeding will modify the requirements for the continued operation of SMT. The parties affected by this proceeding are the utilities participating in the JDOA and persons who access data through SMT. In addition, it is likely that other industry stakeholders will seek intervention in this proceeding.

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<sup>3</sup> Open Meeting Tr. at 72–73 (Jul. 28, 2017).

<sup>4</sup> Public Utility Regulatory Act, Tex. Util. Code § 39.107 (West 2016).

<sup>5</sup> 16 Tex. Admin. Code § 25.130(g)(1)(E)(ii) (TAC).

#### **IV. BUSINESS ADDRESS AND AUTHORIZED REPRESENTATIVES**

Staff's business address is 1701 N. Congress Avenue, P.O. Box 13326, Austin, TX 78711-3326. Staff's authorized legal representative and designated recipient for service of pleadings and other documents is:

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

#### **V. NOTICE**

Notice of this proceeding is governed by 16 TAC § 22.55, which states that the presiding officer may require a party to provide reasonable notice to affected persons. To meet this standard, Staff proposes notice of this docket be published in the Texas Register and serving a copy of this petition on each party that participated in Project Nos. 46204 and 46206, the latter of which Staff will do by August 16, 2017. Staff notes that the participants in those projects included the utilities participating in the JDOA and many industry stakeholders.

#### **VI. PROCEDURAL SCHEDULE**

Staff is filing its petition on August 16, 2017. Staff request that the deadline for intervention be September 15, 2017, which is 30 days after the filing of Staff's petition. Additionally, Staff requests that a prehearing conference be held to set a detailed procedural schedule.

## V. CONCLUSION

Staff requests that the Commission determine what changes, if any, should be made to the requirements for SMT, including any changes to the “Smart Meter Texas Business Requirements – November 2013” document attached to this Petition in Attachment A.

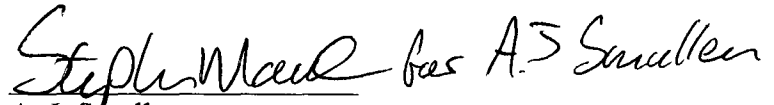
**Date: August 16, 2017**

Respectfully Submitted,

**PUBLIC UTILITY COMMISSION OF TEXAS  
LEGAL DIVISION**

Margaret Uhlig Pemberton  
Division Director

Stephen Mack  
Managing Attorney

A handwritten signature in black ink that reads "Stephen Mack for A.J. Smullen". The signature is written in a cursive, flowing style.

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# **Attachment A**

## **Smart Meter Texas Business Requirements**

Final – Project Record Version

November 2013

ID	REQUIREMENT
	<b><i>Account Management Requirements</i></b>
BR- 017.001	Ability to request a temporary password when the original password is corrupt, forgotten, etc.
BR- 017.004	<p>Ability for the TDSP (or Host) to administer (e.g., grant, revoke or suspend, etc.) a user's ID and password for access to the SMT web portal, in accordance with the business rules. The rights can be administered at the user level, group of users.</p> <p>Includes the ability to reset a user's password, by emailing a temporary one-time password to the email address the user ID is registered to.</p> <p>Includes the ability to reverse a suspended user ID only at the TDSP discretion.</p> <p>Includes the ability to revoke the registration of a user ID or group of user IDs. This is non-reversible revocation.</p> <p>Includes the ability to maintain an audit trail of who is completing the administration action.</p>
BR- 017.009	<p>Ability for a user to restore their access when their user ID and / or password have been forgotten.</p> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>• The password reset will be initiated only after answering one or more security questions.</li> <li>• 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. <ul style="list-style-type: none"> <li>▪ If multiple user ID's are associated with an email address, all user ID's will be sent to the email address.</li> </ul> </li> </ul>
BR- 017.014	Ability for a user to reset their password.
BR- 021.001	Ability for a customer to select and retain a language preference as part of their profile.
BR- 021.002	Ability for a customer to change a language preference as part of their profile.

## **Smart Meter Texas Business Requirements**

Final – Project Record Version

November 2013

ID	REQUIREMENT
BR- 028.002	Ability to authenticate the initial REP Administrator, who is requesting access to the web portal data, actually represents the REP.
BR- 028.003	<p>Ability to authenticate that the initial ERCOT Administrator who is requesting access to the web portal data actually represents ERCOT.</p> <p><b>Note:</b> This does not require ERCOT to register on the SMT web portal and use this access although it will be available for them to have this access. ERCOT does not believe the PUCT rule requires this access for ERCOT</p>
BR- 028.005	Ability to authenticate the initial TDSP Administrator, who is requesting access to the web portal data, actually represents the TDSP.
BR- 028.013	<p>Ability for an administrator to display the company related profile information of other administrators and users in their organizational entity and update select profile attributes:</p> <ul style="list-style-type: none"> <li>• User permissions</li> <li>• Company Name (in drop down list)</li> <li>• Company Address</li> </ul>
BR- 028.014	Ability for an administrator to grant, suspend or revoke access for users and other administrators in their organizational entity.
BR- 028.015	<p>Ability for an individual user to display and update user specific profile attributes.</p> <p>Includes the ability for the SMT web portal to provide an email notification to the user that the profile has been updated.</p>
BR- 028.016	Ability for each administrator within each organizational entity, other than the TDSP administrators, to have the same access and capability (e.g. no super administrators).
BR- 028.020	Ability for an initial user registration to send a notification to the administrator for approval of the user to access



## Smart Meter Texas Business Requirements

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ID	REQUIREMENT
	the SMT web portal.
BR- 028.021	Ability for an administrator to accept or reject the user request to register.
BR- 028.022	Ability for an administrator to view all permissions associated with user IDs in their organizational entity
BR- 031.012	Ability for each REP of Record administrator user account to be associated with multiple DUNS and for the TDSP to validate that the DUNS match the REP.
BR- 037	Ability to automatically log off users after 15 minutes of inactivity.
	<b><i>Ad-hoc Data Query Requirements</i></b>
BR- 005.001	Ability for the user to download / export (including using an API interface) the meter and premise attribute information in a standardized format.
BR- 024.011	Ability to stage the processing order of ad-hoc batch requests based on criteria.
BR- 024	<p>Ability for authorized users of the SMT web portal to initiate an ad-hoc request for retrieval of up to all of their ESIID usage data (e.g. machine to machine, API, web service, batch system access, etc.)</p> <ul style="list-style-type: none"> <li>• Users Include: <ul style="list-style-type: none"> <li>▪ REPs</li> <li>▪ Customer</li> <li>▪ 3<sup>rd</sup> party</li> </ul> </li> </ul>
BR- 079	Ability to make available “on demand” extracts, via an API, of usage information for any or all of the ESIIDs that a 3 <sup>rd</sup> party has access through a Letter of Authorization (LOA).
BR- 300	Ability for 3 <sup>rd</sup> Party users to request and receive up to all of their ESIID usage data in one API request.
BR- 001.003	Ability for the authorized user to export viewable data to a commonly accepted standard format (e.g. Excel).Note: the common format will be a CSV file

## **Smart Meter Texas Business Requirements**

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ID	REQUIREMENT
BR- 024.002	Ability for an authorized user to submit data queries through a programmatic interface for XX ESIIDs in support of ad hoc batch requests.
BR- 024.003	Ability for an authorized user to submit data queries through a programmatic interface for XX ESIIDs in support of online interface requests.
BR- 024.004	Ability for the SMT web portal to send the authorized user results to batch queries in X time.
BR- 024.005	Ability for the SMT web portal to send an authorized user results to online queries in X time.
BR- 024.006	Ability to request usage information for a specific date range and specific usage data interval, for which the meter is configured, for an ESIID, up to a maximum of 4 years.
BR- 024.007	Ability to notify requestor of exceptions to queries and reason for exceptions including negative reports indicating no data was available for the parameters specified.
BR- 024.008	Ability to send, in response to an ad-hoc batch query, the usage values, and associated date and time of each interval.
BR- 024.010	Ability for the SMT web portal to acknowledge to the requestor receipt of the request for data retrieval.
BR- 029.001	Ability to use a secure data transport methodology for the machine to machine interface.
BR- 029.002	Ability for an authorized user to send batch queries through a machine to machine interface for XX ESIIDs.
BR- 029.003	Ability to receive responses to batch queries in X time.
BR- 029.006	Ability for the SMT web portal to acknowledge to the requestor receipt of the of the request for data retrieval
	<b>Customer Data Management Requirements</b>

## Smart Meter Texas Business Requirements

Final – Project Record Version

November 2013

ID	REQUIREMENT
BR- 001	<p>Ability to view 15 minute interval usage data, the daily meter reading, and the interval time stamp, up to a maximum of 13 months. The units will be recorded in kwh with 3 significant digits to the right of the decimal.</p> <p>Note: REP of Record and TDSPs will have access to 48 months</p>
BR- 001.004	Ability to view information for one ESIID at a time.
BR- 001.005	Ability to change viewable parameters (e.g. select the time period to be displayed, ESIID).
BR- 001.006	Ability to retrieve and export usage information for multiple ESIIDs at a time.
BR- 001.007	Ability to display the usage data in graphical format based on a standard design for all TDSPs.
BR- 001.009	Ability to print the viewable usage data.
BR- 001.010	Ability to print the viewable usage data graph.
BR- 004	<p>Ability for the authorized user to view and export up to the most recent 24 months of ESIID / meter <b>monthly</b> AMS billed usage data for user selected dates.</p> <p><b>Note:</b> This requirement is intended to allow the user to see usage data relevant to a billed cycle(s). This duplicates the LOA process for the AMS meters.</p>
BR- 004.001	Ability for the Customer to view and export the AMS historical usage data specific to the Customer and their current premise.
BR- 004.002	Ability to view monthly billed AMS KWH usage information for one ESIID at a time.
BR- 004.003	Ability to change viewable parameters for monthly billed KWH usage data (e.g. select the time period to be displayed, ESIID).

## Smart Meter Texas Business Requirements

Final – Project Record Version

November 2013

ID	REQUIREMENT
BR- 004.004	Ability to retrieve and export monthly billed KWH usage data for multiple ESIDs at a time.
BR- 004.006	Ability to print the viewable monthly billed KWH usage data.
BR- 004.008	Ability to print the viewable monthly billed KWH usage graph.
BR- 005	Ability for users to retrieve and display meter and premise attribute information.
BR- 005.002	<p>Ability to display / export / download (including using an API interface) meter attribute information:</p> <p><b>Note:</b> Based on the user role, some fields may be hidden on the screen</p> <ul style="list-style-type: none"> <li>• Meter serial number</li> <li>• Meter multiplier</li> <li>• Total number of channels the meter has (not necessarily used)</li> <li>• Meter Manufacturer name</li> <li>• Last meter test date</li> <li>• Phases</li> <li>• Meter class (ampacity)</li> <li>• Date Meter was Installed</li> <li>• Initial Provision Date (date the meter becomes part of the AMS system)</li> <li>• Communication indicator (e.g. RF meter, power line carrier, etc.)</li> <li>• Instrument Rated (e.g. Current Transformer / Potential Transformer) <ul style="list-style-type: none"> <li>▪ Ratio of Current Transformers and Potential Transformers</li> </ul> </li> <li>• ESI Firmware version</li> <li>• HAN Protocol (ZigBee or HomePlug)</li> <li>• Meter configuration (which capabilities are enabled and how) <ul style="list-style-type: none"> <li>▪ Interval setting (how often the meter is recording usage)</li> <li>▪ KWH <ul style="list-style-type: none"> <li>▫ In flow / Out flow (DG) – both will be displayed as positive numbers</li> </ul> </li> </ul> </li> </ul>

## Smart Meter Texas Business Requirements

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November 2013

ID	REQUIREMENT
	<ul style="list-style-type: none"> <li>◦ Will need to identify the DG channel               <ul style="list-style-type: none"> <li>▪ KW</li> <li>▪ KVA</li> <li>▪ Remote disconnect / connect</li> </ul> </li> </ul> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>• These are only meter attributes and may not be how the meter is currently physically working</li> <li>• For a waived meter (a meter that has been waived of meeting all requirements of PUCT §25.130(g)) consider putting a “W” in the meter attribute field)</li> <li>• Some meter attributes are publicly available</li> </ul>
BR- 005.003	<p>Ability to display / export / download (including using an API interface) premise information.</p> <ul style="list-style-type: none"> <li>• Premise address (service address – house number, street name, city, state, zip)</li> <li>• ESIID</li> <li>• Meter number</li> <li>• Service Voltage (primary / secondary / transmission)</li> <li>• Meter Status – energized / de-energized</li> <li>• Premise Status – Active / inactive</li> <li>• Premise Time zone</li> <li>• TDSP Rate Code</li> </ul> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>• For a waived meter (a meter that has been waived of meeting all requirements of PUCT §25.130(g)) consider putting a “W” in the meter attribute field)</li> <li>• Some premise attributes are publicly available</li> </ul>
BR- 005.004	<p>Ability to view / export / download, including using an API interface, Meter capability information. (what a meter can do, but may not be doing) (e.g. disconnect / reconnect).</p>

## Smart Meter Texas Business Requirements

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ID	REQUIREMENT
	<b>Note:</b> Meters that are installed are likely to have different capabilities
BR- 008	<p>Ability to view, print, download / extract the usage data for a given period of time based on a supplied date to see all of the updates that have occurred to the data.</p> <p><b>Note:</b> If there are no updates to the usage data for the specified date and time parameter, a negative report will be returned indicating no information has been retrieved.</p>
BR- 019.009	Ability for the customer to view who is authorized for read only access to their data, at both the customer and the ESIID level.
BR- 048	<p>Ability to view and retrieve date / time implementation information (current date and time stamp for firmware revision number and 1 prior date and time stamp for firmware revision number) associated with meter and premise attributes updates:</p> <ul style="list-style-type: none"> <li>• Current Firmware revision number</li> <li>• Inflow / Outflow (distributed generation)</li> <li>• Which HAN communication protocol is enabled</li> <li>• Meter status (connected / disconnected)</li> <li>• Premise status (energized / de-energized)</li> </ul>
	<b>Data Repository Requirements</b>
BR- 001.001	<p>Ability to populate the SMT web portal with the daily VEE 15 minute interval usage 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).</p> <p><b>Note:</b> 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.</p>

## **Smart Meter Texas Business Requirements**

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ID	REQUIREMENT
BR- 001.002	<p>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.</p> <p><b>Note:</b> This only applies for the time period the AMS meter was there.</p> <p><b>Note:</b> 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.</p>
BR- 001.011	Ability to report usage values in kwh with 3 significant digits to the right of the decimal (mathematically 0.000 means zero).
BR- 009	Ability for the TDSP to revise historical AMS usage data and store the date / time stamp of the revision.
BR- 009.001	Ability to indicate whether the 15-minute interval usage data is an actual value or an estimate.
BR- 078	<p>Ability to maintain a maximum of 13 months of usage data from AMS meters online (accessible via the SMT web portal), and a total of 4 years of usage data accessible via API to REPs in order to conform to ERCOT Protocol Section 17.2.5 (and NODAL 17.3.5) and offline (accessible via a batch process) for 3 more years, for a total of 7 years).</p> <p>Note: All usage data will be available for 4 years online for the REP of record as well as via the API. Customers will be able to access 13 months.</p> <p>Depending on the amount of data being requested, the report may run in the background and the status will be returned to the UI with a link to the FTP site.</p>
	<b><i>ESIID Set Up Requirements</i></b>
BR- 043	Ability for a Customer to associate one or more ESIIDs with one Customer's logon user id and password.

## Smart Meter Texas Business Requirements

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ID	REQUIREMENT
BR- 043.007	Ability for the SMT web portal to validate the list of ESIIDs and send a real time error message for each ESIID that failed validation.
BR- 043.009	<p>Ability to prevent an ESIID from being assigned to more than one Customer user ID.</p> <p><b>Note:</b> This does not preclude the customer from allowing read only access to their data through the Friend user access functionality and the 3<sup>rd</sup> Party functionality.</p>
BR- 017.018	Ability to actively accept a terms of use disclosure on initial registration and when selecting a new ESIID.
BR- 043.001	<p>Ability for the Customer to upload a list of ESIIDs (one or more) and associated meter numbers to become associated with one user ID and password.</p> <p><b>Note:</b> 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</p>
BR- 043.002	Ability for the Customer to manually input one or more ESIIDs.
BR- 043.008	Ability for the customer to delete an ESIID associated with their account.
	<b><i>Event Management Requirements</i></b>
BR- 033.003	<p>Ability to provide, to all users, an announcement on the SMT web portal that the web portal is not available, during down times.</p> <p><b>Note:</b> This is different than the standard internet message that the URL cannot be accessed.</p>
BR- 070.002	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.



## Smart Meter Texas Business Requirements

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ID	REQUIREMENT
	<b><i>Friends &amp; Family Functionality Requirements</i></b>
BR- 043.003	Ability for a residential customer to grant, modify, or remove up to 5 Friend users (per User ID) access to view usage data for the customer's ESIID(s).  <b>Note:</b> this is not assigning the ESIID to the Friend users.
	<b><i>FTPS Requirements</i></b>
BR- 049	Ability for the SMT Host to make available, on an FTP site, daily extracts of usage information added to the common data repository since the last extract for all usage data of the REP of Record's ESIIDs.  <b>Note:</b> This will reduce the traffic on the common data repository
BR- 049.002	Ability for the SMT Host to retain the extract for 10 calendar days and then purge the extract.
	<b><i>General Solution Requirements</i></b>
BR- 021	Ability to provide any information displayed for the Customer in English or Spanish.  <b>Note:</b> Spanish support is for residential customers only
BR- 021.003	Ability to provide customer education on the portal in English or Spanish and display based on the language preference in the profile.
BR- 021.005	Ability to have English be the default language upon initial login.
BR- 028.006	Ability to use a secure internet protocol (e.g. HTTPS, etc.) for all functions on the SMT web portal.
BR- 033	Ability to have 24x7x365 access to the SMT web portal.

## Smart Meter Texas Business Requirements

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ID	REQUIREMENT
	<b>Note:</b> There will be predetermined agreed upon maintenance windows or down times when full access to the portal may not be available. These may change over time.
BR- 036	Ability to provide ADA compliant Customer web portal user interfaces.
BR- 036.001	Ability to conform to the ADA section 508 accessibility standard.  <b>Note:</b> Utilize WCAG 2.0
BR- 062	Ability to navigate to all pre-determined user interfaces through a central location (i.e., home page).
BR- 070	Ability to have web portal host owner functionality.
	<b>Green Button Requirements</b>
BR- 306	Ability for 3 <sup>rd</sup> parties to use Green Button functionality to access customer data (e.g. Open ADE, Open ESPI, etc.)

ID	Requirement
	<b>HAN Functionality Requirements – Device Status</b>
BR- 006.016	Ability to immediately notify the authorized user if a previously provisioned HAN device becomes disconnected (i.e. unpaired) from the meter.
BR- 006.017	Ability to for an authorized user to immediately determine if there is a communication error on the meter for one ESIID at a time (i.e. affecting HAN device communication)

## Smart Meter Texas Business Requirements

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ID	Requirement
	<b>Note:</b> via machine to machine interface and GUI
BR- 006.018	Ability to notify an authorized user if there is a communication error on the meter for all ESIID's at the time that the error occurs (i.e. affecting HAN device communication)
BR- 006.020	<p>Ability for an authorized user to view a current status of a paired HAN device on SMT as the device becomes inactive.</p> <p><b>Note:</b> via machine to machine interface and GUI</p>
BR- 006.014b	<p>Ability for an authorized user to immediately determine whether a previously provisioned HAN device is still connected (i.e. paired) to the meter for one ESIID at a time.</p> <p><b>Note:</b> via machine to machine interface and GUI</p>
BR- 006.015b	<p>Ability for an authorized user to immediately determine whether a previously provisioned HAN device is still connected (i.e. paired) to the meter for more than one ESIID at a time.</p> <p><b>Note:</b> via machine to machine interface and GUI</p>
BR- 006.019	<p>Ability for an authorized user to immediately determine the near real time status of the meter (e.g. device added, meter ready, etc.)</p> <p><b>Note:</b> via machine to machine interface and GUI</p>
BR- 068.002	<p>Ability to update the list of Provisioned HAN Devices, in the SMT web portal, after the successful Provisioning of a HAN Device with an ESI.</p> <p><b>Note:</b> The market desires this to occur in under 1 minute, in order to support a good customer experience. This</p>

## Smart Meter Texas Business Requirements

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November 2013

ID	Requirement
	will be defined by SLAs.
BR- 068.005	Ability to display on the SMT web portal a free-form text label identifying a Provisioned HAN Device.
BR- 081.002	<p>Ability to update the list of Provisioned HAN Devices and pending Provision requests by removing the De-Provisioned HAN Device or deleting the request to Provision from the list, after the successful De-Provisioning of a HAN Device or after the successful deletion of the pending Provision request.</p> <p><b>Note:</b> The market desires this to occur in under 1 minute, in order to support a good customer experience. This will be defined by SLAs.</p>
	<b>HAN Functionality Requirements – ESIID Groups</b>
BR- 025.006	Ability for an authorized user to create ESIID groups for sending messages to Provisioned HAN Devices through the SMT web portal or an API.
	<b>HAN Functionality Requirements – De-Provision</b>
BR- 081.003	<p>Ability for an authorized user to select a Provisioned HAN Device or pending Provision request, from a list displayed on the SMT web portal, for purposes of De-Provisioning a Provisioned HAN Device or deleting the pending Provision request.</p> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>• Only TDSPs can delete a pending Provision request</li> <li>• 3<sup>rd</sup> Parties and customers can select a device to de-provision through GUI</li> </ul>
BR- 400	Ability for an authorized user to extract and report on reasons and source for why a device(s) was de-provisioned based on defined roles.

## **Smart Meter Texas Business Requirements**

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ID	Requirement
BR- 084	Ability to display a notice that the TDSP has de-provisioned a HAN device based on defined reason codes.
BR- 081	Ability for an authorized user to send a request to De-Provision a HAN Device or delete a pending provision request through the SMT web portal.
BR- 081.004	Ability to time-date stamp a request and identify and log which authorized user requested to De-Provision a HAN Device when the request is received by the SMT web portal.
	<b><i>HAN Functionality Requirements - General</i></b>
BR- 080	Ability to uniquely identify an ESI with only the meter number and ESIID
BR- 025	Ability for the SMT web portal to facilitate communication to and from Provisioned HAN Devices over the AMS network.
	<b><i>HAN Functionality Requirements - Messaging</i></b>
BR- 053	<p>Ability for an authorized user to assign a priority to a message sent through the common web portal to the HAN devices (i.e., demand response events and price signals should have a high priority and should be sent immediately, etc.).</p> <p><b>Note:</b> The structure for selecting and applying priorities to messages is there, but SMT is not programmed to recognize or act on the priority</p>
BR- 053.001	<p>Ability for an authorized user to assign priorities (High, Medium, and Low) to HAN messages sent to Provisioned HAN Devices</p> <p><b>Note:</b> This may be accomplished through an API, as well as a User Interface</p>
BR- 053.002	Ability for High priority messages to be delivered to HAN Devices in near real-time

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BR- 053.003	Ability for Medium priority messages to be delivered to HAN Devices in less than 2 hours.
BR- 053.004	Ability for Low priority messages to be delivered to HAN Devices in less than 24 hours.
BR- 053.005	Ability for the REP to assign priorities (High and Low) to HAN messages sent from the HAN Device to the Rep of Record (i.e., this is the message acknowledgement).
BR- 053.006	Ability for High priority messages (e.g. HAN Device provisioning, customer opt-out of demand response, etc.) from Provisioned HAN Devices to be made available to the authorized user in near real-time through the ESI.
BR- 053.007	Ability for Low priority messages from HAN Devices to be made available to the authorized user each time the AMS meter is read.
BR- 025.007	<p>Ability to utilize a standardized message size for HAN messages through the portal.</p> <p><b>Note:</b> This may be required to manage the bandwidth utilization.</p>
BR- 025.008	<p>Ability to send and receive x volume of HAN messages through the SMT web portal.</p> <p><b>Note:</b> This may be required to manage the bandwidth utilization.</p>
BR- 025.012	Ability for authorized users to send messages between the SMT web portal using the AMS network to Provisioned HAN devices, in accordance with message priority, using a standardized API interface.
BR- 064	<p>Ability for an authorized user to initiate a message on the SMT web portal that will be sent through the AMS network to the ESI.</p> <p><b>Note:</b> This is available through the API</p>
	<b>HAN Functionality Requirements – Message Status</b>

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BR- 025.009a	Ability to make available, to an authorized user, the failure status of a message sent to the ESI or that failed to be sent from the ESI to the Provisioned HAN Device (e.g. message not sent, message in queue, message undeliverable, message failed, number of retries, etc.).
BR- 025.009b	Ability to display to an authorized user the status of a message sent to a Provisioned HAN Device (e.g. message not sent, message in queue, message undeliverable, message failed, number of retries, etc.).
BR- 025.004	<p>Ability for an authorized user to send a message and receive the status of this communication from the SMT web portal to the ESI.</p> <p><b>Note:</b> Message status report is only available via a user request</p>
BR- 025.005	<p>Ability for the ESI to report the failure to deliver HAN messages and the AMS network to make available such report to the initiator of the message.</p> <p><b>Note:</b> Failed messaging status report is only available via a user request</p>
	<b>HAN Functionality Requirements - Permissions</b>
BR- 025.003a	Ability to authenticate that the user sending / receiving messages through the SMT web portal to / from the ESI is authorized to send / receive messages to / from this ESI.
BR- 025.011	Ability to grant authorized users all or a subset of HAN Device roles and permissions by HAN device at the individual device level.
BR- 401	Ability for the Customer to grant 3 <sup>rd</sup> Parties permission to control (provision, de-provision, message) their HAN device(s).
BR- 025.003b	Ability to authenticate that the user sending / receiving messages through the SMT web portal to / from a Provisioned HAN Device type is authorized to send / receive messages to / from this HAN Device type.

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BR- 025.010	Ability to grant an authorized user the authority to provision / de-provision a specific HAN Device.
BR- 069	Ability for an Administrator to grant or revoke access to users, within their organizational entity, for HAN permissions (e.g., as an Administrator you can control who within the organization has access to control a HAN Device, etc.) on customer's Provisioned HAN devices.
BR- 085	Ability for an Admin to display user HAN permissions in their organizational entity
	<b>HAN Functionality Requirements – Provision HAN Device</b>
BR- 068.001	Ability to uniquely identify a HAN Device for purposes of Provisioning to the ESI with only HAN Device networking details (e.g. MAC Address, Installation codes)
BR- 068.003b	<p>Ability for an authorized user to provision (to the ESI) multiple HAN devices at one or more premises at the same time.</p> <p><b>Note:</b> A possible solution to provision multiple HAN Devices is using a standard API interface across TDSPs.</p>
BR- 068.009	Ability for the TDSP to add the meter security information to an authorized user's request to Provision a HAN Device to complete the HAN Device Provisioning process.
BR- 068.010	Ability to time-date stamp a request to Provision a HAN Device when the request is received by the SMT web portal.
BR- 068	<p>Ability for an authorized user to Provision a HAN Device through the SMT web portal.</p> <p><b>Note:</b> Think about different methods of acquiring a device and how to grant access to the device.</p>
BR- 068.003a	Ability for an authorized user to provision (to the ESI) one HAN device at a time through the SMT web portal, or an API.



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BR- 068.004	Ability for an authorized user to label a HAN Device in free-form text at the time of the Provisioning request.
BR- 068.006	Ability to display a notification to an authorized user who is trying to provision a HAN device that all the ESI slots are filled at the time of provisioning request.
BR- 068.007	<p>Ability for an authorized user to request to Provision a HAN Device, by providing to the TDSP through the common Web Portal the ESIID, meter number and HAN Device networking details (e.g. MAC Address, Installation codes).</p> <p><b>Note:</b> This may be done through a Web Portal UI or a standard API interface.</p>
	<b><i>HAN Functionality Requirements – View Devices</i></b>
BR- 063	Ability to display to an authorized user how many HAN Devices have been provisioned to the ESI (including the description of each Provisioned HAN Device) and how many pending Provision requests.
BR- 063.001	Ability to allow an authorized user access to view a list of all Provisioned HAN Devices and pending Provision requests for an ESI.
	<b><i>Help Functionality Requirements</i></b>
BR- 021.004	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.
BR- 034	Ability to have online help on the SMT web portal that explains how to use functions of the web portal.
BR- 034.001	Ability to maintain and display (add, modify) SMT web portal specific FAQs.
BR- 034.002	Ability to print help material that is displayed on the SMT web portal.

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BR- 034.003	Ability to maintain and display (add, modify) the contact information listed in the help for SMT web portal access and technical help only.
BR- 034.004	Ability to search for a particular help topic.
BR- 034.005	Ability to download the help material information.
BR- 034.006	Ability to link to other outside sources to display help information.
BR- 034.007	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.
BR- 051	Ability for the REP of Record to have access to the appropriate Customer screens in English or Spanish.
BR- 051.001	Ability for the REP of Record to dynamically switch display language (English or Spanish), without it changing the REP user's default profile.
BR- 052	Ability to have an online demonstration guide.
BR- 054	<p>Ability for the customers to view, on the SMT web portal, general information and education regarding AMS deployment related to the customer.</p> <p><b>Note:</b> This could be a link to the TDSP's website for their deployment information</p>
BR- 070.001	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.
	<b><i>Lifecycle Management Requirements</i></b>
BR- 031.001	Ability for REP of record access to all the functions associated with the ESIID to be automatically revoked when

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	the REP is no longer the REP of Record due to a switch or move out.
BR- 044	Ability to terminate <u>all users access</u> to premise specific information whenever the TDSP is notified a Customer has moved out of a premise, via Texas SET transaction, including any authorization for 3 <sup>rd</sup> party access and permissions to usage history, HAN control (e.g., the LOAs associated with the user's ESIIDs, Friend user access, primary ESIID assignment, etc.).
	<b><i>On-Request Poll for Power Status Requirements</i></b>
BR- 006.003	Ability to poll for power status (i.e. does the premise have power currently).
BR- 006.014	Ability for the authorized user to immediately determine whether there is currently power on at the meter for one ESIID at a time.  <b>Note:</b> via machine to machine interface and GUI
BR- 006.015	Ability for the authorized user to immediately obtain the near real time status of the connect/disconnect switch for the meter for one ESIID at a time  <b>Note:</b> via machine to machine interface and GUI
	<b><i>On-Demand Meter Read Requirements</i></b>
BR- 006.010	Ability for an authorized user to obtain immediate access to the near real time register read with a date and time stamp of the read for one ESIID at a time.
	<b><i>Registration Requirements</i></b>
BR- 017	Ability for the user to electronically set up and maintain a user ID and password for accessing appropriate web

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	portal information.
BR- 028.001	<p>Ability to initially authenticate the customer who is requesting access to the data.</p> <p><b>Note:</b> The customer will be required to provide the ESIID, meter number, and REP of Record when they initially register.</p>
BR- 028.011	Ability to establish up to four administrators per organizational entity (i.e. TDSP, REP, 3 <sup>rd</sup> Party, Business Customer, Regulatory)
BR- 028.012	<p>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.)</p> <p><b>Note:</b> This is one outbound communication point that can be updated.</p>
BR- 028.017	Ability to require each user (admin and non-admin) to have a unique user id for access to the common web portal (e.g. there cannot be 2 rsmith user ids)
BR- 028.025	<p>Ability to prevent a customer role from being bundled with any other role other than a customer, under the same User ID</p> <p><b>Note:</b> Any non-customer user will not be able to perform all customer functions without logging on using their customer User ID (e.g. modify customer user profile, grant LOA, etc.)</p> <ul style="list-style-type: none"> <li>• The roles may not be as specific as TDSP Admin, or REP admin, there may be many more than the obvious roles, e.g.:</li> <li>• REP user</li> <li>• REP Admin</li> </ul>

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	<ul style="list-style-type: none"> <li>• REP user and REP Admin</li> <li>• REP of Record and / or 3<sup>rd</sup> Party access</li> </ul> <p><b>Note:</b> A user that has access to multiple role capabilities will need to accept terms and conditions that cover the various roles</p>
BR- 028.005b	Ability to authenticate any Host user who is requesting access to the data.
BR- 028.019a	Ability for a Host Admin to authenticate a PUCT user who is requesting “read only” access to the web portal.
	<b>Portlet Requirements</b>
BR- 001.008	Ability to display usage data in portlets for REPs and 3 <sup>rd</sup> Parties to develop and use, on their own, with their own logo.
BR- 004.005	Ability to display monthly billed KWH usage data in portlets for REPs and 3 <sup>rd</sup> Parties to develop and use, on their own, with their own logo.
	<b>Reporting Requirements</b>
BR- 028.008	Ability for the SMT web portal to provide to the Commission, upon request, a history of who is accessing the portal data.
	<b>Security and Identity Management Requirements</b>
BR- 017.010	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.
BR- 017.011	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.

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	(e.g. send and receive a confirmation).
BR- 017.016	Ability to require a user to change their temporary password after the first log-in with their temporary password.
BR- 061	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.
BR- 028.024	Ability to restrict TDSP access only to data associated with the ESIIDs within that TDSPs territory (e.g., meter data, premise data, usage data)
BR- 031	Ability to establish and maintain security controls associated with portal access for REP of Record.
BR- 028.010	Ability to grant and/or block access to certain data based on security level (e.g. Customer role, REP role, Admin role, etc.)
BR- 031.002	Ability to allow REP of Record access to usage data, meter attributes, and premise information for ESIIDS that are currently served by that REP.
BR- 017.017	Ability to utilize security (e.g. CAPTCHA) procedures during the user's initial registration.  Includes the ability to cancel the registration process to the SMT web portal requiring the user to start the registration process over, after 3 unsuccessful attempts to correctly enter the CAPTCHA.
BR- 028	Ability to provide appropriate level of security depending on who is accessing the ESIID data on the SMT web portal.
BR- 028.007	Ability to adhere to best practices as defined by PCI, NERC CIP cyber security standards.
BR- 017.003	Ability to allow a minimum of at least 6 characters and no more than 24 characters letters and numbers, case sensitive, in the password.

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	Additionally, the password cannot be the user name.
BR- 017.007	Ability to set up and store a user specified password security question and answer.
BR- 017.002	Ability to allow up to a minimum of 5 and a maximum of 100 alphas / numbers / special characters, except slashes and single and double quotes, in the user ID.
	<b>3<sup>rd</sup> Party Functionality Requirements</b>
BR- 019.002	Ability for the SMT web portal to contain a list of current 3 <sup>rd</sup> parties who are registered on the web portal
BR- 073	Ability to purge a 3 <sup>rd</sup> party after 13 months of inactivity by all of their user id(s) and remove the 3 <sup>rd</sup> party from associations they have.
BR- 303	Ability for 3 <sup>rd</sup> parties to request a report via API of all the ESIIDs they are authorized to view.
BR- 303.001	Ability for 3 <sup>rd</sup> parties to search and view a list of the ESIIDs they are authorized to view  Ability to include in the report who the associated TDSP is for each ESIID the 3 <sup>rd</sup> party has access to
BR- 305	Ability to discontinue 3 <sup>rd</sup> party API access for any 3 <sup>rd</sup> party API user who is inactive for 13 months and after notification.
BR- 307	Ability to view a customer education video about 3 <sup>rd</sup> party access
BR- 308	Ability for 3 <sup>rd</sup> parties to have access to updated API process and procedure documentation
BR- 019.015	Ability for 3 <sup>rd</sup> parties and Customers to set up LOAs.

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BR- 019	Ability for a Customer to electronically authorize release of usage data to a 3 <sup>rd</sup> party (i.e. someone other than the REP of Record - either a REP, aggregator, or registered 3 <sup>rd</sup> party).
BR- 019.008	Ability for the Customer to actively select a specific expiration date or unlimited access timeframe for 3 <sup>rd</sup> party access other than the default of 6 months
BR- 019.010	Ability for the Customer to electronically allow select / revoke which 3 <sup>rd</sup> parties are authorized for read-only access to their data
BR- 019.012	Ability for a 3rd party to attest on the SMT web portal that they have a Customer authorization authorizing them to read only access the Customer's data
BR- 019.014	Ability for 3 <sup>rd</sup> parties and / or Customers to receive a notification when access has been granted, access has been changed, or access has been revoked for an ESIID
BR- 019.016	Ability for 3 <sup>rd</sup> parties to search and view a list of the ESIIDs they are authorized to view
BR- 028.009	Ability for the SMT web portal to provide to the Commission, upon request, a history for the time period when different 3 <sup>rd</sup> parties had access to the customer portal data via an API.
BR- 019.001	Ability for a Customer to allow multiple registered 3 <sup>rd</sup> parties to have limited time based read only access, with a default expiration of 6 months, to their usage data on the SMT web portal
BR- 309	Ability for Customer to select the reason they are rejecting a 3rd Party Agreement
BR- 310	Ability for Customers and regulatory officials to view the number and types of usage reports being run on the consumer's usage data. The data elements provided; ESIID, ESIID class, requesting party, date requested, date provided, type of request. Provide data individually and in aggregate with reporting options by ESIID and or date range and or requesting party and or ESIID Class.



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<b>ID</b>	<b>Requirement</b>
BR- 311	Ability for a 3 <sup>rd</sup> party to provide Customers a link to their privacy policy.