

CHAPTER 25. SUBSTANTIVE RULES APPLICABLE TO ELECTRIC SERVICE PROVIDERS.

Subchapter F. METERING.

§25.130. Advanced Metering.

- (a) **Purpose.** This section addresses the deployment, operation, and cost recovery for advanced metering systems.
- (b) **Applicability.** This section is applicable to all electric utilities, including transmission and distribution utilities. Any requirement applicable to an electric utility in this section that relates to retail electric providers (REPs) or REPs of record is applicable only to electric utilities operating in areas open to customer choice.
- (c) **Definitions.** As used in this section, the following terms have the following meanings, unless the context indicates otherwise:
- (1) Advanced meter -- Any new or appropriately retrofitted meter that functions as part of an advanced metering system and that has the minimum system features specified in this section, except to the extent the electric utility has obtained a waiver of a minimum feature from the commission.
 - (2) Advanced Metering System (AMS) -- A system, including advanced meters and the associated hardware, software, and communications systems, including meter information networks, that collects time-differentiated energy usage and performs the functions and has the features specified in this section.
 - (3) Deployment Plan -- An electric utility's plan for deploying advanced meters in accordance with this section and either filed with the commission as part of the Notice of Deployment or approved by the commission following a Request for Approval of Deployment.
 - (4) Enhanced advanced meter -- A meter that contains features and functions in addition to the AMS features in the deployment plan approved by the commission.
 - (5) Web portal -- The website made available on the internet in compliance with this section by an electric utility or a group of electric utilities through which secure, read-only access to AMS usage data is made available to the customer, the customer's REP of record, and entities authorized by the customer.
- (d) **Deployment and use of advanced meters.**
- (1) Deployment and use of an AMS by an electric utility is voluntary unless otherwise ordered by the commission. However, deployment and use of an AMS for which an electric utility seeks a surcharge for cost recovery must be consistent with this section, except to the extent that the electric utility has obtained a waiver from the commission.
 - (2) Six months prior to initiating deployment of an AMS or as soon as practicable after the effective date of this section, whichever is later, an electric utility that intends to deploy an AMS must file a statement of AMS functionality, and either a notice of deployment or a request for approval of deployment. An electric utility may request a surcharge under subsection (k) of this section in combination with a notice of deployment or a request for approval of deployment, or separately. A proceeding that includes a request to establish or amend a surcharge will be a ratemaking proceeding and a proceeding involving only a request for approval of deployment will not be a ratemaking proceeding.
 - (3) The statement of AMS functionality must:
 - (A) state whether the AMS meets the requirements specified in subsection (g) of this section and what additional features, if any, it will have;
 - (B) describe any variances between technologies and meter functions within the electric utility's service territory; and
 - (C) state whether the electric utility intends to seek a waiver of any provision of this section in its request for surcharge.
 - (4) A deployment plan must contain the following information:
 - (A) Type of meter technology;
 - (B) Type and description of communications equipment in the AMS;
 - (C) Systems that will be developed during the deployment period;

CHAPTER 25. SUBSTANTIVE RULES APPLICABLE TO ELECTRIC SERVICE PROVIDERS.

Subchapter F. METERING.

- (D) A timeline for the web portal development or integration into an existing web portal;
 - (E) A deployment schedule by specific area (geographic information); and
 - (F) A schedule for deployment of web portal functionalities.
- (5) An electric utility must file with the deployment plan, testimony and other supporting information, including estimated costs for all AMS components, estimated net operating cost savings expected in connection with implementing the deployment plan, and the contracts for equipment and services associated with the deployment plan, that prove the reasonableness of the plan.
- (6) Competitively sensitive information contained in the deployment plan and the monthly progress reports required under paragraph (9) of this subsection may be filed confidentially. An electric utility's deployment plan must be maintained and made available for review on the electric utility's website. Competitively sensitive information contained in the deployment plan must be maintained and made available at the electric utility's offices in Austin. Any REP that wishes to review competitively sensitive information contained in the electric utility's deployment plan available at its Austin office may do so during normal business hours upon reasonable advanced notice to the electric utility and after executing a non-disclosure agreement with the electric utility.
- (7) If the request for approval of a deployment plan contains the information described in paragraph (4) of this subsection and the AMS features described in subsection (g)(1) of this section, then the commission will approve or disapprove the deployment plan within 150 days, but this deadline may be extended by the commission for good cause.
- (8) An electric utility's treatment of AMS, including technology, functionalities, services, deployment, operations, maintenance, and cost recovery must not be unreasonably discriminatory, prejudicial, preferential, or anticompetitive.
- (9) Each electric utility must provide progress reports on a monthly basis following the filing of its deployment plan with the commission until deployment is complete. Upon filing of such reports, an electric utility operating in an area open to customer choice must notify all REPs of the filing through standard market notice procedures. A monthly progress report must be filed within 15 days of the end of the month to which it applies, and must include the following information:
- (A) the number of advanced meters installed, listed by electric service identifier for meters in the Electric Reliability Council of Texas (ERCOT) region. Additional deployment information if available must also be provided, such as county, city, zip code, feeder numbers, and any other easily discernable geographic identification available to the electric utility about the meters that have been deployed;
 - (B) significant delays or deviation from the deployment plan and the reasons for the delay or deviation;
 - (C) a description of significant problems the electric utility has experienced with an AMS, with an explanation of how the problems are being addressed;
 - (D) the number of advanced meters that have been replaced as a result of problems with the AMS; and
 - (E) the status of deployment of features identified in the deployment plan and any changes in deployment of these features.
- (10) If an electric utility has received approval of its deployment plan from the commission, the electric utility must obtain commission approval before making any changes to its AMS that would affect the ability of a customer, the customer's REP of record, or entities authorized by the customer to utilize any of the AMS features identified in the electric utility's deployment plan by filing a request for amendment to its deployment plan. In addition, an electric utility may request commission approval for other changes in its approved deployment plan. The commission will act upon the request for an amendment to the deployment plan within 45 days of submission of the request, unless good cause exists for additional time. If an electric utility filed a notice of deployment, the electric utility must file an amendment to its notice of deployment at least 45 days before making any changes to its AMS that would affect the ability of a customer, the customer's REP of record, or entities authorized by the customer to utilize any of the AMS features identified in the electric utility's notice of deployment. This paragraph does not in any way preclude the electric utility from conducting its normal operations and maintenance with respect to the electric utility's transmission and distribution system and metering systems.

CHAPTER 25. SUBSTANTIVE RULES APPLICABLE TO ELECTRIC SERVICE PROVIDERS.

Subchapter F. METERING.

- (11) During and following deployment, any outage related to normal operations and maintenance that affects a REP's ability to obtain information from the system must be communicated to the REP through the outage and restoration notice process according to Applicable Legal Authorities, as defined in §25.214(d)(1) of this title (relating to Tariff for Retail Delivery Service). Notification of any planned or unplanned outage that affects access to customer usage data must be posted on the electric utility's web portal home page.
 - (12) An electric utility subject to §25.343 of this title (relating to Competitive Energy Services) must not provide any advanced metering equipment or service that is deemed a competitive energy service under that section. Any functionality of the AMS that is a required feature under this section or that is included in an approved deployment plan or otherwise approved by the commission does not constitute a competitive energy service under §25.343 of this title.
 - (13) An electric utility's deployment and provision of AMS services and features, including but not limited to the features required in subsection (g) of this section, are subject to the limitation of liability provisions found in the electric utility's tariff.
- (e) **Technology requirements.** Except for pilot programs, an electric utility must not deploy AMS technology that has not been successfully installed previously with at least 500 advanced meters in North America, Australia, Japan, or Western Europe.
- (f) **Pilot programs.** An electric utility may deploy AMS with up to 10,000 meters that do not meet the requirements of subsection (g) of this section in a pilot program, to gather additional information on metering technologies, pricing, and management techniques, for studies, evaluations, and other reasons. A pilot program may be used to satisfy the requirement in subsection (e) of this section. An electric utility is not required to obtain commission approval for a pilot program. Notice of the pilot program and opportunity to participate must be sent by the electric utility to all REPs and all entities authorized by a customer to have read-only access to the customer's advanced meter data.
- (g) **AMS features.**
- (1) An AMS must provide or support the following minimum system features:
 - (A) automated or remote meter reading;
 - (B) two-way communications between the meter and the electric utility;
 - (C) remote disconnection and reconnection capability for meters rated at or below 200 amps.
 - (D) time-stamped meter data;
 - (E) access to customer usage data by the customer, the customer's REP of record, and entities authorized by the customer provided that 15-minute interval or shorter data from the electric utility's AMS must be transmitted to the electric utility's or a group of electric utilities' web portal on a day-after basis;
 - (F) capability to provide on-demand reads of a customer's advanced meter through the graphical user interface of an electric utility's or a group of electric utilities' web portal when requested by a customer, the customer's REP of record, or entities authorized by the customer subject to network traffic such as interval data collection, market orders if applicable, and planned and unplanned outages;
 - (G) for an electric utility that provides access through an application programming interface, the capability to provide on-demand reads of a customer's advanced meter data, subject to network traffic such as interval data collection, market orders if applicable, and planned and unplanned outages;
 - (H) on-board meter storage of meter data that complies with nationally recognized non-proprietary standards such as in American National Standards Institute (ANSI) C12.19 tables or International Electrotechnical Commission (IEC) DLMS-COSEM standards;
 - (I) open standards and protocols that comply with nationally recognized non-proprietary standards such as ANSI C12.22, including future revisions;
 - (J) for an electric utility in the ERCOT region, the capability to communicate with devices inside the premises, including, but not limited to, usage monitoring devices, load control devices, and prepayment systems through a home area network (HAN), based on open

CHAPTER 25. SUBSTANTIVE RULES APPLICABLE TO ELECTRIC SERVICE PROVIDERS.

Subchapter F. METERING.

- standards and protocols that comply with nationally recognized non-proprietary standards such as ZigBee, Home-Plug, or the equivalent through the electric utility's AMS. This requirement applies only to a HAN device paired to a meter and in use at the time that the version of the web portal approved in Docket Number 47472 was implemented and terminates when the HAN device is disconnected at the request of the customer or a move-out transaction occurs for the customer's premises; and
- (K) the ability to upgrade these features as the need arises.
- (2) A waiver from any of the requirements of paragraph (1) of this subsection may be granted by the commission if it would be uneconomic or technically infeasible to implement or there is an adequate substitute for that particular requirement. The electric utility must meet its burden of proof in its waiver request.
- (3) In areas where there is not a commission-approved independent regional transmission organization, standards referred to in this section for time tolerance and data transfer and security may be approved by a regional transmission organization approved by the Federal Energy Regulatory Commission or, if there is no approved regional transmission organization, by the commission.
- (4) Once an electric utility has deployed its advanced meters, it may add or enhance features provided by AMS, as technology evolves. The electric utility must notify the commission and REPs of any such additions or enhancements at least three months in advance of deployment, with a description of the features, the deployment and notification plan, and the cost of such additions or enhancements, and must follow the monthly progress report process described in subsection (d)(9) of this section until the enhancement process is complete.
- (h) **Discretionary Meter Services.** An electric utility that operates in an area that offers customer choice must offer, as discretionary services in its tariff, installation of enhanced advanced meters and advanced meter features.
- (1) A REP may request the electric utility to provide enhanced advanced meters, additional metering technology, or advanced meter features not specifically offered in the electric utility's tariff, that are technically feasible, generally available in the market, and compatible with the electric utility's AMS.
- (2) The REP must pay the reasonable differential cost for the enhanced advanced meters or features and system changes required by the electric utility to offer those meters or features.
- (3) Upon request by a REP, an electric utility must expeditiously provide a report to the REP that includes an evaluation of the cost and a schedule for providing the enhanced advanced meters or advanced meter features of interest to the REP. The REP must pay a reasonable discretionary services fee for this report. This discretionary services fee must be included in the electric utility's tariff.
- (4) If an electric utility deploys enhanced advanced meters or advanced meter features not addressed in its tariff at the request of the REP, the electric utility must expeditiously apply to amend its tariff to specifically include the enhanced advanced meters or meter features that it agreed to deploy. Additional REPs may request the tariffed enhanced advanced meters or advanced meter features under the process described in this paragraph of this subsection.
- (i) **Tariff.** All discretionary AMS features offered by the electric utility must be described in the electric utility's tariff.
- (j) **Access to meter data.**
- (1) A customer may authorize its meter data to be available to an entity other than its REP. An electric utility must provide a customer, the customer's REP of record, and other entities authorized by the customer read-only access to the customer's advanced meter data, including meter data used to calculate charges for service, historical load data, and any other proprietary customer information. The access must be convenient and secure, and the data must be made available no later than the day after it was created.
- (2) The requirement to provide access to the data begins when the electric utility has installed 2,000 advanced meters for residential and non-residential customers. If an electric utility has already

CHAPTER 25. SUBSTANTIVE RULES APPLICABLE TO ELECTRIC SERVICE PROVIDERS.

Subchapter F. METERING.

installed 2,000 advanced meters by the effective date of this section, the electric utility must provide access to the data in the timeframe approved by the commission in either the deployment plan or request for surcharge proceeding. If only a notice of deployment has been filed, access to the data must begin no later than six months from the filing of the notice of deployment with the commission.

- (3) An electric utility's or group of electric utilities' web portal must use appropriate and reasonable standards and methods to provide secure access for the customer, the customer's REP of record, and entities authorized by the customer to the meter data. The electric utility must have an independent security audit conducted within one year of providing that access to meter data. The electric utility must promptly report the audit results to the commission.
 - (4) The independent organization, regional transmission organization, or regional reliability entity must have access to information that is required for wholesale settlement, load profiling, load research, and reliability purposes.
- (k) **Cost recovery for deployment of AMS.**
- (1) **Recovery Method.** The commission will establish a nonbypassable surcharge for an electric utility to recover reasonable and necessary costs incurred in deploying AMS to residential customers and nonresidential customers other than those required by the independent system operator to have an interval data recorder meter. The surcharge must not be established until after a detailed deployment plan is filed under subsection (d) of this section. In addition, the surcharge must not ultimately recover more than the AMS costs that are spent, reasonable and necessary, and fully allocated, but may include estimated costs that will be reconciled pursuant to paragraph (6) of this subsection. As indicated by the definition of AMS in subsection (c)(2) of this section, the costs for facilities that do not perform the functions and have the features specified in this section must not be included in the surcharge provided for by this subsection unless an electric utility has received a waiver under subsection (g)(2) of this section. The costs of providing AMS services include those costs of AMS installed as part of a pilot program under this section. Costs of providing AMS for a particular customer class must be surcharged only to customers in that customer class.
 - (2) **Carrying Costs.** The annualized carrying-cost rate to be applied to the unamortized balance of the AMS capital costs must be the electric utility's authorized weighted-average cost of capital (WACC). If the commission has not approved a WACC for the electric utility within the last four years, the commission may set a new WACC to apply to the unamortized balance of the AMS capital costs. In each subsequent rate proceeding in which the commission resets the electric utility's WACC, the carrying-charge rate that is applied to the unamortized balance of the utility's AMS costs must be correspondingly adjusted to reflect the new authorized WACC.
 - (3) **Surcharge Proceeding.** In the request for surcharge proceeding, the commission will set the surcharge based on a levelized amount, and an amortization period based on the useful life of the AMS. The commission may set the surcharge to reflect a deployment of advanced meters that is up to one-third of the electric utility's total meters over each calendar year, regardless of the rate of actual AMS deployment. The actual or expected net operating cost savings from AMS deployment, to the extent that the operating costs are not reflected in base rates, may be considered in setting the surcharge. If an electric utility that requests a surcharge does not have an approved deployment plan, the commission in the surcharge proceeding may reconcile the costs that the electric utility already spent on AMS in accordance with paragraph (6) of this subsection and may approve a deployment plan.
 - (4) **General Base Rate Proceeding while Surcharge is in Effect.** If the commission conducts a general base rate proceeding while a surcharge under this section is in effect, then the commission will include the reasonable and necessary costs of installed AMS equipment in the base rates and decrease the surcharge accordingly, and permit reasonable recovery of any non-AMS metering equipment that has not yet been fully depreciated but has been replaced by the equipment installed under an approved deployment plan.
 - (5) **Annual Reports.** An electric utility must file annual reports with the commission updating the cost information used in setting the surcharge. The annual reports must include the actual costs

CHAPTER 25. SUBSTANTIVE RULES APPLICABLE TO ELECTRIC SERVICE PROVIDERS.

Subchapter F. METERING.

spent to date in the deployment of AMS and the actual net operating cost savings from AMS deployment and how those numbers compare to the projections used to set the surcharge. During the annual report process, an electric utility may apply to update its surcharge, and the commission may set a schedule for such applications. For a levelized surcharge, the commission may alter the length of the surcharge collection period based on review of information concerning changes in deployment costs or operating costs savings in the annual report or changes in WACC. An annual report filed with the commission will not be a ratemaking proceeding, but an application by the electric utility to update the surcharge must be a ratemaking proceeding.

- (6) **Reconciliation Proceeding.** All costs recovered through the surcharge must be reviewed in a reconciliation proceeding on a schedule to be determined by the commission. Notwithstanding the preceding sentence, the electric utility may request multiple reconciliation proceedings, but no more frequently than once every three years. There is a presumption that costs spent in accordance with a deployment plan or amended deployment plan approved by the commission are reasonable and necessary. Any costs recovered through the surcharge that are found in a reconciliation proceeding not to have been spent or properly allocated, or not to be reasonable and necessary, must be refunded to electric utility's customers. In addition, the commission will make a final determination of the net operating cost savings from AMS deployment used to reduce the amount of costs that ultimately can be recovered through the surcharge. Accrual of interest on any refunded or surcharged amounts resulting from the reconciliation must be at the electric utility's WACC and must begin at the time the under or over recovery occurred.
- (7) **Cross-subsidization and fees.** The electric utility must account for its costs in a manner that ensures there is no inappropriate cost allocation, cost recovery, or cost assignment that would cause cross-subsidization between utility activities and non-utility activities. The electric utility shall not charge a disconnection or reconnection fee that was approved by the commission prior to the effective date of this rule, for a disconnection or reconnection that is effectuated using the remote disconnection or connection capability of an advanced meter.