

CHAPTER 25. SUBSTANTIVE RULES APPLICABLE TO ELECTRIC SERVICE PROVIDERS.

Subchapter F. METERING.

§25.130. Advanced Metering.

- (a) **Purpose.** The purposes of this section are to authorize electric utilities to assess a nonbypassable surcharge to use to recover costs incurred for deploying advanced metering systems that are consistent with this section; increase the reliability of the regional electrical network; encourage dynamic pricing and demand response; improve the deployment and operation of generation, transmission and distribution assets, and provide more choices for electric customers.
- (b) **Applicability.** This section is applicable to all electric utilities, including transmission and distribution utilities, other than an electric utility that, pursuant to Public Utility Regulatory Act (PURA) §39.452(d)(1), is not subject to PURA §39.107; and to the Electric Reliability Council of Texas (ERCOT).
- (c) **Definitions.**
- (1) Advanced meter -- Any new or appropriately retrofitted meter that functions as part of an advanced metering system and that has the features specified in this section.
 - (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) Dynamic Pricing -- Retail pricing for electricity consumed that varies during different times of the day.
 - (5) Non-standard advanced meter -- A meter that contains features and functions in addition to the AMS features in the deployment plan approved by the commission.
- (d) **Deployment and use of advanced meters.**
- (1) Deployment and use of 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 shall 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 shall 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 pursuant to 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 shall be a ratemaking proceeding and a proceeding involving only a Request for Approval of Deployment shall not be a ratemaking proceeding.
 - (3) The Statement of AMS Functionality shall:
 - (A) state whether the AMS meets the requirements specified in subsection (g) of this section and what additional features, if any, it will perform;
 - (B) describe any variances between technologies and meter functions within its 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.

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- (4) A Deployment Plan shall 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;
 - (D) A timeline for the web portal development;
 - (E) A deployment schedule by specific area (geographic information);
 - (F) When postings of monthly status reports on the electric utility's website will commence; and
 - (G) A schedule for deployment of web portal functionalities.
- (5) An electric utility shall 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 monthly progress reports may be filed confidentially. An electric utility's Deployment Plan shall be maintained and made available for review on the electric utility's website for REP access. Competitively sensitive information contained in the Deployment Plan shall 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 shall 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 shall not be unreasonably discriminatory, prejudicial, preferential, or anticompetitive.
- (9) Each electric utility shall provide progress reports on a monthly basis and status reports every six months following the filing of its Deployment Plan with the commission until deployment is complete. Upon filing of such reports, the electric utility shall notify all certified REPs of the filing through standard market notice procedures. A monthly progress report shall be filed within 15 days of the end of the month to which it applies, and shall include the following information:
 - (A) the number of advanced meters installed, listed by ESI ID. Additional information if available may also be listed, such as county, city, zip code, feeder numbers, and any other easily discernable geographic identification available to the electric utility;
 - (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.

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- (10) If an electric utility has received approval of its Deployment Plan from the commission, the electric utility shall obtain commission approval before making any changes to its AMS that would affect a REP's ability 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 shall 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 shall file an amendment to its Notice of Deployment at least 45 days before making any changes to its AMS that would affect a REP's ability 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.
 - (11) During and following deployment, any outage related to normal operations and maintenance that affects a REP's ability to obtain information with the system shall be communicated to the REP through the outage/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).
 - (12) The electric utility shall not provide any advanced metering equipment or service that is deemed a competitive energy service under §25.343 of this title (relating to Competitive Energy Services). Any functionality of the AMS that is a required function under this section or that is included in an approved Deployment Plan 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 shall 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 shall be sent by the electric utility to all REPs.
- (g) **AMS features.**
- (1) An AMS shall provide or support the following minimum system features in order to obtain cost recovery through a surcharge pursuant to subsection (k) of this section:
 - (A) automated or remote meter reading;
 - (B) two-way communications;
 - (C) remote disconnection and reconnection capability for meters rated at or below 200 amps, provided that an electric utility shall be considered in compliance with this provision if it makes this function available in all advanced meters installed after the effective date of this rule, and the following meters shall also be considered in compliance with this provision: those advanced meters that were ordered prior to the effective date of this rule, not to exceed 65,000 meters over the number of

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meters received or ordered as of May 10, 2007, and are provisioned with all the features enumerated in this paragraph except remote disconnect and reconnect capability, if those advanced meters are installed by December 31, 2007, and the number of advanced meters installed with all the features enumerated in this paragraph except remote disconnect and reconnect capability does not exceed 18% of the total number of advanced meters installed by the electric utility pursuant to a Deployment Plan.

- (D) the capability to time-stamp meter data sent to the independent organization or regional transmission organization for purposes of wholesale settlement, consistent with time tolerance standards adopted by the independent organization or regional transmission organization;
 - (E) the capability to provide direct, real-time access to customer usage data to the customer and the customer's REP, provided that:
 - (i) hourly data shall be transmitted to the electric utility's web portal on a day-after basis.
 - (ii) the commission staff using a stakeholder process, as soon as practicable shall determine, subject to commission approval, when and how 15-minute IDR data shall be made available on the electric utility's web portal.
 - (F) means by which the REP can provide price signals to the customer;
 - (G) the capability to provide 15-minute or shorter interval data to REPs, customers, and the independent organization or regional transmission organization, on a daily basis, consistent with data availability, transfer and security standards adopted by the independent organization or regional transmission organization;
 - (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;
 - (I) open standards and protocols that comply with nationally recognized non-proprietary standards such as ANSI C12.22, including future revisions thereto;
 - (J) 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 standards and protocols that comply with nationally recognized non-proprietary standards such as ZigBee, Home-Plug, or the equivalent; and
 - (K) the ability to upgrade these minimum capabilities as technology advances and, in the electric utility's determination, become economically feasible.
- (2) An electric utility shall offer, as discretionary services in its tariff, installation of non-standard meters and advanced meter features.
- (A) A REP may require the electric utility to provide non-standard 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;
 - (B) The REP shall pay the reasonable differential cost for the non-standard advanced meters or features.
 - (C) Upon request by a REP, an electric utility shall expeditiously provide a report to the REP that includes an evaluation of the cost and a schedule for providing the nonstandard advanced meters or advanced meter features of interest to the REP. The REP shall pay a reasonable discretionary services fee for this report. This discretionary services fee shall be included in the electric utility's tariff.

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- (D) If an electric utility agrees to deploy non-standard advanced meters or advanced meter features not addressed in its tariff at the request of the REP, the electric utility shall expeditiously apply to amend its tariff to specifically include the non-standard advanced meters or meter features that it agreed to deploy.
- (3) An electric utility may petition the commission for a waiver of the requirements of paragraph (1) of this subsection for portions of its service area where it would be uneconomic or technically infeasible to implement particular system features. A waiver may also be granted for an AMS that exceeds or is an adequate substitute for the requirements in paragraph (1) of this subsection. The electric utility shall provide all relevant studies and cost-benefit analysis and other evidence supporting its waiver request and shall bear the burden of proof in its waiver request. An electric utility that has received a waiver shall explain in the report required by subsection (d)(7) of this section, technology changes and changes in the cost of deployment or savings to the electric utility that would make it economic or technically feasible to offer the system features in the affected portions of its service area. Any waiver granted by the commission shall extend only to those costs and expenses for which the waiver is granted in any proceeding in which the electric utility seeks to recover its costs through the surcharge mechanism addressed in subsection (k) of this section.
- (4) 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.
- (5) Once an electric utility has deployed its advanced meters, it may add or enhance features provided by AMS, as technology evolves and in accordance with Applicable Legal Authorities. The electric utility shall 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 shall follow the monthly progress report process described in subsection (d)(8) of this section until the enhancement process is complete.
- (6) Beginning January 1, 2008, or as soon as such meters are commercially available from the electric utility's current vendor, whichever is earlier, an electric utility shall replace, at no cost to the customer, an advanced meter with all the features enumerated in paragraph (1) of this subsection except remote disconnect and reconnect capability, if: the meter has reached the end of its useful life; the meter has been removed for repair; the premises at which the meter is located has experienced an unusually high number of disconnections and reconnections; or the REP has informed the electric utility that its customer has agreed to utilize a prepaid service and the REP has requested a meter with remote disconnection and reconnection capability. If by January 1, 2009, requests by REPs for replacement of advanced meters with all the features enumerated in paragraph (1) of this subsection except remote disconnect and reconnect capability exceed 20% of those meters, then the electric utility shall replace all of those meters as soon as possible with meters that meet the requirements of paragraph (1) of this subsection and have remote disconnect and reconnect capability.
- (h) **Settlement.** It is the objective of this rule that ERCOT shall be able to use 15-minute meter information from advanced metering systems for wholesale settlement, not later than January 31, 2010.

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- (i) **Tariff.** All non-standard, discretionary AMS features offered by the electric utility shall be described in the electric utility's tariff.
- (j) **Access to meter data.**
 - (1) An electric utility shall provide a customer, the customer's REP, 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 shall be convenient and secure, and the data shall 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 installed 2,000 advanced meters by the effective date of this section, the electric utility shall 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 shall begin no later than six months from the filing of the Notice of Deployment with the commission.
 - (3) An electric utility shall use industry standards and methods for providing secure customer and REP access to the meter data. The electric utility shall have an independent security audit of the mechanism for customer and REP access to meter data conducted within one year of initiating such access and promptly report the results to the commission.
 - (4) The independent organization, regional transmission organization, or regional reliability entity shall have access to information that is required for wholesale settlement, load profiling, load research, and reliability purposes.
 - (5) A customer may authorize its data to be available to an entity other than its REP.
- (k) **Cost recovery for deployment of AMS.**
 - (1) **Recovery Method.** The commission shall 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 shall not be established until after a detailed Deployment Plan is filed pursuant to subsection (d) of this section. In addition, the surcharge shall not ultimately recover more than the AMS costs that are spent, reasonable and necessary, and fully allocated, but may include estimated costs that shall 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 shall not be included in the surcharge provided for by this subsection unless an electric utility has received a waiver pursuant to subsection (g)(3) of this section. The costs of providing AMS services include those costs of AMS installed as part of a pilot program pursuant to this section. Costs of providing AMS for a particular customer class shall 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 shall 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 shall be correspondingly adjusted to reflect the new authorized WACC.

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- (3) **Surcharge Proceeding.** In the request for surcharge proceeding, an electric utility may propose a surcharge methodology, but the commission prefers the stability of a levelized amount, and an amortization period ranging from five to seven years, depending on the useful life of the meter. 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 shall 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 shall file annual reports with the commission updating the cost information used in setting the surcharge. The annual reports shall include the actual costs 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 shall not be a ratemaking proceeding, but an application by the electric utility to update the surcharge shall be a ratemaking proceeding.
- (6) **Reconciliation Proceeding.** All costs recovered through the surcharge shall 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, shall be refunded to electric utility's customers. In addition, the commission shall 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 shall be at the electric utility's WACC and shall begin at the time the under or over recovery occurred.
- (7) **Cross-subsidization and fees.** The electric utility shall account for its costs in a manner that ensures that 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.

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- (1) **Time of Use Schedule.** Commission approval of a time of use schedule (“TOUS”) pursuant to ERCOT protocols is not necessary prior to implementation of the new TOUS.