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|  | **PENNSYLVANIA**  **PUBLIC UTILITY COMMISSION**  Harrisburg, PA. 17105-3265 |  |

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|  | Public Meeting held June 30, 2011 |
| Commissioners Present: |  |

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| Robert F. Powelson, Chairman | |  |
| John F. Coleman, Jr., Vice Chairman | |  |
| Tyrone J. Christy | |  |
| Wayne E. Gardner | |  |
| James H. Cawley | |  |
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| Smart Meter Procurement and Installation | Dockets No. M‑2009‑2092655 |

**TENTATIVE ORDER**

**BY THE COMMISSION:**

The Pennsylvania General Assembly (General Assembly) has directed that electric distribution companies (EDCs) with more than 100,000 customers file smart meter technology procurement and installation plans with the Commission for approval. 66 Pa. C.S. § 2807(f). Act 129 of 2008 (Act 129) requires these EDCs to make available to third parties, including electric generation suppliers (EGSs) and providers of conservation and load management services, with customer consent, direct access to the meter and electronic meter data. 66 Pa. C.S. § 2807(f)(3).

On June 18, 2009, this Commission adopted a *Smart Meter Procurement and Installation Implementation Order[[1]](#footnote-1)* (*Implementation Order*) to establish the standards each plan must meet and to provide guidance on the procedures to be followed for submittal, review and approval of all aspects of each smart meter plan. This *Implementation Order* required covered EDCs to work through the Electronic Data Exchange Working Group (EDEWG) to develop electronic data interchange (EDI) transaction standards to fully achieve the capabilities of smart meter technology.[[2]](#footnote-2)

On December 7, 2009, EDEWG submitted a Preliminary Proposal for the Development of Smart Meter Data Exchange Standards (Preliminary Proposal). We have reviewed the Preliminary Proposal and through this Tentative Order propose further direction and clarification about the role of EDEWG and covered EDCs in the development of statewide smart meter data exchange standards and formats.

**BACKGROUND**

The EDCs obligated to deploy smart meter technology under Act 129 include the Duquesne Light Company (Duquesne); Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company, West Penn Power Company (collectively FirstEnergy); PECO Energy Company (PECO); and PPL Electric Utilities Corporation (PPL). All of these EDCs have filed a Smart Meter Technology Procurement and Installation Plan (Smart Meter Plan) with the Commission for approval. All of these EDCs, with the exception of West Penn Power Company, have received Commission approval of their respective Smart Metering Plans.

The *Implementation Order* required covered EDCs to address, among other things, standards and formats for electronic data communications with customers and customer authorized third parties. Specifically, the Commission noted that these EDCs were required to implement an EDI transaction related to customers enrolled in a real time price or time‑of‑use rate program, as well as a new historical interval usage transaction, in order to provide customers and their designated agents with 12 months of interval usage data.[[3]](#footnote-3) The Commission directed that the historical usage data transaction must facilitate third-party exchange of historical interval usage data recorded at the meter level.[[4]](#footnote-4) Furthermore, the Commission noted that an EDI transaction must be developed and implemented to exchange monthly, billing quality interval usage data recorded at the meter level versus the account level.[[5]](#footnote-5)

To meet these and other potential data requirements related to smart meter technology capabilities and access requirements, the Commission directed the EDCs to propose EDI capabilities through the EDEWG for Commission review no later than January 1, 2010.[[6]](#footnote-6)

The Preliminary Proposal was developed by an EDEWG sub-team of EDCs consisting of Duquesne, FirstEnergy, PECO and PPL. The initial draft version of the Preliminary Proposal was published on the EDEWG List Serve for review by the entire EDEWG. The Preliminary Proposal was then reviewed and discussed at the December 3, 2009, EDEWG meeting, after which the Preliminary Proposal was submitted to the Commission on December 7, 2009.

**DISCUSSION**

The Commission appreciates the time and commitment of resources generously provided by the EDCs and the full membership of the EDEWG for their on‑going, dedicated service to the collaborative process for developing standards and formats for electronic communications. The Preliminary Proposal submitted by EDEWG addresses various aspects of meter and data access by customers and their designated third-party representatives. The Proposal recommends data exchange standards for current and new business processes, a timeline for the development of smart meter data exchange standards with a final version to be published on January 31, 2011. To date, the final version of the Smart Meter Data Exchange Standards has not been published as proposed by EDEWG. As this issue continues to be of significant importance to the Commission, we propose and release for comment additional clarification and directives for the development and implementation of standards and formats for smart meters and data access as set forth below.

Data Exchange Standards for Current Business Processes

The *Implementation Order* required EDCs to convey the following data electronically to customers and their designated agents: (1) real-time and time-of-use prices; (2) historical interval usage; and (3) bill quality interval usage.[[7]](#footnote-7) The EDEWG Sub-Team in its Preliminary Proposal asserted that the continuation of current EDC business practices is capable of handling these meter data access requirements.[[8]](#footnote-8) We now propose further clarification of these EDI transactions below.

1. Real-Time and Time-of-Use Prices

The Preliminary Proposal explained that EDC enrollments of customers into real‑time and time-of-use pricing programs is not an electronic data interchange (“EDI”) function, but that use of the existing 814 Enrollment Request transaction is capable of supporting enrollment of customers into similar pricing programs offered by an EGS. For EDCs that provide Rate Ready billing, the EGS would enroll customers utilizing the appropriate Rate-Ready rate code. For EDCs that offer Dual Billing and Bill Ready Consolidated Billing, EGS and EDC interactions would function under a scenario where the EGS calculates its own charges and bills the customer directly, or provides a Bill-Ready EDI 810 transaction to the EDC.[[9]](#footnote-9)

The Commission agrees that these current practices of providing Dual Billing and Bill Ready Consolidated Billing should be approved for the enrollment and billing of EGS customers who purchase service under a real-time and time-of-use pricing option for all EDCs. As such, we propose that covered EDCs be required to submit the appropriate EDI change control requests for the appropriate EDI transactions to EDEWG within 30 days of the entry of a Final Order in this proceeding, and effect implementation of these changes on an immediate, high priority basis.

2. Historical Interval Usage

The Preliminary Proposal stated that the existing 867 Historical Interval Usage (HIU) transaction meets the requirement of the *Implementation Order*, to provide customers and their agents with 12 months of interval usage data at the meter level. The Preliminary Proposal, however, noted that this transaction is currently optional except in the case of PPL, which limits the provision of this data at the account level. Due to the estimated, high volume of 15-minute meter reads over a 12-month period, the Preliminary Proposal recommended that EDEWG explore the use of alternative methods for the provision of HIU data at the meter level.[[10]](#footnote-10)

The Commission agrees that the use of the 867 HIU transaction may not be the most economically efficient method for providing historical interval usage data at the meter level. We, therefore, propose that EDEWG explore its options with covered EDCs and to identify an alternate solution that can be implemented by the EDCs within 180 days of the entry of a Final Order in this proceeding.

1. Bill Quality Interval Usage

The *Implementation Order* required the development and implementation of an EDI transaction for the exchange of monthly bill-quality interval usage data that has been recorded at the meter level.[[11]](#footnote-11) The Preliminary Proposal stated that the existing 867 Interval Usage (IU) transaction currently meets this requirement; however, some of the EDCs currently use this transaction to provide interval usage data at the account level. The EDCs agreed to initiate a change to the 867 IU to require meter level data and asked the Commission for sufficient time to modify their systems and to complete the testing process. EDCs requested approval for implementing these at the expiration of their respective smart meter 30-Month grace period.[[12]](#footnote-12)

The Commission agrees with the proposal to the use a modified 867 IU transaction to communicate meter level data. Regarding the schedule for deployment, we propose that EDCs complete system changes and testing of the modified 867 IU no later than 12 months prior to the expiration of the respective 30-Month grace period in their approved smart meter plans. In our view, allowing additional time to complete this task could interfere with the development of advanced metering technologies in the marketplace and will create a disservice to customers who plan to purchase these technologies in the near future and to those who currently participate in complex pricing programs.

Data Exchange Standards for New Business Processes

The *Implementation Order* required EDCs and third-parties to participate in EDEWG to develop any new system data capabilities that are recognized as necessary and justifiable by EDCs in their respective smart meter plans. To facilitate the identification of business process alternatives in their smart meter plan filings, EDCs were encouraged to look at smart meter standards-setting activities by national organizations such as the North American Energy Standards Board.[[13]](#footnote-13)

The Preliminary Proposal recommended that an expanded EDEWG Smart Meter Sub-Team (Expanded Sub-Team) be created to address the *Implementation Order* EDI transaction requirements. The Preliminary Proposal asserted that a symbiotic relationship between EDCs, who would comprise the Sub-Team, and all other interested parties, who would comprise the Expanded Sub-Team, would meet the needs of all stakeholders. The Preliminary Proposal defined “other interested parties” as EGSs, Conservation Service Providers (CSPs) and others. The Preliminary Proposal recommended that the expanded Sub-Team would work in parallel with the EDCs’ efforts during their 30-Month grace period. It suggested that while EDCs work through their respective 30‑Month grace periods, EDCs would submit proposals to the Expanded Sub-Team for review of proposed changes to their smart meter plans. Concurrently, the Expanded Sub-Team would conduct thorough analyses of proposed new standards and applicable national standards for EDCs to consider.[[14]](#footnote-14)

We agree that EDCs, EGS, CSPs and other interested parties should be engaged in the process of identifying and developing new data exchange standards for access to meters and data by customers and their designated third parties. We have concerns that the EGSs, CSPs and other interested parties would be working in tandem, separate and apart from the EDCs, as it may not provide an acceptable result for all involved.

The *Implementation Order* clearly expanded the scope of EDEWG’s focus to include new technology related to smart meter data access by customers and their designated third parties. EDC smart meter plans and comments of the parties to the Commission’s Proposed Implementation Order[[15]](#footnote-15) and to the various pleadings filed in the respective EDC smart meter plan cases, recognized that the identification and development of such standards is appropriately addressed by EDEWG and not by any single EDC or group of EDCs.

Therefore, we propose that the identification and development of new standards and formats to support Act 129 smart meter statutory requirements, along with the ongoing maintenance of existing standards and processes for this purpose, be developed by EDEWG and presented to the Commission for review. We further propose that the development and ongoing maintenance of these standards and processes be done in a manner that includes all EDEWG participants, specifically, all EDCs, licensed EGSs, registered CSPs, and all other interested parties.

Timeline for Development of Smart Meter Data Exchange Standards

The Preliminary Proposal included a timeline for the development of smart meter data exchange standards that comports with the smart meter 30-month grace period established for covered EDCs in the *Implementation Order*. The *Implementation Order* required the development of a timeline to address how and when the Commission may expect implementation of EDI transactions.[[16]](#footnote-16)

The *Implementation Order* also directed that the timeline should identify how and when proposed new EDI and non-EDI standards and formats would be developed and implemented.[[17]](#footnote-17) With this Tentative Order, we clarify our expectations of the EDEWG team that is working on smart meter interaction with customers and their representatives, as follows:

* Required Functionality

EDEWG is to review each EDC’s current smart meter plan for provision of the following required functionality:

* 1. To provide customers with direct access to hourly usage and price information;
  2. To provide support for automatic control of a customer’s electricity consumption by the customer, the utility or a customer’s agent (at the discretion of the customer); and
  3. To provide direct meter access and electronic access to customer meter data by third parties with customer consent.
* Standardization Efforts

EDEWG is to perform the following:

* 1. Provide detailed descriptions of any proposed statewide standardized transactions or protocols, if any, for each of the EDCs for providing the required functionality;
  2. Provide estimated system and operational costs, both total and annual, for each utility to provide the required functionality;
  3. Review the ability for a statewide solution to provide the required functionality; and
  4. Review costs for a statewide solution to provide the required functionality for all utilities.

We propose that EDEWG submit to the Commission a report outlining its findings and conclusions within 90 days of the entry of a Final Order in this proceeding.

Finally, we propose that EDEWG incorporate this functionality into its current operational documents, i.e. Implementation Guidelines, Testing and Certification Plans, Revised Plan, Annual Plans, Change Control Request forms and other documentation as deemed necessary by EDEWG, to address the evolving technology related to smart meters and their capabilities on an ongoing basis. Specifically, we propose that such functionality shall include the provision for direct customer access to hourly usage and price information; support for automatic control of the customer’s electricity consumption by the customer, the EDC or a customer’s designated agent; and direct meter access and electronic access to customer meter data to third parties with customer consent.

**CONCLUSION**

With this Tentative Order, the Commission seeks comments on the proposed electronic data interchange capabilities to be developed and reported by the Electronic Data Exchange Working Group. This Tentative Order and filed comments will be made available to the public on the Commission’s Act 129 Information[[18]](#footnote-18) web page. **THEREFORE,**

**IT IS ORDERED:**

1. That this Tentative Order shall be published in the *Pennsylvania Bulletin* and served upon the Office of Consumer Advocate, the Office of Small Business Advocate, the Office of Trial Staff, all jurisdictional electric distribution companies, all licensed electric generation suppliers, the Electronic Data Exchange Working Group leadership, and all parties who participated in proceedings at Docket Nos. M-2009-2123944, M‑2009-2123945, M-2009-2123948, M-2009-2123950 and M-2009-2123951.

2. That interested parties shall have thirty (30) days from the date this Tentative Order is published in the *Pennsylvania Bulletin* to file an original and three (3) copies of written comments to the Pennsylvania Public Utility Commission, Attention: Secretary Rosemary Chiavetta, P.O. Box 3265, Harrisburg, PA 17105-3265.

3. That interested parties shall have fifty (50) days from the date this Tentative Order is published in the *Pennsylvania Bulletin* to file an original and three (3) copies of written reply comments to the Pennsylvania Public Utility Commission, Attention: Secretary Rosemary Chiavetta, P.O. Box 3265, Harrisburg, PA 17105-3265.

4. That the comments shall be electronically mailed to Annunciata E. Marino, Analyst, at [annmarino@state.pa.us](mailto:annmarino@state.pa.us), and Kriss Brown, Assistant Counsel, at [kribrown@state.pa.us](mailto:kribrown@state.pa.us).

5. That the contact person for technical issues is Annunciata E. Marino, Analyst, Bureau of Fixed Utility Services, (717) 772-2151 or [annmarino@state.pa.us](mailto:annmarino@state.pa.us). The contact person for legal issues is Kriss Brown, Assistant Counsel, Law Bureau, (717) 787-4518 or [kribrown@state.pa.us](mailto:kribrown@state.pa.us).

**BY THE COMMISSION**

Rosemary Chiavetta

Secretary

(SEAL)

ORDER ADOPTED: June 30, 2011

ORDER ENTERED: July 8, 2011

1. This Order was entered on June 24, 2009, at Docket No. M-2009-2092655. [↑](#footnote-ref-1)
2. *See Implementation Order* at 24-28. [↑](#footnote-ref-2)
3. *See Implementation Order* at 25. [↑](#footnote-ref-3)
4. *Id*. [↑](#footnote-ref-4)
5. *Id*. [↑](#footnote-ref-5)
6. *Id*. [↑](#footnote-ref-6)
7. *See Implementation Order* at 25. [↑](#footnote-ref-7)
8. Preliminary Proposal at 3. [↑](#footnote-ref-8)
9. Preliminary Proposal at 3-6. [↑](#footnote-ref-9)
10. Preliminary Proposal at 5. [↑](#footnote-ref-10)
11. *See Implementation Order* at 25. [↑](#footnote-ref-11)
12. Preliminary Proposal at 5. [↑](#footnote-ref-12)
13. *See Implementation Order* at 25. [↑](#footnote-ref-13)
14. Preliminary Proposal at 6 and 7. [↑](#footnote-ref-14)
15. These comments were submitted in response to the Commission issued Secretarial Letter dated March 30, 2009, seeking comments on a draft staff proposal and additional questions regarding EDC smart meter procurement and installation. [↑](#footnote-ref-15)
16. *Implementation Order* at 25. [↑](#footnote-ref-16)
17. *Id*. [↑](#footnote-ref-17)
18. http://www.puc.state.pa.us/electric/Act129/Smart\_Meter\_Technology.aspx [↑](#footnote-ref-18)