



Data Security and Privacy Policy

Gary Schrimpf



2020

A. Introduction: The Next Generation Utility

1. Executive Summary

The City of Wadsworth has undergone a citywide upgrade to its water and electric meters to provide homes and businesses with the most reliable utility service. The new meters use smart grid technology that enables more accurate meter readings and gives community members the ability to participate in reducing energy consumption. The new system eliminates the need for the City to send a meter reader to customers' homes, except in rare circumstances, and replaces the estimated monthly bill with real-time data usage personalized to each customer. Further, the City of Wadsworth is offering interconnected Voice over Internet Protocol services for interested communications customers.

This initiative, named the "Next Generation Utility" project, is designed to monitor how effectively and efficiently the City is delivering electricity and water to its residents. Smart meter technology will allow the City to collect usage data wirelessly and in real-time. Because data is updated constantly, the City will be able to quickly detect problems that need immediate attention, such as power outages or water leaks.

2. Introduction to Smart Grid Technology

Smart grid meters record consumption of electric energy and water usage, and communicate that information back to the utility for monitoring and billing purposes. Electric data is updated every 15 minutes, and water data is updated hourly. This data is sent to the central monitoring system via wireless communication. The wireless communication is encrypted and protected by firewalls to prevent any unauthorized access to user data.

Smart grid meters enable secure two-way communication between the meter and the central system, monitored by qualified employees of the City of Wadsworth. The traditional electric and water meters formerly used in Wadsworth measured total consumption only and did not provide any user details such as the time of day utilities were used. With the integration of smart meters, information about when the energy is consumed will be available, allowing the City of Wadsworth to set prices based on the time of day and the season. This gives customers personal control to lower their utility bills if they decrease consumption during peak hours.

Potential benefits to using a smart meter system include an end to estimated bills, which often are the source for customer complaints, and the ability of customers to manage their own energy use. Customers will be able to access their own utility data via a personal Customer Care online portal to assist them with billing and consumption monitoring. Customers will only be able to access their own data. The Customer Care portal is similar to an online banking website, and only accessible using a username and password set by each customer.

Customers may also install a home display that provides up-to-date information on utility consumption. These home displays give users access to their personal energy and water use at all times of day, and can even be controlled remotely using a smart phone. For example, if a customer forgot to turn the lights off at home before leaving for work, the customer can use a smart phone or computer to access the display and turn those lights off, ultimately saving energy and money without having to return home. To assist the customer with decreasing energy consumption during peak hours, customers may receive a notification on their home display at these times asking if they'd like to turn down their thermostat, for example. All notifications can be overridden, pending the customer's needs at that time, allowing for complete personalization of home utility usage.

3. Elements of the City of Wadsworth Data Security and Privacy Policy

As with the introduction of any unfamiliar technology, some concerns may exist over the privacy and security of personal user data reported using smart meters. Because of this, the City of Wadsworth has developed a Data Security and Privacy Policy to ensure its customers' private information is kept secure and inaccessible to unauthorized outsiders.

The City has established a firm policy to monitor the security of sensitive customer data, such as personal information (address, credit card or banking information) and user data (time-of-day usage information). The key elements of the privacy policy are:

- i. Tools to reduce the compromising of customer privacy, including:
 - a. Customer rights
 - b. Categorization of usage data
- ii. Protocols that control the flow of information, including:
 - a. Framework for information systems that demonstrate the City's commitment to customers' rights with respect to information, privacy, options, and data security
 - b. Implementation of the Federal Trade Commission's Fair Information Practice (FIP) Principles*
 - c. Regular Training by utility department, IT and communications division personnel on data security and privacy practices and CPNI requirements

**All customers have the right to be informed, the right to privacy, the right to options in receipt of information and rate programs, and the right to data security. The FIP framework includes as adopted by the City of Wadsworth: (1) Transparency, (2) Individual Participation, (3) Purpose Specification, (4) Data Minimization, (5) Use Limitation, (6) Data Quality and Integrity. The FIP principles are consistent with emerging national privacy and security principles recommended by the Department of Homeland Security and offer a practical tool for developing rules to protect the privacy and security of utility usage data. As such, they are proposed here as the basis of policy elements for data privacy and security for the City of Wadsworth.*

Attachment A

The City of Wadsworth Data Security and Privacy Policy

Customer Rights

To ensure customers have full control over their own private information, the City of Wadsworth proposes the following elements as part of its data security program.

1. **Network Security** – The City of Wadsworth will implement a complete network design to ensure data security to the maximum extent possible. The City of Wadsworth will conduct annual testing of network security.
2. **Customer Access** – Customers have access to meter and other data that pertains to their account. This information enables them to gain advantages from the collection of data from the system and correct data errors when they occur.
3. **Customer Education** – The City of Wadsworth will implement a customer education program that enables customers to get the most out of any programs put into effect using the smart meter system. Customers will be made aware of all utility and customer responsibilities.
4. **Energy Use Profile** – Customers have the right to opt in or out of profile development programs.
5. **Commercial Data Use** – Customers have the right to decide whether proprietary information may be given to commercial interests, such as third parties, and can opt out of any such programs at any time.

The City of Wadsworth will keep the following customer data completely private to third-party entities, as well as unauthorized users, unless specified by the customer.

1. **Personally Identifiable Information** – Information that can be used to identify a person (i.e., social security number, billing account number, address, etc.).
2. **Physical Information**– Information such as physical requirements, health problems, and required medical devices. Smart grids can detect medical devices used in the home, such as oxygen concentration or home dialysis machines. This information will always be protected, as specified under the U.S. Department of Health & Human Services’ Health Insurance Portability and Accountability Act of 1996 (HIPPA).
3. **Personal Behavior** – Information such as the activities customers perform inside their homes, such as washing dishes or watching TV.
4. **Customer Proprietary Network Information (CPNI)**– information as defined in CFR 59212, September 20, 2002, as amended at 72 FR 31962, June 8, 2007.

Categorization of Usage Data

A potential breach in customer privacy stemming from inappropriate use of data collected by the smart meter or communications system would result only if third parties were given access to user data and then used that data for motives that conflict with the customers’ needs or wishes. To avoid this, the City of Wadsworth has categorized user data to determine who should have access to energy usage or communications data, in what form, for what purpose, and subject to what constraints or procedures. The categories for user data are as follows:

1. **Customer-Controlled Authorization Only**
 - a. Customer-specific account data (name, address, banking information)
 - b. Monthly and historical usage data that pertains to a specific customer
 - c. Appliance “event” data
2. **Utility-Controlled Data**
 - a. System-wide monthly and historical usage data
 - b. Participation in subscriber lists made available to third parties
 - c. CPNI Data

Flow of Information Protocols

Information Systems Framework

The City of Wadsworth will never share or sell a customer’s personal information, including account data (name, address, banking information, etc.) or household or business historical or monthly usage data, including appliance “event” data or CPNI data, to third parties as required by recently passed Ohio law that exempts all household and business utility usage data from the public record.

- *An exception to this exemption applies when a journalist requests customer information maintained by a public utility. The journalist will not be given access to social security numbers and any private financial information including credit reports, payment methods, credit card numbers or bank account information.*

The City of Wadsworth can use individual consumption data only for public interest purposes, such as identifying peak hours in utility usage citywide. With customer consent, the utility service may use individual consumption data for entrepreneurial purposes, such as to provide new products and services, but before doing so must demonstrate to the community that such programs warrant the effort involved. Once a customer has agreed to the sharing of data with others, it must be provided equally to competing companies in the City of Wadsworth. The City will inform customers of the intended uses for the data they collect in each case. Public interest purposes for customer data include initiating and billing for service, collecting outage data, dispatching repair personnel, automating processes that require customer data but are traditionally handled manually, and other grid operations. Competitive purposes include developing products to manage usage and promoting the sale of more efficient appliances.

Only the customer can decide whether and when to allow the use of his or her personal usage data for commercial purposes. Should a customer want a third party to have access to their information for any commercial purpose, it is up to the customer and the entity to negotiate the terms of that use.

Fair Information Practice (FIP) Principles Implementation

To implement FIP principles into the City of Wadsworth's Data and Security Privacy Policy, the following definitions have been identified:

1. **Covered Entity**
 - a. The City of Wadsworth or any third party that provides services to the City of Wadsworth under contract, such as a vendor for smart metering services.
 - b. Any third party who accesses, collects, stores, uses or discloses covered information at the request of the customer, unless specifically exempted, who obtains this information from an electrical corporation.
 - c. Any third party, when authorized by the customer, that accesses, collects, stores, uses, or discloses covered information relating to 11 or more customers who obtains this information from the City of Wadsworth.
2. **Covered Information**

Any usage information obtained through the use of the capabilities of Advanced Metering Infrastructure or communications systems when associated with any information that can reasonably be used to identify an individual, family, household, residence, or non-residential customer, except that covered information does not include usage information from which identifying information has been removed such that an individual, family, household or residence, or non-residential customer cannot reasonably be identified or re-identified.
3. **Primary Purposes**

The collection, storage, use or disclosure of covered information to:

 - a. Provide or bill for utility services.
 - b. Provide for system, grid or operational needs.
 - c. Provide services as required by state or federal law.
 - d. Plan, implement, or evaluate demand response, energy management or energy efficiency programs under contract with an electrical corporation under contract with the City.
4. **Secondary Purpose**

Any purpose that is not primary purpose.

FIP Principles and the City of Wadsworth

1. **Transparency**
 - a. The City of Wadsworth will provide customers with a written notice regarding the accessing, collecting, storage, use and disclosure of any covered information used for a secondary purpose. The City is not required to notify the customer of usage of covered data for primary purposes.
 - b. The City will also inform customers how they may obtain a copy of the notice regarding the accessing, collection, storage, use, and disclosure of covered information, and will provide a link to the notice on the home page of the utility division website.

-
- c. The City of Wadsworth will provide written notice when confirming a new customer account.
 - d. The City of Wadsworth will require that companies supporting utility operations follow the same rules as the City to ensure that they cannot use information pertaining to a customer for any reason other than the purpose for which the utility contracted services.

2. **Purpose Specification**

All customer notices will provide an explicit description of:

- a. Each category of covered information collected, used, stored or disclosed by the City, and specific purposes for which it will be collected, stored, used, or disclosed.
- b. Each category of covered information that is disclosed to third parties, the purposes for which it is disclosed, and the type of third parties to which it is disclosed.
- c. The identities of those third parties to whom data is disclosed for secondary purposes, and the secondary purposes for which the information is disclosed.
- d. The means by which customers may view, inquire about, or dispute their covered information.
- e. The means by which customers may limit the collection, use, storage or disclosure of covered information and the consequences to customers if they exercise such limits.

3. **Individual Participation**

- a. **Access** – The City of Wadsworth will provide to customers, upon request, convenient and secure access to their covered information in an easily readable format.
- b. **Control** – The City of Wadsworth shall provide customers with convenient mechanisms for:
 - i. Granting and revoking authorization for secondary uses of covered information
 - ii. Disputing the accuracy or completeness of covered information that the covered entity is storing or distributing for any primary or secondary purpose
 - iii. Requesting corrections or amendments to covered information that the covered entity is collecting, storing, using, or distributing for any primary or secondary purpose
- c. **Disclosure Pursuant to Legal Process**
 - i. Unless otherwise provided in this rule or authorized by state or federal law, the City or its agents shall not disclose covered information except pursuant to a warrant or other court order naming with specificity the customers whose information is sought. Unless otherwise directed by a court of law, the City of Wadsworth shall treat requests for real-time access to covered information as wiretaps, requiring approval under the federal or state wiretap law as necessary.
 - ii. Unless otherwise prohibited by court order, a covered entity, upon receipt of a subpoena for disclosure of covered information, shall, prior to

complying, notify the customer in writing and allow the customer seven days to appear and contest the claim of entity seeking disclosure.

- iii. A person or entity may seek covered information from the customer under any applicable legal procedure or authority.
- iv. A covered entity may disclose covered information with the consent of the customer, where the consent is expressed in written form and specific to the purpose/person or entity seeking the information.
- v. A covered entity may disclose, in response to a subpoena, the name, address and other contact information regarding a customer.

d. **Disclosure of Information in Situations of Imminent Threat to Life or Property**

Rules concerning access, control and disclosure do not apply to information provided to emergency responders in situations involving an imminent threat to life or property.

4. **Data Minimization**

- a. **Generally** – The City of Wadsworth shall collect, store, use, and disclose only as much covered information as is reasonably necessary to accomplish a specific primary purpose identified in the notice required for a specific secondary purpose authorized by the customer.
- b. **Data Retention** – The City of Wadsworth shall maintain covered information only for as long as reasonably necessary to accomplish a specific primary purpose identified in the notice or for a specific secondary purpose authorized by the customer.
- c. **Data Disclosure** – The City of Wadsworth shall not disclose to any third party more covered information than is reasonably necessary for a specific primary purpose identified in the notice required under section 2 or for a specific secondary purpose authorized by the customer.

5. **Use and Disclosure Limitation**

- a. **Generally** – Covered information shall be used solely for the purposes specified by the covered entity.
- b. **Primary Purposes** – The City of Wadsworth, a third party acting under contract with the City, or a governmental entity providing energy efficiency or energy efficiency evaluation services may access, collect, store and use covered information for primary purposes without customer consent. The City of Wadsworth may use covered information only with prior customer consent, except as otherwise provided here.
- c. **Disclosures to Third Parties**
 - i. **Initial Disclosure** by the City of Wadsworth: The City may disclose covered information without customer consent to a third party acting under contract with the City or to a governmental entity for the purpose of providing energy efficiency or energy efficiency evaluation services. The City may also disclose covered information to a third party without customer consent when ordered to do so by a court of law or for a primary purpose being carried out under contract, provided that the covered entity disclosing the data shall require the third party agree to

access, collect, store, use, and disclose the covered information under policies, practices and notification requirements no less protective than those under which the covered entity itself operates as required under this policy.

ii. **Subsequent Disclosures:** Any entity that receives covered information derived initially from a covered entity may disclose such covered information to another entity without customer consent for a primary purpose, provided that the entity disclosing the covered information shall, by contract, require the entity receiving the covered information to use the covered information only for such primary purpose and to agree to store, use, and disclose the covered information under policies, practices and notification requirements no less protective than those under which the covered entity from which the covered information was initially derived operates as required by this policy.

iii. **Terminating Disclosures to Entities Failing to Comply With Privacy Assurances:** When a contracted entity discloses covered information to a third party under this subsection, it shall specify by contract, unless otherwise directed, that it shall be considered a material breach if the third party engages in a pattern or practice of accessing, storing, using or disclosing the covered information in violation of the third party's contractual obligations to handle the covered information. If a covered entity disclosing covered information for a primary purpose being carried out under contract with and on behalf of the entity disclosing the data finds that a third-party contractor to which it disclosed covered information is engaged in a pattern or practice of accessing, storing, using or disclosing covered information in violation of the third party's contractual obligations related to handling covered information, the disclosing entity shall promptly cease disclosing covered information to such third party. If a covered entity disclosing covered information to a City authorized or customer-authorized third party receives a customer complaint about the third party's misuse of data or other violation of the privacy rules, the disclosing entity shall, upon customer request or at the City's direction, promptly cease disclosing that customer's information to such third party. The disclosing entity shall notify the City of Wadsworth of any such complaints or suspected violations. Nothing in this section shall be construed to impose any liability on a corporation relating to disclosures of information by a third party when a customer authorizes or discloses covered data to a third party entity that is unaffiliated with and has no other business relationship with the City. After a secure transfer, the City shall not be responsible for the security of the covered data or its use or misuse by such third party.

d. **Secondary Purposes** – The City of Wadsworth and its agents shall not use or disclose covered information for any secondary purpose without obtaining the customer's prior, express, written authorization for each type of secondary purpose. This authorization is not required when information is:

-
- i. Provided pursuant to a legal process as described above
 - ii. Provided in situations of imminent threat to life or property as described above
 - iii. Authorized by the City
 - e. **Customer Authorization**
 - i. **Authorization:** Separate authorization by each customer must be obtained for all disclosures of covered information except as otherwise provided for herein.
 - ii. **Revocation:** Customers have the right to revoke, at any time, any previously granted authorization. Non-residential customers shall have the same right to revoke, unless specified otherwise in a contract of finite duration.
 - iii. **Opportunity to Revoke:** The consent of a residential customer shall continue without expiration.
 - f. **Parity** – The City of Wadsworth shall permit customers to cancel authorization for any secondary purpose of their covered information by the same mechanism initially used to grant authorization (see City of Wadsworth Application for Utilities, Appendix A).
 - g. **Availability of Aggregated Usage Data** – The City of Wadsworth shall permit the use of aggregated usage data that is removed of all personally identifiable information to be used for analysis, reporting or program management provided that the release of that data does not disclose or reveal specific customer information because of the size of the group, rate classification, or nature of the information.
 - 6. **Data Quality and Integrity**

The City of Wadsworth shall ensure that covered information they collect, store, use and disclose is reasonably accurate and complete or otherwise compliant with applicable rules and tariffs regarding the quality of energy usage data.
 - 7. **Authentication**
 - a. The City of Wadsworth will not release any covered information or CPNI information to any inbound caller without first identifying the caller. The following are acceptable methods for identifying the caller:
 - i. Caller provides accurate CPNI information to the address of record.
 - ii. Calling the telephone number of record.
 - iii. Releasing the CPNI information in person at the offices of the City of Wadsworth if the customer presents a validly issued government photo ID and the ID matches the information on the customer account in question.