

STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION

Illinois Commerce Commission)	
On Its Own Motion)	
)	
Investigation into the Customer)	Docket No. 15-0073
Authorization Required for Access by Third)	(January 28, 2015)
Parties Other than Retail Electric Suppliers)	
To Advanced Metering Infrastructure Interval)	
Meter Data)	

SURREPLY VERIFIED COMMENTS OF THE MISSION:DATA COALITION

The Mission:Data Coalition¹ (“Mission:data”) is pleased to offer these surreply comments in regards to the above-mentioned proceeding concerning the customer authorization process. Mission:data has reviewed reply comments from Citizens Utilities Board/Environmental Defense Fund (“CUB/EDF”), Elevate Energy, Illinois Competitive Energy Association, Retail Energy Supply Association, Ameren Illinois Company (“Ameren”), Commonwealth Edison Company (“ComEd”), the People of the State of Illinois, and Staff of the Illinois Commerce Commission.

1. Introduction

As a preliminary matter, we applaud Ameren for committing to the implementation of both Green Button “Download My Data” and the Green Button “Connect My Data” standards.² Further, as previously noted in our reply comments, Mission:data commended ComEd for its commitment in its initial comments to implement Green Button “Connect My Data.” We applaud Ameren and ComEd for their commitments, an essential step in ensuring that Illinois ratepayers realize full value in connection with the state’s investment in Automated Metering Infrastructure (“AMI”).

However, it seems that Ameren has simultaneously taken a step backward on its position toward data access for non-retail energy supplier (“non-RES”) third parties. In its reply comments, Ameren stated that it no longer supported any “warrant”-based method for third

¹ www.missiondata.org

² Ver. Reply Comments of Ameren dated April 20th, 2015 at p. 4.

parties to initiate a request for access to customer data. In other words, Ameren wishes to support only “customer-based transactions”.³ This position would, if actualized, undo the pre-existing forms of third party access that are convenient and beneficial to customers. In its initial comments, Ameren affirmed that its RES portal is usable by non-RES third parties (Ver. Init. Com. of Ameren dated March 9th, 2015 at p. 7-8). This reversal of position should not go unnoticed by the Commission. As we argue in these surreply comments, there are compelling reasons for supporting third-party-driven authorization processes.

II. Surreply Comments

a. Term of Authorization. The term of customer authorization continued to receive substantial discussion in the reply comments. In its initial comments, ComEd described the the interplay between the Fair Information Practice Principles (“FIPPs”) and the U.S. Department of Energy’s Voluntary Code of Conduct Final Concepts and Principles (“VCC”), observing that informed consent must include notice, choice/consent and access, principles with which Mission:data agrees.⁴ However, Mission:data does not share ComEd’s view expressed in its reply comments that “[h]aving a distinct period of time for which authorization is valid is one of key elements of consent under FIPPs”⁵ and that this is therefore an argument for a two-year limitation in the term of data access. Neither the version of the FIPPs cited in initial comments⁶ nor the VCC suggest a specific period of time for authorization or even that there be any finite limit. Both sets of principles are consistent with third parties and consumers having the flexibility to fashion terms of their choosing including unlimited terms, as long as those are disclosed to the consumer and the consumer has an understanding of how authorization may be withdrawn or cancelled.⁷

Mission:data believes that the authorization process should allow third parties and consumers flexibility so that the authorization period can match the term of the underlying service. For example, the RES authorization language approved by the Commission in Docket 14-0701 provides that the authorization period will expire “(a) six months after this authorization is executed, or (b) when your supply service with [RES] is terminated, *whichever occurs later.*” (emphasis added) The authorization form applicable to non-RES third parties should similarly provide the consumer with the flexibility to designate clearly to the utility how long the authorization will be effective so that the term of data access authorized supports enablement of

³ Ver. Rep. Com. of Ameren dated April 20th, 2015, p. 7

⁴ Ver. Initial Comments of ComEd, p. 4-5

⁵ Ver. Reply Comments of ComEd, p. 3

⁶ Ver. Initial Comments of ComEd, p. 4

⁷ Under the VCC, service providers should explain “specifically which elements of the Customer Data are proposed to be shared with a Third Party, for what purpose, and for how long” but does not preclude an unlimited term so long as that is stated. Similarly, the version of the FIPPs cited by ComEd requires disclosure to the customer of “the period of time for which the authorization is valid; or, lacking such a period, a description of how authorization may be withdrawn or cancelled.” Ver. Initial Comments of ComEd, p. 4.

the underlying service provided by the non-RES third party to the consumer for the contemplated term.

In our reply comments, Mission:data mentioned that some contracts extend for 15-20 years when energy savings are used to pay for a capital-intensive retrofit. These are typically in commercial settings. Mission:data recommends that the Commission consider distinguishing between residential and commercial customers. The People of the State of Illinois (“AG”), CUB/EDF and others rightfully wish to protect consumers, but businesses generally have more sophisticated operational and financial controls and are less in need of Commission protection than residential consumers, and do not appear to us to be the focus of parties’ protective efforts. Mission:data suggests that commercial parties have the option of authorizing any term of their choosing, including one that is unlimited. This will remove an element of uncertainty that might otherwise inhibit large, long-term energy management contracts.

With respect to residential customers, Mission:data prefers the option of an unlimited term, but would accept a *default* term of twenty-four (24) months so long as residential consumers have the option in the authorization process of designating a longer term of up to 5 or 6 years.

b. Limitations on disclosure or sale of customer energy usage information should be narrowed. In reply comments, CUB/EDF suggested limitations on the disclosure or sale of customer energy usage information.⁸ Regarding such disclosures or sales, Mission:data is cognizant of concerns about the potential for abuse of personally identifiable customer information and its sale to others, without customer authorization, for purposes that the customer has not agreed to. Mission:data agrees that consumers should be apprised of how their usage data will be used and that those who misrepresent how they use consumer data should be held accountable.

Mission:data is concerned, however, that a broad limitation on the sharing or sale of customer information, even that which is not individually identifiable, would frustrate achievement of important policy objectives. Implementation of the Open Data Access Framework will position Illinois as one of the largest markets in the country for data-enabled third-party energy management services, providing the state a significant economic opportunity. The Commission must take great care to ensure that companies for which Illinois is the initial market are not disadvantaged relative to competitors in other states operating without such broad prohibitions on sharing.

There are important, legitimate reasons why a company may need to disclose customer energy usage information. For example, the VCC contemplates that a third party may need to do so in order to respond to emergencies that pose immediate threats to life or property, in response to law enforcement demands or as directed by federal or state law. Another instance in which disclosing customer energy use data to “fourth parties” is sensible is the verification and

⁸ Ver. Reply Comments of Citizens Utility Board and Environmental Defense Fund, p. 8-9.

settlement of demand response transactions. In this case, a party (residential or commercial) is compensated for reducing demand at certain times when called upon. The demand response aggregator, acting as a non-RES third party, must transmit historic usage data to the grid operator to prove that a curtailment occurred. Sometimes the energy use data is collected by the aggregator directly through its own equipment and not through AMI - a case in which this docket would not be applicable - but, in other cases, the meter data for settlement comes from the utility's AMI system. It would be imprudent to bind the non-RES third party in a blanket manner such that fulfilling the State of Illinois's energy goals through demand response would be in violation of rules promulgated by the Commission. AMI offers aggregators the potential to acquire meter data at significantly reduced cost, i.e. without the need to install their own metering equipment on-site. Thus, "disclosure" in itself should not be eliminated as a possibility because it is not always an undesired activity.

Further, it is important that third parties, as utilities and other market participants do, have the ability to share data with their own business partners, contractors, etc. in order to further the purposes set forth in the authorization. In its April 1, 2015 Order in Docket 14-0701, the Commission agreed that RESs should be able to share energy usage information with business partners in furtherance of authorized purposes⁹ and rejected language providing that a [RES] will not "sell or disclose the EUI," adopting instead a requirement that "[RES], its affiliates and its contracted third party vendors, will not sell or license the EUI..."¹⁰ The authorization language with respect to the transfer of data adopted here should be consistent with that adopted in 14-0701, i.e. language that a third party vendor, affiliate, and its contracted vendors, will not sell or license the EUI..."

Even with this modification, there are important additional considerations. As one example, Mission:data is concerned that a limitation on the disclosure or sale of customer usage information that lacks an exception for information transferred in connection with the sale of a company could prevent a company engaged in energy management from being acquired if a significant portion of its value lies in its customer base. By complicating an important "exit" strategy for investors, such a limitation could restrict entrepreneurs' ability to raise capital. Such a broad limitation on disclosure or sale is not envisioned in the Voluntary Code of Conduct, which provides that "When a Third Party receiving duly authorized Customer Data is sold, the Service Provider providing the Customer Data is not required to notify the customer of the change in ownership, and the new owner can continue receiving Customer Data without the need for a new disclosure authorization" so long as the new owner notifies the customers of the change of ownership.¹¹

If state agencies or academic research institutions desire at some at some point to access aggregated analytics regarding energy use of Illinois residents from third parties, it may be

⁹ Order of Illinois Commerce Commission in Docket 14-0701 (ICC Docket 14-0701 Order), April 1, 2015, p. 14.

¹⁰ ICC Docket 14-0701 Order, p. 13, Appendix A.

¹¹ VCC, p. 7

helpful to clarify that a company could be compensated for its costs of providing such data. It should be noted that California law permits disclosure of individual customer data by third parties when explicitly consented to by customers and does not limit disclosure where energy usage information is not paired with the customer's name, account number or physical address.

c. The Commission Should Provide Guidance on Purpose Specification.

Mission:data agrees with other parties that consumers must be apprised of the purpose for which their energy data will be used and for which authorization is requested. The details of the purpose are typically spelled out in a contract or terms of service between the customer and the third party. Mission:data agrees with CUB/EDF that "third parties should be afforded a certain degree of flexibility in their description of that purpose".¹² A purpose specification should allow products to incorporate new features and improvements that consumers may find useful. To avoid undue complexity in the authorization form, it should be sufficient for a company offering energy management services, whether those involve efficiency, demand response or other similar energy-related services to utilize a simple purpose specification such as "energy management services." To further avoid placing the utilities in the position of assessing the validity of purposes, the Commission must provide specific guidance as to the acceptability of various purposes. We strongly encourage the Commission to affirm that a specification such as "energy management services" is sufficient.

d. Guiding Principles Alone Are Insufficient; the Commission Must Provide a Minimum Set of Specific Authorization Methods

As we have stated from the beginning, Mission:data believes consumers should have convenient, electronic access to the best available information about their own electricity use in order to fully leverage consumer benefits made possible by Advanced Metering Infrastructure. CUB/EDF and others desire the same. While the parties' discussions and comments filed on "guiding principles" have been productive, it has become increasingly clear that guiding principles alone are not sufficient to ensure that the customer authorization process will be, in fact, convenient. The Commission's, the utilities', and other parties' conceptions of convenience are likely to be different from one another. Society's generally-accepted notions of what is convenient and what is not have also shifted dramatically in the past five years, particularly as ownership rates of smartphones approach 100%. Thus we fear that a lack of minimum required authorization processes from the Commission will result in disappointing or unanticipated authorization processes.

Furthermore, a robust data access system that meets the intent of the legislature as given in Section 16-108(d) of the Public Utilities Act and meets the needs of customers as envisioned in Docket No. 14-0703 (Open Data Access Framework) will fall flat and will be severely

¹² CUB/EDF Ver. Rep. Comments, p. 8

underutilized if the *upstream* authorization processes resulting from this docket are inconvenient, out-dated or inflexible. Because authorization is a “bottleneck” issue, the direct customer benefits of data access from the multi-billion-dollar investment in AMI will in many ways hinge on this docket. In the absence of specifics, a Commission ruling in this proceeding that dictates merely aspirational attributes of an authorization process is not going to provide the certainty of outcomes that is required to meet the objectives. For these reasons, we believe a minimum set of authorization processes should be specified and required by the Commission. (If the utilities wish to supplement the authorization processes described below with additional methods, that should be encouraged, and additional authorization processes should be judged according to the Commission’s guiding principles and best practices.)

Thus, Mission:data proposes the following specific authorization processes that do three things: (i) satisfy the various guiding principles agreed by the parties, (ii) adhere to standard security and software development practices, and (iii) meet modern customers’ expectations for convenience in their lives, as with other services such as banking, social media, and e-commerce. **Specifically, we request that the Commission require the utilities to implement the following authorization processes for non-RES third parties** (and as further explained in the attached slides). In each case below, action is taken by the *customer*:

1. From the utility’s website, in which the customer logs in and selects a third party with whom s/he authorizes to share energy usage data
2. From a non-RES third party’s website, in which the customer creates an account with the third party; the customer is prompted to log in to the utility’s website; and, upon successful authentication, the customer returns to the third party’s site¹³
3. From the utility’s website, but without requiring login by the customer. The customer provides some identifying information in a web form, such as account number, address, last month’s bill amount, etc. Then the customer selects the third party of his/her choice. This method is used if the customer has not yet created a login/password, or the customer is unable to login to their account, if they have one. The Commission will need to determine what information a customer needs to provide to be deemed authenticated in this method.

Furthermore, to allow for so-called “warrant” processes led by the third party, we urge the Commission to require the utilities to implement the following minimum authorization processes. These actions are taken by the *third party*.

¹³ For further detail on this method, which is really a variation of #1, see the attached slides. Also see Verified Initial Comments of the Mission:data Coalition dated March 9th, 2015, p. 6-7.

1. Via a paper form provided by the third party, transmitted via mail or fax.
2. From the utility's website, at which the third party is already registered. The third party provides the customer's zip code, account number, authorization term in months or years and agrees to Commission-approved warrant language (as with the "check box" approach described in Verified Initial Comments of Ameren dated March 9th, 2015, p. 8).
3. Via an Application Programming Interface (API) using HTTP(s) and REST¹⁴ in which the non-RES third party's server sends the customer account number, zip code and authorization term to the utility, and the utility responds with either a "success" or "failure" message.

It is important to note that both ComEd and Ameren offer a "check-box" warrant method today for non-RES third parties (Ameren calls them "Customer Business Partners") in which the third party requests access to customer data with only a zip code and account number. As mentioned above, this was described by Ameren in its initial comments as a system that is currently in operation.¹⁵ Evidently, the existence of this method today signals that both utilities and the Commission have agreed that zip code, account number and a warrant are sufficient to provide a "verifiable authorization" described in the PUA - even for non-RES third parties. Mission:data believes that zip code, account number and a warrant are sufficient, and that the utilities should continue to support it well into the future. It is a good balance between the customer's desire for convenience and the need to protect consumers from bad actors claiming fraudulent consent.

If, however, the Commission changes its mind and determines that zip code, account number and a warrant do *not* adequately demonstrate a showing of consent, then we urge the Commission to require the utilities to implement the following additional verifications to supplement the zip code/account number warrant process in a convenient manner:

4. SMS verification option: The utility sends a text message (SMS) to the customer for verification, as described in the attached example. Note that this method only works if the utility has the customer's mobile phone number on file.
5. Email verification option: Similar to the above SMS option, except the utility sends the customer an email asking for verification. This method only works if the utility has the customer's email address on file.
6. Automated phone verification option: the utility places an automated phone call to the customer asking for verification. This method only works if the utility has the customer's phone number on file.

¹⁴ Representational State Transfer. See https://en.wikipedia.org/wiki/Representational_state_transfer. This is the same method as #2, except that it is executed by a server call, as opposed to by a human.

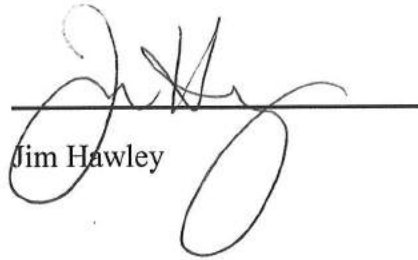
¹⁵ Ver. Init. Comments of Ameren dated March 9th, 2015, p. 7-8.

Taken together, the authorization processes we have outlined above should be adopted by the Commission as the minimum set of methods available. This will ensure that consent is granted in a manner that is simple and convenient for customers. Thank you for your consideration.

Dated: May 4th, 2015

Respectfully submitted,

FOR THE MISSION:DATA COALITION, INC.



Jim Hawley

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of Sacramento

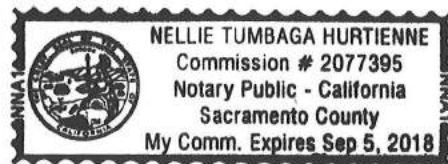
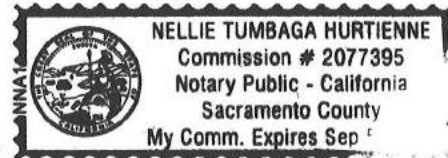
On September 22, 2015, before me, Nellie Tumbaga Hurtienne
(insert name and title of the officer)

personally appeared Jim Hawley
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature Nellie Tumbaga Hurtienne (Seal)



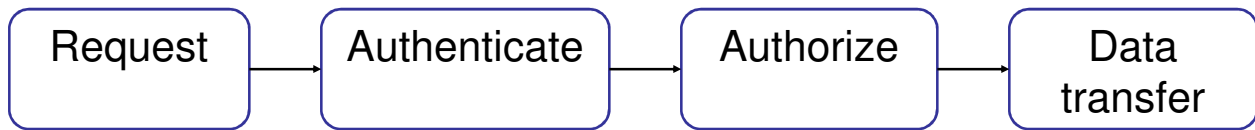


Authorization Processes:
*Appendix to Mission:data's
Verified Sur-reply Comments*

May 4th, 2015
Docket No. 15-0073

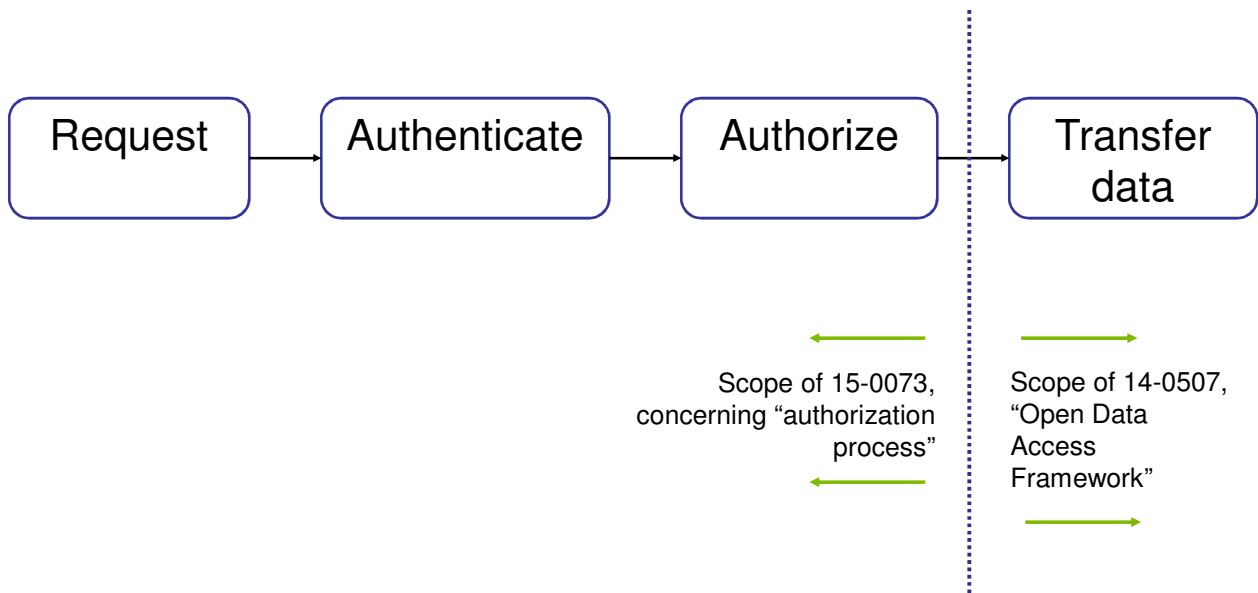


Process Flow



Each process is discrete and must be considered individually.

Process Flow



Definitions

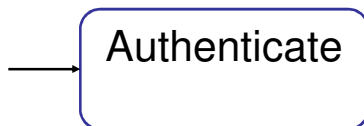
Request

Requests can be either:

- From the customer to the utility
- From the third party to the utility (via 'warrant' process)

Methods (initiated by customer)	Methods (initiated by third party)
Utility portal after login	Online request form
Utility web form (unauthenticated)	API
Phone call to utility	Paper form
Email to the utility	

Definitions



Authentication is the process of establishing genuine **identity**.

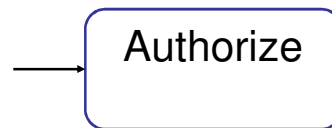
- i.e. “Are you who you say you are?”
- Accomplished by comparing information that both parties have
- Reasonable certainty, not perfect certainty
- Medium-agnostic: could occur over phone, via text, email, paper, or online

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Examples of info the utility may have that could be used to authenticate a customer:

Name
Address (street, zip code)
Account number
Meter identifier
Last month's bill amount
Email address
Mobile phone
Non-mobile phone (work or home)
Username/password

Definitions



Authorization is granting someone a **right** to do something.

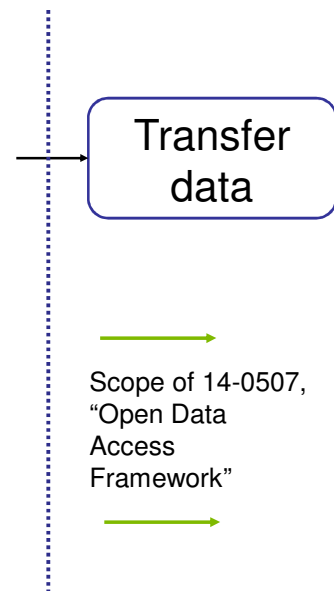
- e.g. “You’re allowed to access this data for 5 years”
- Like authentication, authorization is medium-agnostic
- Authorization could be granted via paper, fax, phone, text, email, web, carrier pigeon, etc.
- May be restricted in *time* or *scope*
- Authorization without authentication is dangerous; authentication without authorization is useless
- Green Button Connect is **NOT** an authorization process

Definitions

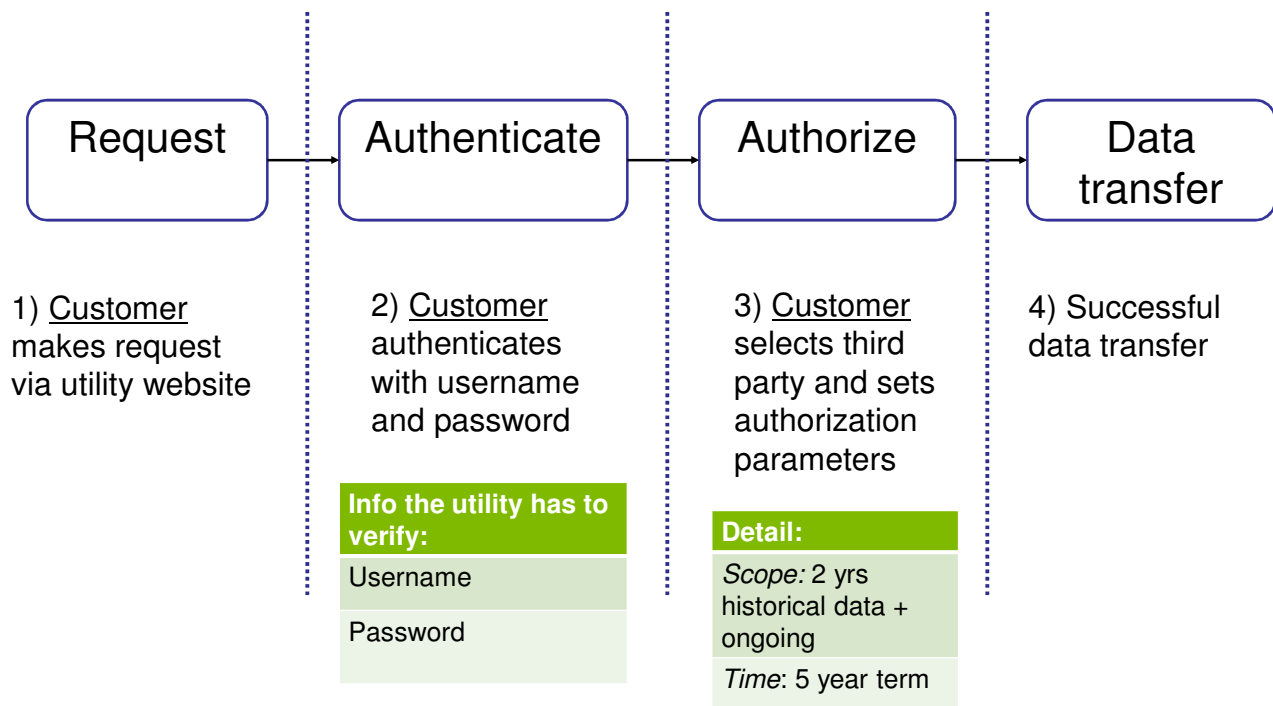
Transfer of data could take several forms:

- Green Button download to customer
- Green Button Connect to third party
- CSV files via SFTP site
- CSV files via email
- CD-ROM via FedEx
- etc.

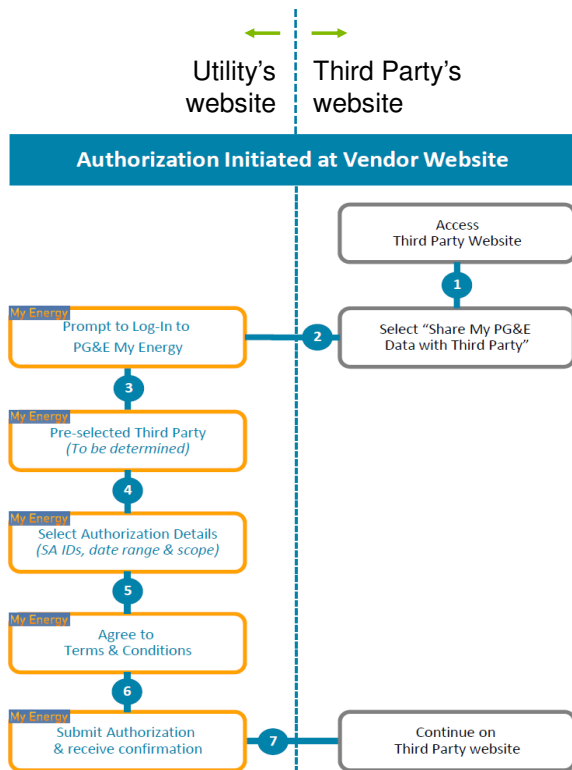
Not in the scope of 15-0073.



Example #1: Website (simple case)



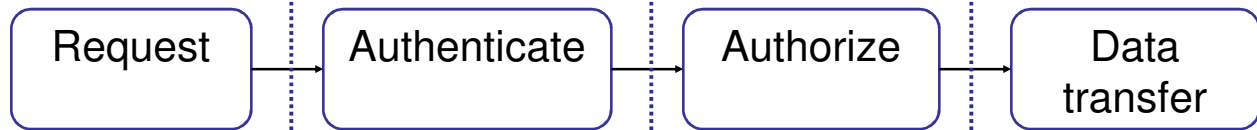
Example #2: Website (enhanced)



- Customer begins at third party's website and creates an account for energy management services.
- Customer clicks "Connect to utility" (PG&E in this example).
- Pop-up window spawned, asks for utility login/password.
- Customer agrees to authorization language, sets authorization term.
- Upon submit, user continues on third party website.

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Warrant Process (regular)



1) Third party makes request via:

Methods (initiated by third party):

Online request form

API

Paper form

2) Third party already authenticated w/ utility because of prior registration.

3) Third party provides info to identify customer:

Info the utility has to verify:

Zip code, 30301

Account number, xxx-xxx-xxxxxx

4) Third party requests authorization by providing this info:

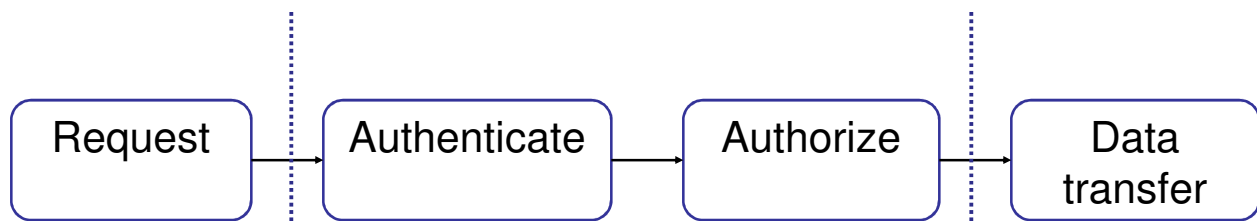
Detail:

Scope: 2 yrs historical data + ongoing

Time: 5 year term

5) Successful data transfer

Option: Warrant with SMS



1) Third party makes request with ZIP and acct # via:

Methods (initiated by third party)

Online request form

API

Paper form

2) Utility sends text (SMS) message to customer. "Do you authorize Party X to access data for 5 years? Reply YES or NO. See terms and conditions bit.ly/xyz."

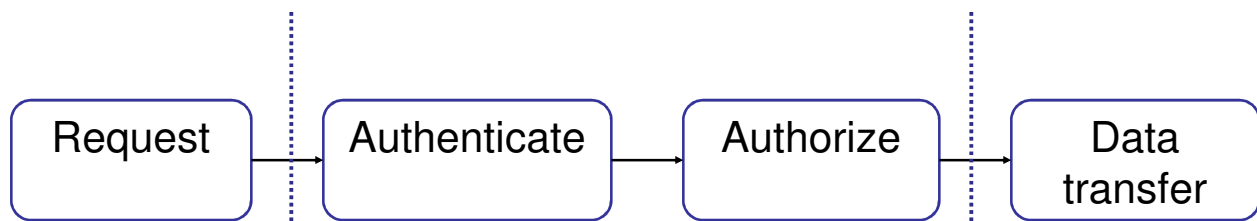
3) Customer replies 'YES'

Note #1: In this case, authentication and authorization are merged into one process.

Note #2: This only works if the utility has the customer's mobile number on file.

4) Successful data transfer

Option: Warrant with email



1) Third party makes request via:

Methods (initiated by third party)

Online request form

API

Paper form

2) Utility sends email to customer. "Do you authorize Party X to access data for 5 years? Reply to this email to confirm. Terms and condition are below."

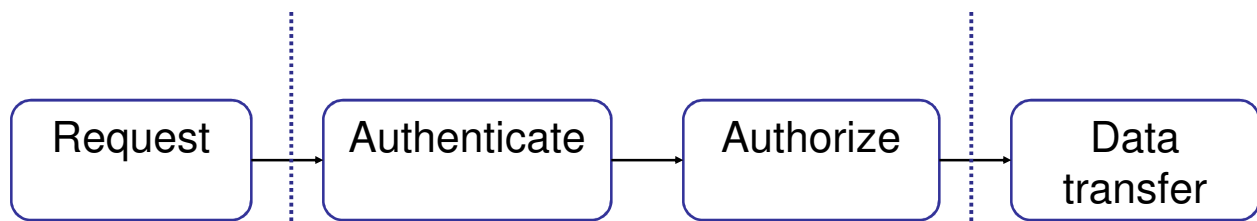
3) Customer replies.

4) Successful data transfer

Note #1: In in "Warrant with SMS," authentication and authorization are merged into one process.

Note #2: This only works if the utility has the customer's email address on file.

Option: Warrant with phone call



1) Third party makes request via:

Methods (initiated by third party)

Online request form

API

Paper form

2) Utility robot calls the customer's phone. "Hi, this is ComEd. We received a request from Party X for energy usage data. Do you want to share your data with Party X? If yes, press 1. If not, press 2. Press 3 to speak with an operator."

3) Customer presses 1.

Note #1: As in "Warrant with SMS," authentication and authorization are merged into one process.

Note #2: This only works if the utility has the customer's phone number on file.

4) Successful data transfer

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