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METERING ISSUES

Sara Cardwell

January 28th and 29th, 2014



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Metering Point ID

- Unique number within the distribution system to identify the actual metering point.
- In the U.S., distribution companies can establish their own numbering systems. Usually the ID includes GPS or the distribution company's network coordinates.
- Established when account first opened. Usually doesn't change if account changes to a new end user.



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Metering Data Standards

- Most states in the US use Electronic Data Interchange for transferring data from the distribution utility with meter reading responsibility to the suppliers.
- There is often a working group comprised of utility, commission and suppliers that engage in continuous dialogue to ensure the system is continuously improving.
- Utilities can continue to have their internal systems as long as the data can be translated into the EDI formats.



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Data Exchange System

- EDI
- See Ohio Electric Implementation Guideline for Electronic Data Interchange.
- See Ohio Electric Choice Electronic Data Interchange (EDI) Transaction Scenario Diagrams



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Customer Databases

- Utilities in the United States either purchase software or build systems internally to function as a customer database and use that database for billing, accounting and reporting functions.
- Because of licensing restrictions the actual designs of the databases are not publicly available.
- In general databases start with an account number and then contain the names, addresses, phone numbers, billing and payment histories and usage data, meter numbers and meter ID numbers.



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Customer Databases Continued

- Each distribution utility and supplier has their own database.
- Databases not regulated. Only customer complaints about incorrect billings are monitored by the regulators.



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Procedures to Operate, Maintain and Update Customer Databases

- Normally on a need to basis.
- Updates needed when rates change.
- Utilities have standard back up processes.
- If the utility has purchased database software from an outside vendor, the utility will need to decide how often to install upgrades.
- Regulators in the US do not specifically regulate this area unless the utility has had billing issues with customers.



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Meter Reading, Billing and Collection

- Distribution utility continues to read the meter.
- Usually there are many billing options. Two examples below:
 - In Oregon the supplier bills the customer for its services and the utility bills the customer for its services. Either party could do a combined billing but would be required to have bonds to ensure the non-billing party received reimbursement
 - In Ohio, the supplier can send bill ready amounts for the utility to include in their bill, both the supplier and the utility can bill or the utility can bill the suppliers' rates if they are one of five "easy" to bill rates.



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The billing risks

- If the supplier and the utility both bill for their services, each incurs risks equal to their services.
- In Ohio the utilities can issue a consolidated bill and buy the supplier's receivables. Suppliers agree to accept a discounted amount on their charges which the utility pays to the supplier at the time of billing.
- Bonding type requirements to ensure each party covered for other party's inability to pay
- Customers can't switch if they haven't paid their bills to the previous supplier.



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Meter Data Procedures

- Utilities are required to test meters at regular intervals and report results to regulators.
- Suppliers are required as per the tariff to keep customer data confidential.
- In order to allow suppliers to have information regarding customers, Ohio provides a compact disc with customer information on it for \$150. Customers can opt out of being included on the list.
- With customer permission, the supplier can also access customer data on the utility's website.



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Meter Data Procedures – Page 2

- Utilities publish meter reading schedules so suppliers know when the meters for each of their customers will be read and also what the time frame for switching is.
- Utility may require a specific meter type for customers of a specified load level and request that the supplier or customer pay for those costs or a portion of them.
- Utility may allow customers and their suppliers to have access to pulse data. Usually a fee is charged.



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- If there are data issues, utilities will estimate data based on a review of historic data.
- Utility may allow the supplier read access to the customer's meter.
- Utilities usually provide meter data via EDI.



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Authorization to Receive Billing Data

- Suppliers sign confidentiality agreements as part of their application process to become a supplier.
- Suppliers submit a direct access service request for each customer they will supply.
- Once it is confirmed that the customer desires service from that supplier, the supplier is authorized to receive billing data.



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Policies for Billing and Collection

- These should be included as part of the utility's tariff.
- Utility may also have a guidebook for suppliers that state the policies.
- Payment is expected by the due date on the bill. Different states have different due date requirements such as 15 or 20 days after receipt.
- If consolidated bill, payment applied to regulated portion of the bill first.
- Payment to the supplier made via Automated Clearing House within 4 business days.



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Policies for Billing and Collection Continued

- Supplier is responsible for getting payment from customer except where the supplier has signed up for the Account Receivables option.
- Utility will submit an invoice monthly to the supplier for services the supplier bought from the utility.
- Supplier expected to pay within a specified number of days such as 5 or 10.



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Meter Data Aggregator

- An entity that has the authority to combine meter data from customers for a specified purpose.
- In the EU the aggregator is used to compile the meter data from all customers with a particular supplier and provide a totalized picture of that data to the supplier.
- In Oregon, the utilities perform this function but also provide data for each customer of the supplier.
- In Ohio, each customer's billing data is forwarded via EDI to the supplier



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Customer Switching

- In the US, customers are switched on their normal meter read date.
- In Europe, there is a three week period to make the switch.