

Responder	1	1.a.	2	2.a.	3	4	4.a.i.	4.a.ii.	4.a.iii.	4.a.iv.	4.b.
<b>A</b>	Yes	No	No	N/A		Commercial/Peak Billing Demand Commercial/On Peak Usage Commercial/Off Peak Usage Commercial/Monthly Commercial/Time of Use Commercial/Hourly or less Commercial/Up to one minute Industrial/Peak Billing Demand Industrial/One Peak Usage Industrial/Off Peak Usage Industrial/Monthly Industrial/Time of Use Industrial/Hourly or less Industrial/Up to 4 second	User selectable	Yes, see 4	Yes, longer term currently	No	Yes, both near real time forecast and through end of billing period
<b>B</b>	Yes	Yes	Yes	Our BAS systems collect Interval Meter Data and building owner shares info with whom they desire.	No, Commonwealth Edison sends home 13 month bar-chart of usage in monthly bill.	Commercial/Hourly or less Industrial/Hourly or less	Archived in MS SQL-Server	Yes, 15 minutes	Yes, longer term currently	Yes, next day, buildings don't need it faster	Yes, better forecasting for curtailment service providers

Responder	5	5.a.	5.b.	5.c.	6	6.a.	7.a.	7.b.	7.c.	8	9
	Do your customers provide any energy usage information to you?	What type of information?	Is there any usage information that would be useful to receive from the customer?	If so, what type of information would you like to receive?	Do you provide a means for customers to request energy usage data on-demand?	How much usage data can they request?	How and how often is usage information communicated to the customer? Currently?	How and how often is usage information communicated to the customer? Plan/wish for future?	How and how often is usage information communicated to the customer? Does this vary by customer class? If so, please explain	What is the current deployment status of your usage communication capability? If not deployed, then please provide an approximate date for this capability to be available to customers.	To what, if any, customer usage information exchange standards do you comply today?
<b>A</b>	Yes	4/sec/1 min/15 min/1 hr interval data as available	Yes	Scheduled energy usage/operations	Yes	Two years	Paper bill/Monthly Email/Monthly Website/Near real-time	Paper bill/Monthly Email/Monthly Website/Near real-time	Yes, dependent on size/metering infrastructure	With a bill/Deployed Event based (e.g. in case of dispute)/Deployed Published at regularly scheduled intervals/Deployed On-demand/Deployed	None
<b>B</b>	Yes	Debugging Peak Demand Shaving application problems, esp. peak exceeded	Yes	Sub-metering to verify maintenance was done	Yes	As much as is archived in SQL-Server	Other data exchange format/BACnet Trend Data	Other data exchange format/REST for Fault Det. & Diag.	No, Almost all have PC workstations, not all use enough energy to absorb the cost of manipulating data.	On-demand/Deployed	Other/Interval Meter contact closures

Responder	In the future?	In which, if any, NIST Smart Grid Interoperability Panel ("SGIP") activities are you engaged? Please specify	In which, if any, other standards development activities or organizations are you engaged?	If not, do you plan to engage?	If not, is there a specific reason why not, or a particular barrier to participation?	Please provide any other comments related to your practice of providing customer with usage information, or any future applications you may be considering.	In which NERC region do you operate?	Please identify the stakeholder categories to which your company belongs?
	9.a.	10	10.a.	10.b.	10.c.	11	12	13
<b>A</b>	TBD	SGIP Committees	OASIS Technical Committees		Time constraints are a significant barrier		Electric Reliability Council of Texas Midwest Reliability Organization Northwest Reliability Organization Reliability First Corporation/Mid Atlantic Area Council Western Electricity Coordinating Council	Electricity and Financial Market Trader (includes Aggregators) Independent Power Producer Information Technology Application Developer and Integrator Renewable Power Producer Retail Service Provider
<b>B</b>	IEC TC57 CIM DLMS COSEM Other/OASIS Energy Interoperation	Paps SGIP Committees, b2g, pap 9, sgac	NAESB Smart Grid Standards Task Force OASIS Technical Committees			Virtual power plant, curtailment, energy usage optimization, micro-grid, retail (not wholesale) market	Electric Reliability Council of Texas Florida Reliability Coordinating Council Midwest Reliability Organization Northwest Reliability Organization Reliability First Corporation/Mid Atlantic Area Council Southeast Electric Reliability Council Southwest Power Pool Western Electricity Coordinating Council	Commercial and Industrial Equipment Manufacturer and Automation Vendor

Responder	1	1.a.	2	2.a.	3	4	4.a.i.	4.a.ii.	4.a.iii.	4.a.iv.	4.b.
C	Yes	Yes	Yes	Authorization form approved by the customer	The company's preferred option is via the web	Residential/On Peak Usage Residential/Off Peak Usage Residential/Seasonal Residential/Monthly Residential/Time of Use Commercial/Peak Billing Demand Commercial/On Peak Usage Commercial/Off Peak Usage Commercial/Seasonal Commercial/Monthly Commercial/Time of Use Commercial/Hourly or less Industrial/Peak Billing Demand Industrial/One Peak Usage Industrial/Off Peak Usage Industrial/Seasonal Industrial/Monthly Industrial/Time of Use Industrial/Hourly or less	Up to 24 months	Yes, 15 minutes	Yes, both	No	
D	No		Yes	The customer has to provide written authorization	No	Residential/Monthly Commercial/Monthly Industrial/Peak Billing Demand Industrial/Monthly	All customers/ Monthly Industrial/As requested	Yes, Industrial Any period	Yes, Longer term	No	No specific plans

Responder	5	5.a.	5.b.	5.c.	6	6.a.	7.a.	7.b.	7.c.	8	9
	Do your customers provide any energy usage information to you?	What type of information?	Is there any usage information that would be useful to receive from the customer?	If so, what type of information would you like to receive?	Do you provide a means for customers to request energy usage data on-demand?	How much usage data can they request?	How and how often is usage information communicated to the customer? Currently?	How and how often is usage information communicated to the customer? Plan/wish for future?	How and how often is usage information communicated to the customer? Does this vary by customer class? If so, please explain	What is the current deployment status of your usage communication capability? If not deployed, then please provide an approximate date for this capability to be available to customers.	To what, if any, customer usage information exchange standards do you comply today?
<b>C</b>	Yes	Energy generation for renewable projects	Yes	More detailed usage information during peak loads	Yes	Up to 24 months	Paper bill/Monthly Website/Monthly Other data exchange format/Energy Profiler Online	SMS/Monthly	Yes, Commercial/Industrial have needs for more real-time detailed information	With a bill/Deployed Event based (e.g. in case of dispute)/Deployed Published at regularly scheduled intervals/Deployed Other means/Smart Grid	C12.19 Tables
<b>D</b>	Yes	The largest customers provide operating plans to assist forecasting	Yes	The largest customers provide operating plans to assist forecasting		Electronic billing customers have two year profiles of monthly use; industrial customer can request profiles of 15 minute data for any period	Paper bill/Monthly Paper bill/Bimonthly Paper bill/Semi-annual Website/Monthly Website/Bimonthly Website/Semi-annual Other data exchange format/Industrial	Other data exchange format/Industrial	Yes, Industrial will likely have near real-time data before others	With a bill/Deployed (all customers) Event based (e.g. in case of dispute)/Deployed (all customers) On demand/Industrial or electronic others	None

Responder	9.a.	10.	10.a.	10.b.	10.c.	11.	12.	13.
C	In the future?	In which, if any, NIST Smart Grid Interoperability Panel ("SGIP") activities are you engaged? Please specify	In which, if any, other standards development activities or organizations are you engaged?	If not, do you plan to engage?	If not, is there a specific reason why not, or a particular barrier to participation?	Please provide any other comments related to your practice of providing customer with usage information, or any future applications you may be considering.	In which NERC region do you operate?	Please identify the stakeholder categories to which your company belongs?
				No	Time and budget constraints	None	Western Electricity Coordinating Council	Electric Utility Company - Investor Owned Utility
D	Not sure	Not involved	Other/CNC-IEC Smart Grid Task Force (establishing a strategy for Canada's contribution to the IEC)	No	Unsure of which standards to participate in		Midwest Reliability Organization	Electric Utility Company - Publicly Owned Utility (also a natural gas distributor)

Responder	1	1.a.	2	2.a.	3	4	4.a.i.	4.a.ii.	4.a.iii.	4.a.iv.	4.b.
<b>E</b>	Yes	Yes	No		Please email me and I can send the information	Residential/On Peak Usage Residential/Off Peak Usage Residential/Monthly Residential/Time of Use Residential/Hourly or less Residential/Other: Cost and carbon emissions Commercial/Peak Billing Demand Commercial/On Peak Usage Commercial/Off Peak Usage Commercial/Monthly Commercial/Time in Use Commercial/Hourly or less Commercial/Other: Cost and carbon emissions Industrial/Peak Billing Demand Industrial/On Peak Usage Industrial/Off Peak Usage Industrial/Monthly Industrial/Time of Use Industrial/Hourly or less	12 months	Yes, Annually, Monthly, or Daily	Yes, Next day	Yes	
<b>F</b>	No		Yes		Counter-signed confidentiality agreement, here by a C&LM supervisor	Residential/Monthly Commercial/Monthly Commercial/Hourly or less Commercial/Other: Hourly for tiny fraction Industrial/Monthly Industrial/Hourly or less Industrial/Other: Hourly for tiny fraction	12-36 months	Yes, Months	Yes, Longer term	No	No current plans

Responder	5	5.a.	5.b.	5.c.	6	6.a.	7.a.	7.b.	7.c.	8	9
E	<p>Do your customers provide any energy usage information to you?</p> <p>Yes</p>	<p>What type of information?</p> <p>Appliance survey data</p>	<p>Is there any usage information that would be useful to receive from the customer?</p> <p>Yes</p>	<p>If so, what type of information would you like to receive?</p> <p>Appliance survey data</p>	<p>Do you provide a means for customers to request energy usage data on-demand?</p> <p>Yes</p>	<p>How much usage data can they request?</p> <p>A year of usage history at whatever intervals are available</p>	<p>How and how often is usage information communicated to the customer? Currently?</p> <p>Paper bill/Monthly Email/Monthly Email/Daily Email/Weekly Website/Daily SMS/Daily</p>	<p>How and how often is usage information communicated to the customer? Plan/wish for future?</p> <p>No</p>	<p>How and how often is usage information communicated to the customer? Does this vary by customer class? If so, please explain</p> <p>With a bill/Deployed Event based (e.g. in case of dispute)/Deployed Published at regularly scheduled intervals/Deployed On-demand/Deployed</p>	<p>What is the current deployment status of your usage communication capability? If not deployed, then please provide an approximate date for this capability to be available to customers.</p> <p>IEC TC57 CIM MDMA</p>	<p>To what, if any, customer usage information exchange standards do you comply today?</p>
F	<p>Do your customers provide any energy usage information to you?</p> <p>Yes</p>	<p>What type of information?</p> <p>Demand response customers (few provide 5-minute interval data via non-billing meters)</p>	<p>Is there any usage information that would be useful to receive from the customer?</p> <p>Yes</p>	<p>If so, what type of information would you like to receive?</p> <p>Metered data more frequently than monthly (5-minute?) would be nice, the more so the larger the user</p>	<p>Do you provide a means for customers to request energy usage data on-demand?</p> <p>Yes</p>	<p>How much usage data can they request?</p> <p>Log onto own account via Company F website; most customers get monthly data, year or more</p>	<p>How and how often is usage information communicated to the customer? Currently?</p> <p>Paper bill/Monthly Email/Monthly Website/Monthly Website/Near real-time SMS/Other: What's SMS?</p>	<p>How and how often is usage information communicated to the customer? Plan/wish for future?</p> <p>Email/Monthly Website/Monthly Website/Hourly or less Website/Near real-time</p>	<p>How and how often is usage information communicated to the customer? Does this vary by customer class? If so, please explain</p> <p>Yes, Large customers will value near real-time data more</p>	<p>What is the current deployment status of your usage communication capability? If not deployed, then please provide an approximate date for this capability to be available to customers.</p> <p>With a bill/Deployed On-demand/Deployed</p>	<p>To what, if any, customer usage information exchange standards do you comply today?</p> <p>Other: Don't know</p>

Responder	In the future?	In which, if any, NIST Smart Grid Interoperability Panel ("SGIP") activities are you engaged? Please specify	In which, if any, other standards development activities or organizations are you engaged?	If not, do you plan to engage?	If not, is there a specific reason why not, or a particular barrier to participation?	Please provide any other comments related to your practice of providing customer with usage information, or any future applications you may be considering.	In which NERC region do you operate?	Please identify the stakeholder categories to which your company belongs?
9.a.	10	10.a.	10.b.	10.c.	11	12	13	
E	IEC TC57 CIM MDMA Multispeak	OpenADE Other/OpenHAN				Electric Reliability Council of Texas Florida Reliability Coordinating Council Midwest Reliability Organization Northwest Reliability Organization Southwest Power Pool Western Electricity Coordinating Council	Commercial Consumer Information Technology Application Developer and Integrator	
F	Other: Don't know	NAESB Smart Grid Standards Task Force Other: Seems likely	No	I know only a modest amount about what's happening in other parts of my company - esp. Qs 9 & 10	Smart Grid pilot was successful. Universal roll-out of Smart meters planned to start in 2012	Northeast Power Coordination Council		

Responder	1	1.a.	2	2.a.	3	4	4.a.i.	4.a.ii.	4.a.iii.	4.a.iv.	4.b.
G	Yes	Yes	Yes	Customer grants the 3rd party access through a standard form letter of authorization or if the customer has a smart meter they can grant a 3rd party access to their usage information through the Smart Meter Texas Portal.	See answer to Q. 11. Also, Smart Meter Texas Portal is a standard interface providing usage information for residential and small commercial customers in ERCOT who have smart meters <a href="https://www.smartmetertexas.com/CAP/public/">https://www.smartmetertexas.com/CAP/public/</a>	Residential/Monthly Residential/Time of Use Residential/Hourly or less Residential/Other: 15 minute data; real time meter data through In home displays Commercial/Peak Billing Demand Commercial/Monthly Commercial/Hourly or less Commercial/Other: 15 minute Industrial/Peak Billing Demand Industrial/Monthly Industrial/Hourly or less Industrial/Other: 15 minute	13 months	Yes, If the customer has a smart meter they can specify a time range for a full day of 15 minute data	Yes, historical usage is used for next day projections, monthly projections, and contract term projections	Yes	If not currently provided today, do you plan to provide any of the above in the future, and if so, which?

Responder	Question	Response
G	5 Do your customers provide any energy usage information to you?	No
	5.a. What type of information?	
	5.b. Is there any usage information that would be useful to receive from the customer?	Yes
	5.c. If so, what type of information would you like to receive?	Sub-meter or device level information
	6 Do you provide a means for customers to request energy usage data on-demand?	Yes
	6.a. How much usage data can they request?	Up to 24 months for monthly data and up to 13 months on 15 minute data
	7.a. How and how often is usage information communicated to the customer? Currently?	Paper bill/Monthly Email/Other: Weekly for 15 minute data Website/Daily Website/Hourly or less
	7.b. How and how often is usage information communicated to the customer? Plan/wish for future?	SMS/Daily
	7.c. How and how often is usage information communicated to the customer? Does this vary by customer class? If so, please explain	Yes, Weekly email and SMS for residential customers with smart meters only, all receive monthly bill and website access
	8 What is the current deployment status of your usage communication capability? If not deployed, then please provide an approximate date for this capability to be available to customers.	With a bill/Deployed Event based (e.g. in case of dispute)/Deployed Published at regularly scheduled intervals/Deployed On-demand/Deployed
	9 To what, if any, customer usage information exchange standards do you comply today?	EDI 867 Other: Lodestar Enhanced (LSE) format

Responder	In the future?	In which, if any, NIST Smart Grid Interoperability Panel ("SGIP") activities are you engaged? Please specify	In which, if any, other standards development activities or organizations are you engaged?	If not, do you plan to engage?	If not, is there a specific reason why not, or a particular barrier to participation?	Please provide any other comments related to your practice of providing customer with usage information, or any future applications you may be considering.	In which NERC region do you operate?	Please identify the stakeholder categories to which your company belongs?
9.a.	10	10.a.	10.b.	10.c.	11	12	13	
<p><b>G</b></p> <p>EDI 867 Other: Lodestar Enhanced (LSE) format</p>		<p>PAP's, PAP10, OpenADE SGIP Governing NAESB Smart Board Grid Standards Task Force</p>				<p>Company G is actively engaged in giving residential consumers their energy usage information in a variety of forms. All residential customers can view and download their historical monthly usage and billing information on the reliant.com website. Customers with smart meters receive a free weekly email that provides them with their past week of 15-minute usage and by the end of 2010 customers will be able to view their 15 minute usage data on a day after basis on the reliant.com website. Also, Company G is deploying HAN devices in customer's homes so consumers can view real time usage information.</p>	<p>Electric Reliability Council of Texas Independent Power Producer Retail Service Provider</p>	



H	Responder		I
5	Do your customers provide any energy usage information to you?	Yes	No
5.a.	What type of information?	interval meter data (kWh, 15-minute kW) or monthly bill data	No
5.b.	Is there any usage information that would be useful to receive from the customer?		No
5.c.	If so, what type of information would you like to receive?	Yes	No
6	Do you provide a means for customers to request energy usage data on-demand?	Yes	No
6.a.	How much usage data can they request?	flexible interval going back as far as they have data entered	bad questions
7.a.	How and how often is usage information communicated to the customer? Currently?	Email/Hourly or less Website/Near real-time SMS/Hourly or less	bad questions
7.b.	How and how often is usage information communicated to the customer? Plan/wish for future?		bad questions
7.c.	How and how often is usage information communicated to the customer? Does this vary by customer class? If so, please explain		Yes, Really bad questions. Not enough space.
8	What is the current deployment status of your usage communication capability? If not deployed, then please provide an approximate date for this capability to be available to customers.		
9	To what, if any, customer usage information exchange standards do you comply today?		

Responder	In the future?	In which, if any, NIST Smart Grid Interoperability Panel ("SGIP") activities are you engaged? Please specify	In which, if any, other standards development activities or organizations are you engaged?	If not, do you plan to engage?	If not, is there a specific reason why not, or a particular barrier to participation?	Please provide any other comments related to your practice of providing customer with usage information, or any future applications you may be considering.	In which NERC region do you operate?	Please identify the stakeholder categories to which your company belongs?
9.a.	10	10.a.	10.b.	10.c.	11	12	13	
H		PAPs SGIP, colleagues in					Electricity Reliability Council of Texas Florida Reliability Coordinating Council Midwest Reliability Organization Northeast Power Coordinating Council ReliabilityFirst Corporation/Mid Atlantic Area Council Southeast Electric Reliability Council Southwest Power Pool Western Electricity Coordinating Council Commercial and Industrial Equipment Manufacturer and Automation Vendor Commercial Consumer Information Technology Application Developer and Integrator	
I		PAPs, 3, 4, 9, 10 Security/Privacy	Other: OpenADR, OpenHAN, SEP		Bad questionnaire: Tailored for utilities or ESP's, indicative of the lack of real world experience with utility/meter data systems.		R&D Organization and Academia	



Responder	5	5.a.	5.b.	5.c.	6	6.a.	7.a.	7.b.	7.c.	8	9
<b>J</b>	Do your customers provide any energy usage information to you? No	What type of information? No	Is there any usage information that would be useful to receive from the customer? No	If so, what type of information would you like to receive? Yes	Do you provide a means for customers to request energy usage data on-demand? Yes	How much usage data can they request? C&I customers with interval meters can request to receive monthly or daily	How and how often is usage information communicated to the customer? Currently? Paper bill/Monthly Paper bill/Other: All Website/Monthly Website/Daily Website/Other: C&I only SMS/Other: None	How and how often is usage information communicated to the customer? Plan/wish for future? Website/Daily Website/Hourly or less	How and how often is usage information communicated to the customer? Does this vary by customer class? If so, please explain Yes, Future plan is for customers with a smart meter	What is the current deployment status of your usage communication capability? If not deployed, then please provide an approximate date for this capability to be available to customers. With a bill/Deployed Event based (e.g. in case of dispute)/Deployed Published at regularly scheduled intervals/Implementing On-demand/Investigating	To what, if any, customer usage information exchange standards do you comply today? EDI 867
<b>K</b>	yes	Meter data - minute, interval and daily Yes	Telemetry data to support load reductions Yes	The quantity of data requested varies based upon the data range being requested. i.e., hourly, daily, monthly and in some instances, yearly. Based on the customer's request, they may receive one day's worth Paper bill/Monthly Paper bill/Weekly Website/Hourly or less					With a bill/Deployed Event based (e.g. in case of dispute)/Deployed Published at regularly scheduled intervals/Deployed On-demand/Deployed	Other: ANSI C12.1	

Responder	In the future?	In which, if any, NIST Smart Grid Interoperability Panel ("SGIP") activities are you engaged? Please specify	In which, if any, other standards development activities or organizations are you engaged?	If not, do you plan to engage?	If not, is there a specific reason why not, or a particular barrier to participation?	Please provide any other comments related to your practice of providing customer with usage information, or any future applications you may be considering.	In which NERC region do you operate?	Please identify the stakeholder categories to which your company belongs?
9.a.	10	10.a.	10.b.	10.c.	11	12	13	
<b>J</b>	ED1 867 C12.19 Tables	SGIP Committees, Monitoring only	NAESB Smart Grid Standards Task Force, Monitoring only	Yes, with NIST standards	Resource/time limited	Educating consumers on their usage information is key for the consumer to effectively manage their energy consumption.	ReliabilityFirst Corporation/Mid Atlantic Area Council	Electric Utility Company - Investor Owned Utility
<b>K</b>	Other: C57.13	PAPs SGIP Committees Company K is engaged in many of these activities	NAESB Smart Grid Standards Task Force OASIS Technical Committees Other: Numerous industry and regulatory activities	Yes, with other standards		Future applications are not defined at this time. Any data provided at this point in time may be inaccurate	ReliabilityFirst Corporation/Mid Atlantic Area Council Southeast Electric Reliability Council	Transmission Operators and Independent System Operators

Responder	1	1.a.	2	2.a.	3	4	4.a.i.	4.a.ii.	4.a.iii.	4.a.iv.	4.b.
L	Yes	No	Yes	Three step process 1. Application accepted by Company L; 2. License issued by MDPSC; 3. Certified by Company L after completion of EDI Testing	Using Smart meters, near real-time data available via web portal and/or In-Home Display	Residential/On Peak Usage Residential/Off Peak Usage Residential/Monthly Residential/Time of Use Commercial/Peak Billing Demand Commercial/On Peak Usage Commercial/Off Peak Usage Commercial/Monthly Commercial/Time of Use Industrial/Peak Billing Demand Industrial/On Peak Usage Industrial/Off Peak Usage Industrial/Monthly Industrial/Time of Use	Monthly	Yes, Hourly	No	Yes	Smart meters, Near real-time data via web portal and/or In-Home Display

Responder	Question	Response
L	5 Do your customers provide any energy usage information to you?	No
	5.a. What type of information?	
	5.b. Is there any usage information that would be useful to receive from the customer?	Yes
	5.c. If so, what type of information would you like to receive?	End-use data, equipment age & efficiency
	6 Do you provide a means for customers to request energy usage data on-demand?	Yes
	6.a. How much usage data can they request?	A year in hourly and/or TOU Intervals for customers with TOU meters, and a year in monthly intervals for customers with standard meters
	7.a. How and how often is usage information communicated to the customer? Currently?	Paper bill/Monthly Website/Monthly Other data exchange format/EDI
	7.b. How and how often is usage information communicated to the customer? Plan/wish for future?	Paper bill/Monthly Email/Monthly Email/Daily Website/Monthly Website/Daily Website/Hourly or less SMS/Monthly SMS/Daily SMS/Hourly or less Other data exchange format/EDI
	7.c. How and how often is usage information communicated to the customer? Does this vary by customer class? If so, please explain	Yes, E-mail & SMS for residential & small commercial
	8 What is the current deployment status of your usage communication capability? If not deployed, then please provide an approximate date for this capability to be available to customers.	With a bill/Deployed Event based (e.g. in case of dispute)/Investigating On-demand/Investigating
	9 To what, if any, customer usage information exchange standards do you comply today?	EDI 867

Responder	10	11	12	13
L EDI 867	<p>In which, if any, NIST Smart Grid Interoperability Panel ("SGIP") activities are you engaged? Please specify</p> <p>In which, if any, other standards development activities or organizations are you engaged?</p> <p>If not, do you plan to engage?</p> <p>If not, is there a specific reason why not, or a particular barrier to participation?</p> <p>Please provide any other comments related to your practice of providing customer with usage information, or any future applications you may be considering.</p>			
			ReliabilityFirst Corporation/Mid Atlantic Area Council	Electric Utility Company - Investor Owned Utility

Responder	1	1.a.	2	2.a.	3	4	4.a.i.	4.a.ii.	4.a.iii.	4.a.iv.	4.b.
M	Yes	Yes	Yes	Company M Direct access to meter data in near real-time business act as is essential to enable smart buildings to fulfill the promise of the smart grid. Best Commercial/Other: N/A today Commercial/Hourly or less Industrial/Other: 15 min. data	3rd parties, receiving energy practices for R, C&I customers can be found in the EIS Alliance customer domain Industrial/Other: 15 min. data	Are you aware of any best practices for residential energy usage data communication? If so, can you describe them or provide links to additional information?	Current Practice - Historical energy usage data - Typically, how much historical data is communicated at one time?	Does the requester have the ability to specify a time range? If yes, at what interval?	Do you use historical energy usage data to develop energy usage projections? If yes, is it done on a near real time basis or a longer term?	Do you provide forecast usage data to the end of the billing period?	If not currently provided today, do you plan to provide any of the above in the future, and is so, which?
				Company M Direct access to meter data in near real-time business act as is essential to enable smart buildings to fulfill the promise of the smart grid. Best Commercial/Other: N/A today Commercial/Hourly or less Industrial/Other: 15 min. data	3rd parties, receiving energy practices for R, C&I customers can be found in the EIS Alliance customer domain Industrial/Other: 15 min. data	Are you aware of any best practices for residential energy usage data communication? If so, can you describe them or provide links to additional information?	Current Practice - Historical energy usage data - Typically, how much historical data is communicated at one time?	Does the requester have the ability to specify a time range? If yes, at what interval?	Do you use historical energy usage data to develop energy usage projections? If yes, is it done on a near real time basis or a longer term?	Do you provide forecast usage data to the end of the billing period?	If not currently provided today, do you plan to provide any of the above in the future, and is so, which?
				Company M Direct access to meter data in near real-time business act as is essential to enable smart buildings to fulfill the promise of the smart grid. Best Commercial/Other: N/A today Commercial/Hourly or less Industrial/Other: 15 min. data	3rd parties, receiving energy practices for R, C&I customers can be found in the EIS Alliance customer domain Industrial/Other: 15 min. data	Are you aware of any best practices for residential energy usage data communication? If so, can you describe them or provide links to additional information?	Current Practice - Historical energy usage data - Typically, how much historical data is communicated at one time?	Does the requester have the ability to specify a time range? If yes, at what interval?	Do you use historical energy usage data to develop energy usage projections? If yes, is it done on a near real time basis or a longer term?	Do you provide forecast usage data to the end of the billing period?	If not currently provided today, do you plan to provide any of the above in the future, and is so, which?

Responder	5	5.a.	5.b.	5.c.	6	6.a.	7.a.	7.b.	7.c.	8	9
M	<p>Do your customers provide any energy usage information to you?</p> <p>Yes</p>	<p>What type of information?</p> <p>see (Question #2) energy usage data is received from C&amp;I customer-owned meters.</p>	<p>Is there any usage information that would be useful to receive from the customer?</p> <p>Yes</p>	<p>If so, what type of information would you like to receive?</p> <p>see answers to above questions</p>	<p>Do you provide a means for customers to request energy usage data on-demand?</p> <p>Yes</p>	<p>How much usage data can they request?</p> <p>energy usage data is provided to the C&amp;I customer thru custom reports as part of our energy services</p>	<p>How and how often is usage information communicated to the customer? Currently?</p> <p>Email/Monthly Email/Daily Website/Monthly Website/Daily</p>	<p>How and how often is usage information communicated to the customer? Plan/wish for future?</p> <p>Each of the 4 types of data (Monthly, Daily, Hourly, and Near Real-time) should be available from the meter to the premises. See response to Question #3. Email/Monthly Email/Daily Website/Monthly Website/Daily Website/Hourly or less Website/Near real-time SMS/Near real-time</p>	<p>How and how often is usage information communicated to the customer? Does this vary by customer class? If so, please explain</p> <p>Yes, services provided to R, C, and I customers will vary depending on their needs</p>	<p>What is the current deployment status of your usage communication capability? If not deployed, then please provide an approximate date for this capability to be available to customers.</p> <p>With a bill/Other: N/A Event based (e.g. in case of dispute)/Other: N/A Published at regularly scheduled intervals/Deployed On-demand/Deployed</p>	<p>To what, if any, customer usage information exchange standards do you comply today?</p> <p>None</p>

Responder	In the future?	In which, if any, NIST Smart Grid Interoperability Panel ("SGIP") activities are you engaged? Please specify	In which, if any, other standards development activities or organizations are you engaged?	If not, do you plan to engage?	If not, is there a specific reason why not, or a particular barrier to participation?	Please provide any other comments related to your practice of providing customer with usage information, or any future applications you may be considering.	In which NERC region do you operate?	Please identify the stakeholder categories to which your company belongs?
	<b>9.a.</b>	<b>10</b>	<b>10.a.</b>	<b>10.b.</b>	<b>10.c.</b>	<b>11</b>	<b>12</b>	<b>13</b>
<b>M</b>	Other: (to be determined) interoperable standards developed under the direction of the NIST SGIP (for R, C, and I customers)	PAPs SGIP Comments all PAPs, DEWGs, and standing committees	Organization for the Advancement of Structured Information Standards (OASIS) Other: EIS Alliance		real-time energy information is a key requirement (see response to Question #3)			Appliance and Consumer Electronics Provider Commercial and Industrial Equipment Manufacturer and Automation Vendor

Responder	1	1.a.	2	2.a.	3	4	4.a.i.	4.a.ii.	4.a.iii.	4.a.iv.	4.b.
N	Yes		Yes	3rd party contract with Company N. Customer authorizes data release to 3rd party	See Open.SG - Open ADE & EDI 867	Residential/Hourly or less Commercial/Hourly or less Industrial/Hourly or less	24 hours	No	Yes		
O	Yes	Yes	No		We currently provide data via email and our web site.	Residential/Monthly Residential/Hourly or less Residential/Other: Daily Commercial/Monthly Commercial/Hourly or less Commercial/Other: Daily Industrial/Monthly Industrial/Hourly or less Industrial/Other: Daily	Daily, hourly, 30 days	Yes, hourly	No	No	

Responder	5	5.a.	5.b.	5.c.	6	6.a.	7.a.	7.b.	7.c.	8	9
N	Do your customers provide any energy usage information to you?	What type of information?	Is there any usage information that would be useful to receive from the customer?	If so, what type of information would you like to receive?	Do you provide a means for customers to request energy usage data on-demand?	How much usage data can they request?	How and how often is usage information communicated to the customer? Currently?	How and how often is usage information communicated to the customer? Plan/wish for future?	How and how often is usage information communicated to the customer? Does this vary by customer class? If so, please explain	What is the current deployment status of your usage communication capability? If not deployed, then please provide an approximate date for this capability to be available to customers.	To what, if any, customer usage information exchange standards do you comply today?
	No				No		Paper bill/Monthly Website/Monthly Website/Daily Website/Hourly or less	Other data exchange format/Near real-time: Zig Bee, SEP from Meter	With a bill/Funded With a bill/Deployed Event based (e.g. in case of dispute)/Investigating Published at regularly scheduled intervals/Funded Published at regularly scheduled intervals/Implementing Published at regularly scheduled intervals/Other: 2011 Other means/Funded: Zig Bee, SEP from Meter (real-time) Other means/Other: 2011	EDI 867 Google API, Power meter	
O	No		No	Yes	We maintain daily data for 13 months, hourly data for 90 days.	Paper bill/Monthly Email/Monthly Email/Daily Website/Monthly Website/Daily Website/Hourly or less SMS/Other: Not yet	Paper bill/Monthly Email/Monthly Email/Daily Email/Hourly or less Website/Monthly Website/Daily Website/Hourly or less SMS/Monthly SMS/Daily SMS/Hourly or less Other data exchange format/Monthly: Facebook?	No	With a bill/Deployed Event based (e.g. in case of dispute)/Deployed Published at regularly scheduled intervals/Investigating	None	

Responder	9.a. In the future?	10. In which, if any, NIST Smart Grid Interoperability Panel ("SGIP") activities are you engaged? Please specify	10.a. In which, if any, other standards development activities or organizations are you engaged?	10.b. If not, do you plan to engage?	10.c. If not, is there a specific reason why not, or a particular barrier to participation?	11. Please provide any other comments related to your practice of providing customer with usage information, or any future applications you may be considering.	12. In which NERC region do you operate?	13. Please identify the stakeholder categories to which your company belongs?
N	EDI 867 Open ADE, Standard when complete	PAPs PAP10	Open ADE		not enough time		Western Electricity Coordinating Council	Electric Utility Company - Publicly Owned Utility
O	Multispeak				Didn't know about them, but would be interested in participating.			Residential Consumer Commercial Consumer

Responder	1	1.a.	2	2.a.	3	4	4.a.i.	4.a.ii.	4.a.iii.	4.a.iv.	4.b.
<p>Have you generated use cases, business requirements and/or business process documentation for communicating customer usage data to either a customer authorized third party or the customer?</p> <p>If yes, are they available to share as part of the NIST Smart Grid standards process?</p> <p>Do you provide customer energy usage data to authorized third parties?</p> <p>If yes, how is the third party authorized and who provides the authorization?</p> <p>Are you aware of any best practices for residential energy usage data communication? If so, can you describe them or provide links to additional information?</p> <p>What type of energy usage information is communicated? Does the information differ by customer class?</p> <p>Current Practice - Historical energy usage data – Typically, how much historical data is communicated at one time?</p> <p>Does the requester have the ability to specify a time range? If yes, at what interval?</p> <p>Do you use historical energy usage data to develop energy usage projections? If yes, is it done on a near real time basis or a longer term?</p> <p>Do you provide forecast usage data to the end of the billing period?</p> <p>If not currently provided today, do you plan to provide any of the above in the future, and if so, which?</p>	Yes	Yes	Yes	OpenADE: not As captured in our Business and User definition by local regulatory jurisdictions	Residential/On Peak Usage Residential/Off Peak Usage Residential/Monthly Residential/Time of Use Residential/Hourly or less Commercial/On Peak Usage Commercial/Off Peak Usage Commercial/Monthly Commercial/Time of Use Commercial/Hourly or less Industrial/On Peak Usage Industrial/Off Peak Usage Industrial/Monthly Industrial/Time of Use Industrial/Hourly or less	No hard limit	Yes, Whatever's No supported by data provider	No	OpenADE: no analytics via data interface, left to discretion of 3rd Party		
<p>Yes, Residential and C&amp;I</p>	Yes	Yes	Yes	Customer authorizes and EGS provides authorization to Electric Distribution Company (EDC) or Company Q upon request	Yes, see "EDEWG Revised Plan," V2.6, 3.C. Customer Billing Scenarios, p. 29 at link at Ques. No. 1. Also, Company Q EDEWG stakeholders are charged by P.U.C. to develop EDI transactions r modify existing EDI transactions to implement smart metering plans of EDCs.	See EDI Implementation Guidelines (Igs) 867MU, HI, HU 7 IU transactions at "EDI Transactions version 4010 found at previous link provided. Residential/Peak Billing Demand Residential/On Peak Usage Residential/Off Peak Usage Residential/Monthly Residential/Time of Use Commercial/Peak Billing Demand Commercial/Off Peak Usage Commercial/Monthly Commercial/Time of Use Industrial/Peak Billing Demand Industrial/On Peak Usage Industrial/Off Peak Usage Industrial/Monthly Industrial/Time of Use	12 mos.	No	N.A.	Yes, Some EDCs provide estimated data	

Responder	5	5.a.	5.b.	5.c.	6	6.a.	7.a.	7.b.	7.c.	8	9
	Do your customers provide any energy usage information to you?	What type of information?	Is there any usage information that would be useful to receive from the customer?	If so, what type of information would you like to receive?	Do you provide a means for customers to request energy usage data on-demand?	How much usage data can they request?	How and how often is usage information communicated to the customer? Currently?	How and how often is usage information communicated to the customer? Plan/wish for future?	How and how often is usage information communicated to the customer? Does this vary by customer class? If so, please explain	What is the current deployment status of your usage communication capability? If not deployed, then please provide an approximate date for this capability to be available to customers.	To what, if any, customer usage information exchange standards do you comply today?
<b>P</b>	No	No	No	Yes	OpenADE: via 3rd party, no constraints as to period or interval	Other data exchange format/Daily: REST/WS Other data exchange format/Hourly or less: REST/WS Other data exchange format/Near real-time: REST/WS Other data exchange format/Other: OpenADE: expect initial delivery from utility post-VEE, 24 hours in arrears. Interface supports near real-time.		No	On-demand/Investigating On-demand/Deployed On-demand/Other/Date: Expect initial implementations Summer 2010.	IEC TC57 CIM	
<b>Q</b>	N.A., however Company Q. allows residential customers to receive 12 calendar months of usage from the EDC upon request of EDC, once a year free of charge			Yes	see Ques., No.5 - 12 mos. Of monthly usage (Residential & Small Business Customers only)	Paper bill/Monthly Website/Daily: one-day delay Other data exchange format:EDI NAESB Std. not adopted in Pennsylvania. EDI data to 3rd party only		Will only vary with meter, CIS technology	With a bill/Deployed Event based (e.g. in case of dispute)/ Deployed Published at regularly scheduled intervals/Implementing On-demand/Implementing	EDI 867	

Responder	In the future?	In which, if any, NIST Smart Grid Interoperability Panel ("SGIP") activities are you engaged? Please specify	In which, if any, other standards development activities or organizations are you engaged?	If not, do you plan to engage?	If not, is there a specific reason why not, or a particular barrier to participation?	Please provide any other comments related to your practice of providing customer with usage information, or any future applications you may be considering.	In which NERC region do you operate?	Please identify the stakeholder categories to which your company belongs?
	9.a.	10	10.a.	10.b.	10.c.	11	12	13
P	IEC TC57 CIM	PAPs, PAP10, SGIP TCC (Company P)	OpenADE NAESB Smart Grid Standards Task Force			Happy to provide any clarifications as required by NAESB. Thanks very much.	Electric Reliability Council of Texas Florida Reliability Coordinating Council Midwest Reliability Organization Northeastern Power Coordinating Council ReliabilityFirst Corporation/Mid Atlantic Area Council Southeast Electric Reliability Council Southwest Power Pool Western Electricity Coordinating Council	Appliance and Consumer Electronics Provider Residential Consumer Information and Communication Technologies Infrastructure and Service Provider
Q	national standards proposed by EDC & approved by the Company Q	PAPs SGIP Committees, limited participation - monitor activities	NAESB Smart Grid Standards Task Force - limited			Not determined at this time	ReliabilityFirst Corporation/Mid Atlantic Area Council	State and Local Regulator

Responder	1	1.a.	2	2.a.	3	4	4.a.i.	4.a.ii.	4.a.iii.	4.a.iv.	4.b.
R	Yes	No	Yes	3rd parties have No access to information either directly from the customer providing it or the customer providing a current, signed authorization. This form outlines what information can be shared and the length of time that it is to be shared.	Are you aware of any best practices for residential energy usage data communication? If so, can you describe them or provide links to additional information?	Residential/Monthly Commercial/Peak Billing Demand Commercial/On Peak Usage Commercial/Off Peak Usage Commercial/Monthly Commercial/Hourly or less Commercial/Other: Hourly data only available for customers with interval meters Industrial/Peak Billing Demand Industrial/On Peak Usage Industrial/Off Peak Usage Industrial/Monthly Industrial/Hourly or less Industrial/Other: Hourly data only available for customers with interval meters	The site provides 24 months of data (if available)	No, 30 minutes	No	No	Our plan is to continue to provide historical data but we do not plan to provide any forecast data or information for the customer
	Have you generated use cases, business requirements and/or business process documentation for communicating customer usage data to either a customer authorized third party or the customer?	If yes, are they available to share as part of the NIST Smart Grid standards process?	Do you provide customer energy usage data to authorized third parties?	If yes, how is the third party authorized and who provides the authorization?		What type of energy usage information is communicated? Does the information differ by customer class?	Current Practice - Historical energy usage data – Typically, how much historical data is communicated at one time?	Does the requester have the ability to specify a time range? If yes, at what interval?	Do you use historical energy usage data to develop energy usage projections? If yes, is it done on a near real time basis or a longer term?	Do you provide forecast usage data to the end of the billing period?	If not currently provided today, do you plan to provide any of the above in the future, and if so, which?

Responder	Question	Response
R	5 Do your customers provide any energy usage information to you?	No
	5.a. What type of information?	No
	5.b. Is there any usage information that would be useful to receive from the customer?	No
	5.c. If so, what type of information would you like to receive?	No
	6 Do you provide a means for customers to request energy usage data on-demand?	Yes
	6.a. How much usage data can they request?	Company R(P) customers can log into our web site and get up to 2 years worth of either monthly and hourly data if they have an interval meter. Please see the Company R(P) example at <a href="http://naesb.org/misc/PAP10_R_PCcustomer_Data.pdf">http://naesb.org/misc/PAP10_R_PCcustomer_Data.pdf</a> . Company R(C) customers can access data similar to Company R(C)'s customers per the above, plus they can access a year of usage history aggregated at monthly intervals for benchmarking using the ENERGY STAR® Portfolio Manager. Please see write-up of Company R(C) programs at <a href="http://naesb.org/misc/PAP10_R_CSummary_EDS_Programs.pdf">http://naesb.org/misc/PAP10_R_CSummary_EDS_Programs.pdf</a> .
	7.a. How and how often is usage information communicated to the customer? Currently?	Paper bill/Monthly Website/Monthly Website/Hourly or less
	7.b. How and how often is usage information communicated to the customer? Plan/wish for future?	Website/Near real-time Website/Other: Company R(C) Other data exchange format/Near real-time: Act 129 Note on Company R(P) Act 129 communicating raw data on a least a near real-time basis to in-home devices installed by the customer or customer designated agenda.
	7.c. How and how often is usage information communicated to the customer? Does this vary by customer class? If so, please explain	No
	8 What is the current deployment status of your usage communication capability? If not deployed, then please provide an approximate date for this capability to be available to customers.	On-demand/Deployed On-demand/Other/Date: Customer requests information via the web
	9 To what, if any, customer usage information exchange standards do you comply today?	EDI 867

Responder	In the future?	In which, if any, NIST Smart Grid Interoperability Panel ("SGIP") activities are you engaged? Please specify	In which, if any, other standards development activities or organizations are you engaged?	If not, do you plan to engage?	If not, is there a specific reason why not, or a particular barrier to participation?	Please provide any other comments related to your practice of providing customer with usage information, or any future applications you may be considering.	In which NERC region do you operate?	Please identify the stakeholder categories to which your company belongs?
<b>R</b> EDI 867 C12.19 Tables	<b>9.a.</b>	PAPs, 3, 4, 9 & Other: CSWG 10	No	<b>10.b.</b>	Time limitations prevent further participation	<b>11</b>	ReliabilityFirst Corporation	Electric Utility Company - Investor Owned Utility
		<b>10</b>	<b>10.a.</b>		<b>10.c.</b>		<b>12</b>	<b>13</b>