#	Response
1	Eddie Webster,Great River Energy,Maple Grove,Minnesota,55369,USA,ewebster@grenergy.com
2	Dan Bowermaster,Pacific Gas & Electric Company,San Francisco,CA,94105,USA,dsbb@pge.com
3	Angelo Giumento,Hydro-Quebec,Montreal,Quebec,H5B 1H7,Canada,giumento.angelo@hydro.qc.ca
4	Jim Brown,EnWin Utilities Ltd.,Windsor,ON,N9A 5T7,Canada,jbrown@enwin.com
5	Joel Pointon,SDG&E,San Diego,CA,92117,USA,jpointon@semprautilities.com
6	Alec Tsang,BC Hydro,Vancouver,BC,V6B 5R3,Canada,alec.tsang@bchydro.com
7	Efrain Ornelas,PG&E,Davis,CA,95616,USA,exo1@pge.com
8	Ralph Boroughs,TVA,Chattanooga ,TN,37402-2801,US,rdboroughs@tva.gov
9	Michael Moore,Wisconsin Public Service/UPPCO,Green Bay,WI,54162,Brown,mrmoore@wiscosinpublicservice
10	Dwight MacCurdy,SMUD,Sacramento,Ca,95817,USA,dmaccur@smud.org
11	Dan Gabel,ComEd,Chicago,IL,60181,USA,daniel.gabel@comed.com
12	Micah Burdge,Public Service Co. of Oklahom - unit of American Electric Power,Tulsa,Oklahoma,74119,US,mburdge@aep.com
13	Mark J. Nealon,Ameren Missouri,St. Louis,MO,63103,USA,mnealon@ameren.com
14	Richard Cromie,Southern California Edison,Rosemead,CA,91770,US,richard.cromie@sce.com
15	Dan Bowermaster,Pacific Gas & Electric Company,San Francisco,CA,94105,USA,dsbb@pge.com
16	Daniel Yurkiw,Manitoba Hydro,Winnipeg,Manitoba,R3C 0G8,Canada,dyurkiw@hydro.mb.ca
17	John Murach,BGE,Baltimore,Maryland,21201,USA,john.j.murach@bge.com
18	Jack Andres,AEP-Southwestern Electric Power Company,Shreveport,La,71101,USA,jwandres@aep.com
19	Lance K Spross,Oncor Electric Delivery,Dallas,TX,75202,USA,lance.spross@oncor.com
20	Cedric Daniels,Alabama Power Company,Birmingham,Alabama,35203,USA,cidaniel@southernco.com
21	Jeff LeBrun,DTE Energy,Detroit,Michigan,48166,US,lebrunj@dteenergy.com
22	Seth Gerber,Consumers Energy,Jackson,Michigan,49201,USA,sdgerber@cmsenergy.com

Who owns and provides the meter socket installed at the customer's home? (please explain)

		Utility	Customer
1	The distribution cooperative.	1	
2	The utility owns the meter; the customer owns the panel.		1
3	The utility owns the meter socket. The utility will also provide the socket.	1	
4	The Customer owns the meter socket.		1
5	Socket is provided by the customer's electrician. It is the customer's property.		1
6	the customer		1
7	The customer is responsible for providing and installing the the metering facilities, but not the meter.		1
8	We wholesale power to 155 local distribution companies which are either municipal utilities or member-owned co-operatives. They own the retail meters.		1
9	The customer owns, we provide specifications for equipment		1
10	Customer. The customer always owns the socket in the SMUD service territory.		1
11	Customer owns and provides the meter socket. Must be installed by a licensed electrician.		1
12	Utility owns & provides meter base but customer/electrician installs	1	
13	Meter socket is owned and maintained by the property owner. Meter and UG or OH wires landing on the premise itself is owned by the utility.		1
14	The customer		1
15	The utility owns the meter; the customer owns the panel.	1	
16	Customer is responsible for providing and the installation of the meter socket.		1
17	BGE would own the socket. We'ne had no requests for separate service to date though.	1	
18	Company	1	
19	The customer.		1
20	Alabama Power/Southern Companies	1	
21	Usually the electrician buys the meter socket and the customer will own the meter socket		1
22	The customers owns the socket although we own some of the wiring in the socket. We provide both single and dual gang meter sockets to our customers free of charge.		1
		7	15

	Does your utility offer a rate for EV charging different from the standard residential rate? (If yes, please describe the type of rate)	Both rates offered
1	The rate is a special rate below the standard off-peak rate since the energy will only be provided to the vehicle durring off peak periods.	
2	Below is a summary of the two electric vehicle rates: E-9A: This option provides a single meter; one baseline amount is shared by both the home and PEV. If PEV charging will not significantly increase daily energy use or current energy use is mostly during non-peak hours, this may be the better rate option. E-9B: This option provides two meters—one for the home, which remains on the current residential rate (E-1, E-6 or E-7), and a second meter for the PEV on the E-9B rate. Therefore, the customer has two baselines. If PEV charging significantly impacts your daily energy usage or current energy use is mostly during peak hours, this may be the better rate option. This option requires a second electrical panel and customers also will incur a $250 fee for the second meter. Although the E-9B rate option generally produces a lower monthly electric bill because of the second baseline for your PEV, the monthly savings may not justify the upfront costs of having an electrician install the second electrical panel	1
3	We do not offer an EV rate but there is Time of Use rates in effect in the Province - depending on whether utilities have implemented them yet or not (there is a mandate to go to TOU rates).	
4	We have two EV TOU rates a) Separately metered (using submetering on the load line to the EVSE, and subtractive billing). b) Whole house - entire house use includiong the EVSE is on one meter and under TOU time periods.	1
5	we did not see a complelling reason for a separate EV rate, either from the customer or utility perspective	
6	it is a TOU rate with three time periods and two seasons	
7	Not at this time.	
8	not yet, promoting whole house TOU	
9	summer M-F, June - Sept, peak is 2 pm to 8 pm @ $0.241/kWh off peak is $0.084/kWh. winter is Oct. - May and peak is 7 am to 10 am and 5 pm to 8 pm with peak charges of $0.108 and off peak is $0.0754.	
10	Residential customers may select hourly energy pricing (Rate BESH) in addition to the flat residential rate. Both are whole-house rates.	
11	We are filing for an EV pilot rate with the Missouri Public Service Commission presently. So as of November 2011, we don't have one.	
12	$0.11/kwh off peak 9 pm-noon 365 days	
13	E-9A: This option provides a single meter; one baseline amount is shared by both the home and PEV. If PEV charging will not significantly increase daily energy use or current energy use is mostly during non-peak hours, this may be the better rate option. E-9B: This option provides two meters—one for the home, which remains on the current residential rate (E-1, E-6 or E-7), and a second meter for the PEV on the E-9B rate. Therefore, the customer has two baselines. If PEV charging significantly impacts your daily energy usage or current energy use is mostly during peak hours, this may be the better rate option. This option requires a second electrical panel and customers also will incur a $250 fee for the second meter. Although the E-9B rate option generally produces a lower monthly electric bill because of the second baseline for your PEV, the monthly savings may not justify the upfront costs of having an electrician install the second electrical panel	repeat
14	Expect to do so in the near future	
15	Planning one	
16	We are a transmission and distribution utility and do not buy, own or sell any power.	
17	Georgia and Gulf Power do offer rates. Alabama and Mississippi will offer soon.	
18	We offer a TOU rate and a flat rate	
19	We have three rate options: Option 1: Whole house TOU - EVSE wired directly to existing home panel Option 2: EV only TOU - sepearte meter for EVSE Option 3: EV only flat plus - seperate meter for EVSE ($35 for first 300kwh then per kwh above 300) TOU (for rates 1 and 2) - off peak 11pm-7am(6cents; year round); shoulder peak 7am-2pm and 6pm-11pm (11 cents winter and 12 cents summer); on peak 2-6pm (11 cents winter and 19 cents summer). Rates include both energy and distribution charges (all in).	1
		3
	Yes	9 41%
	No	13 59%
	Total	**22**

4. If your utility offers an EV charging rate, is separate metering required? (please explain)

1	Yes because we need to measure the kWh to be discounted from the general service rate.		1
2	E-9B: This option provides two meters—one for the home, which remains on the current residential rate (E-1, E-6 or E-7), and a second meter for the PEV on the E-9B rate. Therefore, the customer has two baselines. If PEV charging significantly impacts your daily energy usage or current energy use is mostly during peak hours, this may be the better rate option. This option requires a second electrical panel and customers also will incur a $250 fee for the second meter. Although the E-9B rate option generally produces a lower monthly electric bill because of the second baseline for your PEV, the monthly savings may not justify the upfront costs of having an electrician install the second electrical panel		1
3	Currently, there are no plans to include EV rates and request for separate EV or other application metering.		
4	No separate metering is required for EV metering.		
5	One of the two rates is spearate meter. The other is whole house.		
6	n/a		1
7	the customer has the option of either a "whole House" rate or a "separately metered" EV only rate		1
8	Only one municipal utility in the TVA service area adds a second meter for EVSEs, but this is to only to inform the customer about fuel costs.		1
9	Even if we do develop a PEV rate we do not plan to have 2nd meter		
10	submetered off a 40A breaker circuit, or Level 2 breaker circuit (20A breaker or 15A breaker).		
11	Our pilot rate will be a "whole house" Time-of-Use rate, thus it will not require an additional revenue meter.		
12	Customer could also opt for a special whole house TOU rate just for EV owners		
13	E-9B: This option provides two meters—one for the home, which remains on the current residential rate (E-1, E-6 or E-7), and a second meter for the PEV on the E-9B rate. Therefore, the customer has two baselines. If PEV charging significantly impacts your daily energy usage or current energy use is mostly during peak hours, this may be the better rate option. This option requires a second electrical panel and customers also will incur a $250 fee for the second meter. Although the E-9B rate option generally produces a lower monthly electric bill because of the second baseline for your PEV, the monthly savings may not justify the upfront costs of having an electrician install the second electrical panel.	repeat	
14	Manitoba Hydro does not offer a separate EV rate.		
15	Current thinking is to not require a separate meter.		
16	N/A		
17	To participate in our EV rate, it must be seperately metered		1
18	Yes - Option 1 does NOT require seperate metering. Options 2&3 do require seperate metering. We are changing our message to focus customers toward rate option 1 due to both the long term strategy (one meter per premise) and the complicated coordination effort)		1
			7
		Yes	9 41%
		No	13 59%
		Total	**22**

Please list the steps in your utility's normal process for splitting load at a residential account.

		Split load yes	submeter	Split load no	Second service
1	The load is submetered and the consumption on the two meters is used to bill. One on the residential rate and one on the special rate.		1		
2	Customer: Contacts PG&E to notify purchase of Plug-In Electric Vehicle. Evaluates PEV rate options and identifies the rate option that best suits their individual electricity usage PG&E: Service Planning verifies adequacy of local distribution infrastructure and performs any distributon upgrades, if necessary Electrician: Confirms that customer has contacted PG&E and understood the various rate options. Performs an assessment of the electrical panel and home wiring and provides quotes. Customer: Calls PG&E to inform added load to the residential panel and initiate the rate change process. The electrician initiates the wiring, charger installation and panel upgrade, if applicable. PG&E: PG&E temporarily disconnects service to the residence if customer is performing a panel upgrade or upgrades the existing service to add capacity for the charging equipment. Electrician: Obtains city permits for installation at the customer's residence. Completes installation of home wiring, upgrades panel (if necessary) for electric vehicle supply equipment and arranges for city inspection to verify completed installation. PG&E Receives city inspection approval in case of panel upgrade and reconnects service to the customer's residence. Completes meter work (if necessary) and updates customer's billing information.	1			
3	We cannot split loads in our service territory.			1	
4	We do not normally allow the customer to split the load at a residential location. We only allow this if a building is being broken up into sub-units. The sub-units can be individually metered.			1	
5	The second meter is placed between the service panel and the circuit to the EVSE with a shut off that is mandatory for AHJs. The meter is sub-metering and billing is subtractive.		1		
6	We generally limit residential customers to one meter per premise. Therefore, a customer splitting their load would do so on the load side of the main switch, and separate utility owned metering would generally not be allowed. The exception to this is for situations where there is a detached building which is technically difficult or impossible for the customer to subfeed (usually due to distance between buildings or a physical obstruction such as a lake or cliff).			1	
7	1. Take application for separate meter 2. Complete engineering review of customers service and transformer to make sure they are OK to serve the PEV load 3. If not "OK", process order to replace service or transformer 4. If "OK", notify customer that ok to proceed with installation 5. Customer pulls permits 6. Contractor installs hot gutter and second metering panel per utility requirements customer gets inspection 7. utility sets meter	1			
8	Splitting load is not a normal process. But our "Generation Partners" program uses 2 meters where a residential customer has solar photovoltaic panels. One meter for load, one for generation. --- as noted before, only one municipal utility in our area installs a separate meter for EVSEs.			1	
9	Currently not permitted unless multi unit houing or if commercial they must have differnt voltages			1	
10	We have subtractive billing for the EV TOU rate, whereby the EV usage is subtracted from the whole house usage, and billed at its own rate as a separate line item on the same bill.		1		
11	Load splitting only allowed if a customer takes service from a retail energy supplier (RES. Process is as follows: 1. Customer requests new point of service and submits a load letter to ComEd 2. ComEd New Business visits the site and provides the customer with a Customer Work Agreement (CWA), including charges for the additional service point 3. After receiving the signed CWA and any deposit, ComEd completes engineering and schedules work. 4. Customer's electrician completes onsite work, including installation of second meter socket. 5. ComEd connects new service point and installs new meter.				1
12	During a scheduled outage, the customer's electrician will remove the single meter can and install either a gang meter socket, or an approved junction cabinet. In either case, the utility service conductors terminate in this enclosure and the customer is responsible for taking load conductors to all meter sockets	1			
13	We do not split load at residential accounts.			1	
14	1. Service planner visit with homeowner and contractor - determines feasibility 2. Customer gets permit and installs 2nd panel with socket, plus riser if overhead				1
15	Customer: Contacts PG&E to notify purchase of Plug-In Electric Vehicle. Evaluates PEV rate options and identifies the rate option that best suits their individual electricity usage PG&E: Service Planning verifies adequacy of local distribution infrastructure and performs any distributon upgrades, if necessary Electrician: Confirms that customer has contacted PG&E and understood the various rate options. Performs an assessment of the electrical panel and home wiring and provides quotes. Customer: Calls PG&E to inform added load to the residential panel and initiate the rate change process. The electrician initiates the wiring, charger installation and panel upgrade, if applicable. PG&E: PG&E temporarily disconnects service to the residence if customer is performing a panel upgrade or upgrades the existing service to add capacity for the charging equipment. Electrician: Obtains city permits for installation at the customer's residence. Completes installation of home wiring, upgrades panel (if necessary) for electric vehicle supply equipment and arranges for city inspection to verify completed installation. PG&E Receives city inspection approval in case of panel upgrade and reconnects service to the customer's residence. Completes meter work (if necessary) and updates customer's billing information.	repeat			
16	Manitoba Hydro does not typically allow load splitting.			1	
17	Customer completes a service application (on line) identifying the anticipated work. Customer (qualified contractor fo rhte customer completes the customer side of hte work and notifies hte utility. Local inspection authority has forwarded certificate of inspection information that can be matched to pending work from the service application. When all in order, installation date is set to install or upgrade meter and related connections.				1
18	If it is split, it is done so ahead of the meter either in a duct or with separate weatherhead or connection.				1
19	We do not split load or install 2nd meters by law. The customer may choose to do so on their side of the meter.			1	
20	N/A			1	
21	Please go to this link and read 7-14-1 to 7-13-3 http://www.dteenergy.com/pdfs/wiringApplianceInstallation.pdf	1			
22	1) Customer initiates contact with Consumers Energy 2) Consumers Energy evaluates distribution system (additional load?) 3) Coordinate electricians reciept of dual gang meter socket 4) Coordinate schedules (electrician, customer, inspector, our employees) 5) We disconnect, electrician installs, inspector approves, we reconnect and set the second meter	1			
		5	3	9	4

Is a separate meter socket required for split-load metering, or do your standards allow a different alternative configuration (such as a Dual gang meter fitting)?

1	NA
2	Split load metering (E9-B) is not a requirement but recommended for high energy use customers. Dual meter adapters (Dual gang meter fitting) are not allowed. They are also not UL approved.
3	It would if we offered such a program.
4	We do allow dual gang meter fittings for customers with generators so we meter the generator output separate from the load. Generally, for load, we do not like dual gang meter setups as it makes it difficult to cut one customer for non-payment when the supplies are on the same service.
5	Separate meter socket, as there are no dual meter adapters that are NRTL approved in the US at this time.
6	See the answer to question 5 above. A duplex or multi-meter base would be allowed for multi-unit buildings where more than on single-family dwelling exists.
7	second meter panel is required at this time
8	Our "Generation Partners" program uses 2 meter sockets as well as two meters.
9	Not permitted
10	separate meter socket.
11	Separate meter socket or dual-gang fitting required. Dual-meter adapters are not acceptable.
12	We allow and provide some gang meter sockets
13	N/A
14	Dual meter panel is acceptable. However dual meter adapter is not
15	Split load metering (E9-B) is not a requirement but recommended for high energy use customers. Dual meter adapters (Dual gang meter fitting) are not allowed. They are also not UL approved.
16	Manitoba Hydro does not typically allow load splitting.
17	Do not have signiifcant need for split load designs, so they are handles on case by case basis. Have used dual pans for selected pilot tests related to Smart Grid services.
18	Yes it will be.
19	We use gang sockets to serve multiple tenant commercial structures and multi family housing but not for splitting load at a single premise.
20	N/A
21	Normally a new meter, but we do also use dual gang meters
22	No - dual gang meter socket is required. If a dual gang socket doesn't fit, a juction box can be used to split the load to individual meter sockets. Cannot double lug the existing meter socket.

Is the utility always required to physically disconnect service wires to the meter socket for splitting load?

#	Response
1	http://www.pge.com/includes/docs/pdfs/shared/environment/pge/cleanair/electricdrivevehicles/pev_home_installation.pdf
2	Not Applicable
3	We control the disconnection as we now have smart meters which reports the outage. To minimize truck rolls, we do the disconnection so we know what is happening on the system and don't roll a truck to investigate the interruption.
4	NO...the meter is installed by the customer's electrician on a isolated single circuit dedecated to the EVSE only. It is equipped with a separate shut-off as well as required by AHJs in the region. Picture is available for this installation.
5	Each of our 155 distribution utilities may have different practices, but in general they do not split load, and safety is important. In the "Generation Partners" program most utilities require a separate disconnect switch.
6	we would use the same policy as for removing meter base for residing
7	We have no cases of load splitting for EVs.
8	Customer's electrician may disconnect service wires and pull meter.
9	N/A
10	http://www.pge.com/includes/docs/pdfs/shared/environment/pge/cleanair/electricdrivevehicles/pev_home_installation.pdf
11	Manitoba Hydro does not typically allow load splitting.
12	Preferred method is not to create a sub-deduct situation whereever possible. We have not had thsi situation come up yet, so a definitive answer on our sprecific appraoch is not available.
13	N/A
14	Yes - Per our standards we disconnect

Yes	12	55%
No	10	45%
Total	**22**	

Is the utility or a utility representative (i.e contractor) always required to physically reconnect service wires to the meter socket for an upgrade? (please explain)

1	http://www.pge.com/includes/docs/pdfs/shared/environment/pge/cleanair/electricdrivevehicles/pev_home_installation.pdf
2	Not Applicable
3	As above.
4	See above. We are required to visit the customer site and indicate the safe location for the separate meter socket prior to installation and also to set the second meter following installation. Service planner does a service line and local transformer review at the time of the initial site visit for meter location.
5	Each of our 155 distribution utilities may have different practices, but in general they do not split load, and safety is important. In the "Generation Partners" program most require a separate disconnect switch.
6	For overhead service the connection point is the weatherhead, but for underground service it is the meter lugs, we normally try to disconnect undergound at the padmount transormer if there is one or by removing the transformer connection if overhead transformer and underground service.
7	No necessary when the EV load is from a 40A breaker on the main panel.
8	ComEd connects new service point and installs new meter after site inspection.
9	We do this for safety reasons.
10	http://www.pge.com/includes/docs/pdfs/shared/environment/pge/cleanair/electricdrivevehicles/pev_home_installation.pdf
11	Manitoba Hydro does not typically allow load splitting.
12	Utility or contractor for the utility will do the wiring connections in nearly all cases.
13	Yes - Per our standards we reconnect

Yes	15	68%
No	7	32%
Total	**22**	

Does the utility always require a visual inspection by local inspection authorities before service is reconnected? (please explain)

#	Response
1	http://www.pge.com/includes/docs/pdfs/shared/environment/pge/cleanair/electricdrivevehicles/pev_home_installation.pdf
2	Work has to be done by a master electrician. He then has to submit a form to the Quebec Building Comission (RBQ) which will do spot verifications.
3	This is a Provincial requirement.
4	local inspection is required for the connection line for the EVSE prior to circuit being energized by the utilitty when the meter is installed.
5	we require a permit for the electrical work but the requirement of a visual inspection is up to the regional safety authority. In practise, a visual inspections is not done for every situation.
6	Each of our 155 distribution utilities may have different practices, but in general they do not split load, and safety is important.
7	Yes, we used to accept an electrician afidavit form but that is no longer an acceptable practice.
8	Service is not disconnected, but SMUD requires an inspection from the local inspection authority before setting a meter.
9	Significant electrical upgrades typically require a permit an inspection by local authority.
10	in areas without local inspectors, utility representatives will visually inspect
11	Yes, particularly where there is an established jurisdictional authority.
12	http://www.pge.com/includes/docs/pdfs/shared/environment/pge/cleanair/electricdrivevehicles/pev_home_installation.pdf
13	Manitoba Hydro does not typically allow load splitting.
14	This is dependent on municipal requirements.
15	Inspector must provide appoval before we reconnect the wires or set the meter

Yes	14	64%
No	8	36%
Total	**22**	

Does the utility allow electricians to modify the meter socket and wiring (i.e., wiring between whole-house meter socket and EVSE meter socket)? (please explain)

1	Our PEV standard makes this wiring customer owned and it is therefore govered by the local city/county/state inspector.
2	They can do it but require utility consultation and inspection by the electrical safety authority.
3	See above.
4	as long as the EVSE meter socket is on the load side of the utility (whole house) meter
5	electrician installs the second panel for the PEV meter, so really does not modify the socket
6	we have not had this yet but the customer owns the meter socket and wire so I would assume we would allow it under our current service rules.
7	Not necessary. Submeter socket is installed by customer's electrician and connected to a 40A breaker in main panel.
8	Electrician may make load-side connections at the meter fitting. ComEd makes any line-side connections.
9	N/A
10	Our PEV standard makes this wiring customer owned and it is therefore governed by the local city/county/state inspector.
11	Manitoba Hydro does not typically allow load splitting.
12	We do not perform the wiring in the house. Only from the service connect point
13	Standards prohibit changes to a single meter socket (i.e double lugging)

Yes	10	45%
No	12	55%
Total	**22**	

If the utility or utility representative is required to physically reconnect service, where is the customer's electrician required to terminate the line-side wires from the EVSE meter socket? (e.g., terminated at load-side lugs in house meter socket, then reconnected to line-side by utility when setting meter to split load; or not terminated, just taped off)

1	NA
2	Our PEV standards require a separate termination enclosure for underground services which will be the new point of common coupling with the customer. New wire to the existing panel and PEV panel with originate from the customer side (top half) of this enclosure. A gutter is required for overhead services but the point of common coupling with the customer is still at the weatherhead.
3	.
4	Have not done this but would likely want the electrician to bring line-side supply to the new socket for the EVSE load and leave it pie-plated. Utility would come later and install the second meter.
5	Scenario does not apply. See above.
6	assuming that the EVSE meter socket described above is in a submeter situation, this would be out of our jurisdiction. That is, the electrician needs finish any work on the load side of the whole house meter socket
7	At PG&E, a hot gutter is required for the installation of a second meter panel. The hot gutter is installed ahead of the existing meter panel, thus intercepting the incoming service conductor and providing a place to connect both the PEV and the existing house panel
8	Not applicable
9	We have not faced this yet
10	NA.
11	Taped off in the meter fitting.
12	in the gang sockets provided, the line side conductors to both meter sockets are prefab'd, so not termination is required. Meter electrician will simply terminate utility service conductors on the line side lugs to energize both meter bases. If a junction cabinet is installed, the customer is responsible for both the line and load side terminations on the meter bases, and then brings line side conductors into the junction cabinet where a meter electrician/serviceman will terminate into utility provided blocks.
13	N/A
14	Contractor has to wait for SCE connection to the line side. Cannot do a temporary load side connection to the house meter, although they do it anyway
15	Our PEV standards require a separate termination enclosure for underground services which will be the new point of common coupling with the customer. New wire to the existing panel and PEV panel with originate from the customer side (top half) of this enclosure. A gutter is required for overhead services but the point of common coupling with the customer is still at the weatherhead.
16	Manitoba Hydro does not typically allow load splitting.
17	Customer's electrician would make all connections downstream of meter connection
18	just taped off
19	For normal meter socket installations the electrician terminates at the customer terminals of the meter socket for underground service and at the weatherhead for overhead.
20	N/A
21	For Rate D1.9 the contractor will connect the service to the load side of the Residential Service meter leaving enough wire slack to easily reach the line terminals. Detroit Edison personnel will move the conductors to the line side when the installation is accepted for service.
22	In the case of splitting load, the electrician will replace the single meter socket with a dual gang socket (after we have disconnected the service). Service comes into the dual gang meter socket and connects to the bus bar. The bus splits the load to each meter which are wired into the house and to the disconnect/EVSE respectively.

Does the amperage size of the socket effect any of this process for residential customers?

1	No
2	I assume this is a question about adding PEV load. If so, yes the added load (amperage) could surpass the minimum load limits for the utility's distribution system and customer's service conductors. A new service, conduit, and distribution system upgrades may have to be performed.
3	no
4	Smallest socket size is 60A but relatively few of these left in service. Mostly 100 & 200 A and should not be an issue.
5	40 A installations for all EVSE at this time.
6	no
7	In our case no. But for those utilities using a dual-meter socket. Connecting a dual-meter socket where both sockets of the adapter are rated for a 200A, you could putentially have the 200A of the home and the 40A of the PEV going through the original 200A socket causing overheating and failure
8	Not applicable
9	Yes, we have many residences with less than a 100 amp service, I expect this to require an upgrade of the meter socket and possible the service conductor as well.
10	Socket amperage must be no less than current draw, so 40A minimum in SMUD service territory.
11	Generally the same for class 200 or class 320 service. Transformer rated service require more ComEd involvement, but usually not used for residential.
12	No
13	The socket rating needs to be consistent with the size of the panel, given both are owned by the property owner.
14	Only if the added load is too large for the incoming conductor to the premise
15	I assume this is a question about adding PEV load. If so, yes the added load (amperage) could surpass the minimum load limits for the utilities distribution system and customer's service conductors. A new service, conduit, and distribution system upgrades may have to be performed.
16	Manitoba Hydro does not typically allow load splitting.
17	Have not had any requests for split service yet.
18	no
19	No
20	N/A
21	no
22	Consumers Energy has an approved meter socket list. If the the meter socket amperage size is non-typical, the electrician will need to work with us to purchase the correct dual gang meter socket(or other acceptable configuration) for the required service amperage.

If your utility offers an EV charging rate with separate metering, what are the key drivers for offering such a rate? (please explain)

1	keeping the loads from adding to our peak and coming on at the worst possible time, when everyone gets home and is already turning everything else on.
2	Encourage off-peak, overnight charging to minimize grid impacts and increase reliability for all customers. Also support EV adoption by providing a low cost rate (at the right time).
3	We do not offer it. Our residential Energy Costs are very low.
4	We will offer TOU rates and the expectation is that EVs will charge off peak as the rates are about 1/2 of on-peak rates.
5	Encouragement of off-peak charging. We offer both wholw house and separate meter. Whole house is needed for those who have solar installation and net metering (as credit can only be made to one meter). Separate metering is needed for those household that have significant use during peak periods (e.g. homemaker at home with children during the day during summer peak periods), where peak pricing for home use under TOU would result in higher cost than the tiered domestic rate. Separate meter removed the additional kWH from the house use to prevent pushing the tiered rate through those rate more quickly and only the vehicle need adhere to TOU time periods.
6	n/a
7	overall lower energy cost. The house rate can be much higher due to the impact of the inreasing rate tier based on usage. The separate metered rate allows for the PEV rate to be lower due to only usage for charging to be used to define the billing tier.
8	We do NOT now offer an EV rate. We are considering doing so to help track EVSE installations and to encourage off-peak charging.
9	We don't but the only value we see at this point to gather data.
10	submetering on separate breaker in main panel is the process at SMUD. Lower cost to the EV customer than other optios, and we discontinued the dual meter adaptor process that we used for the last 20 years.
11	does not apply
12	Not currently offering a EV charging rate, but if and when, the drivers would be to monitor charging activity as well as drive off peak load as well as limit additional on peak demand.
13	N/A
14	Inclining block rates in CA may make charging on the typical domestic rate very expensive as the charging adds to the margin and the highest tier which is based on the cumulative monthly kWhs. Could be as high as $0.31 /kWh especially with summer A/C load. CA PUC recently ruled that the CA IOUs must develop a sub metering/subtractive billing protocol by July 2012 to lower the installed cost of the separately metered service.
15	Encourage off-peak, overnight charging to minimize grid impacts and increase reliability for all customers. Also support EV adoption by providing a low cost rate (at the right time).
16	Manitoba Hydro does not offer a separate EV rate.
17	Current focus is not on a separate rate. I can suspect that an EV specific approach may help overcome any customer resistance to putting the entire house load onto a TOU rate structure.
18	Peak control,planning
19	N/A
20	We don't offer with separate metering.
21	gathering data driving off peak behavior
22	1) Learn customer behavior from TOU and other rate structures 2) Promote the purchase of electric vehicles in Michigan 3) Provide financial incentive to customers to contact us if they purchase an electric vehicle

#2 Consumers Energy owns the meter socket and we provide both a single meter socket as well as a dual gang meter socket for free to our customers.

#3 - Y We have three rate options:

Option 1: Whole house TOU - EVSE wired directly to panel

Option 2: EV only TOU - seperate meter for EVSE

Option 3: EV only flat plus - seperate meter for EVSE

TOU (for rates 1 and 2) - off peak 11pm-7am(6cents; year round); shoulder peak 7am-2pm and 6pm-11pm (10cents winter and 11 cents ; on peak 2-6pm. Rates include both energy and distribution charges (all in).