



Plugging In Transportation To Our Energy Future

Edison Status Update:

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Transportation Will Plug- In To Utilities' Changing Customer "Relationship"



"Passive Customer "

- Similar services for all
- Unaware of energy consumption until bill
- Notifies utility about outages, no accurate information when problem will be resolved
- Limited utility/customer partnering for load control

"Informed Customer"

- Advanced meters and price-based DR programs provide energy expenditure options
- Daily information about energy consumption
- Utility aware of outages before customers and proactively notifies them
- Broad range of load control options (smart appliances, programmable thermostats, **PV, BEVs, PHEVs, energy storage**)

Part of the "Energy System"

- Different service offerings
- Crew location/repair status automatically provided to customers
- Customer part of the energy supply
 - **DER such as PV, BEVs, PHEVs, energy storage**

Energy Efficient Plug-in Vehicles in the Pipeline

Toyota Prius



Mitsubishi iMIEV



Ford Escape



Chevy Volt



Saturn Vue



2010-2012



Daimler Sprinter

BMW Mini



Daimler Smart





But The Outcome...By No Means Inevitable!

Challenges:

- Oil Volatility- up...and down
- Consumer/political/regulatory/media resolve?
- Domestic supplier/manufacturing capacity
- OEM financial health
- The Grid (regional “Smart Grid” development, new vehicle/grid com. standards, “load management”)

Barriers:

- Batteries (cost, life, safety, standardization, materials sustainability)
- Technology cost



Thank You

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