JuiceNet™

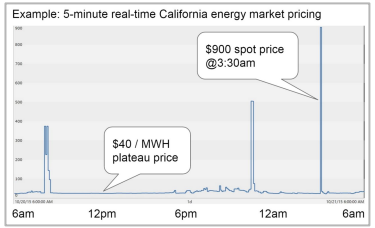
by eMotorWerks

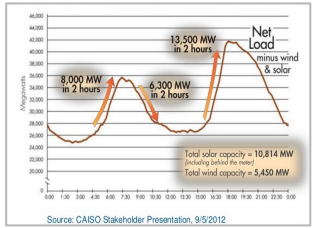
Building Virtual Power Plants from Electric Vehicles

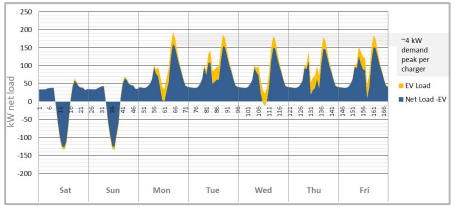
& Other Shiftable Loads

EVs + Grid Services = $ Billions of New Value

New energy market opportunities







$10B+ markets just in the US

EVs - best type of grid resource

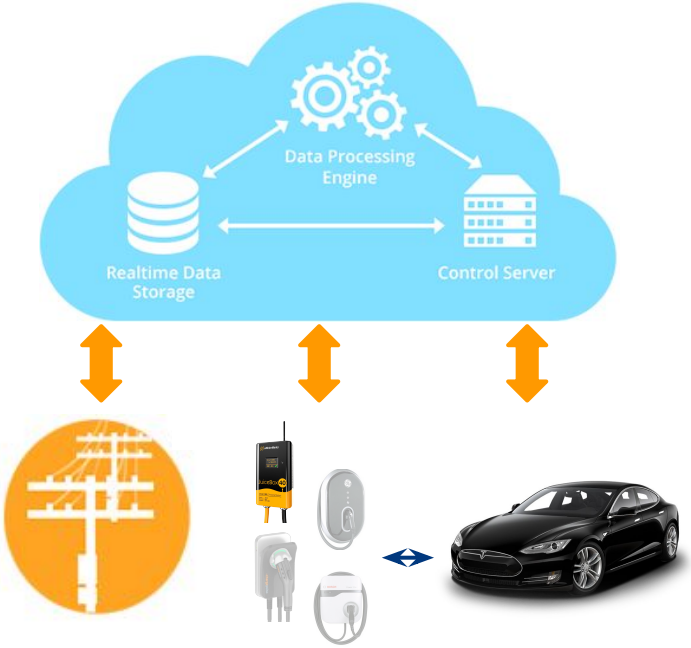
- Ultra-flexible
- Respond in seconds
- Zero capital cost
- Zero dispatch cost

2016: 30 GWH capacity, 5 GW peak

2026: 3 TWH capacity, 300 GW peak

eMotorWerks SMART [GRID] EV CHARGING

JuiceNet® Energy Services Platform



- **Vision** - “energy router” for electric transport - home, work, DCFC
  - Predictive grid models (incl. Renewable balancing)
  - Predictive driver models
  - Dispatch via multiple end points

eMotorWerks SMART [GRID] EV CHARGING

EV Load Access: Three-Stage Master Plan

Better EV Driver Experience & Incentives

Smart Stations

Amazon best-seller, 12,000+ Stations sold, partner to access 50,000+

JuicePlug™

Makes any EV charging smart. Immediate access to the entire EV installed base

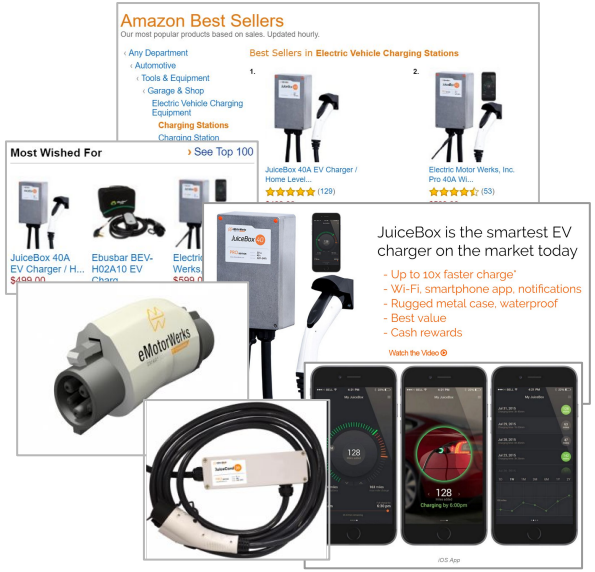
Direct EV Control

JN Cloud - to - OEM Cloud. Traction with six global OEMs, first contract

eMotorWerks SMART [GRID] EV CHARGING

Market Leading Traction

Leading technology



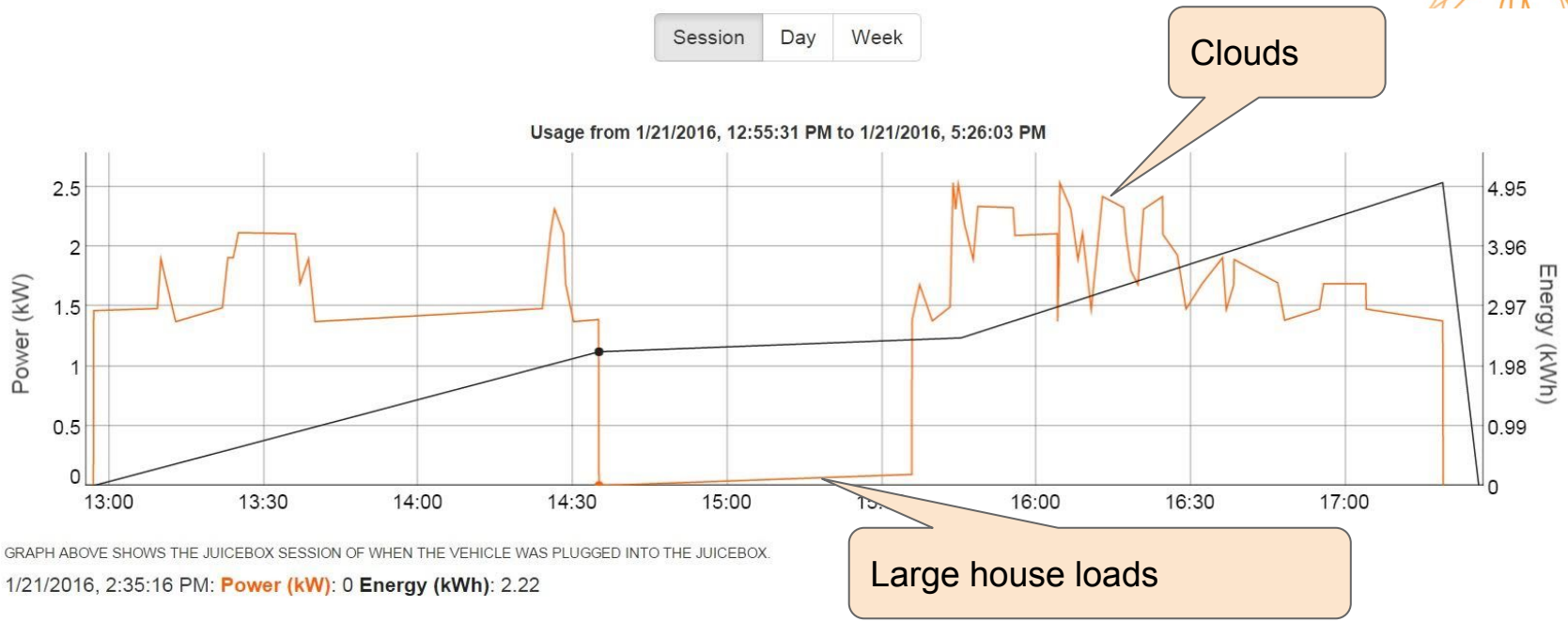
Key relationships

VOLTA
enel
EDF
NAYAX
Attending to the Unattended
HONDA
ENGIE
OSIsoft.
WattTime
CLIPPERCREEK
THE Electric Vehicle Charging Station
SDGE
A Sempra Energy utility
Predix
Pacific Gas and Electric Company
SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company
pjm
California ISO
Shaping a Renewed Future
Sonoma Clean Power
MCE Clean Energy
My community. My choice.
BELD
GREEN MOUNTAIN POWER

eMotorWerks
SMART [GRID] EV CHARGING

Real-Time Control to Solar Production

Utilizing 3-second latency to maximize on-site solar consumption in NZ installations



GRAPH ABOVE SHOWS THE JUICEBOX SESSION OF WHEN THE VEHICLE WAS PLUGGED INTO THE JUICEBOX.

1/21/2016, 2:35:16 PM: **Power (kW)**: 0 **Energy (kWh)**: 2.22

eMotorWerks SMART [GRID] EV CHARGING

Unlocking EV and Renewable Energy Potential

JuiceNet helps drive EV & renewables penetration by unlocking EV-Grid integration value at scale

Reduce monthly costs by up to 20%

Enable higher penetration of intermittent renewables

1 GW target flexible load capacity in 2020

eMotorWerks SMART [GRID] EV CHARGING