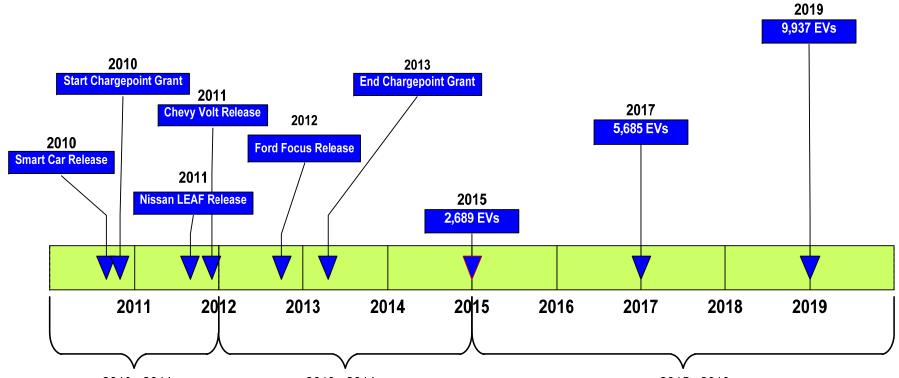
OUC's Electric Vehicle Infrastructure Efforts

Jennifer S. Szaro – Orlando Utilities Commission FPSC Workshop - September 6, 2012



OUC's EV Roadmap



2010 - 2011

Near Term Planning Transformer Mgmt. Approach Customer Outreach Approach **Chargepoint Grant** Nissan Fleet Partnership Project Get Ready

Data Collection and Analysis

2012 - 2014

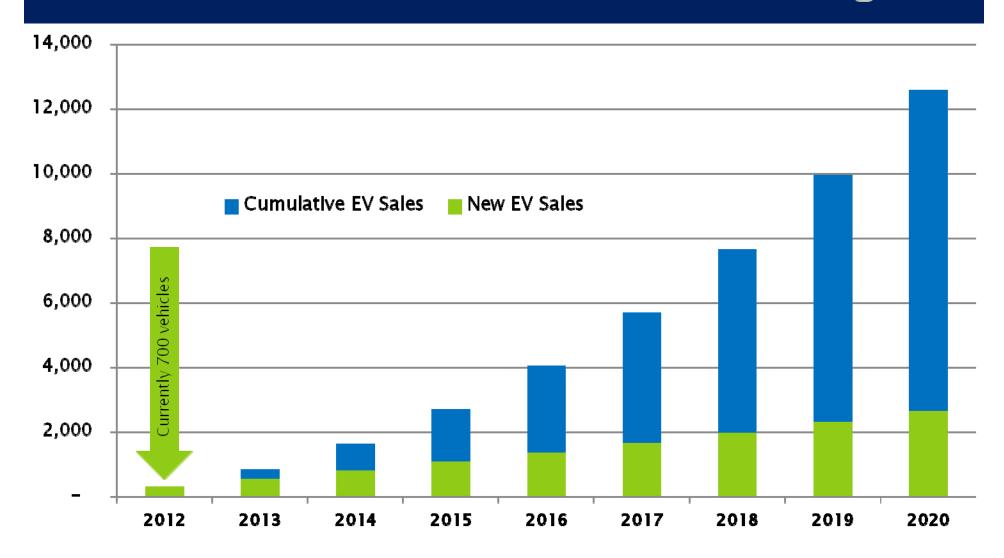
Mid-Term Planning Initial EV Vehicle Introductions EV Releases by Every Major Manufacturer **Pilot Customer Offerings** Meter Data Integration **Automated Demand Response Pilots** Potential Transformer Upgrades

2015 - 2019

Long-Term Planning Widespread EV Adoption Generation Planning TOU or Real-Time Pricing Full Scale Customer Demand Response Feeder/Substation Upgrades

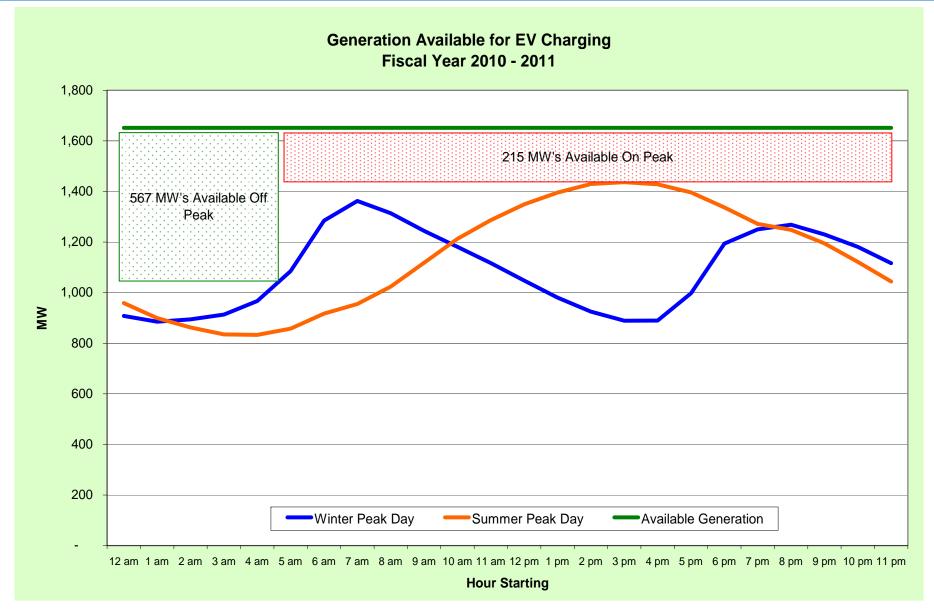


EV Sales Forecast within Orlando Region





RELIABILITY • AFFORDABILITY • ENVIRONMENTAL STEWARDSHIP



^{*}Sufficient capacity for nearly 30,000 EVs on-peak or 78,000 during off-peak



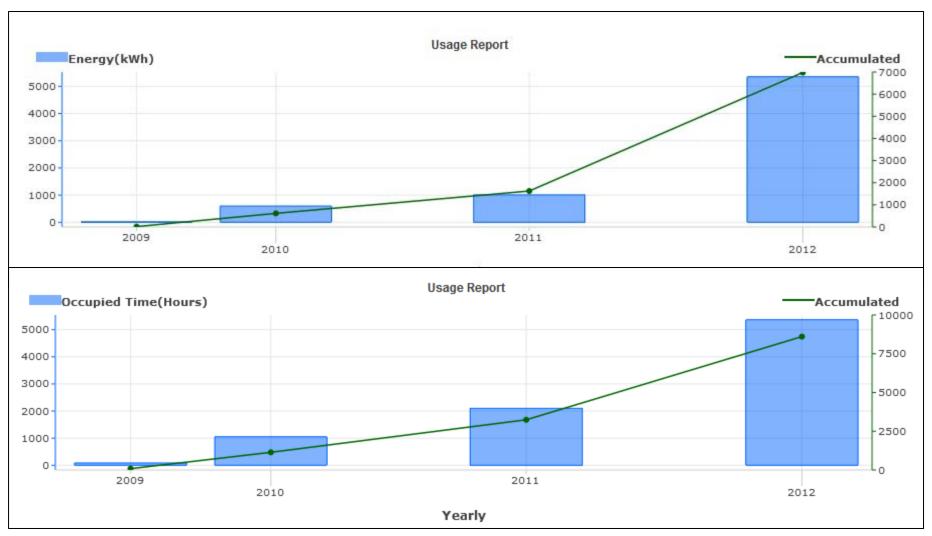
Charge Point America Partnership

- 96 public stations planned or installed
 - Public/Workplace charging
 - 20 percent customer-owned and 80 percent OUC-owned
- Two-pronged deployment
 - OUC provides up to \$2,500 for customer-owned units (customer operates unit)
 - OUC holds site license with host customer for OUC-owned units (OUC operates unit)
- Working with four EVSE installers
- 78 OUC-owned Coulomb units installed to date
 - 2,575 charging sessions to date
 - 8,642 KWH sold to date
 - \$452.20 in fees collected to date*
 - Average session usage is 5.8 KWH
 - Average session time is approximately 4 HRS
 - Roughly 20% workplace charging (468 sessions)





Charging Station Usage Statistics





Level 2 EVSE Installation Costs

Equipment Costs

(\$1,800 - \$2,500)



Installation Costs*
(\$885 - \$10,759

Total Installed

Cost

(\$2,600 to \$13,000)

*Data based on the installation of 63 stations in Orlando, FL



Program Challenges

Site Identification

- Customers struggled with perceived liability concerns of public charging
- Resistance to make investment without more vehicles present (chicken-egg)
- Difficulty filling geographic "gaps"
- Often limited parking in key locations

Equipment Installation

- Directional boring through asphalt and concrete
- Long secondary runs (> 250 FT) due to location selection
- Additional step-down transformers to convert voltage from 277/480 to 120/208 V

Fee Development and Collection

- Industry software/hardware has limited capabilities
- Additional surcharges difficult to collect currently using GSND rate with no additional cost recovery
- Significant utility IT upgrades required to remove third party from revenue collection
- Considered offering flat rate customer charge (i.e. Austin model)





Contact Information: Jennifer Szaro (407) 434-2100 jszaro@ouc.com www.ouc.com/ev

