

What is it we're preparing for?

The electric vehicles coming to Ameren

- **Chevrolet Volt**

- Three Ameren vehicles in total – two in MO, one in IL arrived in June & September
- Extended Range Electric Vehicle (EREV)
 - 16 kWhr Lithium-ion battery
 - 25-50 mile “electric only” range before gas engine kicks in
 - Gas engine drives a generator to keep battery charged at ~20% to support electric drive train
 - Braking and coasting assist in battery charging
- Full charge at 120V in 7-8 hours or at 240V in 3-4 hours
 - 12 kWhrs required to get 40 miles back
 - Cost is \$1 (compared to \$5 to “gas up”)
- MSRP of \$39,900 (\$7,500 tax credit applies)
 - In area dealerships in October/November



What is it we're preparing for?

The electric vehicles coming to Ameren

- **Nissan LEAF**

- Vehicle acquisition plans for MO and IL
- Delivery delayed until March 2012 – six Japanese plants damaged in earthquake
- Battery Electric Vehicle (BEV)
 - 24 kWhr Lithium-ion battery
 - 80-mile average “all-electric” range, no gas engine backup
 - Braking and coasting assist with battery charging
- Full charge at 120V in 16-18 hours or at 208/240V in 8-9 hours
 - 28 kWhrs required to get 80 miles back
 - Fueling cost ratio still 1:5 compared to gas
- Lists at \$33,000 (\$7,500 tax credit applies)
 - In area dealerships in Spring 2012



What is it we're preparing for?

The electric vehicles coming to Ameren

- **Ford Focus EV**
 - Battery Electric Vehicle (BEV)
 - 23 kWhr Lithium-ion battery
 - 80-mile average “all-electric” range, no gas engine backup
 - MSRP will be “competitive” with LEAF
- **Mitsubishi “i”**
 - Battery Electric Vehicle (BEV)
 - 16 kWhr Lithium-ion battery
 - 60-mile average “all-electric” range, no gas engine backup
 - Economy end of EV market – MSRP will be under \$30,000
 - Ameren test drove during March 2011
- **Dozens of other models over next three years**



What else is Ameren doing?

Other activities supporting EV technology and the customer



Charging Times and Costs

Miles Driven Daily	Charging Times			Daily Charging Cost ²	Equivalent Gasoline Costs ³		
	Level 1 (120V)	Level 2 (240V)	Level 3 (480V)		\$3 per gallon	\$4 per gallon	\$5 per gallon
20	4-5 hours	1-2 hours	10 minutes	\$0.50	\$2.00	\$2.65	\$3.35
30	6-8 hours	2-3 hours	15 minutes	\$0.75	\$3.00	\$4.00	\$5.00
40	8-10 hours	4-5 hours	20 minutes	\$1.00	\$4.00	\$5.35	\$6.65
50 ¹	10-13 hours	5-6 hours	25 minutes	\$1.25	\$5.00	\$6.65	\$8.35
75 ¹	15-19 hours	7-8 hours	30 minutes	\$1.90	\$7.50	\$10.00	\$12.50

¹ Data only applies to an electric vehicle that can provide this many "electric only" miles.

² Based on Ameren's blended residential rate of 8¢ per kilowatt-hour.

³ Based on a conventional vehicle rated at 30 MPG.

