



## **Minutes of the Board of Directors Meeting and Stakeholders Conference for Builders, 9 to 11:30 am on March 10, 2010, RVTD Transit Building, Medford, OR**

Board members in attendance: Mike Montero (RVACT), Gary Hall (Gary Hall & Associates), Mike Quilty (MPO), Julie Brown (RVTD), Sue Kupillas (RVCC Coordinator) and Melissa Stiles (RVCC). Out of town: Steve Vincent (Avista) Unavailable: John Vial (Jackson County Roads) and John Becker (DEQ). Guests in attendance: Randy Jones (Mahar Homes, Veranda Park), Alan Welburn (Welburn Electric), Carlos Reichenshammer (Home Builders Association), Bret Moore (WL Moore Construction), Mike James (Jackson County Motor Pool), Rick Wallace (Oregon Department of Energy), Mike Grubbs (City of Medford), Derek Zwagerman (City of Medford), Tim Price (Jackson County Building), Randy Cooper (Medford Fire Department). By teleconference: Brian Verprauskus (Nissan North America, Inc. Senior Manager Corporate Planning) Smokey Stover (CNLNG).

Chair Mike Montero introduced guests and summarized the RVCC mission to develop local strategies to reduce dependence on foreign oil. He summarized the January and February board meetings to gather information about supply, distribution of power and codes to prepare for building garages equipped for alternative fuel vehicles. The meeting featured three speakers, two by phone and one in person, Rick Wallace.

### **Nissan Leaf**

Brian Verprauskus talked about charging specifics of the Nissan Leaf all-electric sedan which is expected to be available at Oregon auto dealerships in December. The Leaf can accommodate Level 1, Level 2 and Level 3 chargers, but Nissan recommends Level 2, which would require a dedicated 40-amp circuit wired in the garage. Level 1 charging will come standard with the car and the Level 2 charger will be an option at additional cost to the buyer. Every Leaf will come with a J1772 and EVSE (surge protector). For a photo and description, see the powerpoint presentation posted on the Events Page of the Rogue Valley Clean Cities website ([www.roguevalleycleancities.org/events.html](http://www.roguevalleycleancities.org/events.html))

Mike Grubbs asked about the life of the batteries with constant draining and charging. Mr. Verprauskus said the batteries have a 10-year life at 70 percent capacity. So after 10 years, the car will have a 70-mile range and after five years, the car will have an 80-mile range. The batteries should have a lower price tag five years from now. In response to a question about safety factors for emergency service crews responding to EV accidents, Mr. Verprauskus said Nissan will provide a guidebook with technical training for first responders. Tim Price asked about the impact on range of using heat and air conditioning. Mr. Verprauskus said running the air conditioning reduces the car's range by 5 percent; the reduction from running the heater depends on temperatures and climate. Information will be available on the website.

### **Natural Gas Conversions and Fuel Maker**

Smokey Stover of CLN NG is a consultant who installs and maintains Fuel Maker units for fueling natural gas vehicles. He also does natural gas conversions for pickup trucks. Carlos Reichenshammer asked about the total cost to convert a vehicle and install a home fueling system. The cost is about \$6,000 to convert a vehicle fueling system and about



\$9,000 to install the home fueling device. Mr. Stover said one of his customers recouped his cost in 18 months because of reduced fuel prices. He was paying nearly \$4 a gallon for gasoline before the conversion and now pays about \$1.60 for natural gas.

### **Builder Discussion**

The builders and inspectors discussed the cost and options for installing the proper circuit in new home construction with electric vehicles in mind. Bret Moore said new homes will have 100-amp panels but won't have three-phase power. He suggested placing a conduit directly below the panel. "If someone gets an EV it wouldn't take too much to wire it." Mike Montero said it would cost very little to plumb a new garage for natural gas. Bret Moore said, "I don't know many people who would invest \$16,000 in a natural gas vehicle with so little infrastructure in place. Constructing the infrastructure costs very little and with increased technology natural gas powered vehicles could become cost effective in the future. These are local vehicles right now." Randy Jones said, "I like the synergy of the private and public coming together. As soon as we get back to building in this valley and as soon as we get past the foreclosures, we will be ready for the new vehicles. As Carlos said, if the code changes are mandated by the state, we will have to do it whether we want to or not." Julie Brown suggested that drivers of natural gas vehicles continue to use the fueling station at Rogue Valley Transportation District. "We are the only filling station between Medford and Eugene and that's one of the reasons we don't run a CNG auto fleet." The few local drivers with CNG cars in Southern Oregon they fuel up at RVTDD, she said.

### **Tax Incentives**

Rick Wallace of Oregon Energy Department talked about the likelihood of alternative fuel vehicles increasing on Oregon roads. Oregon is estimating 60 percent of all vehicles on the road will be electric by 2030. By 2016, vehicles sold in the US must get an average of 35 miles per gallon. "I don't think people are prepared for what's coming and how soon the number of vehicles out there will be electric," Mr. Wallace said. As far as natural gas vehicles, the state's target for CNG is the truck market – delivery trucks, buses, vans. RVCCC continues its work with MPO municipal fleet operators. The state offers a 35 percent alternative fuel tax credit for commercial and 25 percent for residential. A federal tax credit is also available. There is a tax credit for home fueling devices; the credit can be taken by the builder or the homeowner. Most credits can be sold or transferred. For details about tax credits, see the PowerPoint presentation on the website, [www.roguevalleycleancities.org/events.html](http://www.roguevalleycleancities.org/events.html)

### **Follow Up Discussion**

An EV Advisory Committee recently published a study about preparing for increased use of electric vehicles in Oregon. Find the study on the RVCC website. The committee endorsed a streamlined process for consumers setting up home charging stations.

Next regular meeting of the RVCC Board will be at noon Wednesday, April 14, 2010, at RVTDD Translink, Medford.

