

**Fox Valley Electric Auto Association
PO Box 214
Wheaton, IL 60187-0214**

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October 2010 FVEAA Newsletter

The FVEAA is a Not-For-Profit Illinois Corporation and the Chicago Area Chapter of The Electric Auto Association

Next Meeting

**Friday, October 15th, 2010 - 7:00PM (doors open at 6:30PM) at
Packer Engineering, 1976 N Washington St, Naperville, IL 60563**

Packer Engineering is the on East side of Washington St, just North of the I-88 Tollway (North of Diehl, South of Warrenville Rd). Turn off of Washington onto Bighorn at the Packer Engineering sign, then take the first right into Packer Engineering and then an immediate left. Park in the lot between the buildings. 1976 is the new building up the hill. Enter the building in the middle of the North side.

Agenda

- Call To Order
- Old Business
- Committee Reports
- New Business
- Report: J1772 charging, Todd Dore
- Intermission: Refreshments, Networking and EV Viewing.
- Program: George Hamstra from NetGain will discuss the parallels in the electric vehicle industry growth, with the phenomenal growth 40 years ago in the microcomputer industry.

Although my prediction for availability was off by one month, we can now order J1772 connectors. I purchased an inlet from CurrentEVTech and received it about a week ago. See: <http://currentevtech.com/Cables-and-Connectors/SAE-J1772-Connector/SAE-J1772-Socket-p164.html>

This is a very well made inlet, with what looks like #4 wire for the mains and ground. It carries a 70A rating (higher than any of the J1772 charging stations) I found a space in the grill and cut the grill to allow it to fit perfectly. I built brackets to very firmly mount the inlet, and was set to wire it in when Todd Dore called and asked if the inlets were available. CurrentEVTech lists a 2-3 week delay from time of order, my delay on the first one was more like 4 weeks. Todd logically said that I did not have a known, working J1772 charging station within 30 miles of our shop, and he parked very frequently where there is a working J1772 charger, but he has been charging on 117V, as he did not have a J1772 inlet. He convinced me to unbolt my J1772 inlet and allow it to be installed on the Electric Bug. Hopefully, he will have it installed and at the October meeting. I ordered another inlet. We are using the wiring diagram (referenced and linked last month) from Dennis Miles (www.E-V-T-I-Inc.com) Todd hopes to have a report, as the first (or maybe the first non-Tesla) to use the J1772 connectors in Illinois.

Manzanita Micro has not yet introduced their kit to retrofit the Rudman chargers, but it is in the works, and Rich Rudman will have them available soon.

Bruce Jones has spent a couple of weeks doing a renewable energy/missions trip to Uganda. He is scheduled to be back in town on the 11th, only a couple of days prior to the meeting. We're going to have a busy meeting, but I do want Bruce to talk for a couple of minutes on the renewable energy information he has gleaned from Uganda.

I was invited to test drive the new Nissan Leaf last on October 7th. I was ready for a nicely packaged electric car. I believe Nissan has kept in the front line of developing technologies, and was not disappointed. However the car was much better than I had imagined. I drove it a short distance, did try it's acceleration, braked it hard, and tested the handling. In all these, it was flawless. The electric parts are extremely well laid out, and the chargers quite suitable for an electric car in the Chicago area. The base car has navigation and several visual aids to show range (on a map) and available charging stations within the range. Many of the people from the Chicago Electric Vehicle Consortium were present, and the test drive started (and headquartered) at my good friend Paul's office in OakBrook Terrace. Wally Burchfield, the Nissan Regional VP (also a CEVC committee member) was there to show the car. Wally almost always smiles (do you suspect a background in sales?), but this time, he had a smile with pride. He looked just like Jordan, our big Dalmatian, when he first saw the movie *101 Dalmatians*. Kind of a "see there, now you folks can see who had it figured it out."

I would strongly urge all club members to test drive electric vehicles as they come to market. Your opinion will help your friends and colleagues form their opinions. They likely know your interest in EV's, and will look to you for thoughts on the newly available EVs. You will be looked at as an expert; it's important that you have the knowledge they expect.

On both October 2, and October 9, I had the ability to discuss electric vehicles on the air with Paul Brian on "Drive Chicago" on WLS 890. We only touched on electric vehicles for a

minute or two on 10/2, but on October 9 we did spend about 20 minutes discussing EV's, charging stations, the Leaf test drive, etc. Podcasts are available: <http://www.wlsam.com/sectional.asp?id=7319>

Sometimes, the best comments are the lack of comments. Not a single person asked me what I thought of the results of the election, and I guess I consider that very good. I was very pleased with the way the election turned out, and certainly thank all those who voted. I think that everyone is as happy as I was.

Our program this month is George Hamstra. I have been asking George for months to talk to the FVEAA, but during the summer, he seems to have a penchant for taking Fridays off and throwing worms into the lake at his cabin. We've finally nailed him down for this month (and maybe next month). I initially asked George, who seems to have an inside track on everything new in EV's, to comment on where EV's are going in the future. My thought was that he knows what is right around the bend in our road, perhaps he can give some insight as to the long term possibilities. He offered an interesting theory: That the EV industry of 2010 is very similar to the microcomputer industry of the 1970's. Forty years ago, the microcomputer industry was just about to explode, and those who had a viable idea, both software and hardware based, were catapulted to the lead in a multi-trillion dollar industry. George sees a considerable number of markers that lead him to believe that there is a strong parallel in the EV industry right now. I like and respect George a lot. He makes careful decisions, and gets a myriad of facts before setting a course. He is easily able to explain his direction, and will show a logical pattern of small facts that support his choices.

Illinois rebates for the purchase of new Electric vehicles

Rich Carroll

The Illinois Alternate Fuels Rebate Program provides a rebate for 80% of the incremental cost of purchasing an AFV up to a maximum of \$4,000, or 80% of the cost of federally certified AFV conversions up to a maximum of \$4,000. A vehicle is only eligible to receive one rebate in its lifetime. The AFV or conversion system must be purchased from an Illinois-based company or vendor, except if the vehicle is a heavy-duty specialty vehicle that is not sold in Illinois. (415 ILCS 120/30).

The Program is open to all Illinois residents, businesses, government units and organizations located in Illinois, except for federal government. A rebate shall not exceed \$4,000 per vehicle. Over the life of this rebate program, an owner of an alternate fuel vehicle may not receive rebates for more than 150 vehicles per location or for 300 vehicles in total (415 ILCS 120/30).

Source: <http://www.nissanusa.com/leaf-electric-car/incentives/show/Illinois#/leaf-electric-car/incentives/show/Illinois>
<http://www.afdc.energy.gov/afdc/laws/laws/IL/user/3261>

Comment: In the past, this had been primarily used by people who documented their conversion to an electric vehicle. It is fairly clear that up to \$4000 is available for new electric vehicle purchases in Illinois. Vehicles must be:

- Purchased new
- Purchased from an Illinois dealership

- For a new electric powered vehicle that has a conventional gasoline or diesel make and model counterpart, the amount of the rebate is 80 percent of the incremental cost of the alternate fuel vehicle versus its conventional counterpart (same make, model, and model year) up to \$4,000.
- For a new electric powered vehicle that does not have a conventional make and model counterpart, the amount of the rebate is 10 percent of the base retail price of the vehicle as reflected on the MSRP, not including add-on equipment options, up to \$4,000.

Please note that this program will not continue forever. The Illinois Green Fleets website warns: The Illinois EPA will issue rebates as determined by the availability of funds in the Alternate Fuels Fund. Please refer to the updated announcements regarding program funding under the Illinois Alternate Fuels Rebate Program section on the homepage at www.illinoisgreenfleets.org.

For current status, and official forms, and explanations, see:
<http://www.illinoisgreenfleets.org/fuels/index.html> and scroll down to the section (2) on "Vehicle Rebates."

A partial listing of local licensing rules on hybrids

Rich Carroll

Wilmette Hybrid Sticker Fee Discount: The City of Wilmette raised its vehicle sticker fee to \$75, providing a discount only to vehicles that meet the EPA's SmartWay or SmartWay Elite criteria. Only two models sold in Illinois, the Honda Civic Hybrid and Honda Civic GX NGV, qualify for the SmartWay Elite designation and reduced fee (\$25), though more cars qualify for the Smart Way designation and reduced fee (\$50).

Frankfort Hybrid Sticker Fee Waiver: In 11/06, the Frankfort Village Board voted to waive the \$5 registration sticker fee for hybrid vehicles.

Source: <http://go.ucsusa.org/hybridcenter/incentives.cfm#IL>

New Plug in Cars Here, or Coming or Rumored to Come

Rich Carroll

AC Propulsion E-Box
 Aptera 2e
 Audi E-Tron
 BMW/Mini E
 Chevy Volt
 Chrysler EV Town & Country
 Coda EV
 Dodge EV
 Fisker Karma
 Ford Focus Electric
 Ford Transit connect Electric
 Green Vehicles Triac
 Jeep EV Wrangler
 Mitsubishi i-MiEV
 Myers Motors NmG
 Nissan Leaf
 Tesla Model S

Tesla Roadster
Th!nk City
Plug-in Toyota Prius
Volkswagen E-Up!
ZAP Alias
Zap Xebra Xero Sedan

Meeting Minutes - September 2010

Bruce Jones

WELCOME

President Rich Carroll opened the meeting at 7:02 p.m. with first time visitors introducing themselves, along with those who had driven an electric vehicle to the meeting. Rich then covered a variety of subjects including lost and found items. Dave Aarvold offered a number of lead-acid battery service manuals to anyone interested. Thanks Dave!

CEVC UPDATE

As indicated in previous meetings, the Chicago Electric Vehicle Consortium published their RFP on July 19th for the first \$2M phase of the City of Chicago's electric vehicle charging station rollout project. Bids were received from vendors on August 19th followed by an evaluation period and September 1st was set as the original target date for the winner to be announced. The selection has been slightly delayed however due to various factors, but the installation and build-out dates have not changed. Installation of charging stations will begin by end of 2010 with everything up and operational in 2011. So far the investment consists of:

- \$ 14.9M original Federal Grant to the CEVC for the installation of electric vehicle charging stations in the City of Chicago. The first phase of this is worth
- \$ 1.1M plus
- \$ 0.9M from the State of Illinois to assist the first phase of the rollout by expanding charging stations into Chicago's 6 collar counties plus
- \$ 34M potential additional investment by an unnamed company . . . not yet

verified

So the total investment in Chicago-land's electric vehicle infrastructure build-out could be anywhere from \$15.9M to \$49.9M.

Besides providing level 2, 240 ampere charging stations with J1772-2009 plugs, there will be at least 1 solar canopy, and a high amperage DC charging station in the package. To pay for the ongoing electric charging, vendors are proposing various pricing structures, networks, fees, and methods. The Illinois Brotherhood of Electrical Workers (IBEW) is onboard with the program, and training their members. There may be special city stickers allowing electric cars to park in specially marked parking spaces.

NAPERVILLE

Keith Baubkas met with the director of Naperville's department of public works, and they may be interested in working on electric vehicle charging. The City of Naperville is exploring all kinds of alternative fueled vehicles. They have been looking into companies that sell electric trucks like the Ford transit connect, Smith trucks etc. ComEd is using the Chevy Volt and, per Dave Aarvold, Northern Illinois University is also using electric vehicles.

It makes sense for Utilities to use electric vehicles as they can charge batteries during during low demand and use them for business.

PROJECT

Several people have said Packer Engineering has been good to the FVEAA by installing the Avcon charging station which is used by the group on Friday meetings. The idea to buy a complete level 2 J1772 charging station for installation at Packer was discussed and a motion was made to spend some funds to do this. Jon Jeide mentioned we could buy a new J1772 terminal for use at Packer Engineering with approval from Dr. Packer. However, before the first motion was seconded and approved, another motion was made to table the first motion until we receive additional costing and information first.

Members who volunteered to work on this include Ken Simmermon who will lead the group, plus Todd Martin, Jon Jeide, Todd Martin to come up with a report by the October meeting.

STEM PROJECT

Ted Lowe began a discussion on how the FVEAA could work with Science Technology Engineering and Math (STEM) programs as an outreach working with schools to engage the kids and possibly do a club car electric conversion project. Ted Lowe will begin the research on this and work with other volunteers like Dave Mashek and Michael Bodine.

Regarding the last club project a few years ago, Ted Lowe will look into getting the owner of that electric Porsche to bring it to an upcoming meeting.

NEWS

The Chicago Auto Show, per Rich Carroll, is put on by the Chicago Automobile Trade Association, a group of 500 new car dealers. In past shows, on the south end of the west building people took rides in a Jeep with a professional driver on a rugged test track. They now want to look at providing an electric car track where people ride in electric vehicles with a professional driver. They are also proposing to get the public used to electric car technology by having people touching and connecting a J-1772 charger. They want people to become comfortable, and see that electric cars are very safe. Several different cars and charging stations will be featured and charging stations. Next show is February 11th, through 20th 2011

ICC

Ted Lowe received a phone call from the Illinois Commerce Commission (ICC) which regulates electricity and gas. They are interested in talking with our group regarding electrical vehicle charging stations. Ted to let us know what the next steps may be.

NEW BUSINESS

Joliet Junior college would like a charging station, and College of Lake County as well. Todd Dore and Todd Martin have AVCON units sitting in their garages which might be useful here. We have not been reimbursed for chargers by the EAA yet and we need to spend the remaining money allocated. To be discussed by the new officers.

LAKELAND COLLEGE DACUM

Lakeland College is located in southern Illinois, Mattoon to be exact, three hours south of here. They received a \$2.5M grant from the government and are looking for someone to provide input on renewable energy technology classes that they should be offering. They are holding a DACUM in late October which is where they will discuss the future curriculum. If anyone is interested and qualified please contact Bruce Jones.

COMMITTEE REPORTS

OUTREACH - EV SHOW

Rich Hirschberg promoted the Midwest green car expo which is on September 25th. Bring your EV to downtown Elgin. For more information see <http://www.midwestgreencarexpo.weebly.com>

FINANCIAL SUPPORT

To gather interest, George Vergara wrote a letter to schools asking them if they want to learn about electric cars from the FVEAA.

FINANCE

Ted Lowe described a board meeting call which was held this week, with Rich Carroll, Todd Dore, Bruce Jones, Ted Lowe, Dale Corel, and Rich Hirschberg regarding the state of our finances, taxes and 501c3 status. Our goal is by mid next summer 2011 to become an official 501(c)3 entity. Another goal is to fill out and catch up on taxes by Nov 15th of this year. When the organization started taking raffle money a few years ago we needed to track it for tax purposes. Todd Dore and his wife Maribel volunteered to take on filling out the paperwork for us at no charge, and Ted will work with them to get it started within the next two weeks.

LITHIUM BATTERY EXPERIENCES

Todd Dore mentioned there was a recent dedication event for Interpark Corporation when they installed 2 Coulomb charging stations.

Note that there is no up-to-date car charging station map on line yet.

BREAK 8:15 - 8:45 p.m.

Electric cars on display include

- Chuck Carrington's 1975 MG

Chuck Carrington's electric 1975 MG



- Todd Martin's 1997 Solectria Force

Todd Martin's Solectria Force



- Todd Dore's electric VW bug

Kevin Zak with Todd Dore who showed his electric VW bug



- Steve Cimino's electric Saturn SUV converted by Pioneer Conversions to use Thundersky Lithium batteries



Steve Cimino's Saturn SUV converted to an electric SUV running on Thundersky Lithium ion batteries

During the break Ken Simmermon met with other volunteers who mentioned an interest in the afore-mentioned project.

Joe Sykes volunteered to be raffle-meister and he collected \$58 from the group.

LITHIUM BATTERY EXPERIENCE

After the break, Todd Dore described his experiences with Lithium batteries in his VW bug, and the care and maintenance that goes along with driving an electric vehicle. Todd has 48 Lithium batteries each originally costing around \$210 and holding around 160 - 180 amp hours each. Todd noted that Watt-hours per mile is the flip side of miles per gallon. That is, you want fewer watt hours per mile versus more miles per gallon.

He discussed chargers for lithium iron phosphate batteries, and battery monitoring systems which are used to determine if the batteries are over-discharged or overcharged. Todd uses about 313 watt hours per mile in his bug based on how much energy is being put in, and noted some energy is lost by converting AC to DC. His longest trip was 80 miles and he has 3000 miles on the batteries, hoping to get 100k miles. Currently he has negligible battery sag.

Todd mentioned there are two Coulomb electric charging stations at millennium park and others near his office. He can go on-line and see statistics on his car. The nice thing is that he gets a text message when the car is finished charging. An algorithm in the charging station software senses when his batteries are fully charged. Excellent experience Todd, thanks for sharing!

OTHER COMMITTEE REPORTS - None
OLD BUSINESS - None
NEW BUSINESS - None

The Regular portion of the meeting was closed at 9:05 p.m.

ANNUAL MEETING

The Annual meeting was called to order for the Election of officers who must be paid members.

The following individuals were nominated by members of the association. They accepted the nomination, and were either elected due to no other competition, or voted on by the meeting attendees.

PRESIDENT - Rich Carroll

VICE PRESIDET - Todd Martin

SECRETARY - Bruce Jones

TREASURER - Todd Dore

BOARD OF DIRECTORS - Ted Lowe and Rich Hirschberg and Ted Lowe

CONGRATULATIONS TO THE FVEAA LEADERSHIP!

A move was made to adjourn the meeting after elections at 9:15 p.m. which was accepted, and the meeting was closed.

For Sale: 1981 Ford Escort EV

Ted Sanders

Only 19600 miles on conversion. No rust
Original yellow with added lightning flashes
Converted immediately after purchase in 1981
Has always been housed
Longest drive between charges is 40 miles
My normal driving is trips of 5 to 30 miles

Street legal, 65 + MPH

120 volt battery pack

Asking \$10,000
Contact Ted Sanders
847-625-0745
745 Cohasset Ct.
Gurnee, IL

FVEAA Membership Application Form

Name: _____

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Email: _____

Please check one: New Member _____ Renewal _____

How did you hear about the FVEAA ? _____

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Individual	\$15	No Newsletter	\$0
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Business	\$100	Postal Mailed	\$15
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Attn: Membership

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empowers us.*

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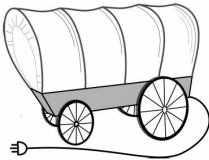
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