

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

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January 2011 FVEAA Newsletter

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

Next Meeting

**Friday, January 21st, 2011 - 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
- Intermission: Refreshments, Networking and EV Viewing.
- Program:
 - Todd Martin relay relay information. (Really!)
 - Rich Carroll will present a short discussion about picking a good vehicle to convert.

President's Words

Rich Carroll

Ted Lowe has been working hard on the 501(c)(3) application. Becoming a 501(c)(3) would change our status with the IRS to that of a tax-exempt organization, which has some

significant benefits. I voted for this, as did several other members. The FVEAA Board of Directors has been actively involved in making several changes and adopting new policies in order to comply with IRS guidelines.

These guidelines are more restrictive than what we have had in the past 36 years. I'll admit that when I voted to pursue 501 (c) (3) status, I did not look deeply at the matter, I assumed that achieving that status would give us greater latitude in accepting donations (we could issue market value receipts for donations that could be used by the donor to reduce their taxes.)

But there are several things I did not realize that come with the 501(c)(3) status.

Organization Type. According to the IRS Publication 447, in the *Organization Reference Chart* section the following is an exact description of a 501(c)(3) organization: "Religious, Education, Charitable, Scientific, Literary, Testing for Public Safety, to Foster National or International Amateur Sports Competition, or Prevention of Cruelty to Children or Animals Organizations."

The IRS goes on to say that 501(c)(3) exemptions apply to ... any community chest, fund, cooperating association or foundation, organized and operated exclusively for Religious, Education, Charitable, Scientific, Literary, Testing for Public Safety, to Foster National or International Amateur Sports Competition, or Prevention of Cruelty to Children or Animals Organizations.

If we have to be organized and operated **exclusively** as ... an education or scientific organization ...(there is more to the list, but the other parts do not pertain) this would mean a change in direction for the club.

Reporting. Yearly reporting and filing becomes more exacting. Ted Lowe and Todd Dore seem to have a good handle on this, but we should be very cautious in the future to choose a Treasurer who is familiar with the 501(c)(3) requirements, or be willing to pay a tax professional for advice.

Fee. There is an additional filing fee of \$400 for registration as a 501(c)(3) organization whose gross receipts do not exceed \$10,000 or less annually over a 4-year period. If the gross receipts are higher, the fee doubles.

Classification. Two exempt classifications of 501(c)(3) organizations are:

1) Public Charity, which, as defined by the IRS, normally receives a substantial part of its income, directly or indirectly from the general public or from the government. The public support must be broad, not limited to a few individuals or families. Such public charities have are defined further by the IRS code 509(a)(1) through 509(a)(4)

2) Private Foundation, which receives most of its income from investments or endowments.

Political activity. All 501(c)(3) organizations are either prohibited from public activities, or have fairly severe limits in these activities, and the reporting of such activities goes up considerably.

I would like to apologize for not doing my homework before voting on the 501(c)(3) application. That said, the 501(c)(3) doesn't look right for us. We don't fit either exempt classification without some liberal interpretation. We were not organized or operated exclusively for educational and scientific purposes. In view of the fact that we occasionally urge members to write their state representatives about some law or licensing function, this would be much more difficult to do as a 501(c)(3). Normally, separate organizations are used to urge passage, modification or rejection of pending legislation, and we have not proposed a second organization to do this. It appears that the filing fee is much more significant than I had initially thought. The reporting requirements of accounting for donations are considerable, and may be difficult by a part time volunteer.

Perhaps we should reconsider our pursuit of 501(c)(3) status.

Pedestrian Safety Enhancement Act

Rich Carroll

On January 4th, President Obama signed into law the Pedestrian Safety Enhancement Act of 2010, which was backed by the National Federation for the Blind, the Alliance of Automotive Manufacturers, and several other national organizations. The bill authorizes the Secretary of Transportation, particularly the National Highway Traffic Safety Administration (NHTSA) to create alert sounds for an electric vehicle to warn visually impaired pedestrians of the presence of a silent car. Some have decried this as silly, adding to the noise pollution that the electric car reduces. I think that demeans the efforts to create a nation which truly offers equal opportunities to people who are physically challenged. The requirement for a small noise maker on the front of an electric vehicle will be one more step in making the physically challenged be more able to navigate productively. One report indicates that the \$2 million dollars to develop and implement the new standards will be taken from the Department of Transportation safety belt performance grants.

The language, as passed said:

The Secretary of Transportation shall make rules for an alert sound for blind and other pedestrians to detect a nearby electric or hybrid vehicle operating at low speed.

There are some caveats, though. the sound is not required above the speed at which tire noise, wind resistance, etc. make the sound unnecessary. The sound is needed for newly produced vehicles and older vehicles alike. The sound should be automatically started, not requiring action by either driver or pedestrians. Overall community noise impact should be considered in making these recommendations. A three year phase in period is allowed. Up to \$2,000,000 is to be made available by the Secretary of Transportation for carrying out this act. This was passed as Senate Bill S.841 last year, and signed this year.

For exact wording, see: <http://thomas.loc.gov/cgi-bin/query/z?c111:S.841>:

January Program

Todd Martin and Rich Carroll

John Emde has suggested to me several times to include programs on the decisions that a member needs to make when considering a conversion to electric power. This month, we have a combination of two small programs.

Todd Martin, FVEAA VP, has agreed to relay information on relays. We all use relays, but not all of us are aware of the different kinds, different methods of actuation, and rating systems. Todd will help explain relays, so that we can make the best choices when we need to choose one.

Rich Carroll will present a short program on "Choosing a vehicle for a conversion." We'll get into a little of what priorities you should give various factors as you pick a vehicle.

Meeting Minutes - December 2010

Bruce Jones

WELCOME

Rich Carroll opened the meeting at 7:00 p.m. and he mentioned we had two brand new members. First time attendees then introduced themselves.

NEWS

As Rich Carroll mentioned in previous meetings, the Chicago Electric Vehicle Consortium (CEVC) has \$15M to spend to install electric vehicle charging stations, mainly in the City of Chicago. Nine proposals were evaluated from various vendors, and it took much more time

to compare the bids than originally anticipated due to some unexpected offers and options. The winning bid came from a company called 350 Green, a consortium that proposed well over 200 Level 2 stations, 15 solar canopies and 73 DC charging stations, which is more than what was required in the RFP. They proposed a unique solution incorporating \$6.5M in additional matching funds from investors and an extremely fast deployment schedule. IGO Zip car sites will receive 25 stations, and there will be 73 quick chargers at locations like Illinois tollway oases so cars can charge quickly, in 5 – 10 minutes. The charging stations will be owned by 350 Green and the investors however.

Their installation timeline was impressive with, at the time of this meeting, crews already working at O'Hare Airport hoping to install 10% of stations and level 3 charging stations within the next two weeks - by Dec 31 2010! The installation timeline includes 30% by March 30 with all stations by Dec 31, 2011. Aerovironment chargers were selected by 350 Green, but others may be used in different locations.

So which electric cars can use the Level 2 and 3 high speed charging stations? There are two ports on the Nissan Leaf, one for the DC quick charge using the CHADEMO plug which handles 480 V direct DC at more than 100 amps. There is no clear indication on the method 350 Green will use to charge customers however. By regulation, vendors can't charge directly for electricity, since only utilities can do that. So creative membership and payment schemes will likely be devised like charging unlimited off peak fees of \$75 /month for example.

Note that the newer Lithium Iron Phosphate batteries with a 3C or 4C rating can actually be overwhelmed by the new rapid charging systems. (Remember one "C" actually relates to the rate per size. A 200 AH battery with a 3C rating could charge/discharge at 600A for short periods. A 240 amp hour Lithium battery charging at 1c should take about 1 hour. Few batteries can actually charge at a 1c rate today. So it appears that older Lithium Ion batteries with a .3c and .5c rating appear to handle quick charging better than the newer technologies.

A discussion began, covering topics such as the grant money being used for the rollout and how it is also going to be used for incentives as well. ComEd has some EV initiatives including their purchase of hybrid vehicles in 2010 and plug-in vehicles in 2011.

TO DO >Bruce will attempt to try and get a speaker from 350 Green at an upcoming meeting.

CHICAGO AUTO SHOW

One of Rich's best friends, Paul Brian is with "CATA" the Chicago Automobile Trade Association, and as the Director of Communications, he helps lay out the trade show booths etc. In previous discussions with Dave Sloan the President of CATA, Rich heard that JEEP might not sponsor a test track at the Chicago auto show this year. . . which opened up the possibility that an electric vehicle charging station and electric vehicles might be able to fill the spot. But Jeep changed their minds and decided to go ahead and include a smaller test track this year. And speaking of trade shows . . .

ELECTRIC BOOTH

Rich opened it up to the floor to discuss if we, the FVEAA wanted to set up an electric vehicle booth, at McCormick Place which would need to be manned 12 hours/day for 14 days when the show opens in early February. Cost to us would be \$9 / sq foot for 14 days. Funding for such an effort was discussed, and Dave Aarvold suggested we could sell memberships to the FVEAA to help pay for it. Dennis Doney said he could volunteer to help at the event, though no one volunteered to head up the project. If we do this, we'd want at least two or three members for each shift.

CAR DEALERS

Rich suggested we could also approach car dealers and offer to give each new electric vehicle (Leaf, Volt etc.) owner a free year of membership to the FVEAA. Perhaps sponsors of the FVEAA could donate funds to us to support this effort.

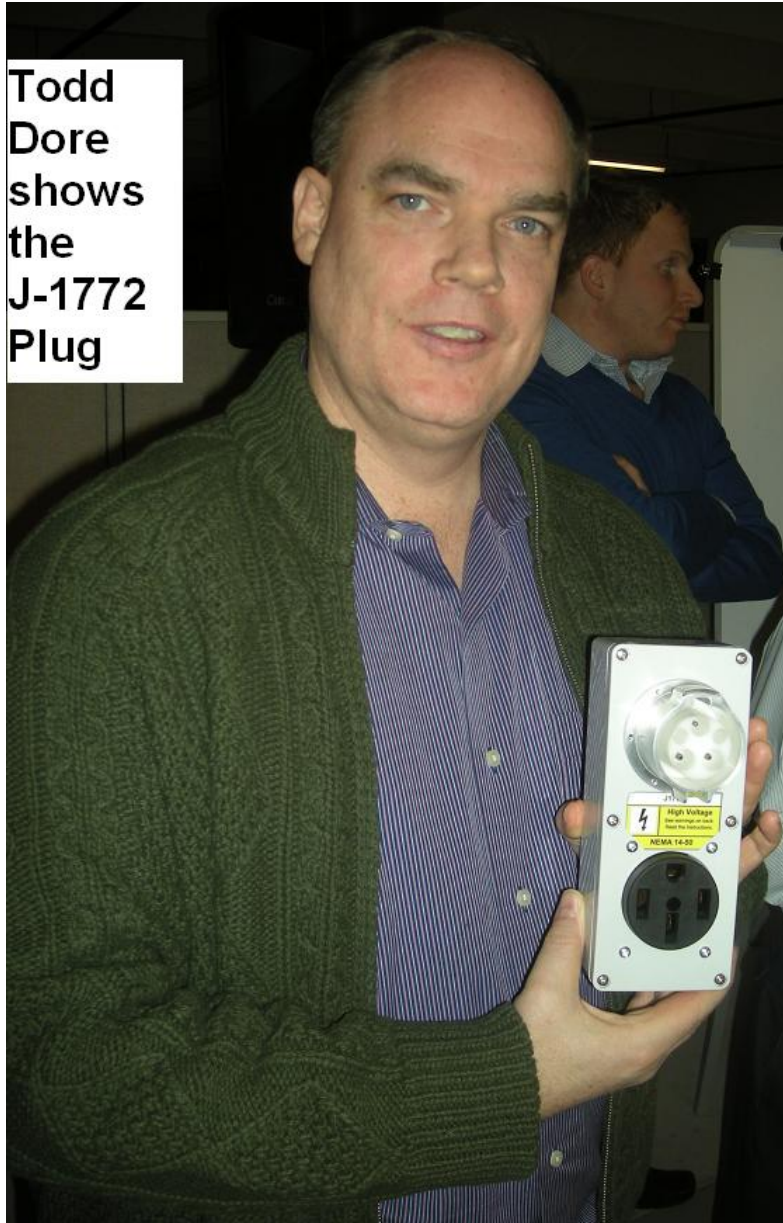
NEWS: J-1772

An actual J-1772 charging cable was shown by Todd Dore. Rich had loaned him a new J-1772 connector and Todd created a female version of the plug, which he uses on his VW bug to plug into a Coulomb charger at a parking garage in downtown Chicago. Todd's monthly electric pass cost him \$12 and he charges around 15 days a month. He said it has worked every single time. The high voltage charger fills up his electric bug in around 1.5 hours and he really likes the Coulomb communication feature which show usage. It even sends him a text message when the charging is completed . . which is quite helpful. Coulomb was the first out of the gate and it works well. He noted as a rule of thumb, a battery provides about two miles per kWh, and nearly as much energy goes into running the defrost as actually driving the car.

COMMITTEE REPORTS

Treasurer – Todd Dore mentioned we have around \$15k in checking and savings and \$5k should be coming from EAA when they finish the application. Todd suggested we think of ways to help us further our EV cause by spending some of the funds.

Todd
Dore
shows
the
J-1772
Plug



OLD BUSINESS

Screwdrivers – Rich wants everyone who has not yet done so, to take two screwdrivers!

Club Project – Several people have talked with Rich about doing an FVEAA sanctioned club project. It's a great idea that will be fun to do. There was so much interest in it, we might even promote two different projects, one in Lake Barrington and other in the Oakbrook area.

The Packers and the Chargers

A month ago Rich met with Dr. Ken Packer of Packer Engineering, where we hold our FVEAA meetings. As a thank-you for them providing us with a meeting room on Friday nights, free electrical charging, installing a J1772-2002 Avcon charger several years ago and doing several things to help the club, we looked at the feasibility of installing two brand new J-1772 charging stations at Packer with new standardized plugs. It would be the first location in the Chicago western suburbs to use J-1772-2009 chargers, and it would be a great showcase since Naperville is in front of the curve as it pertains to reliable electrical infrastructures and promoting green efforts. If the stations were installed, Dr. Packer would likely give us an authorized key to turn the stations on for our members. The stations would

not be used by others outside of Packer unless authorized. Though Naperville vehicles might also charge up there. Many details still need to be worked out however.

TODO >Rich will put together a proposal to the club for the cost of the charging stations

A suggestion was made to give a gift certificate to Ken Packer but it was not an official motion.

BREAK 8:15 p.m. to 8:30 p.m.

RAFFLE – An electric scooter restored and donated by Steve Grushas was the highlight. Dio Vesselinov was raffle meister who collected \$115. Rich had the ticket pulled by a party who did not purchase a ticket, and the winner was Dio Vesselinov, who had been the seller of the raffle tickets.

Two electric cars were outside to view, Todd Dore's electric VW bug and Ted Lowe's yellow electric Chevy S-10 pickup truck.

And we had some delicious snacks at the break! Thanks to Dave Aarvold and others who brought treats.

COULOMB PRESENTATION

Our featured speaker was Brian Levin from Coulomb Technologies based in Campbell California. Brian covered a range of topics related to their intelligent charging stations. There is a free application for Apple or Blackberry that will tell you where you are and where the nearest charging station is located, and if it's available for charging. Coulomb chargers are the only combined Level 1 and Level 2 charge stations with UL approval. Brian describe the company's beginnings based on a \$40M award from the government and then listed many companies, municipalities, and governments purchasing units like Meyers, ComEd, Interpark, Mall of America, along with cities like Amsterdam that just finished their 80th Coulomb station installation.

Regarding payment plans, owners did not like the \$80/month plans because they did not always have a chance to charge their vehicles and the price was high. It seems a simple buck-an- hour plan or charge per session is better.

The Coulomb network shows errors unlike the other chargers that don't have sophisticated communications networks. The communications architecture is based on a CDMA or GSA cellular based networking scheme.

Coulomb gives the owners of the charge stations the flexibility to charge or not to charge and Ecotality is saying they are going to not charge a fee in Portland.

A variety of other subjects were also covered including Zigbee mesh networking, the Acrewade partnership for level III charging, Blue Star, Solar powered stations in Ireland, the need for upgrading infrastructure and transformers in San Francisco, Siemens as a partner and other topics.

Rich closed the meeting at 9:25 and mentioned that Coulomb set the standard high, and their units are very solid. Thanks Brian for your presentation!





SNACKS !!



Brian Levin from Coulomb



Ted Lowe's Electric Chevy S10 Truck

While working on our 501(c)3 application, i discovered that we need to change our bylaws to be able to apply. Basically, the IRS requires 501(c)3's donate their assets to other 501(c)3's in the case of dissolution. Our bylaws currently state that remaining FVEAA assets be divided amongst active members in the event of dissolution.

Details, from IRS form 1023 (<http://www.irs.gov/pub/irs-pdf/f1023.pdf>), Part III, 2a:

"Section 501(c)(3) requires that upon dissolution of your organization, your remaining assets must be used exclusively for exempt purposes, such as charitable, religious, educational, and/or scientific purposes. Check the box on line 2a to confirm that your organizing document meets this requirement by express provision for the distribution of assets upon dissolution. If you rely on state law for your dissolution provision, do not check the box on line 2a and go to line 2c."

The current dissolution wording in the FVEAA Bylaws:

"ARTICLE VIII: DISSOLUTION

In the event of dissolution of the Corporation, all donated property and funds shall be returned to the donators. All assets shall be sold and the resulting funds along with any other funds the Corporation has shall be used to pay any liabilities the Corporation may have accrued. Any residue shall be divided among the members in good-standing."

Proposed Amendment to the FVEAA Bylaws:

"ARTICLE VIII: DISSOLUTION

In the event of dissolution of the Corporation, any remaining assets will be used to pay any Corporation liabilities, with the balance if any, being donated to the Electric Auto Association (our parent organization and recognized 501(c) corporation)."

Please let me know if you have questions, comments or think we need any changes. It is my intent to discuss this change at the February 2011 and then vote as relevant. Assuming the change is accepted, this will allow us time to apply for the 501(c)3 status by the March 2011 deadline.

FVEAA Membership Application Form

Name: _____
 Address: _____
 City, State Zipcode: _____
 Phone: _____ Phone Type: Home ___ Work ___ Cell ___
 Email: _____

Please check one: New Member _____ Renewal _____

How did you hear about the FVEAA ? _____

Member Types and Annual Dues (Please circle one)		Newsletter Delivery Types (Please circle one)	
Individual	\$15	No Newsletter	\$0
Family	\$20	Electronic Only	\$0
Business	\$100	Postal Mailed	\$15
Premier Business	\$250	Postal Mailed and Electronic	\$15
Charter Business	\$500		
Total Due from Both Columns:			

Please make your check payable to "FVEAA" and postal mail it with this membership application form to:

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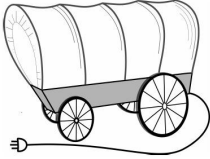
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