

March 2019 FVEAA Newsletter

Fox Valley Electric Auto Association

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

Next Meeting

March 15, 2019

Starts 7:00 p.m. Ends 9:00 p.m. Community Christian Church 1635 Emerson Lane Naperville, IL 60540

Google Map

Agenda

- 6:30 pm Doors open
- 7:00 pm Introductions
- 7:30 pm Rich H upcoming events
- 7:40 pm Rob Schwartz on the Electrathon cars
- 8:15 pm break
- 8:30 pm Rich H presentation on new vehicles
- 9:15 pm adjourn

President's Words

Jeff Miller

April 6th at 11:00AM we are invited to have a meeting with the students at LakeView Tech on their Electrathon cars. Come see these excited youngsters.

LakeView Technology Academy 9449 88th Ave. Pleasant Prairie, WI

Sat. April 6, 2019 Electrathon Workshop

Rob Schwartz says come visit the LakeView Technology Academy as Supermileage and Electrathon teams make final preparations for the 2019 race season. Teams will be at the school from 9 - 4 working on their cars. FVEAA members please come by around 11 am. Students will make a short presentation and give you a tour of the school, half of which is machine shops. Check out the cars, most of which should be running in the parking lot. Ask any of the students questions on designing, machining, welding, and wiring their cars. Lunch will be served around 12 ish. Electrathon America website at http://www.electrathonamerica.org or our sanctioning body Challenge USA at cusamotorsports.org to get a look. See you there!



Articles I found interesting

https://fenix.systems/

These guys are proposing a replacement buy to own, buy, or rental service for existing Leaf cars. They sell it with extra buzz words about monitoring.

<<Replacement batteries for older model Leafs! - BJ>>

https://www.cnbc.com/2019/02/20/chinese-electric-automaker-kandi-shares-rocket-40percent-higher-on-approval-to-import-cars-to-the-us.html

https://www.foxbusiness.com/markets/tesla-turns-around-raising-prices-keeping-more-stores-open

https://www.cnet.com/roadshow/news/ford-f-250-plug-in-hybrid-debut/

https://electrek.co/2019/03/07/tesla-v3-supercharger-action-first-look/

I almost wish I would have bought a Model 3 now! (almost) I don't expect much improvement from my old battery pack but I am curious to see what they can do. I will say that my car on long road trips won't benefit from the preheating, it is always hot when it arrives anyway. But I can see that on newer batteries with lower internal resistance. Seriously good things all around here. I will be sure NOT to park next to Model 3's at Super chargers.

Model Y announcement on March 14th. My wife is beside herself with excitement over the Model Y! I don't think she represents the car buying public as a whole, but she is a better approximation than I am. She couldn't care less about the other cars. The X is so complicated, but she expects the Y to be in that sweet spot of cost/complexity/liveability.

https://insideevs.com/tesla-model-y-ditch-12-volt-battery-95-less-wiring-model-3/

It will be interesting to see how many of these predictions will come true.

https://arstechnica.com/cars/2019/03/the-tesla-model-3-reviewed-finally/

https://arstechnica.com/cars/2019/03/mercedes-benz-debuts-eqv-electric-van-at-the-geneva-auto-show/

Do you like racing junker cars? Do you REALLY like nickels?

https://24hoursoflemons.com/blog/electric-race-car/

Race an EV, if you win it all (beating the gas cars too) you get \$50,000 delivered to your house in NICKELS! 5.5 tons of them.

Certainly something to tell you friends about.

It occurs to me that I own a good EV Lemons car already. The Spitfire in my garage could be pressed into duty. I paid a very small amount of money for it. Off the top of my head I would think we would need three battery packs, some charging kit, a race seat, and a roll cage. It is ugly (just like a Lemons car should be). I am thinking WAY to hard about this. (fortunately the registration deadline for the Joliet race has already gone for this year.) If anyone has a bunch of money to throw away on an EV race car and wants the Spitfire, let me know.

I do not hold any interest in any car manufacturer or any of their subsidiaries

New FVEAA Website Development Update

i took a few weeks off on this project but am back on on it now. i plan to cutover the new website in the next 2 weeks! We will experience some brief outages while i make the changes. i will inform members by email before the cutover begins and again once it is completed. Please stay tuned for more details.

Ted Lowe

Bruce Jones



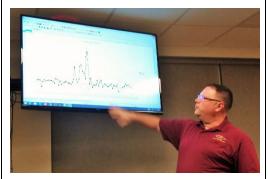
Toyota Rav4 (top left) and 2011 Leaf brave the February cold. The Leaf was able make it around in sub zero weather at the end of January.



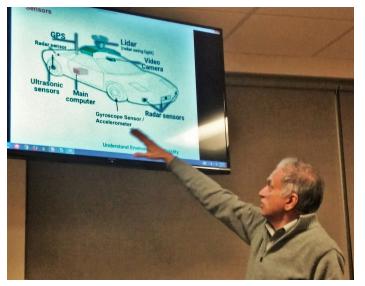
President Jeffrey Miller leads introductions



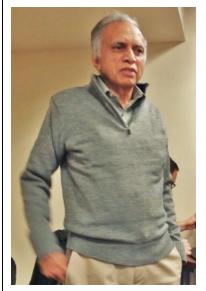
Simon's Toyota Rav4 gets a charge



Jeff explains ComEd's Real Time Residential Rate Plan and compared how his rates actually fluctuated the last two Winters



Dr. Suresh Borkar presents on Driverless Cars and not just technology, but on major issues such as legal, moral and



Thanks Dr. Borkar!

social	

FVEAA On Facebook - Join Us! Like Us!

In October 2015, I created a **Facebook group for the FVEAA** and invited all the past and current FVEAA members i know that are on Facebook. There are 86 members as of 3/11/19. If you're on Facebook but not in the group, yet please join us! If you're not on Facebook yet, please consider joining so you can join our group there! This group supplements our forums because it is much easier to use, read, post pictures and videos and get notifications. Please let me know if you have any questions/comments/suggestions. Hope to see you there! <u>https://www.facebook.com/groups/889497691136309/</u>

Grant Gerke started FVEAA's Facebook Page. Like Us!

https://www.facebook.com/FoxValleyElectricAutoAssociation

Membership Update

Ted Lowe

Ted Lowe

We currently have **52 active paid-up** members, **down ONE** from last month! *I'm officially concerned by the our dwindling membership!* Please renew & recruit new folks in 2019!!!



FVEAA Membership Report as of 2019-03-11 04:58:09

Count of Members by Type

Membership Type	Count	Paid Up
BusinessStd	1	1
Family	4	4
Individual	45	44
LifetimeInd	3	3
Totals	53	52

Other Statistics

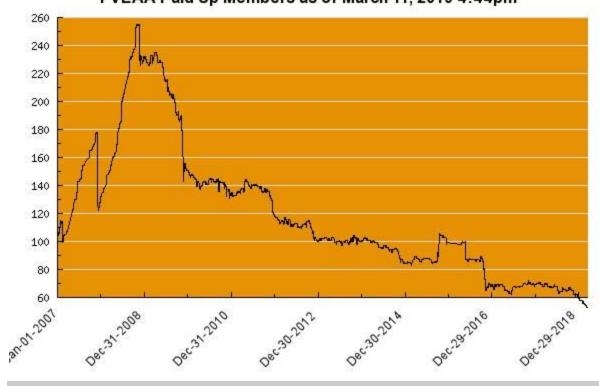
Statistic	Value	
% Paid Up	98.1%	
Avg. Paid Up Days	175.6 days	
% With Email	94.3%	

Encouraging Our Membership To Grow in 2019 and Some History

Ted Lowe

Happy 2019 EVeryone! We live in a large metro area with 8 million people and EVs are the latest buzz so we should be able to grow the FVEAA! Please invite your friends, neighbors, family, colleagues, etc. to FVEAA meetings and EVents. Volunteer to attend EVents on behalf of the FVEAA (with or without an EV)! Your ideas on how to help grow the FVEAA are welcomed at anytime, thanks! Howard Hansen had a great idea... giving an FVEAA membership as a gift!

Here is a time-varying graph of our membership size from 2007 to now. Note that we peaked at about 255 members in the Summer of 2008 when gas was nearing \$5 per gallon. We were also attending lots more invitational EVents with our EVs. Let's get out there and grow the FVEAA in 2019!!!



FVEAA Paid Up Members as of March 11, 2019 4:44pm

Monthly Treasurer Reports

Ted Lowe

As Treasurer, i am publishing a brief Treasurer's Report to our forums around the time our monthly newsletter is published.

i am publishing our various cash balances (Money Market, Checking, PayPal) to this location: <u>FVEAA Committees</u> > <u>Finance</u> > <u>Treasurer Reports</u>

This area of the forums can only be seen by FVEAA members. As an IL Non-Profit corporation, we have no requirement to publish our assets or financial statements publicly.

Feel free to contact me if you have any FVEAA financial matters to discuss.

Membership Renewals

Ted Lowe

Our membership system sends out "renewal reminder emails" before your membership is due. You will receive up to 3 before being marked "not renewed" (inactive). The sooner you renew, the fewer emails you will receive :)

So please pay attention to your email from the FVEAA and renew online using this link (for the easiest approach for all of us):

http://www.fveaa.org/renew

THANK YOU for your continued support of the FVEAA!

Upcoming EVents

Rich has been very active recruiting people to spread the EV Love at the 2019 Chicago Auto Show!

Supermileage and Electrathon Electric Vehicle Workshop

- Date: Saturday April 6, 2019
- Time:11 a.m. 4 p.m.
- Location: 9449 88th Ave. Pleasent Prarie, WI.
- Web Site: <u>Challenge USA Motorsports</u> And <u>Electrathon America</u>
- Contact: Rob Schwartz

Geneva Park District Earth Day

- Date: Saturday, April 13, 2019
- Time: 11:00 am 3:00 pm
- Location: Peck Farm Park, 4038 Kaneville Road, Geneva, IL 60134
- Web Site: Geneva Earth Day

Naperville Park District Earth Day Event

- Date: Saturday April 27, 2019
- Time: 1 p.m 4 p.m.
- Location: Naperville Public Works Service Center, 180 Fort Hill Drive, Naperville, IL 60540
- Web Site: <u>Naperville Earth Day</u>

Meeting Minutes February 15, 2019

Bruce Jones

Welcome

- President Jeff Miller opened the meeting at 7:08 p.m.
- He talked about charging stations and most don't have fuses, except Tesla has a 200a fuse
- Simon's 2014 Toyota Rav4 was built at the Freemont CA factory and has a Tesla 41kWh battery
- Kevin is going to convert a 1960s vintage VW Bug to electric

Jeff Miller on ComEd's Residential Real-Time Pricing (RRTP) Costing trends

- RRTP pricing can be cheaper than fixed pricing if you manage your consumption
- Typically \$.06/kWh for delivery and \$.06/kWh for power on the flat rate plan
- Last Winter 2017-2018 there were some unusually high spikes in RRTP rates
- (though temperatures were somewhat normal)
- So it is important to protect yourself from high spikes in electricity
- Weather drives the peaks to some extent but we're mainly gas heat in this area.
- There is a significant Capacity charge however
- Which is a charge for the peak times on average each month \$.36 for Jeff
- reducing peaks is important The Capacity charge is calculated 3 times per year in a 4 hour window
- You have to stay in the program a year
- Recommends signing up in June when the program starts to see the charge and can exit if it is high
- Overall he saves \$.02 to \$.03 per kWh using the RRTP

BREAK 7:55 to 8:20 p.m.

Dr. Suresh Borkar Presented on Driverless Cars

- Dr. Suresh Borkar, a senior member of the faculty in the Electrical and Computer Engineering (ECE) department at Illinois Institute of Technology (IIT), Chicago presented on the driverless car, known as autonomous automobile, basically a computer on wheels
- This was an interactive session on enabling technologies, societal and legal issues, regulatory decisions, and the challenges of introducing driverless car in the marketplace.
- Stages of integration of Driverless capabilities
 - \circ 0 Driver, 1 Feet off, 2 hands off, 3 eyes off, 4 mind off, 5 passenger
- Lane markings and infrastructure will be key in the future so the driverless car will know where it to go
- Hacking could be an issue
- Huge transition period where driverless cars will co-exist with standard cars
- 4 Key enabling technologies include:
 - Sensors on the car, on board computer and actuators
 - Artificial intelligence
 - Wireless connectivity network 5.0 focused on machine to machine communications
 - Massive data management and computing
- FOG computing (extended cloud computing and services to the edge of the network) is next to you, edge computing will be needed besides the "Cloud" to make driverless cars work
- V2X = vehicle to everything
- 3 types of object detection and vision tech is needed:
 - Camera, Radar and Lidar Laser based radar Lidar is expensive but provides advantages
- This will generate 4 Terabytes per car per day (equivalent to 2700 internet users)
- It will require pattern based artificial intelligence versus rule based machines
- There are some impossible ethical dilemmas of algorithmic morality
 - Decide which of multiple actions seem more morally acceptable
 - Programed in by the manufacturer
- There is currently some reluctance on the part of people to use driverless cars

Electrathon Event - Rob Schwartz

- Date: Sat. April 6, an Electrathon workshop for high school and collegiate level students
- Location: Pleasant Prairie Wisconsin just over the border on I94
- Rob heads teams of students who are designing and fabricating electric 3 wheel vehicles
- With fixed battery capacity they see who can drive their vehicle the farthest
- Looking for attendance, participation from the FVEAA

Meeting adjourned at 9:35 p.m.

FVEAA Membership Application Form - Version 2014-01-01

Name:	
Address:	
City, State Zipcode:	
Phone:	Phone Type: Home Work Cell
Email:	-
Please check one: New N	/lember Renewal

How did you hear about the FVEAA ? _____

Membership Types and Annual Dues (please circle one):

Individual	\$20
Business	\$100
Premier Business	\$250
Charter Business	\$500

Newsletter Delivery Type (please circle one): No Newsletter

Electronic

Please make checks payable to "FVEAA" and postal mail it with this membership application form to: **FVEAA PO Box 214** Wheaton, IL 60187-0214 Attn: Membership

FVEAA Business Members



Best Hybrid Batteries Only The Best

Michael Bradley 18600 IL-59 Shorewood, IL 60404 Phone: 708-669-9402 Email: besthybridbatteries@gmail.com Web: www.besthybridbatteries.com