



July 2023 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

This month's meeting is on Friday **July 21, 2023**
7:00 p.m. and will be IN-PERSON and on Zoom

NOTE DIFFERENT MEETING LOCATION FOR July

Wheeler Park South Pavilion

822 N 1st St, Geneva, IL 60134

MAP [Wheeler Park - Geneva](#)

Shelter is due west of the Playground, exact location:

GPS coordinates 41.89391153800885, -88.30505172368927

Park in the lot on the south side of the park (north of North St, near the Stone Creek Mini Golf Course at 101 North St, Geneva, IL 60134)

We are using the Zoom video-conferencing platform to hold this HYBRID meeting. Zoom runs on all computers and phones. Some setup is required prior to your first use of Zoom on your device of choice. Connect to the meeting a bit early (6:45pm earliest) by using the link below to test your connection. Please call Ted Lowe (630-260-0424) if you want help getting Zoom installed on your device of choice. You can also dial-in on your telephone to have an audio-only connection (see phone number and meeting ID below). The audio on your device will be automatically muted upon entering the call to avoid disrupting the call.

Pre-meeting setup starts at 6:45 [Zoom Link](#)

Meeting starts at 7pm and will run until 9pm.

Topic: FVEAA July 2023 Monthly Meeting

Time: Friday July 21, 2023 6:45 PM CST (pre-meeting setup check), Meeting 7:00 PM

Agenda

- 6:45 Virtual Meeting Starts (to test connections)
- 7:00 Introductions
- 8:00 Simon Gibson on NACS vs J1772 - CCS the charging wars
- 8:30 break
- 8:35 Jeff Miller on car market trends (if time allows)
- 9:00 Close

President's Words

Jeff Miller

June Argonne Meeting

Thanks to everyone that came out to the Argonne event! Thanks again to Bruce for organizing it all. I certainly enjoyed seeing the various technologies that they are working on.

I was most amused that they buy used MRI machines for \$1 and build particle detectors out of them.

A funny thing happened while we were in building 371, one of the people who works there recognized me, and addressed me by name. I am not famous, so I was a bit surprised. As it turns out it was the gentleman that came to our meetings a few years ago, and on our advice, purchased a 2017 Chevy Bolt for \$12,000. He drives about 90 miles each day to get to Argonne and back home, so he calculated that the Bolt would save him enough fuel that it would pay for the car, the energy, and the additional insurance. He is still loving the car, and the extra money in his pocket. He is a real success story of someone who made the switch for a large portion of their driving and continues to have a great experience.

July Meeting

Simon is going to go over the crazy changes in the DC fast charging environment. Not everyone is going to love these changes, but I believe it's a good thing.

AC repair vs replace

My AC compressor started making a horrible noise, fortunately I caught it pretty early in this process and shut it down before it burnt up the compressor too. Based on the power usage graphs it was only running hot for about 1.5 hours. Initially I thought the capacitor had gone bad, so I swapped it out for a new one. That wasn't the issue (I know I should have tested the old one, but I failed at basic troubleshooting on this one). I started it up with the new cap, and everything ran fine for 20 minutes, and then the power draw spiked, and I walked outside to see the fan motor wasn't turning. I then configured a power alert on the Emporia monitoring system for 4KW. The only time it goes over 4KW is when it's failing, so I get an alert to figure out what is going on. I pulled the fan motor, and greased the destroyed front bearing and shaft. I was optimistic and for an hour it ran just fine, then I got an alert as the fan stalled again. I checked the motor and it was \$250 at a local (non-hvac) parts house called Parts Town. Then the tough decision, repair the unit, or just replace it.

As most of you know I plan to replace my HVAC system this year. I was considering doing the

swap late July, however I would like to take advantage of the Comed \$2000 rebate. That turned out to be rather difficult to manage without being a business heavily engaged in the HVAC industry. Unlike the electrical contract houses, who will sell you whatever you need no questions asked, the HVAC supply houses I have spoken to won't sell you anything unless you have an account with them. They won't open an account unless you are a business, and you plan to resell substantial volumes. They explicitly prohibit you from opening an account to install your own system.

I wasn't able to get a system, via a supplier that can get the \$2000 comed credit, and would sell to me directly. So I have teamed up with my cousin and we are going to start doing some HVAC work together under his existing business. His company will open a business account at the required distributors, and we will work together to get systems installed for people. For now I want to get mine done, and probably one other system before we go full steam ahead. We are strictly focused on getting people off of natural gas, and that could include electrical upgrades, car charging, solar, heat pump water heaters, and of course, heat pumps. In my case the mechanisms that protect HVAC contractors from competition from individuals has forced me to go into competition with the standard HVAC contractors. We are just starting to get things organized, but in a few months we should have things reasonably well organized with the goal of guiding people away from gasoline and natural gas.

Vice President's Words

Tracey McFadden

It's summertime and the livin' is easy. I truly hope you are enjoying these nice warm days. I want to invite everyone to the annual Geneva Concours d'Elegance auto show to be held on Sunday August 27th. This is a great opportunity to show off your EV, mingle with antique car collectors and members of our group as well as enjoy a beautiful day in beautiful downtown Geneva IL. This is one of the biggest and most prestigious car shows in the Midwest. There will be thousands of people in attendance.

Our cars will be on display in the car club area where we can show off our EV's and talk with attendees about the benefits of driving electric. In addition, this year we are fortunate to have Bruce Jones's Hupmobile entered in the main event on 3rd street. The Unitarian Church, where we have our meetings, will be selling ice cream and cold drinks next to the Hupmobile. This should help attract even more people to our display.

This is a unique opportunity to give heightened visibility to the FVEAA as well as grow our membership. We will be handing out FVEAA literature and publicizing our group. As the excitement surrounding driving and owning an EV builds in our nation and around the world, we are uniquely positioned to offer advice and EV education to the public.

For this event to be a success for our group, we need as many EV's at the event as possible. If you have the day free, please fill out a registration form and plan on attending the festivities. The entry fee is \$20 and all proceeds go to a wonderful cause, the Living Well Cancer Center in Geneva. Specific information and parking location will be mailed to you once you register. The registration form and check for \$20 **must be mailed** by August 5th.

On the registration form under "Car Club Information" use the following:

Name of Car Club: FVEAA

Club-Region: Fox Valley

Club Contact: Tracey McFadden

Contact-Number: 630-365-5773

To download and print the registration form go to this website:
<http://genevaconcours.net/Media/Media-pdfs/GC-car-club-registration-2023-pdf-version.pdf>

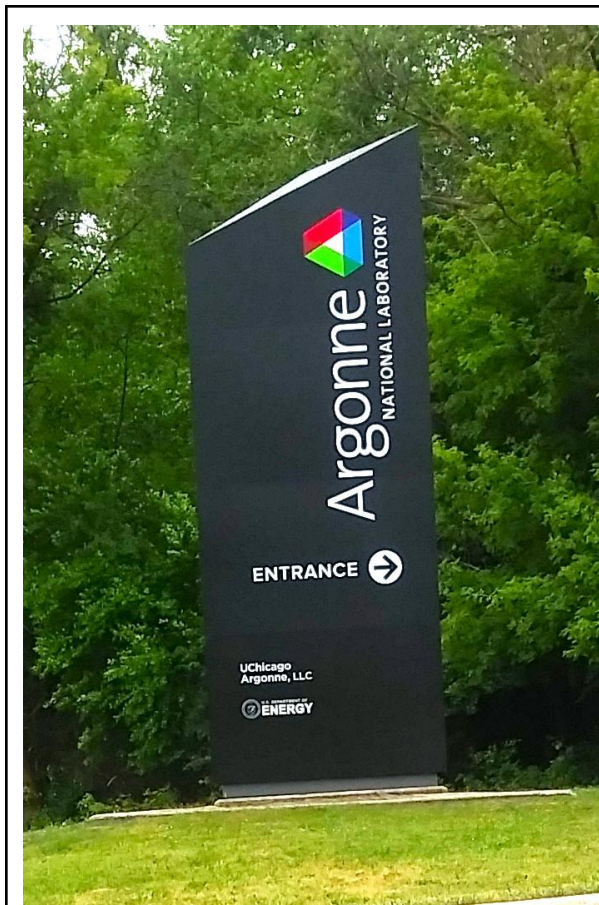
Event website: <http://genevaconcours.net/index.htm>

If you have any questions, please email me at tracer500@gmail.com. I look forward to seeing you at this exciting event.

Stay charged! Tracey

**PHOTOS OF JUNE 16, 2023 MEETING AT
ARGONNE NATIONAL LABORATORY**

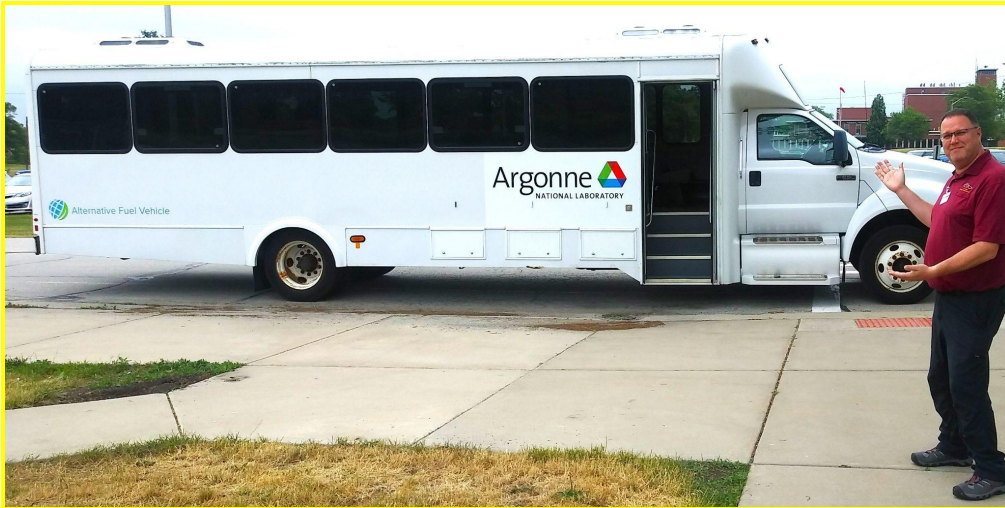
Bruce Jones



Introduction with Q&A at Argonne Information Center Bldg 224 by Dave Hooper, co-tour leader.



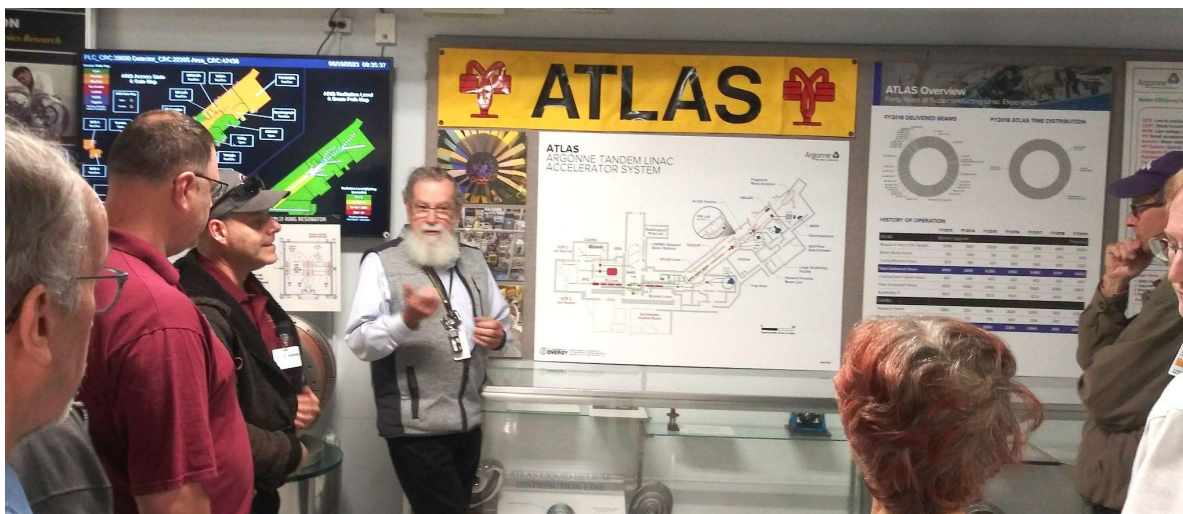
Dan Wood, our second Argonne co-leader herds us onto the shuttle bus



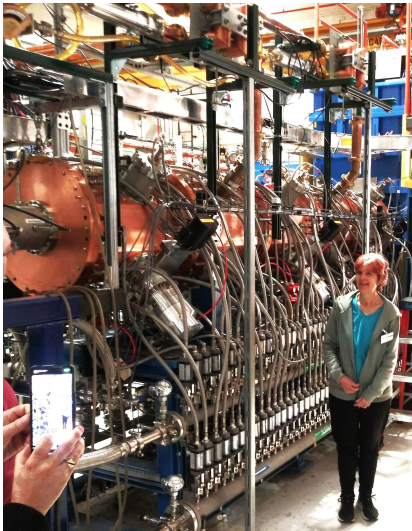
Jeff Miller welcomes us onto the alternate fuel vehicle that transported us from building to building.



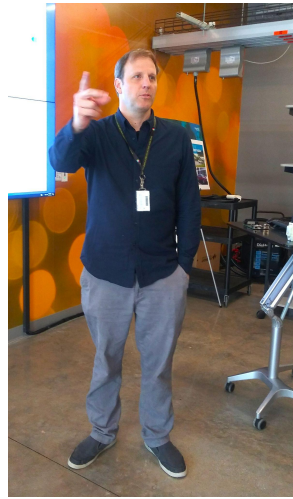
Tour of the Physics building 203 - Argonne Tandem Linac Accelerator System (ATLAS)



ATLAS is a unique U.S. Department of Energy (DOE) National Collaborative Research Facility open to scientists from all over the world. ATLAS consists of a sequence of machines where each machine accelerates charged atoms and feeds the beam into the next section for additional energy gain. Much of the system was custom, or custom made right there on site.



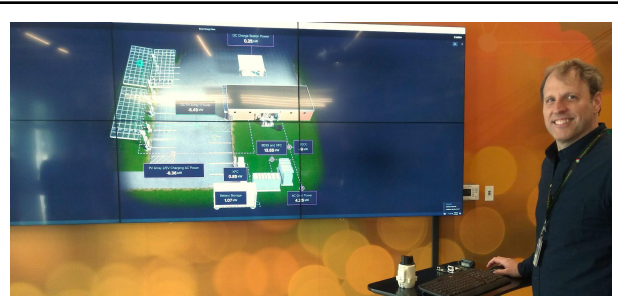
Maureen checks out the ATLAS Hydrogen cooling system



Former FVEAA member Mike Duoba who works at Argonne, hosted us on the 2nd half of the tour and he focused on Electric Vehicles and charging systems.



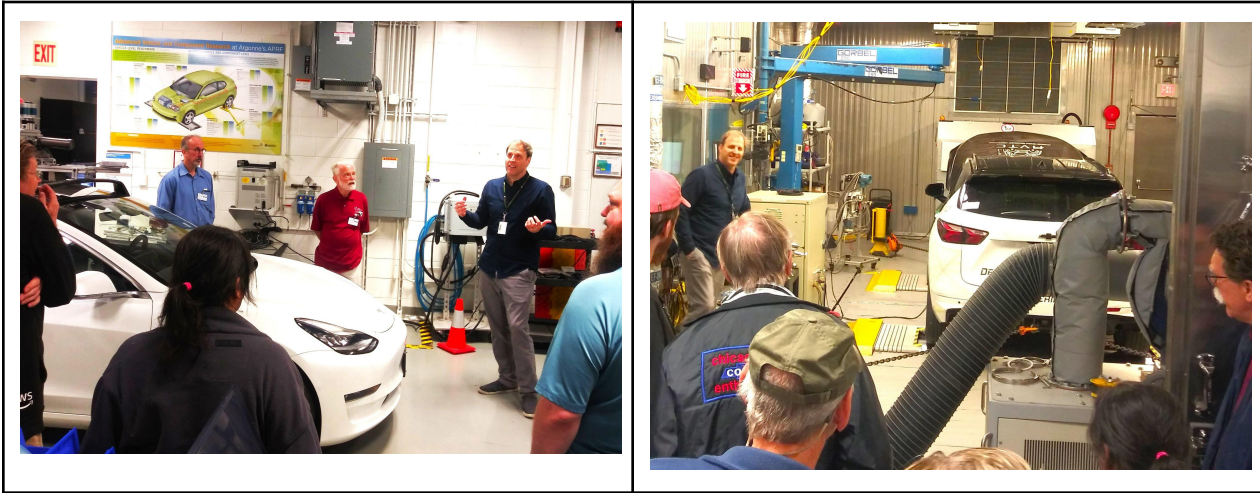
Mike shows us how, in a former gas station on site that was converted into an Electric Vehicle charging complex, how battery storage, canopies with solar panels, charging stations and external energy sources all interconnect.



(Left) 350kW charging stations, and large scale battery energy storage system (BESS). Above Mike explains how the solar canopies, charging, power sources all connect and inter-work.



Onward to Building 371 with EVSE outside and EV testing systems inside



Thanks Mike for hosting us and the great presentations!

Tesla NACS Standard

With the announcement back in November that Tesla was making its charging connector open source and suggested that it becomes NACS, short for North American Charging Standard. We have recently witnessed several major EV manufacturers adopt Tesla's charging port standard. These manufacturers include Ford, GM, Rivian and Aptera.

What does this mean for us, particularly in North America? Currently, (pun intended), we have several standards in North America, CHAdeMO, CCS, J1772, and Tesla (NACS). As many are aware, the CHAdeMO standard is primarily a Japanese standard used by earlier DC fast charging on vehicles such as the Nissan Leaf. CCS and J1772 are a somewhat related connector standard. There have been many complaints and concerns about the roll out of EV Charging infrastructure in North America and the reliability and availability of charging stations. Tesla has clearly demonstrated that their system is dependable and with the addition of the 'Magic Dock' adapter on some of their stations in order to qualify for government infrastructure funding. In fact the Tesla DC Fast Charging standard is very close to CCS and claims that it can easily adopt other manufacturers' EVs to their network. Of course SAE is fast tracking the standard since most of the regulatory UL related stuff has already been established.

Note that the CCS connector has two extra DC pins to carry the DC power in addition to the two AC power pins that match the J1772 connector. Furthermore the CCS/ J1772 standard is not the same as the European CCS2 standard. Because Europe mandated that Tesla adopt a CCS2 standard in order to be able to install superchargers and accept non Tesla vehicles, those European Tesla Chargers are provided with CCS2 connectors. However in the USA, CCS and Tesla NACS are the two major standards that exist.

How will non Tesla vehicles be able to charge at Tesla stations and their NACS connector? The immediate observation is that the sleek, elegant Tesla connector is missing two DC Power pins. But actually it's not. Tesla's elegant solution uses the same two pins for either AC or DC power and the process that they use to manage that involves some switching contactors that prevent the battery pack DC being attached to the grid AC power.

What does this mean for existing auto manufacturers and the DIY EV community which are now attempting to include DC Fast Charging in their conversion projects? Every manufacturer or EV conversion has to establish that their vehicle will charge using the Tesla NACS connector. For the connection to work, the vehicle has to be authorized, with a secure payment process. This means that Tesla has to agree to serve each of those different manufacturers. Unlike where any EV with a standard CCS connector can attach to any CCS charging station... Oh wait, that doesn't always work because the equipment vendors are struggling to make sure the equipment is agnostic to the vehicles being served!

EVENT 1: (LOOKING FOR VOLUNTEERS ESP. IN THE MORNING!)**The 6th Annual Summer Celebration Car, Truck & Cycle Show**

A fund-raising event for the local VFW Post 5151 and the Schaumburg Township Food Pantry
The Schaumburg Home Depot

Sat., July 22nd, 10:30 am to 3: 30 pm

100 Barrington Rd., Schaumburg, IL

Bigger & better than last year (weather dependent)

5 food vendors, custom trophies, door prizes, silent auction, music, Home Depot vendors, contractors and charity partners

RAIN DATE: Sat., July 29th

Website: www.HomeDepotVehicleShow.weebly.com

EVENT 2:**Cary United Methodist Church Annual Car Show**

Sat., July 29th, 9:30 am to 1:30 pm

500 First St., Cary, IL 60013

Local food vendors, games, family fun, judging, and awards

For more info, contact Bob Baker - 847.525.5348

EVENT 3:**Geneva Concours d'Elegance Auto Show - Geneva, Illinois**

Sunday August 27. 10:00 to 4:00 pm

One of the largest auto shows in the Midwest. All proceeds go to Living Well Cancer Center.

All EV owners must **mail in** their registration by August 5th

When filling out registration "Car Club" information use the following:

Name of Car Club: FVEAA Club Region: Fox Valley

Club Contact: Tracey McFadden Contact number: 630-697-5115

Download Registration form here:

<http://genevaconcours.net/Media/Media-pdfs/GC-car-club-registration-2023-pdf-version.pdf>

Auto show website: <http://genevaconcours.net/index.htm>

EVENT 4:**National Drive Electric Week Northern Event**

Spring Hill Mall, West Dundee (possible sale of mall is a mitigating factor)

Sat. Sept. 23rd, times: TBD

Chairman: Rich Hirschberg

Nominate your favorite EV advocate for an **EAGL Award** - Earth, Air, & Green Leadership

Last year's winners: Samantha Bingham-Chgo Area Clean Cities, Rep. Sean Casten, Jeff Miller-Pres FVEAA, and Ted Lowe-Treasurer FVEAA

Contact Chairman Rich H. for an nomination application

Also featuring ride-&-drives, tech talk, story-telling, and folks sporting the "EV Grin"

EVENT 5:**National Drive Electric Week Southern Event**

Fox Valley Mall, Aurora

Sat. Sept. 30th, 10:00 a.m. - 4:00 p.m.

Chairmen: Marty Belovicz and Bruce Jones.

<https://driveelectricweek.org/event?eventid=3914>

Lots of fun, ride-&-drives, tech talk, cool EVs and more

Take care,
Rich Hirschberg - FVEAA Outreach Director

FVEAA business cards available!

Ted Lowe

See one of the officers to get some cards to hand out to people at various Events and daily life to promote EVs and our organization!

Fox Valley Electric Auto Association

PO Box 214
Wheaton, IL 60187-0214

630-260-0424
contactfveaa@fveaa.org

Free Yourself From The Pump^{fm}



Join Us and Discover How!

Check fveaa.org for
details about our
monthly meetings!



Login to our FVEAA website for access to lots of member-only tools!

Ted Lowe

Hi Folks, If you haven't logged in to our website already, please check your email for instructions and login to check it out! Please let me know if you have any questions. Thanks!



FVEAA Web Report

as of 2023-07-19 04:58:11

Website Registered User Statistics

Statistic	Value
Total Users	104
Users Never Logged In	37
% Active Users	64.4%
Ave. Days Since Last Visit	613.8 days

FVEAA On Facebook - Join Us! Like Us!

Ted Lowe

The **FVEAA Facebook group** has 119 members as of 1/17/22! 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!

<https://www.facebook.com/groups/889497691136309/>

Here is the **FVEAA's Facebook Page**. Like Us!

<https://www.facebook.com/FoxValleyElectricAutoAssociation>

FVEAA On YouTube - Check out our videos!

Ted Lowe

The **Fox Valley Electric Auto Association** has a YouTube channel! Subscribe to us and check out our videos! We've had this channel for many years but we're going to start using it more to attract new members and promote EVs. Please let me know if you have some FVEAA-related videos to post.

https://www.youtube.com/channel/UCg_Pgp6q-HEuMICWMO2akPw

We currently have **70 active paid-up** members. Many members have taken advantage of the multi-year renewals offered by the new website! **Please renew & recruit new folks!!!**



FVEAA Membership Report

as of 2023-07-19 04:58:11

Count of Members by Type

Membership Type	Count	Paid Up
Charter Business	1	1
Family	4	4
Individual	64	62
Lifetime	2	2
Totals	71	69

Other Statistics

Statistic	Value
% Paid Up	97.2%
Avg. Paid Up Days	380.0 days
% With Email	97.2%

Encouraging Our Membership To Grow and Some History

We are growing! 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 any time, 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 255 members in October 2008 when gas was nearing \$5 per gallon. We were also attending lots more invitational Events with our converted EVs. The first Tesla Roadster was just coming into being. **Let's get out there and grow the FVEA!!!**

FVEAA Paid Up Members as of July 19, 2023 6:25pm



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:

[FVEAA Committees](#) > [Finance](#) > [Treasurer Reports](#)

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):

<https://www.fveaa.org/renew>

THANK YOU for your continued support of the FVEAA!

Meeting Minutes - June 16, 2023

Bruce Jones

Argonne National Laboratories Tour, 9700 S. Cass Avenue, Lemont, IL

Fox Valley Electric Auto Association 9:00 a.m. to noon

8:30 - 9:00am – 19 of us arrived at Argonne Information Center (AIC) Building 224

9:00am – 9:15am – Group received gate passes & gathered in backroom for Welcome, Safety Overview and Q&A

9:15am – Boarded bus to ATLAS B203

9:20am – 10:15 am – Split into 2 groups and toured ATLAS

This was the national facility for nuclear structure research, the Argonne Tandem Linac Accelerator System (ATLAS), the world's first superconducting linear accelerator for heavy ions at energies in the vicinity of the Coulomb barrier. They can also custom build a nucleus with their amazing tools.

10:20 am – Boarded bus to B300

10:30am – Tour of B300 with Mike Duoba

10:50am – Boarded Bus to B371 4WD chassis dyno facility

11:00am – Tour of B371 with Mike Duoba

EV and Charging Research - Mike Duoba, is a former FVEAA member who led us on the custom half the tour with the EV, Battery and High Speed Charging areas including Building 300 with equipment for charging infrastructure development and standards work and Building 371, high bay with vehicle dynamometer for testing all kinds of vehicles especially EVs. We also dropped by and visited the power center building with solar canopies, batteries and 350 kW charging stations.

11:30 am – Boarded bus and began Site Tour towards AIC

12:00pm – Return to AIC B224 and Tour Concluded

Based on the nice comments and texts afterwards, the tour was highly successful and extremely interesting. Great to be together and have some fun, and many in the group had lunch together afterwards.

Attendees:

Belovicz, Martin Charles

Bergman, Stephen Ross

Brezina, Douglas P

Coleman, Thomas f

Gibson, Simon M

Hirschberg, Richard E

Howell, Joseph W

Johnson, Kenneth R

Johnson, Raymond H

Jones, Bruce L

Kitch, Alfred Lynn

Martinson, David A

Miller Jeffrey Scott

Moravek Michael Joseph

Platt, Kyle J

Stillman, Maureen J

Velazquez Olivera, Ana G

Young, Christopher Robert

Young, Phillip D

FVEAA Membership Application Form - Version 2014-01-01

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 ? _____

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 Charter Business Members

<p>Chicago Area Clean Cities</p> <p>Samantha Bingham 2 N LaSalle St #950 Chicago, IL 60602 Email: info@chicagocleancities.org Web: https://chicagocleancities.org</p>	 The logo for Chicago Area Clean Cities (CACC) is an oval-shaped emblem. The top half of the oval contains the words "CHICAGO AREA" in a blue, sans-serif font. The bottom half contains the words "CLEAN CITIES" in the same font. The central graphic depicts a stylized city skyline with several skyscrapers in shades of blue and grey, set against a light blue background with a white sun or moon and a yellow sun partially visible on the right side.
<p>Chicago Area Clean Cities (CACC) is a 501(c)(3) not-for-profit working to promote the use of clean fuels for clean air in the Chicago area and throughout Illinois. Our coalition includes people from private business, academia, government, scientific research and energy and environmental services. Our main goal is to help with the adoption of cleaner transportation options.</p>	

FVEAA Business Members

<p>EV Converters LLC</p> <p>Rolly Waller 130 Windsor Park Dr, C121 Carol Stream, IL 60188 Cell: 630-865-5744 Email: rollywaller@gmail.com</p>	 The logo for EV Converters LLC features a stylized black electrical plug with a yellow lightning bolt striking it from the left. To the right of the plug, the text "EV Converters" is written in a bold, black, sans-serif font, with "LLC™" in a smaller font size below it.
<p>EVC will become a Franchisor (when the US government approves the conversion rebate) to appoint Franchisees (eg, service stations, oil change shops, transmission shops, independent mechanics, etc.) to convert Internal Combustion Engine (ICE) vehicles to electric vehicles (EV).</p>	