### HIGHLY CONFIDENTIAL INFORMATION

Ameren Missouri Charge Ahead Annual Report - ET-2018-0132 Electric Vehicle Charging – Local Charging Incentive Program Annual Report for 2023, January 1st, 2023 – December 31st, 2023

This report comprises the annual report on the subject case and topics. The report includes this narrative document as well as the associated Excel spreadsheet files, cumulative report of EV registration data, Annual Education and Admin Costs, Annual Costs by FERC Accounting, and an update on the WattTime pilot.

Note: The due date for the annual reports for Electric Vehicle Charging – Corridors and Local Charging Incentive Program is within 120 days of the end of each program year.

### **Corridor Charging Program (background)**

Ameren Missouri pursued a competitive bid "reverse auction" approach to procuring one or more vendors to work with Ameren Missouri business customers to set up the corridor charging per the approved program tariff. The pricing component requested how much incentive from Ameren Missouri would be needed to accomplish the proposed projects to set up the specified charging in designated communities throughout the Ameren Missouri territory. In-person interviews were held with the two top proposals. After interviews, LilyPad EV was unanimously confirmed as the best choice for the Charge Ahead Corridors project. LilyPad EV, along with partners ChargePoint and Sachs Electric have been collaborating with customers in the designated communities outlined in the case. A total of 11 companies and/or partnerships were solicited for 2020 and the \$4 million incentive budget accommodated three more sites (Eureka, Ironton, and Sikeston) in 2021, which resulted in a total of 14 corridor locations. Note that the tariff allowed for 8-15 sites.

Ameren Missouri's assessment that incentives of up to \$360,000 per site may be necessary was relatively accurate. While the costs for each site will vary based on unique site conditions and line extension requirements, the rough average is about \$290,000 per site. LilyPad EV, in their bid, provided an estimate per site that was based on certain reasonable assumptions. As the design for each site is finalized with the business customer and the line extension costs are determined in detail, a final cost for each site is developed.

Each site has the same configuration of charging equipment. Two ChargePoint CPE-250s, each having the capability to provide up to 62.5kW of power and that paired can provide up to 125kW, and two CP-4001 Level 2 chargers providing 6.6kW each. Any modern EV can charge at these stations.

### **Education and Outreach**

We continue to raise awareness of the Corridor Charging Program with education and outreach efforts. To-date, our marketing activities have included the following efforts:

- Earned media (TV news, print publications, radio interviews) and social media (Twitter, Facebook, etc.)
- Outreach to municipalities, business and professional associations through newsletters, speaking opportunities and tabling events.
- Outreach through internal workgroups i.e. Key and Regional Account Executives, Community & Economic Development Team and Contact Center Team.
- Promoted during our monthly Charge Ahead webinars.
- Developed a Corridor Charging Program brochure provided with the third quarterly report in December 2020 and available at the Ameren Missouri EV Website page. This is updated as Ameren Missouri developments are completed as well as those occurring through the MDNR VW Trust process: fast-charging.ashx (ameren.com)

### Annual Costs by FERC account (182/327) JOP80 January 2023 - December 2023

 There haven't been any charges applied to Charge Ahead Corridor Program during this time period.

Below is the total administrative cost breakdown including a detailed description of advertising and education activities to date. See attached spreadsheet for detailed FERC accounting.

### **Total Charge Ahead Corridor Costs To Date \$3,656,063**

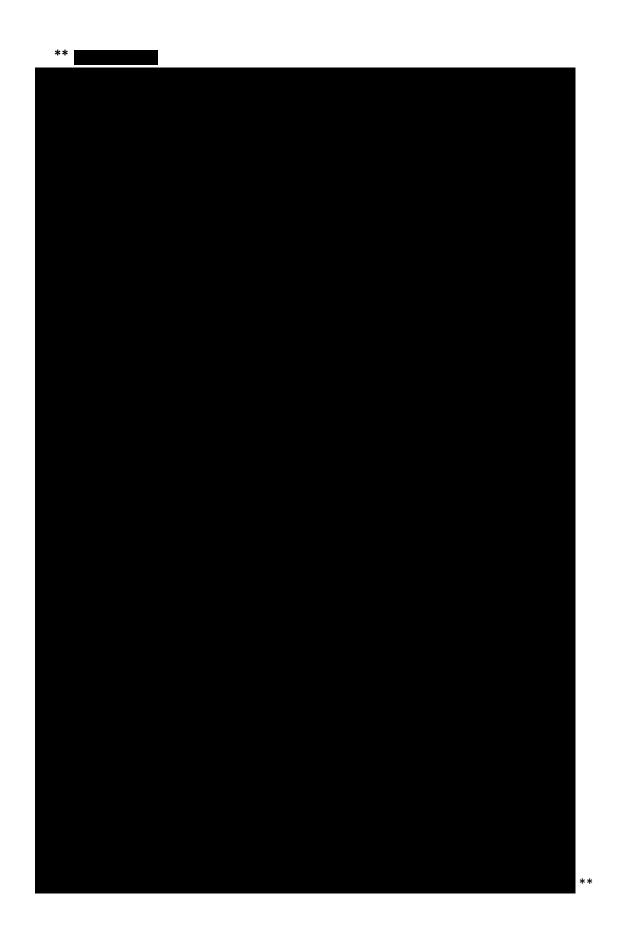
- Marketing activity promoting Charge Ahead Corridor Program \$12,747
- Construction Costs for 14 Corridor Sites \$3,643,316

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Major-Minor	▼ Project ¬	Grand Total
<b>■ 182327</b>		(1,211,344.00)
	JOP80	3,656,062.88
	J0P84	3,901,200.53

**Charger Load Data and Peak versus Off Peak Charging:** 





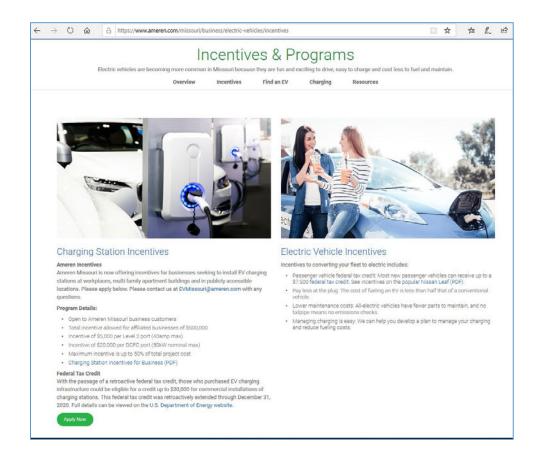


Annual revenue (in dollars):



### **Local Charging Incentive Program**

The Ameren Missouri Local Charging Station Incentives Program opened on January 13, 2020, and business customers can apply through the program application portal linked to the green "Apply Now" button on the Ameren Missouri EV business incentives Web page:



### Thank you for your interest in this program.

To complete the application process, you will need to enter details regarding the following items:

#### Your Contact and Business Information

- Business Name
- · Address, Phone/Email
- · Ameren Missouri Electric account number
- Contact Name
- · Contact Address/Phone/Email
- W9
- · Payment preference (check or bill credit). Download the Payment Release Authorization Form if re-assigning incentive payment to the installer.

### Contractor Information (if not self-install)

- Contractor Name
- Contractor Address
- Contact Name
- · Contact Address/Phone/Email

### **Project Information**

- · Number of ports and charging rate of each
- Equipment Make
- Equipment Model
- · Site Plan including electrical diagram and pictures
- · Electrical supply details-panel has sufficient capacity/is capacity review needed/additional service on site requested

### **Estimated Costs**

- Equipment (charger, pedestals, cord management etc.)
- Labor
- · Site Preparation (trenching/boring, conduit/wiring, concrete/asphalt)
- Battery Storage

Note: Ameren Missouri must pre-approve project prior to construction

Are you ready to begin your application?

**Begin Application** 

### **Education and Outreach Activities**

The Efficient Electrification Team is actively raising awareness of the benefits of EVs through targeted educational outreach to customers via virtual community events, outreach to professional associations, outreach to Key/Regional accounts, email marketing campaigns and through social media. A parallel educational outreach effort is engaging EVPs, Electric Vehicle Partners, such as auto dealers, electricians, building design professionals, and charging station suppliers. EVPs stimulate customer knowledge of and interest in EVs and make them aware of the benefits of the Local Charging Incentive Program.

Our 2023 marketing activities to raise awareness of the Local Charging Incentive Program included the following activities:

- Virtual Community Events EV 101: An Introduction to Electric Vehicles
- Electric Vehicle Partners (EVP) Network quarterly in person roundtable events for the EVPs
- Electric Vehicle Partners (EVP) Network monthly webinar sessions offered to EVPs
- Charge Ahead Webinars –monthly webinar sessions offered to business customers on the Charge Ahead Incentive Program
- Tabling Events
- Outreach to municipalities, businesses, and professional associations Presentations/Speaking Events
- Outreach through CEDES Team members specifically, Key and Regional Account executives
- Direct email marketing and social media marketing to large and mid-size business customers
- Traditional and earned media (TV, print publications, radio) and social media (Twitter, Facebook, etc...)

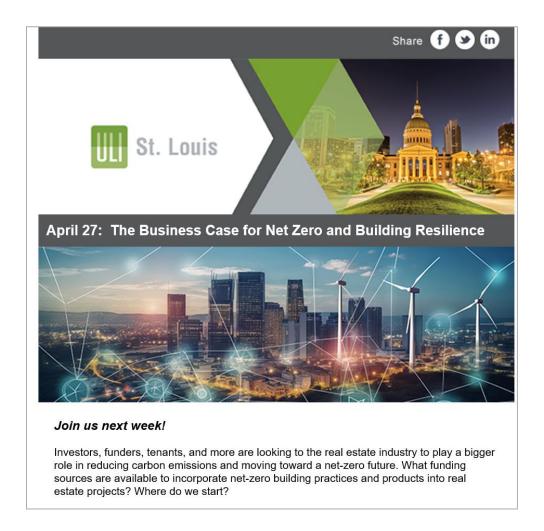
### **Summary of 2023 Marketing Events Promoting Charge Ahead Program**

# <u>Urban Land Institute (ULI) Event "The Business Case for Net Zero and Building Resilience"- April 27,</u> 2023

Electrification Team participated in a panel discussion to discuss the benefits of installing EV charging stations at commercial locations and also discussed the program details for the EV Charging Incentive Program.

ULI St. Louis brings together real estate professionals, civic leaders, and the St. Louis community for educational programs and initiatives impacting the community. ULI provides a platform for everyone to share, learn and connect. The mission of ULI is to shape the future of the built environment for transformative impact in communities worldwide.

Overall, there was great engagement from the attendees on the EV Charging Incentive Program.



### **Charge Ahead Webinars (monthly)**

We continue to offer virtual webinars monthly to business customers. The webinar focuses on program details for the EV Charging Incentive Program and how to apply. During the webinar, we also share success stories from customers who have installed EV charging at their business. The May 9, 2023 virtual charge ahead event resulted in fantastic results with 37 registrants and 24 attendees.



# Museum Saves \$19,487 With EV Charging Incentive

The Missouri History Museum installed EV charging stations not just to make charging convenient for visitors, but also to demonstrate a tangible extension of its commitment to community leadership and sustainability. Working with an Ameren Missouri Electric Vehicle Partner for installation and assistance with the incentive process, the Museum saved half of the \$38,975 cost with incentives. Join our free one-hour webinar to discover how you can take advantage of savings and be ready for EVs.

Sign Up

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### **2023 Electrical Expo August 23-24, 2023**

The Electrical Board of Missouri and Illinois manages an Electrical Expo that attracts manufacturers from across the country. The expo is held every three years, and this year, the expo was held at the St. Charles Convention Center. In addition to product information, seminars were held on a wide variety of topics. The mission of EBMI is to provide services which develop, improve, and preserve business opportunities for members in the electrical industry.

We partnered with Reach Strategies to host a booth at the EBMI Expo. There was a total of 2,239 attendees and 770 exhibitors at the event. Our objective was to recruit potential Electric Vehicle Partners (EVPs), the attendees were very engaged and many of them signed up to learn more about the EVP Network. In addition to recruiting EVPs at the event, we also promoted and provided a presentation on the EV Charge Ahead Incentive Program.







### EVP Q2 Virtual Roundtable June 28th, 2023

The Q2 EVP Roundtable Event was a virtual event that focused on topics selected by EVPs. The topics included discussing the details for the Charging Incentive Program, remaining funding, EV registrations within Ameren MO service territory, and the EVPs also shared some recent wins and best practices with EV charging installation projects. Overall, it was a great virtual event.

# Welcome EVP Roundtable (Virtual)



### 2023 St. Louis Appt Assoc Fall Event Oct 24, 2023

The St. Louis Apartment Association represents 135 property management companies and over 95,000 rental units in the Greater St. Louis market. In addition, SLAA includes over 200 supplier partners that provide a product or service to the multi-family housing industry.

Ameren MO Electrification Team hosted a booth at the SLAA FALL EXPO promoting the Charge Ahead Program. There was a lot of engagement and interest from property managers regarding installing EV charging infrastructure at their properties. During the event, several property managers signed up and attended the Charge Ahead webinar that was hosted in early December.



### ST. Louis Business Fall Expo November 8, 2023

The St. Louis Business Expo is one of the largest B2B trade shows in the state. With an average 1,000+ attendees and vendors attending the expo. This event provides massive brand exposure & the opportunity for B2B sales. Exhibiting at the Expo is active marketing directly to Company Decision-Makers.

Ameren MO Electrification Team parterned with Reach Strategies to host a booth and promote the Charge Ahead program. The booth received a lot of engagement from small to mid size business customers inquiring about the EV Charging Installation process and cost. This was a great opportunity to educate the public about the benefits of electric vehicles and EV charging incentive offered by Ameren Missouri .

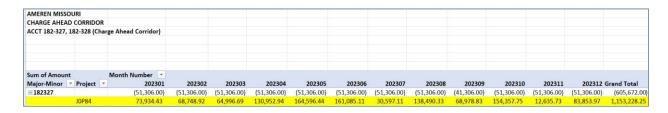


### Annual Costs by FERC account (182/327) JOP84 January 2023 – December 2023

The Charge Ahead program costs are currently being deferred to FERC Accounting 182/327. The Total Annual Costs for the Local Charging Incentive Program – J0P84 is listed below:

### Total Annual Costs \$1,153,228

Customer Incentive Payments \$1,153,228



# The Charge Ahead program total costs to date for the Local Charging Incentive Program – J0P84 is listed below:

### Administrative, Marketing and Education Costs

The administrative costs associated with the Local Charging Incentive Program include development of the application portal and workflow management system developed by Applied Energy Group (AEG). We also partnered with Reach Strategies to implement a marketing plan to educate customers and bring awareness to the Local Charging Incentive Program.

### Total Costs To Date \$3,901,201

- Incentive Payments \$3,300,121
- EV Registration Data \$8,093
- AEG administrative costs \$247,954
- Reach Strategies marketing costs \$322,707
- Contractor Support Role for Portal Management \$11,340
- Watt Time Pilot \$10,986

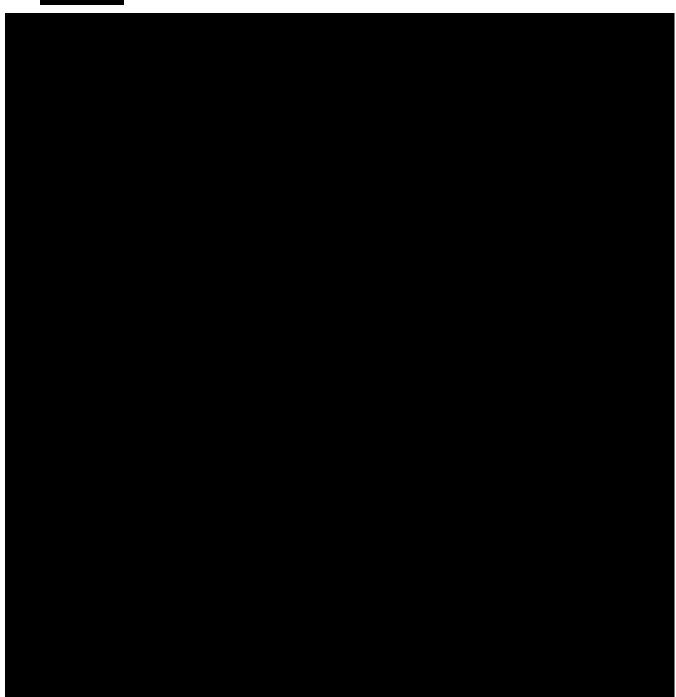
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CHARGE AHEAD CORRIDOR							
ACCT 182-327, 182-328 (Charge Ahead Corridor)							
Sum of Amount							
Major-Minor	-	Project	•	Grand Total			
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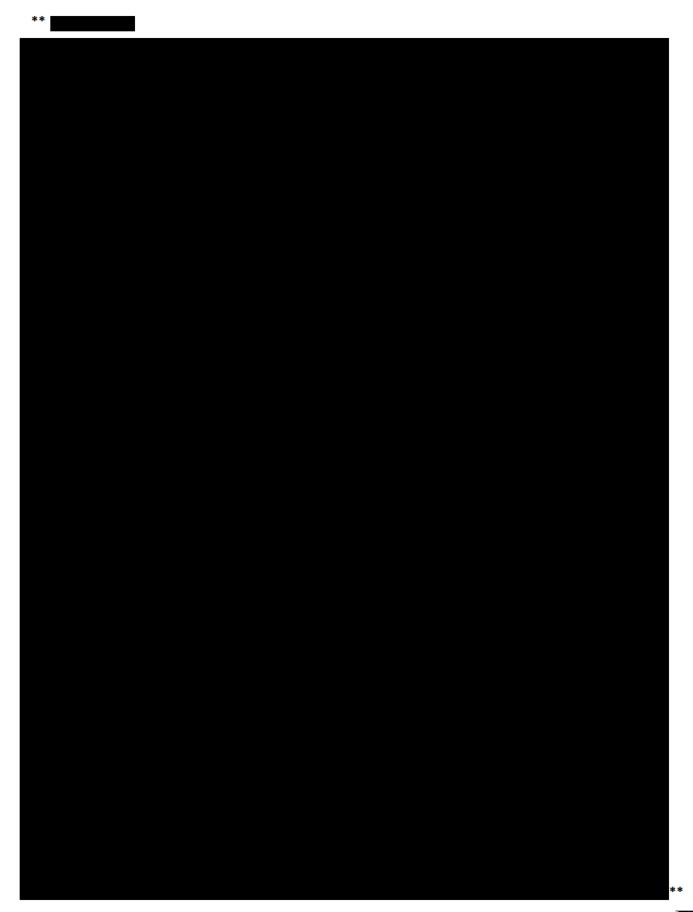
**Line Extension Details:** 

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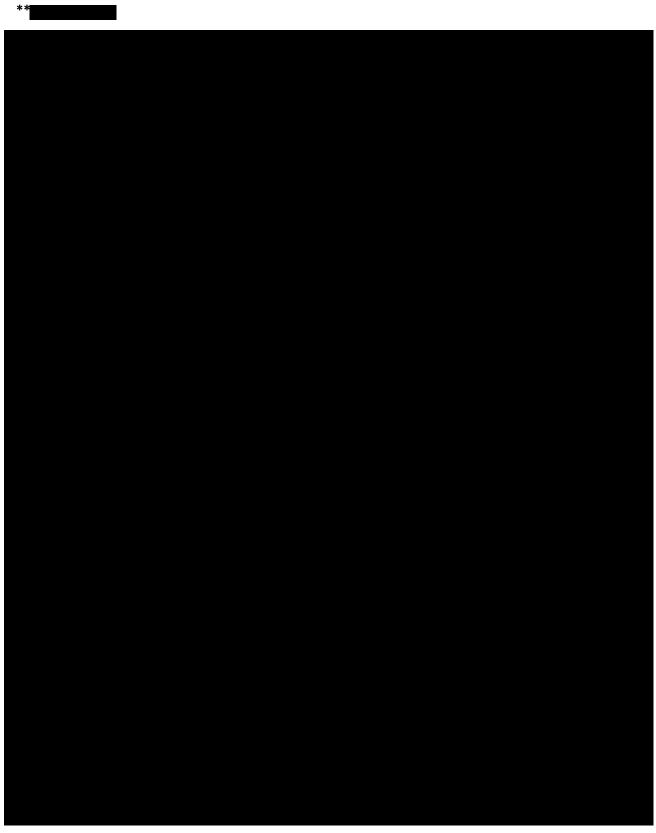
## **Charger Load Data:**

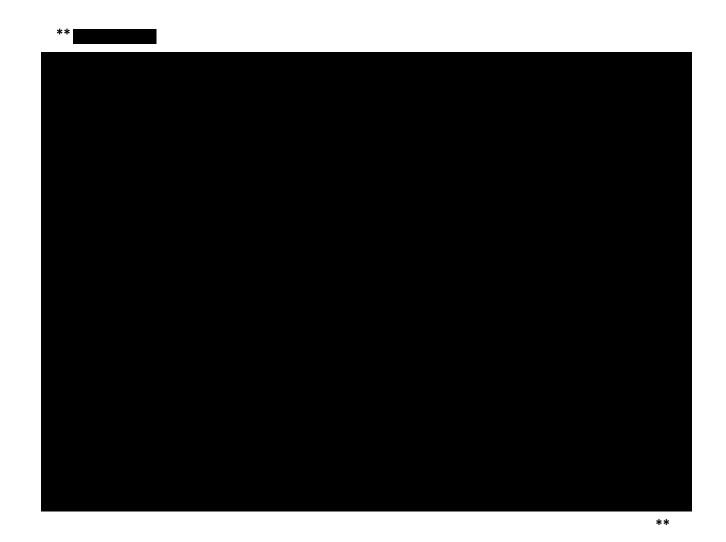
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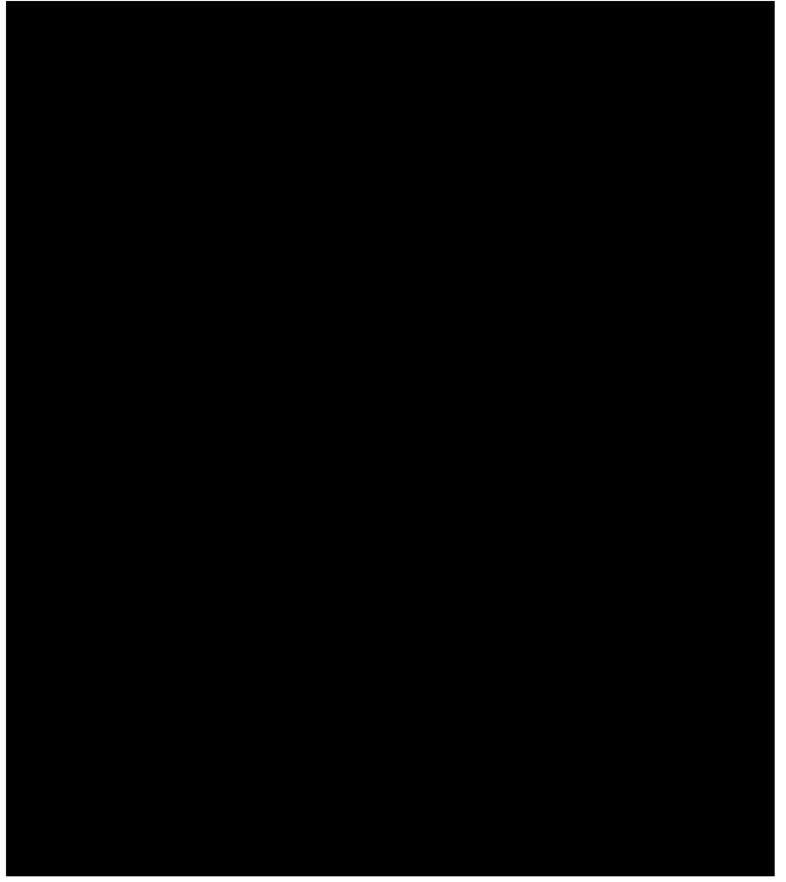






### **Charger Load Data**

For each of the completed projects listed below, the customers identified their charging equipment as a "smart charger" and agreed to monitor their energy usage. Ameren Missouri EV Team is working closely with the customers and charging manufacturers to obtain charger utilization details and will include this data in the Annual Report.





### **Estimated Direct Revenue and Load from Local Charging Stations**

(see workbook, AMO Charge Ahead- Annual Revenue Workbook, for calculations)

The following data represents cumulative numbers for the estimated direct revenue and load for chargers that are not separately metered. Based on the 202 installed charging ports (72 projects) 1-1-23 through 12-31-23, Ameren Missouri estimates a total annual direct load/revenue of \$201,786 to \$272,788. Please refer to included work papers for information by location. Please note that the variability relates to an estimate of billing demand. The high end of the range assumes that, for all customers on rates which include a demand charge, the charging demand coincided with customer billing demand in all months. The low end of the range assumes that the charging demand never coincided with the customer billing demand in any month.

### **Estimated Indirect Revenue and Load (**see workbook for calculations)

Estimated indirect revenue and load (based on EV registrations and Ameren Missouri assumptions) as shown in the work papers. Ameren Missouri receives a snapshot of Missouri registrations from IHS MarkIT on a quarterly basis, approximately seven weeks after the end of the calendar quarter. This report includes baseline and current data through Q4-2023 that reflects numbers for Ameren Missouri territory. See Power BI visual depiction shown at end of this report.

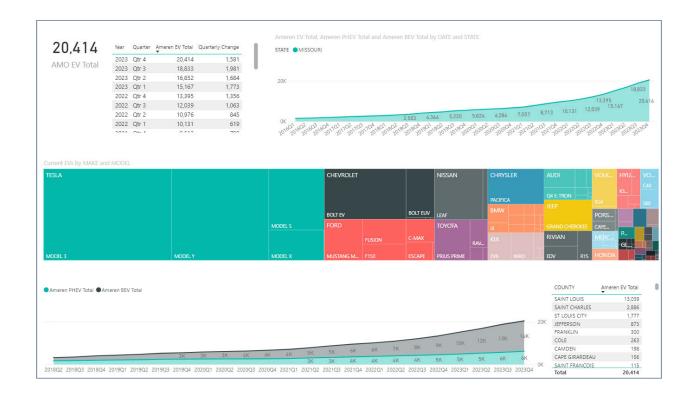
Attachment, "AMO Charge Ahead – Annual Revenue Workbook 1-1-23 to 12-31-23," to this report, contains the EV counts by county and type of EV. Note these counts have been proportioned for the percentage of households served by Ameren Missouri in each county.

Ameren Missouri estimates indirect energy load of 83,493,260 kWh and indirect revenue in a range of \$6,968,578 to \$7,818,256. The variability in revenue range relates to a variable estimate of where charging is occurring (Multifamily, Workplace, or Public).

Beginning with the December 2023 report, an additional source of variably in this revenue range is an assumption related to what rate residential plan charging is occurring under (the assumption that a portion is occurring under Time-of-Use rate plans and is therefore producing less revenue in the lower end of the assumption range).

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### EV Registration Data as Power BI Visuals (includes snapshot at end of December 2023)



### **Automated Emissions Reduction (AER)**

The pilot of Automated Emissions Reduction for EVs, as implemented by Enel X with their JuiceNet Green product **ended Sept 2022**, attached is the final report.

The key take-aways from the pilot evaluation include:

- AER-enabled EV charging is available, functional, and practical for drivers in Missouri.
- JuiceNet Green AER technology reduced carbon emissions by 2.6% overall during the evaluation period, a total of 1,953 pounds of CO2.
- Carbon reduction varied widely among users, with the best user reducing their induced carbon emissions by 15.5%.
- Some users had trouble with the EV JuiceNet app, and many did not use it at all, which negatively affected JuiceNet Green's performance. These are not issues with the AER algorithm, they are specific to Smart Charging with the EV JuiceNet app.
- The carbon reduction opportunity is currently higher in Western MO (Southwest Power Pool) than it is in Ameren Missouri territory (MISO).

## Carbon Reduction Performance

