

**CITY OF PHOENIX  
ELECTRIC VEHICLE AD HOC COMMITTEE:  
CITY FLEET AND CHARGING INFRASTRUCTURE SUBCOMMITTEE**



**Summary Minutes from Tuesday, Jan. 18, 2022**

Virtual Meeting – Via WebEx

**Ad Hoc Committee Members (Present)**

Councilwoman Ansari  
Delbert Hawk  
Kathy Knoop  
Caryn Potter  
Katherine Stainken

**Committee Members (Absent)**

**City Staff Present**

Karen Apple, Sustainability  
Kimberly Brown, Aviation  
John Chan, Convention Center  
Keith Carabajal, Public Works  
Sarah Demory, Aviation  
Joe Giudice, Public Works  
Karen Peters, City Manager's Office  
David Benton, City Attorney's Office  
Albert Crespo, Transit

Scott Coughlin, Parks  
Mark Hartman, Sustainability  
Aaron Kane, District 7 Office  
Karl Kaseoru, ITS  
Maria Lopez, District 7 Office  
Gabriel Nevarez, Aviation  
Jesús Sapien, Transit  
Felissa Washington Smith, Public Works  
Jessica Yates, Public Works

**Guests Present**

Billy Vaughan, SRP  
Jonathan Segal, SRP  
Alex Keros, GM  
Jeremy Urfer, Miller Electric

**1. Call to Order/Roll Call**

Councilwoman Ansari called the meeting to order at 5:06 p.m.

Committee Member Potter and Stainken were not present for rollcall but arrived late, all other members were present.

**2. Approval of Minutes – Nov. 16, 2021, City Fleet and Charging Infrastructure Subcommittee Meeting**

Councilwoman Ansari requested a motion to adopt the minutes. Committee Member Hawk called for a first motion and Committee Member Knoop called for a second. Unanimous pass, motion carried.

**3. News and Announcements**

Councilwoman Ansari introduced Karen Apple, EV Program Manager, to discuss recent news in the EV world.

Ms. Apple started by stating that President Biden established the 2027 goal of 100% light-duty zero emission fleet through Executive Order. In London, Shell will be opening an EV charging hub powered by 100% solar in 2022. 50 utilities formed a group to support EV electric infrastructure: Edison Electric Institute and the formation of the National Electric Highway Coalition. Sony presented two conceptual battery-powered electric vehicles: vision-s 01 and vision-s 02. GM is expanding its technology platform beyond their core portfolio and automotive applications.

#### **4. SRP/ICF- EV Charging and Fleet Assessment Program**

Councilwoman Ansari introduced Mr. Hartman to introduce guest speakers, Billy Vaughan, and Jonathan Segal both with SRP.

Mr. Vaughan provided an overview of SRP 2035 goals that support EV infrastructure development and the business solutions available, specific to rebates offered. Electrification Qualified Service Provider (eQSP) is a closed network of service providers that meet SRP criteria to provide eligible services under on-road program rules. In addition, they also have an off-road rebate program.

Knoop asked about municipal assessments and how they determine who is eligible, specific to service territories.

Mr. Vaughan is happy to assist all customers and hopes that APS will join in expanding EV efforts.

Mr. Segal is the analyst that supports EV assessments. He provided an overview of the assessment process and data required to conduct a thorough assessment. They will also review available incentives. Based on the data provided, they will create a replacement timeline but will only recommend electric if the total cost of ownership makes sense to do so. Replacing everything with electric is not always cost effective. As for vehicle replacements, they will provide recommendations based on lowest total cost options. SRP also conducts site assessments to ensure sufficient power demand and charging requirement. Quantifying total cost of ownership over the life of the vehicle is important. Understanding environmental impacts is also important, i.e., GHG emission reduction, NOx emission reduction, vehicles removed from the road in one year, and equivalent to tree seedings grown.

Mr. Hartman wants to know the total cost of the Mesa assessment conducted.

Mr. Vaughan stated that the cost was \$20,000.

#### **5. General Motors – Fleet Charging Program Overview**

Mr. Hartman then introduced Alex Keros with General Motors (GM).

Mr. Keros leads most of EV charging infrastructure development at GM. There is a significant transition to move to electric. There is much investment in EV, and it needs to be matched from a charging ecosystem approach. Battery technology is a

huge component of bringing EV more mainstream. They have a goal of 30 EVs by 2025, which includes trucks. They are also expanding their portfolio to delivery vehicles and products; Walmart is one company that has committed to the use of EV delivery vehicles. GM will be making \$.75B in investments over the next few years. They are also growing their public Direct Current Fast Charging (DCFC) network. They currently have 85,000 public charging stations in the US and Canada. Energy Assist application can help locate charging stations, plan routes, and provide real time announcements to users. GM offers a service designed to accelerate the adoption of fleet electrification. GM understands there needs to be a comprehensive approach to charging and it takes a team of people to develop a solution. He suggests that Qmerit, Schneider Electric, Duke Energy, EVGo, eTransEnergy, and In-Charge offer turnkey solutions to consider.

## **6. Miller Electric – Electrical Charging Needs Analysis Overview**

Mr. Hartman transitioned to introduce Jeremy Urfer Senior Manager with Miller Electric.

Mr. Urfer discussed the design and build aspect of EV infrastructure. Miller Electric employs over 2,000 electricians nationwide. They have experience in electrifying municipal fleets and can conduct this business all in house, including all the civil engineering work. There is a new EV standard coming out that requires additional training if you are an electrician working on EV infrastructure. They can install all different EV manufacturer solutions. They work in conjunction with utilities when evaluating service requirements. He then discussed the Miller Electric approach to assessing customer needs and determining solutions.

Mr. Hartman asked about multifamily installation and how to future proof costs, when considering the ability to scale.

Mr. Urfer stated that they are currently working on a similar project. It would be a disservice if they did not provide design to future proof the project, specific to expansion. They are designing all systems to be scalable and robust enough to handle the additional loads (load balancing). This aspect will be critical during the design planning phase.

Committee Member Potter asked about Mr. Urfer's perspective on planning and how often this process should be conducted. She wants to know if these types of assessments should be conducted regularly and if so, how often is recommended.

Mr. Urfer stated yes, he recommends entertaining another assessment at least 5-years down the road.

Committee Member Potter stated that utility resource planning and modeling should also be considered when conducting long term planning and assessment.

Committee Member Stainken would like to know where additional capacity is required, she is referencing the nine steps listed in the EV infrastructure lifecycle assessment list provided by Mr. Urfer: from site visit to commissioning and testing. She wants to know what aspect of this list will take the longest when considering the entire project.

Mr. Urfer responded that capacity and solutions will take the longest time, when considering engineering and design. All projects are unique, so it really depends on the project. Permitting and construction can also take some time. EV adoption is still relatively new.

#### **7. Deliverables Update & Draft Summary Report Outline – Feb 2022**

Councilwoman Ansari started to discuss the timeline, with hopes to have a recommendation by end of March with a stakeholder process to follow in April. She then transitioned to allow for Mr. Hartman to dive deeper into action items listed in the proposal.

Mr. Hartman highlighted all deliverables listed on the EV roadmap timeline.

Committee Member Hawk wanted to know whether a training aspect would be included in this timeline.

Mr. Hartman agrees that training is important and if there is industry motivation to support these efforts, we are happy to consider.

#### **8. Public Comment**

Councilwoman Ansari asked for public comment. No public comment.

#### **9. Future Agenda Items**

Councilwoman Ansari asked the committee whether there were additional items to add to future agendas. She made note that Committee Member Hawk's training research component proposed will be included.

Committee Member Potter suggests having members of the subcommittee available to answer questions when the formal recommendation is conducted.

#### **10. Adjournment**

Councilwoman Ansari adjourned the meeting at 6:42 p.m.

Next meeting is Feb. 15, 2022, from 5:00-7:00 p.m. MST