



City of Columbia

701 East Broadway, Columbia, Missouri 65201

Department Source: City Utilities - Water and Light

To: City Council

From: City Manager & Staff

Council Meeting Date: September 21, 2020

Re: Resolution of Support for the installation of an electric vehicle charging station within the City of Columbia's electric service territory.

Executive Summary

Staff has prepared for Council consideration a resolution of support for the installation of electric vehicle charging stations within the City of Columbia. This resolution outlines consideration for a funding match for an electric vehicle charging station built within the City of Columbia's electric service territory and partially funded through a grant administered by the Missouri Department of Natural Resources from Volkswagen Settlement funds.

Discussion

In 2016, the United States settled complaints against Volkswagen (VW) AG, et al. to resolve claims that VW violated the Clean Air Act by selling cars with engines containing emissions defeat devices. As part of the settlement, VW paid \$2.9 billion to a national environmental mitigation trust fund, of which, Missouri received \$41 million. These funds must be used to reduce Nitrogen Oxide (NOx) emissions from mobile sources. The Missouri Department of Natural Resources (MDNR), the designated Missouri VW Settlement Trustee, is using the maximum allowable by the trust to fund a statewide network of Direct Current Fast Charging (DCFC) stations.

To accomplish this, a collaborative of 11 Missouri utilities and stakeholders identified 41 sites primarily located at intersections of heavily traveled highways across Missouri to establish a minimum charging network for across state travel. Of the 41 locations, 13 were identified as ideal EV charging stations for Stage 1 funding. These locations are to make up the Alternative Fuel Corridor designated highways, of which, Columbia's interchange at I-70 and U.S. Hwy 63 is one (attachment A). Missouri's Department of Natural Resources estimates this fast charging network will result in 150 – 200 tons of NOx reduction.

The estimated cost for a DCFC station is \$325,000 per site, and the funding award from MDNR may be up to 80% of the project costs. To encourage development of a DCFC station in Columbia, City of Columbia Utilities could match up to the remaining 20% with a cap of \$50,000. The application period for funding awards for Stage 1 locations is open until October 15, 2020.

The resolution of support will not commit the City to funding the awarded project, but conveys the City's support of developing a DCFC station within the City of Columbia Utilities electric territory. City Council will have an opportunity to appropriate funding if a local project receives an award from MDNR. A letter of commitment for funds would be required within 60 days of notice of award.



Commercial EV Charging Rate

A typical DCFC station will contain two DC fast chargers and one level II charger. With each DCFC using a minimum of 50 kW, the account will incur significant demand charges based on Water & Light's current rate structure. This will make it difficult to find a site host willing to invest the initial funds. To support the charging corridor's goals to reduce range anxiety, increase EV ownership, and reduce NOx emissions, Water & Light will need to evaluate the need for an electric transportation rate pilot for Level II and DC fast charging at commercial locations. As the finalized Integrated Electric Resource and Master Plan (IERMP) will evaluate the transportation sector in relation to electric demand, the IERMP will guide the discussion and implementation of an electric transportation rate

This was presented to the Water and Light Advisory Board at the August 5, 2020 meeting. A DCFC station being located in Columbia and accompanying electric transportation pilot rate will support the City's Climate Action Goal of reducing greenhouse gas emissions from vehicles by encouraging low-to-zero emission vehicles.

Fiscal Impact

Short-Term Impact: Potential maximum expense would be \$50,000.
Long-Term Impact: No long term fiscal impact anticipated.

Strategic & Comprehensive Plan Impact

Strategic Plan Impacts:

Primary Impact: Economy, Secondary Impact: Infrastructure, Tertiary Impact: Not Applicable

Comprehensive Plan Impacts:

Primary Impact: Environmental Management, Secondary Impact: Environmental Management, Tertiary Impact: Not Applicable

Legislative History

Date	Action
None	None

Suggested Council Action

Approval of the resolution of support for installation of an electric vehicle charging station in the City of Columbia's electric service territory.