October 23, 2018

Chief Clerk’s Office
Illinois Commerce Commission Office
527 E. Capitol Avenue
Springfield, IL 62701

Re: Notice of Inquiry Regarding Electric Vehicles

Attention: Office of the Chief Clerk

Thank you for your Inquiry to evaluate Electric Vehicles (EV). We appreciate the opportunity to submit comments on behalf of the municipal members of the Metropolitan Mayors Caucus (Caucus). The Caucus represents 275 mayors in the Chicago metropolitan region working to address issues of common concern in a collaborative fashion. Our consensus sustainability pledge, the Greenest Region Compact articulates goals for sustainable economic development; environmental stewardship; and quality of life for residents of the region that can be advanced by broad adoption of electric vehicles (EV) and sound policies to support EVs and related clean energy objectives.

The Caucus supports the Illinois Commerce Commission in its efforts to develop plans and capture best practices and smart ideas for the rapidly changing EV landscape in Illinois. Our objective is to simply integrate the municipal perspective fairly and logically, as this important groundwork is done.

Our comprehensive study of municipal sustainability priorities indicated that municipalities support broad adoption of EVs. Currently 107 Caucus member-communities representing 5.3 million residents have formally adopted the Greenest Region Compact (GRC). The GRC articulates consensus sustainability goals including goals related to climate change mitigation; clean energy; alternative transportation fuels for both municipal operations and the community; and sustainable transportation programs and policies. Beyond the formal goals of the GRC, leading communities have expressed strong interest in electrification both for municipal fleets and for the community in numerous Caucus events and initiatives related to clean transportation issues. This vocal municipal support for EVs has prompted the Caucus to become engaged in broad-based conversations about EVs and plan supportive actions.

Municipalities can yield influence in the growth of EVs in two primary ways:

1. Adoption of EVs in municipal fleets; and
2. Adoption of local codes and implementation of policies that support access to EV charging infrastructure.
First, municipalities operate a wide variety of vehicles in delivering vital services to their residents. From administrative to operational and emergency service vehicles, all municipalities operate these vehicles within community boundaries. Municipal leaders are interested in electrifying these vehicles for the environmental benefits and the direct health benefits to their constituents. Electrifying ubiquitous public fleet vehicles have the added benefit of demonstrating EVs to the public in diverse communities across the state, including low-income regions where private EV adoption might be slow. Strategic electrification of municipal fleets would benefit from comprehensive analysis of municipal fleets to determine most impactful and most viable segments of public fleets to transition to EVs.

Second, municipalities are very interested in becoming “EV Ready” by preparing policies and updating municipal codes to advance EVs and their supporting infrastructure, and the changing demands on the power grid and electricity markets.

Municipalities have jurisdiction over zoning codes that can impede or accelerate adoption of clean energy technologies, like EVs and EV charging infrastructure. Municipalities are influential in building and electrical code adoption. Municipalities set and enforce permitting and inspection policies that regulate the installation of EV charging infrastructure. It is the role of these local governments to protect the health and safety of their residents; to foster safe and beneficial development; and to sustain a healthy environment. Further, local governments can be influential and trusted sources of information about EVs that can guide communities to integrate clean energy technology into their shared identify and values.

The Caucus is considering a new ‘EV Ready’ program to empower municipalities to contribute to electrification of transportation in the region. The Caucus has successfully led more local governments to earn designation as ‘SolSmart’ for transforming their solar codes and policies than in any other state. This experience informs our recommended strategies for local EV readiness.

Environmental Considerations of EV Adoption

The 2015 regional greenhouse gas (GHG) inventory conducted by CMAP reports that 29% of all regional (7 counties) emissions are produced by the transportation sector. According to the National Air Quality Standards (NAAQS), air quality in certain regions in Illinois including the metropolitan Chicago area and the Metro-East St. Louis area, are considered Illinois Ozone Nonattainment areas. According to the Illinois Environmental Protection Agency’s VW settlement website, almost 75 percent of nitrogen oxide emissions in Illinois are derived from mobile sources which solidifies the importance of focusing on reducing emissions in this sector. The American Lung Association “Clean Air Future” report estimates a public health and climate-change burden to society estimated at $1.15 per gallon of gasoline consumed. A transition to zero emission EVs will realize substantial health and climate related savings for the region and protect the health of vulnerable residents. These benefits will be realized by combining a growth in clean electrical power with the expansion of transportation electrification.

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1 Chicago Metropolitan Agency for Planning: [https://www.cmap.illinois.gov/onto2050/strategy-papers/ghg](https://www.cmap.illinois.gov/onto2050/strategy-papers/ghg)
2 Environmental Protection Agency: [https://www.epa.gov/green-book](https://www.epa.gov/green-book)
The top import into Illinois is “crude oil from petroleum and bituminous minerals”\(^4\), while the vast majority of the electricity produced in Illinois is consumed in the state (US EIA\(^5\)). The United States’ dependence on oil for our transportation needs adds significant risk to the stability our economy and weakens our national security. Electrifying our transportation can lead us towards energy independence and a more stable economy, while creating jobs and reducing harmful emissions.

The Caucus is eager to facilitate the adoption of EVs as a clean, sustainable transportation energy solution that addresses air pollution and climate change.

The Caucus offers these observations in response to specific questions raised in the Notice of Inquiry. Regarding energy efficiency portfolio standards:

- When an EV is charged, funds are currently collected by the electric utilities. Under the Future Energy Jobs Act (FEJA), these funds are pooled and used to incentivize energy efficiency and renewable energy measures. Electric vehicles are not now eligible to receive incentives for energy efficiency measures. Opportunities exist to rethink the allocation of such funds to support the adoption of EVs and their infrastructure, such as:
  - These funds can be applied towards energy efficiency targets within the EV and its use. An example of this is to offer rebates to EV owners that replace their tires with tires that have low rolling resistance, since these tires are more efficient and in turn save electricity.
  - EVs are significantly more energy efficient that internal combustion vehicles (ICE)\(^6\). It is worth exploring the idea of allowing electric utilities to provide incentives for energy savings that are derived from switching from a gasoline or diesel-fueled internal combustion engine to an EV. This can be done by converting the petroleum consumption to the electric consumption of a particular vehicle and calculating the energy savings that can be achieved from switching.

Regarding grid stability:

- To optimize energy use would require the management of the charging process with respect to the grid, its dynamic demand pricing and new technologies such as autonomous electric vehicles and tools to manage the power to and from the EV batteries. According to Bloomberg New Energy Finance, EVs are expected to make up 10% of electricity demand in the US by 2040\(^7\). If it is important to put the proper strategies and policies in place so that we sensibly managed the charging habits of these EV owners. If the right policies are not put in place early on, EV charging during peak demand times could strain the grid and raise infrastructure and operating costs, resulting in a negative impact for rate payers. If managed charging strategies and policies are properly implemented, revenue from the additional consumption during off peak times can


\(^5\) US Energy Information Administration, Electricity Data for Illinois: https://www.eia.gov/state/?sid=IL

\(^6\) According to the US EPA, electric vehicles are about 60% efficient and internal combustion vehicles are about 20% efficient: https://www.fueleconomy.gov/feg/evtech.shtml

\(^7\) Bloomberg: https://www.bloomberg.com/features/2016-ev-oil-crisis/
offset additional infrastructure costs required to prepare for electric vehicle charging resulting in a savings for rate payers. Opportunities to address grid stability include:
  o Managed charging programs for electric vehicle owners designed and implemented by electric utilities; and.
  o Reduce or eliminate demand charges for charging electric vehicles.

Thank you for the opportunity to respond to your Notice on Inquiry regarding electric vehicles. The Metropolitan Mayors Caucus supports the ICC’s efforts to plan for transformative electrification of transportation in Illinois. Please let us know if we can be helpful.

The Caucus acknowledges the thoughtful input of Timothy Milburn, Partner, Green Ways 2Go and Bryan Tillman, Project Manager, 360 Energy Group in the preparation of these comments.

Sincerely,

Edith Makra,
Director of Environmental Initiatives
Metropolitan Mayors Caucus