www.cleanenergyworks.org

1666 Connecticut Ave NW, Suite 100
Washington, DC 20009
info@cleanenergyworks.org

Comments on the Draft Staff Report - Making the Most of Michigan's Energy Future

Michigan Public Service Commission MI Power Grid: New Technologies and Business Models

Prepared October 4th, 2021

Clean Energy Works is a non-profit organization that provides assistance to advocates for public interest, utilities, state and local governments, transit agencies, school districts, and other actors working to accelerate investment in clean energy solutions. We are grateful for the opportunity to participate in the stakeholder consultation process, delivering an invited presentation that is referenced in the Staff Report.

After reviewing the draft, we have the following comments:

Overall Staff recommendations to the Commission

We agree with the Staff recommendations, in specific with the seventh recommendation (page viii) with regards to the implementation of "pilots of tariffed on-bill programs for implementation of residential and commercial energy technologies and energy efficiency to determine the efficacy of on-bill tariff programs for varied applications in Michigan."

Two modifications to this recommendation are warranted, each explained below. The result would be a revised statement:

"Pilots of tariffed on-bill investment programs for implementation of energy efficiency and other energy upgrades in both residential and commercial buildings as well as transportation in order to assure utilities in Michigan gain experience with varied applications."

This revised statement should also appear in Section 11.7-2 of the Staff Report.

Considerations that motivate this recommended revision:

1. Observing that utility commissions in several states have already authorized tariffed on-bill programs, we would commend the Commission to take into account field data from programs that have already been operating for years. This is a much faster way to

assess efficacy. That said, it is essential for the Commission to assure that utilities in Michigan have an opportunity to gain experience with the implementation of inclusive utility investments through a tariffed on-bill program.

2. Table 13 already acknowledges that tariffed on-bill investment programs can address the upfront cost barrier presented by the batteries in electric vehicles as well as charging equipment that integrate those EVs into grid modernization. More information on how tariffed on-bill investment is applicable to clean transportation is accessible in the Climate Policy Institute's Instrument Analysis and Clean Energy Works' online materials.

Electric Vehicles

We concur with the prioritization of the hurdles or barriers identified for the deployment of electric vehicles, in particular the high cost of the vehicles and the charging infrastructure slowing down adoption and the assessment that the role of the Commission is to ensure just and fair practices from utilities (page 55 and item 6.2.5 page 60).

Item 6.2.4 (page 59) addressing equity and affordability concerns is well described, both in terms of affordability of vehicles, as well as energy affordability. We agree with the importance of not raising rates to subsidize the new investments in transportation electrification as this would be an undue burden in low income communities who need the most to benefit from zero emission transportation. Other business models for utilities should be considered, again here tariffed on-bill programs with site-specific cost recovery should be explored for the on-board battery and charging infrastructure. This would not incur in rate changes.

The solutions proposed in the Table 13 (page 63) are very comprehensive and we would like to underscore that *tariffed on-bill for investments of utilities for on board batteries and charging equipment should be identified* as more affordable than battery leasing given the cost recovery vs financial leasing costs. Under the requirements of the Generally Accepted Accounting Principles (GAAP), the leasing option requires the lessee to book a long term liability in its balance sheet, while on utility charges for a tariffed on-bill investment are considered operational costs, not long-term liabilities.

We concur that the capitalization of batteries for on-board energy storage is an important component of the business model for utilities. Not all electric vehicles are the same, of course. In particular, electric school buses are parked the vast majority of the time every year, so the integration of the on-board batteries with the buildings (V2B) and grid (V2G) adds value that can defray the high upfront cost. Vehicle to Grid Integration (V2X) research with school buses is still limited. According to the research report Accelerating Bus Electrification by the US Public Interest Research Group, vehicle to grid services paired with Pay As You Save programs could save up to $130,000 over the life of the bus.

Integration of Two-Way EV Chargers

Section 9.2.6 includes a sidebox on Green Mountain Power's program to integrate Tesla Powerwall stationary storage units. In Michigan, the Ford Lightning pick-up truck hitting the market next quarter is going to have a battery equivalent to **ten** Powerwalls. Ford is poised to crush the cost point of adding grid-connected energy storage through bidirectional EV chargers.

Last year, Underwriters Laboratory certified the first two-way charger under the North American standard, which is primarily applicable to the Nissan LEAF - already one of the most popular EVs in the U.S. The combination of the Ford Lightning and Nissan LEAF along with other models forthcoming with bidirectional charging capability is a game-changer that should be taken into account in the Staff Report.

If there is interest in exploring adoption of a tariffed on-bill investment program for energy storage, it is likely that the lowest cost point with the highest public health benefits would be two-way chargers integrating the capacity of on-board EV batteries.

Sincerely,

/s/

Margarita Parra

Transportation Program Director

Clean Energy Works