



Senate Committee on Utilities, Technology and Telecommunications

Wednesday, February 2, 2022

Senate Bill 573 - Electric Vehicle Charging Station Regulation

Testimony by Jim Boullion, Director of Government Affairs

Mr. Chairman and Committee members, thank you for the opportunity to speak today. My name is Jim Boullion, Director of Government Affairs for RENEW Wisconsin. We are a not-for-profit organization that works to advance renewable energy and clean energy technologies like electric vehicles.

SB 573 would clarify that non-utility entities may sell electricity for electric vehicles (EV's) without violating the State utility laws. **RENEW Wisconsin supports that goal, and that part of this legislation.** Currently, non-utility owned EV charging stations are charging by the minute, not the amount of energy delivered. That results in the owners of slower charging vehicles paying more for energy than the owners of fast charging vehicles, which we feel should be corrected.

While the bill would solve one problem, it is creating another. As drafted, this proposal would prohibit anyone from charging a fee if any non-utility-generated electricity is provided through a non-utility-owned/operated EV station. **RENEW Wisconsin opposes this provision** as it will significantly limit the use of solar+storage EV charging equipment in Wisconsin.

I can find only 5 other states that have adopted this restrictive provision (*Iowa, Kansas, North Dakota, South Carolina and Virginia*) 34 states have simply clarified that EV chargers are not acting as utilities, and the remaining states are similar to Wisconsin, without a clear policy that leads to charging by the minute.

This is an important emerging technology that can make EV charging stations practical and affordable in areas of the state where the local utility infrastructure is inadequate, it is too costly to upgrade or just to keep EV charging costs down. What are the benefits of solar+storage EV charging stations?

- **Facilitates EV chargers in rural areas.** Allows the placement of EV chargers in locations that have inadequate power infrastructure. Rural areas like State parks, tourist areas and small towns with lower capacity grid infrastructure could host EV chargers that otherwise would not exist.
- **Reduces infrastructure cost.** If there is insufficient energy capacity at any location, not just rural areas, a solar+storage system can sometimes be less costly than upgrading the power lines and infrastructure.
- **Limits demand charge spikes.** Some businesses that would like to host EV chargers can incur large spikes in energy usage over short periods of time which could create much higher peak demand charges on their utility bill. Solar+storage can reduce this problem, while also reducing the need for costly peak demand generators on the grid, saving all ratepayers money. Wisconsin based EnTech installed just such a system at Bergstrom Ford in Neenah when John Bergstrom discovered after plugging in some of his new EV's for the first time that "Their electric bill was almost 3 times what a normal bill would be."
- **Increases resilience and safety.** When the power grid goes down for any reason, solar+storage EV chargers can be a critical emergency resource, not only for the emergency vehicles and first responders who switch to electric vehicles, but for the general public as well.

RENEW is also concerned with the provision that prevents local governments and the State from owning, operating or leasing any EV chargers. We agree that private businesses should always be the first option for any EV charging solution. However, there are many areas of the state that will need EV chargers but the economics of that location prevent private investment in them. There will be many small towns, urban streets, and numerous other locations where there is a need for EV chargers, but they can't make enough income to justify a private business investment. Flo, an EV charging company submitted a letter today explaining the issue in more detail.

RENEW Wisconsin urges you to update Wisconsin's electric vehicle charging station laws. We also urge you to remove the limitations on host generated energy that has so many potential benefits for electric vehicle drivers, charging stations owners and the resilience of Wisconsin's energy grid.

Companies Providing Solar+Storage EV Chargers:

EnTech – Based in Menasha, Wisconsin has installed multiple systems such as:

- Metcalf's Market at the Hilldale shopping mall, 726 N Midvale Blvd, Madison.
- Bergstrom Automotive, Neenah. Follow this link to hear John Bergstrom tell their story: <https://energybyentech.com/project/bergstrom-automotive/>



BEAM – Produces a portable, rapidly deployable, go anywhere solar powered EV charger.

- The City of Madison owns three of these portable units.



Wisconsin Auto Dealership Installs Microgrid-Based EV Charging Units

MARCH 29, 2021 BY JENNIFER NASTU

Bergstrom Automotive in Neenah, Wisconsin, has installed clean-energy, microgrid-based EV charging units that can each generate at least 23 megawatt hours of solar energy annually, enough for the dealership to provide nearly 500 electric vehicle charges. The company says the clean energy solution will emit 50% fewer carbon emissions compared to charging vehicles from the traditional utility grid.

Additionally, the system is immune to interruptions that could arise because of utility outages.

Bergstrom Automotive [worked with EnTech Solutions](#) to install EV chargers. The units are powered by solar arrays with support from an onsite natural gas generator. When cars are not plugged into the chargers, the excess energy is collected into batteries.

There were more than 1.7 million electric vehicles on US roads in 2020, and that number is projected to skyrocket to nearly 7 million vehicles by 2025. Relying on the already stressed fossil-fuel utility grid removes much of the environmental impact EVs can make. Powering them with solar energy eliminates carbon emissions, while also being cost effective, EnTech says.

At 821, Wisconsin has [fewer charging stations](#) than neighboring states Illinois and Minnesota (at 2,117 and 1,164 respectively) per the US Department of Energy (via Fox 11 News). However, Wisconsin's Governor Tony Evers wants to improve EV charging infrastructure, and his recent budget proposal includes a \$5 million investment.

[EnTech](#) – A division of Faith Technologies is based in Menasha, Wisconsin. John Bergstrom, President of Bergstrom Automotive [tells their story](#).

[Automotive News Podcast](#) - How Bergstrom Automotive plugged into an EV Solution. John Bergstrom solved a “demand charge” problem and meeting clean energy goals with a Solar+Storage microgrid.

Bergstrom Automotive

NEENAH, WI

Overview

Bergstrom Automotive, headquartered in Neenah, Wisconsin, is one of the top 50 automotive retailers in the United States. Their dealership in Neenah has prepared for the launch of Ford EV models, particularly the Ford Mustang Mach-E and all electric F-150.

Challenges

EnTech Solutions was asked to demonstrate a clean energy solution to support Bergstrom's EV charging infrastructure challenges, while reducing the impact of demand charges.

Solution

To eliminate the need for new utility infrastructure service, EnTech Solutions [clean energy EV charging](#) system was presented as a solution. Utilizing two [Xcape](#) cabinets, EV chargers were installed in the front lot and in their service bay. Both units are powered by one solar field, with support from an onsite natural gas generator.

The microgrid units are off grid, which made the installation quick and easy. This system is always on and always available, without any interruptions that could arise because of utility outages. The clean energy EV charging system also aligns well with Bergstrom's corporate sustainability goals.

Highlights

- 49% carbon reduction vs. charging off the utility grid.
- Project completed, start to finish, in less than three weeks.
- Solar is the primary power source.
- By generating 47 MWh of annual solar energy, the dealership can provide nearly 1,000 EV charges.

Microgrid Specs

[Xcape](#) unit and ground-mount solar

Technical Summary

Customer Load	Mach-E, 68 or 88 kWh battery
Design Output kW	36 kW
Design Storage kWh	160 kWh
Design Solar PV Input	39.4 kW

Supplemental Power Generation

Grid Connection	Off Grid
Generator Application	Natural Gas Generator, supplemental