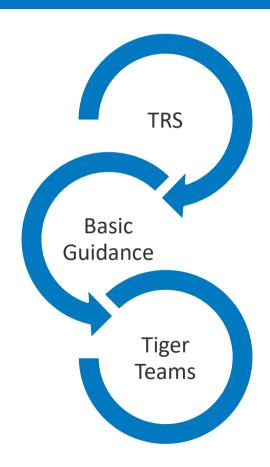


Technical Assistance/Tiger Teams: Southeast Regional Meeting

John Gonzales

- 1 Technical assistance
- 2 Proactive technical assistance
- 3 Reactive technical assistance
- 4 Propane
- 5 CNG
- 6 Electric
- 7 Additional technical assistance offered

Type of Technical Assistance



Reach Out



NREL will **objectively** engage coalitions and their stakeholders at **no cost** to identify issues that are creating barriers to adoption of alternative fuel vehicles.

- Start the conversation with an email
- Start the conversation with a phone call
- Bottom line, start the conversation

Proactive Technical Assistance













MARATHON TECHNICAL SERVICES LLC

MTS

Consulting Engineers Municipal Infrastructure Site Design Commercial Building Design

Reactive Technical Assistance





- Work with PERC to implement a nation-wide fueling nozzle. NFPA 58 adopted and implement Jan 2021
- Propane school bus fire. Work with local authorities in determining root cause and working with PERC to notifying the industry
- Working with Indianapolis fire department regarding a CNG incident. Training measures for first responders.
- NGVA Technical Committee: Member and consistent contributor for both incidents as they occur and site visits when warranted.

Additional Technical Assistance

Duluth: Completion of Duluth Transit EV Bus study.

ETUG: Beginning discussions for an Electric Transit Bus Users group meeting

Provided Technical assistance for Kansas City Clean City on the RFP for building a CNG fueling station

Tucson Clean Cities: Provided support to a CNG listening session. Included a discussion with U of Arizona to look at new propane buses. Discussions with the City of Tucson for additional AHJ training and facility upgrades

Dallas Clean Cities: Facilitated a listening session focused on propane school buses and was able to make a different visit to the Dallas FW school district. Provided information to help them with issues that they were having.

Denver Metro Clean Cities: Facilitated a propane listening session focused on propane school buses. Reported considerable information back to Roush and Navistar about the issues reported

DOT Volpe: Worked with DOT Volpe to greater understand LNG fueling at the Grand Canyon. Helped guide a plan for using a redundant skid design instead of installing LNG storage vessel. This decision will lend the park to NREL | 7

the continue use of CNG transit buses

We call these types of services "Technical Assistance"

What do you and your stakeholders call these types of services?

Fires are not just for alternative fueled vehicles

- There are approximately 171,500 gasoline vehicle fires per year
- Approximately one in eight fires responded to by fire departments across the nation is a highway vehicle fire
- There were 1529 fires per 100k for gasoline vehicles to just 25 per 100K for electric vehicles
- There were zero related electric bus fire deaths reported in 2021
- If there is a power source on board, there is a potential for a fire

Propane Bus Fire

Tennessee School Bus Fire August of 2013



Indianapolis CNG trash truck hit an overpass



November 28, 2022

EV Transit Bus



CT Transit Electric bus fire: September 16, 2022



EV Car Fires

Battery Fires are Making Electric Cars and Bikes Look Bad. CNET



EV Car Fires in salt water floods

Hurricane Ian in 2022







Questions

Feel free to reach out with any questions https://cleancities.energy.gov/technical-assistance/tiger-teams/

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