

Public utility requires reliable fleet

Eversource fleet focuses on ensuring efficient energy delivery

It all comes down to fleet reliability, said Michael Rorison, director of fleet operations at Eversource, an investor-owned utility that delivers electricity and natural gas and supplies water to about 4.3 million customers in Connecticut, Massachusetts, and New Hampshire. “Our fleet is a major part of the logistics involved in providing energy, especially during storm restoration,” he said.

Across three states, Eversource fields more than 5,500 vehicles and pieces of equipment. Vehicles include everything from cars, pickups, vans, and bucket trucks to tractor-trailers that are used to haul materials to job sites. Equipment ranges from small tools and trailers to large backhoes and excavators.

A key focus for the fleet operation is the drive to reduce emissions and fuel consumption. As part of its commitment to environmental sustainability, Eversource has set a goal to be carbon neutral by 2030 by taking a series of targeted steps, Rorison explained. “This includes our vehicles and equipment as well as our maintenance facilities, and to accomplish that objective, we need to look at multiple sources of carbon reduction,” he said.

Several emissions-reducing initiatives are being undertaken by the Eversource fleet. “We’re using biodiesel, and we have a very wide-ranging approach that’s centered on working closely with suppliers,” Rorison said. “Our success also hinges on having manufacturers work with each other on our behalf.”

XL Fleet is one of the major participants with Eversource. The utility currently operates 23 of the company’s XLH hybrid electric vehicle systems on Ford F-250 pickups and two Chevy Express cargo vans. “The XL Fleet upfit systems increase mpg compared to a standard vehicle by 25%, and anytime you don’t have to run the engine, carbon emissions drop,” Rorison stated. “These are a great



Eversource has set a goal to be carbon neutral by 2030. Photo: Eversource

fit because they work naturally.”

For its 118 bucket trucks on International chassis that are fitted with Cummins engines, Eversource works with Altec to outfit the units with the supplier’s JEMS (Jobsite Energy Management System) plug-in system to power the aerial device and tools and to export power.

“In one year, JEMS reduced our idle time by more than 35,500 hours, and it’s only been fitted on 16% of our fleet so far,” Rorison reported. “By the end of this year, it will be in use on a quarter of our bucket trucks, and we plan to have it on every unit by 2030.

“Recently, we’ve also been involved in a joint program with Altec and XL Fleet to upfit XLH systems on Ford E-450 cutaway chassis,” Rorison continued. “The hybrid electric technology will significantly reduce fuel use and emissions.”

To address fuel use, Eversource has implemented the VQ Efficiency program from Derive Systems. The platform allows the fleet to program maximum speeds and idle time limits, Rorison explained. “It automates fuel use reduction without needing to involve the driver,” he said. “The VQ Efficiency platform has lowered our mpg by nearly 10%. Saving fuel reduces emissions.”

It takes a lot of things to keep getting

closer to achieving carbon reduction goals, Rorison noted, and one of those is the fleet’s maintenance operation. The fleet is based at work centers in three states and is serviced by about 165 technicians at 37 maintenance facilities.

“We’ve completed upgrades to LED lighting with motion sensors in our facilities, which lowers electricity use,” Rorison explained. “We’re also addressing environmental issues. For example, we’re fielding a few eco-friendly parts washing systems to see which one makes the most sense to employ.”

Data on equipment and maintenance programs is also helping improve fleet efficiency at Eversource. With its Chevin FleetWave software, for example, key performance indicators help track preferred vendor use, preventive maintenance (PM) completion, overdue PM intervals, and other metrics.

Rorison noted that Eversource found that to be especially true when the company had to respond quickly when Tropical Storm Isaias caused more than a million power outages last August. “Our success was validated when the Edison Electric Institute announced Eversource as a recipient of its Emergency Response Award for restoring power to customers in 33% less time,” he added. **■**