Case Study
LNG #18

LNG Orca™ – The Versatile Mobile Fueler & MicroBulk Delivery System

Application:
Washington State Utility fleet approached Chart to provide a temporary LNG station for factory built LNG dedicated trucks (25). The unit would need to be flexible on refilling, either by transport trailer on site or taken to a nearby LNG fueling station. The first unit and subsequent ones would be placed at operations across Washington to provide fleet access to LNG as needed.

System Configuration:
- Chassis mounted unit
- Minimal power requirement.
- 3000 gal onboard storage capacity
- Designed with single-hose quick disconnect
- Integrated saturation fuel allowed for pump filling spark ignited engine type as well as high pressure direct injection engine platform from single Orca™ unit
- Integrated safety system

Accomplishments:
- Single LNG Orca truck expanded to fleet of three, providing LNG fuel for 150 service vehicles
- System approach has automatic switching, operations thru PLC panels
- LNG system has gone from three months operation support to year round
- Over three year ramp up to fleet conversion – zero accident rate (as of 11/2017)

Highlights:
Locations — Washington, U.S.A.
- Chassis mounted LNG fueling station
- Minimum permitting needed to have onsite LNG fueling
- Zero fill losses, no vent system
- 30 to 50 GPM fill speeds
- All equipment built in the USA

Scope of Projects:
- Factory built & tested Mobile Fueler
- Three year project that would include three mobile fuelers and 150+ vehicles in the program
- Vehicles included bucket trucks, dump trucks, line trucks and one ton trucks

See Orca LNG Spec Sheet (PN 14901969)