Electrified Parking Spaces Facility:  
Emission Reduction Calculation

The DEQ calculates emissions and reductions for vehicles. However, there are situations where a facility provides emission reductions. Here is a method for estimating emission reductions from Electrified Parking Spaces/Truck Stop Electrification (EPS/TSE) using the DEQ.

A. Create a New Project and then 'Add a Vehicle or Engine Group'
   1) Onroad Vehicles and Target Fleet = Long Haul Combination
   2) Class = Class 8 (this should be the default)
   3) Sector = Select the sector that best describes the trucks using the facility
   4) Quantity = Number of parking spaces
   5) Baseline Engine Model Year = The typical Engine Model Year of the trucks using the EPS
   6) Baseline Fuel Type = ULSD (diesel)
   7) Annual Fuel Volume (in gallons per vehicle) = 0.8 * hoteling hours (see Step 10 for calculation of hoteling hours)
   8) Annual Miles Traveled = 1
   9) Annual Idling Hours = 0
   10) Annual Hoteling Hours = Number of hours each parking space will be in use each year. For example, if a parking space is used 10 hours/day on average, and there are 365 days per year, then 3,650 hours.
   11) Upgrade Year = The year the electrified parking spaces will begin being used
   12) Remaining Life = Enter the expected lifetime of the EPS installation

B. After saving the Group, ‘Add an Upgrade’
   13) Idling Control Strategies = Electrified Parking Space
   14) New Annual Idling Hours = 0
   15) New Annual Hoteling Hours = 0
   16) Enter 'Upgrade Cost' and 'Labor Cost' of each parking space if you would like to estimate cost effectiveness.
   17) Save the Upgrade.

C. Select ‘Quantify Project Emissions.’ The Lifetime Results are the Annual Results multiplied by the Remaining Life that was saved for the group.