

The Love's Family of Companies



Heavy Duty Vehicle Hydrogen Infrastructure Challenges



Love's Travel Stops & Country Stores



#18

Forbes List of
America's Largest
Private
Companies



**Over
500**

Travel Stops,
Terminals and
CNG Stations



\$16

Billion
Annual
Revenue



25,000

Employees
Nationwide

Trillium



#2

Largest
Distributor of
CNG in the
U.S.



200

Owned or
Operated
Heavy-Duty
CNG Stations



Design / Build
Maintenance
Own or Operate
Renewable



Transit Agencies
Municipalities
Trucking Companies
Waste Haulers



Gemini Motor Transport

650 trucks / 13 million gallons of fuel daily



MUSKET

Musket Corporation

Wholesale fuel supply, trading and logistics

Design and Build Services



- Customized Solutions
- High-Quality Parts and Equipment
- 30% - 40% Faster Fill Times
- Improved Energy Efficiency
- On Time, On Budget

Operation and Maintenance Services



- ~100 Highly Trained Mechanics
- 24/7 Rapid Response Team
- 99.99% Station Up Time

- Customized Preventive Maintenance
- Total Control over O&M Budget
- Client Connect Portal

Challenges



1. Price
2. Flow Rate
3. Space
4. Availability
5. Demos



The 5 & 5 Challenge

Dispensed price < \$5/kg

- Cost of H₂ (delivered or on-site)
- Operating costs (utilities, O&M)
- Capital recovery
- Margin

Flow rate > 5 kg/min

- Gas compression not sufficient today
- Cannot rely on storage for HDVs

Challenges



3. Space

- On-site production + CSD

4. Availability

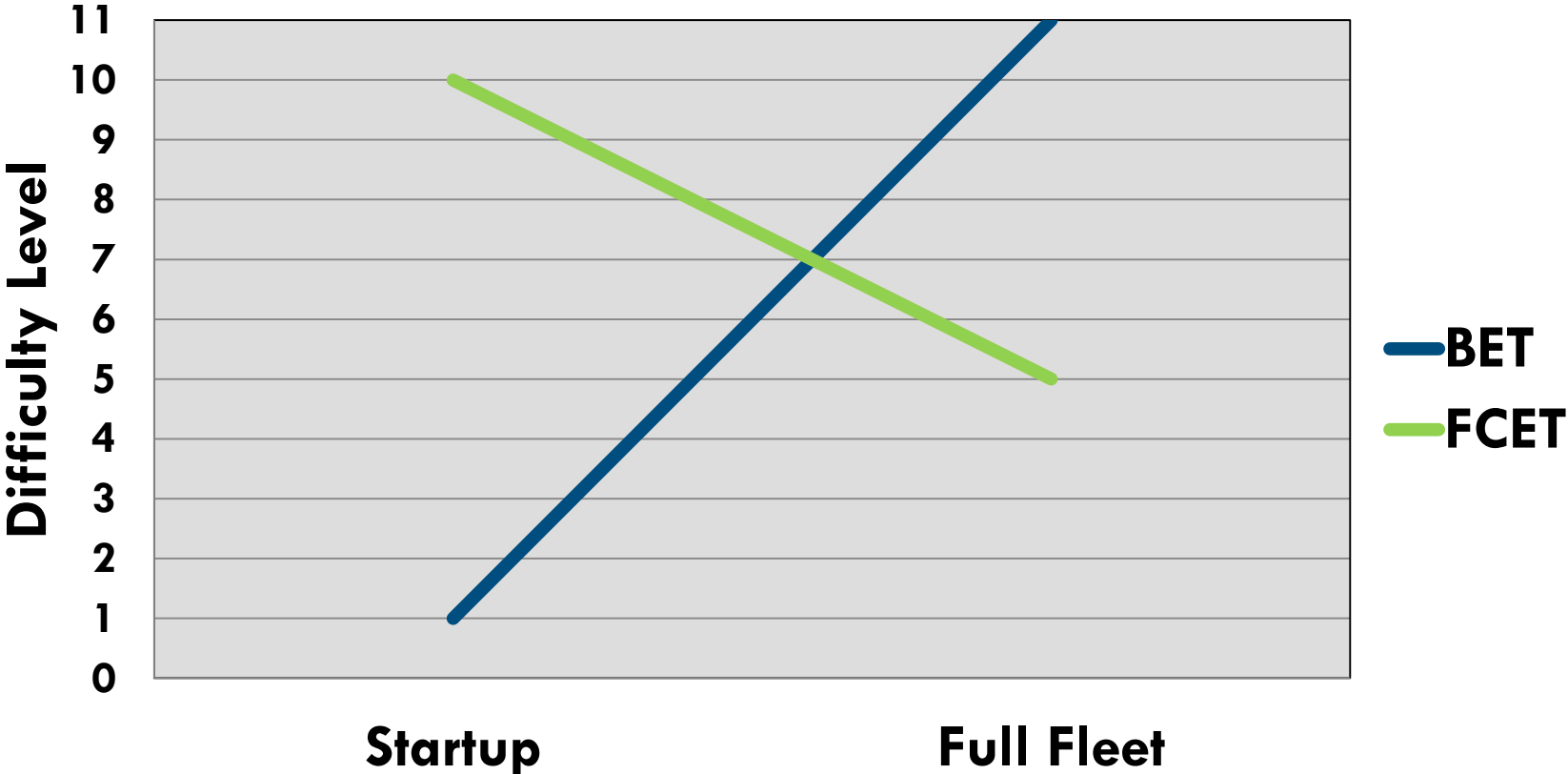
- Gaseous/liquid H₂ supply suitable for FCs not available everywhere
- Limited volumes as expansion occurs



Demos



Too difficult to start doing FCETs



30 kg per vehicle in 6+ minutes

- From 2 dispensers simultaneously
- Up to 1,500 kg/day





Ryan Erickson - GM Strategic Development
(714) 380-2763 Ryan.Erickson@Loves.com