

SIMPKINS ENERGY

107 Magness Drive · McMinnville, TN 37110 · (615) 351-5274 · www.simpkinsenergy.com

What is Natural Gas?

- ▶ CH_4 (One Carbon + 4 Hydrogen Molecules Per Atom)
- ▶ Compared to Gasoline, CNG Vehicles Emit:
 - 25% Less Carbon Dioxide
 - 97% Less Carbon Monoxide
 - 40-60% Less Nitrogen Oxides
 - No Evaporative Emissions
- ▶ CNG is Rated at 117 Octane
- ▶ CNG can be Traced Back to 1930

The CNG Market Today in the U.S.

135,000 Natural Gas Vehicles (NGV's) on U.S. Roads

1,300 NGV Fueling Stations

Natural Gas Costs from \$1.50 - \$2.75 Less per GGE

NGV Vehicles Offset about 360 Million Gallons of Gasoline
in 2011

Source: NGV America



Where is the Market for CNG?

Airports

- Shuttle Buses
- Airport Vehicles
 - Street Sweepers, Baggage Tows, Food Service Vans, etc.

Commercial

- AT&T, Verizon, FedEx, UPS
- Plumbers, Electricians, HVAC, Small Service Companies, Medical Companies

Municipalities

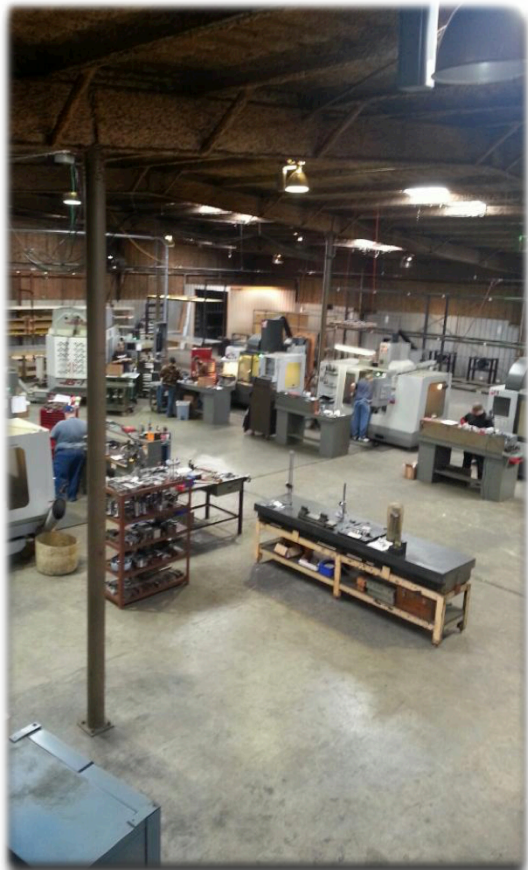
- Cities, Counties & Towns

Refuse

Consumer Markets



Jenkins Energy - Manufacturing Facility



McMinnville, TN

SE 500 Compressor

- ▶ 45-50 GGE's/hr
- ▶ 75 Horsepower
- ▶ Air Cooled
- ▶ Direct Drive Motor
- ▶ 4 Stages/4 Cylinders



SE 1700 Compressor

- ▶ 170 GGE's/hr
- ▶ 200 Horsepower
- ▶ Air Cooled
- ▶ Direct Drive Motor
- ▶ 4 Stages/4 Cylinders



500 CNG System with Storage Tanks and a Fast Fill Dispenser



CNG Dispenser











Heavy Duty Sub-Frame Assembly



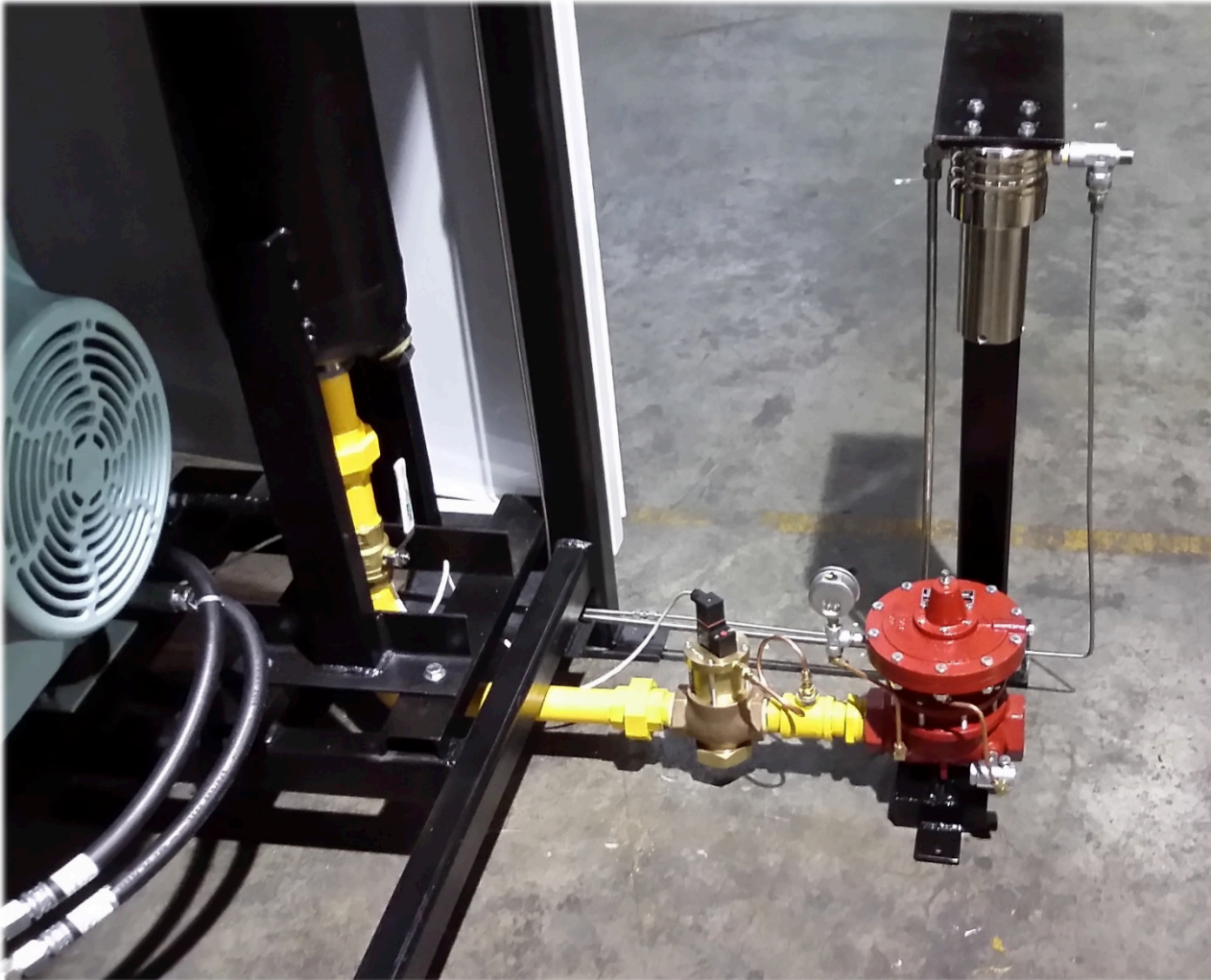
500 Compressor Undergoing Final Testing Before Being Shipped to Customer (Front)



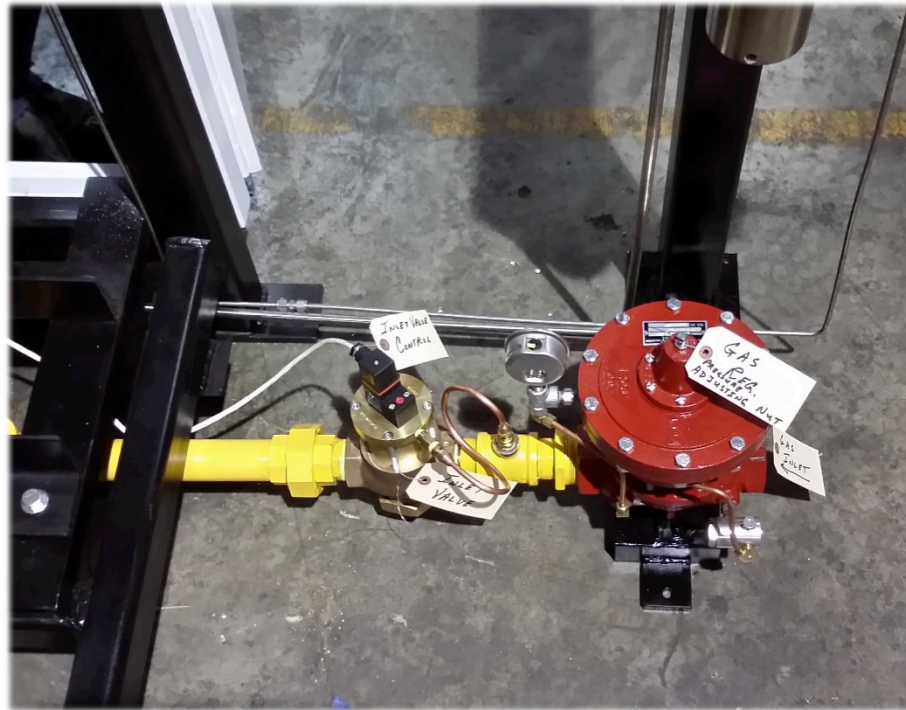
500 Compressor Undergoing Final Testing Before Being Shipped to Customer (Back)



Install Kit Components

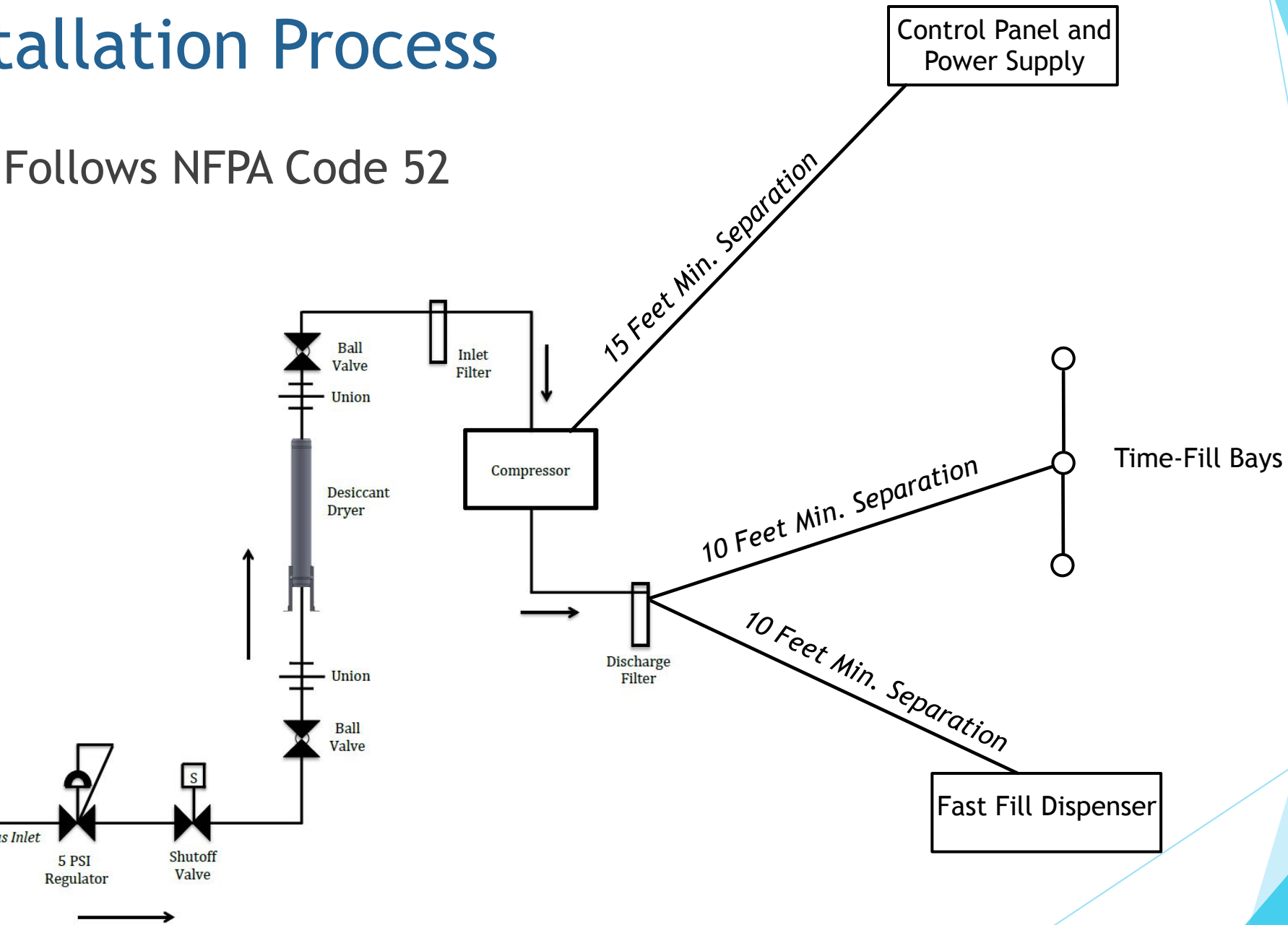


Install Kit Components



Installation Process

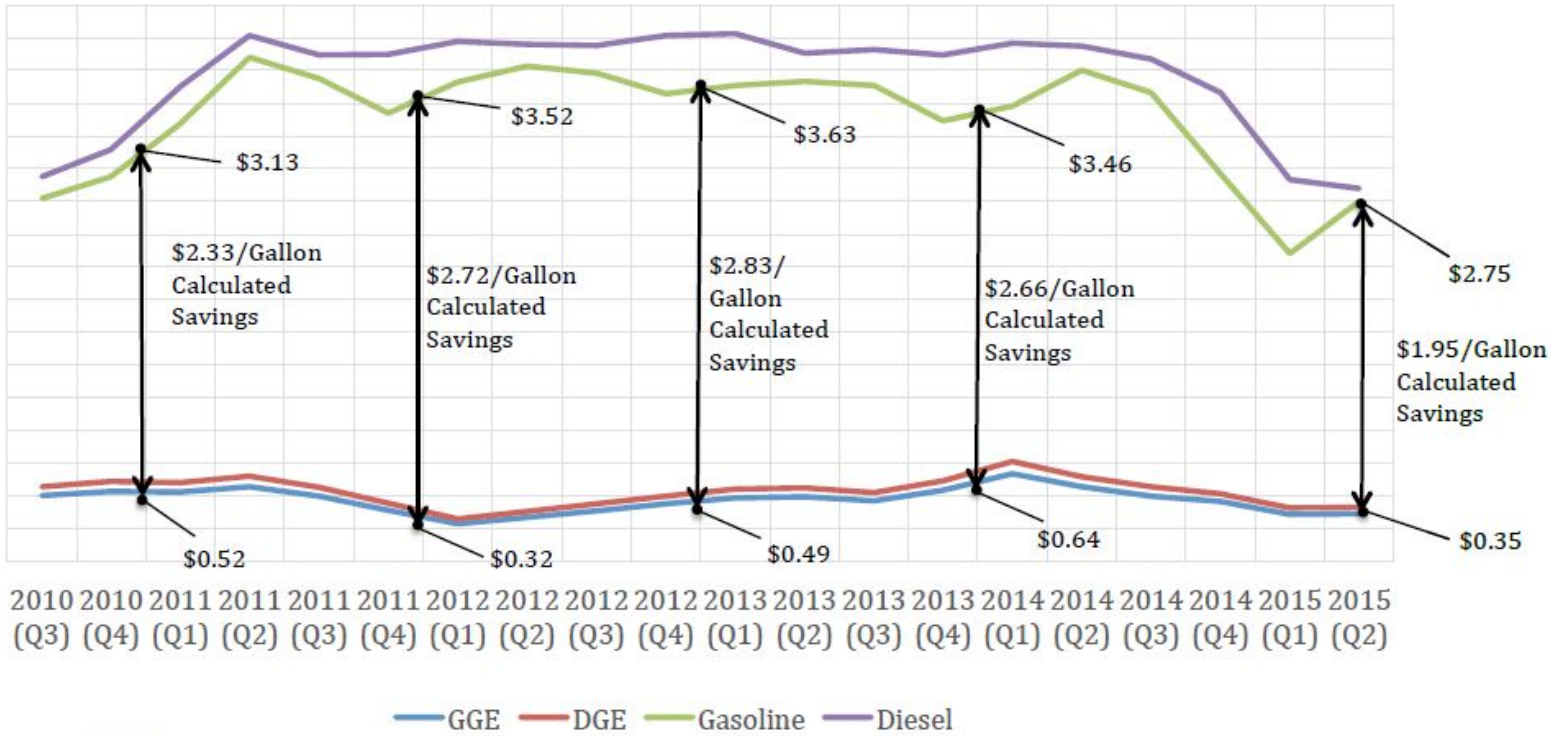
Follows NFPA Code 52



Financial Analysis



CNG/Gas Prices - Last 5 Years



2010 2010 2011 2011 2011 2011 2012 2012 2012 2012 2013 2013 2013 2013 2014 2014 2014 2014 2015 2015
 (Q3) (Q4) (Q1) (Q2) (Q3) (Q4) (Q1) (Q2) (Q3) (Q4) (Q1) (Q2) (Q3) (Q4) (Q1) (Q2) (Q3) (Q4) (Q1) (Q2)



U.S. Energy Information Administration

GGE Cost Assumptions

Natural Gas Cost	\$0.50
Compression	\$0.10
Overhead/Maintenance	\$0.20
Total Cost per GGE	\$0.80

Jenkins Energy CNG Cost Analysis

Seneca East Local School District

	Each	Total	Year	Total GGE'S Per Year	\$ Savings/YR	Cum. Savings
14 School Buses						
Model SE 500	\$ 120,000	\$ 120,000	1	39,120	\$ 78,240	\$ 78,240
CNG hose assemblies	5,000	\$ 35,000	2	40,750	\$ 81,500	\$ 159,740
filter, regulator, emergency shut down	10,000	\$ 10,000	3	42,448	\$ 84,896	\$ 244,636
expense	120,000	\$ 120,000	4	44,216	\$ 88,432	\$ 333,068
Total		\$ 285,000	5	46,058	\$ 92,116	
Total				212,592	\$ 425,184	

Station Break Even = 42.5 Months

(Growth in GGE/Yr = 4%) (Savings average \$2.00/ GGE)

(20 days/ Mmonth)

Sparks Energy CNG Cost Analysis

Seneca County Agency Transportation

	Each	Total	Year	Total GGE'S Per Year	\$ Savings/YR	Cum. Savings
20 Vans						
Model SE 500	120,000	\$ 120,000	1	64,800	\$ 129,600	\$ 129,600
CNG hose assemblies	5,000	\$ 50,000	2	67,500	\$ 135,000	\$ 264,600
filter, regulator, emergency shut down	10,000	\$ 10,000	3	70,312	\$ 140,624	\$ 405,224
expense		\$ 120,000	4	73,241	\$ 146,482	
Total		\$ 300,000	5	76,293	\$ 152,586	
Total				352,146	\$ 704,292	

Station Break Even = 33 Months

(Growth in GGE/Yr = 4%) (Savings average \$2.00/ GGE)

(20 days/ Mmonth)

Spkins Energy CNG Cost Analysis

Mohawk

/10 Buses

gy Model SE 500

CNG hose assemblies

filter, regulator, emergency shut down

oense

Total

Total

Station Break Even = 27 Months

Growth in GGE/Yr = 4%) (Savings average \$2.00/ GGE)

(20 days/ Mmonth)

	Each	Total	Year	Total GGE'S Per Year	\$ Savings/YR	Cum. Savings
	120000	\$ 120,000	1	48,000	\$ 96,000	\$ 96,000
	5000	\$ 25,000	2	50,000	\$ 100,000	\$ 196,000
	10000	\$ 10,000	3	52,083	\$ 104,166	\$ 300,166
		\$ 120,000	4	54,253	\$ 108,506	
		<u>\$ 275,000</u>	5	54,257	\$ 108,514	
				<u>258,593</u>	\$ 517,186	

Simpkins Energy CNG Cost Analysis

Tiffin, OH

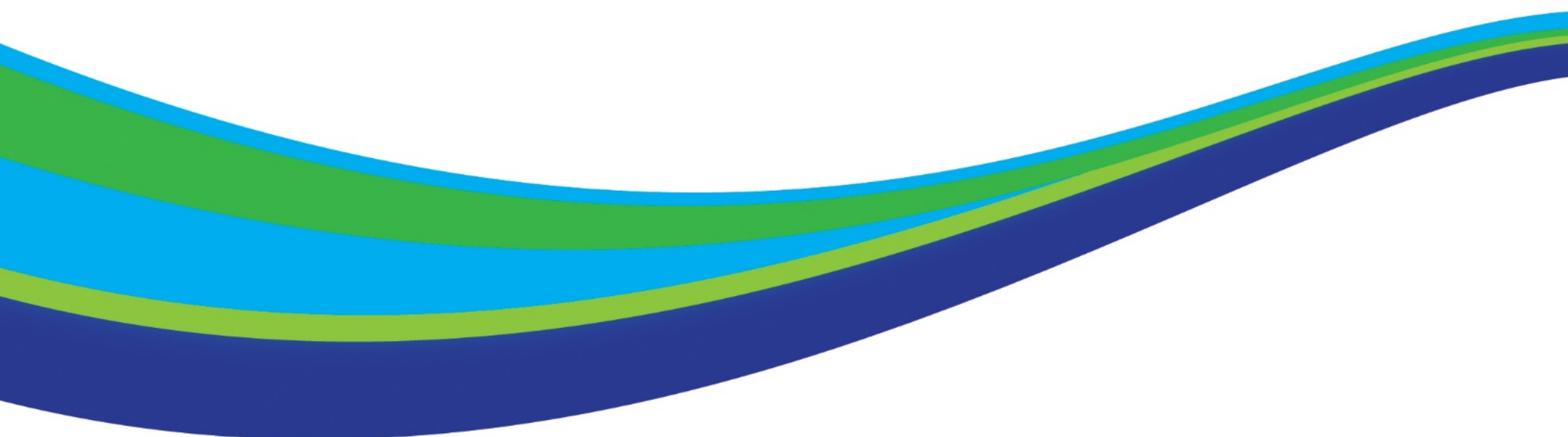
300,000 GGE / Year
 25,000 GGE / Month
 1,250 GGE / Day

Equipment	Each	Total
Simpkins Energy Model SE 1700; rated @ 170 GGE / hr and of 1,250 GGE is 7.35 hours		\$ 225,000
Compressors (96 GGE's storage each, 288 GGE's total)	\$ 38,000	\$ 114,000
Control Panel		\$ 15,000
Dispensers with Dual CNG Hose Assemblies	\$ 60,000	\$ 120,000
Reader and Point of Retail Management System		\$ 18,000
Dryer	\$ 2,500	\$ 5,000
Pressure Discharge Filters		\$ 12,000
Emergency shut down, regulators, check valves)		\$ 38,000
Subtotal		\$ 547,000
Installation, 3/4" Stainless Steel Tubing, Engineering, Permitting, License, Trenching, Electrical and Labor		\$ 250,000
Total		\$ 797,000
Station - Simpkins Energy Model SE 500		\$ 120,000
		\$ 33,000
Total		\$ 950,000

Year	Total GGE'S \$ Savings/YR		Cum. Savings
	Per Year		
1	300,000	\$ 600,000	\$ 600,000
2	312,000	\$ 624,000	\$ 1,224,000
3	324,480	\$ 648,960	\$ 1,872,960
4	337,459	\$ 674,918	
5	350,958	\$ 701,916	
Total	1,624,897	\$ 3,249,794	

Station Break Even = 18 Months

Growth in GGE/Yr = 4% (Savings average \$2.00/ GGE)
 (20 days/ Mmonth)



SIMPKINS ENERGY

107 Magness Drive · McMinnville, TN 37110 · (615) 351-5274 · www.simpkinsenergy.com