The Low Cost Solution To California's Air Pollution

I-5 CLEAN FUELS, LLC (ICF)

Panoche Westside Group LLC – June 2014

Executive Summary
I-5 Clean Fuels (ICF)

- Natural gas (LNG & CNG) is increasingly being used as a transportation fuel across America
- LNG is approximately $1.25/gallon cheaper than diesel.
- LNG use in the Central Valley will reduce smog
- ICF will be the first large-scale, independent natural gas liquefaction facility in Northern California
- LNG will be used in high-horsepower trucks, rail, marine and agricultural equipment
- This is a $300 Million energy infrastructure project with an estimated 25-year economic life
- ICF will create 125 middle class jobs at full capacity

PROJECT DEVELOPER

Panoche Westside Farms (PWF) Property Owner

Panoche Westside Group, LLC (PWG) Development Company

I-5 Clean Fuels LLC (ICF) - Special Purpose Company to Own & Operate

- I-5 Clean Fuels Project is being developed by Panoche Westside Group
- PWF owns the project site
- PWG has extensive California real estate development and energy industry experience
- Project is located in Fresno County, California

Project Location

- Site is owned by project developer
- Site is within 300 miles of existing distribution infrastructure serving ~35 million people
- Within 150 miles is the most efficient distribution zone

PROJECT PARAMETERS

- 1Million gallons per day liquefaction facility
- Converting pipeline gas to LNG
- 3 million gallon storage capacity
- $300 million total project cost (Phase 1: $95million)
- Constructed in 4 phases to match market demand
- Commercial Operations of Phase 1 in Mid 2016

Typical L/CNG Fueling Station

TYPICAL LNG FACILITY EQUIPMENT

Clean Energy's Boron California Plant

DEVELOPMENT TIMELINE

- **Expected Commercial Operation Dates:**
  - Phase 1: 250,000 gpd Mid 2016
  - Phase 2: 250,000 gpd Late 2017
  - Phase 3: 250,000 gpd TBD by Market demand
  - Phase 4: 250,000 gpd TBD by Market demand

LNG is Simply Cleaner !

New clean-burning LNG trucks are much cleaner than existing diesel trucks, resulting in:

- A reduction of more than 20 percent in greenhouse gas emissions (CO2, N2O)
- A reduction of more than 80 percent in smog-forming pollution (NOX and VOCs); and
- A reduction of more than 60 percent in particulate matter pollution.

Regional Environmental Benefits

Environmental benefits of LNG displacing diesel fuel in agricultural and trucks will happen in the Central Valley. The LNG will likely be used within 130 miles of the facility improving local air quality.

At full capacity 1 million gallons/day of LNG from ICF would:

- Eliminate more than 500,000 tons of greenhouse gas emissions (CO_2, N_2O). Equivalent to removing approximately 100,000 cars from the road;
- Reduce smog-forming pollution (NOX and VOCs) by approximately 8,000 tons per year; and
- Reduce carcinogenic diesel particulate matter pollution by approximately 100 tons per year.

Safety and Design Criteria

- LNG is just one of many fuels that is stored and transported as a liquid like gasoline, propane, and other flammable liquid fuels.
- The LNG industry has operated safely for the past 70 years and is a mature industry with an admirable record of public safety.
- 49 CFR 193 governs the siting, design, installation, construction, operation, maintenance, fire protection, and security of LNG facilities in the US, as well as setting standards for the qualification and training of LNG facility employees.
- NFPA 59A is the standard for the Production, Storage, and Handling of LNG. The US Department of Transportation (DOT) made conformance with NFPA 59A a legal requirement.

SUMMARY

- LNG use as a transportation fuel is a growing
- I-5 Clean Fuels will be:

  First in Northern California

  Close to all Bay Area users

  Low cost producer in a commodity market
- Fresno County will be at the forefront of alternative fuel production
- I-5 Clean Fuels will create 125 well paid jobs
- LNG use in the Central Valley and Bay Area will reduce GHG, smog and particulate emissions.