

# **SENECA RESOURCES CORPORATION**

Odyssey Day 2014 Pittsburgh, PA October 17th, 2014



#### National Fuel Gas Company – Safe Harbor For Forward Looking Statements

This presentation may contain "forward-looking statements" as defined by the Private Securities Litigation Reform Act of 1995, including statements regarding future prospects, plans, performance and capital structure, anticipated capital expenditures and completion of construction projects, as well as statements that are identified by the use of the words "anticipates," "estimates," "forecasts," "intends," "plans," "predicts," "projects," "believes," "seeks," "will," "may," and similar expressions. Forward-looking statements involve risks and uncertainties, which could cause actual results or outcomes to differ materially from those expressed in the forward-looking statements. The Company's expectations, beliefs and projections contained herein are expressed in good faith and are believed to have a reasonable basis, but there can be no assurance that such expectations, beliefs or projections will result or be achieved or accomplished.

In addition to other factors, the following are important factors that could cause actual results to differ materially from results referred to in the forward-looking statements: factors affecting the Company's ability to successfully identify, drill for and produce economically viable natural gas and oil reserves, including among others geology, lease availability, title disputes, weather conditions, shortages, delays or unavailability of equipment and services required in drilling operations, insufficient gathering, processing and transportation capacity, the need to obtain governmental approvals and permits, and compliance with environmental laws and regulations; changes in laws, regulations or judicial interpretations to which the Company is subject, including those involving derivatives, taxes, safety, employment, climate change, other environmental matters, real property, and exploration and production activities such as hydraulic fracturing; governmental/regulatory actions. initiatives and proceedings, including those involving rate cases (which address, among other things, allowed rates of return, rate design and retained natural gas), environmental/safety requirements, affiliate relationships, industry structure, and franchise renewal; changes in the price of natural gas or oil; impairments under the SEC's full cost ceiling test for natural gas and oil reserves; uncertainty of oil and gas reserve estimates; significant differences between the Company's projected and actual production levels for natural gas or oil; changes in demographic patterns and weather conditions; changes in the availability, price or accounting treatment of derivative financial instruments; delays or changes in costs or plans with respect to Company projects or related projects of other companies, including difficulties or delays in obtaining necessary governmental approvals, permits or orders or in obtaining the cooperation of interconnecting facility operators; financial and economic conditions, including the availability of credit, and occurrences affecting the Company's ability to obtain financing on acceptable terms for working capital, capital expenditures and other investments, including any downgrades in the Company's credit ratings and changes in interest rates and other capital market conditions: changes in economic conditions, including global, national or regional recessions, and their effect on the demand for, and customers' ability to pay for. the Company's products and services; the creditworthiness or performance of the Company's key suppliers, customers and counterparties; economic disruptions or uninsured losses resulting from major accidents, fires, severe weather, natural disasters, terrorist activities, acts of war, cyber attacks or pest infestation; changes in price differential between similar quantities of natural gas at different geographic locations, and the effect of such changes on natural gas revenues and production, and on the demand for pipeline transportation capacity to or from such locations; other changes in price differentials between similar quantities of oil or natural gas having different quality, heating value, geographic location or delivery date; significant differences between the Company's projected and actual capital expenditures and operating expenses: changes in laws, actuarial assumptions, the interest rate environment and the return on plan/trust assets related to the Company's pension and other post-retirement benefits, which can affect future funding obligations and costs and plan liabilities; the cost and effects of legal and administrative claims against the Company or activist shareholder campaigns to effect changes at the Company; increasing health care costs and the resulting effect on health insurance premiums and on the obligation to provide other post-retirement benefits; or increasing costs of insurance, changes in coverage and the ability to obtain insurance.

Forward-looking statements include estimates of oil and gas quantities. Proved oil and gas reserves are those quantities of oil and gas which, by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be economically producible under existing economic conditions, operating methods and government regulations. Other estimates of oil and gas quantities, including estimates of probable reserves, possible reserves, and resource potential, are by their nature more speculative than estimates of proved reserves. Accordingly, estimates other than proved reserves are subject to substantially greater risk of being actually realized. Investors are urged to consider closely the disclosure in our Form 10-K available at <a href="http://www.nationalfuelgas.com">www.nationalfuelgas.com</a>. You can also obtain this form on the SEC's website at <a href="http://www.sec.gov">www.sec.gov</a>.

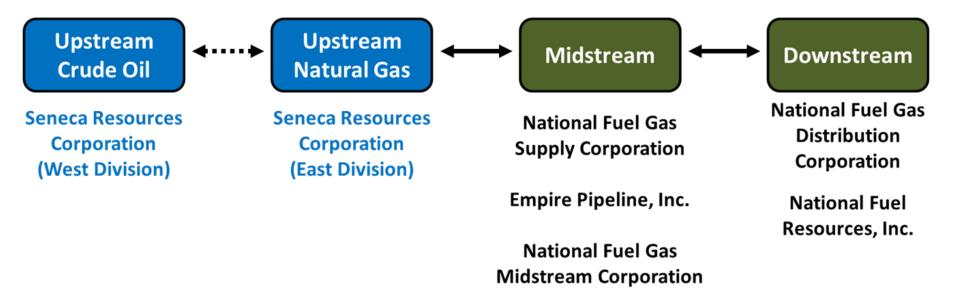
For a discussion of the risks set forth above and other factors that could cause actual results to differ materially from results referred to in the forward-looking statements, see "Risk Factors" in the Company's Form 10-K for the fiscal year ended September 30, 2013. The Company disclaims any obligation to update any forward-looking statements to reflect events or circumstances after the date thereof or to reflect the occurrence of unanticipated events.

# National Fuel Gas Company





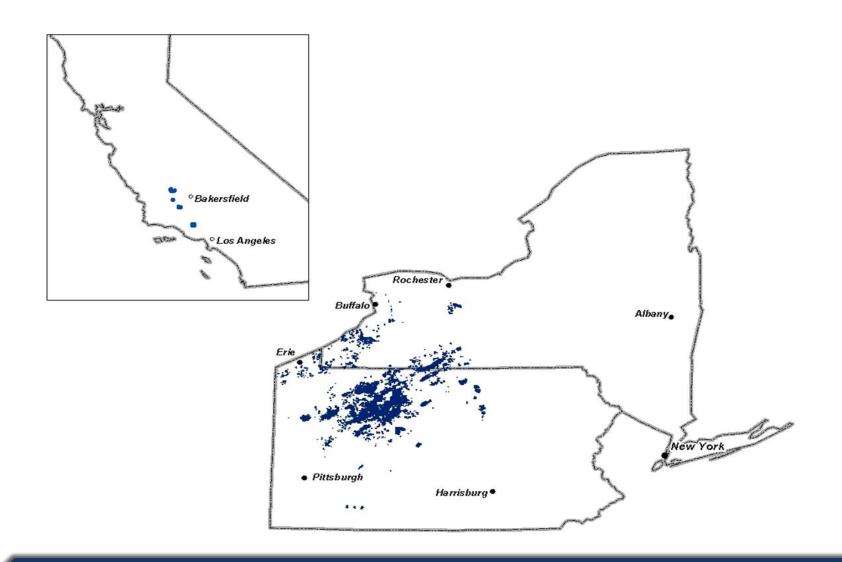
Integrated business mix generates long-term value



The strategic, operational, and financial benefits and flexibility created by this integrated mix of businesses continues to generate significant long-term value for NFG's shareholders in nearly all economic and commodity price scenarios.



#### Seneca Resources Assets





### Developing the rig fuel conversion case



Ensign Rig # 125 at DCNR 100, Pad T, Lycoming County, PA Prometheus LNG vaporizer & storage tanks are in upper right

- Senior leadership support key to initiative's success
- Developed business case to analyze fuel options, fuel cost differentials, conversion equipment, performance, & ongoing O&M costs
- Considered other benefits of emissions reductions, less truck traffic & promoting natural gas
- Concurrently evaluated equipment & fueling options



### Including natural gas fuel in our drilling operations

- Summer 2012: Completed analysis & selected LNG as fuel of choice due to the location of rigs, risk assessment & timing
- Fall 2012: Collaborative effort with Ensign to convert 2 rigs to 100% dedicated natural gas
- Selected LNG supplier through a competitive bidding process
- Contracted for a delivered service with performance metrics



Closer view of onsite Prometheus LNG equipment



## Converting to bi-fuel

- Early 2013: Decision made to install a bi-fuel kit on the 3<sup>rd</sup> rig and to fuel it with field gas
- Decision drivers: Conversion cost, timing, access to field gas, lower perceived risk
- Evaluated conversion kits to find the one that best matched our operations profile
- Summer 2013: Completed bifuel conversion
- Fall 2014: Analyze the conversion of rig boiler to dual fuel

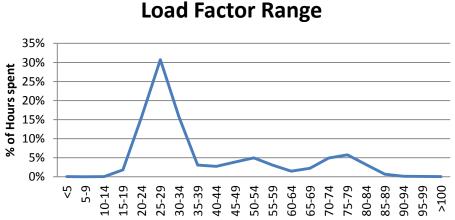


Patterson Rig # 337 at DCNR 007, Pad K Tioga County, PA



# Selecting a Bi-Fuel Conversion Kit

Percentage of Hours Spent in Each

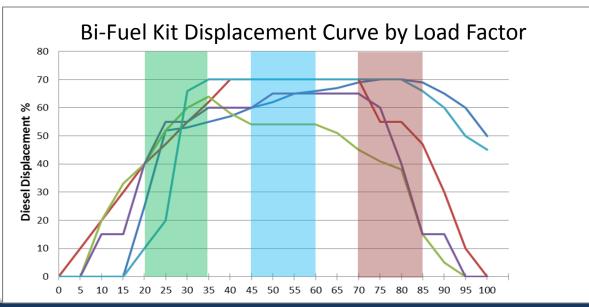


Load Factor

#### Load Factor Range Based On Actual Operating Hours

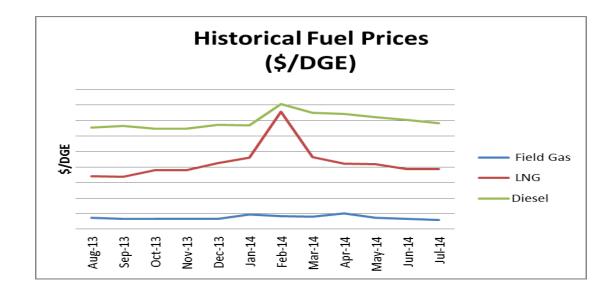
- Green = 62% of Hours
- Blue = 12% of Hours
- Maroon = 14% of Hours

Targeted conversion kits that optimized diesel displacement in the 20-35% load factor range





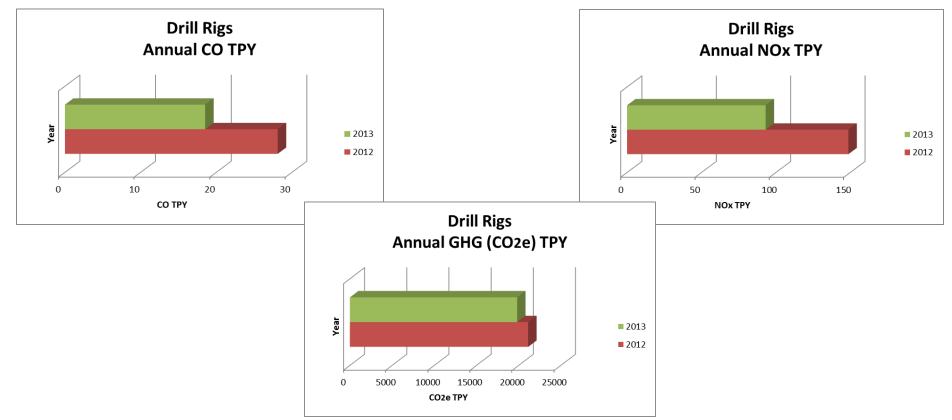
### **Rig Fueling Costs**



#### **Achieved Fuel Cost Reductions**

Fuel	Cost Reduction from Diesel Price
LNG	20%
Field Gas	80%

## Achieved emissions reductions through natural gas



- Drilling rig hours increased by 50%, while diesel consumption was reduced by 50% due to natural gas substitution
- Significant reductions in CO and NOx tons per year emissions
- Reductions also achieved in greenhouse gas emissions (CO2, CH4, and N2O)



### Future Use of LNG in Drilling Operations



Field Gas Skids



- LNG's use in drilling operations is transitioning to a secondary role, only used where in-field infrastructure is not available and as an emergency back up
- Early 2014: Began fueling one of the NG dedicated rigs on field gas with LNG backup
- Summer 2014: Implemented field gas with 2<sup>nd</sup> NG dedicated rig



## Evaluating natural gas fuel in our frac operations

- Evaluating available technology
- Monitoring service provider experiences in Marcellus and other basins
- Developing knowledge with rig fueling options
- Evaluating both LNG and field gas as fueling options



Trican Frac Spread at Seneca's pad DCNR Tract 100, Pad T



### Including natural gas fuel in our fleet vehicles



2014 F150 converted to use CNG

#### **Current Bi-fuel Fleet**

- > 19 vehicles, or 30% of PA fleet
- 5 different vehicle models
  (Tahoe, Silverado, F150, F250, Ram 2500)
- 4 different conversion kits
  (AGA, IMPCO, NatGasCar, Powerfuel)
- > F250 & Ram 2500 are factory conversions
- Performance evolving with each new kit

#### **Ongoing NGV Concerns**

- > Conversion costs,
- Decreased cargo space
- > Model year transition,
- Availability of CNG fueling infrastructure



CNG tank located in the back of a Tahoe



# **SENECA RESOURCES CORPORATION**

Odyssey Day 2014 Pittsburgh, PA October 17th, 2014