

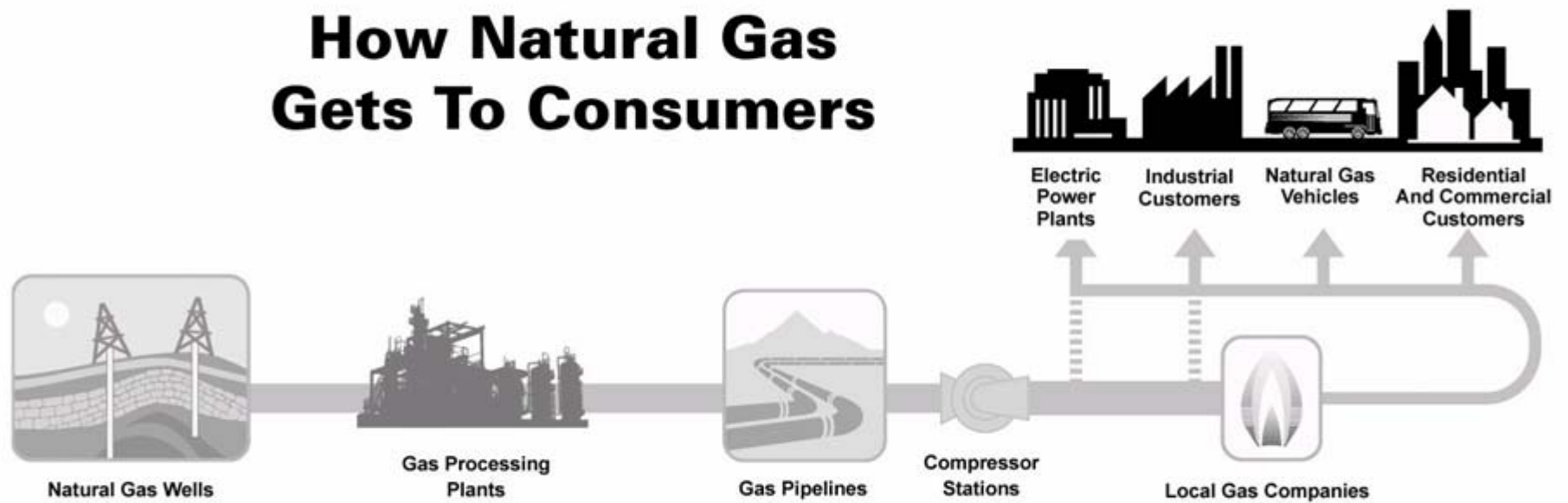


**Vermont Gas**  
CLEAN ENERGY. CLEAN AIR.

# VERMONT GAS SYSTEMS

- Company Overview
- Operations
- Gas Supply
- Regulation
- Conclusion

# How Natural Gas Gets To Consumers

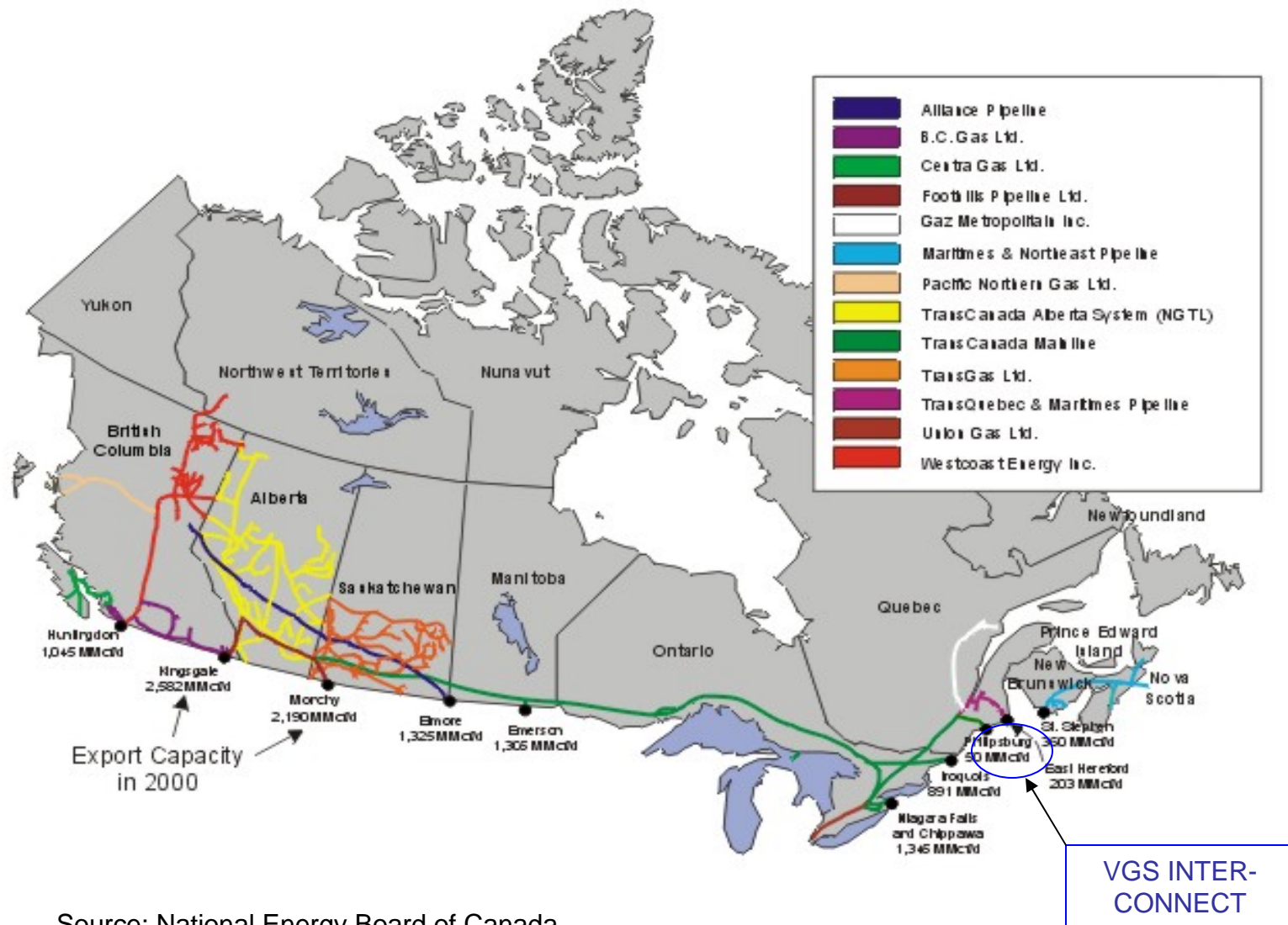




Providing Service to  
37,000 Residential,  
Commercial, Industrial,  
and Institutional  
Customers in 16 towns in  
Chittenden and Franklin  
Counties since 1965

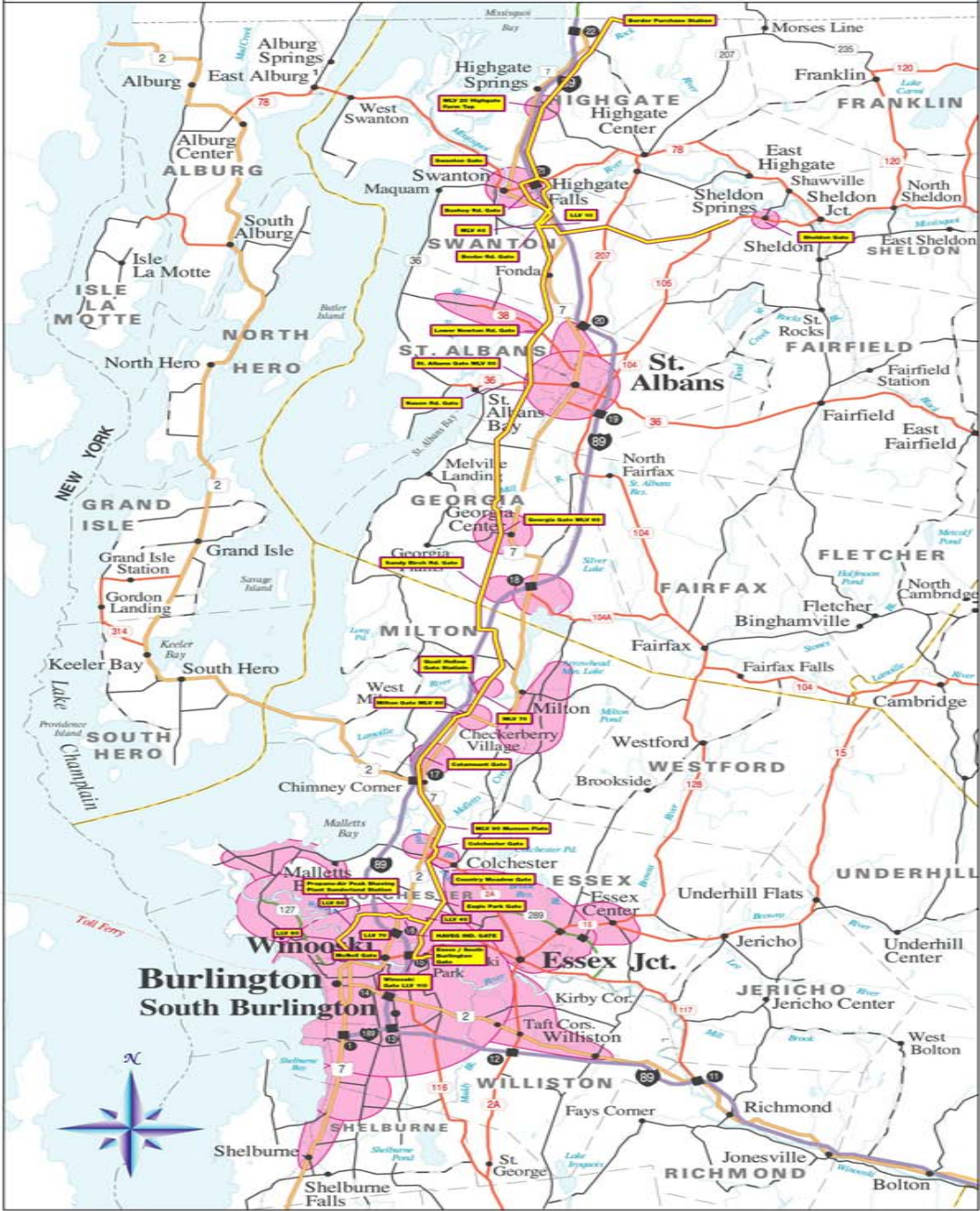


# VERMONT IMPORTS ITS NATURAL GAS FROM THE WESTERN CANADIAN SUPPLY BASIN



Source: National Energy Board of Canada

**Vermont Gas Transmission Line  
Vermont Gas Distribution Territory**



# VERMONT'S ONLY NATURAL GAS DISTRIBUTOR

- ⌚ Regulated by the Vermont Public Service Board
- ⌚ Direct Competition with Oil, Propane, and Wood
- ⌚ Distributed via Network of Underground Pipes

Transmission system from Canadian border totals 70 miles (112 km)

550 miles (885 km) of distribution pipes

27,200 services

 In Vermont Natural Gas is Used for the Following:

Heating (Primary Use)

Hot Water

Cooking

Clothes Drying

Gas Fireplaces

Gas Grills

Pool Heaters

Electric Generation





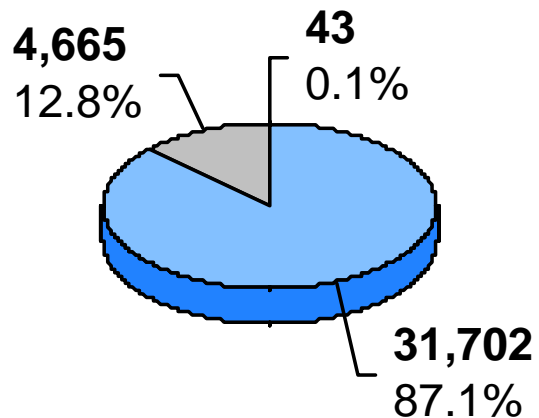
# CUSTOMER CLASSES

- Three classes of customers: firm, interruptible, and transportation
- Firm customers receive service 365 days a year - no matter how cold it gets!
- Interruptible customers can “curtail” or switch to an alternate fuel on cold days
- Transport customers procure their own supply and VGS transports it

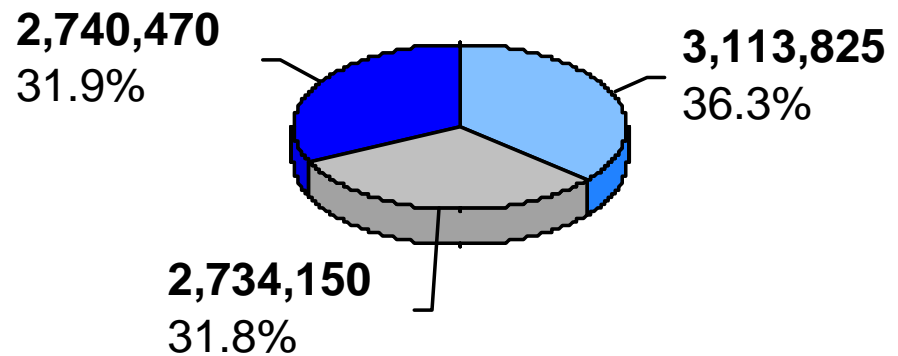




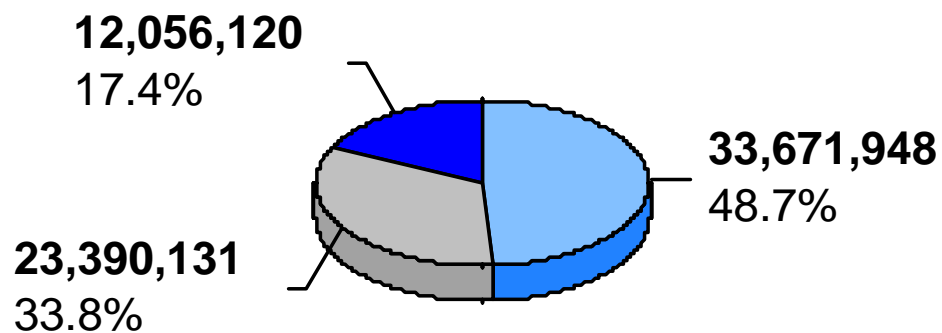
## 36,400 Customers



## Sales 8.6 Bcf

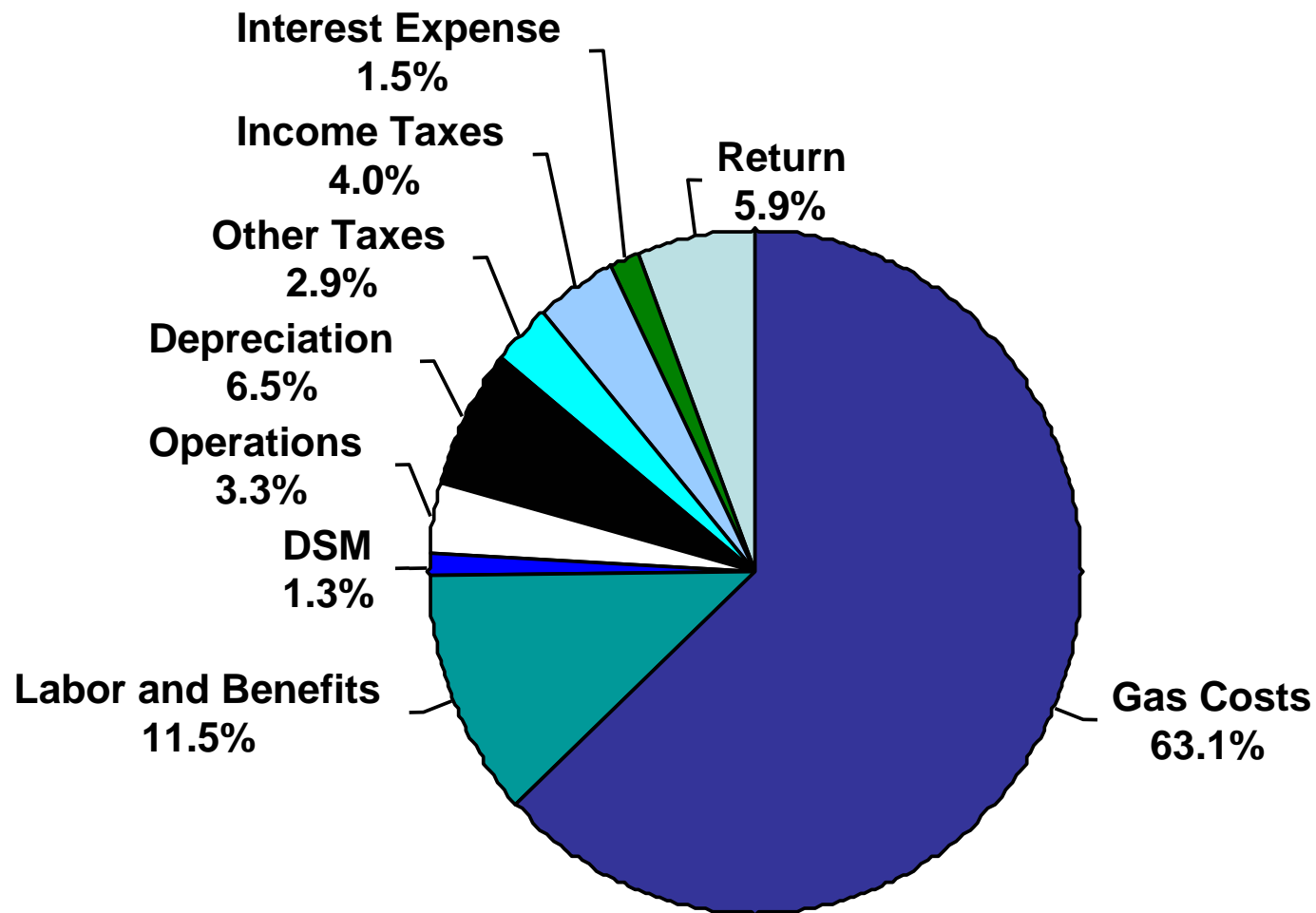


## \$69 Million Revenue



 Residential  Commercial  Industrial

# BREAKDOWN OF COST OF SERVICE



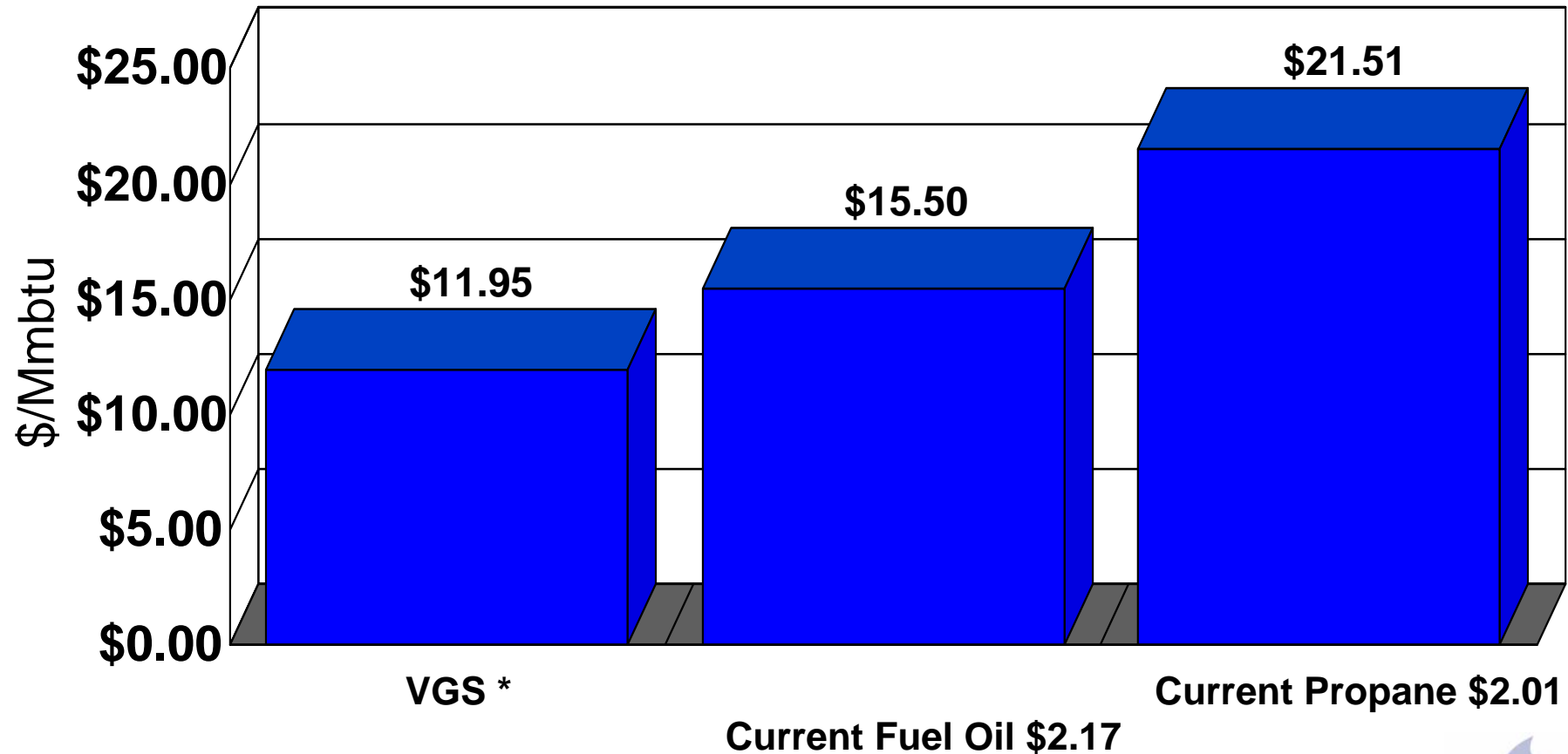
# NATURAL GAS PROVIDES VERMONT WITH SEVERAL BENEFITS

- Economical
- Competitive with other fuel options
- Clean and Efficient Energy
  - Reduces Vermont's Emissions
  - Reduces Truck Traffic on Vermont's Roads
- Supports The Local Economy
  - Supports local businesses
  - Creates employment opportunities
  - Contributes to Local and State tax base
- Supports Economic Development



# Fuel Price Comparison

## \$/Per MMbtu



*Propane and Oil Data Source: DPS Fuel Price Reporter - April 2005*

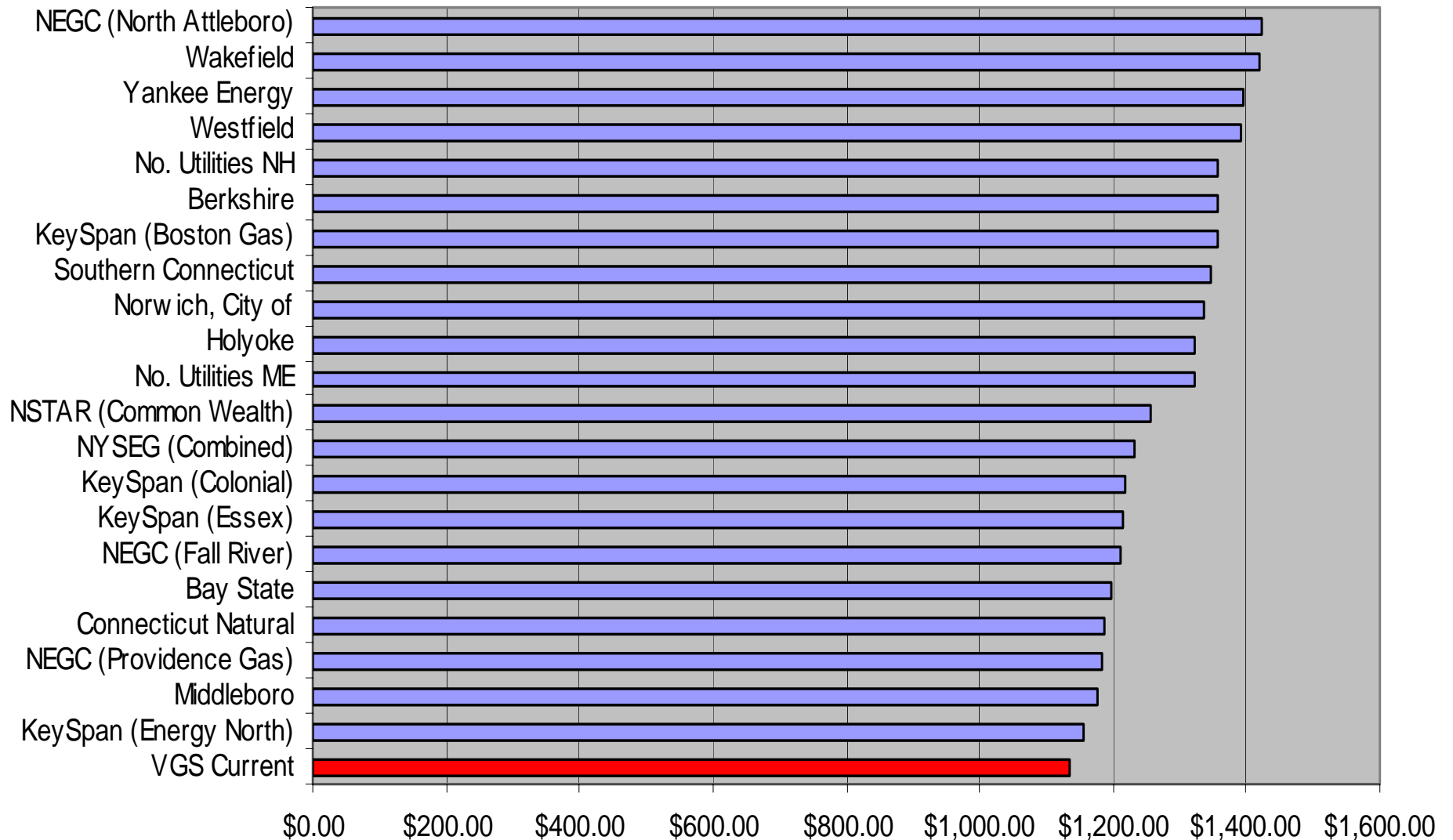
*\* Includes daily access charge*

*For all fuel types, excludes adjustment for efficiencies*



# Annual Residential Bill Comparison

(Based on 95 Mcf per Year)



# NATURAL GAS IS AN EXTREMELY CLEAN FUEL, PRODUCING LESS EMISSIONS THAN COAL, OIL OR WOOD

	Sulfur Dioxide	Nitrogen Oxides	Particulate Matter	Carbon Monoxide	Carbon Dioxide
	(pounds of emissions produced per billion Btu)				
<i>Natural Gas</i>	0.6	92	7	40	117,000
<i>Oil</i>	1,122	448	84	33	164,000
<i>Coal</i>	2,591	457	2,744	208	208,000
<i>Wood (Dry)</i>	25	490	360	600	195,000

Source: U.S. Energy Information Administration, U.S. EPA

- Natural Gas Has Displaced 4.3 Million Gallons of Annual Heating Oil Use in Vermont During the Past 10 Years



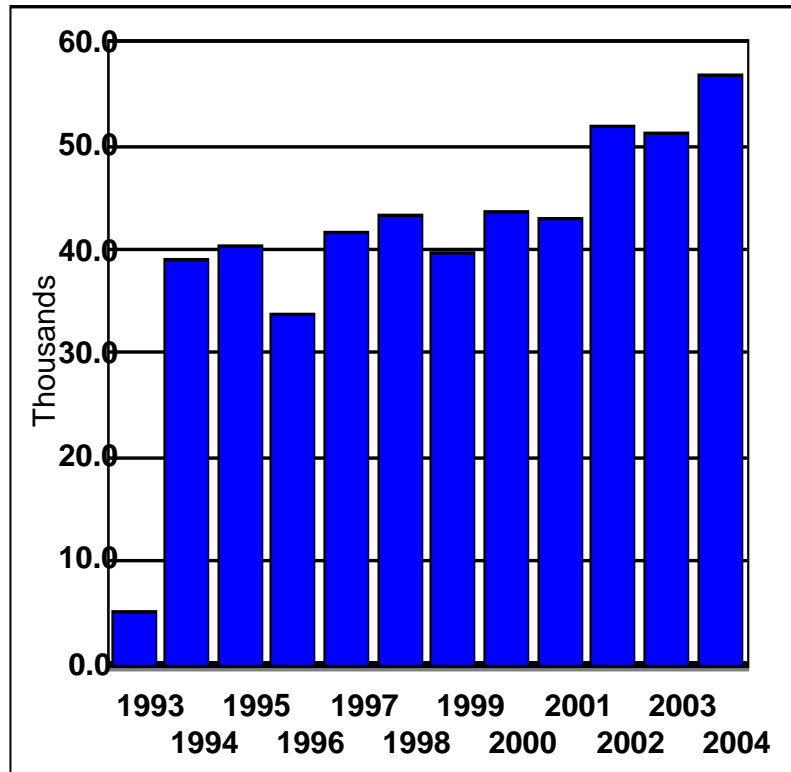
# **VGS IS COMMITTED TO ENERGY EFFICIENCY**

- **\$13.2 Million Invested in Energy Efficiency Since 1992**
- **Energy Efficiency Services Include:**
  - Technical and Financial Assistance
  - Home Energy Audits
  - Commercial Facility Audits
- **Invests \$1 Million per Year**
- **Programs Have Received National Recognition**
- **Highly Valued by Customers**
- **Avoided over 3,700 Mcf on Peak Day**

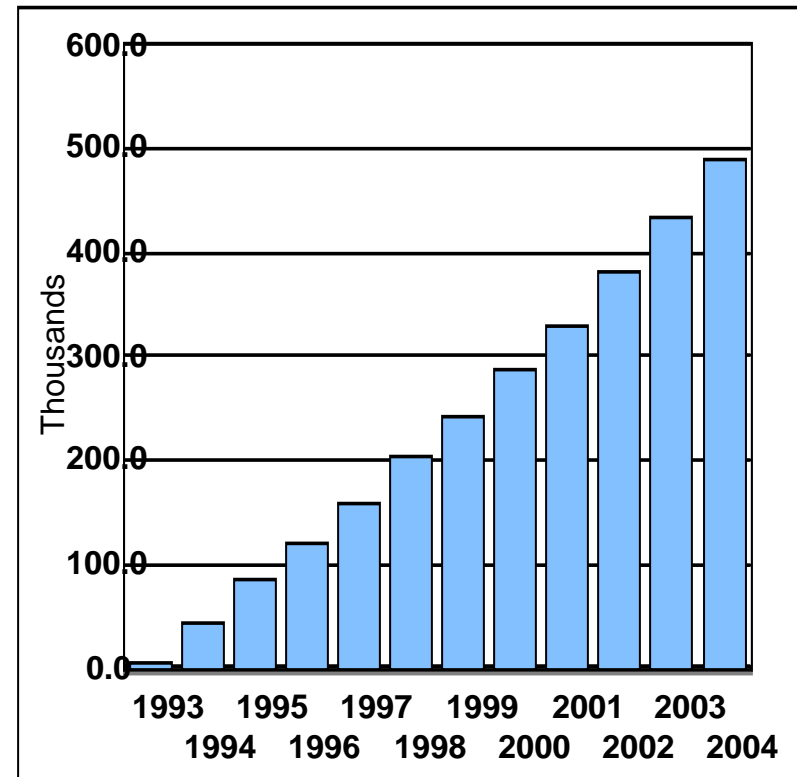




## Annual Mcf Savings



## Cumulative Mcf Savings



# MAJOR CONTRIBUTOR TO VERMONT'S ECONOMY

	(\$ Millions)
Annual Revenues	\$69.1
Annual Payroll	\$6.1
Annual Taxes & Fees	\$5.3
Total Plant in Service	\$106.9
Actual Investment Last 10 Years	\$61
Planned Investment Next 5 Years	\$42
Annual Investment in Energy Efficiency	\$1.0
Number of Full Time Employees	110



# **VERMONT GAS SYSTEMS OPERATIONS**

# VERMONT'S NATURAL GAS INFRASTRUCTURE



# TRANSMISSION SYSTEM

- Initially installed in 1965
- Began expansion in 1995
- Expands in 3 to 4 mile increments every 2 to 3 years
- Expands for overall system growth
- New federal monitoring rules



# DISTRIBUTION SYSTEM

- Each distribution system expansion evaluated to ensure revenue stream covers cost of service
- Need sufficient number of customers to warrant line extension
- In-filling and footprint expansion both key growth objectives



# DISTRIBUTION SYSTEM

- Rural and mountainous nature of Vermont makes expansion outside of existing footprint challenging
- Anchor loads are critical for cost effective expansion
- Expansion to areas currently not served may require initial subsidy from existing customers





# SAFETY FOCUS

- Gas control monitors system 7 X 24
  - Border station
  - Gate stations
  - Key customer locations
- Aggressive winter leak surveying
- Full replacement of cast iron and bare steel mains and services
- DOT operator qualification program



# SAFETY FOCUS

- Extensive personnel training
- Extensive training with local fire departments
- VGS federally and locally recognized for strong safety programs
- Active participation with Vermont Dig Safe®
- Close communication with local regulators



# COMMITTED TO CUSTOMER SERVICE

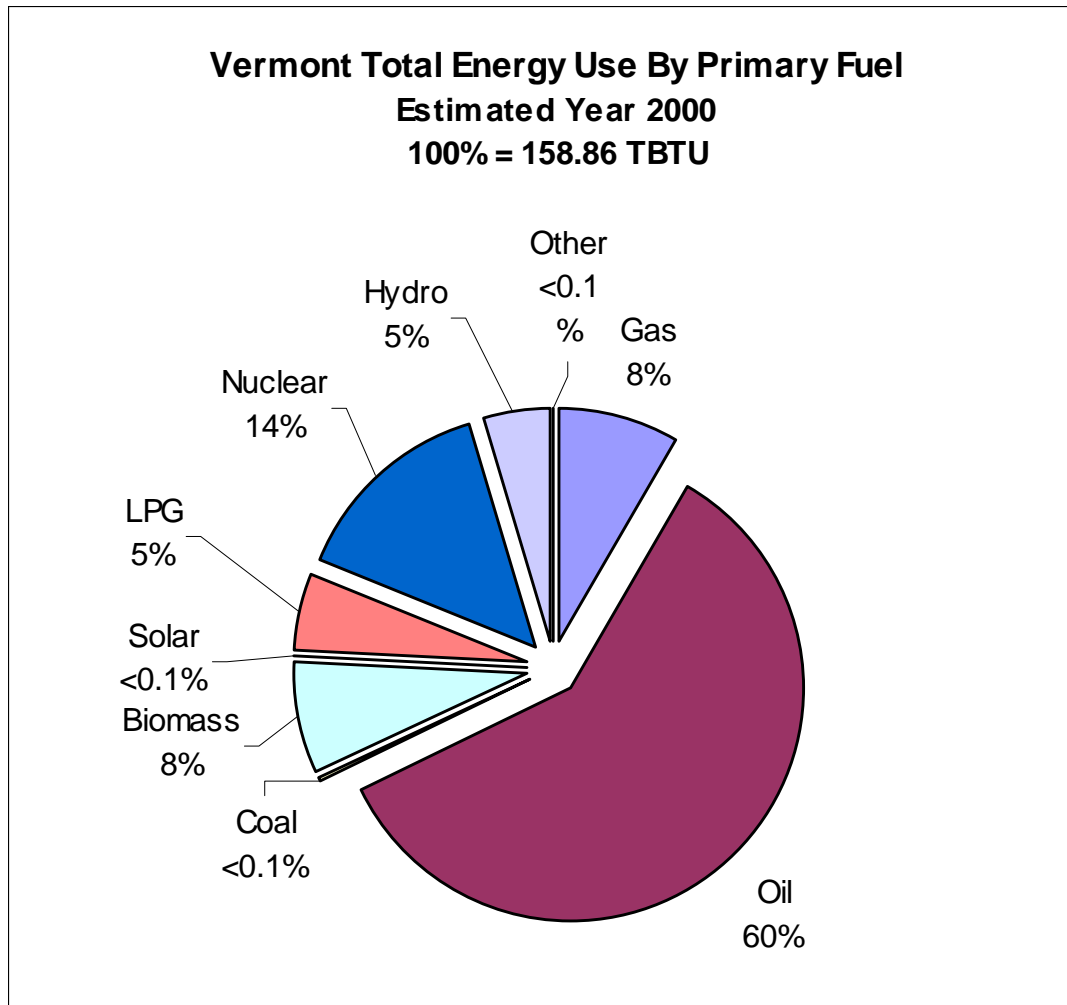
- Monitor, track, and report numerous customer satisfaction indicators:
  - Phone statistics
  - Emergency response times
  - Overall and specific customer satisfaction
  - Meter accuracy
  - Billing accuracy

# VERMONT GAS SYSTEMS CONTINUES TO GROW

- 3.9% customer growth in 2004
- Added 1,373 customers
- Constructed 32.8 miles of distribution pipe
- Constructed 2.45 miles of transmission pipe
- Invested over \$12 million in Vermont
- Evaluated expansion to other parts of Vermont
- 94% customer satisfaction



# Natural Gas Represents Only 8% of Vermont's Total Energy Use



Source: Vermont Department of Public Service

Economic Expansion of Natural Gas in Vermont has the Potential to:

- Reduce Air Emissions
- Increase Energy Efficiency
- Reduce Energy Costs for Vermonters



# Gas Supply Overview



# Gas Supply Objectives

- Meet peak day needs (86 degree day = -21 degrees)
- Meet annual requirements
- Minimize curtailments
- Procure safe, reliable, and flexible supply
- Minimize gas cost volatility
- Minimize cost and maximize margins

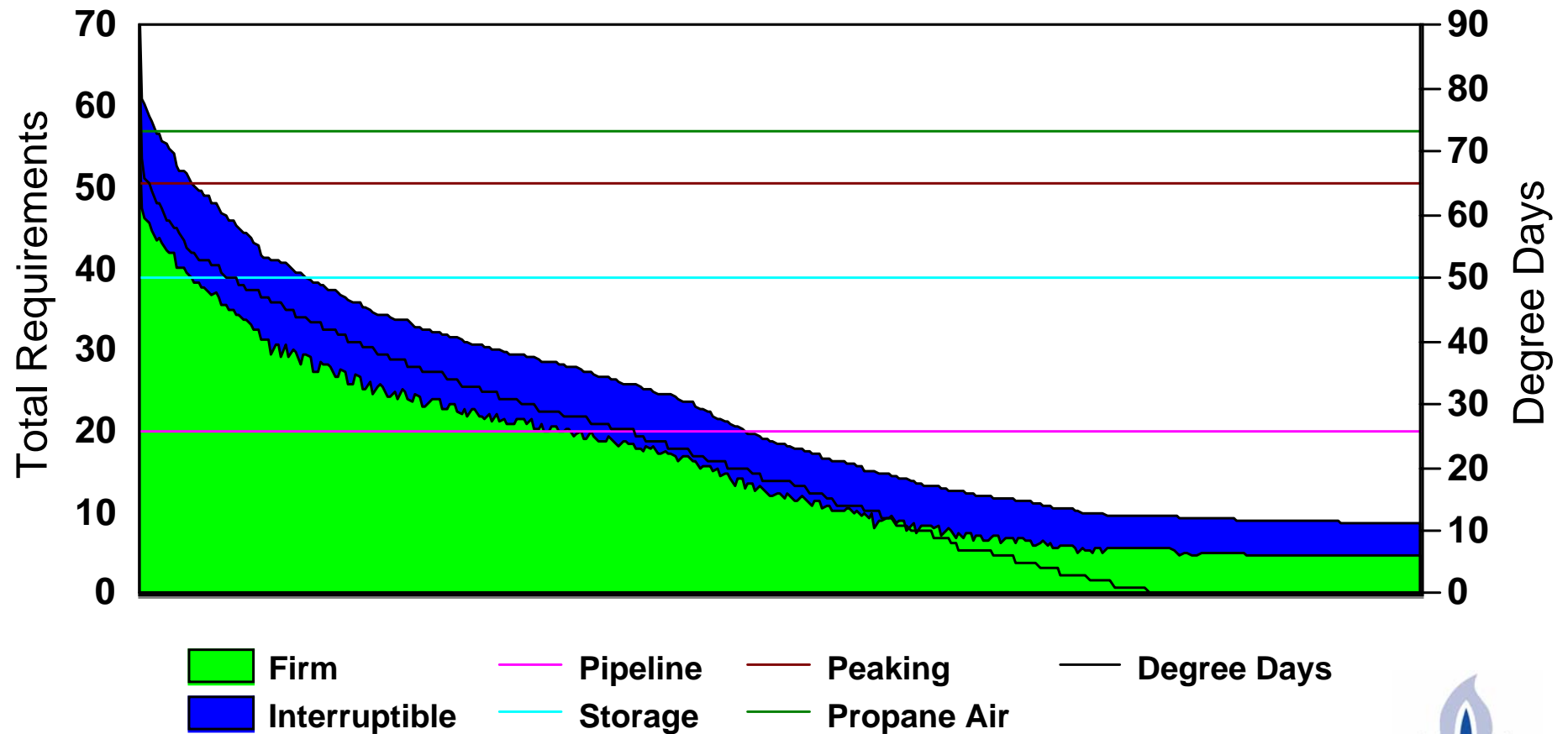




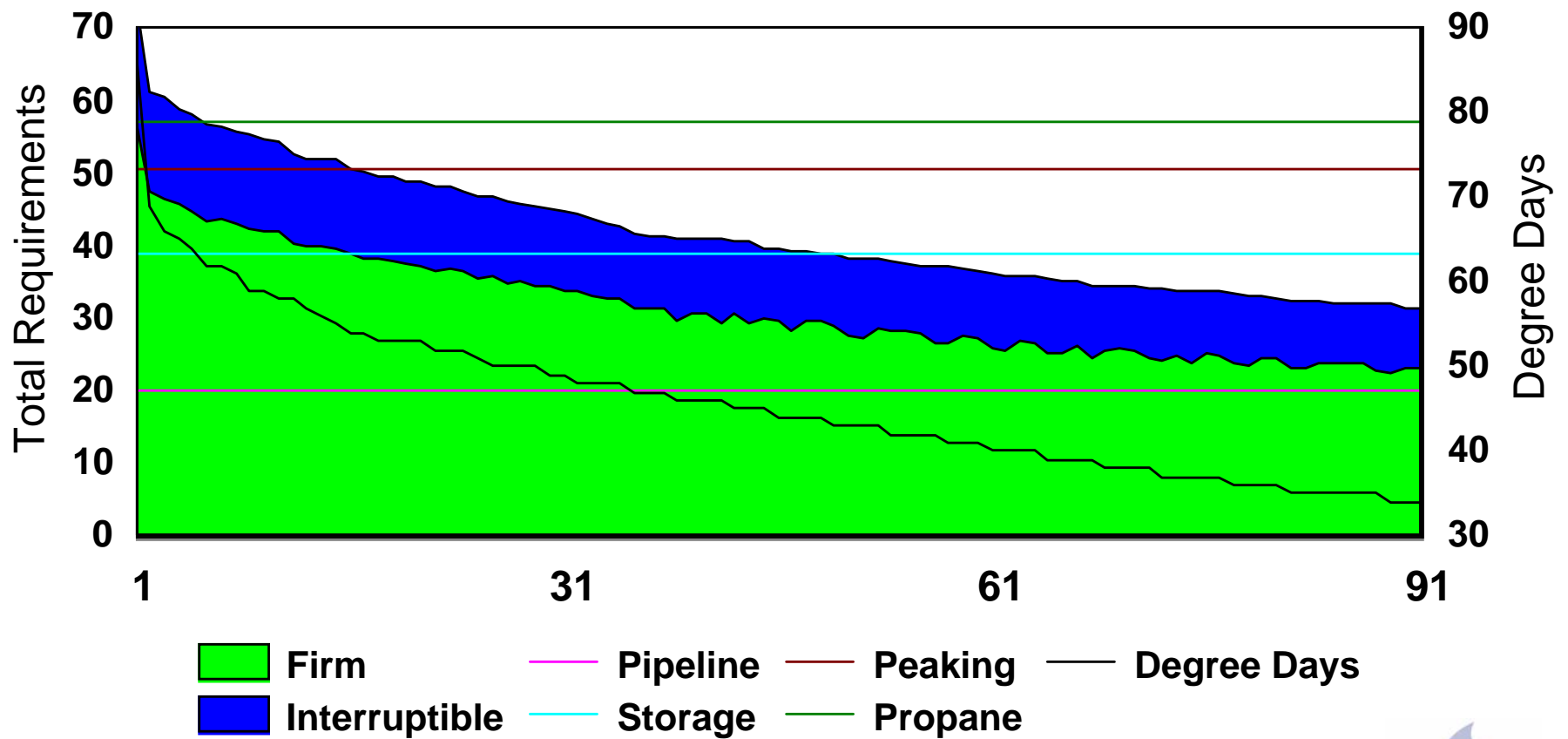
# NATURAL GAS PURCHASING

- Demand/Commodity pricing structure
- Demand charges reflect cost to move gas to Vermont
  - TCPL tolls regulated by Canadian regulators
  - Charge based on contractual quantity
  - Incurred regardless of volume of gas moved
- Commodity costs are volume and market-based

# Vermont Gas Systems Annual Load Duration



# Vermont Gas Systems Winter Load Duration

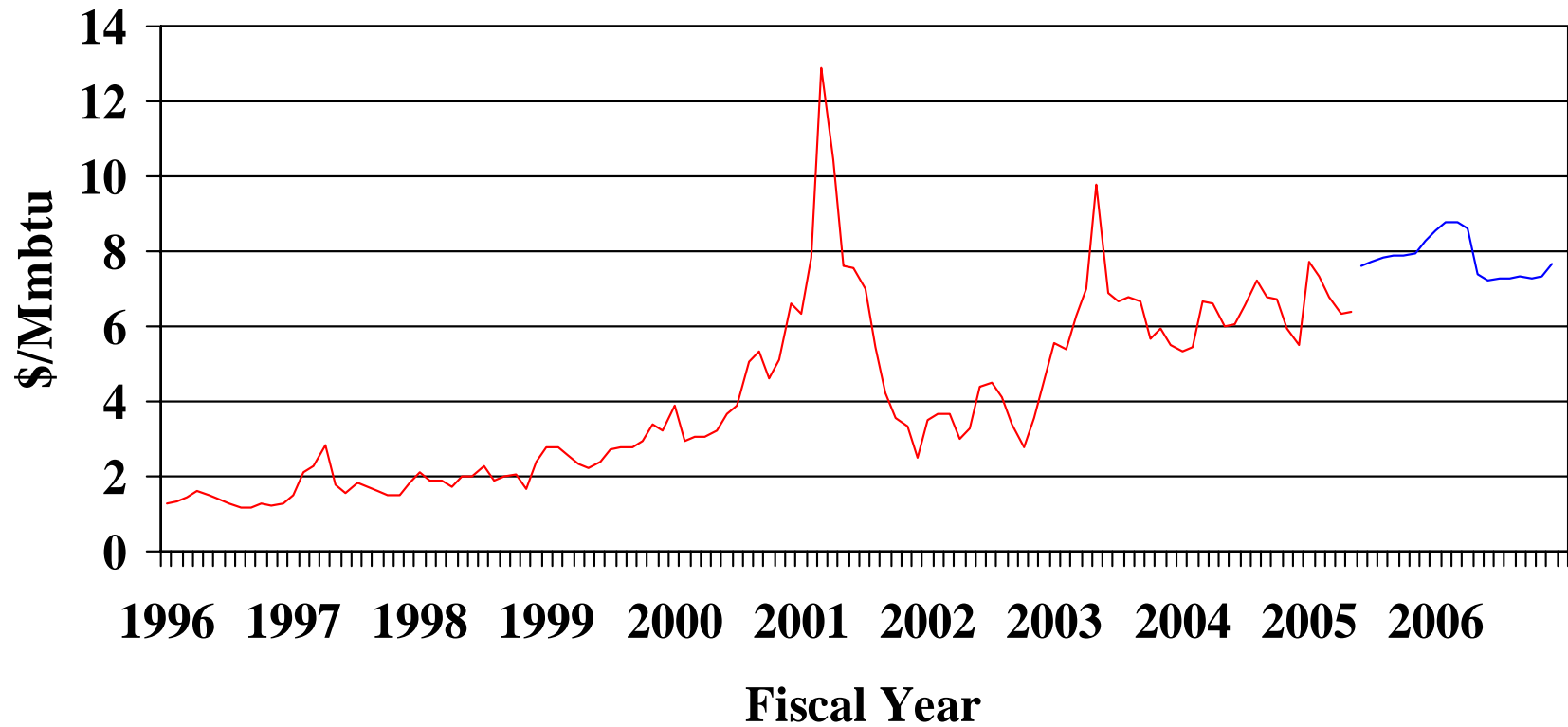


# VGS' PROPANE AIR PLANT



**Vermont Gas**  
CLEAN ENERGY.  
CLEAN AIR.

# NYMEX NATURAL GAS PRICE



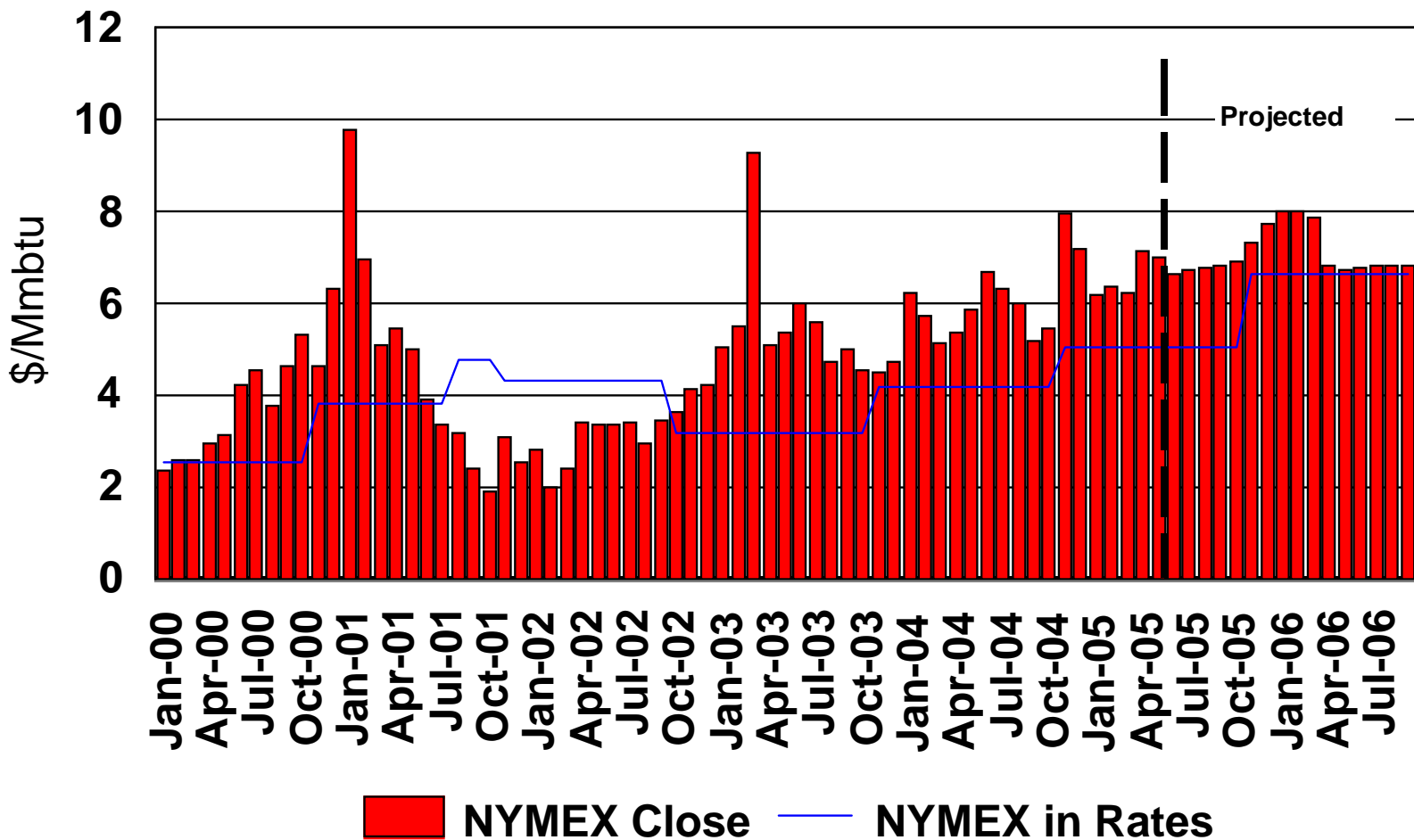
— 3 day close — Current Strip

# HEDGING STRATEGY

- VGS Uses Financial Instruments to Address Volatility, “Hedging”
- Must Align Hedging Strategy with Gas Cost Recovery
- Systematically Hedge Quarterly, 12 months at a time, 10 months in advance
- Take Longer Positions When Market is “Favorable”
- Seeking to Reduce Volatility, Not Predict “Best” Price



## Wholesale Natural Gas Prices Remain High Gas Prices in Rates Are Below Market





# FUTURE OF NATURAL GAS PRICES

- Many factors impact wholesale gas prices
  - Global economy
  - Oil prices
  - Environmental policies
- Numerous initiatives underway to bring more natural gas to market
  - LNG development
  - Development of “unconventional” resources
  - Additional supply basins developed



# Regulatory Overview

# NATURAL GAS REGULATION

- Because VGS does not cross state lines, primarily regulated by State (PSB)
- Federal Government (DOT) regulates pipeline operations
- No Federal Energy Regulatory Commission (FERC) jurisdiction



# RATE REGULATION

- Currently operating under “traditional” cost of service regulation
  - Historic costs adjusted for known and measurable changes
  - Establish appropriate rate of return
  - If fully litigated may take 8 ½ months to change rates
- Due to changes in natural gas industry, traditional cost of service regulation may no longer be best model
- Exploring Alternative Regulation models



# CONCLUSION

- Strong Company
- Providing Vermont With Clean, Economic, Reliable Source of Energy
- Potential to Provide More of Vermont's Energy Needs
- Challenges:
  - Addressing issue of gas cost recovery
  - Cost effectively expanding system

