

**Stephen P. Frink**

**Educational & Professional Experience**

Mr. Frink graduated from the University of New Hampshire with a Bachelor of Arts degree in Sociology in 1977 and a Masters in Business Administration in 1980. He attended and completed Depreciation Programs sponsored by Depreciation Programs, Inc. at Grand Rapids, Michigan in 1992, 1993, 1994 and is a member in good standing of the Society of Depreciation Professionals since 1994.

In 1981, Mr. Frink worked as a High School Math Teacher in Manchester, New Hampshire.

In 1982, Mr. Frink relocated to Texas and worked as an Auditor for Dallas County. He audited various county departments and performed monthly reconciliations of various fund accounts.

In 1985, Mr. Frink went to work for Schenley Industries, Inc., a wholesale liquor distributor located in Dallas, Texas, where he audited national and international manufacturing plants.

In 1986, Mr. Frink left Schenley to work for the City of Dallas as a Budget/Financial Analyst, where he prepared and monitored budgets, prepared pro forma statements, amortization schedules and performed cash flow analysis. He was promoted to Senior Analyst in 1987.

In 1988, Mr. Frink left the City of Dallas to work for the City of Austin as a Financial Analyst. There he prepared budgets and fiscal impact statements, developed a capital projects tracking and monitoring system, and provided training and technical assistance in the implementation of a new accounting system.

In 1990, Mr. Frink joined the Finance staff of the New Hampshire Public Utilities Commission. Working as a member of the PUC Audit Team, he conducted or participated in audits of the books and records of public utilities. He performed desk audits and determined rates of returns. He prepared schedules and exhibits supporting testimony in dockets involving rate increases and participated in settlement conferences. In 1995, Mr. Frink became a full time Analyst for the Finance Department and in 1996 was promoted to a Senior Analyst position, primarily responsible for analyzing and advising the Commission on issues of depreciation, cost of gas adjustment filings, special contracts, and finance and rate increase petitions. In 1998, Mr. Frink was promoted to Assistant Finance Director. As Assistant Finance Director, he assisted in the direction of all aspects of a department responsible for the audit, analysis and review of public utility financial operations, including financing, rate cases and various utility studies filings related to public utility regulation. In 2001, New Hampshire Public Utilities Commission operations were restructured and Mr. Frink became Assistant Director of the Gas & Water Division and now administers all aspects of regulation of gas utilities.

### Comparable Fuel Cost Calculator

At the current price of oil, \$1.92 per gallon, the equivalent Natural Gas per therm rate is \$1.38 per therm. Assuming typical boiler efficiency for oil and gas, the Natural Gas equivalent is \$1.53 per therm.

Comparable Fuel Cost Calculator - Oil to Natural Gas				Efficiency Calculator	
Complete the following three steps:			Btu/Unit	Typical efficiency & unit cost	
1. Enter current fuel ID Code (1 - 6):	1	Fuel Oil	139,000	80.00%	
2. Enter current delivered fuel unit cost:	\$1.9200	per gallon		\$1.9200	per gallon
3. Enter Alternate fuel ID code (1 - 6):	6	Natural	100,000	90.00%	
<b>Calculation Results:</b>					
Alternate fuel equivalent delivered unit cost:			\$1.3813	per Therm	\$1.5348 per Therm

At the current price of propane, \$1.99 per gallon, the equivalent Natural Gas per therm rate is \$2.17 per therm. Assuming typical boiler efficiency for propane and gas, the Natural Gas equivalent is \$2.41 per therm.

Comparable Fuel Cost Calculator - Propane to Natural Gas				Efficiency Calculator	
Complete the following three steps:			Btu/Unit	Typical efficiency & unit cost	
1. Enter current fuel ID Code (1 - 6):	2	Propane	91,600	80.00%	
2. Enter current delivered fuel unit cost:	\$1.9900	per gallon		\$1.9900	per gallon
3. Enter Alternate fuel ID code (1 - 6):	6	Natural	100,000	90.00%	
<b>Calculation Results:</b>					
Alternate fuel equivalent delivered unit cost:			\$2.1725	per Therm	\$2.4139 per Therm

Source: Equivalent pricing calculate using Fuel Cost Conversion Calculator on NHPUC website (<http://www.puc.nh.gov/Gas-Steam/naturalgasvsalternativefuels.htm>)

### Northern and Liberty Natural Gas Rates effective November 1, 2015 Residential Heating Customer (average winter usage for customer class)

Per Therm Rate	Northern	Liberty
Cost of Gas	0.6570	0.7516
Local Distribution Adjustment Clause	0.0374	0.1014
Delivery (including customer charge)	0.7641	0.5522
Total	1.4583	1.4049

Source:

Order No. 25,836 issued October 30, 2015 approving Northern Utilities, Inc. Winter 2015-2016 Cost of Gas, p. 4 'Per Therm Rates (weighted average) & Bill Impacts (average usage) in Dollars'

Order No. 25,833 issued October 30, 2015 approving Liberty Utilities (EnergyNorth natural Gas) Corp. d/b/a Liberty Utilities Winter 2015-2016 Cost of Gas, p. 4 'Per Therm Rates (weighted average) & Bill Impacts (average usage) in Dollars'

## **Dartmouth College Energy Working Group - Draft Findings**

### **ENERGY: VISION, GOALS AND METRICS**

#### **A vision for a brighter Dartmouth**

By 2019, Dartmouth will achieve a sustainable energy system and be among the nation's leaders in energy awareness, conservation and technology.

#### **Goals**

- 1. Reduce energy consumption**
- 2. Diversify our energy supply**
- 3. Move to renewable sources**
- 4. Embrace our energy system as part of the Dartmouth education and experience**

#### **Metrics**

We will know we are making progress towards our goals if:

- 1. We do report our energy use in quantities of fuel, Btus and Joules of energy, and greenhouse gas emissions, in absolute and relative terms and in real time.**
- 2. We express energy goals and projects in terms of dollar savings including net present value, energy savings and carbon emission savings per dollar expenditure.**
- 3. Most occupants of the campus know what Dartmouth's energy goals are, where their energy comes from and how Dartmouth is taking actions to make energy**
- 4. Most occupants of the campus are taking at least one action to improve energy sustainability.**

#### **ROAD MAP**

**immediate (0-2 years)**

##### **Process and Administration**

- 1. Implement an ongoing procedure for reviewing and revising our energy strategy**
- 2. Revise key job descriptions across campus to include sustainability criteria**
- 3. Develop strategies and mechanisms to link student projects and faculty research to campus energy systems**

##### **Energy Supply**

- 1. Get off #6 fuel oil by 2016**
- 2. Increase operational flexibility**
- 3. Reduce cost**
- 4. Mitigate and reduce long term risk**
- 5. Improve environmental, social and regional sustainability**

##### **Demand Side and Integrated Systems**

- 1. Complete CEMS installation and develop access for campus users (Fall 2012)**
- 2. Implement Revolving Loan Fund (Fall 2012)**
- 3. Develop a list organized by dollar impact, GHG impact and payback, of demand-side energy priorities**
- 4. Continue to aggressively pursue projects that reduce energy consumption among the largest energy users**
- 5. Communicate demand side management priorities to the campus community**

### **Sustainability Leadership**

- 1. Develop a set of criteria to guide energy choices including innovation, energy security, life-cycle cost effectiveness, risk management, financial responsibility, educational benefit and environmental impact**
- 2. Reduce fossil fuel consumption by 10% every year**
- 3. Investigate and install onsite renewables on campus for electricity, thermal, and other applications**
- 4. Use hedges (electricity and fuels) to reduce market exposure and GHG impacts (e.g. wind, solar, alternative oils, biomass pellets)**
- 5. Establish mechanisms to communicate about energy supply systems**

### **short term (2-10 years)**

- 1. Enhance diversification of onsite heating fuel supply to achieve at least a 60% reduction in GHG emissions**
- 2. Source energy from off-site renewable electric generation**
- 3. Provide access to data so that our community can develop pilot projects for innovative energy solutions**
- 4. Extend hedging period for 50% of our energy portfolio to 10-15 years**
- 5. Expand Revolving Loan Fund size to increase number and impact of energy projects**
- 6. Develop a robust behavior change energy conservation program**
- 7. Develop energy performance standards for new buildings and renovations**
- 8. Identify opportunities for system improvements such as but not limited to changes in heat delivery systems and utilization of waste heat**
- 9. Provide access to data so that our community can develop pilot projects for innovative energy solutions**

### **long term (10-50 years)**

- 1. Aggressive diversification towards sustainable, place-based and practical energy supply with the expectation of reaching 100% renewable sources**
- 2. Aggressive implementation of energy efficiency and conservation measures throughout campus including behavior change to reflect values**

Source:

<http://sustainability.dartmouth.edu/power/energy-working-group/energy-working-group-draft-findings>