

# The Detroit Thermal VOICE

SUMMER 2003

DETROIT THERMAL, LLC IS A THERMAL VENTURES II, LP COMPANY

## NEW COMPANY BRINGS A NEW COMMITMENT TO DETROIT

*Welcome to the first issue of the Voice. This newsletter gives me an opportunity to introduce you to Detroit Thermal, its management team and its parent company, Thermal Ventures II, LP. Future issues will keep you informed on important energy matters.*



Jeffrey P. Bees

We are delighted to be in Detroit and to take over one of the largest district heating systems in the country. And we are proud to have the opportunity to steer the business into the future.

We have extensive experience in district energy operations, experience that will be of great benefit to our Detroit customers. For instance, operating other systems has taught us that our top priorities must be safety, reliability and efficiency.

We are already addressing a number of important issues such

as the columns of steam that plume from some manholes. We are also tackling efficiency issues by undertaking a thorough review of the company's distribution system and generation facilities. We plan to invest more than \$24 million over the next three years to ensure the efficiency of the system's infrastructure.

That investment is evidence of our emphasis on long-term reliability. Clearly, we are committed to Detroit. In spite of the uncertain economic conditions that currently trouble the entire nation, Detroit shows the promise of rebirth. Economic development has taken hold in many areas within the steam district. Vibrant theaters, new ballparks, high office density and an expanding university are evidence that the city is strong and dynamic. We believe Detroit is on the verge of great things, and we want to be part of them.

Improving Detroit's steam system is a challenge we know we can meet. We also know it won't be done overnight. It takes time to make upgrades. It takes perseverance to make a difference. It takes patience to see results.

We hope that you, as a thermal energy customer, understand the magnitude of the task that lies before us. Your cooperation,

as well as that of city, county and state agencies, is crucial to a thriving thermal energy system.

There are many benefits to district energy. Detroit Thermal plans to bring those benefits to all of its customers.

A handwritten signature in blue ink that reads "Jeffrey P. Bees".

Jeffrey P. Bees ■

### MEET THERMAL VENTURES II, LP

See the back page for an introduction to Detroit Thermal's parent company. ■

# A TOUGH SEASON REFLECTS LONG-TERM TREND

*Boots are put away and heavy coats shoved to the back of the closet, and in these balmy days of summer it is almost easy to forget the bitter cold weather of this past winter. Almost, but not quite, especially for those who track natural gas prices.*

## COLD WINTER DRIVES UP PRICES

“Up until late December, we experienced warmer-than-average weather, so natural gas reserves were high. Late in the month, temperatures dropped, and they

stayed down for most of the heating season. Storage reserves fell, and gas prices rose,” said Mark Butta, vice president of project development for Thermal Ventures II. Butta tracks fluctuations in the price of natural gas for all Thermal Ventures II systems, including Detroit Thermal.

The winter turned out to be one of the coldest and longest in recent history. As a result, demand for natural gas soared and the industry reduced the amount of gas in storage. During the shoulder months of March and April, when the weather is always unpredictable, there were prolonged cold spells that further depleted storage reserves and put pressure on prices.

## LONG-TERM TREND IS UP

But the fluctuations of this winter

were only blips in a slow, overall increase in the cost of gas that Butta says has been going on for at least three years.

“In spite of short-term ups and downs, the overall trend has been a steady increase in natural gas prices,” Butta said. That concerns him because natural gas is the fuel that is most commonly used to produce thermal energy.

Weather is only one of many factors that affect the cost of natural gas. The domestic economy also plays a role, and with the erosion of the stock market and investment money in short supply, there has been less capital available for exploration and drilling. Furthermore, most new energy generating facilities are designed to use natural gas because it is an environmentally friendly fuel.

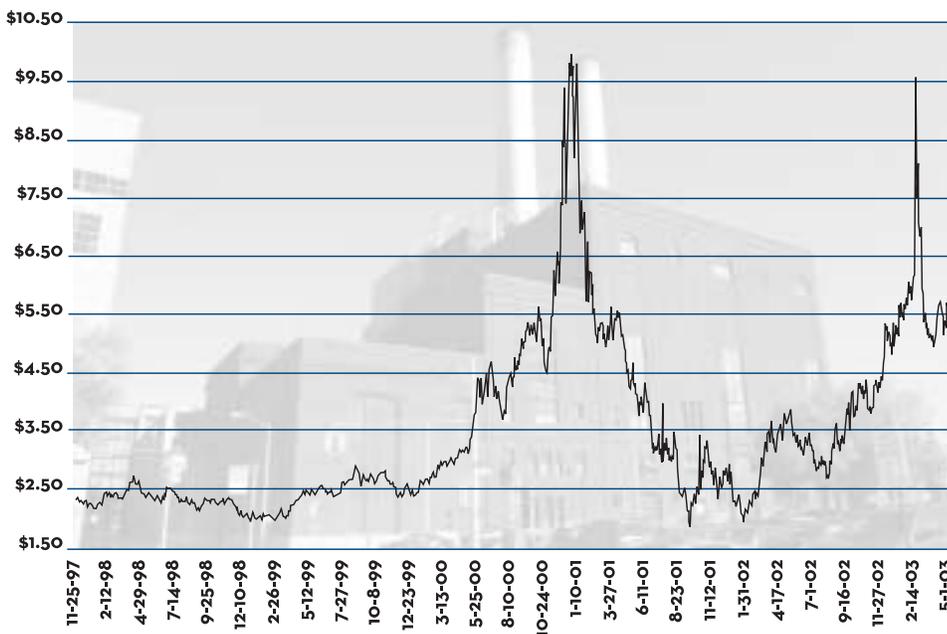
“Overall, we’ve seen an increase in demand but not a corresponding increase in new wells being drilled,” Butta said.

Detroit Thermal is able to mitigate the risk of rising natural gas prices because some of its boilers can also burn fuel oil and the city’s Resource Recovery facility produces some of the steam that the company uses.

“These factors help mitigate our risk,” Butta explained. “They give us flexibility and shield us from the volatility of the gas market.” ■

## DAILY CLOSING PRICE FOR NATURAL GAS FUTURES ON THE NEW YORK MERCANTILE EXCHANGE

\$ PER MMBTU



Until 1999 the price of natural gas was fairly stable and predictable. Since that time the price of natural gas has fluctuated greatly, ranging from less than \$2 to close to \$9 per MMBtu. Companies that buy natural gas have to be prepared to deal with the volatility of the market.

## YOU'VE GOT OUR NUMBER

Report problems, get answers to questions about steam, set up a service call or discuss your bill by calling **313.963.3844.** ■

# DETROIT THERMAL MANAGEMENT TEAM HAS WHAT IT TAKES TO SUCCEED

GM: CLEAR GOALS –  
AND NEEDED KNOW-HOW



Chuck French

**Chuck French**, the general manager of Detroit Thermal, has two goals: Modernize the system and increase the customer base.

“We are in the process of developing a mission statement for Detroit Thermal,” French said. “But even before we get that done, we know what our priorities must be – to improve efficiency and reliability and to focus on our customers.”

French comes to Detroit Thermal from Foster Wheeler Power Systems in Clinton, New Jersey, where he served as director of services and contracts. Foster Wheeler develops, owns and operates power-generating facilities in the United States, Europe and South America. Earlier, French worked for Ahlstrom Pyropower in San Diego.

He has extensive experience in the startup, operation, maintenance, business development and

project management of new and existing power and steam generation facilities.

“Those positions provided me with experience in managing operations and developing new business that will be extremely helpful as we work to modernize and grow Detroit’s thermal energy system,” French said.

French says he looks forward to working with current customers and with building owners and architects planning renovations or new facilities in the area served by Detroit Thermal.

“There is tremendous opportunity in Detroit, and I’m glad to be part of it,” French said.

EARLY EXPERIENCE BENEFITS DETROIT



Paul Razo

**Paul Razo**, distribution manager for Detroit Thermal has managed Thermal Ventures II steam distribution systems in Boston, Cleveland, Akron and San Francisco. “The systems are different but the needs and issues are the same,” Razo said.

“Working in a variety of cities has given me experience in diverse solutions to common problems.”

That experience will be beneficial to Detroit Thermal customers as Razo works on enhancements that improve the distribution system. Razo’s expertise in steam distribution began more than 20 years ago when he worked as a millwright in the power plant of Republic Steel. He was also a stationary engineer and earned an associate’s degree in electrical engineering.

He comes to Detroit from the Thermal Ventures II Youngstown Plant where he served as general manager for the past two years.

DETAILED KNOWLEDGE OF SYSTEM FACILITATES TRANSITION



Roosevelt King

**Roosevelt King** brings more than 32 years of power plant operation experience and expertise to his position as plant manager for Detroit Thermal. Prior to joining Detroit Thermal, King served as director of central heating for

Detroit Edison Thermal Energy. In that position he was responsible for all aspects of steam plant operation at the facilities that are now part of Detroit Thermal. King has a first-class Stationary Engineers license. King joined Detroit Edison in 1966.

**BROAD EXPERIENCE  
AT EXECUTIVE LEVEL**



Jeffrey P. Bees

**Jeffrey P. Bees**, chief executive officer of Detroit Thermal, is also the CEO of Thermal Ventures II. Jeff has nearly 20 years of experience in district heating.

Before becoming CEO of Thermal Ventures II in 2002, he served the company as a general manager of operating units, vice president of business development and chief operating officer. Prior to joining Thermal Ventures II, Bees was a participant in the formation and development of Catalyst Thermal Energy Corporation.



Richard Pucak

**Richard Pucak**, manager of operations for Detroit Thermal and Thermal Ventures II, has held management positions in the

district heating systems of Youngstown, Cleveland and Akron, Ohio; St. Louis and Boston. During his many years in the district energy industry, he has served in both plant and distribution management positions and gained extensive experience in all facets of district energy operations.



Mark Butta

**Mark Butta**, vice president of business development for Detroit Thermal and Thermal Ventures II, joined the company in 2000. At Detroit Thermal, Butta is responsible for project management and developing business relationships that advance the use of district energy. Butta is a mechanical engineering graduate and has advanced degrees in engineering technology. Before joining Thermal Ventures II he worked in the oil and natural gas industry where he managed commodities risk and marketing. ■

## SYSTEM SUMMER MAINTENANCE

Summertime is a good time to take care of minor routine maintenance on your building's steam system. It is also the right time to fix any problems that may have developed during the past heating season.

Take a few minutes to examine your steam system while it is off.

- Check control valves.
- Clean coils.
- Change air filters. ■



# STEAM PLUMES ARE VANISHING INTO THIN AIR

*Motorists and pedestrians have already noticed the presence of Detroit Thermal. Some of the worst steam plumes, those eerie columns of steam that rise from manholes and bother drivers and pedestrians, have been eliminated. Others are slated for elimination soon.*

"We are very aggressive in attacking the plumes," said Paul Razo, Detroit Thermal manager, distribution. "There is a noticeable difference in the area near the Detroit Medical Center, especially around the intersection of Mack and Brush."

## **DETROIT THERMAL TAKES FAST ACTION**

Detroit Thermal acts quickly to eliminate the hazards of steam plumes by installing stacks to divert the steam from street level up to a height that is well beyond eye level. If the plume is from a manhole located in the middle of the street, the company installs a solid manhole cover in the street and positions a stack or chimney

by a curb or in a parking lane. Steam is diverted to the stack through an underground conduit.

"We solve the immediate problem, then go on to a more complex, permanent solution," Razo said. Permanent solutions often involve extensive excavating, fixing leaks, insulating pipes and making other repairs.

Any one of a number of factors can cause a steam plume. For instance, a leak in a steam distribution pipe might be responsible, or the drip of a water leak hitting hot pipe, or cold air from the street mixing with hot, humid air in the manhole.

In addition to finding the cause of the problem, Razo and his crew of service experts also have to find its site. Problems can originate anywhere along the line, and the steam travels through the tunnel until it finds a place to escape.

## **PERMANENT REPAIR WORK UNDER WAY**

Detroit Thermal positioned six stacks in the Medical Center soon after taking over the steam system. The underlying problems have been fixed and the stacks removed at four sites, and the company will complete permanent repair work at the other sites by mid-summer.

The company has also made repairs along a long stretch of the Woodward steam line. There were so many steam plumes along the Woodward line that Detroit Edison shut it down in November. Detroit Thermal made the necessary repairs and reopened the line in early April.

"We had to repair four buried leaks in the Woodward line," Razo said. The repairs involved



**Paul Razo inspects a steam plume in preparation for repairs that will eliminate the problem.**

excavating between manholes, replacing four large sections of pipe and changing gaskets in manholes.

However, Detroit Thermal went further and made improvements designed to enhance the line's durability over the long run. The company replaced existing steam traps with more expensive, longer-lasting traps and installed pipes that run from manholes to sewers to reduce the vapor that exits from manholes into streets.

"These are expensive repairs, but they are long-lasting improvements to the steam distribution system," Razo said. "They are part of our effort to get the system into great shape so we can provide our customers with reliable, cost-effective energy for decades to come." ■

# INTRODUCING DETROIT THERMAL, SPECIALISTS IN DISTRICT ENERGY

*Thermal Ventures II, LP, of Youngstown, Ohio, a company with extensive experience in district heating and cooling, has acquired the downtown Detroit steam system formerly owned by Detroit Edison. A new entity, Detroit Thermal, LLC, headquartered at the Beacon Plant on Madison Avenue in downtown Detroit, has been formed to run the system.*

Thermal Ventures II adds the Detroit system to the roster of district heating and/or cooling services it operates in Ohio, Virginia, Tennessee and California.

Thermal Ventures II managers have extensive experience in the district energy industry. The professional, technical and operational experience they have gained in cities such as San Francisco, Boston, Pittsburgh, St. Louis, Baltimore, Philadelphia and Cleveland gives them the expertise they need to provide high-quality service to Detroit thermal energy customers.

Thermal Ventures II focuses solely on district energy. Its management team firmly believes that steam and chilled water are uniquely suited to the energy needs of densely populated areas.

They know that a properly managed district heating system provides convenient, efficient, reliable, cost-effective heating and cooling, and they are committed to providing these advantages to their Detroit customers.

Detroit's steam system has been in service since 1903 and currently serves more than 275 buildings. The approximate boundaries of the system are Grand Blvd. and Jefferson Avenue on the north and south, and I-75/375 and the Lodge Freeway on the east and west.

Customers may contact Detroit Thermal at 313.963.3844. ■

Thermal Ventures II, LP  
District Energy Systems  
Akron Thermal Cooling, LLC  
Detroit Thermal, LLC  
Hohenhold Thermal, LLC  
Martinsville Thermal, LLC  
Richmond Thermal, LLC  
Santa Ana Thermal, LLC  
Thermal Ventures  
of Orange County, LLC  
Youngstown Thermal, LLC

**Detroit Thermal, LLC**  
541 Madison Avenue  
Detroit, Michigan 48226  
Phone 313.963.3844  
Fax 313.963.7285