

District Heating & Cooling

Volume 75 Number 2

Fourth Quarter 1989



Two Special Features

R&D—Part I

Three Articles on
Industry Research
First in a Two-Part Series

CFCs and Alternatives

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Milwaukee and St. Paul Sign
New Customers

DHC Space—A Spotlight on
System Growth

District Energy St. Paul Downtown Customers Bring Vision to Reality



*Town Square in downtown St. Paul is on the grow and nearing its tenth anniversary.
Courtesy of BCED Minnesota, Inc.*

By Monica L. Westerlund

As the 1980s come to a close and a new decade comes over the horizon, District Energy St. Paul Inc. and two of its newest customers—Town Square and the Minnesota TeleCenter—are gearing toward the future and bringing vision to reality. In many ways, District Energy St. Paul Inc.'s vision has become a reality, with its hot water district heating system in its seventh year of operation and serving over 70 percent of the office space in downtown St. Paul.

***“We’re seeing a need to
redirect our resources . . .
and district heating will
help us do that.”***

**Steven Pauling, Operations Manager
BCED Minnesota, Inc.**

Town Square, now owned and managed by BCED Minnesota Inc., had a vision for downtown St. Paul's retail future and was a pioneer in its revitalization. KTCA-TV Channel 2, at home in St. Paul's new Minnesota TeleCenter, has brought vision—as well as visuals—to the community and to the nation as one of the country's top Public Broadcasting stations. Both

Town Square and the Minnesota TeleCenter are District Energy St. Paul customers.

With 220,000 square feet of retail space, two office towers and an indoor City park, Town Square is one of District Energy's largest customers. That's certainly a long way from the late 1970s when the land on which Town Square now stands was known as the "superhole." But with the commitment and vision of the developer, the City and the downtown business community, the hole was soon filled, and girders began to rise on the horizon. In October 1980, Town Square officially opened its doors and ushered in a new era of retailing in downtown St. Paul.

"My criterion was that the system had to be simple and manageable . . . so HGA recommended (KTCA) use district heating . . . and it certainly didn't hurt that (it) also means lower capital costs than installing a boiler, and the equipment takes up less space."

Kurt Johnson, Project Engineer
Hammel Green & Abrahamson

"It was an exciting time for us," says Pam Kulkey, promotions coordinator for BCED Minnesota. "St. Paul was going through major urban revitalization, and this was the chance for retail to regain its place downtown. The best part about it is that it worked." According to Kulkey, business has increased even more with the addition of nearly 70 new shops in the nearby Town Court, which combined with Town Square comprises the Saint Paul Center.

But Kulkey cautions that success won't lull them into complacency: "You always have to anticipate what the consumer wants and needs," she says. "That's why we extended our hours and offer free parking in the evenings and on the weekends. We also have to keep up with the trends so our mix of retail shops offers something for everyone."



Minnesota TeleCenter, future home of KTCA-TV Ch. 2 and KTCI-TV Ch. 17, under construction in downtown St. Paul. Courtesy of KTCA-TV

Tenant Comfort is Developer's Main Concern

That "something for everyone" wouldn't mean a thing, however, if Steven Pauling, BCED Minnesota's operations manager, and his staff weren't on the job to ensure Town Square is comfortable, clean and accessible. "It's our job to do everything we can to help our visitors enjoy their shopping, and make sure our tenants are pleased with their retail and office space," he says.

"That's one of the reasons we decided to install district heating," Pauling claims. "We were concerned about the hot and cold spots we had in our building using our heat pump system." District heating helps Town Square have more control over its heating system. It has also allowed BCED to install an energy management system, helping Pauling and his staff implement night setbacks, program their preventive maintenance programs and track more information more accurately.

According to Pauling, installation of district heating and the new energy management system are typical of BCED's commitment to recognizing the value of technology. "BCED recognizes the importance of applying new technology to everyday work responsibilities," says Pauling. "We certainly want to stay a jump ahead of the competition. All you have to do is walk through buildings and you know which ones are staying at the forefront of technology."

But it isn't just technology that is changing. Pauling claims tenants are changing as well. "Our tenants are becoming more

sophisticated and placing more demands on building management," states Pauling. "We're seeing a need to redirect our resources—very astutely. And district heating will help us do that. It's easy to operate, so I can direct my staff to other areas of serving tenants rather than babysitting a boiler."

BCED began converting Town Square to the district heating system in the fall of 1988. The conversion included installation of two main heat exchangers in the building's mechanical room and connecting pipes to the district heating system. The building began using heat in late January.

District Heating Keeps Broadcasting the Focus


While January brought heat to Town Square, it brought excitement to KTCA/KTCI-TV as workers began to install broadcast cables in the stations' soon-to-be new home, the Minnesota TeleCenter. For KTCA officials, the move to the new building came none too soon.

"We've increased our activity 300 percent since 1979, but our physical space has increased less than 26 percent in the same period," says Peter Myers, head of KTCA's corporate communications. "We were practically bursting at the seams with staff housed in four temporary trailers and at satellite locations in Energy Park. The TeleCenter allows KTCA and KTCI to expand their local and national programming, be

(Continued on page 47)

the risk of tube corrosion. For more information, contact Dick Schaaf at 14573 Grand Avenue South, Burnsville, MN 55337, (612)-435-3630; FAX: (612)-435-1765.

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St. Paul, continued from page 18

more cost-effective in their operations and stabilize their financial base.


The 82,000-square-foot TeleCenter includes three studios, telecommunications capabilities, a 400 percent increase in set construction and storage space over the old site, room for administrative offices and even vertical expansion potential.

Located at the corner of Kellogg Boulevard and Jackson Street, the TeleCenter is home to KTCA-TV, which is nationally recognized for its innovative and quality programming. "It all goes back to the philosophy that we should look at things with a fresh point of view and not just do the obvious," says Myers. "It's important to us to have a vision and take an off-center look at things sometimes. It's all a part of making television interesting and something to think about." Some of the station's most popular programs are the locally produced Newton's Apple and Alive from Off-Center.

To maintain high-quality programming, KTCA officials placed special emphasis on the TeleCenter's acoustical engineering. Kurt Johnson, project engineer for Hammel Green & Abrahamson, the project's architectural and engineering firm, says the building was designed with top sound-quality in mind: "The TeleCenter's studios have been designed for a noise criteria level of 15. That's about the same as for a concert hall. It will certainly give KTCA some of the best studios in the Midwest."

Johnson says it was also important to select the right heating system for the facility. "Not only does that affect acoustics," states Johnson, "but it means a lot in terms of operation. My criterion was that the sys-

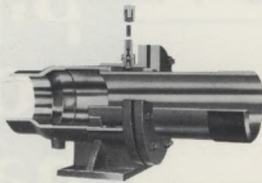
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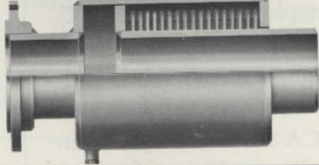
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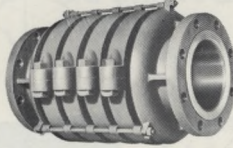
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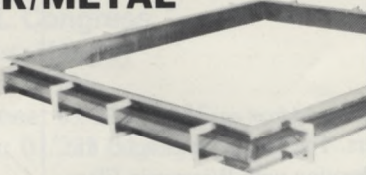
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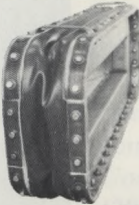
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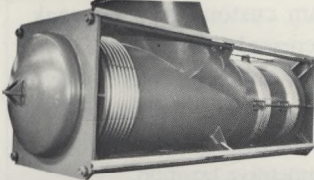
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tem had to be simple and manageable. KTCA is in the business of operating a broadcast studio, not a building. So HGA recommended they use district heating to keep operation as easy as possible. And it certainly didn't hurt that district heating also means lower capital costs than installing a boiler, and the equipment takes up less space."

KTCA's Peter Myers acknowledges that even the move itself proved challenging. The station had to remain on the air even while the technical equipment was in transit. "No matter what, we just had to have the capacity to do the production work. We certainly couldn't let our viewers down." A special team of employees coordinated the move over a two-month period—just to make sure everything ran smoothly.

It's this kind of vision and dedication that has made KTCA and Town Square winners. Along with District Energy St. Paul, they've had a vision for a even brighter future. Together, all can look forward to a stable energy future that will ultimately stimulate St. Paul's economic growth and ensure pleasant surroundings for its citizens.

Monica L. Westerlund is principal of Westerlund Communications, a Twin Cities marketing communications firm.



Milwaukee, *continued from page 16*

steam customers. The booklet highlights the advantages of heating with Wisconsin Electric steam, the many uses for the product, and the extent of steam service in the downtown area. The brochure is also being used to tell the story to developers, architects and engineers, and position purchased steam as the energy of choice for their project's heating and process needs.

"Our marketing efforts will directly benefit all steam customers," Barczak points out. "Increased sales enable us to keep our rates low and competitive. There is plenty of steam available, we just need to do a better job of marketing to maintain and improve our competitive position."

With almost 500 customers on the system, Milwaukee ranks seventh among district heating utility operations in the United States, not bad for the nation's 26th largest metropolitan area. "It's more important than ever," says Barczak, "that we show our existing and prospective customers that our concern for them doesn't end when they become customers. We have learned that we need to do more for them and with them. Our future and theirs depends on it."



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