

FINANCING THE ROCHESTER DISTRICT

HEATING COOPERATIVE

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"As capital markets have tightened in the face of escalating interest rates and recessionary cycles, lenders have sought more protection for projects deemed risky. The situation has usually led to higher financing costs and requirements forcing communities to commit their full faith and credit to a district heating and cooling or cogeneration project."

This quote from the Committee on District Heating and Cooling's 1985 study describes the economic reality of many project financings. The issues such transactions face are numerous and complex. All of us who participated in the Rochester District Heating Cooperative (RDH) bond financing last December grew to appreciate this complexity.

In December 1985, Manufacturers Hanover marketed a \$9 million tax-exempt bond issue for the Rochester District Heating Cooperative. It was accomplished without incurring high financing costs or requiring the full faith and credit of any Cooperative member. In fact, the first interest rate on the bonds, which is readjusted monthly, was 6-5/8%, a very favorable number for December's overcrowded tax-exempt market. Since that

time, the Cooperative has benefitted from a downward trend in interest rates, with subsequent rate adjustments as low as 4.80%. But last December was only the happy ending; the financing had its beginning several months earlier.

Manufacturers Hanover first approached the Rochester District Heating Cooperative in April 1985. A tax-exempt financing was contemplated for the summer, but several major areas of the project remained unsettled. When Manufacturers Hanover was hired in July, we began to work with the Cooperative not only to structure the financing, but also to contribute toward the efforts of the financing team in bringing all the project components together. Completing such basic tasks as signing up the members and purchasing the system clearly had to precede marketing bonds to investors. By hiring its investment banker early in the process, the Cooperative was able to incorporate certain bond structuring concerns in the completion of some crucial financing steps. In this way, there would be no surprises or unusual last minute changes when the bond issue went to market.

Before discussing the financing's details, a brief summary of how the Cooperative began and a description of its evolution will be helpful.

The history of district heating in Rochester is similar to that experienced by other communities in the United States. The steam system was originally developed in 1889 by the Rochester Gas and Electric Company (RG&E) as an outgrowth of its expanding centralized electric system in the downtown area. It eventually became the accepted source of energy for newly constructed buildings and by 1963 had become the fourth largest district heating system in the country, serving 621 customers. However, after reaching this peak, the system began to decline and by the end of 1985 the number of customers had decreased to less than 100.

The decline of Rochester's system over the past two decades has been attributed to a number of factors: RG&E's aggressive marketing of natural gas, an urban renewal program which eliminated many of the older buildings that had been customers of the system, and steadily increasing steam prices. The decision in the early seventies to convert coal-fired boilers to burn natural gas or oil was followed by the 1973 Arab oil embargo. This drastically raised fuel costs and resulted in further increases in steam rates. Moreover, as a regulated utility, RG&E was forced to continue operating sparse distribution lines, resulting in significant steam loss and system inefficiencies.

In July 1984, the New York Public Service Commission ordered RG&E to abandon the steam system by October 1985. Faced with the prospect of having to install individual furnaces, a number of the existing steam customers organized a group to examine alternatives to abandonment of the system. The group's efforts ultimately resulted in the formation of the Rochester District Heating Cooperative in November 1984. As the first steam users' cooperative in New York State, RDH began providing its own steam to members in January 1986. At present, it is supplying approximately 65 percent of the system's steam requirements, using temporary leased boilers, and purchasing the rest from RG&E. RDH's new permanent boiler plant is under construction and is expected to be operational in February 1987.

By joining the Cooperative, RDH members were able to avoid expending capital to construct and install individual on-site boiler systems. As a non-profit organization whose main objective is to provide steam to its members at the lowest possible cost, RDH has been able to reduce steam rates substantially, providing steam at an average cost of \$14 per thousand pounds. As a cooperative, RDH also provides its users with an opportunity to shape policies and make decisions regarding issues which directly affect them and the steam service they receive.

From a financing point of view, the project had to have an unambiguous structure. When Manufacturers Hanover entered the picture, the transaction had a framework, but none of the structural components were actually in place. No matter what form the bonds were to take - whatever maturities, amortization or redemption provisions - the credit had to be sound. Since Manufacturers Hanover was not only acting as investment banker to the transaction, but was also providing a letter of credit, we felt this need from two perspectives - as a marketer of bonds and as a lender.

The cornerstone of the financing is the Cooperative's Membership and Use Agreement, the document which defines the obligations and rights of RDH and those of the project participants. It is this document which determines the creditworthiness of the transaction. Since RDH was engaging in a project financing with no recourse to any one party, this document was vitally important. The Membership and Use Agreement treats areas such as service to be provided, cost of service, payment, events of default, voluntary termination and system expansion and improvements.

The Cooperative currently has 44 very diverse members. They range from Monroe County to a multinational corporation to a large non-profit hospital to a number of small private businesses. Forging covenants that were appropriate to a diversity of members constituted a challenging assignment. The Membership and Use Agreement is not an unconditional take or pay contract, but does divide member charges into two categories. There is a demand cost, representing the member's prorata share of all fixed operating costs including debt service, and an energy cost, based on actual consumption of steam. Payment of the demand cost will continue for a period of time even if RDH is unable to deliver steam to its members. This two-tiered cost structure provides a measure of debt service coverage that goes beyond the terms of the typical take and pay contract.

The Cooperative chose a variable rate financing structure. Variable rate demand bonds, or floating rate bonds as they are sometimes known, have enjoyed great popularity in the tax-exempt market since 1981. This financing structure was developed to take advantage of the extremely attractive interest rates to be found at the short end of the yield curve. The distinguishing features of variable rate demand bonds (VRDO's) are (i) periodic adjustment of a floating interest rate and (ii) investors'

ability to tender or "put" bonds to a remarketing agent upon several (often seven) days' notice. This structure incorporates a bank letter of credit to take care of liquidity risk (the put) and credit concerns. Because there is no guarantor in a project financing, the bank letter of credit will be relied upon by investors, rather than the particular details of the project's structure. The letter of credit will provide coverage of principal and a certain amount of interest, determined for a limited number of days at a maximum rate (usually 15%).

An issuer of VRDO's must enter into an agreement with a remarketing agent who will resell tendered bonds and will also set the periodic interest rate (i.e., "reprice" the issue), informing investors of each rate adjustment.

Typically the letter of credit may also be drawn upon to purchase bonds from tendering bondholders. If the letter of credit is used to pay for unmarketed bonds, there will be a period of time, or a "window" during which a loan will be made to the issuer.

The put or demand feature of the bond offers issuers medium to long-term funds at short-term rates. Indeed, the technique was originally devised for utilities that needed to do large pollution control projects requiring long-term financing despite unfavorable market conditions.

In addition to their low interest cost, variable rate demand bonds are attractive to the issuer for several reasons. First, because of the demand feature, investors do not require the call protection typically afforded in a long-term bond issue. The bonds can therefore be sold for up to 40 years, giving the issuer the flexibility to defer payment until maturity (subject to the terms of the letter of credit), to prepay the issue without paying a call premium, to refund the issue on short notice, or to convert to a fixed rate term issue. Also, given the rapid growth of tax-exempt money market funds and a growing demand for liquidity, there is a ready and expanding market for variable rate securities. Corporate treasurers have turned to variable rate demand bonds as an investment for their excess cash.

Variable rate demand bonds are typically sold to institutional investors in large denominations (\$50,000 or \$100,000 minimum). As a result, the initial sale is analagous

to a private placement, with generally lower issuance costs. The interest rate for the initial interest period is set at the time of sale. Repricings are usually every seven or 30 days.

RDH's bond issue is readjusted monthly. It is supported by a Manufacturers Hanover Trust Company letter of credit which may be drawn upon for payment of interest and principal or to pay tendering bondholders in the event that there are not sufficient remarketing proceeds. In our experience, there has never been a failed remarketing of a variable rate demand bond. This is because the interest rate is tied to the market and its regular readjustment provides assurance to the investor that his investment provides a market-level return.

The index used to price the bonds is Manufacturers Hanover's own Municipal Adjustable Note Index, or MANI. As Remarketing Agent, we have the ability to reprice bonds tendered during the month in a range around MANI.

As noted above, the market for variable rate demand bonds consists primarily of institutional investors. The most important segment of this market is the tax-exempt money market

There were several initial buyers for RDH's bonds - predominantly New York tax-exempt bond funds. The triple tax exemption of RDH's bonds results in an extremely attractive investment, and the issue was placed within hours.

Our financing schedule was controlled by the threat of 1986 financing restrictions embodied in potential tax reform. A financing had to be accomplished by year's end. We actually closed on December 20, 1985 - with more than a week to spare! Despite the fact that the financing process had begun several months earlier, we had more than a few anxious moments in December. The tax-exempt financing calendar was crowded with bond issues trying to beat the potential effective tax reform date of January 1, 1986. This meant issuers had little flexibility to accommodate the schedule of any particular transaction. We were given a closing date of December 20 with very little possibility for alteration.

Building a schedule around this date meant marketing the bonds approximately a week before. This was to be difficult since in early December RDH had yet to accomplish transfer of the existing steam system from RG&E. As it turned out, this crucial step was completed late in the evening of December 19th. We

could not have waited for the System transfer to be effected before selling bonds. RDH would never have met its closing date, since several days are required between a bond sale and closing. The financing team had little choice but to go ahead with marketing, relying upon the strong expectation that all basic requirements would be completed by the closing a week later. We had not anticipated, however, that we would require every spare hour we had.

RDH's photo finish provides a strong reminder that project financings are indeed complex transactions. In retrospect, the months of activity have paid off, since the Cooperative has a long-term bond issue at short-term rates; a transaction that may be prepaid or funded long at any time over its life. In the meantime, RDH has experienced a more than 25% decrease in interest cost since its first monthly pricing and has created the ability to benefit further from positive interest rate movements.

As the previously cited Committee on District Heating and Cooling report states, "the number of financing mechanisms has become more severely limited since 1980 because of shifts in government policies, the great competition for non-government funding, and high interest rates." Through financing innovation, RDH responded to this implied challenge.