DG 03-226

NORTHERN UTILITIES, INC.

Petition for Approval of a Tariff Change
Modifying the Services & Mains Investment Test

Order Nisi Approving the Tariff Change

O R D E R N O. 24,287

March 5, 2004

I. BACKGROUND AND PROCEDURAL HISTORY

The petitioner, Northern Utilities, Inc. (Northern), a public utility organized and existing under the laws of the State of New Hampshire and primarily engaged in the business of distributing natural gas in certain cities and towns in New Hampshire and Maine, on November 26, 2003, filed with the New Hampshire Public Utilities Commission (Commission) a Petition for Authority to Revise Tariff Sheets Regarding Section III – Line Extensions of NHPUC no. 10 – Gas Tariff. The tariff states that Northern reserves the right to reject an application for service if the estimated income from the service is insufficient to yield a reasonable rate of return, unless such application is accompanied by a cash payment. The revised tariff sheets incorporate a change from the current twenty-five percent net investment test (25% test) to an investment test subject to a net present value (NPV) analysis, also referred to as the Discounted Cash Flow (DCF) methodology, in determining whether a requested service will yield a reasonable return.

On January 21, 2004, Northern filed a Motion for Protective Order related to the information contained in the data response to Commission Staff (Staff) Data Request No. 1-8.

On February 20, Staff filed a memorandum with attached Northern Responses to Staff Data Requests 1-1 through 1-7. The memorandum recommended approval of the proposed tariff changes for the reasons cited in the petition and supported by the attached data responses. The memorandum also stated that Staff had returned Northern's response to Data Request No. 1-8, as the information contained in the response was not a factor in Staff's recommendation. On February 19, 2004, Northern filed a letter withdrawing its Motion for Protective Treatment.

II. POSITIONS OF THE PARTIES AND STAFF

A. Northern

The revenue test is designed to protect the utility and customers against uneconomic additions to the existing distribution system. An addition would be considered uneconomic if the additional revenue received as a result of the extension is insufficient to cover the cost of providing service, including yielding a return on the investment that is no less than the utility's current cost of capital. The revenue test requirement is intended to ensure that the incremental load has a positive impact on future earnings and thus does not contribute to any revenue deficiency that could ultimately be borne by existing customers, or stated more simply, that the cost of the extension is borne by the customer(s) requesting it.

The 25% test was intended as a proxy for assessing whether an investment yielded a reasonable rate of return, by comparing the projected annual non-gas revenues (net revenues) with the projected capital costs (investment) of the requested line extension. If the annual net revenues equal or exceed 25% of the investment, a customer contribution is not required. If annual net revenues are less than 25% of the capital cost, the difference must be paid by the customer(s) prior to the utility's installation of the requested extension.

The DCF analysis compares the revenue and cost streams on an NPV basis over the useful life of the investment. While the net revenue calculation is the same under both the 25% test and the DCF methodology, the costs are more comprehensive under the proposed tariff change. The investment cost under the 25% test includes only the cost of the extension, whereas under the proposed tariff change the investment cost would also include meter installations. The proposed change also takes into account incremental operation and maintenance (O&M) expenses, depreciation, and taxes associated with the proposed line extension. The revenue and expense cash flows are discounted to a present value and if the NPV is zero or greater, then no contribution is required. However, if the NPV is negative, then the excess cost is required as a contribution by the initial customer(s).

The estimated incremental O&M expenses used in the analysis include meter reading and collection activities, customer service related activities and other plant and service related activities that grow as customer additions occur. These costs are estimated using a 3-year average of these costs by category and are applied in each year of the cash flow analysis.

Taxes include property taxes determined using the net book value of the project investment and multiplied by the assessed property tax rate for the area and the applicable federal and state income taxes. The depreciation expense for cash flow purposes is based on tax depreciation.

The discount rate used to determine the NPV will be based on Northern's current capital structure.

Northern will use an economic life of ten (10) years for Commercial and Industrial (C&I) customer classes and twenty (20) years for residential in its DCF analysis. Northern's petition and supporting documentation explain why Northern proposes to the use economic lives of the assets in its DCF analysis, rather than the longer depreciation lives. Typically, residential customers change out appliances after about 15 years, using either more energy efficient equipment or an alternative energy source (oil, propane, electric). The shorter economic life for C&I customers reflects the fact that those establishments go out of business and/or become vacant indefinitely. In addition, in serving the C&I market, where customers are more price- sensitive and sophisticated than residential customers, Northern is also exposed to alternate fuel competition. Northern states that the C&I economic life of 10 years is consistent with industry standards. Further, the net cash flow does not change materially beyond 15 years due to discounting at the cost of capital.

Northern's petition states that its parent company, Bay State Gas Company, has been using the DCF methodology to assess line investments in Massachusetts for over 20 years, and that the proposed tariff language establishing DCF analysis as the basis for the line (mains and services) investment test was incorporated in the Northern Maine Division effective November 1, 1999. Further, Northern has used the DCF methodology in New Hampshire whenever justifying investments to serve incremental load under special contract arrangements. Northern used the DCF/NPV analysis in its filing with the Commission to expand natural gas service to the University of New Hampshire (UNH) and into the towns of Durham and Madbury, and approval of a special contract between Northern and UNH. In that Docket (DR 96-089), the Commission approved the Settlement Agreement between Northern, Office of the Consumer Advocate and the Commission

Staff (Staff), in which it was agreed that, "…the DCF framework is the appropriate methodology to use in evaluating the financial viability of large system expansion projects." *Northern Utilities, Inc.*, Order No. 22,297, 81 NH PUC 662 (1996).

B. Staff

Staff has consistently endorsed use of the DCF methodology for large expansion projects. Staff testified in Docket No. DR 96-089, Northern's petition for approval of a special contract with UNH and expansion of service, that the DCF methodology, with its longer time horizon and more inclusive set of revenue and cost variables, is a far better framework in which to evaluate the efficacy (and hence prudence) of a major capital project than the 25% test, with its rigid, ad hoc four year payback period and rather restrictive set of revenue and cost variables.

While Staff endorsed the use of the DCF methodology in financially evaluating the merits and prudence of system expansions, Staff cautioned that great care must be taken in the actual application, noting that while cost streams are fairly certain, revenue flows and timing is less certain. Staff also noted that the discount rate that is selected can also significantly affect the outcome of the DCF analysis.

Based on the petition and data responses filed by Northern, Staff stated that the methodology Northern will apply is reasonable and recommended that the Commission approve Northern's use of the DCF methodology in evaluating requests for line extensions under the terms described above.

III. COMMISSION ANALYSIS

In Northern's last major expansion project Docket No. DR 96-089, as well as in the order approving a similar system expansion to Milford, the Commission agreed that the DCF methodology is the appropriate framework to evaluate the financial viability of large system expansion projects. *See EnergyNorth Natural Gas, Inc.,* Order No. 22,667, 82 NH PUC 557 (1997).

Regardless of the size of the customer, the addition of one more customer on Northern's distribution system results in the unavoidable incurrence of both recurrent and non-recurrent costs. The utility incurs, at a minimum, the non-recurrent capital costs associated with the provision of the service and the meter, plus the recurrent costs of meter reading, billing, accounts collection and annual maintenance on the service and meter. The proposed change provides a more accurate cost analysis, recognizing the cost of new meters, as well as incremental costs. More accurate cost information and use of the DCF analysis will enable Northern to better determine if the estimated income is sufficient to recover the associated costs and provide a reasonable rate of return.

On the other hand, the revenue test should not create an unfair economic barrier for new/prospective customers to request and ultimately receive natural gas service. New Hampshire residents benefit from the availability of alternative energy sources and natural gas is one such option. Therefore, we do not want to impose a significant cost barrier to potential customers requesting to be served by Northern. Potential customers should be provided service where it is economically feasible to do so.

We will require Northern to use its weighted cost of capital (after-tax), updated to reflect the current cost structure, as the discount rate in its DCF analysis for determining the NPV. The cost of equity will be the Commission approved return on equity in effect at the time of the revenue test. Use of the approved return on equity will ensure that parties requesting line extensions will be granted service if the return on investment is equal to or greater than that which the Commission has found to be fair and reasonable.

Use of the DCF methodology, as described above, should protect existing customers from rate increases due to system expansions while not imposing a significant barrier to those customers desiring natural gas service in or near the areas served by Northern. With ten years to show a positive return on C&I accounts and twenty years for residential, and a discount rate that reflects Northern's cost of capital, requests for line extensions will be determined in a fair and consistent manner. Existing customers will be better protected from possible rate increases due to line extensions, as the capital and incremental costs more accurately reflect the cost of service and customer contributions calculated accordingly.

The proposed tariff changes better balance the interests of both existing and potential customers than the 25% test currently in use. Accordingly, we approve the proposed tariff change.

Based upon the foregoing, it is hereby

ORDERED NISI, that subject to the effective date below, Revised Tariff Sheets Regarding Section III – Line Extensions of NHPUC No. 10 – Gas Tariff, is APPROVED; and it is

FURTHER ORDERED, that Northern will use its updated cost of capital as the discount rate over a period of 10 years for Commercial and Industrial customer classes and 20 years for residential customer classes when using the Discounted Cash Flow analysis as the investment test for new line extensions; and it is

FURTHER ORDERED, that Northern shall cause a summary notice of this Order Nisi, a copy of which has been separately provided to Northern by the Commission, to be published once in a statewide newspaper of general circulation or of circulation in those portions of the state where operations are conducted, such publication to be no later than March 12, 2004 and to be documented by affidavit filed with this office on or before March 26, 2004; and it is

FURTHER ORDERED, that Northern shall make a copy of this Order Nisi available to any customer that requests a copy; and it is

FURTHER ORDERED, that all persons interested in responding to this petition be notified that they may submit their comments or file a written request for a hearing on this matter before the Commission no later than March 26, 2004; and it is

FURTHER ORDERED, that any party interested in responding to such comments or request for hearing shall do so no later than March 30, 2004; and it is

FURTHER ORDERED, that this Order Nisi shall be effective April 1, 2004, unless Northern fails to satisfy the publication obligation set forth above or the Commission provides otherwise in a supplemental order issued prior to the effective date; and it is

FURTHER ORDERED, that Northern shall file a compliance tariff with the Commission on or before April 15, 2004, in accordance with N.H. Admin. Rules Puc 1603.02(b).

By order of the Public Utilities Commission of New Hampshire this fifth day of March, 2004.

Thomas B. Getz Chairman	Susan S. Geiger Commissioner	Graham J. Morrison Commissioner

Attested by:

Debra A. Howland
Executive Director & Secretary