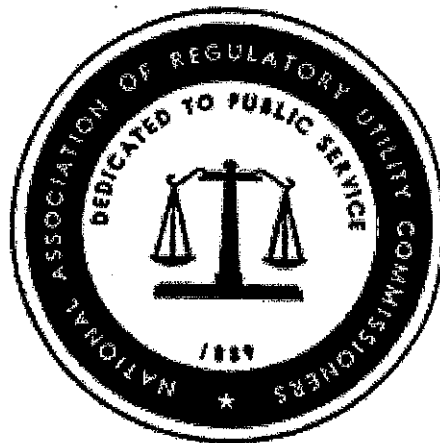


GAS DISTRIBUTION RATE DESIGN MANUAL

Prepared by the
NARUC Staff Subcommittee on Gas

June 1989



**NATIONAL ASSOCIATION OF
REGULATORY UTILITY COMMISSIONERS**

1101 Vermont Avenue NW
Washington, D.C. 20005 USA

Tel: (202) 898-2200

Fax: (202) 898-2213

www.naruc.org

\$17.00

-22-

accordance with prescribed uniform accounting systems. These systems, such as the Uniform System of Accounts, classify costs according to primary operating functions. Thus, the functionalization of costs is already done for the cost of service analyst.

2. Classification of Costs

The functionalization of costs is of limited use in the allocation of costs. Therefore, it is necessary to further classify costs into customer, energy or commodity, and demand or capacity costs.

a. Customer Costs

Customer costs are those operating capital costs found to vary directly with the number of customers served rather than with the amount of utility service supplied. They include the expenses of metering, reading, billing, collecting, and accounting, as well as those costs associated with the capital investment in metering equipment and in customers' service connections.

A portion of the costs associated with the distribution system may be included as customer costs. However, the inclusion of such costs can be controversial. One argument for inclusion of distribution related items in the customer cost classification is the "zero or minimum size main theory." This theory assumes that there is a zero or minimum size main necessary to connect the customer to the system and thus affords the customer an opportunity to take service if he so desires.

Under the minimum size main theory, all distribution mains are priced out at the historic unit cost of the smallest main installed in the system, and assigned as customer costs. The remaining book cost of distribution mains is assigned to demand. The zero-inch main method would allocate the cost of a

-23-

theoretical main of zero-inch diameter to the customer function, and allocate the remaining costs associated with mains to demand. A calculation of a minimum size main is shown in the illustrative cost allocation study. The contra argument to the inclusion of certain distribution costs as customer costs is that mains and services are installed to serve demands of the consumers and should be allocated to that function. Under this basic system theory, only those facilities, such as meters, regulators and service taps, are considered to be customer related, as they vary directly with the number of customers on the system.

Another controversial item is the inclusion of sales promotion expenses in the customer cost component. Analysts vary in their opinions as to the extent of the inclusion. Some would include all, some none, and some a portion of sales promotion expense in the customer category. With emphasis placed on conservation, many regulatory bodies have prohibited this type of activity, and in those cases, if cost were incurred, it should be deleted from the study based upon its being a "below the line" or a stockholder expense.

b. Energy or Commodity Costs

Energy or commodity costs are those which vary with the quantity of gas produced or purchased. They are largely made up of the commodity portion of purchased gas cost and the cost of feedstock, catalyst, fuel, and other variable expenses used in the production of gas from a manufactured or synthetic gas (SNG) plant. Energy or commodity costs increase or decrease as more or less gas is consumed.

c. Demand or Capacity Costs

Demand or capacity costs vary with the quantity or size of plant and equipment. They are related to maximum system requirements which the system is