

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET NO. UG-05_____

EXHIBIT NO. ___(TLK-4)

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NATURAL GAS COST OF SERVICE STUDY

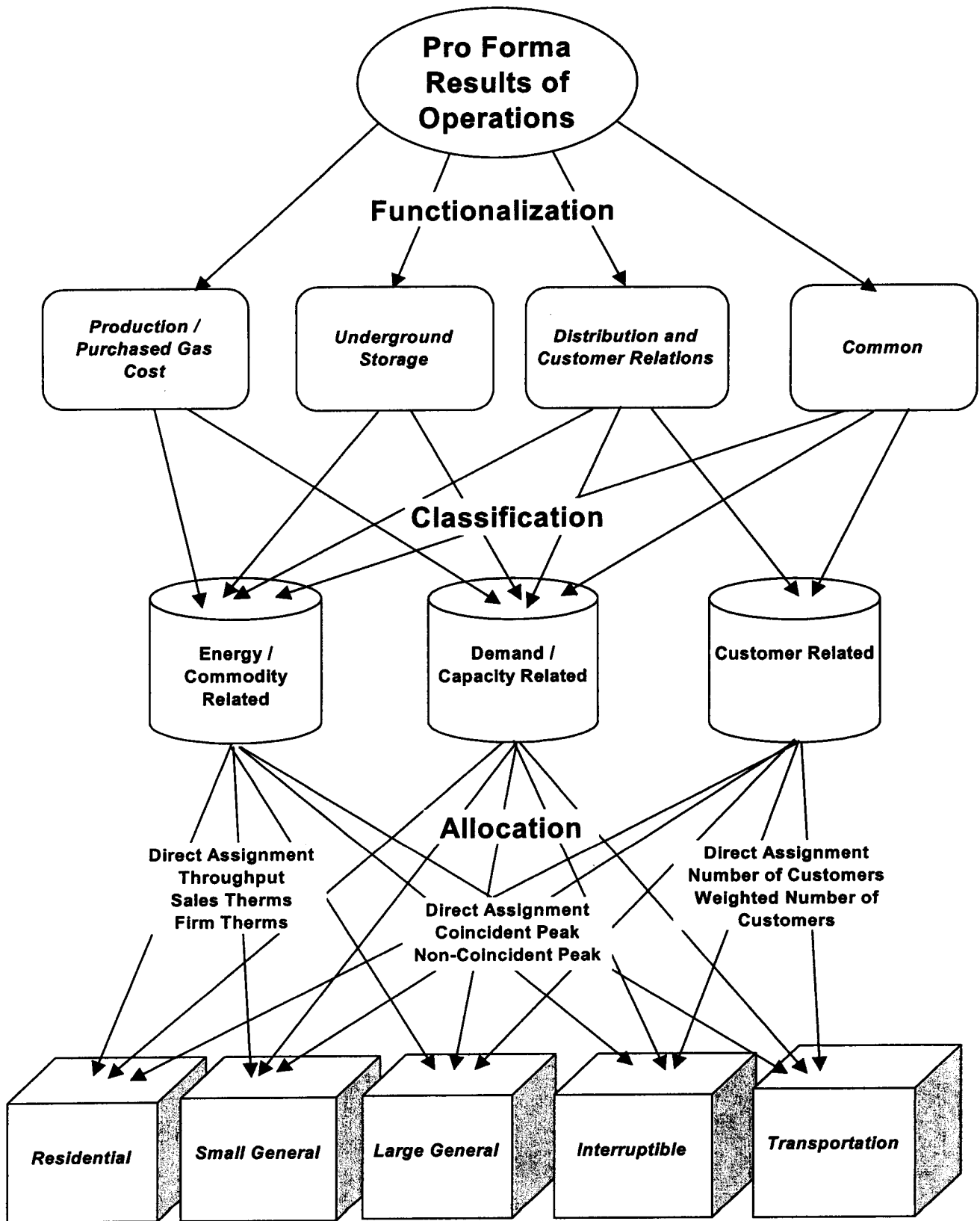
A cost of service study is an engineering-economic study, which apportions the revenue, expenses, and rate base associated with providing natural gas service to designated groups of customers. It indicates whether the revenue provided by the customer group recovers the cost to serve those customers. The study results are used as a guide in determining the appropriate rate spread among the groups of customers.

There are three basic steps involved in a cost of service study: functionalization, classification, and allocation. See flow chart.

First, the expenses and rate base associated with the natural gas system under study are assigned to functional categories. The uniform system of accounts provides the basic segregation into production, underground storage, and distribution. Traditionally, customer accounting, customer information, and sales expenses are included in the distribution function and administrative and general expenses and general plant rate base are allocated to all functions. In this study I have created a separate functional category for common costs. Administrative and general costs that cannot be directly assigned to the other functions have been placed in this category.

Second, the expenses and rate base items are classified into three primary cost components: demand, commodity or customer related. Demand (capacity) related costs are allocated to rate schedules on the basis of each schedule's contribution to system peak demand. Commodity (energy) related costs are allocated based on each rate schedule's share of commodity consumption. Customer related items are allocated to rate schedules based on the number of customers within each schedule. The number of customers may be weighted by appropriate factors such as relative cost of metering equipment. In addition to these three cost components, any revenue related expense is allocated based on the proportion of revenues by rate schedule.

NATURAL GAS COST OF SERVICE STUDY FLOWCHART



Pro Forma Results of Operations by Customer Group

The final step is allocation of the costs to the various rate schedules utilizing the allocation factors selected for each specific cost item. These factors are derived from usage and customer information associated with the test period results of operations.

BASE CASE COST OF SERVICE STUDY

Production - Purchased Gas Costs

The Company owns no natural gas production facilities serving the Washington jurisdiction. The natural gas costs included in the production function include the cost of gas purchased to serve sales customers, pipeline transportation to get it to our system, and expenses of the gas supply department.

The demand and commodity components of account 804 have been determined directly from the weighted average cost of gas (WACOG) approved in the most recent purchased gas adjustment (PGA) filing effective November 2, 2004. The allocation of the commodity portion of pro forma gas cost agrees with the WACOG based computation of them. The allocation of the demand portion of pro forma gas cost reflects Mr. Hirschhorn's proposed adjustment to pipeline fixed contract demand charges.

The expenses of the gas supply department recorded in accounts 807 and 813 are classified as commodity related costs. The gas scheduling process includes transportation customers, so estimated scheduling labor expenses are allocated by throughput. The remaining gas supply department expenses are allocated by sales volumes.

Underground Storage

Underground storage rate base, operating and maintenance expenses are classified as commodity related. Twenty percent of underground storage costs are allocated to customer groups by annual throughput, the remaining eighty percent are allocated by sales therms. This allocation methodology for underground storage costs matches the treatment of underground storage

transportation costs in the last PGA filing. It is based on analysis, performed in conjunction with the Washington Natural (now PSE) Docket No. UG-940814, that evaluated the extent to which transportation customers utilized the Jackson Prairie underground storage facility. Underground storage capacity release revenue from long term contracts reduces underground storage costs to retail customers. This revenue is allocated to customer groups based on underground storage plant in service, thereby indirectly applying the 80% sales / 20% throughput allocations.

Distribution Facilities Classification (Peak and Average)

Distribution mains and regulator station equipment (both general use and city gate stations) are classified as demand and commodity related using the peak and average ratio for the distribution system. Peak demand is defined as the average of the five-day sustained peaks from the most recent three years. Average daily load is calculated by dividing annual throughput by 365 (days in the year). The average daily load is divided by peak load to arrive at the system load factor of 42%. This proportion is classified as commodity related. The remaining 58% is classified as demand related. Meters, services and industrial measuring & regulating equipment are classified as customer related distribution plant. Distribution operating and maintenance expenses are classified (and allocated) in relation to the plant accounts they are associated with.

Customer Relations Distribution Cost Classification

Customer service, customer information and sales expenses are the core of the customer relations functional unit which is included with the distribution cost category. For the most part these costs are classified as customer related. Exceptions include uncollectible accounts expense, which is considered separately as a revenue conversion item, and Demand Side Management amortization expense recorded in Account 908. The demand side management investment costs and amortization expense are included with the distribution function and classified to demand and commodity by the peak and average ratio.

Distribution Cost Allocation

Demand related distribution costs are allocated to customer groups (rate schedules) by each groups' contribution to the three year average five-day sustained peak. Commodity related distribution costs are allocated to customer groups by annual throughput. Distribution main investment has been segregated into large and small mains. Small mains are defined as less than four inches, with large mains being four inches or greater. The small main costs use the same demand and commodity data, but large usage customers (Schedules 131 and 146) that connect to large system mains have been excluded from the allocations.

Most customer related costs are allocated by the annualized number of customers billed during the test period. Meter investment costs are allocated using the number of customers weighted by the relative current cost of meters in service at December 31, 2004. Services investment costs are allocated using the number of customers weighted by the relative current cost of typical service installations. Industrial measuring and regulating equipment investment costs are allocated by number of customers weighted by industrial meters at current cost.

Administrative and General Costs

General and intangible rate base items are allocated by the sum of Underground Storage and Distribution plant. Administrative and general expenses are segregated into plant related, labor related, revenue related and other. The plant related items are allocated based on total plant in service. Labor related items are allocated by operating and maintenance labor expense. Revenue related items are allocated by pro forma revenue. Other administrative and general expenses are allocated 50% by annual throughput (classified commodity related) and 50% by the sum of operating and maintenance expenses not including purchased gas cost or administrative & general expenses. Whenever costs are allocated by sums of other items within the study, classifications are imputed from the relationship embedded in the summed items.

Special Contract Customer Revenue

Several special contract customers receive transportation service from the Company. Rates for these customers were individually negotiated to cover any incremental costs and retain some contribution to margin. The rates for these customers are not being adjusted in this case. The revenue from these special contract customers has been segregated from general rate revenue and allocated back to all the other rate classes by relative rate base. In treating these revenues like other operating revenues their system contribution reduces costs for all rate schedules.

Revenue Conversion Items

In this study uncollectible accounts, state excise tax, and commission fees have been classified as revenue related and are allocated by pro forma revenue. These items vary with revenue and are included in the calculation of the revenue conversion factor. Income tax expense items are allocated to schedules by net income before income tax adjusted by interest expense.

For the functional summaries on pages 2 and 3 of the cost of service study, these items are assigned to the component cost categories. The revenue related expense items have been reduced to a percent of all other costs and loaded onto each cost category by that ratio. Similarly, income tax items have been assigned to cost categories by relative rate base (as is net income).

The following matrix outlines the methodology applied in the Company's Base Case natural gas cost of service study.

WUTC Docket No. UG-04 Methodology Matrix
 Avista Utilities Washington Jurisdiction
 Natural Gas Cost of Service Methodology

Account	Functional Category	Classification	Allocation
Underground Storage Plant			
350 - 357 Underground Storage	Underground Storage	Demand/Commodity to match PGA items	E01/E04 Annual Throughput / Annual Sales Therms
Distribution Plant			
374 Land	Distribution	Demand/Commodity/Customer from Other Dist Plant	S05 Sum of accounts 376-385
375 Structures	Distribution	Demand/Commodity/Customer from Other Dist Plant	S05 Sum of accounts 376-385
376(S) Small Mains	Distribution	Demand/Commodity by Peak & Average	D02/E06 Coincident peak, annual therms (both excl lg use cust) D01/E01/D06/D07 Coincident peak (all), annual throughput (all), direct assign Sch 131, direct assign Sch 146
376(L) Large Mains	Distribution	Demand/Commodity by Peak & Average	D01/E01 Coincident peak (all), annual throughput (all)
378 M&R General	Distribution	Demand/Commodity by Peak & Average	D01/E01 Coincident peak (all), annual throughput (all)
379 M&R City Gate	Distribution	Demand/Commodity by Peak & Average	D01/E01 Coincident peak (all), annual throughput (all)
380 Services	Distribution	Customer	C02, Customers weighted by average typical service cost
381 Meters	Distribution	Customer	C03, Customers weighted by average current meter cost
385 Industrial M&R	Distribution	Customer	C06, Customers weighted by industrial meter cost
387 Other	Distribution	Demand/Commodity/Customer from Other Dist Plant	S05 Sum of accounts 376-385
General Plant			
389-399 All General Plant	Common	Demand/Commodity/Customer from UG & D Plant	S03 Sum of Underground Storage and Distribution Plant in Service
Intangible Plant			
303 Misc Intangible Plant	Distribution	Demand/Commodity/Customer from Dist Plant	S15 Sum of Distribution Plant in Service
303 Computer Software	Common	Demand/Commodity/Customer from UG & D Plant	S03 Sum of Underground Storage and Distribution Plant in Service
Reserve for Depreciation			
Underground Storage	Underground Storage	Demand/Commodity same as related plant	Allocations linked to related plant accounts
Distribution	Distribution	Demand/Commodity/Customer same as related plant	Allocations linked to related plant accounts
General	Common	Demand/Commodity/Customer same as related plant	Allocations linked to related plant accounts
Intangible	Distribution/Common	Demand/Commodity/Customer same as related plant	Allocations linked to related plant accounts
Other Rate Base			
Accumulated Deferred FIT	All	Demand/Commodity/Customer from Plant in Service	S17 Sum of Total Plant in Service
Construction Advances	Distribution	Customer	C10 Residential only
Gas Inventory	Underground Storage	Commodity from Underground Storage Plant	S14 Sum of Underground Storage Plant in Service
Gain on Sale of Office Bldg	Common	Demand/Commodity/Customer from UG & D Plant	S03 Sum of Underground Storage and Distribution Plant in Service
DSM Investment	Distribution	Demand/Commodity by Peak & Average	D01/E01 Coincident peak (all), annual throughput (all)
Purchased Gas Expenses			
804 Purchased Gas Cost	Production	Demand/Commodity from PGA Tracker WACOG	D05/E07 Adjusted PGA Demand / PGA Commodity
807 Purchased Gas Expenses	Production	Commodity	E01/E04 Annual Throughput / Annual Sales Therms
813 Other Gas Expenses	Production	Commodity	E04 Annual Sales Therms

Account	Functional Category	Classification	Allocation
Underground Storage O&M			
814 - 837 Underground Storage Exp	Underground Storage	Commodity	E01/E04 Annual Throughput / Annual Sales Therms
Distribution O&M			
870 OP Super & Engineering	Distribution	Demand/Commodity/Customer from Dist Plant	S15 Sum of Distribution Plant in Service
871 Load Dispatching	Distribution	Commodity	E01 Annual throughput
874 Mains & Services	Distribution	Demand/Commodity/Customer from related plant	S06 Sum of Mains and Services Plant in Service
875 M&R Station - General	Distribution	Demand/Commodity from related plant	S08 Sum of Meas & Reg Station - General Plant in Service
876 M&R Station - Industrial	Distribution	Customer from related plant	S19 Sum of Meas & Reg Station - Industrial Plant in Service
877 M&R Station - City Gate	Distribution	Demand/Commodity from related plant	S09 Sum of Meas & Reg Station - City Gate Plant in Service
878 Meter & House Regulator	Distribution	Customer from related plant	S07 Sum of Meter and Installation Plant in Service
879 Customer Installations	Distribution	Customer	C05, Customers weighted by average current meter cost
880 Other OP Expenses	Distribution	Demand/Commodity/Customer from other dist expenses	S04 Sum of Accounts 870 - 879 and 881 - 894
881 Rents	Distribution	Demand/Commodity/Customer from other dist expenses	S04 Sum of Accounts 870 - 879 and 881 - 894
885 MT Super & Engineering	Distribution	Demand/Commodity/Customer from Dist Plant	S15 Sum of Distribution Plant in Service
886 MT of Structures	Distribution	Demand/Commodity/Customer from Other Dist Plant	S05 Sum of accounts 376-385
887 MT of Mains	Distribution	Demand/Commodity from related plant	S21 Sum of Distribution Mains Plant in Service
889 MT of M&R General	Distribution	Demand/Commodity from related plant	S08 Sum of Meas & Reg Station - General Plant in Service
890 MT of M&R Industrial	Distribution	Customer from related plant	S19 Sum of Meas & Reg Station - Industrial Plant in Service
891 MT of M&R City Gate	Distribution	Demand/Commodity from related plant	S09 Sum of Meas & Reg Station - City Gate Plant in Service
892 MT of Services	Distribution	Customer from related plant	S20 Sum of Services Plant in Services
893 MT of Meters & Hs Reg	Distribution	Customer from related plant	S07 Sum of Meter and Installation Plant in Service
894 MT of Other Equipment	Distribution	Demand/Commodity/Customer from Dist Plant	S15 Sum of Distribution Plant in Service
Customer Accounting Expenses			
901 Supervision	Customer Relations	Customer	C01 All customers (unweighted)
902 Meter Reading	Customer Relations	Customer	C01 All customers (unweighted)
903 Customer Records & Collections	Customer Relations	Customer	C01 All customers (unweighted)
904 Uncollectible Accounts	Revenue Conversion	Revenue	R03 Retail Sales Revenue
905 Misc Cust Accounts	Customer Relations	Customer	C01 All customers (unweighted)
Customer Service & Info Expenses			
907 Supervision	Customer Relations	Customer	C01 All customers (unweighted)
908 Customer Assistance	Customer Relations	Customer	C01 All customers (unweighted)
908 DSM Amortization	Distribution	Demand/Commodity by Peak & Average	D01/E01 Coincident peak (all), annual throughput (all)
909 Advertising	Customer Relations	Customer	C01 All customers (unweighted)
910 Misc Cust Service & Info	Customer Relations	Customer	C01 All customers (unweighted)
Sales Expenses			
911 - 916 Sales Expenses	Customer Relations	Customer	C01 All customers (unweighted)

Account	Functional Category	Classification	Allocation
Admin & General Expenses			
920 Salaries	Common	Demand/Commodity/Customer from Other O&M	S02/E01 50% O&M excl Gas Purchases and A&G / 50% throughput
921 Office Supplies	Common	Demand/Commodity/Customer from Other O&M	S02/E01 50% O&M excl Gas Purchases and A&G / 50% throughput
922 Admin Expenses Transferred	Common	Demand/Commodity/Customer from Other O&M	S02/E01 50% O&M excl Gas Purchases and A&G / 50% throughput
923 Outside Services	Common	Demand/Commodity/Customer from Other O&M	S02/E01 50% O&M excl Gas Purchases and A&G / 50% throughput
924 Property Insurance	Common	Demand/Commodity/Customer from Plant in Service	S17 Sum of Total Plant in Service
925 Injuries & Damages	Common	Demand/Commodity/Customer from Other O&M	S02/E01 50% O&M excl Gas Purchases and A&G / 50% throughput
926 Pensions & Benefits	Common	Demand/Commodity/Customer from Labpr O&M	S13 O&M Labor Expense
928 Regulatory Commission	Common	Demand/Commodity/Customer from Other O&M	S02/E01 50% O&M excl Gas Purchases and A&G / 50% throughput
928 Commission Fees	Revenue Conversion	Revenue	R01 Retail Sales Revenue
930 Miscellaneous General	Common	Demand/Commodity/Customer from Other O&M	S02/E01 50% O&M excl Gas Purchases and A&G / 50% throughput
931 Rents	Common	Demand/Commodity/Customer from Other O&M	S02/E01 50% O&M excl Gas Purchases and A&G / 50% throughput
931 CSS Rent	Customer Relations	Customer	C01 All customers (unweighted)
935 MT of General Plant	Common	Demand/Commodity/Customer from Plant in Service	S17 Sum of Total Plant in Service
Depreciation Expense			
Underground Storage	Underground Storage	Commodity same as related plant	Allocations linked to related plant accounts
Distribution	Distribution	Demand/Commodity/Customer same as related plant	Allocations linked to related plant accounts
General	Common	Demand/Commodity/Customer same as related plant	Allocations linked to related plant accounts
Intangible	Distribution/Common	Demand/Commodity/Customer same as related plant	Allocations linked to related plant accounts
Taxes			
Property Tax	All	Demand/Commodity/Customer from related plant	S14/S15/S16 Sum of UG Plant/Sum of Dist Plant/Sum of Gen Plant
Miscellaneous Dist Tax	Distribution	Demand/Commodity/Customer from Dist Plant	S15 Sum of Distribution Plant in Service
State Excise Tax	Revenue Conversion	Revenue	R01 Retail Sales Revenue
Federal Income Tax	Revenue Conversion	Revenue	R02 Net Income before Taxes Less Interest Expense
Deferred FIT	Revenue Conversion	Revenue	R02 Net Income before Taxes Less Interest Expense
ITC	Revenue Conversion	Revenue	R02 Net Income before Taxes Less Interest Expense
Operating Revenues			
Revenue from Rates	Revenue	Revenue	Pro Forma Revenue per Revenue Study
Special Contract Revenue	All	Demand/Commodity/Customer from Rate Base	S01 Sum of Rate Base
Off System Sales	Production	Commodity	E04 Sales Therms
Miscellaneous Service Revenue	Customer Relations	Customer	C01 All customers (unweighted)
Rent From Gas Property	All	Demand/Commodity/Customer from Rate Base	S01 Sum of Rate Base
Other Gas Revenue	Underground Storage	Commodity from Underground Storage Plant	S14 Sum of Underground Storage Plant in Service