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Case No.  
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**Before the Public Service Com  
of the State of Missouri**

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**Direct Testimony**

**of**

**H. Edwin Overcast**

**June 2009**

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Case No(s). GE-2009-0434  
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TABLE OF CONTENTS  
DIRECT TESTIMONY OF  
H. EDWIN OVERCAST  
ON BEHALF OF  
THE EMPIRE DISTRICT GAS COMPANY  
BEFORE THE MISSOURI PUBLIC SERVICE COMPANY  
CASE NO.

Section 1- Introduction .....	1
Section 2- Cost of Service Principles.....	4
Section 3- Results of the Cost Study.....	12
Section 4- Principles of Rate Design .....	18
Section 5- Issues with Current Volumetric Rates .....	23
Section 6- Alternatives to Volumetric Rates .....	28
Section 7- The SFV Rate Design Proposal .....	29
Section 8- Combining Service Areas .....	33
Section 9- Transportation Issues .....	35
Section 10- Summary.....	37

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1    **Section 1- Introduction**

2

3    **Q.     PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

4    A.     H. Edwin Overcast  
5           P. O. Box 2946  
6           McDonough, GA 30253

7    **Q.     WHAT IS YOUR POSITION AND BY WHO ARE YOU EMPLOYED?**

8    A.     I am a Director with Enterprise Management Solutions, a Black & Veatch  
9           Corporation.

10   **Q.     ON WHOSE BEHALF ARE YOU APPEARING?**

11   A.     I am appearing on behalf of The Empire District Gas Company ("EDG" or "the  
12           Company").

13   **Q.     PLEASE DESCRIBE YOUR BUSINESS AND PROFESSIONAL  
14           BACKGROUND.**

15   A.     A detailed description of my educational and business background is provided in  
16           Appendix A. Briefly, I have a Ph. D. in Economics from Virginia Polytechnic  
17           Institute and State University. I have been employed in various analytical,  
18           management and executive positions in the gas and electric industry for over 30  
19           years. During that time, I have testified extensively on a variety of regulatory  
20           matters including cost of service and rate design for natural gas Local Distribution  
21           Companies ("LDCs") in both a bundled and unbundled service model. I have  
22           participated as an instructor in the American Gas Association Rate Fundamentals  
23           course discussing issues such as Straight Fixed Variable ("SFV") rates,  
24           decoupling and other appropriate rate design alternatives as well as cost of

H. EDWIN OVERCAST  
DIRECT TESTIMONY

1 service. I have designed and implemented SFV rates for Atlanta Gas Light  
2 Company as part of their filing to unbundle natural gas service in Georgia.

3 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**  
4 **PROCEEDING?**

5 A. My testimony addresses the development of the cost of service study and the  
6 appropriate rate design for gas delivery service. As part of my testimony, I  
7 describe the problems inherent in recovery of fixed costs in volumetric rates. The  
8 testimony demonstrates that SFV rate design strikes the best balance between the  
9 competing objectives that are in play when a regulatory authority is making  
10 determinations regarding the establishment of rates and charges for public utility  
11 service. I demonstrate that SFV rate design matches rates and cost of service  
12 more closely than is possible with traditional volumetric rates. Further, I discuss  
13 the benefits of SFV incorporating more economically efficient price signals for  
14 consumers. In addition, I discuss the more practical benefits of the SFV rate  
15 design in minimizing adverse bill impacts on customers. I discuss the  
16 combination of the current North, South and Northwest areas of the EDG system  
17 in terms of distribution rates. Finally, I will discuss some proposed changes to the  
18 provisions of the transportation portion of the tariff.

19 **Q. HOW IS THE TESTIMONY ORGANIZED?**

20 A. The testimony is organized in the following sections:

21 Section 1- Introduction

22 Section 2- Cost of Service Principles

23 Section 3- Results of the Cost Study

24 Section 4- Principles of Rate Design

25 Section 5- Issues with Current Volumetric Rates

26 Section 6- Alternatives to Volumetric Rates

27 Section 7- The SFV Rate Design Proposal

28 Section 8- Combining Service Areas

29 Section 9- Transportation Tariff Issues

30 Section 10- Summary

31 In addition, I am sponsoring a number of schedules attached to the testimony.

1   **Q.   PLEASE   SUMMARIZE   YOUR   CONCLUSIONS   AND**  
2   **RECOMMENDATIONS.**

3   A.   My testimony supports EDG's proposed SFV rate design and recommends that  
4   the Missouri Public Service Commission ("Commission") adopt this approach for  
5   purposes of establishing just and reasonable rates and charges that will produce  
6   the revenue authorized by the Commission. I make this recommendation based  
7   on the analysis of the current volumetric rate design and an application of rate  
8   design and other regulatory principles. Importantly, SFV rates track costs more  
9   accurately than volumetric rates and eliminate intra-class discriminatory pricing.  
10   The gas distribution business is a capital intensive, fixed cost business. Under  
11   volumetric rates, revenue recovery is based on sales volumes which are driven by  
12   variable factors that are out of the LDC's control including, among other things,  
13   weather and natural gas prices. As things presently stand, I believe the current  
14   volumetric rate design is unreasonable and must be modified to: (1) help to  
15   stabilize and make more predictable the month-to-month bills customers pay for  
16   natural gas service provided by EDG; (2) more clearly delineate the relationship  
17   between the distribution service provided by EDG and the costs related to the  
18   supply of natural gas;(3) improve the quality of the price signals that occur by  
19   adopting a rate design that clarifies the match between the customer's and the  
20   Company's cost savings resulting from usage reductions; (4) reflect proper rate  
21   design principles; (5) facilitate budgeting and funding of the capital improvements  
22   that are necessary to maintain or improve the integrity of the systems of pipes and  
23   majns that must stand ready to meet the service needs of natural gas customers;  
24   and, (6) provide the Company with a reasonable opportunity to collect the  
25   revenues authorized by the Commission. . I also believe that an SFV rate design  
26   can have a useful influence on efforts to reduce the frequency of applications to  
27   increase base rates.

28

29   For residential customers and the smaller general service customers, I recommend  
30   a SFV rate structure that consists of an annual charge that is recovered through  
31   monthly customer charges that may be either uniform or variable. For the larger

H. EDWIN OVERCAST  
DIRECT TESTIMONY

1       general service customers, I ultimately recommend an SFV rate structure that  
2       consists of a customer charge and a demand charge with the demand based either  
3       on an imputed demand or the contract demand of the customer. As I explain in  
4       the testimony, the larger general service classes are less homogeneous than the  
5       residential and small general service classes and the combination of a customer  
6       and demand charge tracks cost better than the single annual charge. Based on  
7       discussions with EDG, we have not proposed to go completely to the  
8       recommended SFV rates but rather to make an interim step in order to have the  
9       time to refine the basis for customer groups and the SFV rate design.

10

11    **Section 2- Cost of Service Principles**

12

13    **Q.    WHAT IS THE PURPOSE AND USE OF THE COST OF SERVICE**  
14       **STUDY?**

15    A.    There are many purposes for utility cost analysis ranging from designing  
16       appropriate price signals to determining the share of costs or revenue  
17       requirements borne by various rate classes. In this case, the cost study is a useful  
18       guide for the allocation of the revenue requirements.

19    **Q.    PLEASE DESCRIBE THE VARIOUS TYPES OF COST OF SERVICE**  
20       **STUDIES THAT MAY BE USEFUL FOR RATE DESIGN AND THE**  
21       **ALLOCATION OF REVENUE REQUIREMENTS.**

22    A.    In general, cost studies may be based on embedded costs or marginal cost.  
23       Embedded cost studies analyze the costs for a test period based on either the book  
24       value of accounting costs (a historical period) or the estimated book value of costs  
25       for a forecast test year. Typically, embedded cost studies are used to allocate the  
26       revenue requirement between classes and between customers within a class.  
27       Marginal cost studies do not reflect actual costs but rely on estimates of the  
28       expected changes in cost associated with changes in service. Marginal cost  
29       studies are forward looking to the extent permitted by available data. Marginal

H. EDWIN OVERCAST  
DIRECT TESTIMONY

1 cost studies are useful for rate design where it is important to send appropriate  
2 price signals associated with additional consumption by customers.

3 **Q. PLEASE DISCUSS THE REASON THAT COST OF SERVICE STUDIES**  
4 **ARE USED.**

5 A. Cost studies represent an attempt to analyze which customer or group of  
6 customers cause the utility to incur the costs to provide service. The requirement  
7 to develop cost studies results from the nature of utility costs. Utility costs are  
8 characterized by the existence of common and joint costs<sup>1</sup>. In addition, utility  
9 costs may be fixed or variable costs<sup>2</sup>. Finally, utility costs exhibit significant  
10 economies of scale<sup>3</sup>. These characteristics have implications for both cost  
11 analysis and rate design from a theoretical and practical perspective. The  
12 development of cost studies, either marginal or embedded, requires an  
13 understanding of the operating characteristics of the utility system. Further, as  
14 discussed below, different cost studies provide different contributions to the  
15 development of economically efficient rates and the cost responsibility by  
16 customer class.

17 **Q. PLEASE DISCUSS THE ECONOMIC THEORY UNDER-PINNING COST**  
18 **ANALYSIS.**

19 A. Economic theory holds that efficient prices equal short-run marginal cost. For a  
20 gas utility characterized by economies of scale, setting prices based on marginal  
21 costs will not produce adequate revenues because marginal cost is below average  
22 cost. Utilities must be allowed a reasonable opportunity to earn a return of and on  
23 the assets used to serve customers. Since the utility could not satisfy the revenue  
24 adequacy constraint with prices based on marginal cost, economists developed a  
25 theoretical approach to reconciling marginal cost based prices with the revenue

---

<sup>1</sup> Common costs occur when the fixed costs of providing service to one or more classes or the cost of providing multiple products to the same class use the same facilities and the use by one class precludes the use by another class. Joint costs occur when two or more products are produced simultaneously by the same facilities in fixed proportions. In either case, the allocation of such costs is arbitrary in a theoretical economic sense.

<sup>2</sup> Fixed costs do not change with the level of output while variable costs change directly with the utility output. Most non-fuel related utility costs are fixed and do not vary with changes in load.

<sup>3</sup> Scale economies result in declining average cost as output increases and marginal costs below average costs.

H. EDWIN OVERCAST  
DIRECT TESTIMONY

1 constraint. The theory of Ramsey pricing resolves the revenue adequacy issue by  
2 suggesting that raising prices above marginal cost in relation to the inverse of the  
3 price elasticity of the product or service provided results in the least societal  
4 welfare loss from prices that differ from marginal cost.

5  
6 Under Ramsey pricing (a form of differential pricing), customers' rates are  
7 increased above marginal cost until the rates produce adequate revenues.  
8 Increases are largest for those customers or classes of service whose demand is  
9 most inelastic. To implement Ramsey pricing requires, among other things,  
10 estimates of customer or class price elasticity. Since estimating price elasticity  
11 for gas service is complex, utilities developed other practical methods for  
12 resolving the revenue adequacy issue. Alternatively, the theory of multi-part  
13 pricing suggests that it is possible to recover average costs from infra-marginal  
14 prices while setting the marginal price equal to marginal cost. Thus, the use of  
15 block rates permits efficient prices while recovering total revenue requirements.  
16 Other examples of efficiency based rates includes the concept of fixed variable  
17 rate design where fixed cost recovery occurs through fixed charges (since fixed  
18 costs do not contribute to marginal cost) and variable charges recover variable  
19 costs.

20  
21 The theory of pricing also requires a theory of class or service cost allocation.  
22 However, the existence of joint and common costs makes any allocation of costs  
23 arbitrary. This is theoretically true for any of the various marginal or embedded  
24 cost methods that may be used to allocate costs. Theoretical economists have  
25 developed the theory of subsidy free prices to evaluate traditional regulatory cost  
26 allocations. Prices are said to be subsidy free so long as the price exceeds  
27 marginal cost but is less than stand alone costs ("SAC"). Indeed all of this theory  
28 provides useful insight to the regulatory process where, as a practical matter, costs  
29 must be allocated between classes of service and within classes of service. For  
30 example, if the process of cost allocation results in rates that exceed stand alone  
31 costs for some customers, prices must be set below the stand alone cost but above



H. EDWIN OVERCAST  
DIRECT TESTIMONY

1 marginal cost to assure that those customers make the maximum practical  
2 contribution to common costs. SAC plays a role in addressing issues such as gas  
3 bypass where customers may potentially exit the grid. SAC represents an element  
4 of the allocation process for cost studies and is an alternative to the concept of  
5 fully allocated costs. Unlike other more conventional allocation methods SAC  
6 relies on estimated replacement costs rather than actual costs.

7 **Q. IF ANY ALLOCATION OF COMMON COST IS ARBITRARY, HOW IS**  
8 **IT POSSIBLE TO MEET THE PRACTICAL REQUIREMENTS OF COST**  
9 **ALLOCATION?**

10 A. As noted above, the practical reality of regulation often requires that common  
11 costs be allocated among jurisdictions, classes of service, rate schedules and  
12 customers within rate schedules. The key to a reasonable cost allocation is an  
13 understanding of cost causation. Under the traditional embedded cost allocation,  
14 the process follows three steps: functionalization, classification and allocation.  
15 This three step process underlies the determination of cost causation. By  
16 identifying the functions of utility service- supply, storage, transmission,  
17 distribution and customer for gas service- and the costs of these functions, the  
18 foundation is laid for classifying costs based on the factors that cause the utility to  
19 incur these costs- commodity, demand and customers. The development of  
20 allocation factors by rate schedule or class uses principles of both economics and  
21 engineering to develop allocation factors appropriate for different elements of  
22 costs. Embedded cost allocation may provide the class costs associated with  
23 actual test year revenue requirements or simply the relationship between costs and  
24 revenues for an historic period by customer class.

25 **Q. PLEASE DISCUSS THE ELEMENTS OF MARGINAL COST ANALYSIS.**

26 A. Marginal cost studies, in contrast to embedded cost studies, focus on the change  
27 in costs associated with a small change in output. Marginal costs are forward  
28 looking and require making estimates of future costs with an understanding of the  
29 elements that drive those future costs. As a practical matter, marginal costs bear  
30 no relationship to the mix of actual historical costs that constitute the utility

H. EDWIN OVERCAST  
DIRECT TESTIMONY

1 revenue requirement. The reasons that marginal costs do not reflect actual costs  
2 include the following:

- 3 1. The relationship between historic and prospective costs reflects changes in  
4 technology.
- 5 2. Sunk costs (the fixed cost of the existing system) do not impact marginal cost  
6 but may account for a large portion of the test year revenue requirement,  
7 particularly where economies of scale are significant.
- 8 3. The underlying impacts of inflation on prospective costs differ from past  
9 costs.
- 10 4. Additions to capacity are lumpy and as a result utilities optimal additions  
11 often include more capacity than the marginal change in load.

12  
13 To estimate marginal cost, the first step requires determining the change in cost  
14 associated with the consumption of one more therm of natural gas. Essentially,  
15 marginal costs require an understanding of the system planning process. Often,  
16 however, the planning process does not provide all of the information necessary  
17 to develop marginal cost estimates. For the commodity component of marginal  
18 cost, the existence of competitive wholesale markets provides a direct basis for  
19 estimating marginal commodity costs. The rationale for this statement relies on  
20 the economics of competition where prices equal marginal cost in competitive  
21 markets. Having markets for gas commodity allows the direct estimation of  
22 marginal costs from the market.

23  
24 To the extent that marginal costs differ by hour or by season, wholesale markets  
25 provide the basis for this determination. Where the utility purchases default  
26 service from the market at a fixed rate, the fixed rate provides the appropriate  
27 marginal commodity cost determination. Thus the existence of commodity  
28 markets and active futures markets makes the estimation of commodity marginal  
29 costs both less complex and more accurate.

H. EDWIN OVERCAST  
DIRECT TESTIMONY

1 The second step in the determination of marginal cost relates to the change in  
2 capacity requirements as measured by the daily therm demand of gas. Unlike the  
3 commodity determination, there is no competitive market for either transmission  
4 or distribution. Thus it is necessary to estimate how capacity demand influences  
5 the costs for distribution and transmission. The analysis begins by recognizing  
6 that the capacity demand is different for transmission and distribution because the  
7 load diversity increases as the analysis becomes remote from individual  
8 customers. Initially, the capacity requirements for transmission reflect the  
9 coincident demand for the transmission system as measured by loads on  
10 transmission. The capacity requirements for the distribution system must reflect  
11 the non-coincident demands on the system since delivery must satisfy the local  
12 demands that may not be coincident with the system peaks for a number of  
13 reasons. Although, for customers who use the gas system for heating, as opposed  
14 to process or interruptible services, demands tend to be coincident. For process  
15 and interruptible customers, marginal cost is zero for existing customers unless  
16 the customer expands operations. If expansion occurs marginal cost is the cost  
17 incurred to expand capacity to meet contract demand.

18  
19 Gas customers in the residential and commercial service classes exhibit declining  
20 use per customer due to the improved efficiency of capital stock replacement and  
21 improvements to the thermal envelope. This declining use per customer creates  
22 additional design day capacity within the existing system to serve new loads. As  
23 a result, the growth in transmission plant and distribution plant for gas customers  
24 reflects the growth in number of customers using gas service. For existing  
25 customers the marginal distribution and transmission capacity related cost is  
26 actually zero. Marginal cost for new customers is the driver for the new  
27 investment in the gas system along with the replacement of aging infrastructure.  
28 Further, for gas service there are substantial economies of scale associated with  
29 gas distribution infrastructure such that the unit cost of capacity for gas delivery  
30 declines with size at a relatively rapid rate. The resulting marginal cost becomes  
31 the customer related expansion of main and service for gas delivery.

H. EDWIN OVERCAST  
DIRECT TESTIMONY

1    **Q.    PLEASE DISCUSS THE SCALE ECONOMIES ASSOCIATED WITH GAS**  
2    **DISTRIBUTION SERVICE.**

3    A.    Gas system scale economies reflect the relationship between the installed cost of  
4    pipe by size and type coupled with the increased capacity from pressure and pipe  
5    diameter. Simply doubling the size of the gas main more than doubles the  
6    available capacity of the main at a cost approximately equal to or less than double  
7    the smaller size all else equal. For a low pressure system, increasing pipe size  
8    from two inch to four inch allows over five times the amount of gas to flow and  
9    under higher pressure, the flow rate increases by more than six times that of two  
10   inch pipe all else equal. The resulting cost causation implies that larger customers  
11   impose lower per unit costs on the distribution system than do smaller customers.  
12   Table 1 below provides the data for EDG on the installed cost per foot of main  
13   and the available capacity to serve load based on standard operating pressure for  
14   the system.

Table 1  
Main Cost Comparisons

Size of Main	Materials Costs per foot	Installation Costs per foot	Total cost per foot	Design Day Capacity*	Cost per foot of Design Capacity
2 inch	\$1.10	\$3.78	\$4.88	195 Mcf/day	\$0.025
4 inch	\$3.57	\$6.35	\$9.92	1,102 Mcf/day	\$0.009

\*Based on 5280 feet of main

15    Further, given the customer density for the EDG system of 46 customers per mile  
16    of line, the minimum size of pipe installed will serve the design day load  
17    characteristics of the smallest customers and even for larger customers up to 387  
18    Mcf per year assuming a 25 percent annual load factor. This means that  
19    residential customers using under 387 Mcf annually have the same cost as all  
20    other residential customers. EDG has almost no residential customers this large.  
21    Thus, all residential customers are fully served by the minimum system and thus  
22    have the same delivery service costs.

1   **Q.   WHAT IMPLICATIONS RESULT FROM SCALE ECONOMIES AND**  
2       **THE EDG DATA RELATED TO COST OF SERVICE AND RATE**  
3       **DESIGN?**

4   A.   The implication of these conclusions for both cost allocation (either marginal or  
5       embedded) and rate design on the gas system are quite important. Namely, the  
6       recovery of distribution costs through volumetric charges creates intraclass  
7       subsidies from larger customers to smaller customers and those subsidies may be  
8       quite large. Further, the failure to recover fixed costs in fixed charges results in  
9       inefficient price signals and causes customers to bear the consequences of the  
10      inefficiency. Finally, the cost to serve residential customers (excluding gas costs)  
11      is the same regardless of the size of customer since the minimum system installed  
12      by the Company will serve nearly every residential customer.

13   **Q.   WHAT FACTORS CAUSE THE LDC TO INCUR DISTRIBUTION**  
14       **COSTS?**

15   A.   Both marginal and embedded costs for the distribution system are determined by  
16       two major factors: (1) the number and location of customers and (2) their  
17       demands (albeit for gas distribution the impact of demand becomes less important  
18       when pipe scale economies for residential and small commercial customers cause  
19       the minimum installation to also serve design day demand.) Utility cost studies,  
20       both marginal and embedded, have traditionally attempted to identify a portion of  
21       distribution costs as customer-related and the remaining portion as demand-  
22       related. While it is true that marginal demand costs play a role in the installed  
23       facilities, the customer considerations play a much larger role since local facilities  
24       and policies reflect the underlying customer mix and density. The critical issue  
25       for a gas system is that the system provides sufficient capacity to meet the design  
26       day load requirements of customers. For residential and the smallest general  
27       service customers, the smallest distribution pipe installed on the system will serve  
28       the design day capacity of these customers. As a result, the cost to serve the  
29       individual customers in these classes is the same regardless of the design day  
30       demand.

1 **Section 3- Results of the Cost Study**

2

3 **Q. PLEASE DISCUSS THE APPLICATION OF THE THREE STEPS IN THE**  
4 **COST OF SERVICE STUDY.**

5 A. Cost are functionalized and classified in the study based on data from the Uniform  
6 System of Accounts (USOA). The cost study uses two types of allocation factors:  
7 external factors and internal factors. *External* allocation factors are based on  
8 direct knowledge from data in the utility's accounting and other records. For  
9 example, transmission costs are functionalized to transmission FERC accounts  
10 and are assigned by an external transmission allocation factor. Another example  
11 of an external allocation factor is allocation of distribution mains. The cost of  
12 distribution mains are known and assigned directly to the distribution function.  
13 Once assigned to distribution, mains are allocated using the minimum system as  
14 the external allocation factor. *Internal* allocation factors are based on some  
15 combination of external allocation factors, previously directly assigned costs and  
16 other internal allocation factors. For example, the allocation factors for property  
17 insurance costs are based on plant investment amounts assigned to each function;  
18 it is necessary to compute the amount of plant by function before property  
19 insurance costs can be assigned. Both external and internal allocation factors are  
20 used in each of the functional, and classification steps outlined below.

21 **Q. PLEASE DESCRIBE THE RESULTS OF THE ALLOCATION PROCESS**  
22 **AS APPLIED TO THE USOA.**

23 A. The follow section outlines by FERC account the allocation of costs to each  
24 function and classification.

25

26 A. Intangible Plant (FERC Accounts 301-303)

27 Intangible plant is functionalized and classified based on plant or labor.

28

29 B. Production Plant - None

1  
2 C. Natural Gas Storage Plant and Expenses -None

3 D. Transmission Plant and Expenses

4 1. Plant

5 Transmission Plant (FERC Accounts 365-371) represents measuring and  
6 regulating equipment and other associated equipment used to track volumes and  
7 heat content of gas entering the distribution system. The cost of this equipment is  
8 functionalized to Transmission, and classified to Demand.

9 2. Expense

10 Transmission Operation & Maintenance (FERC Accounts 850-865) are  
11 functionalized, and classified based on FERC Accounts 365-371.

12  
13 E. Distribution Plant and Expenses

14 1. Distribution Plant (FERC Accounts 374-385)

15 a. Mains (FERC Account 376)

16 Mains are functionalized to Distribution, and then classified as either Distribution  
17 Customer or Distribution Demand. The customer component percentage was  
18 determined by taking the ratio of the cost of replacing the present distribution  
19 system verse replacing the total system with only the minimum size main. The  
20 minimum size main was determined to be 2" main.

21 As a result of employing the minimum-size concept, 77% of the distribution  
22 mains were classified as customer related and 23% distribution demand related.

23 b. Services (FERC Account 380)

24 Services are functionalized to Distribution, and then classified to Distribution  
25 Customer.

26 c. Meters (FERC Account 381)

27 Meter-Plant is functionalized to Distribution, and then classified to Distribution  
28 Customer.

29 d. Measuring and Regulating Station Equipment (FERC Account 378)

H. EDWIN OVERCAST  
DIRECT TESTIMONY

1 Measuring and regulating equipment is functionalized to Distribution, and  
2 classified to Demand.

3 e. Structures and Improvements (FERC Account 375)

4 Structures and Improvements are functionalized to Distribution, and classified to  
5 Demand.

6 f. Land and Land Rights (FERC Accounts 374)

7 Land and Land rights are functionalized to Distribution, and classified to Demand

8 2. Distribution Expenses (FERC Accounts 870-895)

9 a. Operation of Mains/Services (FERC Account 874)

10 Operating Expense for mains and services are functionalized and classified  
11 proportionally based on Accounts 376 and 380.

12 b. Measuring and Regulating Operation Expenses (FERC Account 875)

13 Measuring and Regulating operating expenses are functionalized to Distribution,  
14 and classified to Demand.

15 c. Meter and House Regulator Operation Expenses (FERC Account 878)

16 Meter and House Regulator Expenses are functionalized and classified based on  
17 FERC Account 381.

18 d. Customer Installation Expenses (FERC Account 879)

19 Customer Installation Expenses are functionalized to Distribution, classified to  
20 Customer.

21 e. Distribution Rents (FERC Account 881)

22 Rents are functionalized and classified based on other distribution accounts.

23 f. Maintenance of Mains (FERC Account 887)

24 Maintenance of mains is functionalized and classified based on FERC Account  
25 376.

26 g. Maintenance of Services (FERC Account 892)

27 Maintenance of Services is functionalized and classified based on FERC Account  
28 380.

29 h. Meters and House Regulators – Maintenance (FERC Account 893)

30 Maintenance of Meters and House Regulators is functionalized and classified  
31 based on FERC Account 381.



H. EDWIN OVERCAST  
DIRECT TESTIMONY

1        i. Measuring and Regulating Maintenance Expenses (FERC Accounts 889 to 890)

2        Measuring and Regulating maintenance expense is functionalized to Distribution,  
3        and classified to Demand.

4        j. Maintenance of Structures (FERC Account 886)

5        Maintenance of Structures is functionalized and classified based on FERC  
6        Account 375.

8        F. General Plant (FERC Accounts 390-398)

9        General Plant accounts are functionalized and classified based on labor.

11       G. Depreciation Reserve (FERC Account 108-111)

12       Depreciation Reserve accounts are functionalized and classified based on their  
13       corresponding gross plant values.

15       H. Other Rate Base Items

16       These various accounts are functionalized and classified based on labor or plant.

18       I. Customer Accounts Expenses

19       1. Meter Reading Expense (FERC Accounts 902)

20       Meter Reading Expense is functionalized and classified to Customer.

21       2. Customer Records & Collection Expense (FERC Accounts 903)

22       Customer Records & Collection Expense are functionalized and classified to  
23       customer.

24       3. Uncollectible Account Expenses (FERC Account 904)

25       Uncollectible Accounts Expense is functionalized and classified based on  
26       Customers

27       J. Customer Service & Information Expenses

28       1. Call Center (FERC Account 908)

29       Call Center Expenses are functionalized and classified to Customer.

31       2. Inform. & Instruct Advertising (FERC Account 909)

1 Information & Instructional Advertising Expenses are functionalized and  
2 classified to Customer.

3 K. Administrative and General Expenses (Accounts 920-939)

4 Administrative and General Expenses are identified in two groups: labor related,  
5 and plant related. Labor related expenses are functionalized and classified  
6 according to labor in each function. Plant related expenses are functionalized and  
7 classified according to plant in each function.

8  
9 L. Depreciation and Amortization (FERC Accounts 403-407)

10 Depreciation and Amortization Expenses are functionalized and classified the  
11 same as the allocation of Accumulated Depreciation and Amortization.

12  
13 M. General Tax, Payroll and Real Estate Tax

14 Payroll taxes were functionalized and classified based on labor. Real Estate Taxes  
15 were functionalized and classified based on Plant.

16  
17 N. Revenue Taxes

18 Revenue Taxes were functionalized, and classified based on revenue.

19  
20 O. Income Taxes

21 Income Taxes were functionalized and classified based on revenue.

22  
23 P. Revenue and Other Revenue

24 Revenues were functionalized and classified based on revenue requirements and  
25 allocated based on actual revenues collected from each class in the Test Period.

26 **Q. PLEASE SUMMARIZE THE RESULTS OF THE COST OF SERVICE**  
27 **STUDY.**

28 A. The cost study results are summarized in the following table:

Table 2

**THE EDG DISTRICT GAS COMPANY**  
**Class Cost of Service Study**  
**Test Year Ended Dec. 31, 2008**

<b>Rate Class</b>	<b>Actual Return</b>
N&S- Res-RS	-0.4%
NW- Res-RS	-1.2%
N&S- Sm Comm-SCF	23.5%
NW- Sm Comm-SCF	18.8%
N&S- Sm Vol Firm-SVF	37.1%
NW- Sm Vol Firm-SVF	35.4%
N&S- Lg Vol Firm-LVF	12.0%
NW- Lg Vol Firm-LVF	11.3%
N&S- Lg Vol Int-LVI	92.2%
NW- Lg Vol Int-LVI	0.0%
N&S- Tran Sm Vol-SVTS	44.4%
NW- Tran Sm Vol-SVTS	41.1%
N&S- Tran Lg Vol-LVTS	8.9%
NW- Tran Lg Vol-LVTS	17.4%

1 As the table illustrates, residential returns are currently below the system average  
2 return. Most of the other classes of service have higher returns. Returns on the  
3 NW system are below the returns for the N&S systems with the exception of rates  
4 for large volume customers. As a result, it is appropriate to allocate a larger  
5 portion of the rate increase to residential customers and minimize the increases to  
6 other classes.

7 **Q. PLEASE DESCRIBE THE COST OF SERVICE SCHEDULES**  
8 **ATTACHED TO THE TESTIMONY.**

9 A. There are five schedules attached to the testimony that provide the results of the  
10 cost of service study. Schedule HEO-1 consists of 18 pages and represents the  
11 results of the class cost of service study for the test year ended December 31,  
12 2008. Each page contains an account description or label for those items not part  
13 of the uniform system of accounts. Where the item is part of the uniform system  
14 of accounts, the account number is provided. The total dollars for each account is

1 also provided. The remainder of the page shows the proportion of each account  
2 allocated to each rate schedule. Pages 13 and 14 provide the net income and  
3 earned return for each rate schedule. Pages 17 and 18 provide the revenue  
4 requirement for each rate schedule. Schedule HEO-2 consists of seven pages and  
5 provides the summary of account functionalization. Schedule HEO-3 consists of  
6 six pages and summarizes the classification of the distribution function accounts.  
7 Schedule HEO-4 consists of 126 pages and provides the allocation of each  
8 account by classification and by rate schedule. Finally, Schedule HEO-5 consists  
9 of 10 pages and provides a summary of the allocation factors by account and  
10 function.  
11

12 **Section 4- Principles of Rate Design**  
13

14 **Q. PLEASE IDENTIFY THE PRINCIPLES OF RATE DESIGN YOU HAVE**  
15 **RELIED ON TO RECOMMEND THE RATE ALTERNATIVE**  
16 **PROPOSED BELOW TO RESOLVE THE ISSUE OF FIXED COST**  
17 **RECOVERY.**

18 **A.** A number of rate design principles or objectives find broad acceptance in  
19 regulatory and policy literature. These include:

- 20 1. Efficiency;
  - 21 2. Cost of Service;
  - 22 3. Value of Service;
  - 23 4. Stability;
  - 24 5. Non-Discrimination;
  - 25 6. Administrative Simplicity; and
  - 26 7. Balanced Budget.
- 27

28 These rate design principles draw heavily on the "Attributes of a Sound Rate  
29 Structure" developed by James Bonbright in Principles of Public Utility Rates.  
30 Each of these principles plays an important role in analyzing the proposals

1 developed in my testimony. To understand the role these principles play, the  
2 following discusses each of the principles.

3 **Q. PLEASE DISCUSS THE PRINCIPLE OF EFFICIENCY.**

4 A. The principle of efficiency broadly incorporates both economic and technical  
5 efficiency. As such, this principle has both a pricing dimension and an  
6 engineering dimension. Economically efficient pricing promotes good decision-  
7 making by gas producers and consumers, fosters efficient expansion of delivery  
8 capacity, results in efficient capital investment in customer facilities and  
9 facilitates the efficient use of existing pipeline, storage and distribution resources.  
10 The efficiency principle benefits stakeholders by creating outcomes for regulation  
11 consistent with the long-run benefits of competition while permitting the  
12 economies of scale consistent with the best cost of service. Technical efficiency  
13 means that the development of the system is designed and constructed to meet the  
14 design day requirements of customers using the most economic equipment and  
15 technology consistent with design standards.

16 **Q. PLEASE DISCUSS THE COST OF SERVICE AND VALUE OF SERVICE**  
17 **PRINCIPLES.**

18 A. These principles each relate to designing rates that recover the total revenue  
19 requirement without causing inefficient choices by consumers. The cost of  
20 service principle contrasts with the value of service principle when certain  
21 transactions do not occur at price levels determined by embedded cost of service.  
22 In essence, the value of service acts as a ceiling on prices. Where prices are set at  
23 levels higher than the value of service, consumers will not purchase the service.  
24

25 The calculation of a "true" cost of service is complicated by the fact that for  
26 network industries like the natural gas distribution industry, the provision of  
27 public utility service often involves joint and common costs which must be  
28 allocated (rather than directly assigned) to specific customer classes or rate  
29 schedules to develop a full cost of service study. While a good fully distributed  
30 cost of service analysis can be performed using principles of cost causation,  
31 informed judgment is nonetheless required to perform such a study. A fully

H. EDWIN OVERCAST  
DIRECT TESTIMONY

1 distributed cost of service study, properly reflecting cost causation principles and  
2 employing sound methods, provides a reasonable tool for the allocation of the  
3 total revenue requirement to customer classes (interclass distribution) and within  
4 the customer classes (intraclass distribution).

5 **Q. PLEASE DISCUSS THE PRINCIPLE OF STABILITY.**

6 A. The principle of stability typically applies to customer rates. This principle  
7 suggests that reasonably stable and predictable prices are important objectives of  
8 a proper rate design.

9 **Q. PLEASE DISCUSS THE CONCEPT OF NON-DISCRIMINATION.**

10 A. The concept of non-discrimination requires prices designed to promote fairness  
11 and avoid undue discrimination. Fairness requires no undue subsidization either  
12 between customers in the same class or across different classes of customers.

13

14 This principle recognizes that the ratemaking process requires discrimination  
15 where there are factors at work that cause the discrimination to be useful in  
16 accomplishing other objectives. For example, things like the location, type of  
17 meter and service, demand characteristics, size, and a variety of other  
18 considerations are often recognized in the design of utility rates to properly  
19 distribute the total cost of service to and within customer classes.

20 **Q. PLEASE DISCUSS THE PRINCIPLE OF ADMINISTRATIVE**  
21 **SIMPLICITY.**

22 A. The principle of administrative simplicity as it relates to rate design requires  
23 prices reasonably simple to administer and understand. This concept includes  
24 price transparency within the constraints of the ratemaking process. Prices are  
25 transparent when customers are able to reasonably calculate and predict bill levels  
26 and interpret details about the charges resulting from the application of the tariff.

27 **Q. PLEASE DISCUSS THE PRINCIPLE OF THE BALANCED BUDGET.**

28 A. Finally, there is the critical principle that rate design permits the utility a  
29 reasonable opportunity to recover the allowed revenue requirement based on the  
30 cost of service. Proper design of utility rates is a necessary condition to enable an  
31 effective opportunity to recover the cost of providing service included in the

H. EDWIN OVERCAST  
DIRECT TESTIMONY

1 revenue authorized by the regulatory authority. This principle is very similar to  
2 the stability objective that I previously discussed from the perspective of customer  
3 rates.

4 **Q. AT TIMES, CAN THE OBJECTIVES EMBEDDED IN THESE**  
5 **PRINCIPLES COMPETE WITH EACH OTHER?**

6 A. Yes, like most principles that have broad application, these principles can  
7 compete with each other. This competition or tension requires further judgment  
8 to strike the right balance between the principles. Detailed evaluation of rate  
9 design alternatives and rate design recommendations must recognize the potential  
10 and actual competition between these principles. Indeed, Bonbright discusses this  
11 tension in detail. Rate design recommendations must deal effectively with such  
12 tension. For example, as noted above, there are tensions between cost and value  
13 of service principles.

14 **Q. PLEASE DESCRIBE THE CONFLICT BETWEEN MARGINAL COST**  
15 **PRICE SIGNALS AND THE RECOVERY OF THE REVENUE**  
16 **REQUIREMENT.**

17 A. The conflict between good price signals based on marginal cost and a balanced  
18 budget or revenue recovery principle arises because marginal cost is below  
19 average cost due to economies of scale. Where fixed delivery service costs do not  
20 vary with volume of gas sales, marginal costs for delivery equal zero. Marginal  
21 customer costs equal the additional cost of providing the entire delivery service to  
22 the customer. Marginal cost tends to be either above or below average cost in  
23 both the short run and the long run. This means that marginal cost-based pricing  
24 will produce either too much or too little revenue to support the revenue  
25 requirement. This suggests that efficient price signals may require a multi-part  
26 tariff designed to meet the revenue requirements while sending marginal cost  
27 price signals related to consumption decisions. Properly designed, a multi-part  
28 tariff may include elements such as access charges, facilities charges, demand  
29 charges, consumption charges and the potential for revenue credits. In the case of  
30 a gas LDC, for residential and small commercial customers the combination of  
31 scale economies and class homogeneity permits the use of a single fixed annual

H. EDWIN OVERCAST  
DIRECT TESTIMONY

1 charge that meets all of the requirements for an efficient rate and recovers the  
2 embedded cost revenue requirement. For larger customers, a combination of  
3 these elements permit good price signals and revenue recovery; however, the  
4 tariff design becomes more difficult to structure and likely will no longer meet the  
5 requirements of simplicity. Therefore, sacrificing some economic efficiency for a  
6 customer class in order to maintain simplicity represents a reasonable  
7 compromise. For larger customers the added complexity of a demand charge is  
8 not a concern. Further, for the largest customers, the cost of metering is customer  
9 specific and each customer creates its own unique requirements for distribution  
10 service based on factors such as distance from the city gate, pressure requirements  
11 and contract demand.

12 **Q. ARE THERE OTHER POTENTIAL CONFLICTS?**

13 **A.** Yes. There are potential conflicts between simplicity and non-discrimination and  
14 between value of service and non-discrimination. Other potential conflicts arise  
15 where companies face unique circumstances that must be considered as part of the  
16 rate design process.

17 **Q. HOW ARE THESE PRINCIPLES TRANSLATED INTO THE DESIGN OF**  
18 **RETAIL GAS RATES?**

19 **A.** The process of developing rates within the context of these principles and  
20 conflicts requires a detailed understanding of all the factors that impact rate  
21 design. These factors include:

- 22 1. System cost characteristics such as the embedded customer,  
23 demand and commodity related costs by type of service;
- 24 2. Customer load characteristics such as peak demand, load factor,  
25 seasonality of loads, and quality of service;
- 26 3. Market considerations such as elasticity of demand, competitive  
27 fuel prices, end-use load characteristics and bypass alternatives;  
28 and
- 29 4. Other considerations such as the value of service ceiling/marginal  
30 cost floor, unique customer requirements, areas of under-utilized



H. EDWIN OVERCAST  
DIRECT TESTIMONY

1 facilities, opportunities to offer new services and the status of  
2 competitive market development.

3  
4 In addition, the development of rates must consider existing rates and the  
5 customer impact of modifications to the rates.

6 In each case, a rate design seeks to recover the authorized level of revenue based  
7 on the actual billing determinants occurring during the test period used to develop  
8 the rates.  
9

10 **Section 5- Issues with Current Volumetric Rates**

11  
12 **Q. PLEASE GENERALLY DESCRIBE THE CURRENT EDG GAS RATES.**

13 A. EDG's current residential service base rates consist of a customer charge and a  
14 flat volumetric charge for distribution. Both the customer charge and the  
15 volumetric charge differ for the North and South portions of the system when  
16 compared to the NW portion of the system. The volumetric charge is a per Ccf  
17 charge. The small general service base rates consist of a customer charge and a  
18 volumetric charge. For both residential and small general service customers the  
19 rate also includes a volumetric Purchased Gas Adjustment (PGA) charge and a  
20 Tax and License Rider charge in addition to the applicable base rate charges. The  
21 PGA charge differs by each system- North, South and NW based on the costs  
22 associated with the interstate pipelines that serve each segment of the system.  
23

24 The customer charge and volumetric charge, referred to as base rate charges,  
25 recover the delivery service costs, including the costs that are incurred as a  
26 function of the number of customers and the design day demand that is placed on  
27 EDG's distribution system. Base rate costs represent the costs incurred to provide  
28 distribution service since the PGA is designed to recover the delivered cost of  
29 natural gas supply plus applicable storage service costs.

1  
2 The PGA charge recovers the delivered cost of obtaining a natural gas supply  
3 required to meet the needs of customers. Various other specific purpose  
4 adjustment charges or riders apply in accordance with their respective  
5 applicability language.

6 From a total annual bill perspective, the revenue that EDG collects volumetrically  
7 through the PGA is substantially greater than the revenue that is collected to cover  
8 the costs incurred to provide base rate service. For example and based on the test  
9 year data presented by EDG, the annual PGA revenue is about 70 percent of the  
10 total annual bill for a typical residential customer. My recommended SFV rate  
11 design better informs the customer about efficient conservation choices by letting  
12 the customer know that the cost of base rate service is not avoided by a reduction  
13 in annual usage volumes.

14 **Q. ARE RATE DESIGN CHANGES REQUIRED TO PROMOTE**  
15 **ECONOMIC EFFICIENCY?**

16 **A.** Yes. The current volumetric rate design is unreasonable in my opinion because it  
17 does a poor job of aligning the revenue recovered by EDG for providing service  
18 with the costs incurred to provide base rate service. As a result of this poor  
19 alignment, the current rate design works against the goal of ensuring that EDG is  
20 provided a reasonable opportunity to recover its costs including a return of and on  
21 the capital that has been invested in the property, plant and equipment that is used  
22 and useful in providing natural gas distribution service.

23  
24 Once revenues are authorized as part of the ratemaking process and recovery is  
25 attempted through a volumetric rate design, the volumetric rate design will almost  
26 certainly produce too much or too little revenue to match the fixed costs of  
27 providing natural gas distribution service. In current circumstances, I believe that  
28 preserving volumetric rate design for distribution service simply because it has  
29 been used historically will work against fundamental regulatory principles and,

H. EDWIN OVERCAST  
DIRECT TESTIMONY

1       when compared to SFV, does a poor job of balancing the interests of customers  
2       and EDG's shareholders.

3  
4       Failure to provide a rate design by which a reasonable opportunity for cost  
5       recovery is realized also causes inefficiencies relative to the removal of  
6       disincentives for conservation, long-term capital investment and efficient access  
7       to capital markets.

8  
9       As explained in more detail below, changing EDG's rate design is critical to the  
10      long-term provision of efficient, reliable and cost-effective delivery service. To  
11      understand more fully the problems created by a volumetric rate design for base  
12      rate service, it is important to understand certain basic utility cost concepts.

13   **Q.   PLEASE DESCRIBE THE NATURE OF DELIVERY SERVICE COSTS**  
14   **RECOVERED IN DISTRIBUTION RATES.**

15   A.   LDC delivery service costs are fixed costs and do not vary with throughput. An  
16   LDC designs and installs a distribution system capable of meeting its customers'  
17   design day requirements at the time of initial installation. These facilities include  
18   the city gate, mains and pressure regulating facilities, services, meters and  
19   regulators all designed to meet the design day requirements of customers at the  
20   time of the installation. Placing these facilities in service permits the LDC to  
21   serve the changes in load due to extreme weather (the design day peak load) or  
22   economic conditions. Once facilities serve customers, the costs associated with  
23   these facilities are by their nature fixed and do not vary as a function of the  
24   volume of gas consumed by customers.

25   **Q.   PLEASE DESCRIBE THE PROBLEMS ASSOCIATED WITH THE**  
26   **REASONABLE OPPORTUNITY TO RECOVER THESE FIXED**  
27   **DELIVERY SERVICE COSTS THROUGH CURRENT RATES WITH A**  
28   **VOLUMETRIC RATE COMPONENT.**

29   A.   Essentially, the problems fall into two broad categories and a third related  
30   category. First, problems relate to economically efficient price signals. Second,  
31   problems relate to the failure to provide a reasonable opportunity to collect the

H. EDWIN OVERCAST  
DIRECT TESTIMONY

1 authorized level of revenue. Third, the problems that fall in the first two  
2 categories of problems are made worse in the context of other policy objectives  
3 that promote cost-effective energy conservation to address resource constraints,  
4 obtain more efficient use of capital and to help manage price level and volatility  
5 risks.

6 **Q. PLEASE DESCRIBE THE FAILURE TO PROVIDE ECONOMICALLY**  
7 **EFFICIENT PRICE SIGNALS.**

8 A. When fixed costs are recovered volumetrically, customers who conserve save  
9 costs that the Company does not save. As noted above, this causes more frequent  
10 rate cases and from an economic perspective wastes resources. An economically  
11 efficient price signal matches the reduction in cost for the company with the  
12 reduction in cost for the consumer. In the case of EDG, the cost reduction from  
13 conservation is lower PGA related costs. Any customer savings in excess of the  
14 cost of gas overstates the value of conservation and results in both excess  
15 investments by the customer and cross subsidies among customers.

16 **Q. PLEASE DESCRIBE THE FAILURE TO PROVIDE A REASONABLE**  
17 **OPPORTUNITY TO COLLECT THE AUTHORIZED LEVEL OF**  
18 **REVENUE.**

19 A. A fundamental tenet of rate regulation provides that rates create an opportunity  
20 for the utility to earn the allowed return. This regulatory principle has its  
21 foundations in a Missouri case before the U. S. Supreme Court where Justice  
22 Brandeis concluded that a utility is permitted an *opportunity to earn the cost of*  
23 *service* including a return of and on the assets devoted to public service.<sup>4</sup>  
24 (Emphasis added). This regulatory principle is well accepted and has a long  
25 history of application.

26  
27 The allowed return along with operating and maintenance expenses (excluding the  
28 gas costs), depreciation expenses and taxes for a test year constitutes the revenue  
29 requirements for delivery service. For gas delivery service, none of these costs

---

<sup>4</sup> Missouri *ex rel.* Southwestern Bell Tel. Co. v. Public Service Commission, 262 U. S. 276, 290-291 (1923).

H. EDWIN OVERCAST  
DIRECT TESTIMONY

1 varies with the volume of gas consumed by customers. This fact is recognized by  
2 regulatory bodies because they do not weather normalize any of these costs as  
3 would be appropriate if the costs varied with the volume of gas consumed.

4  
5 The recovery of revenues occurs in a prospective period, the first year referred to  
6 as the Rate Effective Period. The dollars that are actually available for the earned  
7 return in the Rate Effective Period equal revenue minus all of the costs incurred in  
8 that same year, not the level of costs included in the test year and used for  
9 ratemaking purposes to establish the revenue requirement. Thus, if rates do not  
10 provide a reasonable opportunity of producing the allowed revenue because of  
11 changing use patterns, even though costs equal test year costs, the opportunity to  
12 earn the allowed return disappears.

13  
14 Even if the annual revenue obtained in the Rate Effective Period coincidentally  
15 matches the authorized revenue, a volumetric rate design still poorly aligns the  
16 flow of revenue a natural gas distribution company receives with the way that  
17 costs are incurred to provide its public utility service. Looking at this from a  
18 customer's perspective, the volumetric rate design tends to also swing monthly  
19 base rate bills up or down without regard to the fixed nature of the costs that are  
20 being incurred to provide base rate service. Thus, a volumetric base rate falsely  
21 suggests that a customer that reduces consumption will somehow produce a  
22 corresponding effect on the costs of providing base rate delivery service.

23  
24 The fundamental point is that sales volume variation from the level assumed for  
25 the test year and ratemaking purposes results in revenue and an actual earned  
26 return variation, either higher or lower than the amount specified for ratemaking  
27 purposes. Actual earned return over time does not equal the allowed return even  
28 though earnings vary from year to year under a variety of circumstances including  
29 declining use per customer, conservation, price elasticity responses, asymmetric  
30 costs and other relevant factors. Nevertheless, volumetric recovery of fixed costs

1 fails to provide a reasonable basis for cost recovery as well as a reasonable  
2 opportunity to earn the allowed return.  
3

4 **Section 6- Alternatives to Volumetric Rates**  
5

6 **Q. PLEASE DESCRIBE POTENTIAL SOLUTIONS TO THE PROBLEMS**  
7 **ASSOCIATED WITH THE CURRENT VOLUMETRIC RATE DESIGN.**

8  
9 A. Potential solutions cover a range of possible alternatives. For example, rate  
10 decoupling represents a commonly discussed alternative to resolving the issue of  
11 rate design and revenue recovery. The term "rate decoupling" describes a family  
12 of tools that include partial decoupling mechanisms such as weather  
13 normalization clauses to more complex full decoupling clauses that permit  
14 revenue true-up. Yet another alternative permits the utility to adjust rates for over  
15 or under-recovery of authorized return.  
16

17 In fact, the alternative selected for addressing revenue recovery issues may  
18 include several different tools. For example, Northwest Natural (NWN) Gas uses  
19 a combination of adjustments to provide for various elements of decoupling,  
20 including a weather normalization adjustment mechanism and a distribution  
21 margin adjustment.  
22

23 But, as I describe below, SFV rate design represents the best alternative to solve  
24 the problems of volumetric rate design.

25 **Q. DO ALL ALTERNATIVE STRATEGIES PROVIDE THE SAME**  
26 **SOLUTION TO THE ISSUES OF FIXED COST RECOVERY?**

27 A. No. For example, a normal weather adjustment clause as a mechanism for  
28 improving fixed cost recovery protects against abnormal weather but does not  
29 address declining use per customer. As such, this alternative represents only a  
30 partial decoupling method in that the adjustment does not resolve the problem of  
31 fixed cost recovery in the face of declining average use per customer (or the risk

1 resulting from higher costs associated with colder than normal weather). Thus,  
2 the solution requires more than weather normalization.

3 **Q. HAVE OTHER GAS COMPANIES AND REGULATORY AUTHORITIES**  
4 **INTRODUCED ALTERNATIVES THAT PROVIDE A REASONABLE**  
5 **OPPORTUNITY TO RECOVER FIXED COSTS?**

6 A. Yes. Gas distribution companies and regulatory authorities use various methods  
7 to provide a reasonable opportunity to recover fixed costs. Examples range from  
8 the combination of a real-time normal weather adjustment plus a Rate  
9 Stabilization and Equalization (RSE) for Alabama Gas Company to the SFV rate  
10 design of Atlanta Gas Light Company and combinations in between.

11  
12 Other gas utility proposals designed to better align fixed cost recovery with the  
13 revenue produced by rate levels and rate design cover a variety of options such as  
14 weather normalization plus decoupling. Some methods use deferral accounts and  
15 recover shortfalls in revenues or earnings in a future period. For example, the  
16 Northwest Natural distribution margin adjustment includes a deferred component  
17 for recovery in the next year and the Baltimore Gas and Electric mechanism  
18 adjusts with a one-month lag time. In each case, the provision improves the  
19 probability of achieving the expected test year revenue.

20 **Q. SHOULD ONE ASSUME THAT ALL THE AVAILABLE**  
21 **ALTERNATIVES TO VOLUMETRIC RATES PRODUCE THE SAME**  
22 **RESULTS?**

23 A. No. Many of the alternatives continue to send volumetric price signals even  
24 though they solve the revenue recovery issue. Since the volumetric price signal  
25 causes rates to exceed marginal cost, the solution to issues with volumetric rates  
26 remains inefficient. As will be discussed below, SFV rates offer a superior option  
27 to volumetric rates when compared to other alternatives.

28

29 **Section 7- The SFV Rate Design Proposal**

30

1   **Q.   HOW DOES EDG PROPOSE TO IMPLEMENT SFV RATES FOR**  
2   **DISTRIBUTION SERVICE?**

3   A.   EDG proposes to have a single Delivery Service Charge for all residential  
4       customers. The delivery service charge recovers the base revenue requirements  
5       for residential service. In addition, residential customers will continue to be  
6       subject to the PGA that recovers the variable cost of gas commodity including  
7       delivery to the city gate. For the smaller general service customers, EDG  
8       proposes to use graduated Delivery Service Charges to recognize the cost  
9       difference based on the local facilities used to serve commercial customers. The  
10      use of graduated delivery service charges reflects the more expensive cost of  
11      meters and service lines for customers as their size increases. In addition, the  
12      small general service rate also includes customers much larger than the residential  
13      customers. For these customers, and as an interim step, EDG proposes to  
14      maintain a commodity related charge that is about half of the existing commodity  
15      charge. For firm, large general service customers, the rate will consist of a  
16      customer charge, a demand charge and as an interim step a commodity charge that  
17      is less than half the existing charge as designed to recover base revenue  
18      requirements. Transportation customers will have the same delivery service rates  
19      but will not be subject to the PGA charge.

20   **Q.   DOES THE PROPOSED RATE DESIGN BALANCE THE PRINCIPLES**  
21   **DICSUSSED ABOVE?**

22   A.   Yes, EDG will recover nearly all fixed costs through fixed monthly charges. That  
23       is, the Delivery Service Charge for residential and the smallest general service  
24       customers will recover the allocated revenue requirement associated with: (a) gas  
25       delivery (transmission and distribution); (b) the costs associated with customer  
26       service; and (c) the common costs for administration and general services. All of  
27       these costs are fixed. For larger customers, the proposed customer and demand  
28       charges will recover a larger share of fixed costs than under current rates.

29

30       For residential customers, the relative homogeneity of the residential class permits  
31       the residential rate design to consist of an annual Delivery Service Charge,



H. EDWIN OVERCAST  
DIRECT TESTIMONY

1 payable in twelve equal monthly installments or in summer and winter  
2 installments that differ with summer charges being lower. The Company  
3 mentions both of these options because it may be better to vary the charge  
4 seasonally so that customers will continue to receive lower summer bills. In any  
5 event, the annual charge will be applicable for all customers.

6  
7 Small general service customers also demonstrate relative homogeneity and the  
8 use of a graduated annual Delivery Service Charge payable in twelve monthly  
9 installments represents a reasonable rate design. During the transition, only the  
10 smallest customers will have a pure SFV rate design while larger customers in the  
11 class will be subject to the graduated customer charge and the reduced commodity  
12 charge. For larger general service customers, a continuation of a customer charge  
13 and a demand charge will track costs better since these classes are less  
14 homogeneous. Differences for larger customers include meter costs, service lines,  
15 mains, pressure regulation and other facilities. During the transition, the reduced  
16 commodity charge will continue to be used to recover revenue requirements.

17 **Q. DOES THE SFV RATE PROVIDE BENEFITS TO BOTH THE**  
18 **CUSTOMERS AND THE COMPANY?**

19 **A.** Yes. Customers benefit from the fixed rate simplicity. Customers understand that  
20 a single charge for delivery represents a common pricing method. Since this  
21 component of the bill does not change regardless of the weather, customers know  
22 the impact of additional gas use in cold weather represents the cost of the gas  
23 used. Customers benefit by knowing that a portion of their bill remains the same  
24 each month and that overall bills during the high cost winter months are lower as  
25 compared to bills under volumetric rates.

26  
27 From an economic perspective, customers benefit from more efficient price  
28 signals and make more economically rational decisions related to conservation.  
29 Importantly, the elimination of volumetric rates for delivery service provides the  
30 most benefit to the customers least able to afford heat. The reason these  
31 customers benefit is that unlike volumetric rates, under SFV rates, customers'

H. EDWIN OVERCAST  
DIRECT TESTIMONY

1 distribution bills will not increase as usage increases. And those customers have  
2 higher usage than average customers because the relative inefficiency of their  
3 capital stock (i.e. heating equipment, wall and attic insulation, windows, etc) and  
4 the resulting higher marginal use associated with colder weather.

5  
6 SFV represents a more direct and customer friendly option with added efficiency  
7 benefits. Benefits for EDG are largely related to the principles of stability and  
8 administrative simplicity. EDG benefits from the movement to SFV because it  
9 permits customers to better appreciate the relationship between base rate bills and  
10 annual consumption and this should, over time, reduce the potential customer  
11 confusion relative to their bills. It will also permit regulators and other  
12 stakeholders that interact with customers to educate customers about the structure  
13 of the industry, the nature and scope of state and federal regulatory authorities and  
14 the effect of decisions and rules issued by state and federal regulatory authorities.  
15 The Company benefits from more stable and predictable revenues. The Company  
16 also benefits from the improved price signals and the ability to develop economic  
17 line extension policies based on the SFV rate.

18 **Q. DOES THE SFV RATE GUARANTEE EDG WILL EARN THE**  
19 **ALLOWED RATE OF RETURN?**

20 A. No. SFV rates may stabilize revenue assuming that the customer counts used to  
21 develop the billing determinants accurately reflect the customers during the Rate  
22 Effective Period.<sup>5</sup> Revenues only reflect part of the equation determining the  
23 rate of return. The other part of the equation is the costs used to establish the  
24 revenue requirement. If costs during the Rate Effective Period differ materially  
25 from the costs actually incurred during the rate effective period then the earned  
26 return will differ materially from the allowed return. The value of SFV is to  
27 improve the opportunity to earn the allowed return as compared to volumetric rate  
28 designs.

29  

---

<sup>5</sup> The Rate Effective Period is the first twelve months after the effective date of new rates. The test period is designed to be a forecast of the costs and revenues during the Rate Effective Period.

**Section 8- Combining Service Areas**

**Q. PLEASE DESCRIBE THE DIFFERENCES BETWEEN RESIDENTIAL BASE RATES FOR THE SERVICE AREAS.**

A. Currently, the EDG gas rates differ between the South and North system and the Northwest system. The following Table 3 illustrates the differences between the service areas for residential customers.

Table 3  
Summary of Residential Rate Differences

Charges	North and South	NW	Differences
Customer Charge	\$9.50	\$7.00	\$2.50
Energy Charge	\$0.2737/Ccf	\$0.2654/Ccf	\$0.0083
500 Ccf Base Bill	\$250.80	\$216.70	\$34.10
750 Ccf Base Bill	\$319.28	\$283.05	\$36.23

Nearly all of the difference in the two residential rates results from the different customer charges (\$30.00 per year). These rate differences are not justified on the basis of cost since the cost to serve residential customers is the same as discussed above. Thus it is appropriate to combine all customers in a single residential rate class.

**Q. PLEASE DESCRIBE THE DIFFERENCES IN THE RESIDENTIAL PGA FACTORS FOR THE SERVICE AREAS.**

A. The PGA factors vary between service areas as the following table illustrates.

Service Area	North System	South System	NW System
PGA	\$0.76489	\$0.79004	\$0.73323

H. EDWIN OVERCAST  
DIRECT TESTIMONY

1 These differences result from different interstate pipeline transportation and  
2 storage costs for the gas as delivered to the various city gates. In addition the  
3 Actual Cost Adjustment (ACA) differs for each system. The Company proposes  
4 no change in the PGA applicable to each system.

5 **Q. HOW SHOULD THESE CUSTOMERS BE COMBINED?**

6 A. The process to combine customers is to determine the residential revenue  
7 requirement for the system, determine the number of annual customers and divide  
8 the customers into the revenue requirement to produce the annual fixed charge  
9 rate for residential schedules. For the other rate schedules the graduated Delivery  
10 Service charges and the combination of customer and demand charges are  
11 designed to produce the class revenue requirement.

12 **Q. HOW SHOULD THE NUMBER OF ANNUAL CUSTOMERS BE**  
13 **DETERMINED?**

14 A. The adoption of SFV rates creates certain price responses from customers who  
15 use little or no gas. These customers are likely to discontinue service as a result  
16 of the SFV rate. This would include vacant dwellings and customers who use gas  
17 for purposes other than heating and water heating. The proforma adjustment to  
18 billing data would exclude all accounts with zero annual use as well as customers  
19 who have winter use under ten Ccf per month. Usage under ten Ccf would  
20 indicate the absence of both space and water heating. By making this adjustment,  
21 the customer count will be more reflective of the customer accounts expected  
22 during the Rate Effective Period.

23 **Q. WHAT IS THE IMPACT OF COMBINING THE TWO RATES ON**  
24 **CUSTOMERS?**

25 A. As the following table illustrates, customers served under the North-South system  
26 rates will have lower increases than under the separate systems and customers in  
27 the NW system will have greater increases.

Table 4  
Customer Impacts of Rate Consolidation

System	500 Ccf Current Rates	500 Ccf New Rates	% Change	750 Ccf Current Rates	750 Ccf New Rates	% Change
North	\$800.45			\$1143.76		
South	\$797.47			\$1139.28		
NW	\$708.74			\$1021.10		

Table 4 shows that for annual use of 500 and 750 Ccf the total bill difference is negligible for the North and South systems. As a result, the combination of those two systems has little overall impact on customers. For the NW system, the differences are larger. However, since the proposed combination applies only to the delivery service charge, the overall bill impact is relatively small.

**Section 9- Transportation Issues**

**Q. PLEASE DESCRIBE THE PROPOSED CHANGES TO THE TRANSPORTATION PORTION OF THE TARIFF.**

A. The changes to the transportation tariff include certain changes to definitions, terms of service and various requirements of the tariff. The changes are designed to protect system reliability, clarify provisions, to provide charges associated with certain ancillary services provided by the Company and to reflect best practices for such services.

**Q. PLEASE DESCRIBE THE PROPOSED CHANGE TO CAPACITY ASSIGNMENT.**

A. Currently, capacity assignment is non-recallable. Under the proposed change, capacity assignment is changed to be recallable under certain conditions that potentially have adverse impacts on system reliability. For example, if a customer or aggregator were to declare bankruptcy, there is the potential that gas would not flow to the system using this capacity. This would adversely impact the ability of

H. EDWIN OVERCAST  
DIRECT TESTIMONY

1 the system to meet design day requirements. As a result, the Company has the  
2 right to recall released capacity if there is a bankruptcy filing or other potentially  
3 adverse event.

4 **Q. PLEASE DISCUSS THE COST OF SERVICE ASSOCIATED WITH**  
5 **IMBALANCES.**

6 A. When the gas delivered to the system by a customer, aggregator or marketer is  
7 less than the gas used by the customer the Company meets this shortfall by  
8 withdrawing gas from storage. This occurs because the Company purchases and  
9 delivers gas for sales customers and expects transporters to match daily load with  
10 daily deliveries. Failure to match loads with deliveries requires the Company to  
11 use storage capacity to match not only sales demand but transportation demand as  
12 well. Since both injection and withdrawal have a direct cost (storage injection  
13 and withdrawal costs) customers, marketers and aggregators impose those costs  
14 on the Company and those costs should be paid by the party imposing costs. In  
15 addition to the direct costs, there is an indirect cost of holding space in storage.  
16 That indirect cost is a portion of the fixed costs associated with storage service.  
17 All storage costs currently pass through the Purchased Gas Adjustment (PGA)  
18 clause and are paid by sales customers. By adding ancillary service charges to the  
19 transportation service provisions, the customers imposing these costs will pay for  
20 both the direct cost and make a contribution to fixed costs based on the level of  
21 the charge. Revenues from the ancillary services charges will be a credit to gas  
22 costs for the benefit of sales customers who otherwise pay these costs.

23 **Q. DOES THE TARIFF PROVIDE THE OPTION FOR TRANSPORTATION**  
24 **CUSTOMERS TO RETURN TO SALES SERVICE?**

25 A. Yes. The Company currently permits transportation customers to return to sales  
26 service.

27 **Q. DOES THIS PROVISION CREATE POTENTIAL ADVERSE IMPACTS**  
28 **ON OTHER SALES CUSTOMERS?**

29 A. Yes, depending upon the timing of the return to sales service. Unlike the current  
30 small volume transportation tariff, the current large volume transportation tariff  
31 does not restrict the timing of a large customer's return to sales service or election

H. EDWIN OVERCAST  
DIRECT TESTIMONY

1 of transportation service. If this return to sales service were to take place at the  
2 very beginning of the winter heating season, it could adversely impact the  
3 Company's gas supply planning for the upcoming winter. To avoid this situation,  
4 the Company is proposing that a large customer's return to sales service can only  
5 take place on June 1<sup>st</sup> each year, and that a large transportation customer must  
6 elect to change to transportation service by May 1<sup>st</sup> each year.

7 **Q. DOES THE COMPANY PROPOSE TO CHANGE THE DELIVERY**  
8 **TOLERANCES DURING OPERATIONAL FLOW ORDERS?**

9 A. Yes. Operational flow orders ("OFO") represent a time when the system is  
10 stressed. During such times, having transportation customers match supply and  
11 demand as closely as possible is critical to the reliable operation of the system.  
12 As a result, the Company proposes a much tighter tolerance on matching receipts  
13 and deliveries before incurring penalties. Failure to match receipts and deliveries  
14 has potential for loss of pressure on the system resulting in outages. Thus the  
15 tighter standards and penalties for failure provide signals that OFO requires more  
16 effort on the part of transportation customers, aggregators and marketers.

17 **Q. DOES THE COMPANY HAVE A PROPOSAL REGARDING**  
18 **TELEMETRY FOR SMALL VOLUME CUSTOMERS?**

19 A. Yes. The Company proposes to allow customers, aggregators and marketers to  
20 have telemetry installed at the customer's expense where such installation will  
21 reduce cash out impacts or provide other benefits for customers by providing  
22 better use data during the month. Under the proposed telemetry option for  
23 schools the school will pay a monthly rental fee for the metering installation  
24 based on actual costs of installation. The Company will own, operate and  
25 maintain the equipment.  
26

27 **Section 10- Summary**

28  
29 **Q. PLEASE SUMMARIZE YOUR TESTIMONY.**

H. EDWIN OVERCAST  
DIRECT TESTIMONY

1 A. My testimony provides a detailed cost of service study reflecting cost causation,  
2 economies of scale and appropriate capacity cost allocation based on design day  
3 demand requirements. Since the system is planned and designed to meet these  
4 design day requirements the cost study reflects the factors causing system costs.  
5 My testimony supports the use of SFV rate design to reflect cost causation for  
6 delivery service to customers. The inclusion of a volumetric component in  
7 delivery rates does not represent sound rate design and should be eliminated as  
8 my testimony demonstrates. I also include recommended changes to the  
9 transportation tariff provisions designed to protect system reliability and to result  
10 in a more efficient set of price signals.

11 **Q. DOES THIS COMPLETE YOUR TESTIMONY?**

12 A. Yes.



AFFIDAVIT OF H. EDWIN OVERCAST

STATE OF GEORGIA   )  
                                  ) ss  
COUNTY OF HENRY   )

On the 3 day of June, 2009, before me appeared H. Edwin Overcast, to me personally known, who, being by me first duly sworn, states that he is Director of Black & Veatch and acknowledged that he has read the above and foregoing document and believes that the statements therein are true and correct to the best of his information, knowledge and belief.

H. Edwin Overcast  
H. Edwin Overcast

Subscribed and sworn to before me this 3 day of June, 2009

Nathan Balliew  
Notary Public

My commission expires: January 7, 2013



**THE EMPIRE DISTRICT GAS COMPANY**  
**Class Cost of Service Study**  
**Test Year Ended Dec. 31, 2008**

Exhibit HEO-1  
Page 1 of 18

			<b>TOTAL Class Allocation</b>					
	<u>Account</u>	<u>Account</u>	<u>Total</u>	N&S- Res-RS	NW- Res-RS	N&S- Sm	NW- Sm	N&S- Sm Vol
	<u>Description</u>	<u>Code</u>	<u>Dollars</u>			Comm-SCF	Comm-SCF	Firm-SVF
								NW- Sm
								Vol Firm-
								SVF
12	I. GAS PLANT IN SERVICE							
13	Organization	301	284,572	168,762	23,856	22,745	3,764	9,548
14	Franchises & Consents	302	22,760	17,468	2,458	2,087	347	201
15	Subtotal - INTANGIBLE ASSETS	301-303	307,332	186,230	26,313	24,832	4,111	9,749
16								
17	B. PRODUCTION PLANT							
18	Production Plant	304-338	0	0	0	0	0	0
19	Subtotal - PRODUCTION PLANT	304-338	0	0	0	0	0	0
20								
21	C. STORAGE PLANT							
22	Storage Plant	360-365	0	0	0	0	0	0
23	Subtotal - STORAGE PLANT	360-366	0	0	0	0	0	0
24								
25	D. TRANSMISSION PLANT	365-369	7,461,275	2,962,604	427,753	693,519	113,657	434,558
26								58,590
27	E. DISTRIBUTION PLANT							
28	Land and Land Rights	374	37,329	26,236	3,701	3,431	569	652
29	Structures and Improvements	375	98,669	69,347	9,782	9,070	1,504	1,723
30	Mains	376	40,882,215	24,080,687	3,387,864	2,877,179	478,198	1,326,331
31	Meas. & Reg. Stat. Equip. - General	378	636,217	252,619	36,474	59,136	9,691	37,054
32	Meas. & Reg. Stat. Equip. - City Gate	379	932,939	370,437	53,485	86,716	14,211	54,336
33	Services	380	23,733,563	18,217,001	2,562,914	2,176,581	361,756	209,765
34	Meters	381	5,233,634	3,541,221	498,207	423,108	70,322	244,659
35	House Regulators	383	3,111,493	2,727,734	383,759	0	0	0
36	Ind. Meas. & Reg. Station Equip.	385	583,501	231,687	33,452	54,236	8,888	33,984
37	Other Equipment	387	5,472	3,846	542	503	83	96
38	Subtotal - DISTRIBUTION PLANT	374-387	75,255,033	49,520,815	6,970,180	5,689,959	945,224	1,908,600
39								265,099
40	F. GENERAL PLANT							
41	Land and Land Rights	389	40,234	27,479	3,444	3,063	451	1,136
42	Structures and Improvements	390	1,269,203	866,848	108,653	96,626	14,239	35,845
43	Office Furniture and Equipment	391	374,488	255,770	32,059	28,510	4,201	10,576
44	Office Furniture and Equipment - C	391C	707,056	482,910	60,529	53,829	7,932	19,969
45	Transportation Equipment	392	1,213,917	829,089	103,920	92,417	13,618	34,284
46	Stores Equipment	393	29,019	19,819	2,484	2,209	326	820
47	Tools & Garage Equipment	394	761,155	519,858	65,160	57,948	8,539	21,497
48	Laboratory Equipment	395	98,267	67,115	8,412	7,481	1,102	2,775
49	Power Operated Equipment	396	425,081	290,325	36,390	32,362	4,769	12,005
50	Common Property	397	410,334	280,253	35,127	31,239	4,603	11,589

**THE EMPIRE DISTRICT GAS COMPANY**  
**Class Cost of Service Study**  
**Test Year Ended Dec. 31, 2008**

Exhibit HEO-1  
Page 2 of 18

			<b>TOTAL Class Allocation</b>							
	<u>Account</u>	<u>Account</u>	<u>Total</u>	N&S- Lg Vol	NW- Lg Vol	N&S- Lg Vol	NW- Lg	N&S- Tran	NW- Tran	N&S- Tran
		<u>Code</u>	<u>Allocated</u>	Firm-LVF	Firm-LVF	Int-LVI	Vol Int-LVI	Sm Vol- SVTS	Sm Vol- SVTS	Lg Vol- LVTS
10	<u>Description</u>		<u>Dollars</u>							Lg Vol- LVTS
12	I. GAS PLANT IN SERVICE									
13	Organization	301	284,572	3,111	734	62	0	6,599	1,367	36,979
14	Franchises & Consents	302	22,760	15	2	2	0	104	18	23
15	Subtotal - INTANGIBLE ASSETS	301-303	307,332	3,126	736	64	0	6,702	1,386	37,002
17	B. PRODUCTION PLANT									
18	Production Plant	304-338	0	0	0	0	0	0	0	0
19	Subtotal - PRODUCTION PLANT	304-338	0	0	0	0	0	0	0	0
21	C. STORAGE PLANT									
22	Storage Plant	360-365	0	0	0	0	0	0	0	0
23	Subtotal - STORAGE PLANT	360-366	0	0	0	0	0	0	0	0
25	D. TRANSMISSION PLANT	365-369	7,461,275	157,252	37,446	0	0	311,732	65,597	1,903,943
27	E. DISTRIBUTION PLANT									
28	Land and Land Rights	374	37,329	157	35	3	0	413	82	1,694
29	Structures and Improvements	375	98,669	416	93	7	0	1,091	217	4,478
30	Mains	376	40,882,215	484,816	115,584	2,820	0	954,874	201,222	5,883,692
31	Meas. & Reg. Stat. Equip. - General	378	636,217	13,409	3,193	0	0	26,581	5,593	162,348
32	Meas. & Reg. Stat. Equip. - City Gate	379	932,939	19,662	4,682	0	0	38,978	8,202	238,064
33	Services	380	23,733,563	14,498	1,933	2,074	0	108,260	19,199	23,437
34	Meters	381	5,233,634	24,127	4,825	16,863	0	126,269	22,393	190,593
35	House Regulators	383	3,111,493	0	0	0	0	0	0	0
36	Ind. Meas. & Reg. Station Equip.	385	583,501	12,298	2,928	0	0	24,379	5,130	148,896
37	Other Equipment	387	5,472	23	5	0	0	61	12	248
38	Subtotal - DISTRIBUTION PLANT	374-387	75,255,033	569,405	133,280	21,767	0	1,280,905	262,050	6,653,450
40	F. GENERAL PLANT									
41	Land and Land Rights	389	40,234	255	59	16	0	626	125	2,960
42	Structures and Improvements	390	1,269,203	8,054	1,875	516	0	19,746	3,954	93,381
43	Office Furniture and Equipment	391	374,488	2,376	553	152	0	5,826	1,167	27,553
44	Office Furniture and Equipment - C	391C	707,056	4,487	1,044	287	0	11,000	2,203	52,021
45	Transportation Equipment	392	1,213,917	7,703	1,793	493	0	18,886	3,782	89,313
46	Stores Equipment	393	29,019	184	43	12	0	451	90	2,135
47	Tools & Garage Equipment	394	761,155	4,830	1,124	309	0	11,842	2,371	56,001
48	Laboratory Equipment	395	98,267	624	145	40	0	1,529	306	7,230
49	Power Operated Equipment	396	425,081	2,697	628	173	0	6,613	1,324	31,275
50	Common Property	397	410,334	2,604	606	167	0	6,384	1,278	30,190

#####

**THE EMPIRE DISTRICT GAS COMPANY**  
**Class Cost of Service Study**  
**Test Year Ended Dec. 31, 2008**

Exhibit HEO-1  
Page 3 of 18

			TOTAL Class Allocation						
	Account	Account	Total	N&S- Res-RS	NW- Res-RS	N&S- Sm	NW- Sm	N&S- Sm Vol	NW- Sm
		Code	Allocated			Comm-SCF	Comm-SCF	Firm-SVF	Vol Firm-SVF
	Description		Dollars						
51	Miscellaneous Equipment	398	116,207	79,368	9,948	8,847	1,304	3,282	446
52	Subtotal - GENERAL PLANT	389-399	5,444,960	3,718,833	466,127	414,533	61,085	153,777	20,901
54	TOTAL UTILITY PLANT		88,468,600	56,388,483	7,890,373	6,822,843	1,124,076	2,506,684	345,931
56	II. DEPRECIATION RESERVE								
57	Intangible Plant	108	117,135	70,979	10,029	9,464	1,567	3,716	511
58	Production Plant	108	0	0	0	0	0	0	0
59	Local Storage Plant	108	0	0	0	0	0	0	0
60	Transmission Plant	108	5,179,243	2,056,491	296,925	481,406	78,895	301,648	40,671
61	Mains	109	15,056,283	8,868,542	1,247,698	1,059,620	176,113	488,467	65,748
62	Mains- Direct Assignment	109	0	0	0	0	0	0	0
63	Services	109	12,276,976	9,423,350	1,325,752	1,125,909	187,130	108,508	16,552
64	Meters	109	3,137,874	2,123,172	298,705	253,678	42,162	146,687	22,376
65	Distr Other	109	1,003,123	417,218	60,095	93,176	15,281	55,901	7,545
66	General Plant	109	2,862,349	1,954,945	245,037	217,915	32,111	80,839	10,987
67	TOTAL - DEPRECIATION RESERVE	108	39,632,982	24,914,698	3,484,240	3,241,168	533,260	1,185,766	164,390
69	III. OTHER RATE BASE ITEMS								
70	Gas Storage Inventory		6,572,717	3,756,613	548,500	888,575	150,465	602,171	89,952
71	Materials & Supplies - 13 Mo Avg		470,373	298,451	42,069	36,300	6,021	13,325	1,841
72	Customer Deposits		(994,045)	(762,910)	(107,332)	(91,153)	(15,150)	(8,785)	(1,340)
73	Customer Advances for Construction		(317,323)	(243,565)	(34,267)	(29,101)	(4,837)	(2,805)	(428)
74	Accum Defd Inc Taxes- Gas Inventory		0	0	0	0	0	0	0
75	Accum Defd Inc Taxes- Plant		(1,847,299)	(1,172,110)	(165,218)	(142,562)	(23,648)	(52,330)	(7,229)
76	Other Gas-related		0	0	0	0	0	0	0
77	Other Plant-related		2,527,130	1,603,462	226,020	195,027	32,351	71,588	9,889
78	Other labor-related		0	0	0	0	0	0	0
79	Total - OTHER RATE BASE ITEMS		6,411,553	3,479,941	509,773	857,085	145,203	623,164	92,685
81	IV. TOTAL RATE BASE (Excl. Working Ca		55,247,170	34,953,726	4,915,906	4,438,760	736,019	1,944,082	274,226
82	Working Capital	131	2,485,148	1,604,290	197,213	220,861	32,301	134,085	18,503
84	V. TOTAL RATE BASE		57,732,318	36,558,016	5,113,118	4,659,621	768,320	2,078,167	292,729
86	I. OPERATION & MAINTENANCE EXPEN								
87	A. PRODUCTION EXPENSES								
88	1. Manufactured Gas Production								
89	Operations Labor	701	0	0	0	0	0	0	0

Exhibit HEO-1  
Page 4 of 18

			TOTAL Class Allocation								
	Account	Account Code	Total Allocated Dollars	N&S- Lg Vol Firm-LVF	NW- Lg Vol Firm-LVF	N&S- Lg Vol Int-LVI	NW- Lg Vol Int-LVI	N&S- Tran Sm Vol-SVTS	NW- Tran Sm Vol-SVTS	N&S- Tran Lg Vol-LVTS	NW- Tran Lg Vol-LVTS
51	Miscellaneous Equipment	398	116,207	737	172	47	0	1,808	362	8,550	1,336
52	Subtotal - GENERAL PLANT	389-399	5,444,960	34,553	8,043	2,212	0	84,713	16,964	400,609	62,610
54	TOTAL UTILITY PLANT		88,468,600	764,336	179,506	24,044	0	1,684,053	345,997	8,995,005	#####
56	II. DEPRECIATION RESERVE										
57	Intangible Plant	108	117,135	1,191	281	24	0	2,554	528	14,103	2,188
58	Production Plant	108	0	0	0	0	0	0	0	0	0
59	Local Storage Plant	108	0	0	0	0	0	0	0	0	0
60	Transmission Plant	108	5,179,243	109,157	25,993	0	0	216,389	45,534	1,321,622	204,513
61	Mains	109	15,056,283	178,550	42,568	1,039	0	351,665	74,107	2,166,872	335,295
62	Mains- Direct Assignment	109	0	0	0	0	0	0	0	0	0
63	Services	109	12,276,976	7,499	1,000	1,073	0	56,001	9,931	12,124	2,145
64	Meters	109	3,137,874	14,465	2,893	10,111	0	75,706	13,426	114,272	20,221
65	Distr Other	109	1,003,123	20,099	4,783	5	0	40,010	8,412	242,996	37,603
66	General Plant	109	2,862,349	18,164	4,228	1,163	0	44,533	8,918	210,595	32,913
67	TOTAL - DEPRECIATION RESERVE	108	39,632,982	349,125	81,745	13,414	0	786,858	160,855	4,082,583	634,879
69	III. OTHER RATE BASE ITEMS										
70	Gas Storage Inventory		6,572,717	237,181	52,255	247,004	0	0	0	0	0
71	Materials & Supplies - 13 Mo Avg		470,373	4,132	971	124	0	9,057	1,863	48,662	7,557
72	Customer Deposits		(994,045)	(670)	(89)	(89)	0	(4,534)	(804)	(1,010)	(179)
73	Customer Advances for Construction		(317,323)	(194)	(26)	(28)	0	(1,447)	(257)	(313)	(55)
74	Accum Defd Inc Taxes- Gas Inventory		0	0	0	0	0	0	0	0	0
75	Accum Defd Inc Taxes- Plant		(1,847,299)	(16,228)	(3,813)	(486)	0	(35,568)	(7,317)	(191,112)	(29,679)
76	Other Gas-related		0	0	0	0	0	0	0	0	0
77	Other Plant-related		2,527,130	22,201	5,216	665	0	48,658	10,010	261,444	40,601
78	Other labor-related		0	0	0	0	0	0	0	0	0
79	Total - OTHER RATE BASE ITEMS		6,411,553	246,422	54,514	247,190	0	16,165	3,495	117,671	18,245
81	IV. TOTAL RATE BASE (Excl. Working Ca		55,247,170	661,632	152,274	257,820	0	913,360	188,637	5,030,092	780,636
82	Working Capital	131	2,485,148	47,914	10,026	46,898	0	28,927	5,672	118,977	19,480
84	V. TOTAL RATE BASE		57,732,318	709,546	162,301	304,718	0	942,287	194,309	5,149,070	800,116
86	I. OPERATION & MAINTENANCE EXPEN										
87	A. PRODUCTION EXPENSES										
88	1. Manufactured Gas Production										
89	Operations Labor	701	0	0	0	0	0	0	0	0	0

**THE EMPIRE DISTRICT GAS COMPANY**  
**Class Cost of Service Study**  
**Test Year Ended Dec. 31, 2008**

Exhibit HEO-1  
Page 5 of 18

			<b>TOTAL Class Allocation</b>						
	<u>Account</u>	<u>Account Code</u>	<u>Total Allocated Dollars</u>	<u>N&amp;S- Res-RS</u>	<u>NW- Res-RS</u>	<u>N&amp;S- Sm Comm-SCF</u>	<u>NW- Sm Comm-SCF</u>	<u>N&amp;S- Sm Vol Firm-SVF</u>	<u>NW- Sm Vol Firm-SVF</u>
90	Operation Supv and Engineering	710	0	0	0	0	0	0	0
91	LNG Expense	717	0	0	0	0	0	0	0
92	Subtotal - O&M Accounts 701-716	710-716	0	0	0	0	0	0	0
93	Maint. of Structure & Improvements	741	0	0	0	0	0	0	0
94	Maint Production Equipment	742	0	0	0	0	0	0	0
95	Subtotal - O&M Accounts 717-742	717-742	0	0	0	0	0	0	0
96	Subtotal - Manufactured Gas Production	710-742	0	0	0	0	0	0	0
97									
98	2. Other Gas Supply Expenses								
99	Natural Gas City Gate Purchases	804	0	0	0	0	0	0	0
100	Other Natural Gas Purchases	805	0	0	0	0	0	0	0
101	Natural Gas W/D from Storage- Gas Repoi	808	0	0	0	0	0	0	0
102	Gas Used for Other Util Operations	812	0	0	0	0	0	0	0
103	LNG Operating Expenses	813	18,343	10,060	1,405	2,304	374	1,870	263
104	Subtotal - PRODUCTION EXPENSES	710-813	18,343	10,060	1,405	2,304	374	1,870	263
105									
106	B. NATURAL GAS STORAGE, TERMINAL								
107	Energy Trading & Accounting	844	77,687	42,606	5,950	9,759	1,586	7,921	1,114
108	Subtotal - NATURAL GAS STORAGE	840-850	77,687	42,606	5,950	9,759	1,586	7,921	1,114
109									
110	C. TRANSMISSION EXPENSES	851-870	169,987	67,496	9,745	15,800	2,589	9,900	1,335
111									
112	D. DISTRIBUTION EXPENSES								
113	Mains and Services Expenses	874	168,919	110,575	15,557	13,212	2,196	4,016	550
114	Perf Distrib Main Locates	874	274,398	161,635	22,740	19,312	3,210	8,902	1,198
115	Routine Leak Surv Mains & SVCS	874	72,227	47,280	6,652	5,649	939	1,717	235
116	Meas. & Reg. Station Expense General	875	110,946	44,052	6,360	10,312	1,690	6,462	871
117	Meas. & Reg. Station Expense Industrial	876	0	0	0	0	0	0	0
118	Meas. & Reg. Station Expense Stat-City G	877	28,156	11,180	1,614	2,617	429	1,640	221
119	Meter & House Regulator Expenses	878	229,717	155,433	21,867	18,571	3,087	10,739	1,638
120	Perf Connects/Discon/Recon-Gas	878	521,299	443,265	31,976	30,444	1,066	12,882	1,457
121	Customer Install	879	294,993	224,103	31,529	26,776	4,450	3,575	545
122	Other expenses	880	211,476	139,137	19,584	15,984	2,655	5,366	745
123	Co Used Gas O&M Offset	880	19,827	13,045	1,836	1,499	249	503	70
124	Distribution Rents	881	0	0	0	0	0	0	0
125	Maint. Supervision & Engineering	885	58,975	38,802	5,461	4,458	741	1,497	208
126	Maint. of Mains	887	450,109	265,126	37,300	31,677	5,265	14,603	1,966
127	PerfMaint3rdPartyDmg-UGDistGas	887	7,160	4,878	689	659	109	146	20
128	Dist Maint Compr Station Equip	888	133	53	8	12	2	8	1

**THE EMPIRE DISTRICT GAS COMPANY**  
**Class Cost of Service Study**  
**Test Year Ended Dec. 31, 2008**

Exhibit HEO-1  
Page 6 of 18

			TOTAL Class Allocation								
	Account	Account Code	Total Allocated Dollars	N&S- Lg Vol Firm-LVF	NW- Lg Vol Firm-LVF	N&S- Lg Vol Int-LVI	NW- Lg Vol Int-LVI	N&S- Tran Sm Vol-SVTS	NW- Tran Sm Vol-SVTS	N&S- Tran Lg Vol-LVTS	NW- Tran Lg Vol-LVTS
	Description										
90	Operation Supv and Engineering	710	0	0	0	0	0	0	0	0	0
91	LNG Expense	717	0	0	0	0	0	0	0	0	0
92	Subtotal - O&M Accounts 701-716	710-716	0	0	0	0	0	0	0	0	0
93	Maint. of Structure & Improvements	741	0	0	0	0	0	0	0	0	0
94	Maint Production Equipment	742	0	0	0	0	0	0	0	0	0
95	Subtotal - O&M Accounts 717-742	717-742	0	0	0	0	0	0	0	0	0
96	Subtotal - Manufactured Gas Production	710-742	0	0	0	0	0	0	0	0	0
97											
98	2. Other Gas Supply Expenses										
99	Natural Gas City Gate Purchases	804	0	0	0	0	0	0	0	0	0
100	Other Natural Gas Purchases	805	0	0	0	0	0	0	0	0	0
101	Natural Gas W/D from Storage- Gas Repoi	808	0	0	0	0	0	0	0	0	0
102	Gas Used for Other Util Operations	812	0	0	0	0	0	0	0	0	0
103	LNG Operating Expenses	813	18,343	842	177	1,048	0	0	0	0	0
104	Subtotal - PRODUCTION EXPENSES	710-813	18,343	842	177	1,048	0	0	0	0	0
105											
106	B. NATURAL GAS STORAGE, TERMINAL										
107	Energy Trading & Accounting	844	77,687	3,566	748	4,438	0	0	0	0	0
108	Subtotal - NATURAL GAS STORAGE	840-850	77,687	3,566	748	4,438	0	0	0	0	0
109											
110	C. TRANSMISSION EXPENSES	851-870	169,987	3,583	853	0	0	7,102	1,494	43,377	6,712
111											
112	D. DISTRIBUTION EXPENSES										
113	Mains and Services Expenses	874	168,919	1,305	307	13	0	2,779	576	15,442	2,391
114	Perf Distrib Main Locates	874	274,398	3,248	775	19	0	6,409	1,351	39,488	6,110
115	Routine Leak Surv Mains & SVCS	874	72,227	558	131	5	0	1,188	246	6,603	1,022
116	Meas. & Reg. Station Expense General	875	110,946	2,338	557	0	0	4,635	975	28,311	4,381
117	Meas. & Reg. Station Expense Industrial	876	0	0	0	0	0	0	0	0	0
118	Meas. & Reg. Station Expense Stat-City G	877	28,156	593	141	0	0	1,176	248	7,185	1,112
119	Meter & House Regulator Expenses	878	229,717	1,059	212	740	0	5,542	983	8,366	1,480
120	Perf Connects/Discon/Recon-Gas	878	521,299	0	0	0	0	209	0	0	0
121	Customer Install	879	294,993	282	45	106	0	1,845	327	1,196	212
122	Other expenses	880	211,476	1,602	375	61	0	3,602	737	18,717	2,910
123	Co Used Gas O&M Offset	880	19,827	150	35	6	0	338	69	1,755	273
124	Distribution Rents	881	0	0	0	0	0	0	0	0	0
125	Maint. Supervision & Engineering	885	58,975	447	105	17	0	1,004	206	5,220	811
126	Maint. of Mains	887	450,109	5,338	1,273	31	0	10,513	2,215	64,779	10,024
127	PerfMaint3rdPartyDmg-UGDistGas	887	7,160	39	9	0	0	95	19	430	67
128	Dist Maint Compr Station Equip	888	133	3	1	0	0	6	1	34	5

**THE EMPIRE DISTRICT GAS COMPANY**  
**Class Cost of Service Study**  
**Test Year Ended Dec. 31, 2008**

Exhibit HEO-1  
Page 7 of 18

			<b>TOTAL Class Allocation</b>						
	<u>Account</u>	<u>Account</u>	<u>Total</u>	<u>N&amp;S- Res-RS</u>	<u>NW- Res-RS</u>	<u>N&amp;S- Sm</u>	<u>NW- Sm</u>	<u>N&amp;S- Sm Vol</u>	<u>NW- Sm</u>
	<u>Description</u>	<u>Code</u>	<u>Dollars</u>			<u>Comm-SCF</u>	<u>Comm-SCF</u>	<u>Firm-SVF</u>	<u>Vol Firm-SVF</u>
129	Maint Of Meas. & Reg. Station Expense G	889	66,419	26,372	3,808	6,174	1,012	3,868	522
130	Maint Of Meas. & Reg. Station Expense In	890	70,803	28,113	4,059	6,581	1,079	4,124	556
131	Maint Of Meas. & Reg. Station Expense St	891	4,809	1,909	276	447	73	280	38
132	Maint. of Services	892	134,957	103,588	14,574	12,377	2,057	1,193	182
133	Maint. of Meters & House Regulators	893	45,986	34,545	4,860	2,332	388	1,348	206
134	Maintenance of Other Equipment	894	189	124	18	14	2	5	1
135	Blank	XXX	0	0	0	0	0	0	0
136	Subtotal - DISTRIBUTION EXPENSES	870-894	2,771,495	1,853,216	230,767	209,106	30,698	82,872	11,230
137	Total - OPERATION & MAINTENANCE EX		3,037,512	1,973,379	247,867	236,969	35,248	102,563	13,942
138									
139	II. CUSTOMER ACCOUNTS EXPENSES								
140	Customer Service - Administrative	901	73,353	57,332	7,716	5,698	939	538	82
141	Meter Reading Expenses	902	667,900	463,945	85,528	62,123	12,549	10,777	1,742
142	Customer Records & Collection Expense	903	915,988	715,930	96,351	71,153	11,719	6,723	1,020
143	Uncollectible Accounts	904	1,365,508	1,161,104	83,759	79,746	2,794	33,743	3,816
144	Write-Off- PIP	904P	0	0	0	0	0	0	0
145	Miscellaneous Customer Accounts Expens	905	51,806	40,491	5,449	4,024	663	380	58
146	Miscellaneous Customer Accounts Expens	905A	0	0	0	0	0	0	0
147	Total - CUSTOMER ACCOUNTS EXPENSES		3,074,555	2,438,802	278,804	222,744	28,663	52,161	6,718
148									
149	III. CUSTOMER SERVICE & INFORMATI								
150	Operation Supervision	907	20,484	15,721	2,212	1,878	312	181	28
151	Customer Assist- Choice	908C	0	0	0	0	0	0	0
152	Customer Assist- Other	908	240,043	172,662	24,291	1,784	296	172	26
153	Advertising & Promotion	909	20,444	12,946	1,811	1,650	272	736	104
154	Other Customer Service & Informational E	910	0	0	0	0	0	0	0
155	Operations sales Expense	911	13,870	8,783	1,228	1,119	185	499	70
156	Demonstration	912	16,439	10,410	1,456	1,327	219	592	83
157	Total - CUSTOMER SERVICE & INFORM		311,281	220,522	30,998	7,758	1,284	2,180	311
158									
159	Total - CUSTOMER ACCOUNTS, SERVIC		3,385,836	2,659,324	309,802	230,502	29,947	54,340	7,029
160									
161	IV. ADMINISTRATIVE & GENERAL EXPE								
162									
163	A. Labor-Related:								
164	Administrative & General Salaries	920	1,750,379	1,195,485	149,845	133,259	19,637	49,435	6,719
165	Office Supplies & Expenses	921	738,856	504,629	63,251	56,250	8,289	20,867	2,836
166	Transfer Expenses	922	0	0	0	0	0	0	0
167	Outside Services Employed	923	205,815	159,860	17,946	15,291	1,933	5,084	693



**THE EMPIRE DISTRICT GAS COMPANY**  
**Class Cost of Service Study**  
**Test Year Ended Dec. 31, 2008**

Exhibit HEO-1  
Page 8 of 18

			TOTAL Class Allocation								
	Account	Account Code	Total Allocated Dollars	N&S- Lg Vol Firm-LVF	NW- Lg Vol Firm-LVF	N&S- Lg Vol Int-LVI	NW- Lg Vol Int-LVI	N&S- Tran Sm Vol-SVTS	NW- Tran Sm Vol-SVTS	N&S- Tran Lg Vol-LVTS	NW- Tran Lg Vol-LVTS
	Description										
129	Maint Of Meas. & Reg. Station Expense Gr	889	66,419	1,400	333	0	0	2,775	584	16,948	2,623
130	Maint Of Meas. & Reg. Station Expense In	890	70,803	1,492	355	0	0	2,958	622	18,067	2,796
131	Maint Of Meas. & Reg. Station Expense St	891	4,809	101	24	0	0	201	42	1,227	190
132	Maint. of Services	892	134,957	82	11	12	0	616	109	133	24
133	Maint. of Meters & House Regulators	893	45,986	133	27	93	0	696	123	1,050	186
134	Maintenance of Other Equipment	894	189	1	0	0	0	3	1	17	3
135	Blank	XXX	0	0	0	0	0	0	0	0	0
136	Subtotal - DISTRIBUTION EXPENSES	870-894	2,771,495	20,173	4,716	1,103	0	46,591	9,435	234,969	36,618
137	Total - OPERATION & MAINTENANCE EXP		3,037,512	28,163	6,494	6,589	0	53,693	10,930	278,346	43,330
138											
139 II. CUSTOMER ACCOUNTS EXPENSES											
140	Customer Service - Administrative	901	73,353	244	33	33	0	274	49	348	68
141	Meter Reading Expenses	902	667,900	892	198	216	0	11,029	1,956	14,398	2,548
142	Customer Records & Collection Expense	903	915,988	3,049	407	407	0	3,421	607	4,349	854
143	Uncollectible Accounts	904	1,365,508	0	0	0	0	547	0	0	0
144	Write-Off- PIP	904P	0	0	0	0	0	0	0	0	0
145	Miscellaneous Customer Accounts Expens	905	51,806	172	23	23	0	193	34	246	48
146	Miscellaneous Customer Accounts Expens	905A	0	0	0	0	0	0	0	0	0
147	Total - CUSTOMER ACCOUNTS EXPENSES		3,074,555	4,358	660	678	0	15,464	2,645	19,341	3,518
148											
149 III. CUSTOMER SERVICE & INFORMATIONAL											
150	Operation Supervision	907	20,484	14	2	2	0	93	17	21	4
151	Customer Assist- Choice	908C	0	0	0	0	0	0	0	0	0
152	Customer Assist- Other	908	240,043	13,389	1,785	1,785	0	89	16	20,177	3,570
153	Advertising & Promotion	909	20,444	251	57	108	0	334	69	1,823	283
154	Other Customer Service & Informational Exp	910	0	0	0	0	0	0	0	0	0
155	Operations sales Expense	911	13,870	170	39	73	0	226	47	1,237	192
156	Demonstration	912	16,439	202	46	87	0	268	55	1,466	228
157	Total - CUSTOMER SERVICE & INFORMATIONAL		311,281	14,027	1,930	2,055	0	1,011	203	24,724	4,278
158											
159	Total - CUSTOMER ACCOUNTS, SERVICE & INFORMATIONAL		3,385,836	18,385	2,589	2,733	0	16,475	2,848	44,065	7,796
160											
161 IV. ADMINISTRATIVE & GENERAL EXPENSES											
162											
163 A. Labor-Related:											
164	Administrative & General Salaries	920	1,750,379	11,108	2,586	711	0	27,233	5,453	128,783	20,127
165	Office Supplies & Expenses	921	738,856	4,689	1,091	300	0	11,495	2,302	54,361	8,496
166	Transfer Expenses	922	0	0	0	0	0	0	0	0	0
167	Outside Services Employed	923	205,815	275	53	160	0	1,696	294	2,149	380

**THE EMPIRE DISTRICT GAS COMPANY**  
**Class Cost of Service Study**  
**Test Year Ended Dec. 31, 2008**

Exhibit HEO-1  
Page 9 of 18

			TOTAL Class Allocation					
	Account	Account	Total	N&S- Res-RS	NW- Res-RS	N&S- Sm	NW- Sm	N&S- Sm Vol
	Description	Code	Allocated			Comm-SCF	Comm-SCF	Firm-SVF
			Dollars					Vol Firm-SVF
168	Outside Services Employed	923	0	0	0	0	0	0
169	Injuries & Damages	925	260,141	177,673	22,270	19,805	2,918	7,347
170	Employee Pensions and Benefits	926	<u>767,116</u>	<u>523,930</u>	<u>65,670</u>	<u>58,402</u>	<u>8,606</u>	<u>21,665</u>
171	Subtotal - O&M Accounts 920-923, 926		3,722,307	2,561,576	318,983	283,007	41,383	104,398
172								
173	B. Plant-Related:							
174	Property Insurance	924	<u>255</u>	<u>161</u>	<u>23</u>	<u>20</u>	<u>3</u>	<u>7</u>
175	Subtotal - O&M Accounts 924		255	161	23	20	3	7
176								
177	C. Other-Related:							
178	Regulatory Commission Expenses	928	269,917	171,262	24,141	20,830	3,455	7,646
179	Duplicate Charges Credit	929	(18,875)	(11,976)	(1,688)	(1,457)	(242)	(535)
180	PUCO Assessments	408	0	0	0	0	0	0
181	Customer Interest Expense	431	61,449	47,161	6,635	5,635	937	543
182	Miscellaneous General	930	185,185	120,590	17,009	15,015	2,489	4,840
183	Rents	931	314,468	230,333	32,447	27,572	4,576	4,830
184	Misc. General Plant	935	<u>114,011</u>	<u>76,473</u>	<u>10,771</u>	<u>7,389</u>	<u>1,226</u>	<u>3,472</u>
185	Subtotal - O&M Accounts 928-935		926,155	633,843	89,314	74,985	12,442	20,797
186								
187	Total - ADMINISTRATIVE & GENERAL EXPENSES		4,648,717	3,195,581	408,320	358,012	53,828	125,202
188								
189	TOTAL - OPERATING EXPENSES (Excl I		11,072,065	7,828,284	965,989	825,483	119,023	282,106
190								
191	VI. DEPRECIATION EXPENSE							
192	Intangible Plant	403	26,866	16,280	2,300	2,171	359	852
193	Production Plant	403	0	0	0	0	0	0
194	Local Storage Plant	403	0	0	0	0	0	0
195	Transmission Plant	403	117,683	46,728	6,747	10,939	1,793	6,854
196	Mains	404	940,291	553,856	77,921	66,175	10,999	30,506
197	Mains- Direct	404	0	0	0	0	0	0
198	Services	404	683,527	524,650	73,812	62,686	10,419	6,041
199	Meters	404	230,211	155,767	21,915	18,611	3,093	10,762
200	Distr Other	404	47,111	19,594	2,822	4,376	718	2,625
201	General Plant	404	315,085	215,198	26,973	23,988	3,535	8,899
202	Rent from Gas Ppty / Other Rev	404	753,598	478,157	67,400	58,158	9,647	21,348
203	Adjustments		<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
204	Total - DEPRECIATION EXPENSE	403	3,114,371	2,010,230	279,890	247,102	40,562	87,887
205								

**THE EMPIRE DISTRICT GAS COMPANY**  
**Class Cost of Service Study**  
**Test Year Ended Dec. 31, 2008**

Exhibit HEO-1  
Page 10 of 18

			TOTAL Class Allocation								
	Account	Account Code	Total Allocated Dollars	N&S- Lg Vol Firm-LVF	NW- Lg Vol Firm-LVF	N&S- Lg Vol Int-LVI	NW- Lg Vol Int-LVI	N&S- Tran Sm Vol-SVTS	NW- Tran Sm Vol-SVTS	N&S- Tran Lg Vol-LVTS	NW- Tran Lg Vol-LVTS
	Description										
168	Outside Services Employed	923	0	0	0	0	0	0	0	0	0
169	Injuries & Damages	925	260,141	1,651	384	106	0	4,047	810	19,140	2,991
170	Employee Pensions and Benefits	926	767,116	4,868	1,133	312	0	11,935	2,390	56,440	8,821
171	Subtotal - O&M Accounts 920-923, 926		3,722,307	22,589	5,247	1,589	0	56,406	11,250	260,872	40,815
172											
173	B. Plant-Related:										
174	Property Insurance	924	255	2	1	0	0	5	1	26	4
175	Subtotal - O&M Accounts 924		255	2	1	0	0	5	1	26	4
176											
177	C. Other-Related:										
178	Regulatory Commission Expenses	928	269,917	2,371	557	71	0	5,197	1,069	27,924	4,336
179	Duplicate Charges Credit	929	(18,875)	(166)	(39)	(5)	0	(363)	(75)	(1,953)	(303)
180	PUCO Assessments	408	0	0	0	0	0	0	0	0	0
181	Customer Interest Expense	431	61,449	41	6	6	0	280	50	62	11
182	Miscellaneous General	930	185,185	1,412	329	49	0	3,226	658	16,353	2,542
183	Rents	931	314,468	854	183	87	0	2,825	540	8,218	1,293
184	Misc. General Plant	935	114,011	809	186	114	0	2,151	424	9,066	1,431
185	Subtotal - O&M Accounts 928-935		926,155	5,321	1,221	321	0	13,316	2,666	59,671	9,310
186											
187	Total - ADMINISTRATIVE & GENERAL EXPENSES		4,648,717	27,913	6,469	1,910	0	69,727	13,917	320,570	50,130
188											
189	TOTAL - OPERATING EXPENSES (Excl DEPRECIATION)		11,072,065	74,460	15,553	11,233	0	139,894	27,696	642,981	101,256
190											
191	VI. DEPRECIATION EXPENSE										
192	Intangible Plant	403	26,866	273	64	6	0	586	121	3,235	502
193	Production Plant	403	0	0	0	0	0	0	0	0	0
194	Local Storage Plant	403	0	0	0	0	0	0	0	0	0
195	Transmission Plant	403	117,683	2,480	591	0	0	4,917	1,035	30,030	4,647
196	Mains	404	940,291	11,151	2,658	65	0	21,962	4,628	135,325	20,940
197	Mains- Direct	404	0	0	0	0	0	0	0	0	0
198	Services	404	683,527	418	56	60	0	3,118	553	675	119
199	Meters	404	230,211	1,061	212	742	0	5,554	985	8,384	1,484
200	Distr Other	404	47,111	944	225	0	0	1,879	395	11,412	1,766
201	General Plant	404	315,085	1,999	465	128	0	4,902	982	23,182	3,623
202	Rent from Gas Ppty / Other Rev	404	753,598	6,620	1,555	198	0	14,510	2,985	77,963	12,107
203	Adjustments		0	0	0	0	0	0	0	0	0
204	Total - DEPRECIATION EXPENSE	403	3,114,371	24,947	5,827	1,198	0	57,428	11,684	290,206	45,188
205											

Exhibit HEO-1  
Page 11 of 18

				TOTAL Class Allocation					
	Account	Account Code	Total Allocated Dollars	N&S- Res-RS	NW- Res-RS	N&S- Sm Comm-SCF	NW- Sm Comm-SCF	N&S- Sm Vol Firm-SVF	NW- Sm Vol Firm-SVF
206	VII. TAXES OTHER THAN INCOME TAXE								
207	A. General Taxes								
208	Property Tax- Plant		615,720	390,673	55,068	47,517	7,882	17,442	2,409
209	Distribution Tax		0	0	0	0	0	0	0
210	Payroll related		12,179	8,318	1,043	927	137	344	47
211	Other taxes		40,251	25,539	3,600	3,106	515	1,140	158
212	Property Tax- Inventory		<u>241,503</u>	<u>138,030</u>	<u>20,154</u>	<u>32,649</u>	<u>5,529</u>	<u>22,126</u>	<u>3,305</u>
213	Subtotal- Taxes Other Than Income Taxes	408	909,652	562,561	79,865	84,200	14,063	41,052	5,919
214									
215	B. Franchise and Revenue Taxes								
216	Gross Receipts Tax		0	0	0	0	0	0	0
217	GRT- Uncoll Rider		<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
218	Subtotal- Franchise and Gross Receipts Tax		0	0	0	0	0	0	0
219									
220	C. Income Tax Expense								
221	State Income Tax expense		33,394	395	(219)	9,558	1,283	6,713	903
222	Federal Income Tax Deferred		519,234	317,014	44,694	38,737	6,424	16,355	2,243
223	Federal Income Tax expense		<u>212,506</u>	<u>2,511</u>	<u>(1,394)</u>	<u>60,826</u>	<u>8,163</u>	<u>42,718</u>	<u>5,749</u>
224	Subtotal- Income tax expense		<u>765,133</u>	<u>319,919</u>	<u>43,081</u>	<u>109,121</u>	<u>15,871</u>	<u>65,786</u>	<u>8,896</u>
225	Total- TAX EXPENSE		1,674,786	882,480	122,945	193,320	29,933	106,838	14,814
226									
227	TOTAL EXPENSES		15,861,222	10,720,994	1,368,824	1,265,906	189,518	476,830	65,146
228									

THE EMPIRE DISTRICT GAS COMPANY  
Class Cost of Service Study  
Test Year Ended Dec. 31, 2008

Exhibit HEO-1  
Page 12 of 18

			TOTAL Class Allocation								
	Account	Account	Total	N&S- Lg Vol	NW- Lg Vol	N&S- Lg Vol	NW- Lg	N&S- Tran	NW- Tran	N&S- Tran	NW- Tran
		Code	Allocated	Firm-LVF	Firm-LVF	Int-LVI	Vol Int-LVI	Sm Vol- SVTS	Sm Vol- SVTS	Lg Vol- LVTS	Lg Vol- LVTS
	Description		Dollars								
VII. TAXES OTHER THAN INCOME TAXE											
A. General Taxes											
	Property Tax- Plant		615,720	5,409	1,271	162	0	11,855	2,439	63,699	9,892
	Distribution Tax		0	0	0	0	0	0	0	0	0
	Payroll related		12,179	77	18	5	0	189	38	896	140
	Other taxes		40,251	354	83	11	0	775	159	4,164	647
	Property Tax- Inventory		<u>241,503</u>	<u>8,715</u>	<u>1,920</u>	<u>9,076</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
	Subtotal- Taxes Other Than Income Taxes	408	909,652	14,555	3,292	9,253	0	12,820	2,636	68,759	10,679
B. Franchise and Revenue Taxes											
	Gross Receipts Tax		0	0	0	0	0	0	0	0	0
	GRT- Uncoll Rider		<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
	Subtotal- Franchise and Gross Receipts Taxes		0	0	0	0	0	0	0	0	0
C. Income Tax Expense											
	State Income Tax expense		33,394	837	185	2,307	0	3,732	717	5,558	1,425
	Federal Income Tax Deferred		519,234	5,332	1,260	135	0	11,302	2,342	63,536	9,860
	Federal Income Tax expense		<u>212,506</u>	<u>5,325</u>	<u>1,175</u>	<u>14,679</u>	<u>0</u>	<u>23,752</u>	<u>4,565</u>	<u>35,368</u>	<u>9,070</u>
	Subtotal- Income tax expense		<u>765,133</u>	<u>11,494</u>	<u>2,620</u>	<u>17,121</u>	<u>0</u>	<u>38,786</u>	<u>7,624</u>	<u>104,463</u>	<u>20,355</u>
	Total- TAX EXPENSE		1,674,786	26,048	5,912	26,374	0	51,605	10,260	173,222	31,034
TOTAL EXPENSES											
			15,861,222	125,455	27,292	38,806	0	248,927	49,639	1,106,408	177,477

Exhibit HEO-1  
Page 13 of 18

				<b>TOTAL Class Allocation</b>					
			Total Allocated	N&S- Res-RS	NW- Res-RS	N&S- Sm Comm-SCF	NW- Sm Comm-SCF	N&S- Sm Vol Firm-SVF	NW- Sm Vol Firm-SVF
	<u>Description</u>	<u>Account Code</u>	<u>Dollars</u>						
V.	REVENUES at Present Rates								
	Residential	480-483	11,695,138	10,409,754	1,285,384	0	0	0	0
	Comm - Indust Sales	480-483	4,661,454	0	0	2,343,324	330,993	1,244,259	168,382
	Comm - Indust Transport	480-483	2,673,260	0	0	0	0	0	0
	Forfeited Discounts Gas	480-483	94,128	72,241	10,164	8,631	1,435	832	127
	Returned Check Chgs Gas	480-483	13,340	10,238	1,440	1,223	203	118	18
	Reconnect Charges Gas	480-484	67,279	51,635	7,264	6,169	1,025	595	91
	Tax Remuneration Gas	480-485	29,924	16,369	2,021	3,685	520	1,957	265
	Misc Revenue	480-485	0	0	0	0	0	0	0
	Gas Revenue	480-483	0	0	0	0	0	0	0
	Rent from Gas Ppty / Other Rev	495	0	0	0	0	0	0	0
	Subtotal Gas Revenues, net		19,234,523	10,560,238	1,306,273	2,363,033	334,177	1,247,759	168,882
	Non-Operating Income	418-421	0	0	0	0	0	0	0
	Non-Operating Income	426	0	0	0	0	0	0	0
	Total Non-Oper Income		0	0	0	0	0	0	0
	Total Revenue		19,234,523	10,560,238	1,306,273	2,363,033	334,177	1,247,759	168,882
	Total Expenses		15,861,222	10,720,994	1,368,824	1,265,906	189,518	476,830	65,146
	NET INCOME at Present Rates		<u>3,373,301</u>	<u>(160,755)</u>	<u>(62,551)</u>	<u>1,097,127</u>	<u>144,659</u>	<u>770,930</u>	<u>103,737</u>
				-0.4%	-1.2%	23.5%	18.8%	37.1%	35.4%
	Tariff Revenue Requirements		19,234,523	10,560,238	1,306,273	2,363,033	334,177	1,247,759	168,882

Exhibit HEO-1  
Page 14 of 18

			TOTAL Class Allocation								
	Account	Account	Total	N&S- Lg Vol	NW- Lg Vol	N&S- Lg Vol	NW- Lg	N&S- Tran	NW- Tran	N&S- Tran	NW- Tran
	Description	Code	Allocated	Firm-LVF	Firm-LVF	Int-LVI	Vol Int-LVI	Sm Vol- SVTS	Sm Vol- SVTS	Lg Vol- LVTS	Lg Vol- LVTS
			Dollars								
229	V. REVENUES at Present Rates										
230	Residential	480-483	11,695,138	0	0	0	0	0	0	0	0
231	Comm - Indust Sales	480-483	4,661,454	209,848	45,555	319,093	0	0	0	0	0
232	Comm - Indust Transport	480-483	2,673,260	0	0	0	0	665,715	129,074	1,561,943	316,528
233	Forfeited Discounts Gas	480-483	94,128	63	8	8	0	429	76	96	17
234	Returned Check Chgs Gas	480-483	13,340	9	1	1	0	61	11	14	2
235	Reconnect Charges Gas	480-484	67,279	45	6	6	0	307	54	68	12
236	Tax Remuneration Gas	480-485	29,924	330	72	502	0	1,047	203	2,456	498
237	Misc Revenue	480-485	0	0	0	0	0	0	0	0	0
238	Gas Revenue	480-483	0	0	0	0	0	0	0	0	0
239	Rent from Gas Ppty / Other Rev	495	0	0	0	0	0	0	0	0	0
240	Subtotal Gas Revenues, net		19,234,523	210,296	45,642	319,610	0	667,559	129,418	1,564,577	317,057
241											
242	Non-Operating Income	418-421	0	0	0	0	0	0	0	0	0
243	Non-Operating Income	426	0	0	0	0	0	0	0	0	0
244	Total Non-Oper Income		0	0	0	0	0	0	0	0	0
245											
246	Total Revenue		19,234,523	210,296	45,642	319,610	0	667,559	129,418	1,564,577	317,057
247											
248	Total Expenses		15,861,222	125,455	27,292	38,806	0	248,927	49,639	1,106,408	177,477
249											
250	NET INCOME at Present Rates		3,373,301	84,841	18,351	280,804	0	418,632	79,779	458,169	139,580
251				12.0%	11.3%	92.2%	0.0%	44.4%	41.1%	8.9%	17.4%
252	Tariff Revenue Requirements		19,234,523	210,296	45,642	319,610	0	667,559	129,418	1,564,577	317,057
253											

**THE EMPIRE DISTRICT GAS COMPANY**  
**Class Cost of Service Study**  
**Test Year Ended Dec. 31, 2008**

Exhibit HEO-1  
Page 15 of 18

		TOTAL Class Allocation						
	Account	Account Code	Total Allocated Dollars	N&S- Res-RS	NW- Res-RS	N&S- Sm Comm-SCF	NW- Sm Comm-SCF	N&S- Sm Vol Firm-SVF
1								
2								
3								
7								
8								
9								
10	Description							
11								
254	<b>SUMMARY</b>							
255	<u>Revenues</u>							
256	Gas revenues		19,234,523	10,560,238	1,306,273	2,363,033	334,177	1,247,759
257	Non-operating income		<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
258	Total revenues		19,234,523	10,560,238	1,306,273	2,363,033	334,177	1,247,759
259								
260	<u>Operating Expenses</u>							
261	Production Expenses		18,343	10,060	1,405	2,304	374	1,870
262	Natural Gas Storage, Terminating & Proc. I		77,687	42,606	5,950	9,759	1,586	7,921
263	Transmission Expenses		169,987	67,496	9,745	15,800	2,589	9,900
264	Distribution Expenses		<u>2,771,495</u>	<u>1,853,216</u>	<u>230,767</u>	<u>209,106</u>	<u>30,698</u>	<u>82,872</u>
265	Total Operating Expenses		3,037,512	1,973,379	247,867	236,969	35,248	102,563
266								
267	Customer Accounts, Services, & Sales Exp		3,385,836	2,659,324	309,802	230,502	29,947	54,340
268	Administrative & General Expenses		4,648,717	3,195,581	408,320	358,012	53,828	125,202
269	Depreciation Expense		3,114,371	2,010,230	279,890	247,102	40,562	87,887
270	Taxes other than Income, GRT		<u>909,652</u>	<u>562,561</u>	<u>79,865</u>	<u>84,200</u>	<u>14,063</u>	<u>41,052</u>
271	Total Other Expenses		12,058,576	8,427,696	1,077,876	919,816	138,400	308,481
272								
273	Income tax expense		765,133	319,919	43,081	109,121	15,871	65,786
274	Gross receipts tax expense		<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
275	Total expenses		15,861,222	10,720,994	1,368,824	1,265,906	189,518	476,830
276								
277	NET INCOME at Present Rates		<u>3,373,301</u>	<u>(160,755)</u>	<u>(62,551)</u>	<u>1,097,127</u>	<u>144,659</u>	<u>770,930</u>
278								
279	<b>Total Rate Base</b>		<b>57,732,318</b>	<b>36,558,016</b>	<b>5,113,118</b>	<b>4,659,621</b>	<b>768,320</b>	<b>2,078,167</b>
280	Effective tax rate		18.5%	201.0%	-221.3%	9.0%	9.9%	7.9%
281	Effective GRT Rate		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
282								



Exhibit HEO-1  
Page 16 of 18

			TOTAL Class Allocation									
	Account	Account Code	Total Allocated Dollars	N&S- Lg Vol Firm-LVF	NW- Lg Vol Firm-LVF	N&S- Lg Vol Int-LVI	NW- Lg Vol Int-LVI	N&S- Tran Sm Vol-SVTS	NW- Tran Sm Vol-SVTS	N&S- Tran Lg Vol-LVTS	NW- Tran Lg Vol-LVTS	
254	SUMMARY											
255	Revenues											
256	Gas revenues		19,234,523	210,296	45,642	319,610	0	667,559	129,418	1,564,577	317,057	
257	Non-operating income		0	0	0	0	0	0	0	0	0	
258	Total revenues		19,234,523	210,296	45,642	319,610	0	667,559	129,418	1,564,577	317,057	
260	Operating Expenses											
261	Production Expenses		18,343	842	177	1,048	0	0	0	0	0	
262	Natural Gas Storage, Terminaling & Proc. I		77,687	3,566	748	4,438	0	0	0	0	0	
263	Transmission Expenses		169,987	3,583	853	0	0	7,102	1,494	43,377	6,712	
264	Distribution Expenses		2,771,495	20,173	4,716	1,103	0	46,591	9,435	234,969	36,618	
265	Total Operating Expenses		3,037,512	28,163	6,494	6,589	0	53,693	10,930	278,346	43,330	
267	Customer Accounts, Services, & Sales Exp		3,385,836	18,385	2,589	2,733	0	16,475	2,848	44,065	7,796	
268	Administrative & General Expenses		4,648,717	27,913	6,469	1,910	0	69,727	13,917	320,570	50,130	
269	Depreciation Expense		3,114,371	24,947	5,827	1,198	0	57,428	11,684	290,206	45,188	
270	Taxes other than Income, GRT		909,652	14,555	3,292	9,253	0	12,820	2,636	68,759	10,679	
271	Total Other Expenses		12,058,576	85,799	18,178	15,096	0	156,449	31,086	723,600	113,792	
273	Income tax expense		765,133	11,494	2,620	17,121	0	38,786	7,624	104,463	20,355	
274	Gross receipts tax expense		0	0	0	0	0	0	0	0	0	
275	Total expenses		15,861,222	125,455	27,292	38,806	0	248,927	49,639	1,106,408	177,477	
277	NET INCOME at Present Rates		3,373,301	84,841	18,351	280,804	0	418,632	79,779	458,169	139,580	
279	Total Rate Base		57,732,318	709,546	162,301	304,718	0	942,287	194,309	5,149,070	800,116	
280	Effective tax rate		18.5%	11.9%	12.5%	5.7%	#DIV/0!	8.5%	8.7%	18.6%	12.7%	
281	Effective GRT Rate		0.00%	0.00%	0.00%	0.00%	#DIV/0!	0.00%	0.00%	0.00%	0.00%	

**THE EMPIRE DISTRICT GAS COMPANY**  
**Class Cost of Service Study**  
**Test Year Ended Dec. 31, 2008**

Exhibit HEO-1  
Page 17 of 18

				TOTAL Class Allocation					
	Account	Account Code	Total Allocated Dollars	N&S- Res-RS	NW- Res-RS	N&S- Sm Comm-SCF	NW- Sm Comm-SCF	N&S- Sm Vol Firm-SVF	NW- Sm Vol Firm-SVF
283	REVENUE REQUIREMENTS								
284									
285	Target ROR		9.17%	9.17%	9.17%	9.17%	9.17%	9.17%	9.17%
286	Using Target for System								
287	Rate Base		57,732,318	36,558,016	5,113,118	4,659,621	768,320	2,078,167	292,729
288									
289	Operating expenses		11,072,065	7,828,284	965,989	825,483	119,023	282,106	38,108
290	Depreciation expense		3,114,371	2,010,230	279,890	247,102	40,562	87,887	12,223
291	Additional Bad Debt expense		0	0	0	0	0	0	0
292	Taxes other than Income, GRT		909,652	562,561	79,865	84,200	14,063	41,052	5,919
293	Operating expenses to recover		15,096,088	10,401,075	1,325,743	1,156,785	173,648	411,044	56,250
294									
295	Target Return on Rate Base- After taxes		5,295,901	3,353,540	469,037	427,436	70,480	190,634	26,853
296									
297	Income taxes to recover	1,035,246	1,800,380	1,140,060	159,452	145,310	23,960	64,808	9,129
298	Subtotal- Rev Req before GRT		22,192,369	14,894,675	1,954,232	1,729,532	268,087	666,486	92,232
299	GRT needed	0	0	0	0	0	0	0	0
300	TOTAL REVENUE REQUIREMENT		22,192,369	14,894,675	1,954,232	1,729,532	268,087	666,486	92,232

THE EMPIRE DISTRICT GAS COMPANY  
Class Cost of Service Study  
Test Year Ended Dec. 31, 2008

Exhibit HEO-1  
Page 18 of 18

Description	Account Code	Total Allocated Dollars	TOTAL Class Allocation							
			N&S- Lg Vol Firm-LVF	NW- Lg Vol Firm-LVF	N&S- Lg Vol Int-LVI	NW- Lg Vol Int-LVI	N&S- Tran Sm Vol-SVTS	NW- Tran Sm Vol-SVTS	N&S- Tran Lg Vol-LVTS	NW- Tran Lg Vol-LVTS
REVENUE REQUIREMENTS										
Target ROR		9.17%	9.17%	9.17%	9.17%	9.17%	9.17%	9.17%	9.17%	9.17%
Using Target for System										
Rate Base		57,732,318	709,546	162,301	304,718	0	942,287	194,309	5,149,070	800,116
Operating expenses		11,072,065	74,460	15,553	11,233	0	139,894	27,696	642,981	101,256
Depreciation expense		3,114,371	24,947	5,827	1,198	0	57,428	11,684	290,206	45,188
Additional Bad Debt expense		0	0	0	0	0	0	0	0	0
Taxes other than Income, GRT		<u>909,652</u>	<u>14,555</u>	<u>3,292</u>	<u>9,253</u>	<u>0</u>	<u>12,820</u>	<u>2,636</u>	<u>68,759</u>	<u>10,679</u>
Operating expenses to recover		15,096,088	113,962	24,671	21,685	0	210,142	42,015	1,001,946	157,122
Target Return on Rate Base- After taxes		5,295,901	65,088	14,888	27,952	0	86,438	17,824	472,334	73,396
Income taxes to recover	1,035,246	<u>1,800,380</u>	<u>22,127</u>	<u>5,061</u>	<u>9,503</u>	<u>0</u>	<u>29,385</u>	<u>6,060</u>	<u>160,573</u>	<u>24,952</u>
Subtotal- Rev Req before GRT		22,192,369	201,177	44,621	59,140	0	325,965	65,899	1,634,853	255,470
GRT needed	0	0	0	0	0	0	0	0	0	0
TOTAL REVENUE REQUIREMENT		<u>22,192,369</u>	<u>201,177</u>	<u>44,621</u>	<u>59,140</u>	<u>0</u>	<u>325,965</u>	<u>65,899</u>	<u>1,634,853</u>	<u>255,470</u>

THE EMPIRE DISTRICT GAS COMPANY  
Class Cost of Service Study  
Test Year Ended Dec. 31, 2008

Exhibit HEO-2  
Page 1 of 7

FUNCTIONALIZATION

Account Description	Account Code	Account Balance	Allocation Factor	SUPPLY	STORAGE	TRANSMI	DISTRIBU	ONSITE
<b>I. GAS PLANT IN SERVICE</b>								
Organization	301	284,572	DIST	0	0	0	284,572	0
Franchises & Consents	302	22,760	DIST	0	0	0	22,760	0
Subtotal - INTANGIBLE ASSETS	301-303	307,332		0	0	0	307,332	0
<b>B. PRODUCTION PLANT</b>								
Production Plant	304-338	0	None	0	0	0	0	0
Subtotal - PRODUCTION PLANT	304-338	0		0	0	0	0	0
<b>C. STORAGE PLANT</b>								
Storage Plant	360-365	0	None	0	0	0	0	0
Subtotal - STORAGE PLANT	360-366	0		0	0	0	0	0
<b>D. TRANSMISSION PLANT</b>	365-369	7,461,275	TRANS	0	0	7,461,275	0	0
<b>E. DISTRIBUTION PLANT</b>								
Land and Land Rights	374	37,329	DIST	0	0	0	37,329	0
Structures and Improvements	375	98,669	DIST	0	0	0	98,669	0
Mains	376	40,882,215	DIST	0	0	0	40,882,215	0
Meas. & Reg. Stat. Equip. - General	378	636,217	DIST	0	0	0	636,217	0
Meas. & Reg. Stat. Equip. - City Gate	379	932,939	DIST	0	0	0	932,939	0
Services	380	23,733,563	DIST	0	0	0	23,733,563	0
Meters	381	5,233,634	ONSITE	0	0	0	0	5,233,634
House Regulators	383	3,111,493	ONSITE	0	0	0	0	3,111,493
Ind. Meas. & Reg. Station Equip.	385	583,501	DIST	0	0	0	583,501	0
Other Equipment	387	5,472	DIST	0	0	0	5,472	0
Subtotal - DISTRIBUTION PLANT	374-387	75,255,033		0	0	0	66,909,905	8,345,128
<b>F. GENERAL PLANT</b>								
Land and Land Rights	389	40,234	LABOR	0	0	0	20,934	19,299
Structures and Improvements	390	1,269,203	LABOR	0	0	0	660,393	608,810
Office Furniture and Equipment	391	374,488	LABOR	0	0	0	194,854	179,634
Office Furniture and Equipment - C	391C	707,056	LABOR	0	0	0	367,896	339,160
Transportation Equipment	392	1,213,917	LABOR	0	0	0	631,626	582,291
Stores Equipment	393	29,019	LABOR	0	0	0	15,099	13,920
Tools & Garage Equipment	394	761,155	LABOR	0	0	0	396,044	365,110
Laboratory Equipment	395	98,267	LABOR	0	0	0	51,130	47,137
Power Operated Equipment	396	425,081	LABOR	0	0	0	221,179	203,903

THE EMPIRE DISTRICT GAS COMPANY  
Class Cost of Service Study  
Test Year Ended Dec. 31, 2008

Exhibit HEO-2  
Page 2 of 7

FUNCTIONALIZATION

Account Description	Account Code	Account Balance	Allocation Factor	SUPPLY	STORAGE	TRANSMI	DISTRIBU	ONSITE
Common Property	397	410,334	LABOR	0	0	0	213,505	196,829
Miscellaneous Equipment	398	<u>116,207</u>	LABOR	<u>0</u>	<u>0</u>	<u>0</u>	<u>60,465</u>	<u>55,742</u>
Subtotal - GENERAL PLANT	389-399	5,444,960		0	0	0	2,833,126	2,611,834
<b>TOTAL UTILITY PLANT</b>		88,468,600		0	0	7,461,275	70,050,363	10,956,962
<b>II. DEPRECIATION RESERVE</b>								
Intangible Plant	108.10	117,135	DIST	0	0	0	117,135	0
Production Plant	108.20	0	None	0	0	0	0	0
Local Storage Plant	108.30	0	None	0	0	0	0	0
Transmission Plant	108.40	5,179,243	TRANS	0	0	5,179,243	0	0
Mains	108.52	15,056,283	DIST	0	0	0	15,056,283	0
Mains- Direct Assignment	108.52	0	None	0	0	0	0	0
Services	108.54	12,276,976	DIST	0	0	0	12,276,976	0
Meters	108.55	3,137,874	ONSITE	0	0	0	0	3,137,874
Distr Other	108.58	1,003,123	DIST	0	0	0	1,003,123	0
General Plant	108.80	<u>2,862,349</u>	LABOR	<u>0</u>	<u>0</u>	<u>0</u>	<u>1,489,340</u>	<u>1,373,009</u>
TOTAL - DEPRECIATION RESERVE	108	39,632,982		0	0	5,179,243	29,942,857	4,510,883
<b>III. OTHER RATE BASE ITEMS</b>								
Gas Storage Inventory		6,572,717	STOR	0	6,572,717	0	0	0
Materials & Supplies - 13 Mo Avg		470,373	PLANT	0	0	42,429	380,489	47,455
Customer Deposits		(994,045)	DIST	0	0	0	(994,045)	0
Customer Advances for Construction		(317,323)	DIST	0	0	0	(317,323)	0
Accum Defd Inc Taxes- Gas Inventory		0	STOR	0	0	0	0	0
Accum Defd Inc Taxes- Plant		(1,847,299)	PLANT	0	0	(166,632)	(1,494,296)	(186,371)
Other Gas-related		0	STOR	0	0	0	0	0
Other Plant-related		2,527,130	PLANT	0	0	227,955	2,044,216	254,958
Other labor-related		<u>0</u>	LABOR	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total - OTHER RATE BASE ITEMS		6,411,553		0	6,572,717	103,752	(380,958)	116,042
<b>IV. TOTAL RATE BASE (Excl. Working Capital)</b>		55,247,170		0	6,572,717	2,385,785	39,726,548	6,562,121
Working Capital	131	<u>2,485,148</u>	O&M	17,466	0	53,446	945,436	1,468,800
<b>V. TOTAL RATE BASE</b>		<u>57,732,318</u>		<u>17,466</u>	<u>6,572,717</u>	<u>2,439,231</u>	<u>40,671,983</u>	<u>8,030,921</u>

I. OPERATION & MAINTENANCE EXPENSE

A. PRODUCTION EXPENSES

THE EMPIRE DISTRICT GAS COMPANY  
Class Cost of Service Study  
Test Year Ended Dec. 31, 2008

Exhibit HEO-2  
Page 3 of 7

FUNCTIONALIZATION									
Account	Account	Account	Allocation		SUPPLY	STORAGE	TRANSMI	DISTRIBU	ONSITE
Description	Code	Balance	Factor						
1. Manufactured Gas Production									
Operations Labor	701	0	None		0	0	0	0	0
Operation Supv and Engineering	710	0	None		0	0	0	0	0
LNG Expense	717	0	None		0	0	0	0	0
Subtotal - O&M Accounts 701-716	710-716	0			0	0	0	0	0
Maint. of Structure & Improvements	741	0	None		0	0	0	0	0
Maint Production Equipment	742	0	None		0	0	0	0	0
Subtotal - O&M Accounts 717-742	717-742	0			0	0	0	0	0
Subtotal - Manufactured Gas Production	710-742	0			0	0	0	0	0
2. Other Gas Supply Expenses									
Natural Gas City Gate Purchases	804	0	SUPP		0	0	0	0	0
Other Natural Gas Purchases	805	0	SUPP		0	0	0	0	0
Natural Gas W/D from Storage- Gas Repoi	808	0	SUPP		0	0	0	0	0
Gas Used for Other Util Operations	812	0	SUPP		0	0	0	0	0
LNG Operating Expenses	813	18,343	SUPP		18,343	0	0	0	0
Subtotal - PRODUCTION EXPENSES	710-813	18,343			18,343	0	0	0	0
B. NATURAL GAS STORAGE, TERMINALING & PROCESSING EXPENSES									
Energy Trading & Accounting	844	77,687	SUPP		77,687	0	0	0	0
Subtotal - NATURAL GAS STORAGE	840-850	77,687			77,687	0	0	0	0
C. TRANSMISSION EXPENSES	851-870	169,987	TRANS		0	0	169,987	0	0
D. DISTRIBUTION EXPENSES									
Mains and Services Expenses	874	168,919	DIST		0	0	0	168,919	0
Perf Distrib Main Locates	874.01	274,398	DIST		0	0	0	274,398	0
Routine Leak Surv Mains & SVCS	874.02	72,227	DIST		0	0	0	72,227	0
Meas. & Reg. Station Expense General	875	110,946	DIST		0	0	0	110,946	0
Meas. & Reg. Station Expense Industrial	876	0	DIST		0	0	0	0	0
Meas. & Reg. Station Expense Stat-City G.	877	28,156	DIST		0	0	0	28,156	0
Meter & House Regulator Expenses	878	229,717	ONSITE		0	0	0	0	229,717
Perf Connects/Discon/Recon-Gas	878.01	521,299	ONSITE		0	0	0	0	521,299
Customer Install	879	294,993	ONSITE		0	0	0	0	294,993
Other expenses	880	211,476	DIST_PT		0	0	0	188,025	23,451
Co Used Gas O&M Offset	880.01	19,827	DIST_PT		0	0	0	17,628	2,199
Distribution Rents	881	0	DIST_PT		0	0	0	0	0
Maint. Supervision & Engineering	885	58,975	DIST_PT		0	0	0	52,435	6,540
Maint. of Mains	887	450,109	DIST		0	0	0	450,109	0
PerfMaint3rdPartyDmg-UGDistGas	887.01	7,160	DIST		0	0	0	7,160	0

THE EMPIRE DISTRICT GAS COMPANY  
Class Cost of Service Study  
Test Year Ended Dec. 31, 2008  
FUNCTIONALIZATION

Exhibit HEO-2  
Page 4 of 7

Account Description	Account Code	Account Balance	Allocation Factor	SUPPLY	STORAGE	TRANSMI	DISTRIBU	ONSITE
128 Dist Maint Compr Station Equip	888	133	DIST	0	0	0	133	0
129 Maint Of Meas. & Reg. Station Expense Gr	889	66,419	DIST	0	0	0	66,419	0
130 Maint Of Meas. & Reg. Station Expense In	890	70,803	DIST	0	0	0	70,803	0
131 Maint Of Meas. & Reg. Station Expense St	891	4,809	DIST	0	0	0	4,809	0
132 Maint. of Services	892	134,957	DIST	0	0	0	134,957	0
133 Maint. of Meters & House Regulators	893	45,986	ONSITE	0	0	0	0	45,986
134 Maintenance of Other Equipment	894	189	DIST_PT	0	0	0	168	21
135 Blank	XXX	0	DIST_PT	0	0	0	0	0
136 Subtotal - DISTRIBUTION EXPENSES 870-894		2,771,495		0	0	0	1,647,291	1,124,204
137 Total - OPERATION & MAINTENANCE EXPENSES		3,019,169		77,687	0	169,987	1,647,291	1,124,204
<b>II. CUSTOMER ACCOUNTS EXPENSES</b>								
140 Customer Service - Administrative	901	73,353	ONSITE	0	0	0	0	73,353
141 Meter Reading Expenses	902	667,900	ONSITE	0	0	0	0	667,900
142 Customer Records & Collection Expense	903	915,988	ONSITE	0	0	0	0	915,988
143 Uncollectible Accounts	904	1,365,508	ONSITE	0	0	0	0	1,365,508
144 Write-Off- PIP	904P	0	ONSITE	0	0	0	0	0
145 Miscellaneous Customer Accounts Expens	905	51,806	ONSITE	0	0	0	0	51,806
146 Miscellaneous Customer Accounts Expens	905A	0	ONSITE	0	0	0	0	0
147 Total - CUSTOMER ACCOUNTS EXPENSES		3,074,555		0	0	0	0	3,074,555
<b>III. CUSTOMER SERVICE &amp; INFORMATIONAL EXPENSES</b>								
150 Operation Supervision	907	20,484	ONSITE	0	0	0	0	20,484
151 Customer Assist- Choice	908C	0	ONSITE	0	0	0	0	0
152 Customer Assist- Other	908	240,043	ONSITE	0	0	0	0	240,043
153 Advertising & Promotion	909	20,444	ONSITE	0	0	0	0	20,444
154 Other Customer Service & Informational E	910	0	ONSITE	0	0	0	0	0
155 Operations sales Expense	911	13,870	ONSITE	0	0	0	0	13,870
156 Demonstration	912	16,439	ONSITE	0	0	0	0	16,439
157 Total - CUSTOMER SERVICE & INFORMATIONAL EXP.		311,281		0	0	0	0	311,281
159 Total - CUSTOMER ACCOUNTS, SERVICES & SALES EXPENSES		3,385,836		0	0	0	0	3,385,836
<b>IV. ADMINISTRATIVE &amp; GENERAL EXPENSES</b>								
<b>A. Labor-Related:</b>								
164 Administrative & General Salaries	920	1,750,379	LABOR	0	0	0	910,759	839,621
165 Office Supplies & Expenses	921	738,856	LABOR	0	0	0	384,442	354,414
166 Transfer Expenses	922	0	LABOR	0	0	0	0	0
167 Outside Services Employed	923	205,815	ONSITE	0	0	0	0	205,815

THE EMPIRE DISTRICT GAS COMPANY  
Class Cost of Service Study  
Test Year Ended Dec. 31, 2008

Exhibit HEO-2  
Page 5 of 7

FUNCTIONALIZATION

Account Description	Account Code	Account Balance	Allocation Factor	SUPPLY	STORAGE	TRANSMI	DISTRIBU	ONSITE
168 Outside Services Employed	923	0	ONSITE	0	0	0	0	0
169 Injuries & Damages	925	260,141	LABOR	0	0	0	135,357	124,784
170 Employee Pensions and Benefits	926	767,116	LABOR	0	0	0	399,146	367,970
171 Subtotal - O&M Accounts 920-923, 926		3,722,307		0	0	0	1,829,704	1,892,604
173 B. Plant-Related:								
174 Property Insurance	924	255	PLANT	0	0	23	206	26
175 Subtotal - O&M Accounts 924		255		0	0	23	206	26
177 C. Other-Related:								
178 Regulatory Commission Expenses	928	269,917	PLANT	0	0	24,347	218,338	27,232
179 Duplicate Charges Credit	929	(18,875)	PLANT	0	0	(1,703)	(15,268)	(1,904)
180 PUCO Assessments	408	0	PLANT	0	0	0	0	0
181 Customer Interest Expense	431	61,449	DIST	0	0	0	61,449	0
182 Miscellaneous General	930	185,185	PLANT	0	0	16,704	149,798	18,683
183 Rents	931	314,468	PLANT	0	0	28,366	254,375	31,726
184 Misc. General Plant	935	114,011	LABOR	0	0	0	59,322	54,689
185 Subtotal - O&M Accounts 928-935		926,155		0	0	67,715	728,014	130,425
187 Total - ADMINISTRATIVE & GENERAL EXPENSES		4,648,717		0	0	67,738	2,557,924	2,023,055
189 TOTAL - OPERATING EXPENSES (Excl Depr, Tax and Gas Supply)		11,053,722		77,687	0	237,725	4,205,215	6,533,095
191 VI. DEPRECIATION EXPENSE								
192 Intangible Plant	403.10	26,866	INTANG_PT	0	0	0	26,866	0
193 Production Plant	403.20	0	None	0	0	0	0	0
194 Local Storage Plant	403.30	0	None	0	0	0	0	0
195 Transmission Plant	403.40	117,683	TRANS	0	0	117,683	0	0
196 Mains	403.51	940,291	DIST	0	0	0	940,291	0
197 Mains- Direct	403.52	0	DIST	0	0	0	0	0
198 Services	403.53	683,527	DIST	0	0	0	683,527	0
199 Meters	403.54	230,211	ONSITE	0	0	0	0	230,211
200 Distr Other	403.55	47,111	DIST_xMSM	0	0	0	47,111	0
201 General Plant	403.60	315,085	LABOR	0	0	0	163,945	151,140
202 Rent from Gas Ppty / Other Rev	404.00	753,598	PLANT	0	0	67,977	609,592	76,029
203 Adjustments		0	PLANT	0	0	0	0	0
204 Total - DEPRECIATION EXPENSE	403	3,114,371		0	0	185,660	2,471,331	457,380
206 VII. TAXES OTHER THAN INCOME TAXES								
207 A. General Taxes								



THE EMPIRE DISTRICT GAS COMPANY  
Class Cost of Service Study  
Test Year Ended Dec. 31, 2008  
FUNCTIONALIZATION

Exhibit HEO-2  
Page 6 of 7

Account Description	Account Code	Account Balance	Allocation Factor	SUPPLY	STORAGE	TRANSMI	DISTRIBU	ONSITE
208 Property Tax- Plant		615,720	PLANT	0	0	55,540	498,061	62,119
209 Distribution Tax		0	None	0	0	0	0	0
210 Payroll related		12,179	LABOR	0	0	0	6,337	5,842
211 Other taxes		40,251	PLANT	0	0	3,631	32,559	4,061
212 Property Tax- Inventory		<u>241,503</u>	STOR	<u>0</u>	<u>241,503</u>	<u>0</u>	<u>0</u>	<u>0</u>
213 Subtotal- Taxes Other Than Income Taxes	408	909,652		0	241,503	59,171	536,957	72,022
<b>B. Franchise and Revenue Taxes</b>								
216 Gross Receipts Tax		0	REVENUE	0	0	0	0	0
217 GRT- Uncoll Rider		<u>0</u>	None	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
218 Subtotal- Franchise and Gross Receipts Tax		0		0	0	0	0	0
<b>C. Income Tax Expense</b>								
221 State Income Tax expense		33,394	Pre-Tax	53	7,563	1,962	2,649	21,166
222 Federal Income Tax Deferred		519,234	PLANT	0	0	46,837	420,013	52,385
223 Federal Income Tax expense		<u>212,506</u>	Pre-Tax	<u>339</u>	<u>48,131</u>	<u>12,483</u>	<u>16,858</u>	<u>134,695</u>
224 Subtotal- Income tax expense		<u>765,133</u>		<u>392</u>	<u>55,694</u>	<u>61,282</u>	<u>439,519</u>	<u>208,246</u>
225 Total- TAX EXPENSE		<u>1,674,786</u>		<u>392</u>	<u>297,197</u>	<u>120,452</u>	<u>976,476</u>	<u>280,268</u>
227 TOTAL EXPENSES		15,861,222		96,422	297,197	543,837	7,653,022	7,270,742

THE EMPIRE DISTRICT GAS COMPANY  
Class Cost of Service Study  
Test Year Ended Dec. 31, 2008

Exhibit HEO-2  
Page 7 of 7

FUNCTIONALIZATION

Account Description	Account Code	Account Balance	Allocation Factor	SUPPLY	STORAGE	TRANSMI	DISTRIBU	ONSITE
<b>V. REVENUES at Present Rates</b>								
Residential	480-483	11,695,138	REVENUE	62,401	716,759	441,224	4,585,627	5,889,127
Comm - Indust Sales	480-483	4,661,454	REVENUE	24,872	285,686	175,863	1,827,741	2,347,291
Comm - Indust Transport	480-483	2,673,260	REVENUE	14,264	163,836	100,854	1,048,177	1,346,129
Forfeited Discounts Gas	480-483	94,128	REVENUE	502	5,769	3,551	36,907	47,398
Returned Check Chgs Gas	480-483	13,340	REVENUE	71	818	503	5,231	6,717
Reconnect Charges Gas	480-484	67,279	REVENUE	359	4,123	2,538	26,380	33,879
Tax Remuneration Gas	480-485	29,924	REVENUE	160	1,834	1,129	11,733	15,068
Misc Revenue	480-485	0	REVENUE	0	0	0	0	0
Gas Revenue	480-483	0	REVENUE	0	0	0	0	0
Rent from Gas Ppty / Other Rev	495	0	REVENUE	0	0	0	0	0
Subtotal Gas Revenues, net		19,234,523		102,628	1,178,826	725,663	7,541,796	9,685,610
Non-Operating Income	418-421	0	None	0	0	0	0	0
Non-Operating Income	426	0	None	0	0	0	0	0
Total Non-Oper Income		0		0	0	0	0	0
Total Revenue		19,234,523		102,628	1,178,826	725,663	7,541,796	9,685,610
Total Expenses		15,861,222		96,422	297,197	543,837	7,653,022	7,270,742
<b>NET INCOME at Present Rates</b>		<u>3,373,301</u>		<u>6,206</u>	<u>881,628</u>	<u>181,826</u>	<u>(111,226)</u>	<u>2,414,867</u>

**THE EMPIRE DISTRICT GAS COMPANY**  
**Class Cost of Service Study**  
**Test Year Ended Dec. 31, 2008**

Account Description	Account Code	DISTRIBUTION Dollars	Classification Allocation Factor	DISTRIBUTION		
				Demand	Commodity	Customer
<b>I. GAS PLANT IN SERVICE</b>						
Organization	301	284,572	DISTOnlyPT	49,690	0	234,882
Franchises & Consents	302	22,760	CUST	0	0	22,760
Subtotal - INTANGIBLE ASSETS	301-303	307,332		49,690	0	257,642
<b>B. PRODUCTION PLANT</b>						
Production Plant	304-338	0	None	0	0	0
Subtotal - PRODUCTION PLANT	304-338	0		0	0	0
<b>C. STORAGE PLANT</b>						
Storage Plant	360-365	0	None	0	0	0
Subtotal - STORAGE PLANT	360-366	0		0	0	0
<b>D. TRANSMISSION PLANT</b>	365-369	0	None	0	0	0
<b>E. DISTRIBUTION PLANT</b>						
Land and Land Rights	374	37,329	DISTOnlyPT	6,518	0	30,811
Structures and Improvements	375	98,669	DISTOnlyPT	17,229	0	81,440
Mains	376	40,882,215	MAINS	9,505,920	0	31,376,294
Meas. & Reg. Stat. Equip. - General	378	636,217	DEMAND	636,217	0	0
Meas. & Reg. Stat. Equip. - City Gate	379	932,939	DEMAND	932,939	0	0
Services	380	23,733,563	CUST	0	0	23,733,563
Meters	381	0	None	0	0	0
House Regulators	383	0	None	0	0	0
Ind. Meas. & Reg. Station Equip.	385	583,501	DEMAND	583,501	0	0
Other Equipment	387	5,472	DISTOnlyPT	956	0	4,517
Subtotal - DISTRIBUTION PLANT	374-387	66,909,905		11,683,280	0	55,226,625
<b>F. GENERAL PLANT</b>						
Land and Land Rights	389	20,934	DISTLABOR	6,220	0	14,715
Structures and Improvements	390	660,393	DISTLABOR	196,201	0	464,191
Office Furniture and Equipment	391	194,854	DISTLABOR	57,891	0	136,963
Office Furniture and Equipment - C	391C	367,896	DISTLABOR	109,301	0	258,595
Transportation Equipment	392	631,626	DISTLABOR	187,655	0	443,971
Stores Equipment	393	15,099	DISTLABOR	4,486	0	10,613
Tools & Garage Equipment	394	396,044	DISTLABOR	117,664	0	278,380
Laboratory Equipment	395	51,130	DISTLABOR	15,191	0	35,940
Power Operated Equipment	396	221,179	DISTLABOR	65,712	0	155,467
Common Property	397	213,505	DISTLABOR	63,432	0	150,073
Miscellaneous Equipment	398	60,465	DISTLABOR	17,964	0	42,501

**THE EMPIRE DISTRICT GAS COMPANY**  
**Class Cost of Service Study**  
**Test Year Ended Dec. 31, 2008**

	Account Description	Account Code	DISTRIBUTION Dollars	Classification Allocation Factor	DISTRIBUTION		
					Demand	Commodity	Customer
52	Subtotal - GENERAL PLANT	389-399	2,833,126		841,716	0	1,991,409
54	TOTAL UTILITY PLANT		70,050,363		12,574,686	0	57,475,677
56	II. DEPRECIATION RESERVE						
57	Intangible Plant	108	117,135	DISTPT_INT	18,939	0	98,197
58	Production Plant	108	0	None	0	0	0
59	Local Storage Plant	108	0	None	0	0	0
60	Transmission Plant	108	0	None	0	0	0
61	Mains	109	15,056,283	MAINS	3,500,882	0	11,555,401
62	Mains- Direct Assignment	109	0	None	0	0	0
63	Services	109	12,276,976	CUST	0	0	12,276,976
64	Meters	109	0	None	0	0	0
65	Distr Other	109	1,003,123	DISTPT_xMSM	952,065	0	51,057
66	General Plant	109	<u>1,489,340</u>	DISTLABOR	<u>442,480</u>	<u>0</u>	<u>1,046,860</u>
67	TOTAL - DEPRECIATION RESERVE	108	29,942,857		4,914,366	0	25,028,491
69	III. OTHER RATE BASE ITEMS						
70	Gas Storage Inventory		0	COMMODITY	0	0	0
71	Materials & Supplies - 13 Mo Avg		380,489	DISTPT	66,438	0	314,051
72	Customer Deposits		(994,045)	CUST	0	0	(994,045)
73	Customer Advances for Construction		(317,323)	CUST	0	0	(317,323)
74	Accum Defd Inc Taxes- Gas Inventory		0	DISTPT	0	0	0
75	Accum Defd Inc Taxes- Plant		(1,494,296)	DISTPT	(260,922)	0	(1,233,374)
76	Other Gas-related		0	CUST	0	0	0
77	Other Plant-related		2,044,216	DISTPT	356,945	0	1,687,271
78	Other labor-related		<u>0</u>	DISTLABOR	<u>0</u>	<u>0</u>	<u>0</u>
79	Total - OTHER RATE BASE ITEMS		(380,958)		162,461	0	(543,419)
81	IV. TOTAL RATE BASE (Excl. Working Ca		39,726,548		7,822,780	0	31,903,767
82	Working Capital	131	<u>945,436</u>	DISTPT	165,085	0	780,351
84	V. TOTAL RATE BASE		40,671,983		7,987,865	0	32,684,119
86	I. OPERATION & MAINTENANCE EXPEN						
87	A. PRODUCTION EXPENSES						
88	1. Manufactured Gas Production						
89	Operations Labor	701	0	None	0	0	0
90	Operation Supv and Engineering	710	0	None	0	0	0
91	LNG Expense	717	<u>0</u>	None	<u>0</u>	<u>0</u>	<u>0</u>

## THE EMPIRE DISTRICT GAS COMPANY

## Class Cost of Service Study

Test Year Ended Dec. 31, 2008

Account Description	Account Code	DISTRIBUTION Dollars	Classification Allocation Factor	DISTRIBUTION		
				Demand	Commodity	Customer
Subtotal - O&M Accounts 701-716	710-716	0		0	0	0
Maint. of Structure & Improvements	741	0	None	0	0	0
Maint Production Equipment	742	0	None	0	0	0
Subtotal - O&M Accounts 717-742	717-742	0		0	0	0
Subtotal - Manufactured Gas Production	710-742	0		0	0	0
2. Other Gas Supply Expenses						
Natural Gas City Gate Purchases	804	0	None	0	0	0
Other Natural Gas Purchases	805	0	None	0	0	0
Natural Gas W/D from Storage- Gas Repoi	808	0	None	0	0	0
Gas Used for Other Util Operations	812	0	None	0	0	0
LNG Operating Expenses	813	0	None	0	0	0
Subtotal - PRODUCTION EXPENSES	710-813	0		0	0	0
B. NATURAL GAS STORAGE, TERMINAL						
Energy Trading & Accounting	844	0	None	0	0	0
Subtotal - NATURAL GAS STORAGE	840-850	0		0	0	0
C. TRANSMISSION EXPENSES	851-870	0	None	0	0	0
D. DISTRIBUTION EXPENSES						
Mains and Services Expenses	874	168,919	MAIN&SERVICE	24,850	0	144,068
Perf Distrib Main Locates	874	274,398	MAINS	63,803	0	210,595
Routine Leak Surv Mains & SVCS	874	72,227	MAIN&SERVICE	10,626	0	61,602
Meas. & Reg. Station Expense General	875	110,946	DEMAND	110,946	0	0
Meas. & Reg. Station Expense Industrial	876	0	DEMAND	0	0	0
Meas. & Reg. Station Expense Stat-City G.	877	28,156	DEMAND	28,156	0	0
Meter & House Regulator Expenses	878	0	None	0	0	0
Perf Connects/Discon/Recon-Gas	878	0	None	0	0	0
Customer Install	879	0	None	0	0	0
Other expenses	880	188,025	DISTOnlyPT	32,831	0	155,194
Co Used Gas O&M Offset	880	17,628	DISTOnlyPT	3,078	0	14,550
Distribution Rents	881	0	DISTOnlyPT	0	0	0
Maint. Supervision & Engineering	885	52,435	DISTOnlyPT	9,156	0	43,279
Maint. of Mains	887	450,109	MAINS	104,659	0	345,450
PerfMaint3rdPartyDmg-UGDistGas	887	7,160	MAINS	1,665	0	5,495
Dist Maint Compr Station Equip	888	133	DEMAND	133	0	0
Maint Of Meas. & Reg. Station Expense G	889	66,419	DEMAND	66,419	0	0
Maint Of Meas. & Reg. Station Expense In	890	70,803	DEMAND	70,803	0	0
Maint Of Meas. & Reg. Station Expense St	891	4,809	DEMAND	4,809	0	0

## THE EMPIRE DISTRICT GAS COMPANY

## Class Cost of Service Study

Test Year Ended Dec. 31, 2008

Account Description	Account Code	DISTRIBUTION Dollars	Classification Allocation Factor	DISTRIBUTION		
				Demand	Commodity	Customer
Maint. of Services	892	134,957	CUST	0	0	134,957
Maint. of Meters & House Regulators	893	0	None	0	0	0
Maintenance of Other Equipment	894	168	DISTOnlyPT	29	0	139
Blank	XXX	0	MAIN&SERVICE	0	0	0
Subtotal - DISTRIBUTION EXPENSES	870-894	1,647,291		531,963	0	1,115,328
Total - OPERATION & MAINTENANCE EXPENSES		1,647,291		531,963	0	1,115,328
II. CUSTOMER ACCOUNTS EXPENSES						
Customer Service - Administrative	901	0	None	0	0	0
Meter Reading Expenses	902	0	None	0	0	0
Customer Records & Collection Expense	903	0	None	0	0	0
Uncollectible Accounts	904	0	CUST	0	0	0
Write-Off- PIP	904P	0	CUST	0	0	0
Miscellaneous Customer Accounts Expenses	905	0	None	0	0	0
Miscellaneous Customer Accounts Expenses	905A	0	None	0	0	0
Total - CUSTOMER ACCOUNTS EXPENSES		0		0	0	0
III. CUSTOMER SERVICE & INFORMATIONAL EXPENSES						
Operation Supervision	907	0	CUST	0	0	0
Customer Assist- Choice	908C	0	CUST	0	0	0
Customer Assist- Other	908	0	CUST	0	0	0
Advertising & Promotion	909	0	CUST	0	0	0
Other Customer Service & Informational Expenses	910	0	CUST	0	0	0
Operations sales Expense	911	0	CUST	0	0	0
Demonstration	912	0	CUST	0	0	0
Total - CUSTOMER SERVICE & INFORMATIONAL EXPENSES		0		0	0	0
Total - CUSTOMER ACCOUNTS, SERVICE & INFORMATIONAL EXPENSES		0		0	0	0
IV. ADMINISTRATIVE & GENERAL EXPENSES						
A. Labor-Related:						
Administrative & General Salaries	920	910,759	DISTLABOR	270,585	0	640,174
Office Supplies & Expenses	921	384,442	DISTLABOR	114,217	0	270,225
Transfer Expenses	922	0	DISTLABOR	0	0	0
Outside Services Employed	923	0	DISTLABOR	0	0	0
Outside Services Employed	923	0	DISTLABOR	0	0	0
Injuries & Damages	925	135,357	DISTLABOR	40,214	0	95,143
Employee Pensions and Benefits	926	399,146	DISTLABOR	118,586	0	280,561
Subtotal - O&M Accounts 920-923, 926		1,829,704		543,601	0	1,286,102

**THE EMPIRE DISTRICT GAS COMPANY**  
**Class Cost of Service Study**  
**Test Year Ended Dec. 31, 2008**

Account Description	Account Code	DISTRIBUTION Dollars	Classification	DISTRIBUTION		
			Allocation Factor	Demand	Commodity	Customer
<b>B. Plant-Related:</b>						
Property Insurance	924	<u>206</u>	DISTPT	<u>36</u>	<u>0</u>	<u>170</u>
Subtotal - O&M Accounts 924		206		36	0	170
<b>C. Other-Related:</b>						
Regulatory Commission Expenses	928	218,338	DISTPT	38,124	0	180,214
Duplicate Charges Credit	929	(15,268)	DISTPT	(2,666)	0	(12,602)
PUCO Assessments	408	0	CUST	0	0	0
Customer Interest Expense	431	61,449	CUST	0	0	61,449
Miscellaneous General	930	149,798	DISTPT	26,157	0	123,641
Rents	931	254,375	CUST	0	0	254,375
Misc. General Plant	935	<u>59,322</u>	DISTLABOR	<u>17,625</u>	<u>0</u>	<u>41,698</u>
Subtotal - O&M Accounts 928-935		728,014		79,240	0	648,775
<b>Total - ADMINISTRATIVE &amp; GENERAL EXPENSES</b>		2,557,924		622,877	0	1,935,047
<b>TOTAL - OPERATING EXPENSES (Excl of Depreciation)</b>		4,205,215		1,154,840	0	3,050,375
<b>VI. DEPRECIATION EXPENSE</b>						
Intangible Plant	403	26,866	DISTPT_INT	4,344	0	22,522
Production Plant	403	0	None	0	0	0
Local Storage Plant	403	0	None	0	0	0
Transmission Plant	403	0	None	0	0	0
Mains	404	940,291	MAINS	218,636	0	721,655
Mains- Direct	404	0	None	0	0	0
Services	404	683,527	CUST	0	0	683,527
Meters	404	0	None	0	0	0
Distr Other	404	47,111	DISTPT_xMSM	44,713	0	2,398
General Plant	404	163,945	DISTLABOR	48,708	0	115,237
Rent from Gas Ppty / Other Rev	404	609,592	DISTPT	106,442	0	503,150
Adjustments		<u>0</u>	DISTPT	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total - DEPRECIATION EXPENSE</b>	403	2,471,331		422,843	0	2,048,488
<b>VII. TAXES OTHER THAN INCOME TAXE</b>						
<b>A. General Taxes</b>						
Property Tax- Plant		498,061	DISTPT	86,967	0	411,093
Distribution Tax		0	None	0	0	0
Payroll related		6,337	DISTLABOR	1,883	0	4,454
Other taxes		32,559	DISTPT	5,685	0	26,874

**THE EMPIRE DISTRICT GAS COMPANY**  
**Class Cost of Service Study**  
**Test Year Ended Dec. 31, 2008**

Account Description	Account Code	DISTRIBUTION Dollars	Classification Allocation Factor	DISTRIBUTION		
				Demand	Commodity	Customer
212 Property Tax- Inventory		<u>0</u>	COMMODITY	<u>0</u>	<u>0</u>	<u>0</u>
213 Subtotal- Taxes Other Than Income Taxes	408	536,957		94,535	0	442,421
214						
215 B. Franchise and Revenue Taxes						
216 Gross Receipts Tax		0	CUST	0	0	0
217 GRT- Uncoll Rider		<u>0</u>	CUST	<u>0</u>	<u>0</u>	<u>0</u>
218 Subtotal- Franchise and Gross Receipts T:		0		0	0	0
219						
220 C. Income Tax Expense						
221 State Income Tax expense		2,649	PreTax-DIST	(268)	0	2,917
222 Federal Income Tax Deferred		420,013	RevReq_Dist	91,277	0	328,736
223 Federal Income Tax expense		<u>16,858</u>	PreTax-DIST	<u>(1,707)</u>	<u>0</u>	<u>18,565</u>
224 Subtotal- Income tax expense		439,519		89,301	0	350,218
225 Total- TAX EXPENSE		<u>976,476</u>		<u>183,836</u>	<u>0</u>	<u>792,640</u>
226						
227 TOTAL EXPENSES		7,653,022		1,761,519	0	5,891,503
228						
229 V. REVENUES at Present Rates						
230 Residential	480-483	4,585,627	RevReq_Dist	996,541	0	3,589,086
231 Comm - Indust Sales	480-483	1,827,741	RevReq_Dist	397,202	0	1,430,540
232 Comm - Indust Transport	480-483	1,048,177	RevReq_Dist	227,788	0	820,389
233 Forfeited Discounts Gas	480-483	36,907	RevReq_Dist	8,021	0	28,887
234 Returned Check Chgs Gas	480-483	5,231	RevReq_Dist	1,137	0	4,094
235 Reconnect Charges Gas	480-484	26,380	RevReq_Dist	5,733	0	20,647
236 Tax Remuneration Gas	480-485	11,733	RevReq_Dist	2,550	0	9,183
237 Misc Revenue	480-485	0	CUST	0	0	0
238 Gas Revenue	480-483	0	RevReq_Dist	0	0	0
239 Rent from Gas Ppty / Other Rev	495	<u>0</u>	DISTPT	<u>0</u>	<u>0</u>	<u>0</u>
240 Subtotal Gas Revenues, net		7,541,796		1,638,971	0	5,902,825
241						
242 Non-Operating Income	418-421	0	None	0	0	0
243 Non-Operating Income	426	<u>0</u>	None	<u>0</u>	<u>0</u>	<u>0</u>
244 Total Non-Oper Income		0		0	0	0
245						
246 Total Revenue		7,541,796		1,638,971	0	5,902,825
247						
248 Total Expenses		7,653,022		1,761,519	0	5,891,503
249						
250 NET INCOME at Present Rates		<u>(111,226)</u>		<u>(122,548)</u>	<u>0</u>	<u>11,321</u>



**THE EMPIRE DISTRICT GAS COMPANY**  
**Class Cost of Service Study**  
**Test Year Ended Dec. 31, 2008**

Exhibit HEO-4A  
Page 1 of 126

Account Description	Account Code	SUPPLY COMMODITY Dollars	Allocation Factor Embedded	SUPPLY COMMODITY Class Allocation				
				N&S- Res-RS	NW- Res-RS	N&S- Sm Comm-SCF	NW- Sm Comm-SCF	N&S- Sm Vol Firm-SVF
<b>I. GAS PLANT IN SERVICE</b>								
Organization	301	0	None	0	0	0	0	0
Franchises & Consents	302	0	None	0	0	0	0	0
Subtotal - INTANGIBLE ASSETS	301-303	0		0	0	0	0	0
<b>B. PRODUCTION PLANT</b>								
Production Plant	304-338	0	None	0	0	0	0	0
Subtotal - PRODUCTION PLANT	304-338	0		0	0	0	0	0
<b>C. STORAGE PLANT</b>								
Storage Plant	360-365	0	None	0	0	0	0	0
Subtotal - STORAGE PLANT	360-366	0		0	0	0	0	0
<b>D. TRANSMISSION PLANT</b>	365-369	0	None	0	0	0	0	0
<b>E. DISTRIBUTION PLANT</b>								
Land and Land Rights	374	0	None	0	0	0	0	0
Structures and Improvements	375	0	None	0	0	0	0	0
Mains	376	0	None	0	0	0	0	0
Meas. & Reg. Stat. Equip. - General	378	0	None	0	0	0	0	0
Meas. & Reg. Stat. Equip. - City Gate	379	0	None	0	0	0	0	0
Services	380	0	None	0	0	0	0	0
Meters	381	0	None	0	0	0	0	0
House Regulators	383	0	None	0	0	0	0	0
Ind. Meas. & Reg. Station Equip.	385	0	None	0	0	0	0	0
Other Equipment	387	0	None	0	0	0	0	0
Subtotal - DISTRIBUTION PLANT	374-387	0		0	0	0	0	0
<b>F. GENERAL PLANT</b>								
Land and Land Rights	389	0	SUPPPT-E	0	0	0	0	0
Structures and Improvements	390	0	SUPPPT-E	0	0	0	0	0
Office Furniture and Equipment	391	0	SUPPPT-E	0	0	0	0	0
Office Furniture and Equipment - C	391C	0	SUPPPT-E	0	0	0	0	0
Transportation Equipment	392	0	SUPPPT-E	0	0	0	0	0
Stores Equipment	393	0	SUPPPT-E	0	0	0	0	0
Tools & Garage Equipment	394	0	SUPPPT-E	0	0	0	0	0
Laboratory Equipment	395	0	SUPPPT-E	0	0	0	0	0

THE EMPIRE DISTRICT GAS COMPANY  
Class Cost of Service Study  
Test Year Ended Dec. 31, 2008

Exhibit HEO-4A  
Page 2 of 126

Account Description	Account Code	SUPPLY COMMODITY Dollars	Allocation Factor Embedded	SUPPLY COMMODITY Class Allocation				
				NW- Sm Vol Firm-SVF	N&S- Lg Vol Firm-LVF	NW- Lg Vol Firm-LVF	N&S- Lg Vol Int-LVI	NW- Lg Vol Int-LVI
I. GAS PLANT IN SERVICE								
Organization	301	0	None	0	0	0	0	0
Franchises & Consents	302	0	None	0	0	0	0	0
Subtotal - INTANGIBLE ASSETS	301-303	0		0	0	0	0	0
B. PRODUCTION PLANT								
Production Plant	304-338	0	None	0	0	0	0	0
Subtotal - PRODUCTION PLANT	304-338	0		0	0	0	0	0
C. STORAGE PLANT								
Storage Plant	360-365	0	None	0	0	0	0	0
Subtotal - STORAGE PLANT	360-366	0		0	0	0	0	0
D. TRANSMISSION PLANT	365-369	0	None	0	0	0	0	0
E. DISTRIBUTION PLANT								
Land and Land Rights	374	0	None	0	0	0	0	0
Structures and Improvements	375	0	None	0	0	0	0	0
Mains	376	0	None	0	0	0	0	0
Meas. & Reg. Stat. Equip. - General	378	0	None	0	0	0	0	0
Meas. & Reg. Stat. Equip. - City Gate	379	0	None	0	0	0	0	0
Services	380	0	None	0	0	0	0	0
Meters	381	0	None	0	0	0	0	0
House Regulators	383	0	None	0	0	0	0	0
Ind. Meas. & Reg. Station Equip.	385	0	None	0	0	0	0	0
Other Equipment	387	0	None	0	0	0	0	0
Subtotal - DISTRIBUTION PLANT	374-387	0		0	0	0	0	0
F. GENERAL PLANT								
Land and Land Rights	389	0	SUPPPT-E	0	0	0	0	0
Structures and Improvements	390	0	SUPPPT-E	0	0	0	0	0
Office Furniture and Equipment	391	0	SUPPPT-E	0	0	0	0	0
Office Furniture and Equipment - C	391C	0	SUPPPT-E	0	0	0	0	0
Transportation Equipment	392	0	SUPPPT-E	0	0	0	0	0
Stores Equipment	393	0	SUPPPT-E	0	0	0	0	0
Tools & Garage Equipment	394	0	SUPPPT-E	0	0	0	0	0
Laboratory Equipment	395	0	SUPPPT-E	0	0	0	0	0

**THE EMPIRE DISTRICT GAS COMPANY**  
**Class Cost of Service Study**  
**Test Year Ended Dec. 31, 2008**

Exhibit HEO-4A  
Page 3 of 126

Account Description	Account Code	SUPPLY COMMODITY Dollars	Allocation Factor Embedded	SUPPLY COMMODITY Class Allocation			
				N&S- Tran Sm Vol-SVTS	NW- Tran Sm Vol-SVTS	N&S- Tran Lg Vol-LVTS	NW- Tran Lg Vol-LVTS
I. GAS PLANT IN SERVICE							
Organization	301	0	None	0	0	0	0
Franchises & Consents	302	0	None	0	0	0	0
Subtotal - INTANGIBLE ASSETS	301-303	0		0	0	0	0
B. PRODUCTION PLANT							
Production Plant	304-338	0	None	0	0	0	0
Subtotal - PRODUCTION PLANT	304-338	0		0	0	0	0
C. STORAGE PLANT							
Storage Plant	360-365	0	None	0	0	0	0
Subtotal - STORAGE PLANT	360-366	0		0	0	0	0
D. TRANSMISSION PLANT	365-369	0	None	0	0	0	0
E. DISTRIBUTION PLANT							
Land and Land Rights	374	0	None	0	0	0	0
Structures and Improvements	375	0	None	0	0	0	0
Mains	376	0	None	0	0	0	0
Meas. & Reg. Stat. Equip. - General	378	0	None	0	0	0	0
Meas. & Reg. Stat. Equip. - City Gate	379	0	None	0	0	0	0
Services	380	0	None	0	0	0	0
Meters	381	0	None	0	0	0	0
House Regulators	383	0	None	0	0	0	0
Ind. Meas. & Reg. Station Equip.	385	0	None	0	0	0	0
Other Equipment	387	0	None	0	0	0	0
Subtotal - DISTRIBUTION PLANT	374-387	0		0	0	0	0
F. GENERAL PLANT							
Land and Land Rights	389	0	SUPPPT-E	0	0	0	0
Structures and Improvements	390	0	SUPPPT-E	0	0	0	0
Office Furniture and Equipment	391	0	SUPPPT-E	0	0	0	0
Office Furniture and Equipment - C	391C	0	SUPPPT-E	0	0	0	0
Transportation Equipment	392	0	SUPPPT-E	0	0	0	0
Stores Equipment	393	0	SUPPPT-E	0	0	0	0
Tools & Garage Equipment	394	0	SUPPPT-E	0	0	0	0
Laboratory Equipment	395	0	SUPPPT-E	0	0	0	0

THE EMPIRE DISTRICT GAS COMPANY  
Class Cost of Service Study  
Test Year Ended Dec. 31, 2008

Exhibit HEO-4A  
Page 4 of 126

Account Description	Account Code	SUPPLY COMMODITY Dollars	Allocation Factor Embedded	SUPPLY COMMODITY Class Allocation				
				N&S- Res-RS	NW- Res-RS	N&S- Sm Comm-SCF	NW- Sm Comm-SCF	N&S- Sm Vol Firm-SVF
49 Power Operated Equipment	396	0	SUPPPT-E	0	0	0	0	0
50 Common Property	397	0	SUPPPT-E	0	0	0	0	0
51 Miscellaneous Equipment	398	0	SUPPPT-E	0	0	0	0	0
52 Subtotal - GENERAL PLANT	389-399	0		0	0	0	0	0
54 TOTAL UTILITY PLANT		0		0	0	0	0	0
56 II. DEPRECIATION RESERVE								
57 Intangible Plant	108	0	Gas_Deliveries	0	0	0	0	0
58 Production Plant	108	0	None	0	0	0	0	0
59 Local Storage Plant	108	0	None	0	0	0	0	0
60 Transmission Plant	108	0	None	0	0	0	0	0
61 Mains	109	0	None	0	0	0	0	0
62 Mains- Direct Assignment	109	0	None	0	0	0	0	0
63 Services	109	0	None	0	0	0	0	0
64 Meters	109	0	None	0	0	0	0	0
65 Distr Other	109	0	None	0	0	0	0	0
66 General Plant	109	0	SUPPLABOR-E	0	0	0	0	0
67 TOTAL - DEPRECIATION RESERVE	108	0		0	0	0	0	0
69 III. OTHER RATE BASE ITEMS								
70 Gas Storage Inventory		0	Winter4	0	0	0	0	0
71 Materials & Supplies - 13 Mo Avg		0	None	0	0	0	0	0
72 Customer Deposits		0	None	0	0	0	0	0
73 Customer Advances for Construction		0	None	0	0	0	0	0
74 Accum Defd Inc Taxes- Gas Inventory		0	Winter4	0	0	0	0	0
75 Accum Defd Inc Taxes- Plant		0	None	0	0	0	0	0
76 Other Gas-related		0	None	0	0	0	0	0
77 Other Plant-related		0	None	0	0	0	0	0
78 Other labor-related		0	SUPPLABOR-E	0	0	0	0	0
79 Total - OTHER RATE BASE ITEMS		0		0	0	0	0	0
81 IV. TOTAL RATE BASE (Excl. Working Ca		0		0	0	0	0	0
82 Working Capital	131	17,466	SUPPO&MXGAS-C	9,580	1,328	2,191	353	1,740
84 V. TOTAL RATE BASE		17,466		9,580	1,328	2,191	353	1,740

THE EMPIRE DISTRICT GAS COMPANY  
Class Cost of Service Study  
Test Year Ended Dec. 31, 2008

Exhibit HEO-4A  
Page 5 of 126

Account Description	Account Code	SUPPLY COMMODITY Dollars	Allocation Factor Embedded	SUPPLY COMMODITY Class Allocation				
				NW- Sm Vol Firm-SVF	N&S- Lg Vol Firm-LVF	NW- Lg Vol Firm-LVF	N&S- Lg Vol Int-LVI	NW- Lg Vol Int-LVI
49 Power Operated Equipment	396	0	SUPPPT-E	0	0	0	0	0
50 Common Property	397	0	SUPPPT-E	0	0	0	0	0
51 Miscellaneous Equipment	398	0	SUPPPT-E	0	0	0	0	0
52 Subtotal - GENERAL PLANT	389-399	0		0	0	0	0	0
53								
54 TOTAL UTILITY PLANT		0		0	0	0	0	0
55								
56 II. DEPRECIATION RESERVE								
57 Intangible Plant	108	0	Gas_Deliveries	0	0	0	0	0
58 Production Plant	108	0	None	0	0	0	0	0
59 Local Storage Plant	108	0	None	0	0	0	0	0
60 Transmission Plant	108	0	None	0	0	0	0	0
61 Mains	109	0	None	0	0	0	0	0
62 Mains- Direct Assignment	109	0	None	0	0	0	0	0
63 Services	109	0	None	0	0	0	0	0
64 Meters	109	0	None	0	0	0	0	0
65 Distr Other	109	0	None	0	0	0	0	0
66 General Plant	109	0	SUPPLABOR-E	0	0	0	0	0
67 TOTAL - DEPRECIATION RESERVE	108	0		0	0	0	0	0
68								
69 III. OTHER RATE BASE ITEMS								
70 Gas Storage Inventory		0	Winter4	0	0	0	0	0
71 Materials & Supplies - 13 Mo Avg		0	None	0	0	0	0	0
72 Customer Deposits		0	None	0	0	0	0	0
73 Customer Advances for Construction		0	None	0	0	0	0	0
74 Accum Defd Inc Taxes- Gas Inventory		0	Winter4	0	0	0	0	0
75 Accum Defd Inc Taxes- Plant		0	None	0	0	0	0	0
76 Other Gas-related		0	None	0	0	0	0	0
77 Other Plant-related		0	None	0	0	0	0	0
78 Other labor-related		0	SUPPLABOR-E	0	0	0	0	0
79 Total - OTHER RATE BASE ITEMS		0		0	0	0	0	0
80								
81 IV. TOTAL RATE BASE (Excl. Working Ca		0		0	0	0	0	0
82 Working Capital	131	17,466	SUPPO&MXGAS-C	244	763	160	953	0
83								
84 V. TOTAL RATE BASE		17,466		244	763	160	953	0
85								

**THE EMPIRE DISTRICT GAS COMPANY**  
**Class Cost of Service Study**  
**Test Year Ended Dec. 31, 2008**

Exhibit HEO-4A  
Page 6 of 126

Account Description	Account Code	SUPPLY COMMODITY Dollars	Allocation Factor Embedded	SUPPLY COMMODITY Class Allocation			
				N&S- Tran Sm Vol-SVTS	NW- Tran Sm Vol-SVTS	N&S- Tran Lg Vol-LVTS	NW- Tran Lg Vol-LVTS
49 Power Operated Equipment	396	0	SUPPPT-E	0	0	0	0
50 Common Property	397	0	SUPPPT-E	0	0	0	0
51 Miscellaneous Equipment	398	0	SUPPPT-E	0	0	0	0
52 Subtotal - GENERAL PLANT	389-399	0		0	0	0	0
54 TOTAL UTILITY PLANT		0		0	0	0	0
56 II. DEPRECIATION RESERVE							
57 Intangible Plant	108	0	Gas_Deliveries	0	0	0	0
58 Production Plant	108	0	None	0	0	0	0
59 Local Storage Plant	108	0	None	0	0	0	0
60 Transmission Plant	108	0	None	0	0	0	0
61 Mains	109	0	None	0	0	0	0
62 Mains- Direct Assignment	109	0	None	0	0	0	0
63 Services	109	0	None	0	0	0	0
64 Meters	109	0	None	0	0	0	0
65 Distr Other	109	0	None	0	0	0	0
66 General Plant	109	0	SUPPLABOR-E	0	0	0	0
67 TOTAL - DEPRECIATION RESERVE	108	0		0	0	0	0
69 III. OTHER RATE BASE ITEMS							
70 Gas Storage Inventory		0	Winter4	0	0	0	0
71 Materials & Supplies - 13 Mo Avg		0	None	0	0	0	0
72 Customer Deposits		0	None	0	0	0	0
73 Customer Advances for Construction		0	None	0	0	0	0
74 Accum Defd Inc Taxes- Gas Inventory		0	Winter4	0	0	0	0
75 Accum Defd Inc Taxes- Plant		0	None	0	0	0	0
76 Other Gas-related		0	None	0	0	0	0
77 Other Plant-related		0	None	0	0	0	0
78 Other labor-related		0	SUPPLABOR-E	0	0	0	0
79 Total - OTHER RATE BASE ITEMS		0		0	0	0	0
81 IV. TOTAL RATE BASE (Excl. Working Ca		0		0	0	0	0
82 Working Capital	131	17,466	SUPPO&MXGAS-C	38	7	90	18
84 V. TOTAL RATE BASE		17,466		38	7	90	18

**THE EMPIRE DISTRICT GAS COMPANY**  
**Class Cost of Service Study**  
**Test Year Ended Dec. 31, 2008**

Exhibit HEO-4A  
Page 7 of 126

Account Description	Account Code	SUPPLY COMMODITY Dollars	Allocation Factor Embedded	SUPPLY COMMODITY Class Allocation				
				N&S- Res-RS	NW- Res-RS	N&S- Sm Comm-SCF	NW- Sm Comm-SCF	N&S- Sm Vol Firm-SVF
I. OPERATION & MAINTENANCE EXPEN								
A. PRODUCTION EXPENSES								
1. Manufactured Gas Production								
Operations Labor	701	0	None	0	0	0	0	0
Operation Supv and Engineering	710	0	None	0	0	0	0	0
LNG Expense	717	0	None	0	0	0	0	0
Subtotal - O&M Accounts 701-716	710-716	0		0	0	0	0	0
Maint. of Structure & Improvements	741	0	None	0	0	0	0	0
Maint Production Equipment	742	0	None	0	0	0	0	0
Subtotal - O&M Accounts 717-742	717-742	0	None	0	0	0	0	0
Subtotal - Manufactured Gas Production	710-742	0		0	0	0	0	0
2. Other Gas Supply Expenses								
Natural Gas City Gate Purchases	804	0	Gas_Rev	0	0	0	0	0
Other Natural Gas Purchases	805	0	Gas_Rev	0	0	0	0	0
Natural Gas W/D from Storage- Gas Repoi	808	0	Gas_Rev	0	0	0	0	0
Gas Used for Other Util Operations	812	0	Gas_Rev	0	0	0	0	0
LNG Operating Expenses	813	18,343	Gas_Rev	10,060	1,405	2,304	374	1,870
Subtotal - PRODUCTION EXPENSES	710-813	18,343		10,060	1,405	2,304	374	1,870
B. NATURAL GAS STORAGE, TERMINAL								
Energy Trading & Accounting	844	77,687	Gas_Rev	42,606	5,950	9,759	1,586	7,921
Subtotal - NATURAL GAS STORAGE	840-850	77,687		42,606	5,950	9,759	1,586	7,921
C. TRANSMISSION EXPENSES	851-870	0	None	0	0	0	0	0
D. DISTRIBUTION EXPENSES								
Mains and Services Expenses	874	0	None	0	0	0	0	0
Perf Distrib Main Locates	874	0	Gas_Deliveries	0	0	0	0	0
Routine Leak Surv Mains & SVCS	874	0	None	0	0	0	0	0
Meas. & Reg. Station Expense General	875	0	None	0	0	0	0	0
Meas. & Reg. Station Expense Industrial	876	0	None	0	0	0	0	0
Meas. & Reg. Station Expense Stat-City G	877	0	None	0	0	0	0	0
Meter & House Regulator Expenses	878	0	None	0	0	0	0	0
Perf Connects/Discon/Recon-Gas	878	0	None	0	0	0	0	0
Customer Install	879	0	None	0	0	0	0	0
Other expenses	880	0	None	0	0	0	0	0

**THE EMPIRE DISTRICT GAS COMPANY**  
**Class Cost of Service Study**  
**Test Year Ended Dec. 31, 2008**

Exhibit HED-4A  
Page 8 of 126

Account Description	Account Code	SUPPLY COMMODITY Dollars	Allocation Factor Embedded	SUPPLY COMMODITY Class Allocation				
				NW- Sm Vol Firm-SVF	N&S- Lg Vol Firm-LVF	NW- Lg Vol Firm-LVF	N&S- Lg Vol Int-LVI	NW- Lg Vol Int-LVI
1. OPERATION & MAINTENANCE EXPEN								
A. PRODUCTION EXPENSES								
1. Manufactured Gas Production								
Operations Labor	701	0	None	0	0	0	0	0
Operation Supv and Engineering	710	0	None	0	0	0	0	0
LNG Expense	717	0	None	0	0	0	0	0
Subtotal - O&M Accounts 701-716	710-716	0		0	0	0	0	0
Maint. of Structure & Improvements	741	0	None	0	0	0	0	0
Maint Production Equipment	742	0	None	0	0	0	0	0
Subtotal - O&M Accounts 717-742	717-742	0	None	0	0	0	0	0
Subtotal - Manufactured Gas Production	710-742	0		0	0	0	0	0
2. Other Gas Supply Expenses								
Natural Gas City Gate Purchases	804	0	Gas_Rev	0	0	0	0	0
Other Natural Gas Purchases	805	0	Gas_Rev	0	0	0	0	0
Natural Gas W/D from Storage- Gas Repoi	808	0	Gas_Rev	0	0	0	0	0
Gas Used for Other Util Operations	812	0	Gas_Rev	0	0	0	0	0
LNG Operating Expenses	813	18,343	Gas_Rev	263	842	177	1,048	0
Subtotal - PRODUCTION EXPENSES	710-813	18,343		263	842	177	1,048	0
B. NATURAL GAS STORAGE, TERMINAL								
Energy Trading & Accounting	844	77,687	Gas_Rev	1,114	3,566	748	4,438	0
Subtotal - NATURAL GAS STORAGE	840-850	77,687		1,114	3,566	748	4,438	0
C. TRANSMISSION EXPENSES	851-870	0	None	0	0	0	0	0
D. DISTRIBUTION EXPENSES								
Mains and Services Expenses	874	0	None	0	0	0	0	0
Perf Distrib Main Locates	874	0	Gas_Deliveries	0	0	0	0	0
Routine Leak Surv Mains & SVCS	874	0	None	0	0	0	0	0
Meas. & Reg. Station Expense General	875	0	None	0	0	0	0	0
Meas. & Reg. Station Expense Industrial	876	0	None	0	0	0	0	0
Meas. & Reg. Station Expense Stat-City G.	877	0	None	0	0	0	0	0
Meter & House Regulator Expenses	878	0	None	0	0	0	0	0
Perf Connects/Discon/Recon-Gas	878	0	None	0	0	0	0	0
Customer Install	879	0	None	0	0	0	0	0
Other expenses	880	0	None	0	0	0	0	0



THE EMPIRE DISTRICT GAS COMPANY  
Class Cost of Service Study  
Test Year Ended Dec. 31, 2008

Exhibit HEO-4A  
Page 9 of 126

Account Description	Account Code	SUPPLY COMMODITY Dollars	Allocation Factor Embedded	SUPPLY COMMODITY Class Allocation			
				N&S- Tran Sm Vol-SVTS	NW- Tran Sm Vol-SVTS	N&S- Tran Lg Vol-LVTS	NW- Tran Lg Vol-LVTS
I. OPERATION & MAINTENANCE EXPEN							
A. PRODUCTION EXPENSES							
1. Manufactured Gas Production							
Operations Labor	701	0	None	0	0	0	0
Operation Supv and Engineering	710	0	None	0	0	0	0
LNG Expense	717	0	None	0	0	0	0
Subtotal - O&M Accounts 701-716	710-716	0		0	0	0	0
Maint. of Structure & Improvements	741	0	None	0	0	0	0
Maint Production Equipment	742	0	None	0	0	0	0
Subtotal - O&M Accounts 717-742	717-742	0	None	0	0	0	0
Subtotal - Manufactured Gas Production	710-742	0		0	0	0	0
2. Other Gas Supply Expenses							
Natural Gas City Gate Purchases	804	0	Gas_Rev	0	0	0	0
Other Natural Gas Purchases	805	0	Gas_Rev	0	0	0	0
Natural Gas W/D from Storage- Gas Repoi	808	0	Gas_Rev	0	0	0	0
Gas Used for Other Util Operations	812	0	Gas_Rev	0	0	0	0
LNG Operating Expenses	813	18,343	Gas_Rev	0	0	0	0
Subtotal - PRODUCTION EXPENSES	710-813	18,343		0	0	0	0
B. NATURAL GAS STORAGE, TERMINAL							
Energy Trading & Accounting	844	77,687	Gas_Rev	0	0	0	0
Subtotal - NATURAL GAS STORAGE	840-850	77,687		0	0	0	0
C. TRANSMISSION EXPENSES	851-870	0	None	0	0	0	0
D. DISTRIBUTION EXPENSES							
Mains and Services Expenses	874	0	None	0	0	0	0
Perf Distrib Main Locates	874	0	Gas_Deliveries	0	0	0	0
Routine Leak Surv Mains & SVCS	874	0	None	0	0	0	0
Meas. & Reg. Station Expense General	875	0	None	0	0	0	0
Meas. & Reg. Station Expense Industrial	876	0	None	0	0	0	0
Meas. & Reg. Station Expense Stat-City G	877	0	None	0	0	0	0
Meter & House Regulator Expenses	878	0	None	0	0	0	0
Perf Connects/Discon/Recon-Gas	878	0	None	0	0	0	0
Customer Install	879	0	None	0	0	0	0
Other expenses	880	0	None	0	0	0	0

THE EMPIRE DISTRICT GAS COMPANY  
Class Cost of Service Study  
Test Year Ended Dec. 31, 2008

Exhibit HEO-4A  
Page 10 of 126

Account Description	Account Code	SUPPLY COMMODITY Dollars	Allocation Factor Embedded	SUPPLY COMMODITY Class Allocation				
				N&S- Res-RS	NW- Res-RS	N&S- Sm Comm-SCF	NW- Sm Comm-SCF	N&S- Sm Vol Firm-SVF
123 Co Used Gas O&M Offset	880	0	None	0	0	0	0	0
124 Distribution Rents	881	0	None	0	0	0	0	0
125 Maint. Supervision & Engineering	885	0	None	0	0	0	0	0
126 Maint. of Mains	887	0	None	0	0	0	0	0
127 PerfMaint3rdPartyDmg-UGDistGas	887	0	None	0	0	0	0	0
128 Dist Maint Compr Station Equip	888	0	None	0	0	0	0	0
129 Maint Of Meas. & Reg. Station Expense Gi	889	0	None	0	0	0	0	0
130 Maint Of Meas. & Reg. Station Expense In	890	0	None	0	0	0	0	0
131 Maint Of Meas. & Reg. Station Expense St	891	0	None	0	0	0	0	0
132 Maint. of Services	892	0	None	0	0	0	0	0
133 Maint. of Meters & House Regulators	893	0	None	0	0	0	0	0
134 Maintenance of Other Equipment	894	0	None	0	0	0	0	0
135 Blank	XXX	0	None	0	0	0	0	0
136 Subtotal - DISTRIBUTION EXPENSES	870-894	0		0	0	0	0	0
137 Total - OPERATION & MAINTENANCE EX		77,687		42,606	5,950	9,759	1,586	7,921
139 II. CUSTOMER ACCOUNTS EXPENSES								
140 Customer Service - Administrative	901	0	None	0	0	0	0	0
141 Meter Reading Expenses	902	0	None	0	0	0	0	0
142 Customer Records & Collection Expense	903	0	None	0	0	0	0	0
143 Uncollectible Accounts	904	0	None	0	0	0	0	0
144 Write-Off- PIP	904P	0	None	0	0	0	0	0
145 Miscellaneous Customer Accounts Expens	905	0	None	0	0	0	0	0
146 Miscellaneous Customer Accounts Expens	905A	0	None	0	0	0	0	0
147 Total - CUSTOMER ACCOUNTS EXPENSES		0		0	0	0	0	0
149 III. CUSTOMER SERVICE & INFORMATION								
150 Operation Supervision	907	0	None	0	0	0	0	0
151 Customer Assist- Choice	908C	0	None	0	0	0	0	0
152 Customer Assist- Other	908	0	None	0	0	0	0	0
153 Advertising & Promotion	909	0	None	0	0	0	0	0
154 Other Customer Service & Informational E	910	0	None	0	0	0	0	0
155 Operations sales Expense	911	0	None	0	0	0	0	0
156 Demonstration	912	0	None	0	0	0	0	0
157 Total - CUSTOMER SERVICE & INFORMATION		0	None	0	0	0	0	0
159 Total - CUSTOMER ACCOUNTS, SERVICE		0		0	0	0	0	0

**THE EMPIRE DISTRICT GAS COMPANY**  
**Class Cost of Service Study**  
**Test Year Ended Dec. 31, 2008**

Exhibit HEO-4A  
Page 11 of 126

Account Description	Account Code	SUPPLY COMMODITY Dollars	Allocation Factor Embedded	SUPPLY COMMODITY Class Allocation				
				NW- Sm Vol Firm-SVF	N&S- Lg Vol Firm-LVF	NW- Lg Vol Firm-LVF	N&S- Lg Vol Int-LVI	NW- Lg Vol Int-LVI
123 Co Used Gas O&M Offset	880	0	None	0	0	0	0	0
124 Distribution Rents	881	0	None	0	0	0	0	0
125 Maint. Supervision & Engineering	885	0	None	0	0	0	0	0
126 Maint. of Mains	887	0	None	0	0	0	0	0
127 PerfMaint3rdPartyDmg-UGDistGas	887	0	None	0	0	0	0	0
128 Dist Maint Compr Station Equip	888	0	None	0	0	0	0	0
129 Maint Of Meas. & Reg. Station Expense Gr	889	0	None	0	0	0	0	0
130 Maint Of Meas. & Reg. Station Expense In	890	0	None	0	0	0	0	0
131 Maint Of Meas. & Reg. Station Expense St	891	0	None	0	0	0	0	0
132 Maint. of Services	892	0	None	0	0	0	0	0
133 Maint. of Meters & House Regulators	893	0	None	0	0	0	0	0
134 Maintenance of Other Equipment	894	0	None	0	0	0	0	0
135 Blank	XXX	0	None	0	0	0	0	0
136 Subtotal - DISTRIBUTION EXPENSES	870-894	0		0	0	0	0	0
137 Total - OPERATION & MAINTENANCE EX		77,687		1,114	3,566	748	4,438	0
138								
139 II. CUSTOMER ACCOUNTS EXPENSES								
140 Customer Service - Administrative	901	0	None	0	0	0	0	0
141 Meter Reading Expenses	902	0	None	0	0	0	0	0
142 Customer Records & Collection Expense	903	0	None	0	0	0	0	0
143 Uncollectible Accounts	904	0	None	0	0	0	0	0
144 Write-Off- PIP	904P	0	None	0	0	0	0	0
145 Miscellaneous Customer Accounts Expens	905	0	None	0	0	0	0	0
146 Miscellaneous Customer Accounts Expens	905A	0	None	0	0	0	0	0
147 Total - CUSTOMER ACCOUNTS EXPENS		0		0	0	0	0	0
148								
149 III. CUSTOMER SERVICE & INFORMATI								
150 Operation Supervision	907	0	None	0	0	0	0	0
151 Customer Assist- Choice	908C	0	None	0	0	0	0	0
152 Customer Assist- Other	908	0	None	0	0	0	0	0
153 Advertising & Promotion	909	0	None	0	0	0	0	0
154 Other Customer Service & Informational E	910	0	None	0	0	0	0	0
155 Operations sales Expense	911	0	None	0	0	0	0	0
156 Demonstration	912	0	None	0	0	0	0	0
157 Total - CUSTOMER SERVICE & INFORM		0	None	0	0	0	0	0
158								
159 Total - CUSTOMER ACCOUNTS, SERVIC		0		0	0	0	0	0

## THE EMPIRE DISTRICT GAS COMPANY

Exhibit HEO-4A

## Class Cost of Service Study

Page 12 of 126

Test Year Ended Dec. 31, 2008

## SUPPLY COMMODITY Class Allocation

Account Description	Account Code	SUPPLY COMMODITY Dollars	Allocation Factor Embedded	N&S- Tran Sm Vol-SVTS	NW- Tran Sm Vol-SVTS	N&S- Tran Lg Vol-LVTS	NW- Tran Lg Vol-LVTS
123 Co Used Gas O&M Offset	880	0	None	0	0	0	0
124 Distribution Rents	881	0	None	0	0	0	0
125 Maint. Supervision & Engineering	885	0	None	0	0	0	0
126 Maint. of Mains	887	0	None	0	0	0	0
127 PerfMaint3rdPartyDmg-UGDistGas	887	0	None	0	0	0	0
128 Dist Maint Compr Station Equip	888	0	None	0	0	0	0
129 Maint Of Meas. & Reg. Station Expense Gr	889	0	None	0	0	0	0
130 Maint Of Meas. & Reg. Station Expense In	890	0	None	0	0	0	0
131 Maint Of Meas. & Reg. Station Expense St	891	0	None	0	0	0	0
132 Maint. of Services	892	0	None	0	0	0	0
133 Maint. of Meters & House Regulators	893	0	None	0	0	0	0
134 Maintenance of Other Equipment	894	0	None	0	0	0	0
135 Blank	XXX	0	None	0	0	0	0
136 Subtotal - DISTRIBUTION EXPENSES	870-894	0		0	0	0	0
137 Total - OPERATION & MAINTENANCE EX		77,687		0	0	0	0
139 II. CUSTOMER ACCOUNTS EXPENSES							
140 Customer Service - Administrative	901	0	None	0	0	0	0
141 Meter Reading Expenses	902	0	None	0	0	0	0
142 Customer Records & Collection Expense	903	0	None	0	0	0	0
143 Uncollectible Accounts	904	0	None	0	0	0	0
144 Write-Off- PIP	904P	0	None	0	0	0	0
145 Miscellaneous Customer Accounts Expens	905	0	None	0	0	0	0
146 Miscellaneous Customer Accounts Expens	905A	0	None	0	0	0	0
147 Total - CUSTOMER ACCOUNTS EXPENSE		0		0	0	0	0
149 III. CUSTOMER SERVICE & INFORMATI							
150 Operation Supervision	907	0	None	0	0	0	0
151 Customer Assist- Choice	908C	0	None	0	0	0	0
152 Customer Assist- Other	908	0	None	0	0	0	0
153 Advertising & Promotion	909	0	None	0	0	0	0
154 Other Customer Service & Informational E	910	0	None	0	0	0	0
155 Operations sales Expense	911	0	None	0	0	0	0
156 Demonstration	912	0	None	0	0	0	0
157 Total - CUSTOMER SERVICE & INFORM		0	None	0	0	0	0
159 Total - CUSTOMER ACCOUNTS, SERVICE		0		0	0	0	0

THE EMPIRE DISTRICT GAS COMPANY  
Class Cost of Service Study  
Test Year Ended Dec. 31, 2008

Exhibit HEO-4A  
Page 13 of 126

Account Description	Account Code	SUPPLY COMMODITY Dollars	Allocation Factor Embedded	SUPPLY COMMODITY Class Allocation				
				N&S- Res-RS	NW- Res-RS	N&S- Sm Comm-SCF	NW- Sm Comm-SCF	N&S- Sm Vol Firm-SVF
IV. ADMINISTRATIVE & GENERAL EXPE								
A. Labor-Related:								
Administrative & General Salaries	920	0	SUPPLABOR-E	0	0	0	0	0
Office Supplies & Expenses	921	0	SUPPLABOR-E	0	0	0	0	0
Transfer Expenses	922	0	SUPPLABOR-E	0	0	0	0	0
Outside Services Employed	923	0	None	0	0	0	0	0
Outside Services Employed	923	0	SUPPLABOR-E	0	0	0	0	0
Injuries & Damages	925	0	SUPPLABOR-E	0	0	0	0	0
Employee Pensions and Benefits	926	0	SUPPLABOR-E	0	0	0	0	0
Subtotal - O&M Accounts 920-923, 926		0		0	0	0	0	0
B. Plant-Related:								
Property Insurance	924	0	None	0	0	0	0	0
Subtotal - O&M Accounts 924		0		0	0	0	0	0
C. Other-Related:								
Regulatory Commission Expenses	928	0	None	0	0	0	0	0
Duplicate Charges Credit	929	0	None	0	0	0	0	0
PUCO Assessments	408	0	None	0	0	0	0	0
Customer Interest Expense	431	0	None	0	0	0	0	0
Miscellaneous General	930	0	SUPPPT-E	0	0	0	0	0
Rents	931	0	None	0	0	0	0	0
Misc. General Plant	935	0	SUPPPT-E	0	0	0	0	0
Subtotal - O&M Accounts 928-935		0		0	0	0	0	0
Total - ADMINISTRATIVE & GENERAL EXP		0		0	0	0	0	0
TOTAL - OPERATING EXPENSES (Excl f		77,687		42,606	5,950	9,759	1,586	7,921
VI. DEPRECIATION EXPENSE								
Intangible Plant	403	0	Winter4	0	0	0	0	0
Production Plant	403	0	None	0	0	0	0	0
Local Storage Plant	403	0	None	0	0	0	0	0
Transmission Plant	403	0	None	0	0	0	0	0
Mains	404	0	None	0	0	0	0	0

**THE EMPIRE DISTRICT GAS COMPANY**  
**Class Cost of Service Study**  
**Test Year Ended Dec. 31, 2008**

Exhibit HEO-4A  
Page 14 of 126

Account Description	Account Code	SUPPLY COMMODITY Dollars	Allocation Factor Embedded	SUPPLY COMMODITY Class Allocation				
				NW- Sm Vol Firm-SVF	N&S- Lg Vol Firm-LVF	NW- Lg Vol Firm-LVF	N&S- Lg Vol Int-LVI	NW- Lg Vol Int-LVI
160								
161	IV. ADMINISTRATIVE & GENERAL EXPE							
162								
163	A. Labor-Related:							
164	Administrative & General Salaries	920	0	SUPPLABOR-E	0	0	0	0
165	Office Supplies & Expenses	921	0	SUPPLABOR-E	0	0	0	0
166	Transfer Expenses	922	0	SUPPLABOR-E	0	0	0	0
167	Outside Services Employed	923	0	None	0	0	0	0
168	Outside Services Employed	923	0	SUPPLABOR-E	0	0	0	0
169	Injuries & Damages	925	0	SUPPLABOR-E	0	0	0	0
170	Employee Pensions and Benefits	926	0	SUPPLABOR-E	0	0	0	0
171	Subtotal - O&M Accounts 920-923, 926		0		0	0	0	0
172								
173	B. Plant-Related:							
174	Property Insurance	924	0	None	0	0	0	0
175	Subtotal - O&M Accounts 924		0		0	0	0	0
176								
177	C. Other-Related:							
178	Regulatory Commission Expenses	928	0	None	0	0	0	0
179	Duplicate Charges Credit	929	0	None	0	0	0	0
180	PUCO Assessments	408	0	None	0	0	0	0
181	Customer Interest Expense	431	0	None	0	0	0	0
182	Miscellaneous General	930	0	SUPPPT-E	0	0	0	0
183	Rents	931	0	None	0	0	0	0
184	Misc. General Plant	935	0	SUPPPT-E	0	0	0	0
185	Subtotal - O&M Accounts 928-935		0		0	0	0	0
186								
187	Total - ADMINISTRATIVE & GENERAL EX		0		0	0	0	0
188								
189	TOTAL - OPERATING EXPENSES (Excl I		77,687		1,114	3,566	748	4,438
190								
191	VI. DEPRECIATION EXPENSE							
192	Intangible Plant	403	0	Winter4	0	0	0	0
193	Production Plant	403	0	None	0	0	0	0
194	Local Storage Plant	403	0	None	0	0	0	0
195	Transmission Plant	403	0	None	0	0	0	0
196	Mains	404	0	None	0	0	0	0

THE EMPIRE DISTRICT GAS COMPANY  
Class Cost of Service Study  
Test Year Ended Dec. 31, 2008

Exhibit HEO-4A  
Page 15 of 126

Account Description	Account Code	SUPPLY COMMODITY Dollars	Allocation Factor Embedded	SUPPLY COMMODITY Class Allocation			
				N&S- Tran Sm Vol-SVTS	NW- Tran Sm Vol-SVTS	N&S- Tran Lg Vol-LVTS	NW- Tran Lg Vol-LVTS
IV. ADMINISTRATIVE & GENERAL EXPE							
A. Labor-Related:							
Administrative & General Salaries	920	0	SUPPLABOR-E	0	0	0	0
Office Supplies & Expenses	921	0	SUPPLABOR-E	0	0	0	0
Transfer Expenses	922	0	SUPPLABOR-E	0	0	0	0
Outside Services Employed	923	0	None	0	0	0	0
Outside Services Employed	923	0	SUPPLABOR-E	0	0	0	0
Injuries & Damages	925	0	SUPPLABOR-E	0	0	0	0
Employee Pensions and Benefits	926	0	SUPPLABOR-E	0	0	0	0
Subtotal - O&M Accounts 920-923, 926		0		0	0	0	0
B. Plant-Related:							
Property Insurance	924	0	None	0	0	0	0
Subtotal - O&M Accounts 924		0		0	0	0	0
C. Other-Related:							
Regulatory Commission Expenses	928	0	None	0	0	0	0
Duplicate Charges Credit	929	0	None	0	0	0	0
PUCO Assessments	408	0	None	0	0	0	0
Customer Interest Expense	431	0	None	0	0	0	0
Miscellaneous General	930	0	SUPPPT-E	0	0	0	0
Rents	931	0	None	0	0	0	0
Misc. General Plant	935	0	SUPPPT-E	0	0	0	0
Subtotal - O&M Accounts 928-935		0		0	0	0	0
Total - ADMINISTRATIVE & GENERAL EXP		0		0	0	0	0
TOTAL - OPERATING EXPENSES (Excl I		77,687		0	0	0	0
VI. DEPRECIATION EXPENSE							
Intangible Plant	403	0	Winter4	0	0	0	0
Production Plant	403	0	None	0	0	0	0
Local Storage Plant	403	0	None	0	0	0	0
Transmission Plant	403	0	None	0	0	0	0
Mains	404	0	None	0	0	0	0

THE EMPIRE DISTRICT GAS COMPANY  
Class Cost of Service Study  
Test Year Ended Dec. 31, 2008

Exhibit HEO-4A  
Page 16 of 126

SUPPLY					SUPPLY COMMODITY Class Allocation				
Account	Account	COMMODITY	Allocation		N&S- Res-RS	NW- Res-RS	N&S- Sm	NW- Sm	N&S- Sm Vol
Description	Code	Dollars	Factor	Embedded			Comm-SCF	Comm-SCF	Firm-SVF
197 Mains- Direct	404	0	None		0	0	0	0	0
198 Services	404	0	None		0	0	0	0	0
199 Meters	404	0	None		0	0	0	0	0
200 Distr Other	404	0	None		0	0	0	0	0
201 General Plant	404	0	SUPPLABOR-E		0	0	0	0	0
202 Rent from Gas Ppty / Other Rev	404	0	None		0	0	0	0	0
203 Adjustments		0	None		0	0	0	0	0
204 Total - DEPRECIATION EXPENSE	403	0			0	0	0	0	0
205									
206 VII. TAXES OTHER THAN INCOME TAXE									
207									
208 Property Tax- Plant		0	None		0	0	0	0	0
209 Distribution Tax		0	RATEBASE		0	0	0	0	0
210 Payroll related		0	SUPPLABOR-E		0	0	0	0	0
211 Other taxes		0	None		0	0	0	0	0
212 Property Tax- Inventory		0	Gas_Deliveries		0	0	0	0	0
213 Subtotal- Taxes Other Than Income Taxes	408	0			0	0	0	0	0
214									
215 B. Franchise and Revenue Taxes									
216 Gross Receipts Tax		0	SUPP-E_Rev_GRT		0	0	0	0	0
217 GRT- Uncoll Rider		0	None		0	0	0	0	0
218 Subtotal- Franchise and Gross Receipts Tax		0			0	0	0	0	0
219									
220 C. Income Tax Expense									
221 State Income Tax expense		53	PreTax-Supp-E		30	(3)	4	(1)	(25)
222 Federal Income Tax Deferred		0	PreTax-Supp-E		0	0	0	0	0
223 Federal Income Tax expense		339	PreTax-Supp-E		189	(20)	28	(9)	(161)
224 Subtotal- Income tax expense		392			219	(23)	32	(11)	(186)
225 Total- TAX EXPENSE		392			219	(23)	32	(11)	(186)
226									
227 TOTAL EXPENSES		96,422			52,885	7,332	12,095	1,950	9,605
228									
229 V. REVENUES at Present Rates									
230 Residential	480-483	62,401	Res_Rev		55,543	6,858	0	0	0
231 Comm - Indust Sales	480-483	24,872	CI_Bundled		0	0	12,503	1,766	6,639
232 Comm - Indust Transport	480-483	14,264	CI_Transport		0	0	0	0	0
233 Forfeited Discounts Gas	480-483	502	Forfeited Discounts G		385	54	46	8	4



THE EMPIRE DISTRICT GAS COMPANY  
Class Cost of Service Study  
Test Year Ended Dec. 31, 2008

Exhibit HEO-4A  
Page 17 of 126

Account Description	Account Code	SUPPLY COMMODITY Dollars	Allocation Factor Embedded	SUPPLY COMMODITY Class Allocation				
				NW- Sm Vol Firm-SVF	N&S- Lg Vol Firm-LVF	NW- Lg Vol Firm-LVF	N&S- Lg Vol Int-LVI	NW- Lg Vol Int-LVI
197 Mains- Direct	404	0	None	0	0	0	0	0
198 Services	404	0	None	0	0	0	0	0
199 Meters	404	0	None	0	0	0	0	0
200 Distr Other	404	0	None	0	0	0	0	0
201 General Plant	404	0	SUPPLABOR-E	0	0	0	0	0
202 Rent from Gas Ppty / Other Rev	404	0	None	0	0	0	0	0
203 Adjustments		0	None	0	0	0	0	0
204 Total - DEPRECIATION EXPENSE	403	0		0	0	0	0	0
206 VII. TAXES OTHER THAN INCOME TAXE								
208 Property Tax- Plant		0	None	0	0	0	0	0
209 Distribution Tax		0	RATEBASE	0	0	0	0	0
210 Payroll related		0	SUPPLABOR-E	0	0	0	0	0
211 Other taxes		0	None	0	0	0	0	0
212 Property Tax- Inventory		0	Gas_Deliveries	0	0	0	0	0
213 Subtotal- Taxes Other Than Income Taxes	408	0		0	0	0	0	0
215 B. Franchise and Revenue Taxes								
216 Gross Receipts Tax		0	SUPP-E_Rev_GRT	0	0	0	0	0
217 GRT- Uncoll Rider		0	None	0	0	0	0	0
218 Subtotal- Franchise and Gross Receipts Taxes		0		0	0	0	0	0
220 C. Income Tax Expense								
221 State Income Tax expense		53	PreTax-Supp-E	(4)	(27)	(5)	(31)	0
222 Federal Income Tax Deferred		0	PreTax-Supp-E	0	0	0	0	0
223 Federal Income Tax expense		339	PreTax-Supp-E	(24)	(169)	(35)	(194)	0
224 Subtotal- Income tax expense		392		(28)	(195)	(40)	(225)	0
225 Total- TAX EXPENSE		392		(28)	(195)	(40)	(225)	0
227 TOTAL EXPENSES		96,422		1,349	4,212	884	5,261	0
229 V. REVENUES at Present Rates								
230 Residential	480-483	62,401	Res_Rev	0	0	0	0	0
231 Comm - Indust Sales	480-483	24,872	CI_Bundled	898	1,120	243	1,703	0
232 Comm - Indust Transport	480-483	14,264	CI_Transport	0	0	0	0	0
233 Forfeited Discounts Gas	480-483	502	Forfeited Discounts Gas	1	0	0	0	0

THE EMPIRE DISTRICT GAS COMPANY  
Class Cost of Service Study  
Test Year Ended Dec. 31, 2008

Exhibit HEO-4A  
Page 18 of 126

Account Description	Account Code	SUPPLY COMMODITY Dollars	Allocation Factor Embedded	SUPPLY COMMODITY Class Allocation			
				N&S- Tran Sm Vol-SVTS	NW- Tran Sm Vol-SVTS	N&S- Tran Lg Vol-LVTS	NW- Tran Lg Vol-LVTS
197 Mains- Direct	404	0	None	0	0	0	0
198 Services	404	0	None	0	0	0	0
199 Meters	404	0	None	0	0	0	0
200 Distr Other	404	0	None	0	0	0	0
201 General Plant	404	0	SUPLABOR-E	0	0	0	0
202 Rent from Gas Ppty / Other Rev	404	0	None	0	0	0	0
203 Adjustments		0	None	0	0	0	0
204 Total - DEPRECIATION EXPENSE	403	0		0	0	0	0
206 VII. TAXES OTHER THAN INCOME TAXE							
208 Property Tax- Plant		0	None	0	0	0	0
209 Distribution Tax		0	RATEBASE	0	0	0	0
210 Payroll related		0	SUPLABOR-E	0	0	0	0
211 Other taxes		0	None	0	0	0	0
212 Property Tax- Inventory		0	Gas_Deliveries	0	0	0	0
213 Subtotal- Taxes Other Than Income Taxes	408	0		0	0	0	0
215 B. Franchise and Revenue Taxes							
216 Gross Receipts Tax		0	SUPP-E_Rev_GRT	0	0	0	0
217 GRT- Uncoll Rider		0	None	0	0	0	0
218 Subtotal- Franchise and Gross Receipts T		0		0	0	0	0
220 C. Income Tax Expense							
221 State Income Tax expense		53	PreTax-Supp-E	29	6	67	14
222 Federal Income Tax Deferred		0	PreTax-Supp-E	0	0	0	0
223 Federal Income Tax expense		339	PreTax-Supp-E	183	35	429	87
224 Subtotal- Income tax expense		392		212	41	496	101
225 Total- TAX EXPENSE		392		212	41	496	101
227 TOTAL EXPENSES		96,422		212	41	496	101
229 V. REVENUES at Present Rates							
230 Residential	480-483	62,401	Res_Rev	0	0	0	0
231 Comm - Indust Sales	480-483	24,872	CI_Bundled	0	0	0	0
232 Comm - Indust Transport	480-483	14,264	CI_Transport	3,552	689	8,334	1,689
233 Forfeited Discounts Gas	480-483	502	Forfeited Discounts G	2	0	1	0

THE EMPIRE DISTRICT GAS COMPANY  
Class Cost of Service Study  
Test Year Ended Dec. 31, 2008

Exhibit HEO-4A  
Page 19 of 126

Account Description	Account Code	SUPPLY COMMODITY Dollars	Allocation Factor Embedded	SUPPLY COMMODITY Class Allocation				
				N&S- Res-RS	NW- Res-RS	N&S- Sm Comm-SCF	NW- Sm Comm-SCF	N&S- Sm Vol Firm-SVF
234 Returned Check Chgs Gas	480-483	71	Returned Check Chgs t	55	8	7	1	1
235 Reconnect Charges Gas	480-484	359	Reconnect Charges G	276	39	33	5	3
236 Tax Remuneration Gas	480-485	160	ax Remuneration G:	87	11	20	3	10
237 Misc Revenue	480-485	0	Delivery_Rev	0	0	0	0	0
238 Gas Revenue	480-483	0	Gas_Rev	0	0	0	0	0
239 Rent from Gas Ppty / Other Rev	495	0	SUPPLABOR-E	0	0	0	0	0
240 Subtotal Gas Revenues, net		102,628		56,346	6,970	12,608	1,783	6,658
242 Non-Operating Income	418-421	0	None	0	0	0	0	0
243 Non-Operating Income	426	0	None	0	0	0	0	0
244 Total Non-Oper Income		0		0	0	0	0	0
246 Total Revenue		102,628		56,346	6,970	12,608	1,783	6,658
248 Total Expenses		96,422		52,885	7,332	12,095	1,950	9,605
250 NET INCOME at Present Rates		<u>6,206</u>		<u>3,460</u>	<u>(362)</u>	<u>513</u>	<u>(167)</u>	<u>(2,947)</u>

## THE EMPIRE DISTRICT GAS COMPANY

Exhibit HEO-4A

## Class Cost of Service Study

Page 20 of 126

Test Year Ended Dec. 31, 2008

## SUPPLY COMMODITY Class Allocation

Account Description	Account Code	SUPPLY COMMODITY Dollars	Allocation Factor Embedded	NW- Sm Vol Firm-SVF	N&S- Lg Vol Firm-LVF	NW- Lg Vol Firm-LVF	N&S- Lg Vol Int-LVI	NW- Lg Vol Int-LVI
234 Returned Check Chgs Gas	480-483	71	Returned Check Chgs t	0	0	0	0	0
235 Reconnect Charges Gas	480-484	359	Reconnect Charges G	0	0	0	0	0
236 Tax Remuneration Gas	480-485	160	ax Remuneration G:	1	2	0	3	0
237 Misc Revenue	480-485	0	Delivery_Rev	0	0	0	0	0
238 Gas Revenue	480-483	0	Gas_Rev	0	0	0	0	0
239 Rent from Gas Ppty / Other Rev	495	0	SUPPLABOR-E	0	0	0	0	0
240 Subtotal Gas Revenues, net		102,628		901	1,122	244	1,705	0
241								
242 Non-Operating Income	418-421	0	None	0	0	0	0	0
243 Non-Operating Income	426	0	None	0	0	0	0	0
244 Total Non-Oper Income		0		0	0	0	0	0
245								
246 Total Revenue		102,628		901	1,122	244	1,705	0
247								
248 Total Expenses		96,422		1,349	4,212	884	5,261	0
249								
250 NET INCOME at Present Rates		<u>6,206</u>		<u>(447)</u>	<u>(3,090)</u>	<u>(640)</u>	<u>(3,556)</u>	<u>0</u>

THE EMPIRE DISTRICT GAS COMPANY  
Class Cost of Service Study  
Test Year Ended Dec. 31, 2008

Exhibit HEO-4A  
Page 21 of 126

Account Description	Account Code	SUPPLY COMMODITY Dollars	Allocation Factor Embedded	SUPPLY COMMODITY Class Allocation			
				N&S- Tran Sm Vol-SVTS	NW- Tran Sm Vol-SVTS	N&S- Tran Lg Vol-LVTS	NW- Tran Lg Vol-LVTS
234 Returned Check Chgs Gas	480-483	71	Returned Check Chgs t	0	0	0	0
235 Reconnect Charges Gas	480-484	359	Reconnect Charges G	2	0	0	0
236 Tax Remuneration Gas	480-485	160	ax Remuneration Gt	6	1	13	3
237 Misc Revenue	480-485	0	Delivery_Rev	0	0	0	0
238 Gas Revenue	480-483	0	Gas_Rev	0	0	0	0
239 Rent from Gas Ppty / Other Rev	495	0	SUPPLABOR-E	0	0	0	0
240 Subtotal Gas Revenues, net		102,628		3,562	691	8,348	1,692
241							
242 Non-Operating Income	418-421	0	None	0	0	0	0
243 Non-Operating Income	426	0	None	0	0	0	0
244 Total Non-Oper Income		0		0	0	0	0
245							
246 Total Revenue		102,628		3,562	691	8,348	1,692
247							
248 Total Expenses		96,422		212	41	496	101
249							
250 NET INCOME at Present Rates		<u>6,206</u>		<u>3,350</u>	<u>649</u>	<u>7,852</u>	<u>1,591</u>

THE EMPIRE DISTRICT GAS COMPANY  
Class Cost of Service Study  
Test Year Ended Dec. 31, 2008

Exhibit HEO-4B  
Page 22 of 126

Account Description	Account Code	STORAGE DEMAND Dollars	Allocation Factor Embedded	STORAGE DEMAND Class Allocation				
				N&S- Res-RS	NW- Res-RS	N&S- Sm Comm-SCF	NW- Sm Comm-SCF	N&S- Sm Vol Firm-SVF
				3	4	5	6	7
I. GAS PLANT IN SERVICE								
Organization	301	0	TOTALPLANT	0	0	0	0	0
Franchises & Consents	302	0	TOTALPLANT	0	0	0	0	0
Subtotal - INTANGIBLE ASSETS	301-303	0		0	0	0	0	0
B. PRODUCTION PLANT								
Production Plant	304-338	0	None	0	0	0	0	0
Subtotal - PRODUCTION PLANT	304-338	0		0	0	0	0	0
C. STORAGE PLANT								
Storage Plant	360-365	0	None	0	0	0	0	0
Subtotal - STORAGE PLANT	360-366	0		0	0	0	0	0
D. TRANSMISSION PLANT	365-369	0	None	0	0	0	0	0
E. DISTRIBUTION PLANT								
Land and Land Rights	374	0	None	0	0	0	0	0
Structures and Improvements	375	0	None	0	0	0	0	0
Mains	376	0	None	0	0	0	0	0
Meas. & Reg. Stat. Equip. - General	378	0	None	0	0	0	0	0
Meas. & Reg. Stat. Equip. - City Gate	379	0	None	0	0	0	0	0
Services	380	0	None	0	0	0	0	0
Meters	381	0	None	0	0	0	0	0
House Regulators	383	0	None	0	0	0	0	0
Ind. Meas. & Reg. Station Equip.	385	0	None	0	0	0	0	0
Other Equipment	387	0	None	0	0	0	0	0
Subtotal - DISTRIBUTION PLANT	374-387	0		0	0	0	0	0
F. GENERAL PLANT								
Land and Land Rights	389	0	STORLABOR-D	0	0	0	0	0
Structures and Improvements	390	0	STORLABOR-D	0	0	0	0	0
Office Furniture and Equipment	391	0	STORLABOR-D	0	0	0	0	0
Office Furniture and Equipment - C	391C	0	STORLABOR-D	0	0	0	0	0
Transportation Equipment	392	0	STORLABOR-D	0	0	0	0	0
Stores Equipment	393	0	STORLABOR-D	0	0	0	0	0
Tools & Garage Equipment	394	0	STORLABOR-D	0	0	0	0	0
Laboratory Equipment	395	0	STORLABOR-D	0	0	0	0	0

THE EMPIRE DISTRICT GAS COMPANY

Exhibit HEO-4B

Class Cost of Service Study

Page 23 of 126

Test Year Ended Dec. 31, 2008

Account Description	Account Code	STORAGE DEMAND Dollars	Allocation Factor Embedded	STORAGE DEMAND Class Allocation				
				NW- Sm Vol Firm-SVF	N&S- Lg Vol Firm-LVF	NW- Lg Vol Firm-LVF	N&S- Lg Vol Int-LVI	NW- Lg Vol Int-LVI
				8	9	10	11	12
I. GAS PLANT IN SERVICE								
Organization	301	0	TOTALPLANT	0	0	0	0	0
Franchises & Consents	302	0	TOTALPLANT	0	0	0	0	0
Subtotal - INTANGIBLE ASSETS	301-303	0		0	0	0	0	0
B. PRODUCTION PLANT								
Production Plant	304-338	0	None	0	0	0	0	0
Subtotal - PRODUCTION PLANT	304-338	0		0	0	0	0	0
C. STORAGE PLANT								
Storage Plant	360-365	0	None	0	0	0	0	0
Subtotal - STORAGE PLANT	360-366	0		0	0	0	0	0
D. TRANSMISSION PLANT	365-369	0	None	0	0	0	0	0
E. DISTRIBUTION PLANT								
Land and Land Rights	374	0	None	0	0	0	0	0
Structures and Improvements	375	0	None	0	0	0	0	0
Mains	376	0	None	0	0	0	0	0
Meas. & Reg. Stat. Equip. - General	378	0	None	0	0	0	0	0
Meas. & Reg. Stat. Equip. - City Gate	379	0	None	0	0	0	0	0
Services	380	0	None	0	0	0	0	0
Meters	381	0	None	0	0	0	0	0
House Regulators	383	0	None	0	0	0	0	0
Ind. Meas. & Reg. Station Equip.	385	0	None	0	0	0	0	0
Other Equipment	387	0	None	0	0	0	0	0
Subtotal - DISTRIBUTION PLANT	374-387	0		0	0	0	0	0
F. GENERAL PLANT								
Land and Land Rights	389	0	STORLABOR-D	0	0	0	0	0
Structures and Improvements	390	0	STORLABOR-D	0	0	0	0	0
Office Furniture and Equipment	391	0	STORLABOR-D	0	0	0	0	0
Office Furniture and Equipment - C	391C	0	STORLABOR-D	0	0	0	0	0
Transportation Equipment	392	0	STORLABOR-D	0	0	0	0	0
Stores Equipment	393	0	STORLABOR-D	0	0	0	0	0
Tools & Garage Equipment	394	0	STORLABOR-D	0	0	0	0	0
Laboratory Equipment	395	0	STORLABOR-D	0	0	0	0	0

THE EMPIRE DISTRICT GAS COMPANY  
Class Cost of Service Study  
Test Year Ended Dec. 31, 2008

Exhibit HEO-4B  
Page 24 of 126

Account Description	Account Code	STORAGE DEMAND Dollars	Allocation Factor Embedded	STORAGE DEMAND Class Allocation			
				N&S- Tran Sm Vol-SVTS	NW- Tran Sm Vol-SVTS	N&S- Tran Lg Vol-LVTS	NW- Tran Lg Vol-LVTS
				13	14	15	16
I. GAS PLANT IN SERVICE							
Organization	301	0	TOTALPLANT	0	0	0	0
Franchises & Consents	302	0	TOTALPLANT	0	0	0	0
Subtotal - INTANGIBLE ASSETS	301-303	0		0	0	0	0
B. PRODUCTION PLANT							
Production Plant	304-338	0	None	0	0	0	0
Subtotal - PRODUCTION PLANT	304-338	0		0	0	0	0
C. STORAGE PLANT							
Storage Plant	360-365	0	None	0	0	0	0
Subtotal - STORAGE PLANT	360-366	0		0	0	0	0
D. TRANSMISSION PLANT	365-369	0	None	0	0	0	0
E. DISTRIBUTION PLANT							
Land and Land Rights	374	0	None	0	0	0	0
Structures and Improvements	375	0	None	0	0	0	0
Mains	376	0	None	0	0	0	0
Meas. & Reg. Stat. Equip. - General	378	0	None	0	0	0	0
Meas. & Reg. Stat. Equip. - City Gate	379	0	None	0	0	0	0
Services	380	0	None	0	0	0	0
Meters	381	0	None	0	0	0	0
House Regulators	383	0	None	0	0	0	0
Ind. Meas. & Reg. Station Equip.	385	0	None	0	0	0	0
Other Equipment	387	0	None	0	0	0	0
Subtotal - DISTRIBUTION PLANT	374-387	0		0	0	0	0
F. GENERAL PLANT							
Land and Land Rights	389	0	STORLABOR-D	0	0	0	0
Structures and Improvements	390	0	STORLABOR-D	0	0	0	0
Office Furniture and Equipment	391	0	STORLABOR-D	0	0	0	0
Office Furniture and Equipment - C	391C	0	STORLABOR-D	0	0	0	0
Transportation Equipment	392	0	STORLABOR-D	0	0	0	0
Stores Equipment	393	0	STORLABOR-D	0	0	0	0
Tools & Garage Equipment	394	0	STORLABOR-D	0	0	0	0
Laboratory Equipment	395	0	STORLABOR-D	0	0	0	0



**THE EMPIRE DISTRICT GAS COMPANY**  
**Class Cost of Service Study**  
**Test Year Ended Dec. 31, 2008**

Exhibit HEO-48  
Page 25 of 126

Account Description	Account Code	STORAGE DEMAND Dollars	Allocation Factor Embedded	STORAGE DEMAND Class Allocation				
				N&S- Res-RS	NW- Res-RS	N&S- Sm Comm-SCF	NW- Sm Comm-SCF	N&S- Sm Vol Firm-SVF
				3	4	5	6	7
49 Power Operated Equipment	396	0	STORLABOR-D	0	0	0	0	0
50 Common Property	397	0	STORLABOR-D	0	0	0	0	0
51 Miscellaneous Equipment	398	0	STORLABOR-D	0	0	0	0	0
52 Subtotal - GENERAL PLANT	389-399	0		0	0	0	0	0
54 TOTAL UTILITY PLANT		0		0	0	0	0	0
56 II. DEPRECIATION RESERVE								
57 Intangible Plant	108	0	STORPT-D	0	0	0	0	0
58 Production Plant	108	0	None	0	0	0	0	0
59 Local Storage Plant	108	0	None	0	0	0	0	0
60 Transmission Plant	108	0	None	0	0	0	0	0
61 Mains	109	0	None	0	0	0	0	0
62 Mains- Direct Assignment	109	0	None	0	0	0	0	0
63 Services	109	0	None	0	0	0	0	0
64 Meters	109	0	None	0	0	0	0	0
65 Distr Other	109	0	None	0	0	0	0	0
66 General Plant	109	0	STORLABOR-D	0	0	0	0	0
67 TOTAL - DEPRECIATION RESERVE	108	0		0	0	0	0	0
69 III. OTHER RATE BASE ITEMS								
70 Gas Storage Inventory		6,572,717	Winter4	3,756,613	548,500	888,575	150,465	602,171
71 Materials & Supplies - 13 Mo Avg		0	STORPT-D	0	0	0	0	0
72 Customer Deposits		0	STORPT-D	0	0	0	0	0
73 Customer Advances for Construction		0	STORPT-D	0	0	0	0	0
74 Accum Defd Inc Taxes- Gas Inventory		0	Winter4	0	0	0	0	0
75 Accum Defd Inc Taxes- Plant		0	STORPT-D	0	0	0	0	0
76 Other Gas-related		0	Winter4	0	0	0	0	0
77 Other Plant-related		0	STORLABOR-D	0	0	0	0	0
78 Other labor-related		0	None	0	0	0	0	0
79 Total - OTHER RATE BASE ITEMS		6,572,717		3,756,613	548,500	888,575	150,465	602,171
81 IV. TOTAL RATE BASE (Excl. Working Ca		<u>6,572,717</u>		<u>3,756,613</u>	<u>548,500</u>	<u>888,575</u>	<u>150,465</u>	<u>602,171</u>
82 Working Capital	131	0	None	0	0	0	0	0
84 V. TOTAL RATE BASE		<u>6,572,717</u>		<u>3,756,613</u>	<u>548,500</u>	<u>888,575</u>	<u>150,465</u>	<u>602,171</u>

**THE EMPIRE DISTRICT GAS COMPANY**  
**Class Cost of Service Study**  
**Test Year Ended Dec. 31, 2008**

Exhibit HEO-4B  
Page 26 of 126

Account Description	Account Code	STORAGE DEMAND Dollars	Allocation Factor Embedded	STORAGE DEMAND Class Allocation				
				NW- Sm Vol Firm-SVF	N&S- Lg Vol Firm-LVF	NW- Lg Vol Firm-LVF	N&S- Lg Vol Int-LVI	NW- Lg Vol Int-LVI
				8	9	10	11	12
49 Power Operated Equipment	396	0	STORLABOR-D	0	0	0	0	0
50 Common Property	397	0	STORLABOR-D	0	0	0	0	0
51 Miscellaneous Equipment	398	0	STORLABOR-D	0	0	0	0	0
52 Subtotal - GENERAL PLANT	389-399	0		0	0	0	0	0
54 TOTAL UTILITY PLANT		0		0	0	0	0	0
56 II. DEPRECIATION RESERVE								
57 Intangible Plant	108	0	STORPT-D	0	0	0	0	0
58 Production Plant	108	0	None	0	0	0	0	0
59 Local Storage Plant	108	0	None	0	0	0	0	0
60 Transmission Plant	108	0	None	0	0	0	0	0
61 Mains	109	0	None	0	0	0	0	0
62 Mains- Direct Assignment	109	0	None	0	0	0	0	0
63 Services	109	0	None	0	0	0	0	0
64 Meters	109	0	None	0	0	0	0	0
65 Distr Other	109	0	None	0	0	0	0	0
66 General Plant	109	0	STORLABOR-D	0	0	0	0	0
67 TOTAL - DEPRECIATION RESERVE	108	0		0	0	0	0	0
69 III. OTHER RATE BASE ITEMS								
70 Gas Storage Inventory		6,572,717	Winter4	89,952	237,181	52,255	247,004	0
71 Materials & Supplies - 13 Mo Avg		0	STORPT-D	0	0	0	0	0
72 Customer Deposits		0	STORPT-D	0	0	0	0	0
73 Customer Advances for Construction		0	STORPT-D	0	0	0	0	0
74 Accum Defd Inc Taxes- Gas Inventory		0	Winter4	0	0	0	0	0
75 Accum Defd Inc Taxes- Plant		0	STORPT-D	0	0	0	0	0
76 Other Gas-related		0	Winter4	0	0	0	0	0
77 Other Plant-related		0	STORLABOR-D	0	0	0	0	0
78 Other labor-related		0	None	0	0	0	0	0
79 Total - OTHER RATE BASE ITEMS		6,572,717		89,952	237,181	52,255	247,004	0
81 IV. TOTAL RATE BASE (Excl. Working Ca		6,572,717		89,952	237,181	52,255	247,004	0
82 Working Capital	131	0	None	0	0	0	0	0
84 V. TOTAL RATE BASE		6,572,717		89,952	237,181	52,255	247,004	0

## THE EMPIRE DISTRICT GAS COMPANY

Exhibit HEO-4B

## Class Cost of Service Study

Page 27 of 126

Test Year Ended Dec. 31, 2008

Account Description	Account Code	STORAGE DEMAND Dollars	Allocation Factor Embedded	STORAGE DEMAND Class Allocation			
				N&S- Tran Sm Vol-SVTS	NW- Tran Sm Vol-SVTS	N&S- Tran Lg Vol-LVTS	NW- Tran Lg Vol-LVTS
				13	14	15	16
49 Power Operated Equipment	396	0	STORLABOR-D	0	0	0	0
50 Common Property	397	0	STORLABOR-D	0	0	0	0
51 Miscellaneous Equipment	398	0	STORLABOR-D	0	0	0	0
52 Subtotal - GENERAL PLANT	389-399	0		0	0	0	0
54 TOTAL UTILITY PLANT		0		0	0	0	0
56 II. DEPRECIATION RESERVE							
57 Intangible Plant	108	0	STORPT-D	0	0	0	0
58 Production Plant	108	0	None	0	0	0	0
59 Local Storage Plant	108	0	None	0	0	0	0
60 Transmission Plant	108	0	None	0	0	0	0
61 Mains	109	0	None	0	0	0	0
62 Mains- Direct Assignment	109	0	None	0	0	0	0
63 Services	109	0	None	0	0	0	0
64 Meters	109	0	None	0	0	0	0
65 Distr Other	109	0	None	0	0	0	0
66 General Plant	109	0	STORLABOR-D	0	0	0	0
67 TOTAL - DEPRECIATION RESERVE	108	0		0	0	0	0
69 III. OTHER RATE BASE ITEMS							
70 Gas Storage Inventory		6,572,717	Winter4	0	0	0	0
71 Materials & Supplies - 13 Mo Avg		0	STORPT-D	0	0	0	0
72 Customer Deposits		0	STORPT-D	0	0	0	0
73 Customer Advances for Construction		0	STORPT-D	0	0	0	0
74 Accum Defd Inc Taxes- Gas Inventory		0	Winter4	0	0	0	0
75 Accum Defd Inc Taxes- Plant		0	STORPT-D	0	0	0	0
76 Other Gas-related		0	Winter4	0	0	0	0
77 Other Plant-related		0	STORLABOR-D	0	0	0	0
78 Other labor-related		0	None	0	0	0	0
79 Total - OTHER RATE BASE ITEMS		6,572,717		0	0	0	0
81 IV. TOTAL RATE BASE (Excl. Working Ca		6,572,717		0	0	0	0
82 Working Capital	131	0	None	0	0	0	0
84 V. TOTAL RATE BASE		6,572,717		0	0	0	0

**THE EMPIRE DISTRICT GAS COMPANY**  
**Class Cost of Service Study**  
**Test Year Ended Dec. 31, 2008**

Exhibit HEO-4B  
Page 28 of 126

	Account Description	Account Code	STORAGE DEMAND Dollars	Allocation Factor Embedded	STORAGE DEMAND Class Allocation				
					N&S- Res-RS	NW- Res-RS	N&S- Sm Comm-SCF	NW- Sm Comm-SCF	N&S- Sm Vol Firm-SVF
					3	4	5	6	7
86	I. OPERATION & MAINTENANCE EXPEN								
87	A. PRODUCTION EXPENSES								
88	1. Manufactured Gas Production								
89	Operations Labor	701	0	None	0	0	0	0	0
90	Operation Supv and Engineering	710	0	None	0	0	0	0	0
91	LNG Expense	717	0	None	0	0	0	0	0
92	Subtotal - O&M Accounts 701-716	710-716	0		0	0	0	0	0
93	Maint. of Structure & Improvements	741	0	None	0	0	0	0	0
94	Maint Production Equipment	742	0	None	0	0	0	0	0
95	Subtotal - O&M Accounts 717-742	717-742	0	None	0	0	0	0	0
96	Subtotal - Manufactured Gas Production	710-742	0		0	0	0	0	0
97									
98	2. Other Gas Supply Expenses								
99	Natural Gas City Gate Purchases	804	0	None	0	0	0	0	0
100	Other Natural Gas Purchases	805	0	None	0	0	0	0	0
101	Natural Gas W/D from Storage- Gas Repoi	808	0	None	0	0	0	0	0
102	Gas Used for Other Util Operations	812	0	None	0	0	0	0	0
103	LNG Operating Expenses	813	0	None	0	0	0	0	0
104	Subtotal - PRODUCTION EXPENSES	710-813	0		0	0	0	0	0
105									
106	B. NATURAL GAS STORAGE, TERMINAL								
107	Energy Trading & Accounting	844	0	None	0	0	0	0	0
108	Subtotal - NATURAL GAS STORAGE	840-850	0		0	0	0	0	0
109									
110	C. TRANSMISSION EXPENSES	851-870	0	None	0	0	0	0	0
111									
112	D. DISTRIBUTION EXPENSES								
113	Mains and Services Expenses	874	0	None	0	0	0	0	0
114	Perf Distrib Main Locates	874	0	None	0	0	0	0	0
115	Routine Leak Surv Mains & SVCS	874	0	None	0	0	0	0	0
116	Meas. & Reg. Station Expense General	875	0	None	0	0	0	0	0
117	Meas. & Reg. Station Expense Industrial	876	0	None	0	0	0	0	0
118	Meas. & Reg. Station Expense Stat-City G.	877	0	None	0	0	0	0	0
119	Meter & House Regulator Expenses	878	0	None	0	0	0	0	0
120	Perf Connects/Discon/Recon-Gas	878	0	None	0	0	0	0	0
121	Customer Install	879	0	None	0	0	0	0	0
122	Other expenses	880	0	None	0	0	0	0	0