PENNICHUCK WATER WORKS, INC. MERRIMACK, NEW HAMPSHIRE

REPORT ON

COST OF SERVICE ALLOCATIONS

AND WATER RATE DESIGN

by

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REPORT ON COST OF SERVICE ALLOCATIONS AND WATER RATE DESIGN PENNICHUCK WATER WORKS, INC.

INTRODUCTION

This report sets forth the procedures, findings, and results of a cost of service allocation study for Pennichuck Water Works, Inc. The cost of service allocation study developed herein is based on the financial and operating parameters developed by the Company for use in a rate filing scheduled to be made before the New Hampshire Public Utilities Commission in May 2010.

A discussion of the rationale employed for cost of service allocation studies, including a description of the allocations, together with illustrative tables and a general discussion of water rate design follows.

GENERAL

The total cost of service is a utility's revenue requirement. This amount is determined by establishing the revenues needed (that is, required) from all customers, in total, to permit the utility to recover its expenses and taxes, and to produce a fair return on its rate base. The determination of the Company's revenue requirement involves the issues pertaining to revenues, expenses, taxes, and rate base that are typically raised in a rate proceeding.

A water system furnishes service to a number of different customer classifications, each of which has different needs and conditions of service. A water utility incurs costs in relation to its operating requirements and its investment in system facilities necessary to meet the needs of its customers. As these needs vary among the different classes of customers, so also does the utility's cost of providing service to the respective customer classes. A cost of service allocation study allocates the total cost of service (that is, the revenue requirement) among classes of

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customers in accordance with recognized principles and generally accepted procedures in order to obtain an indication of the relative cost responsibilities of each such class of customers. Additionally, a cost of service allocation study provides the cost information necessary to develop appropriate customer, volumetric, and fire protection charges. A cost of service allocation study is one of a number of factors that may be considered in developing a schedule of rates and charges which produce the required revenues.

Several bases or methods have evolved for use in the allocation of water utility costs. In most methods, the costs are allocated or assigned in two major steps: first to functional categories, and second to customer classifications. In this particular study, the cost allocation process is based upon the "Base-Extra Capacity Method" as recognized by the American Water Works Association as set forth in its Water Rates Manual. Costs are identified and allocated to functional cost categories of base and extra capacity cost, customer cost, and fire hydrant cost. Once the cost of service has been determined by functional cost category, the next step is the allocation of such costs to the customer classifications.

FUNCTIONAL COSTS

Base costs include those costs which would generally be incurred if the water system were operated at a uniform rate throughout the year and customers received water on the same basis. That is, base costs are generally associated with the provision of service under average or base load conditions without meeting peak demand requirements or water use variations. Base costs include the operating costs of supply, treatment, pumping, and transmission and distribution facilities, as well as the capital costs for water plant investment associated with serving customers at a constant, average, rate of use.

Extra capacity costs include those costs related to peak rates of water use in excess of

average requirements. The amount of system costs related to peak or maximum demands is affected by the customer mix within the area being studied. For example, in an area which is principally residential in nature, the peak demands on the system are relatively high. Alternatively, in an area comprising a mix of industrial, as well as residential and commercial customers, the delivery of water to industrial customers on a year-round basis generally results in an overall system peak load factor that is lower than would be the case for an essentially residential area. Extra capacity costs include capital and operating charges for additional plant and system capacity beyond that required for an average rate of use. This study considers extra capacity costs which are related to maximum day and maximum hour extra demand criteria.

Customer costs include those costs associated with connecting and serving customers irrespective of the volume of water used or demand requirements imposed. Customer costs generally comprise capital and operating costs related to services, meters, and customer installations and meter reading, billing, and collecting expense. In this study, customer costs have been sub-divided into costs related to commercial operations (that is, billing and collecting activities) and costs related to meters and services.

Fire hydrant costs comprise costs related to the capital investment in and the maintenance of fire hydrants.

The costs of the water utility are assigned to the various functional cost categories through the use of allocation factors which are developed for each item of capital investment, operating expense, taxes, and other items. Certain costs, such as chemical costs for water treatment, are assigned entirely to the base cost function. Other costs, such as meter reading and billing, are assigned directly to the customer cost function. Many cost elements, however, are not specifically related to a single cost function and are therefore allocated on the basis of other relevant factors. For example, the capital investment in and associated costs of facilities required to meet maximum daily demands are allocated to the base cost and extra capacity maximum day functions in accordance with the relationship of the system maximum day consumption to the average annual rate of consumption. That is, if the maximum daily rate of water consumption is equal to 15 million gallons per day, and average use is 10 million gallons per day, facilities required to meet maximum daily demands would be allocated 66.7 percent ($10 \div 15$) to the base cost function and 33.3 percent ($5 \div 15$) to the extra capacity maximum day function. Costs associated with facilities required to meet maximum to meet maximum hourly demands are allocated in a similar manner.

CUSTOMER CLASSIFICATIONS

Customer classifications, or equivalently customer classes, are the groupings of those customers who are generally recognized as having reasonably similar service, consumption, and demand characteristics. Additionally, the practical necessities of utilities' billing systems have also been a factor in the way customer groups have been established. Pennichuck Water Works, Inc. maintains detailed customer group classifications as follows: general metered service, contract sales and service, and municipal and private fire protection service. These classes parallel the rate schedules presently used by Pennichuck Water Works, Inc. For purposes of the allocations made in this study, the general metered service class and the contract sales class have been consolidated into a water service class.

Each customer classification is allocated a portion of the base and extra capacity cost, the customer cost and the fire hydrant cost. This is accomplished by allocating the functional costs to each customer class in the proportion that the respective class responsibility for costs bears to the total cost responsibility of all customers served by the system. The sum of all functional

costs attributable to a customer class is the total cost of service to be recovered from that class.

Each individual functional cost category is allocated to the customer classifications in accordance with the following methodology.

Base costs are costs that would be incurred in supplying water at the annual average rate of usage exclusive of costs incurred in meeting peak demand requirements or water use variations. Base costs are therefore allocated to the customer classes in the same proportion that the total annual volume of water used by each customer class is to the total annual system water use.

Extra capacity costs are costs incurred in meeting peak rates of water usage in excess of average requirements. Extra capacity maximum day costs are allocated to the customer classes in accordance with the maximum day demand of each customer class which is in excess of the average rate of consumption. For fire protection costs, demand estimates are made on the basis of system capacity and fire demand requirements. Extra capacity maximum hour costs are allocated on a similar basis except that the maximum hour demand in excess of the maximum day demand is used as the controlling factor.

Customer costs are allocated to the customer classes on the basis of the billing costs and the numbers of meters and services.

Customer class billing requirements are generally used to allocate the so-called "commercial" customer costs (that is, the costs related to billing and collection and the maintenance of customer records) to the various customer classes. These costs are a function of the total number of bills rendered during the year and are therefore allocated to the customer classes on the basis of the annual number of bills rendered to each class.

Neither the municipal fire protection class nor the private fire protection class has any responsibility for the customer cost-meters or customer cost-services functional components.

Such facilities are not used in the provision of municipal fire protection service and any such facilities used by the private fire protection class were installed by customers in that class. Hence, the water service class has sole responsibility for these facilities.

Fire hydrant functional costs are directly assigned to the public fire protection service customer class.

Finally, the base, the extra capacity, the customer, and the fire hydrant costs, when summarized by customer class, define the total cost of service to be recovered from each customer class. This summation also provides an indication of the responsibility of each customer class for each of the functional costs which together constitute the total cost of service.

REVENUE REQUIREMENT

As previously discussed, the total cost of service is synonymous with a utility's revenue requirement. The total revenue requirement for a water utility should be sufficient to guarantee the provision of adequate water service and to assure the maintenance, development, and perpetuation of the water system. The principal components of the revenue requirement for an investor-owned water utility comprise operation and maintenance expenditures; depreciation and amortization expenses; income and other taxes; and, operating income or return on investment. Cost of service studies for investor-owned water utilities reporting to a regulatory authority are often prepared in conjunction with the processing of a rate relief application and the concurrent development of a pro forma revenue requirement. This particular study is based on a total revenue requirement of \$28,397,565 as developed by Pennichuck Water Works, Inc. for filing in a rate proceeding before the New Hampshire Board of Public Utilities Commission. This revenue requirement provides for the following expense categories:

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Item	Amount
Operation and Maintenance	\$10,392,652
Depreciation and Amortization	4,086,040
Taxes Other Than Income Tax	3,194,227
Income Taxes	3,047,413
Utility Operating Income	7,677,233
Total Revenue Requirement	<u>\$28,397,565</u>

As subsequently discussed in this report, the \$28,397,565 revenue requirement is allocated to the previously-defined functional costs. This functional cost allocation then becomes an input into both the development of rates and charges and the cost allocations to customer classes.

Additionally, it is noted that a portion of the \$28,397,565 revenue requirement is attained by other revenue not received from water sales or the provision of fire protection service. The management of Pennichuck Water Works, Inc. has projected other revenue to be \$365,964 on a pro forma basis. This other revenue amount is deducted from the total revenue requirement during the development of the functional cost allocations. Thus, the revenue to be attained from water sales and the provision of fire protection service is \$28,031,601.

PLANT INVESTMENT/RATE BASE

Pennichuck Water Works, Inc. maintains its plant investment accounts in accordance with the fixed capital reporting requirements of the New Hampshire Public Utilities Commission. Under this system, the original cost and the related depreciation reserve for utility plant in service as of December 31, 2009 has been set forth in the 2009 Annual report to the New Hampshire Public Utilities Commission as follows:

Functional Plant Account	Original <u>Cost</u>	Depreciation <u>Reserve</u>
Source of Supply and Pumping Plant	\$45,841,547	\$11,156,569
Treatment Plant	18,099,878	1,815,537
Transmission and Distribution Plant	81,499,230	21,349,145
General Plant	8,439,082	4,774,851
Intangible Plant	239,912	117,323
Adjustments		(7,168,458)
Totals	<u>\$154,119,649</u>	\$32,044,967

The combination of the original cost and the depreciation reserve results in the net utility plant in service. This is an important input in the development of the net investment rate base which also includes contributions in aid of construction, customer advances for construction, customer deposits, working capital, deferred income taxes, deferred investment tax credits, and other items. The year-end December 31, 2009 rate base used in this study was developed by Pennichuck Water Works, Inc. and may be summarized as follows:

Description	Amount
Original Cost Utility Plant in Service	\$154,119,649
Depreciation Reserve	(32,044,967)
Acquisition Adjustment	(534,870)
Contributions in Aid of Construction	(22,794,159)
Working Capital	1,272,195
Materials and Supplies	716,730
Prepayments	771,666
Other & Deferred Charges	6,383,915
Customer Advances for Construction	(84,000)
Customer Deposits	(118,483)
Deferred Income Tax	(14,769,177)
Deferred Tax Liability	(838,590)
Unamortized ITC	(767,922)
Deferred Rental Credits	(3,244)
Total Rate Base	<u>\$91,308,743</u>

The rate base is allocated to the several functional cost categories in accordance with the

methodology previously described. The results of the rate base allocation are then subsequently used to allocate investment related revenue requirement items such as income taxes and utility operating income.

WATER PRODUCTION/SYSTEM DELIVERY

A necessary step in a water cost of service allocation study is the development of the appropriate allocation factors for the functional cost elements. Hence, it is necessary to determine the system-wide water production and delivery on average day, maximum day, and maximum hour bases. The water production records maintained by Pennichuck Water Works, Inc. are recorded in sufficient detail to enable this determination to be made.

A review of the Pennichuck Water Works, Inc. system delivery statistics for the 2004 through 2009 period indicates the ratio of maximum day to average day delivery ranged from about 1.64 times to about 1.93 times and averaged about 1.74 times. Further, available data indicates that the ratio of maximum hour to peak day delivery is about 1.46 times. Based on this review, a maximum day ratio of 1.75 times and a maximum hour ratio of 2.55 times (i.e., 1.46 x 1.75 = 2.55) were used in this study as being representative of system capabilities.

A maximum day ratio of 1.75 times means that for facilities allocated on a maximum day basis, 57.14 percent of the cost is allocated to the base cost function while 42.86 percent of the cost is allocated to the extra capacity cost maximum day function. Similarly, a maximum hour ratio of 2.55 times means that for facilities allocated on maximum hour basis, 39.22 percent of the cost is allocated to the base cost function and 60.78 percent of the cost is allocated to the extra capacity cost-maximum hour function.

FUNCTIONAL COST OF SERVICE ALLOCATION

The allocation of Pennichuck Water Works' cost of service to the previously defined

functional cost components is set forth on a series of four schedules attached hereto. Descriptions of the individual schedules are given below.

Schedule 1 presents the details, in tabular form, of the allocation of the original cost of plant in service and rate base to the previously defined cost functions. The left-most column of Schedule 1 sets forth an account number while the second column from the left gives a description of the item being allocated. The third column from the left sets forth the total cost of the item being allocated. The allocations to the several cost functions are shown in Columns 4 through 10, while the right-most column indicates an allocation code for the specific allocation factor used to assign each cost element to the cost functions. The allocations set forth on Schedule 1 utilize the utility plant in service and depreciation reserve data that were previously summarized in an earlier section of this report. The allocations to the cost functions were made in accordance with the concepts which were previously described.

Schedule 2 is constructed in a format which is similar to that of Schedule 1. Schedule 2, however, sets forth the details of the allocation of the operation and maintenance expense, the annual depreciation and amortization expense, taxes other than income taxes, income taxes, and utility operating income as adjusted by Pennichuck Water Works, Inc. for the twelve months ended December 31, 2009. The data utilized on Schedule 2 were previously summarized in the Revenue Requirement discussion in this report.

Schedule 3 is similar in format to Schedules 1 and 2. Schedule 3 sets forth the development of the labor benefits allocator.

The allocation codes mentioned above are simply reference numbers which designate groups of percentages which are used to allocate the total amount of any given cost element to the several cost functions. Schedule 4 contains a written description of the allocation bases used

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to allocate cost elements to the cost functions together with a list of the allocation codes and factors. Additionally, Page 3 of Schedule 4 illustrates the development of several of the factors used in the allocation of cost elements to the cost functions.

CUSTOMER CLASS COST OF SERVICE ALLOCATION

The allocation of Pennichuck Water Works' cost of service to the customer classifications is set forth on a series of three schedules attached hereto. Descriptions of the individual schedules are given below.

Schedule 5 presents the details, in tabular form, of the allocation of the revenue requirement functional costs, as developed on Schedule 2, to the previously identified customer groups. The far left column of Schedule 5 describes the cost elements which were developed on Schedule 2, while the next column shows the total cost of the items being allocated. The allocations to the customer groups are shown in columns 3 through 5, while the right-most column indicates an allocation code for the specific allocation factor used to assign each cost element to the customer classes.

The allocation codes mentioned above are simply reference numbers which designate groups of percentages which are used to allocate the total amount of any given functional cost element to the customer classifications. Schedule 6 contains a written description of the allocation bases used to allocate cost elements to the customer classifications together with a list of the allocation codes and factors.

Schedule 7 sets forth the development of the factors used in the allocations to the customer classes. Page 1 of this schedule illustrates the annual consumption as well as the non-coincident maximum day and maximum hour demands by customer group. The consumption data are based on metered sales or, in the case of fire protection, an estimated usage. Maximum daily and

maximum hourly totals for customer classes are based on the application of customer class demand factors to the average consumption. Page 1 of Schedule 7 also develops the customer class allocation factors related to the number of bills.

Page 2 of Schedule 7 sets forth the development of the private and public fire protection allocation factors based on the number of units in service.

REVENUES FROM PRESENT RATES

Before designing a schedule of rates and charges based on the allocations set forth herein, revenues under present rates were calculated. This calculation was based on the reported number of meters and fire protection units in service at December 31, 2009 together with the reported billable volumetric water usage during calendar year 2009.

Schedule 8 attached hereto sets forth the calculation of revenues under present rates.

COST OF SERVICE ALLOCATION RESULTS

The results of the previously described cost of service allocations are set forth on Schedule 9 attached hereto and are compared thereon with the revenues projected to be received under the present rate schedule. In general, Schedule 9 shows that, on a percentage basis, the present rate revenues from water service are slightly less than their cost of service indications. Revenues from both private fire protection and municipal fire protection service are greater than their cost of service indications on a percentage basis.

COST OF SERVICE RATE DESIGN

A rate design based upon the cost of service allocations is set forth on Schedule 10 attached hereto. Design of the individual rate elements will be discussed in the following paragraphs.

The costs of serving municipal fire protection customers are recovered through a two-part

rate, namely a hydrant charge and an inch-foot charge. The hydrant charge is usually developed to recover the functional fire-hydrant costs and municipal fire protection's share of the functional customer costs, while the inch-foot charge is usually developed to recover the capacity costs allocated to municipal fire protection service.

As set forth on Page 1 of Schedule 10, on a cost of service basis, the monthly hydrant charge is \$19.78 while the inch-foot charge is \$0.12831 per year.

The costs of serving private fire protection customers are recovered through periodic charges based on the size of the connection pipe entering the property. Costs to be recovered include the capacity costs allocated to private fire protection service and a share of the customer cost-commercial cost component. Since the present rate private fire protection revenues are greater than the allocated private fire protection costs, no changes are being proposed to the private fire rates. Pennichuck Water Works' existing tariff contains only three private fire service size classifications namely, 4 inch and smaller, 6 inch, and 8 inch or larger. These classifications will remain as set forth on Page 2 of Schedule 10.

Customer costs include meter and service and billing and collecting related costs. These costs are incurred regardless of the amount of water, if any, that is used. These costs are usually recovered through a fixed charge designated as either a service charge or a customer charge. The existing general service-metered tariff of Pennichuck Water Works, Inc. includes a customer charge which varies by meter size. This customer charge is a service charge which provides no water use allowance. This same general type of customer charge will be discussed herein.

As noted above, the existing Pennichuck customer charges vary by meter size. Schedule 11 attached hereto lists the existing monthly customer charges and ratios the charge for each meter size to the charge for a 5/8 inch meter. The resulting ratios are then compared with ratios developed from the relationship of the AWWA recommended operating capacities by meter size. The AWWA capacity ratios have acceptance as a general guide for the relationship of customer charges for one meter size to another. Given the similarity of the existing customer charge ratios to the AWWA standard, as illustrated on Schedule 11, the existing ratios will be used in the customer charge development.

One issue that is always of concern is revenue instability problems. One method of alleviating such revenue instability problems would be to increase the level of the customer charges so that they recover more than the functional customer costs. The inclusion of other fixed costs in addition to the functional customer costs will tend to enhance revenue and financial stability and would help stabilize cash flow.

The inclusion of other costs in addition to the functional customer costs in customer (service) charges is recognized in the water ratemaking literature. AWWA Water Rates Manual M1 states that "The service charge is designed to recover customer-related costs and possibly some capacity-related costs associated with readiness to serve..." (Fourth Edition, page 34). Additionally, AWWA Water Rates Manual M1 also notes that "a portion of distribution-main costs as well as a portion of demand-related costs are sometimes included in the determination of service charges." (Fourth Edition, page 39).

In addition to the above examples from the AWWA Water Rates Manual, further support for the inclusion of other items in the customer charge may be obtained from Publication NRRI 93-13 of the National Regulatory Research Institute. That publication, entitled "Meeting Water Utility Revenue Requirements: Financing and Ratemaking Alternatives", states on page 69 that "common (overhead) costs include those costs (for example, administrative and general) that are generally independent of the number of customers, maximum demand, average demand, and volume of usage. Common costs can be recovered via a periodic service charge."

Page 3 of Schedule 10 sets forth the development of the proposed customer charges. As shown thereon, 75% of the non-customer, non-hydrant administrative and general costs were included in the customer charge development as recognition of other costs. It is noted that this concept has been used in the past to design customer charges for Pennichuck Water Works.

Additionally, in order to further stabilize revenues and cash flow, a portion of the expenses related to transmission and distribution mains has also been included in the customer charge development in accordance with the discussion in the AWWA Water Rates Manual. As shown on Page 3 of Schedule 10, 40% of the transmission and distribution expenses were included in the customer charge development. This 40% allocator was determined through an analysis of the inch-feet of mains in service at December 31, 2009.

Schedule 12 attached hereto sets forth the lengths of transmission and distribution mains in service as of December 31, 2009. As shown thereon, there were a total of 2,278,237 feet of transmission and distribution mains in service as of December 31, 2009. Schedule 12 illustrates both the reduction of all larger size mains to a 4" diameter and the calculation of inch-feet of mains. An inch-foot is simply the length of main in feet multiplied by the size of the diameter in inches. As shown on Schedule 12, there was an actual total of 20,253,859.8 inch-feet as of December 31, 2009. Under the reduction in size, there are only 8,801,443.8 inch-feet or about 43% of the actual number. This 43% is rounded down to 40% which is the customer cost portion of the mains. In essence, reducing the mains to 4" in diameter is similar to developing a minimum size system. This is also similar to the minimum size distribution system concept used in electric cost of service analyses.

Additionally, a portion of the fixed costs related to depreciation, amortization, and

property taxes has also been included in the customer charge development. As shown on Page 3 of Schedule 10, 75% of the base costs of depreciation, amortization, and property taxes (net of amounts applicable to the Anheuser-Busch carrying charge which is discussed below) were included in recognition of the fact that these costs are incurred irrespective of water production and use.

As shown on Page 3 of Schedule 10, the proposed customer charges are about 39.2 percent greater than the present customer charges. The increase to the 5/8" customer charge is slightly less, in order to tie to the overall revenue requirement.

A modification to the manner in which Pennichuck Water Works' largest customer, Anheuser-Busch, is billed is being proposed as part of the rate design set forth herein. Anheuser-Busch currently takes service under a contractual arrangement and is billed the monthly customer charge for each of its meters and a volumetric rate which is less than that applicable to general water service customers. Anheuser-Busch's water usage has been noticeably declining in recent years and concern exists that Anheuser-Busch will not be paying its fair share of the embedded fixed costs of water service, particularly with respect to the recent improvements and upgrades made to the treatment and supply facilities. In order to alleviate this concern, it is proposed to implement a carrying charge which would recover the fixed costs of the production facilities needed to serve Anheuser-Busch. The development of this carrying charge is set forth in detail in the Appendix which companies this report. Additionally, the customer charge would no longer be applicable to Anheuser-Busch and the volumetric charge would be based on production costs and Anheuser-Busch's share of administrative and general costs.

Schedule 13 attached hereto sets forth the development of the unit production cost and the Anheuser-Busch volumetric rate. As shown on Page 1 of Schedule 13, the unit production cost

is \$0.4647 per CCF. The unit production cost includes source of supply costs net of purchased water; pumping costs at the water treatment plant; and, water treatment costs. Pumping costs at the water treatment plant are set forth on Page 2 of Schedule 13. Anheuser-Busch's share of the administrative and general costs is developed on Page 3 of Schedule 13. The proposed Anheuser-Busch volumetric rate of \$1.1739 developed on Page 3 of Schedule 13 is considerably less than the \$1.4956 per CCF volumetric rate currently charged Anheuser-Busch. The implementation of a monthly carrying charge allows for this reduction.

As developed in the accompanying Appendix, the annual carrying charge is \$742,861. It is proposed to round this to \$742,860 or \$61,905 per month.

The proposed revenues to be obtained from service to Anheuser-Busch are calculated on Page 3 of Schedule 15 attached hereto.

Having developed the municipal fire protection charges, the private fire protection charges, the customer charges, and the charges for Anheuser-Busch, the volumetric rate remains as the "balance wheel" to provide the remainder of the revenue requirement. Page 4 of Schedule 10 illustrates the development of the volumetric rate, showing the deduction of revenue from other rates and charges from the revenue requirement and the comparison with the present volume charge revenue (exclusive of present volume revenue from Anheuser-Busch).

It is noted that in addition to the volumetric rate being proposed for Anheuser-Busch, there are actually three other volumetric rates, one for general service customers and one for each of the other two contract service customers (i.e., Hudson and Milford). The contracts with Hudson and Milford each relate the individual contract volumetric rate to the general service volumetric rate. Hence, as shown on Page 4 of Schedule 10, the proposed volumetric rates for general service, Hudson, and Milford are each approximately 4.0 percent greater than the corresponding

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present rate.

The proposed rates and charges, as discussed above in the report section, are summarized on Schedule 14 attached hereto.

The proposed rates and charges are applied to the billing parameters on Schedule 15 attached hereto. As shown on Page 5 of Schedule 15, the proposed rates and charges generate about \$988 more than the net water revenue requirement. This difference is only 0.004% and is considered negligible for rate design purposes.

Finally, Schedule 16 attached hereto compares the class cost of service indications with the proposed rate revenues. As shown thereon, there is excellent agreement between the cost of service indications and the revenues generated by the proposed rates.

CLOSURE

The studies discussed in this report have allocated Pennichuck Water Works' revenue requirement to functional cost classifications and then to customer classifications. A rate design based on these allocations has been developed.

The results of the studies discussed herein can provide reasonable guidelines to be utilized in establishing appropriate rate levels in the planned Pennichuck Water Works, Inc. rate proceeding. It must be noted that seldom, if ever, are rates exactly in line with the cost of service indications at any given time. Generally, minor differences will exist just as a matter of normal circumstances. Cost of service allocations are the products of analyses based in part on judgment and experience and their results provide a substantial aid in the design of rates. However, actual tariff design, in addition to relying on the results of cost of service analyses, should also include consideration of policy matters, impact of rate changes, future planning, special customer characteristics, and judicial, regulatory, and contract requirements.

PENNICHUCK WATER WORKS, INC. MERRIMACK, NEW HAMPSHIRE

SCHEDULES TO ACCOMPANY

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April 2010

Pennichuck Water Works, inc. Test Period Ending December 31, 2009 Allocation of Rate Base

	Description	Total Cost	Base Cost	Extra Cap Max Day	Extra Cap Max Hour	Customer Commercial	Customer Meters	Customer Services	Fire Hydrants	Allocation
	Description	10101 0001	5450 0051	max bay	intex i loui	Commercial	metero	00111000	rijulanis	0000
Ut	ility Plant in Service at December 31, 2009									
	Source of Supply and Pumping Plant									
303	Land and Land Rights	622,003	355,413	266,590	0	0	0	0	0	21
304	Structures and Improvements	34,802,480	19,886,137	14,916,343	0	0	0	0	0	21
305	Collecting and Impounding Reservoirs	2,434,786	2,434,786	0	0	0	0	0	0	20
306	Lake, River and Other Intakes	8,634	4,933	3,701	0	0	0	0	0	21
307	Wells and Springs	858,785	490,710	368,075	0	0	0	0	0	21
308	Infiltration Galleries and Tunnels	1,543	882	661	0	0	0	0	0	21
309	Supply Mains	491,742	280,981	210,761	0	0	0	0	0	21
310	Power Generation Equipment	686,125	269,099	201,789	215,237	0	0	0	0	41
311	Pumping Equipment	5,935,449	2,327,883	1,745,616	1,861,950	0	0	0	0	41
	Total Supply and Pumping Plant	45,841,547	26,050,824	17,713,536	2,077,187	0	0	0	0	
	(Percent Code 34)	100.00	% 56.83	% 38.64	% 4.53	% 0.00	% 0.00	% 0.00	% 0.00	%
	Water Treatment Plant									
320	Water Treatment Equipment	18,099,878	10,342,270	7,757,608	0	0	0	0	0	21
020	Trater frequinent Equipment	10,000,010	10,012,210	1,101,000			0	•	v	21
	Total Water Treatment Plant	18,099,878	10,342,270	7,757,608	0	0	0	0	0	
	Transmission and Distribution									
330	Distribution Reservoirs and Standpipes	7,789,627	778,963	1,168,444	5,842,220	0	0	0	0	45
331	Transmission and Distribution Mains	54,256,564	21,279,425	15,956,855	17,020,284	0	0	0	0	44
333	Services	9,859,946	0		0	0	0	9,859,946	0	25
334	Meters and Meter Installations	5,925,910	0	0	0	0	5,925,910	0	0	24
335	Hydrants	3,240,423	0	0	0		0	0	3,240,423	26
	Subtotal Transmission and Distribution	81,072,470	22,058,388	17,125,299	22,862,504	0	5,925,910	9,859,946	3,240,423	
									-	
	Subtotal % (Percent Code 35)	100.00	% 27.21	% 21.12	% 28.20	% 0.00	% 7.31	% 12.16	% 4.00	%
339	Other Plant and Miscellaneous Eq.	426,760	116,121	90,132	120,346	0	31,196	51,894	17,071	35
	Total Transmission and Distribution	81,499,230	22,174,509	17,215,431	22,982,850	0	5,957,106	9,911,840	3,257,494	
	Subtotal Above Utility Plant	145,440,655	58,567,603	42,686,575	25,060,037	0	5,957,106	9,911,840	3,257,494	
	Subtotal % (Percent Code 29)	100.00	% 40.27	% 29.35	% 17.23	% 0.00	% 4.10	% 6.81	% 2.24	%
	Intangible Plant									
301	Organization	26,852	10,813	7,881	4,627	0	1,101	1,829	601	29
302	Franchise	213,060	85,799		36,710		8,735	14,509	4,774	29
	Total Intangible Plant	239,912	96,612	70,414	41,337	0	9,836	16,338	5,375	

Pennichuck Water Works, Inc. Test Period Ending December 31, 2009 Allocation of Rate Base

	Description	Total Cost		Base Cost		Extra Cap Max Day		Extra Cap Max Hour		Customer Commercial		Customer Meters		Customer Services		Fire Hydrants		Allocation Code
U	tility Plant in Service at December 31, 2009 - Co	ntinued																
340	General Plant Office Furniture and Equipment	494,197		199.013		145.047		85,150		0		20.262		33,655		11.070		29
341	Transportation Equipment	2,573,024		1,036,157		755,183		443,332		Ū.		105,494		175,223		57,635		29
343	Tools, Shop and Garage Equipment	205,346		82,693		60,269		35,381		õ		8,419		13,984		4,600		29
344	Laboratory Equipment	104,150		104,150		0		0		ō		0		0		0		20
345	Power Operated Equipment	351,417		141,516		103,141		60,549		0		14,408		23,931		7.872		29
346	Communication Equipment	1,026,912		413,537		301,399		176,937		0		42,103		69,933		23,003		29
347	Miscellaneous Equipment	3,193,225		1,285,912		937,212		550,193		0		130,922		217,459		71,527		29
348	Other Tanglble Equipment	490,811		197,650		144,053		84,567		0		20,123		33,424		10,994		29
	Total General Plant	8,439,082		3,460,628		2,446,304		1,436,109		0		341,731		567,609		186,701		
	(Percent Code 39)	100.00	%	41.01	%	28.99	%	17.02	%	0.00	%	4.05	%	6.72	%	2.21	%	
	Total Utility Plant in Service	154,119,649		62,124,843		45,203,293		26,537,483		0		6,308,673		10,495,787		3,449,570		
	(Percent Code 30)	100.00	%	40.31	%	29.33	%	17.22	%	0.00	%	4.09	%	6.81	%	2.24	%	
A	Accumulated Depreciation Reserve at December Source of Supply and Pumping Plant Water Treatment Plant Transmission and Distribution General Plant	11,156,569 1,815,537 21,349,145 4,774,851		6,340,278 1,037,398 5,809,102 1,958,166		4,310,898 778,139 4,508,939 1,384,229		505,393 0 6,020,459 812,680		0 0 0		0 0 1,560,622 193,381		0 0 2,596,056 320,870		0 0 853,967 105,525		34 21 35 39
	Intangible Plant	117,323		47,246		34,434		20,215		0		4,810		7,990		2,628		29
	Subtotal Accumulated Depreciation Reserve	39,213,425		15,192,190		11,016,639		7,358,747		0		1,758,813		2,924,916		962,120		
	Subtotal % (Percent Code 28)	100.00	%	38.74	%	28.09	%	18.77	%	0.00	%	4.49	%	7.46	%	2.45	%	
	Accumulated Depreciation - Loss Accumulated Depreciation - Cost of Removal Miscellaneous Adjustments	(4,314,363) (1,794,616) (1,059,479)		(1,671,384) (695,234) (410,442)		(1,211,905) (504,108) (297,608)		(809,806) (336,849) (198,864)		0 0 0		(193,715) (80,578) (47,571)		(321,851) (133,878) (79,037)		(105,702) (43,969) (25,957)		28 28 28
	Total Accumulated Depreciation Reserve	32,044,967		12,415,130		9,003,018		6,013,228		0		1,436,949		2,390,150		786,492		
	(Percent Code 28)	100.00	%	38.74	%	28.10	%	18.77	%	0.00	%	4.48	%	7.46	%	2.45	%	
	Total Depreciated Utility Plant in Service	122,074,682		49,709,713		36,200,275		20,524,255		0		4,871,724		8,105,637		2,663,078		
	(Percent Code 27)	100.00	%	40.72	%	29,66	%	16.81	%	0.00	%	3.99	%	6.64	%	2.18	%	

Pennichuck Water Works, Inc. Test Period Ending December 31, 2009 Allocation of Rate Base

Description	Total Cost	Base Cost	Extra Cap Max Day	Extra Cap Max Hour	Customer Commercial	Customer Meters	Customer Services	Fire Hydrants	Allocation Code
Acquisition Adjustment									
Acquisition Adjustment at 12/31/09 Accum Amort Acq Adj	844,905 310,035	340,581 124,975	247,811 90,933	145,493 53,388	0	34,557 12,680	57,538 21,113	18,925 6,946	30 30
Contributions in Ald of Construction									
CIAC at 12/31/09 Amort of CIAC	27,069,195 4,275,036	10,911,593 1,723,267	7,939,395 1,253,868	4,661,315 736,161	0	1,107,130 174,849	1,843,412 291,130	606,350 95,761	30 30
Subtotal Rate Base Elements	98,745,653	40,305,781	29,357,870	16,508,996	0	3,917,568	6,516,930	2,140,510	
Rate Base Additions									
Working Capital	1,272,195	524,399	282,809	148,720	90,326	148,720	51,397	25,824	46
Materials and Supplies Transmission and Distribution	441,179	173,030	129,751	138,398	0	0	0	0	44
Meters	110,663	0	0	0	0	110,663	0	0	24
Water Treatment	14,747	8,426	6,321	0	0	0	0	0	21
Chemicals	107,221	107,221	0	0	0	0	0	0	20
Transportation Equipment	3,916	1,577	1,149	675	0	161	267	87	29
Generator Fuel	9,612	3,770	2,827	3,015	0	0	0	0	41
Customer Billing Materials	28,442	0	0	0	28,442	0	0	0	23
General Supplies	950	383	279	164	0	39	65	20	29
Total Materials and Supplies	716,730	294,407	140,327	142,252	28,442	110,863	332	107	
Prepayments - Property Taxes	350,305	141,208	102,744	60,323	0	14,327	23,856	7,847	30
Prepaid Insurance	421,361	169,851	123,585	72,558	0	17,234	28,695	9,438	30
Other and Deferred Charges	6,383,915	2,573,356	1,872,402	1,099,310	0	261,102	434,745	143,000	30
Total Rate Base Additions	9,144,506	3,703,221	2,521,867	1,523,163	118,768	552,246	539,025	186,216	
Rate Base Deductions									
Customer Advances for Construction	84.000	32,945	24,704	26.351	0	0	0	0	44
Customer Deposits	118,483	0	0	0	0	0	118,483	0	25
Deferred Income Tax	14,769,177	5,953,455	4,331,800	2.543,252	0	604,059	1.005,781	330,830	30
Deferred Tax Liability	838,590	338,038	245,958	144,405	0	34,298	57,108	18,785	30
Unamortized ITC	767,922	309,549	225,232	132,236	0	31,408	52,295	17,202	30
Deferred Rental Credits	3,244	1,308	951	559	0	133	221	72	
Total Rate Base Deductions	16,581,416	6,635,293	4,828,645	2,846,803	0	669,898	1,233,888	366,889	
Total Rate Base	91,308,743	37,373,709	27,051,092	15,183,356	118,768	3,799,914	5,822,067	1,959,837	
	A	00450-400	10	172 143	· · ·				
(Percent Code 33)	100.00	% 40.93	% 29.62	% 16.63	% 0.13	% 4.16	% 6.38	% 2.15	%

Pennichuck Water Works, Inc. Test Period Ending December 31, 2009 Allocation of Pro Forma Revenue Requirement

			(1) 25 C S S S S S S S S S S S S S S S S S S							
	Description	Total Cost	Base Cost	Extra Cap Max Day	Extra Cap Max Hour	Customer Commercial	Customer Meters	Customer Services	Fire Hydrants	Allocation Code
	Description	Total Cost	base cost	Wax Day	Wax Hour	Commercial	Weters	36111085	Hydrants	Code
P	ro Forma Operation and Maintenance Expenses				20					
	Source of Supply									
601	Operation Labor and Expenses	43,471	24,839	18,632	0	0	0	0	0	21
602	Purchased Water	244,717	139,831	104,886	0	0	0	0	0	
603	Miscellaneous Expenses	10,737	6,135	4,602	0	0	0	0	0	
610	Maintenance Super & Eng'g	395,162	225,796	169,366	0	0	0	0	0	21
	Total Source of Supply	694,087	396,601	297,486	0	0	0	0	0	
	Pumping Expenses									
623	Fuel or Power Purchased	935,018	794,763	93,502	46,751	0	0	0	0	43
624	Pumping Labor and Expenses	229,700	90,088	67,555	72,057	0	0	0	0	41
628	Miscellaneous Expenses	82,521	32,365	24,269	25,887	0	0	0	0	41
631	Maint. of Structures and Imp.	82,794	32,472	24,350	25,972	0	0	0	0	41
633	Maint, of Pumping Equipment	210,533	82,571	61,918	66,044	0	0	0	0	41
	Total Pumping Expenses	1,540,564	1,032,259	271,594	236,711	0	0	0	0	
	Water Treatment Expenses									
641	Chemicals	538,587	538,587	0	0	0	0	0	0	20
642	Operation Labor and Expenses	426,719	243,827	182,892	0	0	0	0	0	21
643	Miscellaneous Expenses	(31,020)	(17,725)	(13,295)	0	0	0	0	0	21
652	Maint, of Treatment Equipment	82,660	47,232	35,428	0	0	0	0	0	21
	Total Water Treatment Expenses	1,016,946	811,921	205,025	0	0	0	٥	0	
	Transmission and Distribution									
	Trans & Dist Operation									
662	Trans & Dist Lines Expenses	40,394	15,842	11,880	12,672	0	0	0	0	44
663	Meter Expenses	120,443	0	0	0	0	120,443	0	0	
664	Customer Installation Expenses	3,785	0	0	0	0	0	3,785	0	
	Subtotal Trans & Dist Operation	164,622	15,842	11,880	12,672	0	120,443	3,785	0	
	Subtotal % (Percent Code 37)	100.00	% 9.62	% 7.22	% 7.70	% 0.00 %	6 73.16	% 2.30	% 0.00	%
660	Operation Super & Engig	895,084	86,108	64,625	68,921	0	654,843	20,587	0	37
665	Miscellaneous Expenses	(128,358)					(93,907)	(2,952)		
	Total Trans & Dist Operation	931,348	89,602	67,238	71,709	0	681,379	21,420	0	
	Trans & Dist Maintenance									
673	Maint, of Trans & Dist Mains	334,654	131,251	98,422	104,981	0	0	0	0	44
675	Maintenance of Services	152,214	0	0	0	0	0	152,214	0	
676	Maintenance of Meters	23,149	0	0	0	0	23,149	0	0	24
677	Maintenance of Hydrants	100,545	0	0	0	0	0	0	100,545	
	Subtotal Trans & Dist Maintenance	610,562	131,251	98,422	104,981	0	23,149	152,214	100,545	i.
	Subtotal % (Percent Code 38)	100.00	% 21.50	% 16.12	% 17.19	% 0.00 %	% 3.79	% 24.93	% 16.47	%

Pennichuck Water Works, Inc. Test Period Ending December 31, 2009 Allocation of Pro Forma Revenue Requirement

	Description	Total Cost	Base Cost	Extra Cap Max Day	Extra Cap Max Hour	Customer Commercial	Customer Meters	Customer Services	Fire Hydrants	Allocation Code
P	ro Forma Operation and Maintenance Expenses	- Continued								
	Trans & Dist Maintenance - Continued									
678	Maintenance of Misc. Equip.	95,530	20,539	15,399	16,422	0	3,621	23,816	15,733	38
	Total Trans & Dist Maintenance	706,092	151,790	113,821	121,403	0	26,770	176,030	116,278	
	Total Transmission and Distribution	1,637,440	241,392	181,059	193,112	0	708,149	197,450	116,278	
	Customer Accounts Expenses									
902	Meter Reading Expenses	92,650	0	0	0	0	92,650	0	0	24
903	Customer Records Expenses	267,649	0	0	0	267,649	0	0	0	23
904	Uncollectible Accounts	74,675	0	0	0	74,675	0	0	0	23
	Total Customer Accounts	434,974	0	0	0	342,324	92,650	0	0	
	Subtotal Above O&M Expenses									
	Less Purchased Water, Power, & Chemicals	3,605,691	1,008,992	756,776	383,072	342,324	800,799	197,450	116,278	
	Subtotal % (Percent Code 47)	100.00	% 27.98	% 20.99	% 10.62	% 9.49	% 22.21	% 5.48	% 3.23	%
	Administrative and General Expenses									
920	Admin. and Gen'l Salarles	2,830,355	791,933	594,092	300,584	268,601	628,622	155,103	91,420	47
921	Office Supplies and Other Exp.	403,855	112,999	84,769	42,889	38,328	89,696	22,131	13,045	47
922	Admin. Expenses Transferred	(1,025,956)	(287,062)	(215,348) (108,957)	(97,363)	(227,865)	(58,222)	(33,139)	47
923	Outside Services Employed	142,869	39,975	29,988	15,173	13,558	31,731	7,829	4,615	47
924	Property Insurance	359,715	145,001	105,504	61,943	0	14,712	24,497	8,058	30
926	Employee Pensions and Benefits	3,228,408	1,242,291	938,498	565,817	255,690	70,379	117,191	38,742	48
928	Regulatory Commission Exp.	70,344	19,682	14,765	7,471	6,676	15,623	3,855	2,272	47
930	Misc, General Expense	(1,303,118)	(364,612)	(273,524	(138,391)	(123,666)	(289,423)	(71,411)	(42,091)	47
950	Maintenance of General Plant	362,169	101,335	76,019	38,462	34,370	80,438	19,847	11,698	47
	Total Admin. and Gen'l Expenses	5,068,641	1,801,542	1,354,763	784,791	396,192	413,913	222,820	94,620	
	Total O&M Expense	10,392,652	4,283,715	2,309,927	1,214,614	738,516	1,214,712	420,270	210,898	
	(Percent Code 46)	100.00	% 41.22	% 22.23	% 11.69	% 7.10	% 11.69	% 4.04	% 2.03	%

Pennichuck Water Works, inc. Test Period Ending December 31, 2009 Allocation of Pro Forma Revenue Requirement

Description Total Cost Base Cost Max Day Max Hour Commercial Meters Services Hydrants Pro Forma Depreciation Expense	29 29 29 21
	29 21
	29 21
301 Organization 1,343 541 394 231 0 55 91 31	29 21
302 Franchise 10,653 4,290 3,127 1,836 0 437 725 238	21
303 Land and Land Rights 0 0 0 0 0 0 0 0 0 0	
304 Structures and Improvements 889,321 508,158 381,163 0 0 0 0 0 0	21
305 Collecting and Impounding Reservoirs 43,608 43,608 0 0 0 0 0 0 0 0	20
308 Lake, River and Other Intakes 285 163 122 0 0 0 0 0 0	21
307 Wells and Springs 28,175 16,099 12,076 0 0 0 0 0	21
308 Infiltration Galleries and Tunnels 38 22 16 0	21
309 Supply Mains 7,407 4,232 3,175 0 0 0 0 0 0	21
310 Power Generation Equipment 41,805 16,396 12,295 13,114 0 0 0 0 0	41
311 Pumping Equipment 232,679 91,257 68,431 72,991 0 0 0 0	41
320 Water Treatment Equipment 734,941 419,945 314,996 0 0 0 0 0 0	21
330 Distribution Reservoirs and Standpipes 168,009 16,801 25,201 126,007 0 0 0 0	45
331 Transmission and Distribution Mains 806,858 316,450 237,297 253,111 0 0 0 0 0	44
333 Services 209,658 0 0 0 0 0 209,658 0	25
334 Meters and Meter Installations 252,122 0 0 0 0 0 252,122 0 0	24
335 Hydrants 72,244 0 0 0 0 0 0 0 72,244	26
339 Other Plant and Miscellaneous Eq. 10,669 2,903 2,253 3,009 0 780 1,297 427	35
340 Office Furniture and Equipment 39,127 15,758 11,484 6,742 0 1,604 2,665 876	29
341 Transportation Equipment 217,969 87,776 63,974 37,556 0 8,937 14,844 4,882	29
343 Tools, Shop and Garage Equipment 12,085 4,867 3,547 2,082 0 495 823 271 344 Laboratory Equipment 4,900 4,900 0	29 20
	20
	29
346 Communication Equipment 51,525 20,749 15,123 8,878 0 2,113 3,509 1,153 347 Miscellaneous General Equipment 296,805 119,523 87,112 51,140 0 12,169 20,212 6,649	29
348 Other Tangle Equipment 18,032 7,261 5,292 3,107 0 739 1,228 405	29
Oto Cute Insigned Equation 10,002 1,201 0,002 1,201 0,003 1,201 100 114 Acquisition Adjustment (27,026) (10,894) (7,927) (4,654) 0 (1,105) (1,840) (600)	30
Cost of Removal Adjustment (89,701) (28,098) (20,443) (12,003) 0 (2,851) (4,747) (1,581	30
Total Depreciation Expense 4,070,540 1,669,557 1,223,700 566,078 0 276,192 249,623 85,390	
Amortization Expense	
Amortization of CIAC (480,385) (193,643) (140,897) (82,722) 0 (19,648) (32,714) (10,761	30
Other Amortization 495,885 199,891 145,443 85,391 0 20,282 33,770 11,108	30
Total Amortization Expense 15,500 6,248 4,546 2,869 0 634 1,056 347	
Pro Forma Taxes Other Than Income Taxes	
Payroll Taxes 520,118 200,141 151,198 91,125 41,193 11,339 18,880 6,242	48
Property Taxes 2,674,109 1,077,933 784,316 460,482 0 109,371 182,107 59,900	30
Total Taxes Other Than Income Taxes 3,194,227 1,278,074 935,514 551,607 41,193 120,710 200,987 66,142	

Pennichuck Water Works, Inc. Test Period Ending December 31, 2009 Allocation of Pro Forma Revenue Requirement

Description	Total Cost	Ba	ase Cost		Extra Cap Max Day		Extra Cap Max Hour		Customer Commercial		Customer Meters		Customer Services		Fire Hydrants		Allocation Code
Net Operating Income and Income Taxes																	
Net Operating Income	7,677,233	З,	3,142,291		2,273,996		1,276,724		9,980		319,373		489,807		165,062		33
Income Taxes	3,047,413	1,	,247,306		902,644		506,785		3,962		126,772		194,425		65,519		33
Total	10,724,646	4,	,389,597		3,176,640		1,783,509		13,942		446,145		684,232		230,581		
Total Revenue Requirement	28,397,565	11,	,627,191		7,650,327		4,118,477		793,651		2,058,393		1,556,168		593,358		
Percents	100.00	%	40.94	%	26.94	%	14.50	%	2.80	%	7.25	%	5.48	%	2.09	%	
Less Other Revenue	(365,964)	((149,826)		(98,591)		(53,065)		(10,247)		(26,532)		(20,055)		(7,648)		
Net Water Revenues	28,031,601	11,	,477,365		7,551,736		4,065,412		783,404		2,031,861		1,536,113		585,710		
Percents	100.00	%	40.94	%	26.94	%	14.50	%	2.80	%	7.25	%	5.48	%	2.09	%	

Pennichuck Water Works, Inc. Test Period Ending December 31, 2009 Allocation of Year 2009 Salaries and Wages - Development of Allocation Code 48

Description	Total Cost		Base Cost		Extra Cap Max Day		Extra Cap Max Hour		Customer Commercial		ustomer Meters		Customer Services		Fire Hydrants	A	Allocation Code
Salarles and Wages																	
Source of Supply	308,606		176,337		132,269		0		0		0		0		0		21
Pumping	721,507		282,975		212,195		226,337		0		0		0		0		41
Water Treatment	517,662		295,792		221,870		0		0		0		0		0		21
Transmission and Distribution	743,323		202,258		156,990		209,617		0		54,337		90,388		29,733		35
Customer Accounts	196,961		0		0		0		198,961		0		0		0		23
Subtotal Salaries and Wages	2,488,059		957,362		723,324		435,954		196,961		54,337		90,388		29,733		
Subtotal % (Percent Code 48)	100.00	%	38.48	%	29.07	%	17.52	%	7.92	%	2.18	%	3.63	%	1.20	%	
Administrative and General	887,334		341,448		257,948		155,481		70,277		19,344		32,210		10,648		48
Total Salaries and Wages	3,375,393		1,298,808		981,272		591,415		267,238		73,681		122,598		40,381		
(Percent Code 48)	100.00	%	38.48	%	29.07	%	17.52	%	7.92	%	2.18	%	3.63	%	1.20	%	

Schedule 4 Page 1 of 3

PENNICHUCK WATER WORKS, INC. Explanation of Factors Used in the Allocation to Cost Functions

Allocation

Code Description

- 20 This code allocates items 100 percent to Base Cost. Base Costs are costs which tend to vary with the quantity of water used and do not contain elements necessary to meet variations in demand.
- 21 This code allocates items to Base Cost and Extra Capacity Cost Maximum Day in accordance with the ratio of the average annual system production per day to the maximum daily system production. Extra capacity costs are those costs associated with meeting rate of use requirements in excess of the average.
- 22 This code allocates items to Base Cost and Extra Capacity Cost Maximum Hour in accordance with the ratio of the average annual system delivery per day to the maximum hourly system delivery.
- 23 This code allocates items 100 percent to Customer Cost Commercial. Costs allocated by this code are commercial costs associated with serving customers irrespective of the amount of water used or the demand imposed on the system. They include billing, customer accounting, and collection expenses.
- 24 This code allocates items 100 percent to Customer Cost Meters. Items allocated by this code are associated with the maintenance and capital charges for customer meters.
- 25 This code allocates items 100 percent to Customer Cost Services. Items allocated by this code are associated with the maintenance and capital charges for customer water services.
- 26 This code allocates items 100 percent to Fire Hydrant Cost.
- 27 This code allocates items to the Cost Functions in accordance with the composite allocation of the depreciated cost of plant in service.
- 28 This code allocates items to the Cost Functions in accordance with the composite allocation of the accumulated depreciation reserve.
- 29 This code allocates items to the Cost Functions in accordance with the composite allocation of the original cost of non-general utility plant. It is used to allocate general plant items.
- 30 This code allocates items to the Cost Functions in accordance with the composite allocation of the total utility plant in service.
- 33 This code allocates items to the Cost Functions in accordance with the composite allocation of all rate base items.

Schedule 4 Page 2 of 3

PENNICHUCK WATER WORKS, INC. Explanation of Factors Used in the Allocation to Cost Functions

Allocation <u>Code</u>	Description
34	This code allocates items to the Cost Functions in accordance with the composite allocation of the original cost of supply and pumping plant.
35	This code allocates items to the Cost Functions in accordance with the composite allocation of the original cost of transmission and distribution plant.
37	This code allocates items to the Cost Functions in accordance with the composite allocation of transmission and distribution operation expenses.
38	This code allocates items to the Cost Functions in accordance with the composite allocation of transmission and distribution maintenance expenses.
39	This code allocates items to the Cost Functions in accordance with the composite allocation of the original cost of general plant.
41	This code allocates items to Base Cost, Extra Capacity Cost - Maximum Day, and Extra Capacity Cost - Maximum Hour to recognize the pumping requirements of the system.
43	This code is used to allocate purchased power expenses to Base Cost, Extra-Capacity Cost - Maximum Day, and Extra Capacity Cost - Maximum Hour. It gives recognition to the demand element in purchased power costs.
44	This code allocates transmission and distribution mains costs to Base Cost, Extra Capacity Cost - Maximum Day, and Extra Capacity Cost - Maximum Hour functions.
45	This code allocates distribution storage costs to Base Cost, Extra Capacity Cost - Maximum Day, and Extra Capacity Cost - Maximum Hour.
46	This code allocates items to the Cost Functions in accordance with the composite allocation of the total pro forma operation and maintenance expenses.
47	This code allocates certain administrative and general expenses based on the composite allocation of previously allocated functional expenses.
48	This code allocates items to the Cost Functions in accordance with the composite allocation of the total labor expenses.

Pennichuck Water Works, Inc. Summary of Functional Cost Allocation Factors

Allocation Code	Description	Base Cost	Extra Cap Max Day	Extra Cap Max Hour	Customer Commercial	Customer Meters	Customer Services	Fire Hydrants	Check Total
20	Base Cost	100.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00 %
21	Base/Ex Cap - Max Day	57.14	42.86	0.00	0.00	0.00	0.00	0.00	100.00 %
22	Base/Ex Cap - Max Hour	39.22	0.00	60.78	0.00	0.00	0.00	0.00	100.00 %
23	Commercial	0.00	0.00	0.00	100.00	0.00	0.00	0.00	100.00 %
24	Meters	0.00	0.00	0.00	0.00	100.00	0.00	0.00	100.00 %
25	Services	0.00	0.00	0.00	0.00	0.00	100.00	0.00	100.00 %
26	Fire Hydrants	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00 %
27	Depreciated Plant	40.72	29.66	16.81	0.00	3.99	6.64	2.18	100.00 %
28	Depreciation Reserve	38.74	28.09	18.77	0.00	4.49	7.46	2.45	100.00 %
29	Subtotal Plant in Service	40.27	29.35	17.23	0.00	4.10	6.81	2.24	100.00 %
30	Total Utility Plant In Service	40.31	29.33	17.22	0.00	4.09	6.81	2.24	100.00 %
33	Total Rate Base	40.93	29.62	16.63	0.13	4.18	6.38	2.15	100.00 %
34	Supply and Pumping Plant	56.83	38.64	4.53	0.00	0.00	0.00	0.00	100.00 %
35	T&D Plant	27.21	21.12	28.20	0.00	7.31	12.16	4.00	100.00 %
37	T&D Operation	9.62	7.22	7.70	0.00	73.16	2.30	0.00	100.00 %
38	T&D Maintenance	21.50	16.12	17.19	0.00	3.79	24.93	16.47	100.00 %
39	General Plant	41.01	28.99	17.02	0.00	4.05	6.72	2.21	100.00 %
41	Pumping	39.22	29.41	31.37	0.00	0.00	0.00	0.00	100.00 %
43	Purchased Power	85.00	10.00	5.00	0.00	0.00	0.00	0.00	100.00 %
44	T&D Mains	39.22	29.41	31.37	0.00	0.00	0.00	0.00	100.00 %
45	Distribution Storage	10.00	15,00	75.00	0.00	0.00	0.00	0.00	100.00 %
46	Total O&M Expense	41.22	22.23	11.69	7.10	11.69	4.04	2.03	100.00 %
47	Admin & Gen'l Expense	27.98	20.99	10.62	9.49	22.21	5.48	3.23	100.00 %
48	Labor Benefits	38.48	29.07	17.52	7.92	2.18	3.63	1.20	100.00 %
	<u>System Factors:</u> Max Day - Average Day Max Hour - Average Day Pumping and T&D Mains	175 9 255 9 255 9	% 39.22	%	60.78				

Pennichuck Water Works, nc.

Allocation of Functional Costs to Classes

Functional Cost Component	Amount	Water Service	Municipal <u>Fire</u>	Private <u>Fire</u>	Allocation Code
Base Cost	11,477,365	11,362,592	81,489	33,284	60
Extra Capacity - Max Day	7,551,736	5,793,692	1,251,323	506,721	61
Extra Capacity - Max Hour	4,065,412	2,612,027	1,034,241	419,144	62
Customer - Commercial	783,404	759,353	157	23,894	63
Customer - Meters	2,031,861	2,031,861	0	0	64
Customer - Services	1,536,113	1,536,113	0	0	65
Fire Hydrants	585,710	0	585,710	0	70
Net Revenue Requirement	28,031,601	24,095,638	2,952,920	983,043	

Schedule 6 Page 1 of 2

PENNICHUCK WATER WORKS, INC. Explanation of Factors Used in the Allocation to Customer Groups

Allocation <u>Code</u>	Description
60	This code allocates Base Cost to the customer groups in accordance with the percentage of water used by each individual customer group.
61	This code allocates Extra Capacity Cost - Maximum Day to the customer groups in accordance with the ratio of the excess maximum day demand of each individual customer group to the total non-coincident excess daily demand for all customer groups.
62	This code allocates Extra Capacity Cost - Maximum Hour to the customer groups in accordance with the ratio of the excess maximum hour demand of each individual customer group to the total non-coincident excess hourly demand for all customer groups.
63	This code allocates Customer Cost - Commercial to the customer groups in accordance with the percentage of bills issued to each individual customer group.
64	This code allocates Customer Cost - Meters to the customer groups in accordance with the ratio of the number of equivalent meters in each individual customer group to the total number of equivalent meters for all customer groups.
65	This code allocates Customer Cost - Services to the customer groups on a basis similar to that for the allocation of Customer Cost - Meters.
70	This code allocates items entirely to the public fire service class.

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Pennichuck Water Works, Inc.

Summary of Class Allocation Factors

Allocation Code	Functional Cost Component	Water Service	Municipal <u>Fire</u>	Private <u>Fire</u>	Check <u>Total</u>
60	Base Cost	99.00	0.71	0.29	100.00 %
61	Extra Capacity - Max Day	76.72	16.57	6.71	100.00 %
62	Extra Capacity - Max Hour	64.25	25.44	10.31	100.00 %
63	Customer - Commercial	96.93	0.02	3.05	100.00 %
64	Customer - Meters	100.00	0.00	0.00	100.00 %
65	Customer - Services	100.00	0.00	0.00	100.00 %
70	Fire Hydrants	0.00	100.00	0.00	100.00 %

Pennichuck Water Works, Inc.

Customer Class Allocation Factors

	Annual Consumption			Maximum Day			Maximum Hour			Customer	Customer Costs		
	(1)	(2)	(3)	(4) % of	(5) Amount	(6) Excess	(7)	(8) % of	(9) Amount	(10) Excess	(11)	(12)	(13)
Customer Class	CCFT	MGD	%	AvDay	MGD	(5)-(2)	%	AvDay	MGD	(9)-(5)	%	Bills	%
General Water Anheuser-Busch Hudson Milford	4,258,586 551,400 143,376 45,237	8.727 1.130 0.294 0.093	84.34 10.92 2.84 0.90	190 CA CA CA	16.581 3.000 1.578 1.399	7.854 1.870 1.284 1.306	48.93 11.65 8.00 8.14	325 CA CA CA	28.363 4.000 2.000 2.000	11.782 1.000 0.422 0.601	54.84 4.65 1.96 2.80	307,680 24 12 12	96.92 0.01 0.00 0.00
Total Water Service	4,998,599	10.244	99.00		22.558	12.314	76.72		36.363	13.805	64.25	307,728	96.93
Municipal Fire Private Fire	35,934 14,557	0.074 0.030	0.71 0.29		2.733 1.107	2.659 1.077	16.57 6.71		8.199 3.321	5.466 2.214	25.44 10.31	60 9,684	0.02 3.05
Total Fire Service	50,491	0.104	1.00		3.840	3.736	23.28		11.520	7.680	35.75	9,744	3.07
Grand Total	5,049,090	10.348	100.00		26.398	16.050	100.00		47.883	21.485	100.00	317,472	100.00
	Allocation Code		60				61				62		63

Fire Requirements: 1.0% of total water consumption Fire Demand 8,000 gpm for 8 hours Fire Req'm'nts split 71.17% Municipal and 28.83% Private

CA: Max Day and Max Hour Contract Amounts for Anheuser-Busch, Hudson, and Milford

Pennichuck Water Works, Inc.

Fire Service Capacity Units

	Number	Capacity <u>Ratio</u>	Capacity <u>Units</u>	<u>%</u>
Municipal Hydrants	2,468	1.00	2,468.00	71.17
Private Fire Services				
2"	29	0.11	3.19	
4"	105	0.44	46.20	
6"	369	1.00	369.00	
8"	284	1.78	505.52	
10"	6	2.78	16.68	
12"	13	4.00	52.00	
16"	1	7.11	7.11	
Total Private	807		999.70	28.83
Grand Total	3,275		3,467.70	100.00

Note:

Capacity ratios are based on the cross-sectional area of municipal hydrant branches and private fire service connections. The cross-sectional area of a 6" branch is taken as unity. All hydrant branches are considered as 6".

Capacity costs include the following functional costs: Base Costs, Extra Capacity Costs - Maximum Day, and Extra Capacity Costs - Maximum Hour.

General Service - Metered

Residential

Meter <u>Size</u>	Number of Meters	Number of Bills	Present <u>Rate</u>				Present <u>Revenue</u>
5/8"	23,188	278,256	\$	18.18	\$ 5,058,694.08		
3/4"	325	3,900		26.16	102,024.00		
1"	205	2,460		42.13	103,639.80		
1 1/2"	131	1,572		82.10	129,061.20		
2"	45	540		134.41	72,581.40		
3"	19	228		246.48	56,197.44		
4"	3	36		406.51	14,634.36		
6"	0	0		806.63	0.00		
8"	0	0		1,286.90	0.00		
10"	0	0		1,847.05	0.00		
Subtotal	23,916	286,992			\$ 5,536,832.28		
	CCFT						
Volume	3,190,170		\$	2.90	\$ 9,251,493.00		
Total Reside	ntial Revenue				\$ 14,788,325.28		

Commercial

Meter Size	Number of Meters	Number of Bills	Present Rate	Present Revenue
5/8"	605	7,260	\$ 18.18	\$ 131,986.80
3/4"	175	2,100	26.16	54,936.00
1"	255	3,060	42.13	128,917.80
1 1/2"	233	2,796	82.10	229,551.60
2"	150	1,800	134.41	241,938.00
3"	17	204	246.48	50,281.92
4"	2	24	406.51	9,756.24
6"	1	12	806.63	9,679.56
8"	0	0	1,286.90	0.00
10"	0	0	1,847.05	0.00
Subtotal	1,438	17,256		\$ 857,047.92
	CCFT			
Volume	766,150		\$ 2.90	\$ 2,221,835.00
Total Comme	ercial Revenue			\$ 3,078,882.92

General Service - Metered

Industrial

Meter <u>Size</u>	Number of Meters	Number Present <u>of Bills Rate</u>				Present <u>Revenue</u>	
5/8"	30	360	\$	18.18	\$	6,544.80	
3/4"	17	204		26.16		5,336.64	
1"	39	468		42.13		19,716.84	
1 1/2"	29	348		82.10		28,570.80	
2"	35	420		134.41		56,452.20	
3"	13	156		246.48		38,450.88	
4"	2	24		406.51		9,756.24	
6"	2	24		806.63		19,359.12	
8"	0	0		1,286.90		0.00	
10"	0	0		1,847.05		0.00	
Subtotal	167	2,004			\$	184,187.52	
	CCFT						
Volume	222,313		\$	2.90	\$	644,707.70	
Total Indust	rial Revenue				\$	828,895.22	

Municipal

Meter <u>Size</u>	Number of Meters	Number <u>of Bills</u>	Present <u>Rate</u>	Present <u>Revenue</u>
5/8"	17	204	\$ 18.18	\$ 3,708.72
3/4"	10	120	26.16	3,139.20
1"	16	192	42.13	8,088.96
1 1/2"	27	324	82.10	26,600.40
2"	37	444	134.41	59,678.04
3"	8	96	246.48	23,662.08
4"	2	24	406.51	9,756.24
6"	2	24	806.63	19,359.12
8"	0	0	1,286.90	0.00
10"	0	0	1,847.05	0.00
Subtotal	119	1,428		\$ 153,992.76
	CCFT			
Volume	79,953		\$ 2.90	\$ 231,863.70
Total Munici	pal Revenue			\$ 385,856.46
Grand Total	GWS Revenue	9		\$ 19,081,959.88

Service to Contract Customers

Town of Milford

		Present <u>Rate</u>		Present <u>Revenue</u>
Annual Fixed	Fee	\$8	1,000.00	\$ 81,000.00
Volume	<u>CCFT</u> 45,237	\$	1.8249	\$ 82,553.00
Total Milford	Revenue			\$ 163,553.00

Town of Hudson

		F	Present <u>Rate</u>	Present <u>Revenue</u>
Annual Dema	and Charge	\$ 3	2,800.00	\$ 32,800.00
Volume	<u>CCFT</u> 143,376	\$	1.8419	\$ 264,084.25
Total Hudsor	Revenue			\$ 296,884.25

Anheuser-Busch

Meter Size	Number of Meters	Number of Bills	Present <u>Rate</u>			
6"	2	24	\$	806.63	\$	19,359.12
Volume Total Anheu	<u>CCFT</u> 551,400 ser-Busch Rev	venue	\$	1.4956	\$	824,673.84 844,032.96
					•	
Grand Total Contract Revenue						1,304,470.22

Fire Protection Service

Private Fire Protection

rivate Fire	Protection				
Size	Number	Number of Bills	I	Present <u>Rate</u>	Present <u>Revenue</u>
2"	29	348	\$	55.70	\$ 19,383.60
4"	105	1,260		55.70	70,182.00
6"	369	4,428		93.46	413,840.88
8"	284	3,408		137.60	468,940.80
10"	6	72		137.60	9,907.20
12"	13	156		137.60	21,465.60
16"	1	12		137.60	1,651.20
Total	807	9,684			\$ 1,005,371.28

Municipal Fire Protection

Size	Number	of Bills	Rate		Rate		Revenue
Hydrant	2,468	60	\$	17.16	\$ 508,210.56		
Inch-Feet	18,448,150			0.11828	2,182,047.18		
Total Munip	ical Fire Reven	ue			\$ 2,690,257.74		

Total Present Rate Revenue

Grand Total GWS Revenue	\$ 19,081,959.88
Grand Total Contract Revenue	\$ 1,304,470.22
Grand Total Private Fire Revenue	\$ 1,005,371.28
Grand Total Munipical Fire Revenue	\$ 2,690,257.74
Grand Total Revenue	\$ 24,082,059.12
Total Customer Charge Revenue	\$ 6,751,419.60
Total Volume Charge Revenue	\$ 13,521,210.50
Total Contract Fixed Fee Revenue	\$ 113,800.00
Total Private Fire Revenue	\$ 1,005,371.28
Total Munipical Fire Revenue	\$ 2,690,257.74
Grand Total Revenue	\$ 24,082,059.12

Note: All bills are monthly bills.

Pennichuck Water Works, Inc.

Comparison of Present Rate Revenues and Cost of Service Indications

	Present Ra	ates	Cost of Se	ervice
	\$	<u>%</u>	\$	<u>%</u>
Water Service Revenue	20,386,430.10	84.65	24,095,638	85.96
Private Fire Revenue	1,005,371.28	4.18	983,043	3.51
Munipical Fire Revenue	2,690,257.74	11.17	2,952,920	10.53
Total Revenues	24,082,059.12	100.00	28,031,601	100.00

Pennichuck Water Works, Inc.

Rate Design

Municipal Fire Protection	
Functional Allocations: Fire Hydrants Customer - Commercial	585,710 157
Total	585,867
Number of Hydrants	2,468
Annual Cost per Hydrant	237.39
Monthly Charge per Hydrant	19.78

Functional Allocations:	
Base Cost	81,489
Extra Capacity - Max Day	1,251,323
Extra Capacity - Max Hour	1,034,241
Total	2,367,053
Number of Inch-Feet	18,448,150
Annual Charge per Inch-Foot	0.12831

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Pennichuck Water Works, Inc.

Rate Design

Private Fire Protection

Total Private Fire Protection Rev Regmt	983,043
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Present Private Fire Protection Revenue 1,005,371

Since Allocated Costs are less than present rate revenues, no changes will be proposed for Private Fire rates.

<u>Size</u>	Present Monthly <u>Charge</u>	Proposed Monthly Charge	Increase
2"	55.70	55.70	0.00 %
4"	55.70	55.70	0.00 %
6"	93.46	93.46	0.00 %
8"	137.60	137.60	0.00 %
10"	137.60	137.60	0.00 %
12"	137.60	137.60	0.00 %
16"	137.60	137.60	0.00 %

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Pennichuck Water Works, Inc.

Rate Design

Customer Charges	
Functional Allocations (Water Service): Customer - Commercial Customer - Meters Customer - Services Subtotal	759,353 2,031,861 <u>1,536,113</u> 4,327,327
Add: 75% of A&G Expenses 75% A&G Base Cost 75% A&G Max Day Cost 75% A&G Max Hour Cost Subtotal	1,351,157 1,016,072 <u>588,593</u> 2,955,822
Add: 40% of T&D Expenses 40% T&D Base Cost 40% T&D Max Day Cost 40% T&D Max Hour Cost Subtotal	96,557 72,424 <u>77,245</u> 246,226
Add: 75% of Base Fixed Costs 75% Depreciation Expense (Less A-B) 75% Amortization Expense 75% Property Taxes (Less A-B) Subtotal	1,131,772 4,686 <u>730,718</u> 1,867,176
Total for Customer Charge	9,396,551
Present Customer Charge Revenue	6,751,420
Increase Required	39.18 %
Present Proposed	

Meter <u>Size</u>	Monthly Charge	Monthly Charge	Increase	
5/8"	18.18	25.29	39.11	%
3/4"	26.16	36.41	39.18	%
1"	42.13	58.64	39.19	%
1 1/2"	82.10	114.27	39.18	%
2"	134.41	187.07	39.18	%
3"	246.48	343.05	39.18	%
4"	406.51	565.78	39.18	%
6"	806.63	1,122.67	39.18	%
8"	1,286.90	1,791.11	39.18	%
10"	1,847.05	2,570.72	39.18	%

Pennichuck Water Works, Inc.

Rate Design

Volumetric Charges							
Net Water Revenue Re	equirement		28,031,601				
Less Proposed Revent From Municipal Fire Pr From Private Fire Prote From Customer Charg From Contract Fixed F From A-B Carrying Cha From A-B Volume Cha	(2,952,887) (1,005,371) (9,366,019) (113,800) (742,860) (647,288)						
Net Required From Vo	lume Charge	es	13,203,376				
Present Volume Charg		12,696,537					
Increase Re	equired		3.99 %				
	Present <u>Charge</u>	Proposed <u>Charge</u>	Increase				
General Water	2.90	3.016	4.00 %				
Anheuser-Busch	1.4956	1.1739	(21.51) %				
Hudson	1.8419	1.9154	3.99 %				

1.8249

1.8977

3.99 %

Milford

Pennichuck Water Works, Inc.

Ratios of Present Rates

Customer Charges

Meter <u>Size</u>	Monthly Present <u>Rate</u>	Present Ratio <u>to 5/8"</u>	AWWA Capacity <u>Ratios</u>	Present Ratio as % of <u>AWWA</u>	
5/8"	18.18	1.00	1.00	100.00	%
3/4"	26.16	1.44	1.50	95.93	%
1"	42.13	2.32	2.50	92.70	%
1 1/2"	82.10	4.52	5.00	90.32	%
2"	134.41	7.39	8.00	92.42	%
3"	246.48	13.56	15.00	90.39	%
4"	406.51	22.36	25.00	89.44	%
6"	806.63	44.37	50.00	88.74	%
8"	1,286.90	70.79	80.00	88.48	%
10"	1,847.05	101.60	115.00	88.35	%

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Pennichuck Water Works Transmission and Distribution Inch-Feet Inch-Feet of Mains in Service at December 31, 2009 Reduce Larger Mains to 4" Size

Actual Mains in Service		Reduce	e Larger Mains	s to 4" Size		
Size	Length	In-Ft	Size	Length	In-Ft	
1"	3,423	3,423.0	1"	3,423	3,423.0	
1 1/4"	6,361	7,951.3	1 1/4"	6,361	7,951.3	
1 1/2"	4,937	7,405.5	1 1/2"	4,937	7,405.5	
2"	118,073	236,146.0	2"	118,073	236,146.0	
3"	35,254	105,762.0	3"	35,254	105,762.0	
4"	185,566	742,264.0	4"	185,566	742,264.0	
6"	243,653	1,461,918.0	4"	243,653	974,612.0	
8"	1,042,710	8,341,680.0	4"	1,042,710	4,170,840.0	
10"	35,834	358,340.0	4"	35,834	143,336.0	
12"	373,504	4,482,048.0	4"	373,504	1,494,016.0	
14"	535	7,490.0	4"	535	2,140.0	
16"	137,423	2,198,768.0	4"	137,423	549,692.0	
20"	2,343	46,860.0	4"	2,343	9,372.0	
24"	77,886	1,869,264.0	4"	77,886	311,544.0	
30"	8,840	265,200.0	4"	8,840	35,360.0	
42"	570	23,940.0	4"	570	2,280.0	
72"	1,325	95,400.0	4"	1,325	5,300.0	
Total	2,278,237	20,253,859.8	Total	2,278,237	8,801,443.8	

Inch-Feet Based on Actual Size of Mains	20,253,859.8
Inch-Feet Based on Reduced Size of Mains	8,801,443.8
Difference	11,452,416.0
	43.46%

Pennichuck Water Works, Inc. Rate Design

Development of Unit Production Cost

Source of Supply Base Cost Extra Capacity Max Day Cost Extra Capacity Max Hour Cost Less Purchased Water Base Less Purchased Water Max Day Less Purchased Water Max Hr	\$ 396,601 297,486 0 (139,831) (104,886) 0	
Pumping Base Cost Extra Capacity Max Day Cost Extra Capacity Max Hour Cost	588,283 155,614 135,879	
<u>Water Treatment</u> Base Cost Extra Capacity Max Day Cost Extra Capacity Max Hour Cost Total Production Cost	811,921 205,025 0 \$2,346,092	
Water Use in CCF Unit Production Cost per CCF	5,049,090 \$ 0.4647	

Note: Pumping Cost are at the Water Treatment Plant. See next page for details.

Pennichuck Water Works, Inc. Rate Design

Allocation of Pumping Costs at Water Treatment Plant For Use in Development of Unit Production Cost

Pumping Expenses:				Extra Cap	Extra Cap	Allocation
	Total	<u>At WTP</u>	Base Cost	Max Day	Max Hour	Code
Fuel or Power Purchased	935,016	531,315	451,617	53,132	26,566	43
Pumping Labor and Expenses	229,700	229,700	90,088	67,555	72,057	41
Miscellaneous Expenses	82,521	82,521	32,365	24,269	25,887	41
Maint. of Structures and Imp.	82,794	19,473	7,637	5,727	6,109	41
Maint. of Pumping Equipment	210,533	16,767	6,576	4,931	5,260	41
Total Pumping Expenses	1,540,564	879,776	588,283	155,614	135,879	

WTP Pumping is 57.11% of Total Pumping

Pennichuck Water Works, Inc. Rate Design

Allocation of Administrative and General Costs to Anheuser-Busch

		Allocatio	A-B Charge		
	Total	%	\$	\$	per CCF
Administrative and General Costs:					
Base Cost	1,801,542	10.92	196,728		
Extra Capacity Max Day Cost	1,354,763	11.65	157,830		
Extra Capacity Max Hour Cost	784,791	4.65	36,493		
Total A-B Share of Admin and General			391,051	\$	0.7092
Anheuser-Busch Annual Volume =	551,400 (CCF			

Development of Anheuser-Busch Volumetric Rate

Unit Production Cost per CCF	\$ 0.4647
Total A-B Share of Admin and General	<u>0.7092</u>
Anheuser-Busch Volumetric Rate	\$ 1.1739

Pennichuck Water Works, Inc. Summary of Proposed Rates

General Service - Metered Schedule G-M

	Monthly
Meter	Proposed
Size	Charge
5/8"	\$ 25.29
3/4"	36.41
1"	58.64
1 1/2"	114.27
2"	187.07
3"	343.05
4"	565.78
6"	1,122.67
8"	1,791.11
10"	2,570.72
Volumetric Charge	
0	

per 100 cu. ft.

Municipal Fire Protection Service Schedule FP-M

\$ 3.016

137.60

Schedule	
	Monthly Proposed <u>Charge</u>
Each Hydrant	\$ 19.78
Inch-Foot per year	\$ 0.12831
Private Fire Prot Schedule	
Connection Size	Monthly Proposed <u>Charge</u>
4" or smaller 6"	\$ 55.70 93.46

Special Contract Service

	Annual Carrying Chg	\$ 742,860
	Volumetric Charge per 100 cu. ft.	\$ 1.1739
Hudson		
	Annual Charge	\$ 32,800
	Volumetric Charge	
	per 100 cu. ft.	\$ 1.9154
Milford		
	Annual Fixed Fee	\$ 81,000
	Volumetric Charge	
	per 100 cu. ft.	\$ 1.8977

8" or larger

General Service - Metered

Residential

Meter <u>Size</u>	Number of Meters	Number of Bills	F	Proposed Rate		Proposed <u>Revenue</u>
5/8"	23,188	278,256	\$	25.29	\$	7,037,094.24
3/4"	325	3,900		36.41		141,999.00
1"	205	2,460		58.64		144,254.40
1 1/2"	131	1,572		114.27		179,632.44
2"	45	540		187.07		101,017.80
3"	19	228		343.05		78,215.40
4"	3	36		565.78		20,368.08
6"	0	0		1,122.67		0.00
8"	0	0		1,791.11		0.00
10"	0	0		2,570.72		0.00
Subtotal	23,916	286,992			\$	7,702,581.36
	<u>CCFT</u>				-	
Volume	3,190,170		\$	3.016	\$	9,621,552.72
Total Reside	ntial Revenue				\$	17,324,134.08

Commercial

Meter Size	Number of Meters	Number of Bills	I	Proposed Rate	Proposed Revenue
5/8"	605	7,260	\$	25.29	\$ 183,605.40
3/4"	175	2,100		36.41	76,461.00
1"	255	3,060		58.64	179,438.40
1 1/2"	233	2,796		114.27	319,498.92
2"	150	1,800		187.07	336,726.00
3"	17	204		343.05	69,982.20
4"	2	24		565.78	13,578.72
6"	1	12		1,122.67	13,472.04
8"	0	0		1,791.11	0.00
10"	0	0		2,570.72	0.00
Subtotal	1,438	17,256			\$ 1,192,762.68
	CCFT				
Volume	766,150		\$	3.016	\$ 2,310,708.40
Total Comme	ercial Revenue				\$ 3,503,471.08

General Service - Metered

Industrial

Meter <u>Size</u>	Number of Meters	Number of Bills	ļ	Proposed <u>Rate</u>	Proposed Revenue
5/8"	30	360	\$	25.29	\$ 9,104.40
3/4"	17	204		36.41	7,427.64
1"	39	468		58.64	27,443.52
1 1/2"	29	348		114.27	39,765.96
2"	35	420		187.07	78,569.40
3"	13	156		343.05	53,515.80
4"	2	24		565.78	13,578.72
6"	2	24		1,122.67	26,944.08
8"	0	0		1,791.11	0.00
10"	0	0		2,570.72	0.00
Subtotal	167	2,004			\$ 256,349.52
	CCFT				
Volume	222,313		\$	3.016	\$ 670,496.01
Total Industr	ial Revenue				\$ 926,845.53

Municipal

Meter <u>Size</u>	Number of Meters	Number of Bills	Proposed <u>Rate</u>	Proposed Revenue
5/8"	17	204	\$ 25.29	\$ 5,159.16
3/4"	10	120	36.41	4,369.20
1"	16	192	58.64	11,258.88
1 1/2"	27	324	114.27	37,023.48
2"	37	444	187.07	83,059.08
3"	8	96	343.05	32,932.80
4"	2	24	565.78	13,578.72
6"	2	24	1,122.67	26,944.08
8"	0	0	1,791.11	0.00
10"	0	0	2,570.72	0.00
Subtotal	119	1,428		\$ 214,325.40
	CCFT			
Volume	79,953		\$ 3.016	\$ 241,138.25
Total Municip	oal Revenue			\$ 455,463.65
Grand Total	GWS Revenue	•		\$ 22,209,914.34

Service to Contract Customers

Town of Milford

		Proposed <u>Rate</u>	Proposed Revenue
Annual Fixed	Fee	\$ 81,000.00	\$ 81,000.00
Volume	CCFT 45,237	\$ 1.8977	\$ 85,846.25
Total Milford	Revenue		\$ 166,846.25

Town of Hudson

		1	Proposed <u>Rate</u>	Proposed <u>Revenue</u>
Annual Dema	and Charge	\$	32,800.00	\$ 32,800.00
Volume	<u>CCFT</u> 143,376	\$	1.9154	\$ 274,622.39
Total Hudsor	Revenue			\$ 307,422.39

Anheuser-Busch

Meter <u>Size</u>	Number of Meters	Number of Bills	1	Proposed <u>Rate</u>	Proposed <u>Revenue</u>
6"	2	24	\$	-	\$ -
Volume	<u>CCFT</u> 551,400			1.1739	\$ 647,288.46
Annual Carrying Charge				742,860.00	\$ 742,860.00
Total Anheu	ser-Busch Rev	venue			\$ 1,390,148.46
Grand Total Contract Revenue				\$ 1,864,417.11	

Fire Protection Service

Private Fire Protection

Size	Number	Number of Bills	P	roposed <u>Rate</u>	Proposed Revenue
2"	29	348	\$	55.70	\$ 19,383.60
4"	105	1,260		55.70	70,182.00
6"	369	4,428		93.46	413,840.88
8"	284	3,408		137.60	468,940.80
10"	6	72		137.60	9,907.20
12"	13	156		137.60	21,465.60
16"	1	12		137.60	1,651.20
Total	807	9,684			\$ 1,005,371.28

Municipal Fire Protection

Size	Number	of Bills	F	Proposed Rate	Proposed <u>Revenue</u>
Hydrant	2,468	60	\$	19.78	\$ 585,804.48
Inch-Feet	18,448,150			0.12831	2,367,082.13
Total Munip	ical Fire Reven	ue			\$ 2,952,886.61

Total Proposed Rate Revenue

Grand Total GWS Revenue	\$ 22,209,914.34
Grand Total Contract Revenue	\$ 1,864,417.11
Grand Total Private Fire Revenue	\$ 1,005,371.28
Grand Total Munipical Fire Revenue	\$ 2,952,886.61
Grand Total Proposed Revenue	\$ 28,032,589.33
Total Customer Charge Revenue	\$ 9,366,018.96
Total Volume Charge Revenue	\$ 13,851,652.48
Total Contract Fixed Fee Revenue	\$ 856,660.00
Total Private Fire Revenue	\$ 1,005,371.28
Total Munipical Fire Revenue	\$ 2,952,886.61
Grand Total Proposed Revenue Net Water Revenue Requirement	\$ 28,032,589.33 28,031,601.00
Difference	\$ 988.33 0.004%

Pennichuck Water Works, Inc.

Comparison of Cost of Service Indications and Proposed Rate Revenues

	Cost of Ser	vice	Proposed R	ates
	<u>\$</u>	%	<u>\$</u>	<u>%</u>
Water Service Revenue	24,095,638	85.96	24,074,331.44	85.88
Private Fire Revenue	983,043	3.51	1,005,371.28	3.59
Munipical Fire Revenue	2,952,920	10.53	2,952,886.61	10.53
Total Revenues	28,031,601	100.00	28,032,589.33	100.00

PENNICHUCK WATER WORKS, INC. MERRIMACK, NEW HAMPSHIRE

APPENDIX

TO

REPORT ON

COST OF SERVICE ALLOCATIONS

AND WATER RATE DESIGN

by

John R. Palko, Principal AUS Consultants 155 Gaither Drive, Suite A Mt. Laurel, NJ 08054

April 2010

<u>Appendix</u> Pennichuck Water Works Development of Carrying Costs and Carrying Charges <u>for Water Supply and Treatment Facilities</u>

As developed in this analysis, a carrying cost may be defined as the embedded annual cost or expense related to owning a given element of utility property. In other words, it is the expense incurred by ownership. It includes a return on the monies invested in the property, taxes on this return, depreciation of the property, and taxes on the property. For purposes of this analysis, it does not include operation and maintenance costs such as salaries and wages, electric power, chemicals, or repairs. Thus, it is more of a fixed cost than a variable cost. A carrying charge relates the carrying cost to units of capacity or use to allow for fair, just, and reasonable recovery of the expense of ownership.

The data required to develop a carrying cost are available from the books and records of Pennichuck Water Works. For purposes of this analysis, emphasis is placed on the core system water supply and treatment facilities. These facilities include the Supply Pond, Holt Dam, the Water Treatment Plant, and the Fifield Tank (which is used to control the hydraulic gradient in the core system). The accompanying Schedule A-1 summarizes the asset values and related expenses used in the development of the carrying cost parameters. As shown thereon, the investment in water supply and treatment assets for the facilities considered herein totals \$55,161,618 at December 31, 2009. Similarly, the accumulated depreciation reserve totals \$8,491,006 while the annual depreciation expense was \$1,539,523 during calendar year 2009.

The amount of deferred income taxes related to the water supply and treatment facility assets is a needed component in the determination of the return on the investment

A-1

in these assets. While deferred income taxes are calculated at the Company level (as opposed to being calculated on each individual utility plant element), it is possible to estimate the deferred taxes related to the water supply and treatment facilities by comparing the investment in these facilities to the total utility plant investment. Using such an approach, it is estimated that \$13,373,304 of deferred income taxes are related to the water supply and treatment facility investment at December 31, 2009.

Property taxes on the water supply and treatment facilities are paid both on a local municipal level and on a state level. Local property taxes totaled \$1,450,055 during calendar year 2009. State property taxes, much like the deferred income taxes, are calculated at the Company level. It is possible to estimate the state property taxes related to the water supply and treatment facilities by comparing the state valuations by town and the town valuations by plant asset category. Under such an approach, it is estimated that the state property taxes related to the water supply and treatment facilities are supply and treatment facilities were \$384,924 for calendar year 2009.

The above data may be used to develop the carrying cost of the water supply and treatment facility assets. This development is set forth on the accompanying Schedule A-2. As shown thereon, a rate base of \$35,608,498 is calculated by deducting the accumulated depreciation and the deferred income tax from the original cost of the water supply and treatment facility assets. The overall 7.38% rate of return allowed in Pennichuck's most recent rate proceeding when applied to the rate base results in a \$2,627,907 return on the investment in the water supply and treatment facilities. Taxes on this return are \$1,723,653 using a 60.39% tax factor. As shown on Schedule 2, depreciation expense is \$1,539,523 while total property taxes are \$1,834,979. The sum

of the return on the water supply and treatment facility investment, the taxes on this return, the depreciation expenses, and the property taxes is \$7,726,062 which is the annual carrying cost of these facilities during 2009. It is noted that all numeric values referred to above are for the total of the Supply Pond, Holt Dam, the Water Treatment Plant, and the Fifield Tank. Schedule 2 sets forth comparable values for each individual facility.

This \$7,726,062 carrying cost can be used to develop a carrying charge related to the capacity requirements of Anheuser-Busch. In accordance with the Anheuser-Busch contract, Pennichuck must maintain facilities capable of delivering 2.0 million gallons per day on a continuous basis. In addition these facilities must also be capable of delivering 3.0 million on a maximum day basis and the 24-hour equivalent of 4.0 million gallons during the peak hour. It has recently been reported that the water supply and treatment facility is capable of delivering water at a rate of 31.2 million gallons per day. This 31.2 million gallons per day is the maximum day delivery volume from the treatment facility.

Since the treatment facilities are designed to meet maximum day demands, it is appropriate to relate the Anheuser-Busch maximum day contract requirements to the treatment plant capacity. The 3.0 million gallon Anheuser-Busch maximum day requirement is equivalent to 9.615% of the treatment plant capacity. (That is, $3.0 \div 31.2 = 9.615\%$.) Applying this 9.615% to the total annual carrying cost of \$7,726,062 results in a carrying charge of \$742,861 applicable to service to Anheuser-Busch. (That is, 9.615% x \$7,726,062 = \$742,861.)

The carrying charge developed herein can be incorporated with the rate schedules applicable to service to Anheuser-Busch. The use of a carrying charge will aid in assuring that Anheuser-Busch provides its fair share of the fixed costs of the water supply and treatment facilities in which certain capacity requirements are reserved for Anheuser-Busch's use and will give recognition to the fact that Pennichuck must maintain certain capacity requirements for Anheuser-Busch irrespective of the amount of water actually taken.

Pennichuck Water Works Asset Values and Related Expenses for Development of Carrying Cost Parameters For Water Supply and Treatment Facilities

Plant Investment	Supply Pond	Holt <u>Dam</u>	Water Treatment <u>Plant</u>	Fifield <u>Tank</u>	Total
Original Cost	\$ 969,382	\$ 638,469	\$48,908,994	\$4,644,773	\$55,161,618
Accumulated Depreciation	143,242	116,542	7,544,701	686,521	8,491,006
Net Book Value	826,140	521,927	41,364,293	3,958,252	46,670,612
Depreciation Expense	21,774	11,339	1,431,515	74,895	1,539,523
Estimated Deferred Income Tax	303,908	8,167,355	2,007,282	2,894,759	13,373,304
Property Taxes					
Local Taxes Estimated State Taxes	0 0	0 0	1,389,748 368,903	60,307 16,021	1,450,055 384,924
Total Property Taxes	0	0	1,758,651	76,328	1,834,979

Pennichuck Water Works Development of Carrying Cost For Water Supply and Treatment Facilities

Plant Investment	Supply Pond	Holt <u>Dam</u>		Water Treatment <u>Plant</u>	Fifield <u>Tank</u>	Total
Original Cost Accumulated Depreciation	\$ 969,382 143,242	638,469 116,542	\$	48,908,994 7,544,701	\$ 4,644,773 686,521	\$ 55,161,618 8,491,006
Net Book Value	826,140	521,927	į	41,364,293	3,958,252	46,670,612
Estimated Deferred Income Tax	583,569	303,908		8,167,355	2,007,282	11,062,114
Rate Base	242,571	218,019		33,196,938	1,950,970	35,608,498
Allowed Rate of Return	7.38 %	7.38 %		7.38 %	7.38 %	7.38 %
Return on Investment	17,902	16,090		2,449,934	143,982	2,627,907
Tax Factor on Return	60.39 %	60.39 %		60.39 %	60.39 %	60.39 %
Taxes on Return	11,742	10,553		1,606,920	94,438	1,723,653
Depreciation Expense	21,774	11,339		1,431,515	74,895	1,539,523
Property Taxes						
Local Taxes Estimated State Taxes	0 0	0 0		1,389,748 368,903	60,307 16,021	1,450,055 384,924
Total Property Taxes	0	0		1,758,651	76,328	1,834,979
Total Annual Carrying Cost	\$ 51,418	\$ 37,982	\$	7,247,020	\$ 389,643	\$ 7,726,062

PENNICHUCK WATER WORKS, INC. MERRIMACK, NEW HAMPSHIRE

ADDENDUM TO

REPORT ON

COST OF SERVICE ALLOCATIONS

AND RATE DESIGN

by

John R. Palko, Principal AUS Consultants 155 Gaither Drive, Suite A Mount Laurel, NJ 08054

April 2010

Addendum To Report on Cost of Service Allocations and Water Rate Design Pennichuck Water Works, Inc.

The cost of service allocations and related rate design developed in the main body of this report were premised upon a net water revenue requirement of \$28,031,601. This amount has been characterized as the "Permanent Rate Increase" by the management of Pennichuck Water Works, Inc.

In addition to the Permanent Rate Increase, two other revenue requirement levels will be considered in the rate filing before the New Hampshire Public Utilities Commission. These levels and the corresponding revenue requirements are identified as the "Temporary Rate Increase" of \$26,720,950 and the "Step Rate Increase" of \$28,918,240.

This addendum sets forth the design of rates and charges which will generate the revenue requirements under the Temporary Rate Increase and the Step Rate Increase. Attached hereto are a series of schedules similar in format to Schedules 10, 14, and 15 (i.e., the rate design schedules) of the main report. The schedules attached hereto are identified with ".Temp" and ".Step" extensions according to the individual revenue requirement under consideration.

Additionally, Schedule A.Temp and Schedule A.Step attached hereto set forth respectively the allocation of the revenue requirement to the customer classes for the Temporary Rate Increase and the Step Rate Increase. Each revenue requirement is ratioed to the revenues from the Permanent Rate Increase on these schedules.

Page 5 of Schedule 15 of each of the rate designs set forth herein shows that the temporary rate design is within 0.007% of its revenue requirement and that the step rate design is within 0.006% of its revenue requirement. These differences are each considered negligible and are acceptable for rate design purposes.

Finally, a series of schedules illustrating the effect of the step increase is attached hereto. Schedule SE.1 sets forth the difference between the combined rate elements (that is, those designed to generate the step revenue requirement) and the permanent rate elements. This difference is then applied to the billing parameters on Schedule SE.2. As shown on Page 5 of Schedule SE.2, the movement from the permanent rate increase to the step rate increase generates an additional \$887,494 of revenue.

PENNICHUCK WATER WORKS, INC. MERRIMACK, NEW HAMPSHIRE

SCHEDULES TO ACCOMPANY

ADDENDUM TO

REPORT ON

COST OF SERVICE ALLOCATIONS

AND WATER RATE DESIGN

by

John R. Palko, Principal AUS Consultants 155 Gaither Drive, Suite A Mt. Laurel, NJ 08054

April 2010

PENNICHUCK WATER WORKS, INC.

RATE DESIGN FOR

TEMPORARY RATE INCREASE

Pennichuck Water Works, Inc. Temporary Rate Increase

Allocation of Temporary Rate Revenue

	Proposed Permanent Rates				Temporary Revenue		
		Amo	ount		<u>%</u>		Requirement
Total Customer Charge Revenue	\$	9,366	6,018.96		33.41%		8,913,971
Total Volume Charge Revenue		13,851	1,652.48		49.41%		13,183,106
Total Contract Fixed Fee Revenue		856	8,660.00		3.06%		856,660
Total Private Fire Revenue		1,008	5,371.28		3.59%		956,847
Total Munipical Fire Revenue		2,952	2,886.61		10.53%		2,810,366
Grand Total Proposed Revenue	\$:	28,032	2,589.33	1	00.00%	:	\$ 26,720,950
Net Water Revenue Requirement	\$ 2	28,031	,601.00				
Difference	\$		988.33 0.004%				

Pennichuck Water Works, Inc. Temporary Rate Increase Rate Design

Municipal Fire Protection

Total Municipal Fire	Protection Rev Reqmt	2,810,366

Present Municipal Fire Protection Revenue 2,690,258

Present revenue is less than the cost of service indications. An increase of about 4.5% will be developed for municipal fire protection.

Rate <u>Element</u>	Present Monthly <u>Rate</u>	Temporary Monthly <u>Rate</u>	% Increase
Hydrant	\$ 17.16	\$ 17.93	4.49 %
Inch-Foot	0.11828	0.12356	4.46 %

Pennichuck Water Works, Inc. Temporary Rate Increase Rate Design

Private Fire Protection

Total Private Fire Protection Rev Regmt	956,847
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Present Private Fire Protection Revenue 1,005,371

Since Allocated Costs are less than present rate revenues, no changes will be proposed for Private Fire rates.

<u>Size</u>	Present Monthly <u>Charge</u>	Temporary Monthly <u>Charge</u>	Increase
2"	55.70	55.70	0.00 %
4"	55.70	55.70	0.00 %
6"	93.46	93.46	0.00 %
8"	137.60	137.60	0.00 %
10"	137.60	137.60	0.00 %
12"	137.60	137.60	0.00 %
16"	137.60	137.60	0.00 %

Schedule 10.Temp Page 3 of 4

Pennichuck Water Works, Inc. Temporary Rate Increase Rate Design

Customer Charges

Total for Customer Charge	8,913,971
Rate Design Adjustment	179,974

Net for Customer Charges

Present Customer Charge Revenue

6,751,420

29.37 %

8,733,997

Increase Required

Meter <u>Size</u>	Present Monthly <u>Charge</u>	Temporary Monthly <u>Charge</u>	Increase
5/8"	18.18	23.51	29.32 %
3/4"	26.16	33.84	29.36 %
1"	42.13	54.50	29.36 %
1 1/2"	82.10	106.21	29.37 %
2"	134.41	173.89	29.37 %
3"	246.48	318.87	29.37 %
4"	406.51	525.90	29.37 %
6"	806.63	1,043.54	29.37 %
8"	1,286.90	1,664.86	29.37 %
10"	1,847.05	2,389.53	29.37 %

Pennichuck Water Works, Inc. Temporary Rate Increase Rate Design

Volumetric Charges	
Net Water Revenue Requirement	26,720,950
Less Proposed Revenues: From Municipal Fire Protection From Private Fire Protection From Customer Charges From Contract Fixed Fees From A-B Carrying Charge From A-B Volume Charge	(2,810,468) (1,005,371) (8,706,514) (113,800) (742,860) (647,288)
Net Required From Volume Charges	12,694,649
Present Volume Charge Revenue	12,696,537
Increase Required	(0.01) %

Increase Required

	Present <u>Charge</u>	Proposed Charge	Increase
General Water	2.90	2.900	0.00 %
Anheuser-Busch	1.4956	1.1739	(21.51) %
Hudson	1.8419	1.8419	0.00 %
Milford	1.8249	1.8249	0.00 %

Pennichuck Water Works, Inc. Summary of Temporary Rates

General Service - Metered Schedule G-M

	Temporary
Meter	Monthly
Size	Charge
5/8"	\$ 23.51
3/4"	33.84
1"	54.50
1 1/2"	106.21
2"	173.89
3"	318.87
4"	525.90
6"	1,043.54
8"	1,664.86
10"	2,389.53
Volumetric Charge	
per 100 cu. ft.	\$ 2.900

per 100 cu. ft. Municipal Fire Protection Service

Schedule FP-M

\$ 2.900

				M	mporary Ionthly <u>charge</u>
Each Hydra	nt			\$	17.93
Inch-Foot pe	er year	\$	0.12356		
	Private Fire Protection Schedule FP-				
Connection <u>Size</u>				M	mporary Ionthly Charge
4" or smalle 6" 8" or larger	r				55.70 93.46 137.60
	Special Contract	Ser	vice		
Anheuser-B	usch				
	Annual Carrying Chg Volumetric Charge	\$	742,860		
	per 100 cu. ft.	\$	1.1739		
Hudson	Annual Charge Volumetric Charge	\$	32,800		
	per 100 cu. ft.	\$	1.8419		
Milford	Annual Fixed Fee Volumetric Charge	\$	81,000		
	per 100 cu. ft.	\$	1.8249		

-

Pennichuck Water Works, Inc. Calculation of Revenues Under Temporary Rates

General Service - Metered

Residential

Meter <u>Size</u>	Number of Meters	Number of Bills	Т	emporary <u>Rate</u>	Revenue
5/8"	23,188	278,256	\$	23.51	\$ 6,541,798.56
3/4"	325	3,900		33.84	131,976.00
1"	205	2,460		54.50	134,070.00
1 1/2"	131	1,572		106.21	166,962.12
2"	45	540		173.89	93,900.60
3"	19	228		318.87	72,702.36
4"	3	36		525.90	18,932.40
6"	0	0		1,043.54	0.00
8"	0	0		1,664.86	0.00
10"	0	0		2,389.53	0.00
Subtotal	23,916	286,992			\$ 7,160,342.04
	CCFT				
Volume	3,190,170		\$	2.900	\$ 9,251,493.00
Total Reside	ntial Revenue				\$ 16,411,835.04

Commercial

Meter Size	Number of Meters	Number of Bills	Т	emporary Rate	Revenue
5/8"	605	7,260	\$	23.51	\$ 170,682.60
3/4"	175	2,100		33.84	71,064.00
1"	255	3,060		54.50	166,770.00
1 1/2"	233	2,796		106.21	296,963.16
2"	150	1,800		173.89	313,002.00
3"	17	204		318.87	65,049.48
4"	2	24		525.90	12,621.60
6"	1	12		1,043.54	12,522.48
8"	0	0		1,664.86	0.00
10"	0	0		2,389.53	0.00
Subtotal	1,438	17,256			\$ 1,108,675.32
	CCFT				
Volume	766,150		\$	2.900	\$ 2,221,835.00
Total Comme	ercial Revenue				\$ 3,330,510.32

Pennichuck Water Works, Inc. Calculation of Revenues Under Temporary Rates

General Service - Metered

Industrial

Meter Size	Number of Meters	Number of Bills	Т	emporary <u>Rate</u>	Revenue
5/8"	30	360	\$	23.51	\$ 8,463.60
3/4"	17	204		33.84	6,903.36
1"	39	468		54.50	25,506.00
1 1/2"	29	348		106.21	36,961.08
2"	35	420		173.89	73,033.80
3"	13	156		318.87	49,743.72
4"	2	24		525.90	12,621.60
6"	2	24		1,043.54	25,044.96
8"	0	0		1,664.86	0.00
10"	0	0		2,389.53	0.00
Subtotal	167	2,004			\$ 238,278.12
	CCFT				
Volume	222,313		\$	2.900	\$ 644,707.70
Total Industri	ial Revenue				\$ 882,985.82

Municipal

Meter Size	Number of Meters	Number of Bills	Т	emporary <u>Rate</u>	Revenue
5/8"	17	204	\$	23.51	\$ 4,796.04
3/4"	10	120		33.84	4,060.80
1"	16	192		54.50	10,464.00
1 1/2"	27	324		106.21	34,412.04
2"	37	444		173.89	77,207.16
3"	8	96		318.87	30,611.52
4"	2	24		525.90	12,621.60
6"	2	24		1,043.54	25,044.96
8"	0	0		1,664.86	0.00
10"	0	0		2,389.53	0.00
Subtotal	119	1,428			\$ 199,218.12
	CCFT				
Volume	79,953		\$	2.900	\$ 231,863.70
Total Municip	al Revenue				\$ 431,081.82
Grand Total	GWS Revenue	Э			\$ 21,056,413.00

Pennichuck Water Works, Inc. Calculation of Revenues Under Temporary Rates

Service to Contract Customers

Town of Milford

		Temporary <u>Rate</u>	Revenue
Annual Fixed	Fee	\$ 81,000.00	\$ 81,000.00
Volume	CCFT 45,237	\$ 1.8249	\$ 82,553.00
Total Milford	Revenue		\$ 163,553.00

Town of Hudson

		1	emporary <u>Rate</u>	Revenue
Annual Dema	and Charge	\$	32,800.00	\$ 32,800.00
Volume	<u>CCFT</u> 143,376	\$	1.8419	\$ 264,084.25
Total Hudsor	Revenue			\$ 296,884.25

-

Anheuser-Busch

Meter <u>Size</u>	Number of Meters	Number of Bills	Т	emporary <u>Rate</u>	Revenue
6"	2	24	\$	-	\$ -
Volume	<u>CCFT</u> 551,400			1.1739	\$ 647,288.46
Annual Carr	ying Charge		\$ 1	742,860.00	\$ 742,860.00
Total Anheu	ser-Busch Rev	/enue			\$ 1,390,148.46
Grand Total Contract Revenue				\$ 1,850,585.72	

Pennichuck Water Works, Inc. Calculation of Revenues Under Temporary Rates

Fire Protection Service

Private Fire Protection

Private Fire	Protection				
Size	Number	Number of Bills	T	emporary <u>Rate</u>	Revenue
2"	29	348	\$	55.70	\$ 19,383.60
4"	105	1,260		55.70	70,182.00
6"	369	4,428		93.46	413,840.88
8"	284	3,408		137.60	468,940.80
10"	6	72		137.60	9,907.20
12"	13	156		137.60	21,465.60
16"	1	12		137.60	1,651.20
Total	807	9,684			\$ 1,005,371.28

Municipal Fire Protection

Size	Number	of Bills	Т	emporary <u>Rate</u>	Revenue
Hydrant	2,468	60	\$	17.93	\$ 531,014.88
Inch-Feet	18,448,150			0.12356	2,279,453.41
Total Munip	ical Fire Reven	ue			\$ 2,810,468.29

-

Pennichuck Water Works, Inc. Calculation of Revenues Under Temporary Rates

Total Proposed Temporary Rate Revenue

Grand Total GWS Revenue	\$ 21,056,413.00
Grand Total Contract Revenue	\$ 1,850,585.72
Grand Total Private Fire Revenue	\$ 1,005,371.28
Grand Total Munipical Fire Revenue	\$ 2,810,468.29
Grand Total Proposed Revenue	\$ 26,722,838.29
Total Customer Charge Revenue	\$ 8,706,513.60
Total Volume Charge Revenue	\$ 13,343,825.12
Total Contract Fixed Fee Revenue	\$ 856,660.00
Total Private Fire Revenue	\$ 1,005,371.28
Total Munipical Fire Revenue	\$ 2,810,468.29
Grand Total Proposed Revenue Net Water Revenue Requirement	26,722,838.29
Difference	\$ 1,888.29
	0.007%

PENNICHUCK WATER WORKS, INC.

RATE DESIGN FOR

STEP RATE INCREASE

-

Pennichuck Water Works, Inc. Combined Rate Increase Combined Permanent and Step Increase Allocation of Combined Rate Revenue

	Proposed Permanent Rates			Combined Revenue
		nount	<u>%</u>	Requirement
Total Customer Charge Revenue	\$ 9,36	6,018.96	33.41%	9,671,253
Total Volume Charge Revenue	13,85	1,652.48	49.41%	14,303,071
Total Contract Fixed Fee Revenue	85	6,660.00	3.06%	856,660
Total Private Fire Revenue	1,00	5,371.28	3.59%	1,038,136
Total Munipical Fire Revenue	2,95	2,886.61	10.53%	3,049,120
Grand Total Proposed Revenue	\$ 28,03	2,589.33	100.00%	\$28,918,240
Net Water Revenue Requirement	\$ 28,03	1,601.00		
Difference	\$	988.33 0.004%		

Pennichuck Water Works, Inc. Combined Rate Increase Combined Permanent and Step Increase Rate Design

Municipal Fire Protection

Total Municipal Fire Protection Rev Reqmt	3,049,120	
Permanent Municipal Fire Protection Revenue	2,952,887	

Permanent revenue is less than the allocated amount. An increase of about 3.2% will be developed for municipal fire protection.

Rate <u>Element</u>	Permanent Monthly <u>Rate</u>	Combined Monthly <u>Rate</u>	% Increase
Hydrant	\$ 19.78	\$ 20.42	3.24 %
Inch-Foot	0.12831	0.13249	3.26 %

Pennichuck Water Works, Inc. Combined Rate Increase Combined Permanent and Step Increase Rate Design

Private Fire Protection

Total Private Fire Protection Rev Reqmt	1,038,136
Permanent Private Fire Protection Revenue	1,005,371

Permanent revenue is less than the allocated amount. An increase of about 3.2% will be developed for municipal fire protection.

Size	Permanent Monthly <u>Charge</u>	Combined Monthly <u>Charge</u>	Increase
2"	\$ 55.70	\$ 57.52	3.27 %
4"	55.70	57.52	3.27 %
6"	93.46	96.51	3.26 %
8"	137.60	142.08	3.26 %
10"	137.60	142.08	3.26 %
12"	137.60	142.08	3.26 %
16"	137.60	142.08	3.26 %

-

Pennichuck Water Works, Inc. Combined Rate Increase Combined Permanent and Step Increase Rate Design

Customer Charges

Total for Customer Charge Rate Design Adjustment			9,671,253 0
Net for Customer (Charges		9,671,253
Permanent Customer Charge Revenue			9,366,019
	Increase R	Required	3.26 %
Meter	Permanen Monthly	Monthly	
Size	Charge	Charge	Increase
5/8" 3/4" 1"	\$ 25.29 36.41 58.64	\$ 26.11 37.60 60.55	3.24 % 3.27 % 3.26 %
1 1/2"	114.27	118.00	3.26 %
2"	187.07	193.17	3.26 %
3"	343.05	354.23	3.26 %
- 4"	565.78	584.22	3.26 %
6"	1,122.67	1,159.27	3.26 %
8"	1,791.11	1,849.50	3.26 %
10"	2,570.72	2,654.53	3.26 %

3.27 %

Pennichuck Water Works, Inc. Combined Rate Increase Combined Permanent and Step Increase Rate Design

Volumetric Charges

Net Water Revenue Requirement	28,918,240			
Less Proposed Revenues:				
From Municipal Fire Protection	(3,048,954)			
From Private Fire Protection	(1,038,146)			
From Customer Charges	(9,670,112)			
From Contract Fixed Fees	(113,800)			
From A-B Carrying Charge	(742,860)			
From A-B Volume Charge				
Net Required From Volume Charges	14,304,368			
	40.054.050			
Permanent Volume Charge Revenue	13,851,652			

Increase Required

	Permanent Charge	Combined Charge	Increase
General Water	\$ 3.016	\$ 3.115	3.28 %
Anheuser-Busch	1.1739	1.2123	3.27 %
Hudson	1.9154	1.9780	3.27 %
Milford	1.8977	1.9598	3.27 %

Pennichuck Water Works, Inc. Summary of Combined Rates Combined Permanent and Step Increase General Service - Metered Schedule G-M

	Combined
Meter	Monthly
Size	Charge
5/8"	\$ 26.11
3/4"	37.60
1"	60.55
1 1/2"	118.00
2"	193.17
3"	354.23
4"	584.22
6"	1,159.27
8"	1,849.50
10"	2,654.53
Volumetric Charge	
the second s	

per 100 cu. ft.

Municipal Fire Protection Service Schedule FP-M

\$ 3.115

				M	mbined onthly harge
Each Hydra	nt			\$	20.42
Inch-Foot p	er year	\$	0.13249		
	Private Fire Protection Schedule FP-		ervice		
Connection Size	L			M	mbined Ionthly <u>charge</u>
4" or smalle 6" 8" or larger	9 Г			\$	57.52 96.51 142.08
	Special Contract	Serv	vice		
Anheuser-B	Busch Annual Carrying Chg	\$	742,860		
	Volumetric Charge per 100 cu. ft.	\$	1.2123		
<u>Hudson</u>	Annual Charge Volumetric Charge	\$	32,800		
	per 100 cu. ft.	\$	1.9780		
Milford	Annual Fixed Fee Volumetric Charge	\$	81,000		
	per 100 cu. ft.	\$	1.9598		

Pennichuck Water Works, Inc. Calculation of Revenues Under Combined Rates Combined Permanent and Step Increase General Service - Metered

Residential

Meter Size	Number of Meters	Number of Bills	C	Combined Rate	Revenue
5/8"	23,188	278,256	\$	26.11	\$ 7,265,264.16
3/4"	325	3,900		37.60	146,640.00
1"	205	2,460		60.55	148,953.00
1 1/2"	131	1,572		118.00	185,496.00
2"	45	540		193.17	104,311.80
3"	19	228		354.23	80,764.44
4"	3	36		584.22	21,031.92
6"	0	0		1,159.27	0.00
8"	0	0		1,849.50	0.00
10"	0	0		2,654.53	0.00
Subtotal	23,916	286,992			\$ 7,952,461.32
	CCFT				
Volume	3,190,170		\$	3.115	\$ 9,937,379.55
Total Reside	ntial Revenue				\$ 17,889,840.87

Commercial

Meter Size	Number of Meters	Number of Bills	C	Combined Rate	Revenue
5/8"	605	7,260	\$	26.11	\$ 189,558.60
3/4"	175	2,100		37.60	78,960.00
1"	255	3,060		60.55	185,283.00
1 1/2"	233	2,796		118.00	329,928.00
2"	150	1,800		193.17	347,706.00
3"	17	204		354.23	72,262.92
4"	2	24		584.22	14,021.28
6"	1	12		1,159.27	13,911.24
8"	0	0		1,849.50	0.00
10"	0	0		2,654.53	0.00
Subtotal	1,438	17,256			\$ 1,231,631.04
	CCFT				
Volume	766,150		\$	3.115	\$ 2,386,557.25
Total Comm	ercial Revenue				\$ 3,618,188.29

Pennichuck Water Works, Inc. Calculation of Revenues Under Combined Rates Combined Permanent and Step Increase General Service - Metered

Industrial

Meter Size	Number of Meters	Number of Bills	(Combined <u>Rate</u>	Revenue
5/8"	30	360	\$	26.11	\$ 9,399.60
3/4"	17	204		37.60	7,670.40
1"	39	468		60.55	28,337.40
1 1/2"	29	348		118.00	41,064.00
2"	35	420		193.17	81,131.40
3"	13	156		354.23	55,259.88
4"	2	24		584.22	14,021.28
6"	2	24		1,159.27	27,822.48
8"	0	0		1,849.50	0.00
10"	0	0		2,654.53	0.00
Subtotal	167	2,004			\$ 264,706.44
	CCFT				
Volume	222,313		\$	3.115	\$ 692,505.00
Total Industr	ial Revenue				\$ 957,211.44

Municipal

Meter <u>Size</u>	Number of Meters	Number of Bills	(Combined Rate		Revenue
5/8"	17	204	\$	26.11	\$	5,326.44
3/4"	10	120		37.60		4,512.00
1"	16	192		60.55		11,625.60
1 1/2"	27	324		118.00		38,232.00
2"	37	444		193.17		85,767.48
3"	8	96		354.23		34,006.08
4"	2	24		584.22		14,021.28
6"	2	24		1,159.27		27,822.48
8"	0	0		1,849.50		0.00
10"	0	0		2,654.53		0.00
Subtotal	119	1,428			\$	221,313.36
	CCFT					
Volume	79,953		\$	3.115	\$	249,053.60
Total Municip	al Revenue				\$	470,366.96
Grand Total GWS Revenue \$ 2						22,935,607.55

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Pennichuck Water Works, Inc. Calculation of Revenues Under Combined Rates Combined Permanent and Step Increase Service to Contract Customers

Town of Milford

		Combined <u>Rate</u>	Revenue
Annual Fixed	Fee	\$ 81,000.00	\$ 81,000.00
Volume	<u>CCFT</u> 45,237	\$ 1.9598	\$ 88,655.47
Total Milford	Revenue		\$ 169,655.47

Town of Hudson

		(Combined <u>Rate</u>	Revenue
Annual Dema	and Charge	\$	32,800.00	\$ 32,800.00
Volume	<u>CCFT</u> 143,376	\$	1.9780	\$ 283,597.73
Total Hudsor	n Revenue			\$ 316,397.73

Anheuser-Busch

Meter <u>Size</u>	Number of Meters	Number of Bills		Combined <u>Rate</u>	Revenue
6"	2	24	\$	-	\$ -
Volume	<u>CCFT</u> 551,400			1.2123	\$ 668,462.22
Annual Carr	ying Charge		\$	742,860.00	\$ 742,860.00
Total Anheu	ser-Busch Rev	/enue			\$ 1,411,322.22
Grand Total Contract Revenue					\$ 1,897,375.42

Pennichuck Water Works, Inc. Calculation of Revenues Under Combined Rates Combined Permanent and Step Increase Fire Protection Service

Private Fire Protection

IIVale File	Protection	Number	C	ombined	
Size	Number	of Bills		Rate	Revenue
2"	29	348	\$	57.52	\$ 20,016.96
4"	105	1,260		57.52	72,475.20
6"	369	4,428		96.51	427,346.28
8"	284	3,408		142.08	484,208.64
10"	6	72		142.08	10,229.76
12"	13	156		142.08	22,164.48
16"	1	12		142.08	1,704.96
Total	807	9,684			\$ 1,038,146.28

Municipal Fire Protection

Municipal Fi	IE FIOLECIION		C	Combined	
Size	Number	of Bills		Rate	Revenue
Hydrant	2,468	60	\$	20.42	\$ 604,758.72
Inch-Feet	18,448,150			0.13249	2,444,195.39
Total Munip	ical Fire Reven	ue			\$ 3,048,954.11

Pennichuck Water Works, Inc. Calculation of Revenues Under Combined Rates Combined Permanent and Step Increase Total Proposed Combined Rate Revenue

Grand Total GWS Revenue	\$ 22,935,607.55
Grand Total Contract Revenue	\$ 1,897,375.42
Grand Total Private Fire Revenue	\$ 1,038,146.28
Grand Total Munipical Fire Revenue	\$ 3,048,954.11
Grand Total Proposed Revenue	\$ 28,920,083.36
Total Customer Charge Revenue	\$ 9,670,112.16
Total Volume Charge Revenue	\$ 14,306,210.81
Total Contract Fixed Fee Revenue	\$ 856,660.00
Total Private Fire Revenue	\$ 1,038,146.28
Total Munipical Fire Revenue	\$ 3,048,954.11
Grand Total Proposed Revenue	\$ 28,920,083.36
Net Water Revenue Requirement	\$ 28,918,240.00
Difference	\$ 1,843.36 0.006%

PENNICHUCK WATER WORKS, INC. SCHEDULES ILLUSTRATING EFFECT OF STEP INCREASE

Pennichuck Water Works, Inc. Summary of Combined Rates Combined Permanent and Step Increase General Service - Metered Schedule G-M

Meter	M	mbined onthly	N	rmanent Ionthly		fect of Step
Size	<u>c</u>	harge	0	harge	Ind	crease
5/8"	\$	26.11	\$	25.29	\$	0.82
3/4"		37.60		36.41		1.19
1"		60.55		58.64		1.91
1 1/2"		118.00		114.27		3.73
2"		193.17		187.07		6.10
3"	;	354.23		343.05		11.18
4"		584.22		565.78		18.44
6"	1,	159.27	1	,122.67		36.60
8"	1,	849.50	1	,791.11		58.39
10"	2,	654.53	2	570.72		83.81

Volumetric Charge

per 100 cu. ft. \$ 3.115 \$ 3.016 \$ 0.099

Municipal Fire Protection Service Schedule FP-M

	Combined Monthly <u>Charge</u>		Permanent Monthly Charge		Effect of Step Increase	
Each Hydrant	\$	20.42	\$	19.78	\$	0.64
Inch-Foot per year	\$0	.13249	\$	0.12831	\$0	00418

Private Fire Protection Service Schedule FP-NM

Connection Size	Combined Monthly <u>Charge</u>		Permanent Monthly <u>Charge</u>		Effect of Step Increase	
4" or smaller	\$	57.52	\$	55.70	\$	1.82
6"		96.51		93.46		3.05
8" or larger		142.08		137.60		4.48

Special Contract Service

Anheuser-Busch Annual Carrying Chg Volumetric Charge	\$ 742,860	\$ 742,860	\$ -
per 100 cu. ft.	\$ 1.2123	\$ 1.1739	\$ 0.0384
Hudson Annual Charge Volumetric Charge	\$ 32,800	\$ 32,800	\$ -
per 100 cu. ft.	\$ 1.9780	\$ 1.9154	\$ 0.0626
Milford Annual Fixed Fee Volumetric Charge	\$ 81,000	\$ 81,000	\$
per 100 cu. ft.	\$ 1.9598	\$ 1.8977	\$ 0.0621

Pennichuck Water Works, Inc. Calculation of Revenues Under Combined Rates Combined Permanent and Step Increase General Service - Metered

Residential

Meter Size	Number of Meters	Number of Bills	Combined Rate	Revenue
5/8"	23,188	278,256	\$ 0.82	\$ 228,169.92
3/4"	325	3,900	1.19	4,641.00
1"	205	2,460	1.91	4,698.60
1 1/2"	131	1,572	3.73	5,863.56
2"	45	540	6.10	3,294.00
3"	19	228	11.18	2,549.04
4"	3	36	18.44	663.84
6"	0	. 0	36.60	0.00
8"	0	0	58.39	0.00
10"	0	0	83.81	0.00
Subtotal	23,916	286,992		\$ 249,879.96
Volume	<u>CCFT</u> 3,190,170		\$ 0.099	\$ 315,826.83
Total Reside	ntial Revenue			\$ 565,706.79

Commercial

Meter	Number	Number	C	Combined	
Size	of Meters	of Bills		Rate	Revenue
5/8"	605	7,260	\$	0.82	\$ 5,953.20
3/4"	175	2,100		1.19	2,499.00
1"	255	3,060		1.91	5,844.60
1 1/2"	233	2,796		3.73	10,429.08
2"	150	1,800		6.10	10,980.00
3"	17	204		11.18	2,280.72
4"	2	24		18.44	442.56
6"	1	12		36.60	439.20
8"	0	0		58.39	0.00
10"	0	0		83.81	0.00
Subtotal	1,438	17,256			\$ 38,868.36
	CCFT				
Volume	766,150		\$	0.099	\$ 75,848.85
Total Comm	ercial Revenue				\$ 114,717.21

Pennichuck Water Works, Inc. Calculation of Revenues Under Combined Rates Combined Permanent and Step Increase General Service - Metered

Industrial

Meter Size	Number of Meters	Number of Bills	С	ombined <u>Rate</u>		Revenue
5/8"	30	360	\$	0.82	\$	295.20
3/4"	17	204		1.19		242.76
1"	39	468		1.91		893.88
1 1/2"	29	348		3.73		1,298.04
2"	35	420		6.10		2,562.00
3"	13	156		11.18		1,744.08
4"	2	24		18.44		442.56
6"	2	24		36.60		878.40
8"	0	0		58.39		0.00
10"	0	0		83.81		0.00
Subtotal	167	2,004			\$	8,356.92
Volume	<u>CCFT</u> 222,313		\$	0.099	\$	22,008.99
Volumo	222,010		Ŧ	0.000	7	
Total Industr	ial Revenue				\$	30,365.91

Municipal

Meter <u>Size</u>	Number of Meters	Number of Bills	C	Combined Rate	Revenue
5/8"	17	204	\$	0.82	\$ 167.28
3/4"	10	120		1.19	142.80
1"	16	192		1.91	366.72
1 1/2"	27	324		3.73	1,208.52
2"	37	444		6.10	2,708.40
3"	8	96		11.18	1,073.28
4"	2	24		18.44	442.56
6"	2	24		36.60	878.40
8"	0	0		58.39	0.00
10"	0	0		83.81	0.00
Subtotal	119	1,428			\$ 6,987.96
	CCFT				
Volume	79,953		\$	0.099	\$ 7,915.35
Total Municip	al Revenue				\$ 14,903.31
Grand Total	GWS Revenue	е			\$ 725,693.21

Pennichuck Water Works, Inc. Calculation of Revenues Under Combined Rates Combined Permanent and Step Increase Service to Contract Customers

Town of Milford

		Combined <u>Rate</u> <u>Revenue</u>					
Annual Fixed	Fee	\$	-	\$	-		
Volume	<u>CCFT</u> 45,237	\$	0.0621	\$	2,809.22		
Total Milford	Revenue			\$	2,809.22		

Town of Hudson

		Combined <u>Rate</u> <u>Revenu</u>					
Annual Dem	and Charge	\$	-	\$	-		
Volume	<u>CCFT</u> 143,376	\$	0.0626	\$	8,975.34		
Total Hudson	n Revenue			\$	8,975.34		

Anheuser-Busch

Meter <u>Size</u>	Number of Meters	Number of Bills	С	ombined <u>Rate</u>	Revenue
6"	2	24	\$	-	\$ -
Volume	<u>CCFT</u> 551,400			0.0384	\$ 21,173.76
Annual Carr	ying Charge		\$	-	\$
Total Anheu	ser-Busch Rev	venue			\$ 21,173.76
Grand Total Contract Revenue					\$ 32,958.32

Pennichuck Water Works, Inc. Calculation of Revenues Under Combined Rates Combined Permanent and Step Increase Fire Protection Service

Private Fire Protection

nvate Fire	Protection		0.	and the set	
Size	Number	Number of Bills	0.000	mbined <u>Rate</u>	Revenue
2"	29	348	\$	1.82	\$ 633.36
4"	105	1,260		1.82	2,293.20
6"	369	4,428		3.05	13,505.40
8"	284	3,408		4.48	15,267.84
10"	6	72		4.48	322.56
12"	13	156		4.48	698.88
16"	1	12		4.48	53.76
Total	807	9,684			\$ 32,775.00

Municipal Fire Protection

Manopart	ine i rotecuori		C	Combined	
Size	Number	of Bills		Rate	Revenue
Hydrant	2,468	60	\$	0.64	\$ 18,954.24
Inch-Feet	18,448,150			0.00418	77,113.27
Total Munip	ical Fire Reven	ue			\$ 96,067.51

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Pennichuck Water Works, Inc. Calculation of Revenues Under Combined Rates Combined Permanent and Step Increase Total Proposed Combined Rate Revenue

Grand Total GWS Revenue	\$ 725,693.21
Grand Total Contract Revenue	\$ 32,958.32
Grand Total Private Fire Revenue	\$ 32,775.00
Grand Total Munipical Fire Revenue	\$ 96,067.51
Grand Total Proposed Revenue	\$ 887,494.04
Total Customer Charge Revenue	\$ 304,093.20
Total Volume Charge Revenue	\$ 454,558.33
Total Contract Fixed Fee Revenue	\$ -
Total Private Fire Revenue	\$ 32,775.00
Total Munipical Fire Revenue	\$ 96,067.51
Grand Total Proposed Revenue	\$ 887,494.04

PENNICHUCK WATER WORKS, INC. MERRIMACK, NEW HAMPSHIRE

ADDENDUM TO

REPORT ON

COST OF SERVICE ALLOCATIONS

AND RATE DESIGN

by

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April 2010

Addendum To Report on Cost of Service Allocations and Water Rate Design Pennichuck Water Works, Inc.

The cost of service allocations and related rate design developed in the main body of this report were premised upon a net water revenue requirement of \$28,031,601. This amount has been characterized as the "Permanent Rate Increase" by the management of Pennichuck Water Works, Inc.

In addition to the Permanent Rate Increase, two other revenue requirement levels will be considered in the rate filing before the New Hampshire Public Utilities Commission. These levels and the corresponding revenue requirements are identified as the "Temporary Rate Increase" of \$26,720,950 and the "Step Rate Increase" of \$28,918,240.

This addendum sets forth the design of rates and charges which will generate the revenue requirements under the Temporary Rate Increase and the Step Rate Increase. Attached hereto are a series of schedules similar in format to Schedules 10, 14, and 15 (i.e., the rate design schedules) of the main report. The schedules attached hereto are identified with ".Temp" and ".Step" extensions according to the individual revenue requirement under consideration.

Additionally, Schedule A.Temp and Schedule A.Step attached hereto set forth respectively the allocation of the revenue requirement to the customer classes for the Temporary Rate Increase and the Step Rate Increase. Each revenue requirement is ratioed to the revenues from the Permanent Rate Increase on these schedules.

Page 5 of Schedule 15 of each of the rate designs set forth herein shows that the temporary rate design is within 0.007% of its revenue requirement and that the step rate design is within 0.006% of its revenue requirement. These differences are each considered negligible and are acceptable for rate design purposes.

Finally, a series of schedules illustrating the effect of the step increase is attached hereto. Schedule SE.1 sets forth the difference between the combined rate elements (that is, those designed to generate the step revenue requirement) and the permanent rate elements. This difference is then applied to the billing parameters on Schedule SE.2. As shown on Page 5 of Schedule SE.2, the movement from the permanent rate increase to the step rate increase generates an additional \$887,494 of revenue.

PENNICHUCK WATER WORKS, INC. MERRIMACK, NEW HAMPSHIRE

SCHEDULES TO ACCOMPANY

ADDENDUM TO

REPORT ON

COST OF SERVICE ALLOCATIONS

AND WATER RATE DESIGN

by

John R. Palko, Principal AUS Consultants 155 Gaither Drive, Suite A Mt. Laurel, NJ 08054

April 2010

PENNICHUCK WATER WORKS, INC.

RATE DESIGN FOR

TEMPORARY RATE INCREASE

Pennichuck Water Works, Inc. Temporary Rate Increase

Allocation of Temporary Rate Revenue

	Proposed Permanent Rates		Temporary Revenue			
		Amo	ount		<u>%</u>	Requirement
Total Customer Charge Revenue	\$	9,366	6,018.96		33.41%	8,913,971
Total Volume Charge Revenue	0	13,851	1,652.48		49.41%	13,183,106
Total Contract Fixed Fee Revenue		856	660.00		3.06%	856,660
Total Private Fire Revenue		1,005	5,371.28		3.59%	956,847
Total Munipical Fire Revenue		2,952	2,886.61		10.53%	2,810,366
Grand Total Proposed Revenue		28,032	2,589.33	1	00.00%	\$ 26,720,950
Net Water Revenue Requirement	\$ 2	28,031	,601.00			
Difference	\$		988.33 0.004%			

Pennichuck Water Works, Inc. Temporary Rate Increase Rate Design

Total Municipal Fire Protection Rev Regmt	2,810,366

Present Municipal Fire Protection Revenue 2,690,258

Present revenue is less than the cost of service indications. An increase of about 4.5% will be developed for municipal fire protection.

Rate <u>Element</u>	Present Monthly <u>Rate</u>	Temporary Monthly <u>Rate</u>	% Increase
Hydrant	\$ 17.16	\$ 17.93	4.49 %
Inch-Foot	0.11828	0.12356	4.46 %

Pennichuck Water Works, Inc. Temporary Rate Increase Rate Design

Private Fire Protection

Total Private Fire Protection Rev Reqmt	956,847

Present Private Fire Protection Revenue 1,005,371

Since Allocated Costs are less than present rate revenues, no changes will be proposed for Private Fire rates.

<u>Size</u>	Present Monthly <u>Charge</u>	Temporary Monthly <u>Charge</u>	Increase
2"	55.70	55.70	0.00 %
4"	55.70	55.70	0.00 %
6"	93.46	93.46	0.00 %
8"	137.60	137.60	0.00 %
10"	137.60	137.60	0.00 %
12"	137.60	137.60	0.00 %
16"	137.60	137.60	0.00 %

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Pennichuck Water Works, Inc. Temporary Rate Increase Rate Design

Customer Charges

Total for Customer Charge	8,913,971
Rate Design Adjustment	179,974

Increase Required

Net for Customer Charges

Present Customer Charge Revenue

6,751,420

29.37 %

8,733,997

Meter <u>Size</u>	Present Monthly <u>Charge</u>	Temporary Monthly <u>Charge</u>	Increase
5/8"	18.18	23.51	29.32 %
3/4"	26.16	33.84	29.36 %
1"	42.13	54.50	29.36 %
1 1/2"	82.10	106.21	29.37 %
2"	134.41	173.89	29.37 %
3"	246.48	318.87	29.37 %
4"	406.51	525.90	29.37 %
6"	806.63	1,043.54	29.37 %
8"	1,286.90	1,664.86	29.37 %
10"	1,847.05	2,389.53	29.37 %

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Pennichuck Water Works, Inc. Temporary Rate Increase Rate Design

Volumetric Charges	
Net Water Revenue Requirement	26,720,950
Less Proposed Revenues: From Municipal Fire Protection From Private Fire Protection From Customer Charges From Contract Fixed Fees From A-B Carrying Charge	(2,810,468) (1,005,371) (8,706,514) (113,800) (742,860) (647,288)
From A-B Volume Charge Net Required From Volume Charges Present Volume Charge Revenue	(647,288) 12,694,649 12,696,537
Increase Required	(0.01) %

Increase Required

	Present Charge	Proposed Charge	Increase
General Water	2.90	2.900	0.00 %
Anheuser-Busch	1.4956	1.1739	(21.51) %
Hudson	1.8419	1.8419	0.00 %
Milford	1.8249	1.8249	0.00 %

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Pennichuck Water Works, Inc. Summary of Temporary Rates

General Service - Metered Schedule G-M

	Temporary
Meter	Monthly
Size	Charge
5/8"	\$ 23.51
3/4"	33.84
1"	54.50
1 1/2"	106.21
2"	173.89
3"	318.87
4"	525.90
6"	1,043.54
8"	1,664.86
10"	2,389.53
Volumetric Charge	
per 100 cu. ft.	\$ 2.900

per 100 cu. ft.

Municipal Fire Protection Service Schedule FP-M

				M	nporary onthly <u>harge</u>
Each Hydra	nt			\$	17.93
Inch-Foot pe	er year	\$	0.12356		
	Private Fire Protection Schedule FP-				
Connection Size				M	nporary onthly <u>harge</u>
4" or smaller 6" 8" or larger	(\$	55.70 93.46 137.60
	Special Contract	Ser	vice		
<u>Anheuser-B</u>	<u>usch</u> Annual Carrying Chg Volumetric Charge per 100 cu. ft.	\$ \$	742,860 1.1739		
<u>Hudson</u>	Annual Charge Volumetric Charge per 100 cu. ft.	\$ \$	32,800 1.8419		
Milford	Annual Fixed Fee Volumetric Charge	\$	81,000		

\$ 1.8249

per 100 cu. ft.

Pennichuck Water Works, Inc. Calculation of Revenues Under Temporary Rates

General Service - Metered

Residential

Meter <u>Size</u>	Number of Meters	Number of Bills	Т	emporary <u>Rate</u>	Revenue
5/8"	23,188	278,256	\$	23.51	\$ 6,541,798.56
3/4"	325	3,900		33.84	131,976.00
1"	205	2,460		54.50	134,070.00
1 1/2"	131	1,572		106.21	166,962.12
2"	45	540		173.89	93,900.60
3"	19	228		318.87	72,702.36
4"	3	36		525.90	18,932.40
6"	0	0		1,043.54	0.00
8"	0	0		1,664.86	0.00
10"	0	0		2,389.53	0.00
Subtotal	23,916	286,992			\$ 7,160,342.04
	CCFT				
Volume	3,190,170		\$	2.900	\$ 9,251,493.00
Total Reside	ntial Revenue				\$ 16,411,835.04

Commercial

Meter Size	Number of Meters	Number of Bills	Т	emporary Rate		Revenue
5/8"	605	7,260	\$	23.51	\$	170,682.60
3/4"	175	2,100	Ŷ	33.84	¥	71,064.00
1"	255	3,060		54.50		166,770.00
1 1/2"	233	2,796		106.21		296,963.16
2"	150	1,800		173.89		313,002.00
3"	17	204		318.87		65,049.48
4"	2	24		525.90		12,621.60
6"	1	12		1,043.54		12,522.48
8"	0	0		1,664.86		0.00
10"	0	0		2,389.53		0.00
Subtotal	1,438	17,256			\$	1,108,675.32
	CCFT					
Volume	766,150		\$	2.900	\$	2,221,835.00
Total Comme	ercial Revenue				\$	3,330,510.32

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Pennichuck Water Works, Inc. Calculation of Revenues Under Temporary Rates

General Service - Metered

Industrial

Meter Size	Number of Meters	Number of Bills	Т	emporary <u>Rate</u>	Revenue
5/8"	30	360	\$	23.51	\$ 8,463.60
3/4"	17	204		33.84	6,903.36
1"	39	468		54.50	25,506.00
1 1/2"	29	348		106.21	36,961.08
2"	35	420		173.89	73,033.80
3"	13	156		318.87	49,743.72
4"	2	24		525.90	12,621.60
6"	2	24		1,043.54	25,044.96
8"	0	0		1,664.86	0.00
10"	0	0		2,389.53	0.00
Subtotal	167	2,004			\$ 238,278.12
	CCFT				
Volume	222,313		\$	2.900	\$ 644,707.70
Total Industri	ial Revenue				\$ 882,985.82

Municipal

Meter <u>Size</u>	Number of Meters	Number of Bills	Т	emporary <u>Rate</u>	Revenue
5/8"	17	204	\$	23.51	\$ 4,796.04
3/4"	10	120		33.84	4,060.80
1"	16	192		54.50	10,464.00
1 1/2"	27	324		106.21	34,412.04
2"	37	444		173.89	77,207.16
3"	8	96		318.87	30,611.52
4"	2	24		525.90	12,621.60
6"	2	24		1,043.54	25,044.96
8"	0	0		1,664.86	0.00
10"	0	0		2,389.53	0.00
Subtotal	119	1,428			\$ 199,218.12
	CCFT				
Volume	79,953		\$	2.900	\$ 231,863.70
Total Municip	oal Revenue				\$ 431,081.82
Grand Total	GWS Revenue	N.			\$ 21,056,413.00

Pennichuck Water Works, Inc. Calculation of Revenues Under Temporary Rates

Service to Contract Customers

Town of Milford

		٦	Femporary <u>Rate</u>	Revenue
Annual Fixed	Fee	\$	81,000.00	\$ 81,000.00
Volume	CCFT 45,237	\$	1.8249	\$ 82,553.00
Total Milford	Revenue			\$ 163,553.00

Town of Hudson

		1	emporary <u>Rate</u>	Revenue
Annual Dem	and Charge	\$	32,800.00	\$ 32,800.00
Volume	<u>CCFT</u> 143,376	\$	1.8419	\$ 264,084.25
Total Hudsor	n Revenue			\$ 296,884.25

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Anheuser-Busch

Meter Size	Number of Meters	Number of Bills	Te	emporary <u>Rate</u>	Revenue
6"	2	24	\$		\$ -
Volume	<u>CCFT</u> 551,400			1.1739	\$ 647,288.46
Annual Carr	ying Charge		\$7	42,860.00	\$ 742,860.00
Total Anheu	ser-Busch Rev	venue			\$ 1,390,148.46
Grand Total	Contract Reve	enue			\$ 1,850,585.72

Pennichuck Water Works, Inc. Calculation of Revenues Under Temporary Rates

Fire Protection Service

Private Fire Protection

Size	Number	Number of Bills	Te	emporary <u>Rate</u>	Revenue
2"	29	348	\$	55.70	\$ 19,383.60
4 "	105	1,260		55.70	70,182.00
6"	369	4,428		93.46	413,840.88
8"	284	3,408		137.60	468,940.80
10"	6	72		137.60	9,907.20
12"	13	156		137.60	21,465.60
16"	1	12		137.60	1,651.20
Total	807	9,684			\$ 1,005,371.28

Municipal Fire Protection

Size	Number	of Bills	Т	emporary <u>Rate</u>	Revenue
Hydrant	2,468	60	\$	17.93	\$ 531,014.88
Inch-Feet	18,448,150			0.12356	2,279,453.41
Total Munip	ical Fire Reven	nue			\$ 2,810,468.29

Pennichuck Water Works, Inc. Calculation of Revenues Under Temporary Rates

Total Proposed Temporary Rate Revenue

Grand Total GWS Revenue	\$ 21,056,413.00
Grand Total Contract Revenue	\$ 1,850,585.72
Grand Total Private Fire Revenue	\$ 1,005,371.28
Grand Total Munipical Fire Revenue	\$ 2,810,468.29
Grand Total Proposed Revenue	\$ 26,722,838.29
Total Customer Charge Revenue	\$ 8,706,513.60
Total Volume Charge Revenue	\$ 13,343,825.12
Total Contract Fixed Fee Revenue	\$ 856,660.00
Total Private Fire Revenue	\$ 1,005,371.28
Total Munipical Fire Revenue	\$ 2,810,468.29
Grand Total Proposed Revenue	\$ 26,722,838.29
Net Water Revenue Requirement	\$ 26,720,950.00
Difference	\$ 1,888.29 0.007%

PENNICHUCK WATER WORKS, INC.

RATE DESIGN FOR

STEP RATE INCREASE

Pennichuck Water Works, Inc. Combined Rate Increase Combined Permanent and Step Increase Allocation of Combined Rate Revenue

	Proposed Permanent Rates		Combined Revenue			
		Amo	ount		<u>%</u>	Requirement
Total Customer Charge Revenue	\$	9,366	6,018.96		33.41%	9,671,253
Total Volume Charge Revenue		13,851	,652.48	2	49.41%	14,303,071
Total Contract Fixed Fee Revenue		856	660.00		3.06%	856,660
Total Private Fire Revenue		1,005	6,371.28		3.59%	1,038,136
Total Munipical Fire Revenue		2,952	,886.61		10.53%	3,049,120
Grand Total Proposed Revenue	\$	28,032	,589.33	1	00.00%	\$28,918,240
Net Water Revenue Requirement	\$	28,031	,601.00			
Difference	\$		988.33 0.004%			

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Pennichuck Water Works, Inc. Combined Rate Increase Combined Permanent and Step Increase Rate Design

Municipal Fire Protection

Total Municipal Fire Protection Rev Reqmt	3,049,120

Permanent Municipal Fire Protection Revenue 2,952,887

Permanent revenue is less than the allocated amount. An increase of about 3.2% will be developed for municipal fire protection.

Rate <u>Element</u>	Permanent Monthly <u>Rate</u>	Combined Monthly <u>Rate</u>	% Increase
Hydrant	\$ 19.78	\$ 20.42	3.24 %
Inch-Foot	0.12831	0.13249	3.26 %

Pennichuck Water Works, Inc. Combined Rate Increase Combined Permanent and Step Increase Rate Design

Private Fire Protection

Total Private Fire Protection Rev Reqmt	1,038,136

Permanent Private Fire Protection Revenue 1,005,371

Permanent revenue is less than the allocated amount. An increase of about 3.2% will be developed for municipal fire protection.

Size	Permanent Monthly <u>Charge</u>	Combined Monthly <u>Charge</u>	Increase
2"	\$ 55.70	\$ 57.52	3.27 %
4"	55.70	57.52	3.27 %
6"	93.46	96.51	3.26 %
8"	137.60	142.08	3.26 %
10"	137.60	142.08	3.26 %
12"	137.60	142.08	3.26 %
16"	137.60	142.08	3.26 %

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Pennichuck Water Works, Inc. Combined Rate Increase Combined Permanent and Step Increase Rate Design

Customer Charges

Total for Customer Rate Design Adjust			9,671,253 0
Net for Customer C	harges		9,671,253
Permanent Custom	er Charge Rev		9,366,019
r ennanent oustoni	er onarge neve	chue	5,000,015
	Increase Re	quired	3.26 %
Meter	Permanent Monthly	Combined	т
Size	<u>Charge</u>	Monthly Charge	Increase
5/8"	\$ 25.29	\$ 26.11	3.24 %
3/4"	36.41	37.60	3.27 %
1"	58.64	60.55	3.26 %
1 1/2"	114.27	118.00	3.26 %
2"	187.07	193.17	3.26 %
3"	343.05	354.23	3.26 %
. 4"	565.78	584.22	3.26 %
6"	1,122.67	1,159.27	3.26 %
8"	1,791.11	1,849.50	3.26 %
10"	2,570.72	2,654.53	3.26 %

Pennichuck Water Works, Inc. Combined Rate Increase Combined Permanent and Step Increase Rate Design

Volumetric Charges Net Water Revenue Requirement 28,918,240 Less Proposed Revenues: From Municipal Fire Protection (3,048,954) From Private Fire Protection (1,038,146) From Customer Charges (9,670,112) From Contract Fixed Fees (113,800) From A-B Carrying Charge (742,860) From A-B Volume Charge Net Required From Volume Charges 14,304,368 Permanent Volume Charge Revenue 13,851,652 Increase Required 3.27 %

	Permanent Charge	Combined Charge	Increase
General Water	\$ 3.016	\$ 3.115	3.28 %
Anheuser-Busch	1.1739	1.2123	3.27 %
Hudson	1.9154	1.9780	3.27 %
Milford	1.8977	1.9598	3.27 %

Pennichuck Water Works, Inc. Summary of Combined Rates Combined Permanent and Step Increase General Service - Metered Schedule G-M

\$ 3.115

	Combined
Meter	Monthly
Size	Charge
5/8"	\$ 26.11
3/4"	37.60
1"	60.55
1 1/2"	118.00
2"	193.17
3"	354.23
4"	584.22
6"	1,159.27
8"	1,849.50
10"	2,654.53
Volumetric Charge	
0	

per 100 cu. ft.

Municipal Fire Protection Service Schedule FP-M

				M	mbined lonthly tharge
Each Hydra	int			\$	20.42
Inch-Foot p	er year	\$	0.13249		
	Private Fire Protection Schedule FP-	1.1.1.1.1.1			
Connectior Size	1			N	mbined Ionthly <u>harge</u>
4" or smalle 6" 8" or larger					57.52 96.51 142.08
	Special Contract	Ser	vice		
Anheuser-E	Busch Annual Carrying Chg Volumetric Charge	\$	742,860		
	per 100 cu. ft.	\$	1.2123		
<u>Hudson</u>	Annual Charge Volumetric Charge per 100 cu. ft.	\$	32,800 1.9780		
Milford	Annual Fixed Fee	₽ \$			

Volumetric Charge per 100 cu. ft.

\$ 1.9598

Pennichuck Water Works, Inc. Calculation of Revenues Under Combined Rates Combined Permanent and Step Increase General Service - Metered

Residential

Meter Size	Number of Meters	Number of Bills	C	Combined Rate	Revenue
5/8"	23,188	278,256	\$	26.11	\$ 7,265,264.16
3/4"	325	3,900		37.60	146,640.00
1"	205	2,460		60.55	148,953.00
1 1/2"	131	1,572		118.00	185,496.00
2"	45	540		193.17	104,311.80
3"	19	228		354.23	80,764.44
4"	3	36		584.22	21,031.92
6"	0	0		1,159.27	0.00
8"	0	0		1,849.50	0.00
10"	0	0		2,654.53	0.00
Subtotal	23,916	286,992			\$ 7,952,461.32
Volume	<u>CCFT</u> 3,190,170		\$	3.115	\$ 9,937,379.55
Total Reside	ntial Revenue				\$ 17,889,840.87

Commercial

Meter <u>Size</u> 5/8" 3/4" 1" 1 1/2" 2" 3"	Number of Meters 605 175 255 233 150 17	Number of Bills 7,260 2,100 3,060 2,796 1,800 204	\$ Combined <u>Rate</u> 26.11 37.60 60.55 118.00 193.17 354.23	\$ Revenue 189,558.60 78,960.00 185,283.00 329,928.00 347,706.00 72,262.92
4"	2	24	584.22	14,021.28
6"	1	12	1,159.27	13,911.24
8"	0	0	1,849.50	0.00
10"	0	0	2,654.53	0.00
Subtotal	1,438	17,256		\$ 1,231,631.04
Volume	<u>CCFT</u> 766,150		\$ 3.115	\$ 2,386,557.25
Total Comm	ercial Revenue			\$ 3,618,188.29

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Pennichuck Water Works, Inc. Calculation of Revenues Under Combined Rates Combined Permanent and Step Increase General Service - Metered

Industrial

Meter <u>Size</u>	Number of Meters	Number of Bills	(Combined <u>Rate</u>	Revenue
5/8"	30	360	\$	26.11	\$ 9,399.60
3/4"	17	204		37.60	7,670.40
1"	39	468		60.55	28,337.40
1 1/2"	29	348		118.00	41,064.00
2"	35	420		193.17	81,131.40
3"	13	156		354.23	55,259.88
4"	2	24		584.22	14,021.28
6"	2	24		1,159.27	27,822.48
8"	0	0		1,849.50	0.00
10"	0	0		2,654.53	0.00
Subtotal	167	2,004			\$ 264,706.44
	CCFT				
Volume	222,313		\$	3.115	\$ 692,505.00
Total Indust	rial Revenue				\$ 957,211.44

Municipal

Meter <u>Size</u>	Number of Meters	Number of Bills	(Combined <u>Rate</u>	Revenue
5/8"	17	204	\$	26.11	\$ 5,326.44
3/4"	10	120		37.60	4,512.00
1"	16	192		60.55	11,625.60
1 1/2"	27	324		118.00	38,232.00
2"	37	444		193.17	85,767.48
3"	8	96		354.23	34,006.08
4"	2	24		584.22	14,021.28
6"	2	24		1,159.27	27,822.48
8"	0	0		1,849.50	0.00
10"	0	0		2,654.53	0.00
Subtotal	119	1,428			\$ 221,313.36
	CCFT				
Volume	79,953		\$	3.115	\$ 249,053.60
Total Municip	al Revenue				\$ 470,366.96
Grand Total	GWS Revenue	e			\$ 22,935,607.55

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Pennichuck Water Works, Inc. Calculation of Revenues Under Combined Rates Combined Permanent and Step Increase Service to Contract Customers

Town of Milford

		Combined Rate	Revenue
Annual Fixed	Fee	\$ 81,000.00	\$ 81,000.00
Volume	CCFT 45,237	\$ 1.9598	\$ 88,655.47
Total Milford	Revenue		\$ 169,655.47

Town of Hudson

		(Combined <u>Rate</u>	Revenue
Annual Dema	and Charge	\$	32,800.00	\$ 32,800.00
Volume	<u>CCFT</u> 143,376	\$	1.9780	\$ 283,597.73
Total Hudson	Revenue			\$ 316,397.73

Anheuser-Busch

Meter <u>Size</u>	Number of Meters	Number of Bills	C	ombined <u>Rate</u>	Revenue
6"	2	24	\$	-	\$ -
Volume	<u>CCFT</u> 551,400			1.2123	\$ 668,462.22
Annual Carr	ying Charge		\$ 7	42,860.00	\$ 742,860.00
Total Anheu	ser-Busch Rev	/enue			\$ 1,411,322.22
Grand Total	Contract Reve	enue			\$ 1,897,375.42

Pennichuck Water Works, Inc. Calculation of Revenues Under Combined Rates Combined Permanent and Step Increase Fire Protection Service

Private Fire Protection

rivate Fire	Protection				
Size	Number	Number of Bills	C	ombined <u>Rate</u>	Revenue
2"	29	348	\$	57.52	\$ 20,016.96
4 "	105	1,260		57.52	72,475.20
6"	369	4,428		96.51	427,346.28
8"	284	3,408		142.08	484,208.64
10"	6	72		142.08	10,229.76
12"	13	156		142.08	22,164.48
16"	1	12		142.08	1,704.96
Total	807	9,684			\$ 1,038,146.28

Municipal Fire Protection

Municiparri	ie Piolecilon		C	Combined	
Size	Number	of Bills		Rate	Revenue
Hydrant	2,468	60	\$	20.42	\$ 604,758.72
Inch-Feet	18,448,150			0.13249	2,444,195.39
Total Munip	ical Fire Reven	ue			\$ 3,048,954.11

Pennichuck Water Works, Inc. Calculation of Revenues Under Combined Rates Combined Permanent and Step Increase Total Proposed Combined Rate Revenue

Grand Total GWS Revenue	\$ 22,935,607.55
Grand Total Contract Revenue	\$ 1,897,375.42
Grand Total Private Fire Revenue	\$ 1,038,146.28
Grand Total Munipical Fire Revenue	\$ 3,048,954.11
Grand Total Proposed Revenue	\$ 28,920,083.36
Total Customer Charge Revenue	\$ 9,670,112.16
Total Volume Charge Revenue	\$ 14,306,210.81
Total Contract Fixed Fee Revenue	\$ 856,660.00
Total Private Fire Revenue	\$ 1,038,146.28
Total Munipical Fire Revenue	\$ 3,048,954.11
Grand Total Proposed Revenue	\$ 28,920,083.36
Net Water Revenue Requirement	\$ 28,918,240.00
Difference	\$ 1,843.36 0.006%

PENNICHUCK WATER WORKS, INC. SCHEDULES ILLUSTRATING EFFECT OF STEP INCREASE

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Pennichuck Water Works, Inc. Summary of Combined Rates Combined Permanent and Step Increase General Service - Metered Schedule G-M

Meter	Combine Monthly	d Permanent Monthly	Effect of Step
Size	Charge	Charge	Increase
5/8"	\$ 26.11	\$ 25.29	\$ 0.82
3/4"	37.60	36.41	1.19
1"	60.55	58.64	1.91
1 1/2"	118.00	114.27	3.73
2"	193.17	187.07	6.10
3"	354.23	343.05	11.18
4"	584.22	565.78	18.44
6"	1,159.27	1,122.67	36.60
8"	1,849.50	1,791.11	58.39
10"	2,654.53	2,570.72	83.81

Volumetric Charge per 100 cu. ft.

Municipal Fire Protection Service

\$ 3.115 \$ 3.016 \$ 0.099

Schedule FP-M

	Combined Permanent Monthly Monthly <u>Charge</u> <u>Charge</u> h Hydrant \$ 20.42 \$ 19.78		Effect of Step Increase			
Each Hydrant			\$	19.78	\$	0.64
Inch-Foot per year	\$0	.13249	\$ 1	0.12831	\$0.	.00418

Private Fire Protection Service Schedule FP-NM

Connection Size	N	Combined Monthly <u>Charge</u>		ermanent Aonthly Charge	Effect of Step Increase	
4" or smaller	\$	57.52	\$	55.70	\$	1.82
6"		96.51		93.46		3.05
8" or larger		142.08		137.60		4.48

Special Contract Service

Anheuser-Busch Annual Carrying Chg	\$ 742,860	\$ 742,860	\$ -
Volumetric Charge			
per 100 cu. ft.	\$ 1.2123	\$ 1.1739	\$ 0.0384
Hudson			
Annual Charge	\$ 32,800	\$ 32,800	\$ -
Volumetric Charge			
per 100 cu. ft.	\$ 1.9780	\$ 1.9154	\$ 0.0626
Milford			
Annual Fixed Fee	\$ 81,000	\$ 81,000	\$ -
Volumetric Charge			
per 100 cu. ft.	\$ 1.9598	\$ 1.8977	\$ 0.0621

Pennichuck Water Works, Inc. Calculation of Revenues Under Combined Rates Combined Permanent and Step Increase General Service - Metered

Residential

Meter Size	Number of Meters	Number of Bills	C	combined <u>Rate</u>	Revenue
5/8"	23,188	278,256	\$	0.82	\$ 228,169.92
3/4"	325	3,900		1.19	4,641.00
1"	205	2,460		1.91	4,698.60
1 1/2"	131	1,572		3.73	5,863.56
2"	45	540		6.10	3,294.00
3"	19	228		11.18	2,549.04
4"	3	36		18.44	663.84
6"	0	. 0		36.60	0.00
8"	0	0		58.39	0.00
10"	0	0		83.81	0.00
Subtotal	23,916	286,992			\$ 249,879.96
	CCFT				
Volume	3,190,170		\$	0.099	\$ 315,826.83
Total Reside	ntial Revenue				\$ 565,706.79

Commercial

Meter Size	Number of Meters	Number of Bills	C	Combined Rate	Revenue
5/8"	605	7,260	\$	0.82	\$ 5,953.20
3/4"	175	2,100		1.19	2,499.00
1"	255	3,060		1.91	5,844.60
1 1/2"	233	2,796		3.73	10,429.08
2"	150	1,800		6.10	10,980.00
3"	17	204		11.18	2,280.72
4"	2	24		18.44	442.56
6"	1	12		36.60	439.20
8"	0	0		58.39	0.00
10"	0	0		83.81	0.00
Subtotal	1,438	17,256			\$ 38,868.36
	CCFT				
Volume	766,150		\$	0.099	\$ 75,848.85
Total Comm	ercial Revenue				\$ 114,717.21

Pennichuck Water Works, Inc. Calculation of Revenues Under Combined Rates Combined Permanent and Step Increase General Service - Metered

Industrial

Meter Size	Number of Meters	Number of Bills	С	ombined <u>Rate</u>		Revenue
5/8"	30	360	\$	0.82	\$	295.20
3/4"	17	204		1.19		242.76
1"	39	468		1.91		893.88
1 1/2"	29	348		3.73		1,298.04
2"	35	420		6.10		2,562.00
3"	13	156		11.18		1,744.08
4"	2	24		18.44		442.56
6"	2	24		36.60		878.40
8"	0	0		58.39		0.00
10"	0	0		83.81		0.00
Subtotal	167	2,004			\$	8,356.92
Volume	<u>CCFT</u> 222,313		\$	0.099	\$	22,008.99
volume	222,313		Ψ	0.035	φ	22,000.00
Total Industr	ial Revenue				\$	30,365.91

Municipal

Meter <u>Size</u>	Number of Meters	Number of Bills	C	Combined Rate	Revenue
5/8"	17	204	\$	0.82	\$ 167.28
3/4"	10	120		1.19	142.80
1"	16	192		1.91	366.72
1 1/2"	27	324		3.73	1,208.52
2"	37	444		6.10	2,708.40
3"	8	96		11.18	1,073.28
4"	2	24		18.44	442.56
6"	2	24		36.60	878.40
8"	0	0		58.39	0.00
10"	0	0		83.81	0.00
Subtotal	119	1,428			\$ 6,987.96
	CCFT				
Volume	79,953		\$	0.099	\$ 7,915.35
Total Municip	al Revenue				\$ 14,903.31
Grand Total	GWS Revenue	e			\$ 725,693.21

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Pennichuck Water Works, Inc. Calculation of Revenues Under Combined Rates Combined Permanent and Step Increase Service to Contract Customers

Town of Milford

		Co	mbined Rate	Revenue
Annual Fixed	Fee	\$	-	\$ -
Volume	<u>CCFT</u> 45,237	\$	0.0621	\$ 2,809.22
Total Milford	Revenue			\$ 2,809.22

Town of Hudson

		Co	mbined <u>Rate</u>	Revenue
Annual Dema	and Charge	\$	-	\$ -
Volume	<u>CCFT</u> 143,376	\$	0.0626	\$ 8,975.34
Total Hudsor	n Revenue			\$ 8,975.34

Anheuser-Busch

Meter <u>Size</u>	Number of Meters	Number of Bills	C	ombined <u>Rate</u>	Revenue
6"	2	24	\$		\$ -
Volume	<u>CCFT</u> 551,400			0.0384	\$ 21,173.76
Annual Carrying Charge					\$ -
Total Anheuser-Busch Revenue					\$ 21,173.76
Grand Total Contract Revenue					\$ 32,958.32

Pennichuck Water Works, Inc. Calculation of Revenues Under Combined Rates Combined Permanent and Step Increase Fire Protection Service

Private Fire Protection

Size	Number	Number of Bills	nbined <u>Rate</u>	Revenue
2"	29	348	\$ 1.82	\$ 633.36
4"	105	1,260	1.82	2,293.20
6"	369	4,428	3.05	13,505.40
8"	284	3,408	4.48	15,267.84
10"	6	72	4.48	322.56
12"	13	156	4.48	698.88
16"	1	12	4.48	53.76
Total	807	9,684		\$ 32,775.00

Municipal Fire Protection

Size	Number	of Bills	C	Combined Rate	Revenue
Hydrant	2,468	60	\$	0.64	\$ 18,954.24
Inch-Feet	18,448,150			0.00418	77,113.27
Total Munip	ical Fire Revenu	le			\$ 96,067.51

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Pennichuck Water Works, Inc. Calculation of Revenues Under Combined Rates Combined Permanent and Step Increase Total Proposed Combined Rate Revenue

Grand Total GWS Revenue	\$ 725,693.21
Grand Total Contract Revenue	\$ 32,958.32
Grand Total Private Fire Revenue	\$ 32,775.00
Grand Total Munipical Fire Revenue	\$ 96,067.51
Grand Total Proposed Revenue	\$ 887,494.04
Total Customer Charge Revenue	\$ 304,093.20
Total Volume Charge Revenue	\$ 454,558.33
Total Contract Fixed Fee Revenue	\$ •
Total Private Fire Revenue	\$ 32,775.00
Total Munipical Fire Revenue	\$ 96,067.51
Grand Total Proposed Revenue	\$ 887,494.04

		Total Budgeted	Amount of Total	
		Amount	Budgeted in	Used and
	Project Description	(including O/H)	2010 incl O/H	Useful Date
2009 Operations Carryover Projects				
	Subtotal 2009 Carryover Projects	-		
New 2010 Operations Projects				
12 New Services	12 New Services	30.00	30.00	Nov-10
25 Renewed Services	25 Renewed Services	50.00	50.00	Dec-10
4 Hydrants	4 Hydrants	16.00	16.00	Dec-10
4 Valves/10 Bleeders	4 Valves/10 Bleeders	25.00	25.00	Dec-10
150 New Meters (growth)	150 New Meters (growth)	32.25	32.25	Dec-10
Paving	Paving	110.00	110.00	Dec-10
1000 Meter Rebuilds	1000 Meter Rebuilds	75.00	75.00	Dec-10
1207 Meters for meter exchanges	1207 Meters for meter exchanges	90.50	90.50	Dec-10
Pipe Saws (3)	Pipe Saws (3)	6.00	6.00	Feb-10
Metal Detectors (5)	Metal Detectors (5)	6.00	6.00	Feb-10
Emergency Pump replacement	Emergency Pump replacement	35.00	35.00	May-10
Backhoe Replacement	Backhoe Replacement	125.00	125.00	Mar-10
Utility Truck/Crane Truck	Utility Truck/Crane Truck	65.00	65.00	Jun-10
Service truck replacement (2)	Service truck replacement (2)	90.00	90.00	Jul-10
Service Van Replacement(2)	Service Van Replacement(2)	60.00	60.00	Jul-10
Tools for service vehicles	Tools for service vehicles	8.00	8.00	Jul-10
Fleet Diagnostic equipment	Fleet Diagnostic equipment	15.00	15.00	Jul-10
Replacement Grund-O-Mat	Replacement Grund-O-Mat	12.00	12.00	Jul-10
2 Replacement D-5 Tapping machines	2 Replacement D-5 Tapping machines	6.00	6.00	Jul-10
6 Replacement Backflow Test Units	6 Replacement Backflow Test Units	4.00	4.00	Jul-10
6 Cordless Sawzall units	6 Cordless Sawzall units	1.20	1.20	Jul-10
Replacement Confined spacemonitors (3)	Replacement Confined spacemonitors (3)	7.50	7.50	Mar-10
Electric Blower for confined space evacuation	Electric Blower for confined space evacuation	2.00	2.00	Mar-10
Replacement tri-pod and harness for confined space entry	Replacement tri-pod and harness for confined space entry	6.00	6.00	Jun-10
Replacement Pressure recorders (2)	Replacement Pressure recorders (2)	3.00	3.00	Jun-10
Neptune flow recorder	Neptune flow recorder	4.00	4.00	Jul-10
Power broom	Power broom	1.00	1.00	Jul-10
Valve Turner extension	Valve Turner extension	16.00	16.00	Apr-10
2 Traffic Advisory signs for Foreman Trucks	2 Traffic Advisory signs for Foreman Trucks	4.00	4.00	Mar-10
Construction Sign package	Construction Sign package	3.00	3.00	Jul-10
Arrow Board for Vac Trailer	Arrow Board for Vac Trailer	3.00	3.00	Jul-10
2 Replacement Generators	2 Replacement Generators	6.00	6.00	Jul-10

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1 Dewatering Pump Purchase small 2 1/2" Grund-O-Mat Plate Compactor Small Trench Box Replacement turner for B-101 tapping machine Replacement Tracks for excavator 87.5 Hydrant painting for NFPA coding, Nashua	Project Description 1 Dewatering Pump Purchase small 2 1/2" Grund-O-Mat Plate Compactor Small Trench Box Replacement turner for B-101 tapping machine Replacement Tracks for excavator 87.5 Hydrant painting for NFPA coding, Nashua	Total Budgeted Amount (including O/H) 3.00 9.00 8.50 5.00 3.50 3.00 3.00 6.00	Amount of Total Budgeted in 2010 incl O/H 3.00 9.00 8.50 5.00 3.50 3.00 6.00	Used and Useful Date Jul-10 Jul-10 Jul-10 Feb-10 Feb-10 Jul-10 Sep-10
	Subtotal New 2010 Projects	955.45	955.45	
	Total 2010 Operations Capital Projects Budget	955.45	955.45	
2009 Engineering Carryover Projects Cross Street Summer Street Jefferson Street Shattuck Street Norton St Lessard Street Holman & Grove Street Lock Street Armory South Main Street Haines Street Fletcher Street Glen Ridge Ashley Commons E.Derry Water Supply	Rehab 1875 of 6" CI pipe & Replace 93 of 2" CL pipe Rehab 606 of 6" CI pipe & Replace 260' of 6" CI Rehab 172 of 6" CI pipe & Replace 844 of 4" CI pipe Rehab 540' of 6" CI pipe Rehab 330' of 6" DI Pipe & replace 435' of 4" with 6" Replace 470' of 4" CI pipe Replace 354' of 2" CL pipe Rehab 2450' of 6" CI Pipe New Pump Station Main Replacement Paving on Main Street Additional Tank and Tank Repair Paving East Derry Study	195.00 118.00 194.00 41.00 178.00 114.00 272.00 275.00 56.00 8.50 98.00 450.00 10.00	195.00 118.00 194.00 41.00 178.00 114.00 146.00 272.00 275.00 56.00 8.50 98.00 75.00 10.00	Jun-10 Jul-10 Aug-10 Sep-10 Aug-10 Oct-10 Oct-10 May-10 May-10 Jul-10 May-10 Jul-10
	Subtotal 2009 Carryover Projects	2.155.50	1,780.50	
New Eingeering 2010 Projects Nashua New Vehicle Didgital Cameras for inspectors Amherst Street Beech Street Wilder Street Arlington Street Batchelder Avenue Palm Street	Survey Work for new main replacements in 2011 Replacement vehicle for unit 31 Three digital Cameras @ S200 Each Replace 801 LF of 6" CI pipe with 12" DIPCL Replace 848 LF of 6" CI pipe with 8" DIPCL Replace 658 LF of 4" CI & 69 LF of 6" CI pipe with 8" DIPCL Replace 1430 LF of 6" CI pipe with 12" DIPCL Replace 120 LF of 1.5" steel pipe with 2" HDPE Replace 354 LF of 4" CI & 1293 LF of 6" CI pipe with 8" DIPCL	30.00 31.00 0.60 228.00 123.00 113.00 259.00 14.00 255.00	31.00 0.60 228.00 123.00 113.00 259.00 14.00	throughout the year Feb-10 Jun-10 Jun-10 Jul-10 Jul-10 Jul-10 Aug-10

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	Project Description	Total Budgeted Amount (including O/H)	Amount of Total Budgeted in 2010 incl O/H	Used and Useful Date
Late Oracle		and the second s		
Lake Street	Replace 1130 LF of 6" CI pipe with 12" DIPCL	204.00	204.00	Aug-10
E.Derry Water Main (Part 1)	E. Derry Fire Station to Drew Woods	1.088.10	1,088.10	Jul-10
E.Derry Water Main (Part 1)	Booster Station	110.00	110.00	Jul-10
E.Derry Water Main (Part 1)	Chloramination - Dechloramination Eval	20.00	20.00	Jul-10
HI & LO Well Renovation	HI & LO Well Renovation	45.00	45.00	May-10
Taylor Falls Pump Station	Building Expansion & Pump Addition	155.00	155.00	Jun-10
Souhegan Woods Water Supply	Groundwater Rule Compliance	50.00	50.00	Sep-10
Tinker Road BMP	NHDES Stormwater treatment project	350.00	350.00	Aug-10
Tinker Road BMP Grant Funds	EPA 319 Source water protection grant	(187.00)	(187.00)	Oct-10
E.Derry Station Demolition	Demolish Two Unused Stations	40.00	40.00	Jun-10
Salmon Brook Dam	Rebuild Dam to NHDES specifications	368.00	368.00	Oct-10
	Subtotal New 2010 Projects	3,296.70	3,296.70	
	Total 2010 Engineering Capital Projects Budget	5,452.20	5.077.20	
2009 Water Supply Carryover Projects WTP Capital Improvements	WTP Capital Improvements Subtotal 2009 Carryover Projects	50.00	50.00	2/28/09
New Water Supply 2010 Projects				
Replace Vehicle #36	Replace Vehicle #36	32.00	32.00	3/1/10
Replace Vehicle #39	Replace Vehicle #39	32.00	32.00	3/1/10
Replace Vehicle #45	Replace Vehicle #45	32.00	32.00	3/1/10
Replace Vehicle #61	Replace Vehicle #61	40.00	40.00	3/1/10
Replace Vehicle #62	Replace Vehicle #62	40.00	40.00	3/1/10
Replace Vehicle #66	Replace Vehicle #66	40.00	40.00	3/1/10
Booster/Well Pump Replacements	Booster/Well Pump Replacements	40.00		Throughout the year
Treatment Media Replacement	Treatment Media Replacement	20.00	20.00	Throughout the year
Repair Roof of Dean and Main Station	Repair Roof of Dean and Main Station	40.00	40.00	6/1/10
Confined Space Entry Equipment	Confined Space Entry Equipment	6.00	6.00	4/1/10
Treatment System Installations	Treatment System Installations	12.00		Throughout the year
New laboratory Equipment	New laboratory Equipment	5.00		Throughout the year
Replace Roof, Timberline Drive pump station	Replace Roof, Timberline Drive pump station	5.00	5.00	4/30/10
install Generator Redfield	install Generator Redfield	59.00		Throughout the year
Install Generator Great Bay	Install Generator Great Bay	59.00		Throughout the year
Install Iron/Manganese treatment Great Bay	Install Iron/Manganese treatment Great Bay	75.00		Throughout the year
Install Generator Woodlands	Install Generator Woodlands	59.00		Throughout the year
Install Generator Valleyfields	Install Generator Valleyfields	59.00	59.00	Throughout the year

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			Amount of Total	
		Amount	Budgeted in	Used and
	Project Description	(including O/H)	2010 incl O/H	Useful Date
Miscellaneous security improvements at remote sites	Miscellaneous security improvements at remote sites	10.00	10.00	Throughout the year
Paint walls and ceiling in Snow Station	Paint walls and ceiling in Snow Station	25.00	25.00	Throughout the year
Twin Ridge Water Supply	connect rolling hills well to twin ridge system	47.50	47.50	4/30/10
Harris Dam Repairs Engineering	Harris Dam Repairs Engineering	25.00	25.00	Throughout the year
	Subtotal New 2010 Projects	762.50	762.50	
	Total 2010 Water Supply Capital Projects Budget	812.50	812.50	
2009 CWS Operations Carryover Projects		I. I	-	ł
<u></u>			-	
	Subtotal 2009 Carryover Projects			
New 2010 Projects				
New Services (2)	New Services (2)	5.00	5.00	Throughout the year
Renewed Services (2)	Renewed Services (2)	4.00	4.00	Throughout the year
Sampling Stations (10)	Sampling Stations (10)	20.00	20.00	Throughout the year
Valves (1)/Bleeders (2)	Valves (1)/Bleeders (2)	7.50	7.50	Throughout the year
New meters (50)	New meters (50)	9.50		Throughout the year
182 Meter Rebuilds	182 Meter Rebuilds	13.60		Throughout the year
61 Meters for meter exchanges	61 Meters for meter exchanges	4.60		Throughout the year
Paving	Paving	15.00	15.00	Throughout the year
	Subtotal New 2010 Projects	79.20	79.20	
	Total 2010 CWS Operations Capital Projects Budget	79.20	79.20	
2009 Accounting Carryover Projects		1	1 -	1
2000 Accounting Carryover Projecto			-	
	Subtotal 2009 Carryover Projects		•]
New Accounting 2010 Projects				
			-	
	Subtotal New 2010 Projects		-	-
	Total 2010 Capital Projects Budget			1
			и. 92	4
2009 HR Carryover Projects			-	
	Subtatal 2000 Carriente Projecto		-	4
	Subtotal 2009 Carryover Projects		-	1

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		Total Budgeted Amount	Amount of Total Budgeted in	Used and
	Project Description	(including O/H)	2010 incl O/H	Useful Date
New HR 2010 Projects				
WTP	5-drawer flat file and base	1.50	1.50	Through out the Year
Administration	Typewriter	0.40		Through out the Year
Administration	Task Chairs	0.70	0.70	Through out the Year
Administration	Lateral File Cabinet	0.50	0.50	Through out the Year
Administration	Compass Upgraded	2.00	2.00	Through out the Year
Administration	Lights and Ballasts	2.00	2.00	Through out the Year
Engineering	Bookcase - J. Boisvert	0.25	0.25	Through out the Year
	Subtotal New 2010 Projects	7.35	7.35	1
	Total 2010 HR Capital Projects Budget	7.35	7.35	1
		Contraction of Contraction of Contraction		3
2009 IS Carryover Projects			-	1
	Upgrade of Customer Revenue collection system to latest]		
Munis Upgrade	version. S\$ Mostly Training	21.00	21.00	
	Upgrade appointment schedule GUI software to Work with Munis			
Clicksoft to Munis GUI Upgrade	Upgrade	27.00	27.00	
	Subtotal 2009 Carryover Projects	48.00	48.00]
New IS 2010 Projects		1		r.
	Backup Strageity change for better performance and increase			
De-duplication	Disater Recovery. Will also reduce Tape storage costs.	77.00	77.00	4/30/10
Anti-Spam Enterprise Software	enterprise level spam protection for workstations	2.40	2.00	2/28/10
BESR - Saturn	Disaster Recovery software	1.00	1.00	2/28/10
Arcserver Backup Licenses	Upgrade server to same version of Backup Software	6.00	6.00	2/28/10
	Implement process to alleviate the tedious task of guaranteeing			
	sample testing requirements			
State Chemical Monitoring interface to LIMS	(dependent on State participation)	15.00	15.00	6/30/10
	Implement the ability for customers to automatically retrieve their			
Contract Contract Contract Contract			10.00	4/20/40
Customer Retrieval of Balances over the phone	account balances over the phone without human intervention Replace switches for greater performance, increased capacity,	12.00	12.00	4/30/10
Network Switch Replacement	redundancy in case of failure.	62.00	62.00	3/31/10
Cisco Wan Appliances - OPS and WTP	3X-6X Increased Bandwidth to OPS and WTP	84.00	84.00	
Synergen Data collection in the field	Ability to collect Time, Truck and ODC Charges in the field	1 150.00	150.00	
VPN Data Access	Ability to collect time, truck and ODC charges in the field	6.00	6.00	
	Evaluate a replacement product to provide scheduling for the field			
Click Replacement Evaluation	Evaluate a replacement product to provide scheduling for the field	9 5.00	5.00	12/31/10

	Project Description	Total Budgeted Amount (including O/H)	Amount of Total Budgeted in 2010 incl O/H	Used and Useful Date
Virtualization	Hardware and software necessary to start vitrualizing our IT environment in order to help reduce electical and cooling costs. Speed development testing	147.00	147.00	5/31/10
LIMS on Handheld	Electronic collection of LIMS data in the field - handheld hardware		13.00	9/30/10
Various Consulting and Programming	On the fly Consulting and programming	60.00	60.00	Through out the Year
Miscellaneous Hardware	Miscellaneous hardware purchase requests	15.00	15.00	Through out the Year
Miscellaneous Software	Miscellaneous software purchase requests	8.00	8.00	Through out the Year
	Subtotal New 2010 Projects	663.40	663.00	-
	Total 2010 IS Capital Projects Budget	711.40	711.00	
	2009 Carryover Projects - Total PWW	2,253.50	1,878.50	÷
	New 2010 Projects - Total PWW	5,764.60	5,764.20	
	Total Capital Budget - PWW	8,018.10	7,642.70	

WAIVER OF CERTAIN PROVISIONS OF PUC 1600 FILING RULES

(9) Chart of Accounts – No Difference.

WAIVER OF CERTAIN PROVISIONS OF PUC 1600 FILING RULES

(10) Forms 10-K and 10-Q – 2009 and 2008 Form 10-K and Form 10-Q contained in this binder. 2007, 2006 and 2005 Forms 10-K and 10-Q previously filed with Commission in DW 08-073.

Pennichuck Water Works, Inc. Memberships 2930-101-001 For the Year Ended December 31, 2009

Date	Vendor	Description	Employee	Amount
01/07/09	WaterISAC	Subscriber fees	C. Countie	1,000.00
01/14/09	American Water Works Assoc.	Annual Membership Fee	S. Densberger	231.00
01/14/09	American Water Works Assoc	Annual Membership Fee	C. Countie	231.00
01/21/09	Greater Nashua Chamber of Commerce	Annual Dues	S. Densberger	1,156.50
01/31/09	Nat'l Assoc. of Water Companies	Company (PWW) membership	PWW	968.33
01/31/09	NH Water Works Assoc.	Company (PWW) membership	PWW	25.00
02/11/09	American Backflow Prevention	Annual Membership Fee	P. Tedder	72.00
02/25/09	Greater Nashua Chamber of Commerce	2009 State of The City Addr - Member Registration	D. Ware	20.00
02/28/09	Nat'l Assoc. of Water Companies	Company (PWW) membership	PWW	968.33
02/28/09	NH Water Works Assoc.	Company (PWW) membership	PWW	25.00
03/31/09	Nat'l Assoc. of Water Companies	Company (PWW) membership	PWW	968.33
03/31/09	NAWC - NE Chapter	Member Registrations - Spring Membership Mtg	BH/PG/CH/RO/TL/DW	825.00
03/31/09	NH Water Works Assoc.	Company (PWW) membership	PWW	25.00
03/31/09	NE Water Works Assoc.	Annual Membership Fee	J. Boisvert	85.00
04/08/09	Savoie, Mark	NH Society of CPAs - Dues	M. Savoie	278.00
04/15/09	NAWC - NE Chapter	Meeting Registration	S. Densberger	75.00
04/22/09	NAWC - NE Chapter	NE Chapter Dues	B. Hartley	840.00
04/22/09	American Payroll Assoc.	Annual Membership Fee	L. Cassidy	195.00
04/22/09	Water Research Foundation	Annual Membership Fee	D. Ware	3,231.00
	Nat'l Assoc. of Corp. Directors	Annual Membership Fee	D. Montopoli	575.00
04/30/09	Nat'l Assoc. of Water Companies	Company (PWW) membership	PWW	968.33
04/30/09	American Water Works Assoc.	Annual Membership Fee	M. Day	234.00
04/30/09	NH Water Works Assoc.	Company (PWW) membership	PWW	25.00
05/13/09	American Water Works Assoc.	Annual Dues	D. Ware	234.00
05/26/09	Savoie, Mark	Amer. Inst of Certified Public Accountants - Dues	M. Savoie	200.00
05/26/09	American Water Works Assoc.	Annual Membership Fee	M. Day	234.00
05/31/09	Nat'l Assoc. of Water Companies	Company (PWW) membership	PWW	968.33
05/31/09	NH Water Works Assoc./Water Reasearch Found.	Company (PWW) membership	PWW	832.92
05/31/09	American Water Works Assoc.	Annual Membership Fee	D. Ware	229.95 60.00
06/03/09	Manchester Area HR Association	Membership Fee	K. Giotas	
06/16/09	American Water Works Assoc.	Annual Membership Fee	G. Tetley	234.00 234.00
06/16/09	American Water Works Assoc.	Annual Membership Fee	B. Rousseau	200.00
06/24/09	Hoepper, Charlie	AICPA Institute - Membership Fee	C. Hoepper	500.00
06/25/09	Report It	Anonymous Hotline Service - Annual Renewal	PWW	968.33
	Nat'l Assoc. of Water Companies	Company (PWW) membership	PWW	150.00
	Rotary Club of Nashua West	Rotary International - Annual Dues	PWW (S. Densberger)	832.92
06/30/09	NH Water Works Assoc./Water Reasearch Found.	Company (PWW) membership	PWW	970.00
07/01/09	Savoie, Mark	FASB Subscrip & AICPA Membership	M. Savoie	235.00
	Leonard, Thomas	Mass. Society of CPA - Dues	T. Leonard	968.33
	Nat'l Assoc. of Water Companies	Company (PWW) membership	PWW	832.92
07/31/09	NH Water Works Assoc./Water Reasearch Found.	Company (PWW) membership	PWW	65.00
07/31/09	Greater Nashua HR Association	Membership Fee	P. Gorman	225.00
07/31/09	NE Water Works Assoc.	Conference Registration	D.Ware/C.Countie	500.00
	American Water Works Assoc.	Partnership for Safe Water - Membership	C. Countie	968.33
	Nat'l Assoc. of Water Companies	Company (PWW) membership	PWW	832.92
	NH Water Works Assoc./Water Reasearch Found.	Company (PWW) membership	PWW	231.00
	American Water Works Assoc.	Annual Membership Fee	J. Delude	968.33
	Nat'l Assoc. of Water Companies	Company (PWW) membership	PWW PWW	832.92
	NH Water Works Assoc. Water Reasearch Found.	Company (PWW) membership	PWW	968.33
	Nat'l Assoc. of Water Companies	Company (PWW) membership	PWW	832.92
	NH Water Works Assoc./Water Reasearch Found.	Company (PWW) membership	PWW	310.00
	NE Water Works Assoc.	Annual Membership Fee	B. Hartley	85.00
	NE Water Works Assoc.	Annual Membership Fee	PWW	968.33
And a state of the	Nat'l Assoc. of Water Companies	Company (PWW) membership	PWW	807.92
112022-02622-0202-0201	Water Reasearch Found.	Company (PWW) membership	S. Densberger	50.00
	NH Water Works Association	Utility Membership Dues	S. Densberger PWW	968.37
	Nat'l Assoc. of Water Companies	Company (PWW) membership	PWW	808.56
12/31/09	Water Reasearch Foundation	Company (PWW) membership		32,329.45

Pennichuck Water Works, Inc. Meetings & Conventions 2930-100-001 For the Year Ended December 31, 2009

Date	Vendor	Description	Employee	Amount
	American Express	Registration for January NEWWA Meeting	S. Densberger	50.00
	Greater Nashua Chamber of Commerce		DW/SD/BH/BR/TL	150.00
	 Szopa, Todd American Express 	Manchester Area Human Resources Monthly Meeting	K. Giotas	50.00
	American Express	NEWWA Meeting and Training - January AWWA Utility Mgmt Conference - Registration	B. Rousseau S. Densberger	525.00
	American Express	MWUA/NEWWA Conference - Lodging	J. Boisvert	217.33
	Boisvert, John	MWUA/NEWWA Conference - Registration	J. Boisvert	150.00
	Szopa, Todd	Monthly MAHRA Mtg	P.Gorman/K. Giotas	45.00
03/10/09	New England Water Works Assoc	Registration for Spring Joint Regional Conference & Exhibition	32 Attendees	980.00
03/18/09	American Express	Janney Water Industry Summit Conference	D Montopoli	149.20
03/18/09	Montopoli, Duane	Nashua Chamber of Commerce - Mayoral Breakfast Forum	D. Montopoli	20.00
	Szopa, Todd	GNHRA - March Meeting	P.Gorman/K. Giotas	25.00
	Granite State Human Resources	Granite State Human Resources Conference	P.Gorman/K. Giotas	390.00
	American Express	Pre Registration for American Ground Water Trust Meeting	D. Ware	25.00
	American Express	NAWC NE Chapter Mtg - Ogunquit, ME (Lodging)	B. Hartley	405.00 131.57
	Countie, Chris American Express	NEWWA Spring Conference - Lodging	C Countie R. Olivier	131.57
	Szopa, Todd	NE Water Works Association Mtg (NAWC) Monthly MAHRA Mtg	P.Gorman/K. Giotas	80.00
	American Express	NAWC Mtg - Ogunquit, ME (Lodging)	T. Leonard	145.45
	American Express	NENAWC Lodging	BH/CH/PG	31.35
	American Express	Amer. Ground Water Trust Workshop (Lodging & Fee)	J. Boisvert	156.57
	United Way of Greater Nashua	United Way of Greater Nashua - Annual Meeting	B. Rousseau	35.00
	Hoepper, Charlie	NAWC NE Mtg Mileage/Lodging	C. Hoepper	73.71
	Savoia, Mark	SEC Reporting Conference - Washington, DC	M. Savoie	906.86
05/31/09	American Express	Mt. Washington Valley Chamber of Commerce - Business Expo	S. Densberger	238.58
06/26/09	New England Water Works Assoc.	35th Annual Joint CT Section/NEWWA Mtg	S. Densberger	70.00
	New England Water Works Assoc.	2009 Joint Regional Spring Conference & Exhibition	PWW	150.00
	Szopa, Todd	Monthly MAHRA Mtg	P.Gorman/K. Giotas	45.00
	New England Water Works Assoc.	128th Annual Conference	DW/SD/BR/JB/CC	1,600.00
	American Express	NEWWA Annual Conference	D.Ware/C. Countie	542.00
	American Express	NEWWA Annual Conference - Lodging	J. Boisvert D. Montopoli	328.00 60.00
	American Express American Express	NACDNE Event - Registrationi NEWWA Conf (Registration/Lodging/Airfare)	S. Densberger	3.033.41
	Densberger, Stephen	AWWA Conference	S. Densberger	40.00
	American Express	NEWWA Annual Mtg - Lodging	S Densberger	214.00
	American Express	NEWWA Conference - Registration	J. Boisvert	95.00
	American Express	NEWWA Conference - Registration	S. Densberger	120.00
	American Express	NAWC Symposium Registration Fees	B Hartley	860.00
08/12/09	Hartley, Bonalyn	NAWC Symposium - Airfare	B. Hartley	284 20
09/15/09	New England Water Works Assoc.	2009 Water Resources Symposium	B. Rousseau/C. Countie	270.00
09/30/09	American Express	National Assoc. of Water Companies Symposium - Registration/Lodging	D. Montopoli	1,128.88
	NH Water Works Associatioin	NH Drinking Water Expo/Trade Show	23 Attendees	720.00
	NAWC - New England Chapter	2009 Fall Conference Registration	BH/PG/CH	900.00
	American Express	NEWWA Annual Expo. & Training	B. Rousseau	1,030.48
	American Express	NEWWA Annual Conference - Lodging	S. Densberger	1,078.86
	American Express American Express	NEWWA Fall Meeting - Lodging	D. Ware/C. Countie J. Boisvert	1,250.80 978.69
	Hartley, Bonalyn	NEWWA Annual Conference - Lodging NAWC Symposium - Airfare/Car	B. Hartley	526.05
	American Express	NAWC Symposium - Lodging	B. Hartley	1,186.28
	Business & Industry Association	BIA Annual Meeting	D. Montopoli/R. Olivier	220.00
	NH Water Works Association	Annual/Technical Meeting	SD/BR/CC/MP	180.00
	Greater Nashua Chamber of Commerce		D. Montopoli/S. Densberger	170.00
	American Express	NEWWA Water Works Symposium - Registration	D. Ware	110.00
10/31/09	Szopa, Todd	Monthly MAHRA Mtg	P.Gorman/K. Giolas	45.00
	Business & Industry Association	BIA Energy Seminar	D. Ware	60.00
	NH Water Works Associatioin	NHWWA Drinking Water Issues	10 Allendees	600.00
	NH Water Works Associatioin	NHWWA Operator Training Session	S. Densberger	60.00
	Business & Industry Association	"Meet the Commissioners" Forum	R. Olivier	500.00
	American Express	NEWWA Symposium Registration	S Densberger	110.00
	American Express Montopoli, Duane	NAWC Mtg - Florida (Lodging/Car)	D. Montopoli D. Montopoli	660.00
	Hoepper, Charlie	2009 NAWC Nat'l Drinking Water Symposium NENAWC 2009 Fall Chapter Meeting	C. Hoepper	311.37
	Szopa, Todd	MAHRA Monthly Meeting	P.Gorman/K. Giotas	20.00
	American Express	NENAWC Chapter Meeting - Newport, RI	B. Hartley/P. Gorman	361.74
	American Express	NY Society of SEC Analysts Conf - Reg Fees and Lodging	D.Montopoli	4,544.23
	American Express	NAWC-NE Mtg - Lodging	S. Densberger	189.36
	Leonard, Thomas	Annual Water Utilities Conference - Local Transportation	T. Leonard	146.00
	American Express	13th Annual Water Utilities Conference - Airfare	T. Leonard	192.20
	Szopa, Todd	GNHRA - Monthly Mtg.	P.Gorman/K. Giotas	60.00
12/31/09	American Express	13th Annual Water Utilities Conference - Lodging	T. Leonard	428.28
12/31/09	American Express	NYC Society of Security Analysts - Lodging	D. Montopoli	531.35
				32,297.19

(12) Recent Management and Depreciation Studies – No recent Management Study has been undertaken by the Company. Latest depreciation study submitted in DW 06-073.

(13) Audits or Studies which Utility has not submitted to Commission - None

		Corporation ors Compensation		Ohanna
For the Twelve Months E	nding December 31, 2008	For the Twelve Months Er	nding December 31, 2009	Shares Beneficially
Officers	Compensation	Officers	Compensation	Owned as of December 31, 2009
Stephen J. Densberger	263,755	Stephen J. Densberger	200,072	51,137
Bonalyn J. Hartley	201,312	Bonalyn J. Hartley	202,171	21,041
Thomas C. Leonard	153,010	Thomas C. Leonard	200,768	6,000
Duane Montopoli	343,838	Duane Montopoli	396,649	41,000
	95,574	William Patterson	-	-
William Patterson	35,574			
William Patterson Donald L. Ware	233,501	Donald L. Ware	215,121	20,286
Donald L. Ware Roland E. Olivier		Roland E. Olivier	215,121 182,527	
Donald L. Ware Roland E. Olivier	233,501 117,377	Roland E. Olivier		
Donald L. Ware Roland E. Olivier * Compensation includes sala	233,501 117,377 ary, bonuses, option awards, defe	Roland E. Olivier erred and other compensation.	182,527	5,400
Donald L. Ware Roland E. Olivier * Compensation includes sala Directors	233,501 117,377 ary, bonuses, option awards, defe Compensation	Roland E. Olivier erred and other compensation. Directors	182,527 Compensation	5,400
Donald L. Ware Roland E. Olivier * Compensation includes sala Directors Joseph Bellavance	233,501 117,377 ary, bonuses, option awards, defe Compensation 16,234	Roland E. Olivier erred and other compensation. Directors Joseph Bellavance	182,527 Compensation 18,700	5,400
Donald L. Ware Roland E. Olivier * Compensation includes sala Directors Joseph Bellavance Stephen Bolander Janet M. Hansen	233,501 117,377 ary, bonuses, option awards, defe Compensation 16,234 18,333	Roland E. Olivier erred and other compensation. Directors Joseph Bellavance Stephen Bolander	182,527 Compensation 18,700 20,200	5,400 10,300 133
Donald L. Ware Roland E. Olivier * Compensation includes sala Directors Joseph Bellavance Stephen Bolander Janet M. Hansen	233,501 117,377 ary, bonuses, option awards, defe Compensation 16,234 18,333 10,867	Roland E. Olivier erred and other compensation. Directors Joseph Bellavance Stephen Bolander Janet M. Hansen	182,527 Compensation 18,700 20,200 19,000	5,400 10,300 133 3,213
Donald L. Ware Roland E. Olivier * Compensation includes sala Directors Joseph Bellavance Stephen Bolander Janet M. Hansen Robert Keller	233,501 117,377 ary, bonuses, option awards, defe Compensation 16,234 18,333 10,867 22,633	Roland E. Olivier erred and other compensation. Directors Joseph Bellavance Stephen Bolander Janet M. Hansen Robert Keller	182,527 Compensation 18,700 20,200 19,000 23,300	5,400 10,300 133 3,213 1,060
Donald L. Ware Roland E. Olivier * Compensation includes sala Directors Joseph Bellavance Stephen Bolander Janet M. Hansen Robert Keller John Kreick	233,501 117,377 ary, bonuses, option awards, defe Compensation 16,234 18,333 10,867 22,633 21,200	Roland E. Olivier erred and other compensation. Directors Joseph Bellavance Stephen Bolander Janet M. Hansen Robert Keller John Kreick Hannah McCarthy James Murphy	182,527 Compensation 18,700 20,200 19,000 23,300 24,000	20,286 5,400 10,300 133 3,213 1,060 1,288 500
Donald L. Ware Roland E. Olivier * Compensation includes sala Directors Joseph Bellavance Stephen Bolander Janet M. Hansen Robert Keller John Kreick Hannah McCarthy	233,501 117,377 ary, bonuses, option awards, defe Compensation 16,234 18,333 10,867 22,633 21,200 14,134	Roland E. Olivier erred and other compensation. Directors Joseph Bellavance Stephen Bolander Janet M. Hansen Robert Keller John Kreick Hannah McCarthy James Murphy Martha O'Neil	182,527 Compensation 18,700 20,200 19,000 23,300 24,000 15,400 20,500 17,800	5,400 10,300 133 3,213 1,060 1,288 500 16,266
Donald L. Ware Roland E. Olivier * Compensation includes sala Directors Joseph Bellavance Stephen Bolander Janet M. Hansen Robert Keller John Kreick Hannah McCarthy James Murphy	233,501 117,377 ary, bonuses, option awards, defe Compensation 16,234 18,333 10,867 22,633 21,200 14,134 17,434	Roland E. Olivier erred and other compensation. Directors Joseph Bellavance Stephen Bolander Janet M. Hansen Robert Keller John Kreick Hannah McCarthy James Murphy	182,527 Compensation 18,700 20,200 19,000 23,300 24,000 15,400 20,500	5,400 10,300 133 3,213 1,060 1,288 500

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Pennichuck Water Works, Inc. Contractual Services over \$50,000 For the Twelve Months Ended December 31, 2009

Name	Address			Amount	Purpose
SORDEN REMINGTON CORP	PO BOX 2573	FALL RIVER	MA	- V2 (2) (2) (2) (2) (2) (3)	Chemical Supplier
CARUS PHOSPHATES, INC.	15111 COLLECTIONS CENTER DR	CHICAGO	IL		Chemical Supplier
CURTIS 1000 - (POSTAGE ONLY)	36 HOLLY DRIVE	NEWINGTON	CT		Postage related to Billing Services
CURTIS 1000 INC	PO BOX 512598	PHILADELPHIA	PA		Billing Services and Supplies
DIRECT INVEST LLC	ONE FEDERAL ST	BOSTON	MA	323,606	Lessor for Office at 25 Manchester Street
LECTRICAL INSTALLATIONS INC	397 WHITTIER HWY		NH		Electrical Services
VERETT J PRESCOTT INC	PO BOX 350002	BOSTON	MA		Inventory Provider - Pipes & Fittings
AY, SPOFFORD & THORNDIKE, LLC	5 BURLINGTON WOODS	BURLINGTON	MA		Construction Services - WTP
SOMEZ AND SULLIVAN ENGINEERS, P.C.	288 GENESEE STREET	UTICA	NY		Engineering Services
SRANITE STATE ANALYTICAL INC	22 MANCHESTER RD RT 28	DERRY	NH		Laboratory Services - Water Analysis
ARCROS CHEMICALS INC	PO BOX 74583	CHICAGO	IL		Chemical Supplier
HARVARD PILGRIM HEALTH CARE OF NE	PO BOX 970050	BOSTON	MA		Health Care Benefits Provider
HOOKSETT PAVING COMPANY INC.	6 WEST STEARNS AVE.	HOOKSETT	NH		Construction Services
UDSON PAVING INC	19 BARRETTS HILL ROAD	HUDSON	NH		Construction Services
TYDROSOURCE ASSOCIATES, INC.	50 WINTER STREET, PO BOX 609	ASHLAND	NH		Water Testing Services
IAMES S. PISCOPO GENERAL CONTRACTOR, INC	PO BOX 130	WINNISQUAM	NH		Construction Services
ICI JONES CHEMICALS, INC.	DEPARTMENT AT 952958	ATLANTA	GA		Chemical Supplier
MANCHESTER WATER WORKS	281 LINCOLN STREET	MANCHESTER	NH		Bulk Water Provider
MASSMUTUAL FINANCIAL GROUP - PENSION	ATTN: DON EDWARDS	SPRINGFIELD	MA		Retirement Benefits Provider
MERRIMACK VILLAGE DISTRICT	2 GREENS POND RD.	MERRIMACK	NH		Bulk Water Provider
NORTHEAST DELTA DENTAL	PO BOX 9566	MANCHESTER	NH		Dental Care Benefits Provider
PARK CONSTRUCTION CORP	PO BOX 600	FITZWILLIAM	NH		Construction Services
PRELOAD INC	60 COMMERCE DRIVE	HAUPPAUGE	NY		Construction Services
PUBLIC SERVICE CO OF NH	P.O. BOX 360	MANCHESTER	NH		Electricity Provider
R E PRESCOTT COMPANY INC	10 RAILROAD AVE PO BOX 339	EXETER	NH		Inventory Provider - Equipment
RH WHITE CONSTRUCTION CO	41 CENTRAL ST	AUBURN	MA		Construction Services
ROBERT PIKE CONSTRUCTION INC	PO BOX 5507	SALISBURY	MA		Construction Services
TI SALES INC	36 HUDSON RD	SUDBURY	MA		Inventory Provider - Meters
TROUPE WATER SERVICES, LLC	P.O. BOX 4402	WINDHAM	NH	the second second second	Meter Services
TYLER TECHNOLOGIES, INC	MUNIS DIVISION	DALLAS	TX		Billing Systems Provider
UNUM LIFE INSURANCE CO OF AMERICA	PO BOX 406990	ATLANTA	GA		Life, AD&D, STD Insurance Provider
VELLANO BROS. INC	7 HEMLOCK STREET	LATHAM	NY	56,220	Inventory Provider - Hydrants
WATER WORKS SUPPLY CORP	PO BOX 51357	BOSTON	MA		Inventory Provider - Equipment
WRIGHT EXPRESS	FLEET FUELING	CAROL STREAM	IL	186,637	Fuel Provider

(17) Assets and Cost Allocations – we anticipate that no non-utility assets or operations will be included in the Company's financial statements for the test year.

(18) Balance Sheet and Income Statements – The statements have either been filed previously with the Commission or will be filed as a part of the Company's rate case filing.

Pennichuck Water Works Corporation Statements of Operations

					3 Month	s Ended				
	12/31/2006	12/31/2007	3/31/2008	6/30/2008	9/30/2008	12/31/2008	3/31/2009	6/30/2009	9/30/2009	12/31/2009
Water Revenues	\$4,636,754	\$ 5,080,194	\$4,702,968	\$ 5,586,518	\$ 6,086,168	\$ 5,351,083	\$4,785,783	\$5,718,490	\$7,169,882	\$ 5,413,805
Other	189,736	113,775	74,854	114,699	91,009	90,024	56,324	273,888	(111,219)	96,296
Total Revenues	4,826,489	5,193,969	4,777,822	5,701,217	6,177,177	5,441,107	4,842,107	5,992,379	7.058,663	5,510,102
Total Nevendes	4,020,400		4,111,022			0,441,107	4,042,107		7,000,000	3,310,102
Operating Expenses:										
Production	826,326	819,357	800,766	947,747	1,129,530	848,388	804,441	902,819	966,653	730,983
Trans, Distrib and Engineering	439,420	458,563	458,536	474,427	474,656	459,993	465,984	559,900	409,636	473,947
Customer Acct	116,907	117,253	80,595	69,177	88,127	112,096	102,861	119,824	95,498	116,792
Admin & General	1,429,395	1,546,736	1,488,912	1,383,845	1,228,471	1,679,463	1,549,305	1,484,301	1,453,472	1,619,823
Interdiv Mgt Fee	(302,000)	(305,994)	(274,803)	(398,242)	(300,903)	(381,484)	(288,054)	(369,759)	(387,526)	(386,348)
	2,510,048	2,635,915	2,554,005	2,476,953	2,619,881	2,718,456	2,634,536	2.697,084	2,537,733	2,555,196
Depreciation/Amort	809,699	898,098	941,385	959,512	962,794	983,508	988,760	959,297	950,448	993,542
Amort Exp: CIAC	(106,443)	(116,514)	(116,911)	(117,206)	(117, 958)	(122,918)	(120,313)	(120,520)	(115,825)	(123,728)
Gain on Disposition of Utility Prop	-		-	-	-	(15,000)	-	-	-	-
Taxes other than Income	512,103	491,977	583,594	710,089	687,047	427,756	745,482	674,357	663,841	883,788
Income Taxes	409,526	332,312	118,349	440,706	552,149	274,807	(39,145)	400,180	943,840	69,809
	4,134,933	4,241,788	4,080,422	4,470,054	4,703,912	4,266,608	4,209,320	4,610,398	4,980,037	4.378.606
Operating Income	691,556	952,181	697,400	1,231,163	1,473,265	1,174,499	632,787	1,381,980	2.078,625	1,131,496
-F										-
Other Income (Exp)	6,784	(39,567)	(1,240)	54,381	-	(4,068)	1,330	~	(534)	(2.112)
AFDUC	(352,426)	(189,819)	(134,457)	(92,176)	(94,055)	(97,298)	(102,965)	(4,403)	(6,797)	-
Interest on LTD	517,592	710,831	742,275	772,538	792,101	752,529	755,983	748,758	747,601	747,363
Interest on Customer Deposits	011,002		-		-	-	-	-	-	-
Interest - Other	(135,621)	(229,634)	(127,451)	(106,899)	(110,281)	(34,667)	(4,173)	419	(301)	(16,223)
Amortization	24,654	33,649	35.358	40,173	43,687	44,338	44,953	44,953	45,013	45,815
	54,199	325,027	515,725	613,636	631,451	664,901	693,798	789,727	785,516	776,954
Net Income (Loss)	\$ 644,141	<u>\$ 587,587</u>	\$ 180,435	\$ 671,909	\$ 841,814	\$ 505,529	<u>\$ (59,681</u>)	\$ 592,253	\$1,292,575	\$ 352,429

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H:\PWW 2010 Rate Case\1604.01 Schedules\2008 & 2009 Qtr PWW Financials #19

Pennichuck Water Works Corporation Statements of Operations

				3 Month	s Ended			
	3/31/2006	6/30/2006	9/30/2006	12/31/2006	3/31/2007	6/30/2007	9/30/2007	12/31/2007
Water Revenues	\$ 3,399,365	\$4,019,308	\$4,603,736	\$4,636,754	\$4,161,934	\$ 5,313,762	\$6,758,039	\$ 5,080,194
Other	73,877	98,517	89,801	189,736	89,713	108,067	154,721	113,775
Total Revenues	3,473,242	4,117,825	4,693,536	4,826,489	4,251,647	5,421,829	6,912,759	5,193,969
Operating Expenses:								
Production	694,584	779,503	920,652	826,326	688,894	839,596	1,102,066	819,357
Trans, Distrib and Engineering	373,805	434,162	433,583	439,420	457,050	432,737	413,841	458,563
Customer Acct	101,441	69,735	73,983	116,907	74,538	54,649	92,592	117,253
Admin & General	1,168,226	1,019,313	1,278,734	1,429,395	1,302,919	1,389,141	1,441,407	1,546,736
Interdiv Mgt Fee	(77,000)	(146,000)	(309,000)	(302,000)	(298,387)	(451,494)	(346,499)	(305,994)
	2,261,056	2,156,713	2,397,953	2,510,048	2,225,014	2,264,629	2,703,408	2,635,915
Depreciation/Amort	719,151	732,942	804,484	809,699	797,997	799,472	795,166	898,098
Amort Exp: CIAC	(86,056)		(86,913)	and the second share the second states	(108,299)	(109,767)	(111,852)	(116,514)
Gain on Disposition of Utility Prop	-	-	1,250	-	-	-	-	-
Taxes other than Income	447,248	473,938	431,656	512,103	536,080	486,670	480,426	491,977
Income Taxes	(29,475)	319,571	388,807	409,526	170,010	629,156	1,067,774	332,312
	3,311,923	3,594,721	3,937,237	4,134,933	3,620,802	4,070,160	4,934,921	4,241,788
Operating Income	161,319	523,104	756,299	691,556	630,845	1,351,669	1,977,838	952,181
operating meenie	101,010		100,200			1,001,000	1,017,000	002,101
Other Income (Exp)	15,460	15,626	14,319	6,784	44,326	635,254	(10,999)	(39,567)
AFDUC	-(130,778)	(267,287)	(243,359)	(352,426)	(55,929)	(76,364)	(125,832)	(189,819)
Interest on LTD	498,039	345,416	651,723	517,592	543,137	542,272	521,706	710,831
Interest on Customer Deposits		-	-		-	-	021,700	110,001
Interest - Other	(191,374)	(72,456)	(272,968)	(135,621)	(97,601)	(88,934)	(83,759)	(229,634)
Amortization	24,980	24,980	24,980	24,654	26,366	26,780	26,779	33,649
	200,867	30,653	160,377	54,199	415,973	403,755	338,894	325,027
	200,007	00000	100,377			403,733	000,004	
Net Income (Loss)	\$ (24,088)	\$ 508,077	\$ 610,241	\$ 644,141	\$ 259,198	\$ 1,583,169	\$ 1,627,945	\$ 587,587

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PENNICHUCI \TER WORKS QUARTERLY STATEMENTS OF INCOME CY 2005

	3 Months Ended 3/31/2005	3 Months Ended 6/30/2005	6 Months Ended 6/30/2005	3 Months Ended 9/30/2005	9 Months Ended 9/30/2005	3 Months Ended 12/31/2005	12 Months Ended 12/31/2005
Water Revenues	\$ 3,413,010	\$ 4,629,437	\$ 8,042,448	4,951,769	12,994,217	\$ 3,700,069	\$ 16,694,286
Other	123,529	94,218	217,748	147,478	365,226	210,409	575,634
Total Revenues	3,536,540	4,723,656	8,260,196	5,099,247	13,359,442	3,910,478	17,269,920
Operating Expenses:							
Production	666,622	719,026	1,385,649	1,039,403	2,425,051	750,452	3,175,503
Trans & Distrib	341,599	165,009	506,608	151,475	658,083	270,456	928,539
Customer Accting	92,113	268,212	360,325	186,800	547,125	195,833	742,959
Admin & General	1,223,493	1,104,514	2,328,007	1,088,616	3,416,623	1,406,145	4,822,768
Interdiv Mgt Fee	(175,000)	(97,000)	(272,000)	(55,000)	(327,000)	(144,000)	(471,000)
	2,148,828	2,159,761	4,308,589	2,411,294	6,719,883	2,478,886	9,198,769
Depreciation/Amort	795,749	628,511	1,424,260	690,332	2,114,592	657,038	2,771,630
Amort Exp: CIAC	(78,315)	(77,550)	(155,865)	(79,438)	(235,303)	(87,911)	(323,214)
Taxes other than Income	483,679	455,176	938,856	454,325	1,393,181	27,142	1,420,323
Income Taxes	(84,040)	474.043	390,003	458,730	848,733	251,296	1,100,029
	3,265,902	3,639,941	6,905,842	3,935,244	10,841,086	3,326,452	14,167,537
Operating Income	270,638	1,083,715	1,354,353	1,164,003	2,518,356	584,027	3,102,383
Other Income (Exp)	13,609	17,019	30,628	8,724	39,351	62,600	101,952
AFDUC	(51,398)	(62,935)	(114,333)	(61,248)	(175,581)	(102,539)	(278,120)
Interest on LTD	361,754	354,089	715,844	357,173	1,073,017	559,246	1,632,264
Interest on Customer Deposits	12,724	-	12,724	0	12,724		12,724
Interest on STD	52,467	42,229	94,696	42,070	136,766	(130,116)	6,650
Amortization	15,978	23,765	39,743	23,609	63,353	6,940	70,292
	391,525	357,149	748,674	361,605	1,110,279	333,531	1,443,810
Net Income	<u>\$ (107,278)</u>	743,585	636,307	811,122	1,447,429	<u>\$ 313,096</u>	\$ 1,760,525

Pennichuck Water Works, Inc. Quarterly Sales Volume Schedule for the Five Years from 2005 through 2009

2005

Ma	rch \$	March Cons.	Ju	ne \$	June Cons.	Se	ptember S	September Cons.	De	cember S	December Cons.	Total S	6	Total Cons.
\$	2,048,290.14	732,662	\$	2,195,773.36	778,104	s	2,927,275.27	1,142,855	s	2,674,616.28	999,763	S	9,845,955.05	3,653,384
S	457,405.28	164,341	\$	504,511.40	182,280	s	713,159.81	289,057	\$	626,277.89	238,542	S	2,301,354.38	874,220
S	358,350.98	277,616	S	384,996,16	299,196	\$	465,684.15	354,569	S	392,784.72	287,730	S	1,601,816.01	1,219,111
S	561,164.85	12,679	S	565,309.73	16,137	s	616,759.63	42,508	S	575,289.64	18,865	S	2,318,523.85	90,189
s	55,858.14	22,685	\$	96,782.26	44,787	Ş	162,929.09	83,360	\$	77,507.19	40,860	S	393,076.68	191,692
\$	3,481,069.39	1,209,983	S	3,747,372.91	1,320,504	S	4,885,807.95	1,912,349	\$	4,346,475.72	1,585,760	S	255,696.18	Unbilled Revenue
												S	(35,757.88)	Abatements
					** 16803	.87	7 anheuser a	adjustment recog	gniz	ed gl in 200	4 in billing 2005	S	13,621.17	Other Adjustments
												\$	16,694,285.44	6,028,596
	\$ \$ \$ \$ \$	\$ 358,350.98 \$ 561,164.85	\$ 2,048,290.14 732,662 \$ 457,405.26 164,341 \$ 358,350.98 277,616 \$ 561,164.85 12,679 \$ 55,858.14 22,685	\$ 2,048,290.14 732,662 \$ \$ 457,405.26 164,341 \$ \$ 358,350.98 277,616 \$ \$ 561,164.85 12,679 \$ \$ 55,858.14 22,685 \$	\$ 2,048,290.14 732,662 \$ 2,195,773.36 \$ 457,405.26 164,341 \$ 504,511.40 \$ 358,350.98 277,616 \$ 384,996.16 \$ 561,164.85 12,679 \$ 565,309.73 \$ 55,858.14 22,685 \$ 96,782.26	\$ 2,048,290.14 732,662 \$ 2,195,773.36 778,104 \$ 457,405.26 164,341 \$ 504,511,40 182,280 \$ 358,350.98 277,616 \$ 384,996.16 299,196 \$ 561,164.85 12,679 \$ 565,309.73 16,137 \$ 55,858.14 22,685 \$ 96,782.26 44,787 \$ 3,481,069.39 1,209,983 \$ 3,747,372.91 1,320,504	\$ 2,048,290.14 732,662 \$ 2,195,773.36 778,104 \$ \$ 457,405.26 164,341 \$ 504,511.40 182,280 \$ \$ 358,350.98 277,616 \$ 384,996.16 299,196 \$ \$ 561,164.85 12,679 \$ 565,309.73 16,137 \$ \$ 55,858.14 22,685 \$ 96,782.26 44,787 \$ \$ 3,481,069.39 1,209,983 \$ 3,747,372.91 1,320,504 \$	\$ 2,048,290.14 732,662 \$ 2,195,773.36 778,104 \$ 2,927,275.27 \$ 457,405.26 164,341 \$ 504,511.40 182,280 \$ 713,159.81 \$ 358,350.98 277,616 \$ 384,996.16 299,196 \$ 465,684.15 \$ 561,164.85 12,679 \$ 565,309.73 16,137 \$ 616,759.63 \$ 55,858.14 22,685 \$ 96,782.26 44,787 \$ 162,929.09 \$ 3,481,069.39 1,209,983 \$ 3,747,372.91 1,320,504 \$ 4,885,807.95	\$ 2,048,290.14 732,662 \$ 2,195,773.36 778,104 \$ 2,927,275.27 1,142,855 \$ 457,405.26 164,341 \$ 504,511.40 182,280 \$ 713,159.81 289,057 \$ 358,350.98 277,616 \$ 384,996.16 299,196 \$ 465,684.15 354,569 \$ 561,164.85 12,679 \$ 565,309.73 16,137 \$ 616,759.63 42,508 \$ 55,858.14 22,685 \$ 96,782.26 44,787 \$ 162,929.09 83,360 \$ 3,481,069.39 1,209,983 \$ 3,747,372.91 1,320,504 \$ 4,885,807.95 1,912,349	\$ 2,048,290.14 732,662 \$ 2,195,773.36 778,104 \$ 2,927,275.27 1,142,855 \$ \$ 457,405.26 164,341 \$ 504,511,40 182,280 \$ 713,159.81 289,057 \$ \$ 358,350.98 277,616 \$ 384,996.16 299,196 \$ 465,684.15 354,569 \$ \$ 561,164.85 12,679 \$ 565,309.73 16,137 \$ 616,759.63 42,508 \$ \$ 55,858.14 22,685 \$ 96,782.26 44,787 \$ 162,929.09 83,360 \$ \$ 3,481,069.39 1,209,983 \$ 3,747,372.91 1,320,504 \$ 4,885,807.95 1,912,349 \$	\$ 2,048,290.14 732,662 \$ 2,195,773.36 778,104 \$ 2,927,275.27 1,142,855 \$ 2,674,616.28 \$ 457,405.26 164,341 \$ 504,511,40 182,280 \$ 713,159.81 289,057 \$ 626,277.89 \$ 358,350.98 277,616 \$ 384,996.16 299,196 \$ 465,684.15 354,569 \$ 392,784.72 \$ 561,164.85 12,679 \$ 565,309.73 16,137 \$ 616,759.63 42,508 \$ 575,289.64 \$ 55,858.14 22,685 \$ 96,782.26 44,787 \$ 162,929.09 83,360 \$ 77,507.19 \$ 3,481,069.39 1,209,983 \$ 3,747,372.91 1,320,504 \$ 4,885,807.95 1,912,349 \$ 4,346,475.72	\$ 2,048,290.14 732,662 \$ 2,195,773.36 778,104 \$ 2,927,275.27 1,142,855 \$ 2,674,616.28 999,763 \$ 457,405.28 164,341 \$ 504,511.40 182,280 \$ 713,159.81 289,067 \$ 626,277.89 238,542 \$ 358,350.98 277,616 \$ 384,996.16 299,196 \$ 465,684.15 354,569 \$ 392,784.72 287,730 \$ 561,164.85 12,679 \$ 565,309.73 16,137 \$ 616,759.63 42,508 \$ 575,289.64 18,865 \$ 55,858.14 22,685 \$ 96,782.26 44,787 \$ 162,929.09 83,360 \$ 77,507.19 40,860 \$ 3,481,069.39 1,209,983 \$ 3,747,372.91 1,320,504 \$ 4,885,807.95 1,912,349 \$ 4,346,475.72 1,585,760	\$ 2,048,290.14 732,662 \$ 2,195,773.36 778,104 \$ 2,927,275.27 1,142,855 \$ 2,674,616.28 999,763 \$ \$ 457,405.28 164,341 \$ 504,511.40 182,280 \$ 713,159.81 289,057 \$ 626,277.89 238,542 \$ \$ 358,350.98 277,616 \$ 384,996.16 299,196 \$ 465,684.15 354,569 \$ 392,784.72 287,730 \$ \$ 561,164.85 12,679 \$ 565,309.73 16,137 \$ 616,759,63 42,508 \$ 575,289.64 18,865 \$ \$ 55,858.14 22,685 \$ 96,782.26 44,787 \$ 162,929.09 83,360 \$ 77,507.19 40,860 \$ \$ 3,481,069.39 1,209,983 \$ 3,747,372.91 1,320,504 \$ 4,885,807.95 1,912,349 \$ 4,346,475.72 1,585,760 \$ \$ 16803.87 anheuser adjustment recognized gl in 2004 in billing 2005 \$ \$ \$ \$ \$	\$ 2,048,290.14 732,662 \$ 2,195,773.36 778,104 \$ 2,927,275.27 1,142,855 \$ 2,674,616.28 999,763 \$ 9,845,955.05 \$ 457,405.28 164,341 \$ 504,511.40 182,280 \$ 713,159.81 289,057 \$ 626,277.89 238,542 \$ 2,301,354.38 \$ 358,350.98 277,616 \$ 384,996.16 299,196 \$ 465,684.15 354,569 \$ 392,784.72 287,730 \$ 1,601,816.01 \$ 561,164.85 12,679 \$ 565,309.73 16,137 \$ 616,759.63 42,508 \$ 575,289.64 18,865 \$ 2,318,523.85 \$ 55,858.14 22,685 \$ 96,782.26 44,787 \$ 162,929.09 83,360 \$ 77,507.19 40,860 \$ 393,076.68 \$ 3,481,069.39 1,209,983 \$ 3,747,372.91 1,320,504 \$ 4,885,807.95 1,912,349 \$ 4,346,475.72 1,585,760 \$ 255,696.18 \$ (35,757.88) \$ 3,481,069.39 1,209,983 \$ 3,747,372.91 1,320,504 \$ 4,885,807.95 1,912,349 \$ 4,346,475.72 1,585,760 \$ 255,696.18

	2006														
Customer Type	Mai	rch S	March Cons.	Jun	e S	June Cons.	Se	otember S	September Cons.	De	cember S	December Cons.	Tota	15	Total Cons.
Residential	\$	2.092,711.96	716,166	S	2,183,482.27	765,521	S	2,904,590.54	1,172,418	\$	2,890,193.18	932,186	S	10,070,977.95	3,586,291
Commercial	S	460,174.95	157,606	\$	509,207.04	183,968	\$	706,249.47	292,323	\$	630,858.87	204,612	S	2,306,490.33	838,509
Industrial	\$	364,947.83	281,606	S	371,996.01	288,074	S	459,983.05	359,838	S	422,098.23	279,146	S	1,619,025.12	1,208,664
Municipal	S	558,122.27	10,461	S	563,810.46	16,571	S	617,456.18	63,545	S	581,098.38	30,669	S	2,320,487.29	121,246
Other	S	35,708.58	12,228	\$	67,959.20	39,434	\$	60,071.87	34,864	\$	33,778.18	9,515	S	197,517.83	96,041
	S	3,511,665.59	1,178,067	\$	3,696,454.98	1,293,568	\$	4,748,351.11	1,922,988	S	4,558,026.84	1,456,128	S	49,382.24	Unbilled Revenue
													S	(182,005.72)	Abatements
													S	247.68	Other Adjustments
													\$	264,698.66	Recoupment
													\$	16,646,821.38	5,850,751

								200	7						
Customer Type	Mar	rch S	March Cons.	Jun	e \$	June Cons.	Se	ptember \$	September Cons.	De	cember S	December Cons.	Tota	IS	Total Cons.
Residential	\$	2,407,562.10	695,075	\$	2,703,983.07	768,642	S	4,019,898.97	1,202,502	\$	3,639,002.76	1,034,525	S	12,770,446.90	3,700,744
Commercial	s	511,216.21	147,734	s	656,988.20	197,370	s	958,217.29	293,160	\$	795,708.79	224,432	\$	2,922,130.49	862,696
Industrial	S	380,363.89	253,764	\$	452,866.67	285,316	S	591,129.52	338,601	\$	491,025.81	272,075	\$	1,915,385.89	1,149,756
Municipal	\$	558,403.91	9,522	\$	627,260.00	26,698	S	937,864.94	156,602	S	790,415.95	69,721	S	2,913,944.80	262,543
Other	S	34,295.46	9,915	\$	35,461.45	10,226	s	49,200.60	18,034	S	36,811.92	9,871	S	155,769.43	48,046
	s	3,891,841.57	1,116,010	\$	4,476,559.39	1,288,252	S	6,556,311.32	2,008,899	\$	5,752,965.23	1,610,624	\$	296,804.21	Unbilled Revenue
													\$	(10,878.27)	Abatements
													S	110.04	Other Adjustments
													S	349,282.98	Recoupment

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6,023,785

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Pennichuck Water Works, Inc. Quarterly Sales Volume Schedule for the Five Years from 2005 through 2009

2008

Customer Type	Ma	rch S	March Cons.	Jur	ne S	June Cons.	Se	ptember S	September Cons.	De	cember S	December Cons.	Tota	IS	Total Cons
Residential	\$	2,821,320.15	692,993	S	3.157.087.63	809,817	\$	4,171,365.37	1,200,666	s	3,295,624.02	841,562	S	13,445,397,17	3,545,038
Commercial	S	619,068.97	153,554	\$	710,324.63	188,605	s	948,809.29	285,000	s	747.292.54	199,847	S	3,025,495.43	827,006
Industrial	S	449,391.20	255,569	\$	476,592.61	270.462	s	500,675.94	275,550	s	399,451.31	209,825	s	1,826,111.06	1.011,406
Municipal	S	695,076.41	11,410	\$	761,420.11	50,238	\$	818,788.72	78,311	S	731,487.37	27,185	S	3,006,772.61	167,144
Other	s	48,948.48	17,966	s	56,238.84	22,745	s	47,308,68	16,727	\$	73,102.44	22.769	Ş	225,598.44	80,207
	\$	4,633,805.21	1,131,492	S	5,161,663.82	1,341,867	s	6,486,948.00	1,856,254	\$	5,246,957.68	1,301,188	S	(506,351.64)	Unbilled Revenue
													S	(30,255.22)	Abatements
													s	(863.17)	Other Adjustments
													S	732,215.68	Recoupment
													S	21,724,120.36	5,630,801
													_		

2009

Customer Type	Ma	rch S	March Cons.	Ju	ne S	June Cons.	Se	ptember S	September Cons.	De	cember \$	December Cons.	Tota	IS	Total Cons.
Residential	\$	3,014,531.60	670,941	\$	3,333,835.39	782,902	Ş	4,023,232.92	974,661	\$	3,594,675.73	756,391	S	13,966,275.64	3,184,895
Commercial	\$	689,731.40	151,322	\$	768,714.47	177,245	S	1,027,441.01	248,232	\$	917,580.99	189,502	S	3,403,467.87	766,301
Industrial	s	397,501.00	190,021	S	593,176.67	192,299	s	477,319.30	209,143	\$	456,492.97	182,250	S	1,924,489.94	773,713
Municipal	\$	724,562.19	10,853	S	738,819.25	15,161	\$	889,803.06	81,621	S	805,478.85	28,772	S	3,158,663.35	136,407
Other	s	47,824.40	10,589	\$	96,359.81	39,510	\$	37,409.14	8,627	S	175,997.03	79,104	\$	357,590.38	137,830
	Ş	4,874,150.59	1,033,726	\$	5,530,905.59	1,207,117	s	6,455,205.43	1,522,284	S	5,950,225.57	1,236,019	S	206,692.16	Unbilled Revenue
													s	(240.43)	Abatements
													Ş	(1,065.08)	Other Adjustments
*** 2nd Quarter \$	for	Industiral Cla	ass includes t	ne A	Anheuser Bus	ch minimum p	bayr	nent obligatio	n for fiscal year 200	09 0	of \$186,823.62		S	71,388.60	Recoupment
													S	23.087.262.43	4,999,146

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Projected Five Year Capital Expenditures

Pennichuck Water Works, Inc. 2010 and 2011 (In thousands of dollars)

	20	10	2011
Supply & Watershed:			
Watershed Studies/Improvements(Net of Grants)		163	250
Vulnerability Upgrades - EPA			
New Wells/Well Pumps ·		40	100
Dam Repairs/Upgrades (Net of Grants)		393	-
Supply & Watershed		596	350
Treatment Improvements:			
Treatment Process Upgrade, Contract #4 -		50	
Merrimack River Intake upgrade (AFUDC) ·			-
Shakespeare Booster Station Expansion -			
Various Pump Upgrades & Equipment -		101	175
Treatment Improvements		151	175
Distribution Infrastructure Deals comparts			
Distribution Infrastructure Replacement:			
Radio Read Program -		•	
Water Main Cleaning and Lining -		1,253	460
Water Main Replacements -		,265	2,044
Fifield Tank - Concrete #2 -			
Infrastructure Replacement	2	,518	2,504
Distribution & Storage:			
Distribution Department Equipment -		852	950
New/Renewed Services -		80	80
New/Renewed Gates -		25	25
New/Renewed Hydrants		16	16
New/Renewed Meters		198	200
Water Main Upsizing -		30	50
One X Revenue Contribution -		50	80
Taylor Falls Pump Station upgrades -		155	
Armory Pump House (AFUDC) -		275	
Will Street Upgrades -		-	185
Distribution & Storage -	1	,681	1,586
		01/	750
PWW Community Water System Capex* -	3	,916	750
Engineering Equipment/Misc		62	60
Engineering - GIS Implementation -		- 7	550
Administration -		7	50
Data Processing -		711	750
Pennichuck Water Works Grand Total -	Ş 7	,642 \$	6,775

Pennichuck Water Works

Annual Budgeted Stmt of Cash Flows

For the Twelve Months Ended December 31, 2010 and 2011

	2010	2011
Operating Activities: Net Income	3 225 230	4,000,000
iset income	3,225,239	4,000,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	3,440,078	3,600,000
Gain on sale of land/cell tower leases		
Amortization of deferred investment tax credits	(33,036)	(33,036)
Provision for deferred income taxes		
Allowance for funds used during construction		
Undistributed earnings in real estate partnerships	+	
Special shareholder distributions	-	
Change in assets and liabilities:		
(Increase) decrease in accounts receivable and unbilled revenue	(1,158,533)	600,000
(Increase) decrease in refundable income taxes		a :
(Increase) decrease in materials and supplies	203,022	200,000
(Increase) decrease in prepaid expenses	8,392	-
(Increase) decrease) in deferred charges and other assets	(142,817)	(145,000)
Increase (decrease) in accounts payable and accrued expenses	482,483	200,000
Increase (decrease) in other	8,649,463	2,591,494
Net cash provided by (used in) operating activities	14,674,291	11,013,458
Investing Activities:		
Purchases of property, plant and equipment	(7,642,700)	(6,775,304)
Contributions in aid of construction	(,0 m, as)	(at a star a st
(Increase) decrease in restricted cash		
Sale (purchase) of investment securities	-	
Net (increase) decrease in notes receivable		
Proceeds from sale of land	-	
Net change in investment in real estate partnerships and deferred land costs	-	
Net cash provided by (used in) investing activities	(7,642,700)	(6,775,304)
Financing Activities:		
(Repayments) advances on line of credit	~	
Payments on long-term debt		
Proceeds on long-term borrowings	(3,680,553)	(738,154)
Debt issuance costs	(0,000,000)	(130,134)
Proceeds from issuance of common stock and dividend reinvestment plan		
Dividends paid	(3,351,038)	(3,500,000)
Londendo para	(.,	(5,500,000)
Net cash provided by (used in) financing activities	(7,031,591)	(4,238,154)
Net increase (decrease) in cash	*	ŝ
Cash at beginning of period	2,450	2,450
Cash at end of period	2,450	2,450

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Pennichuck Corporation Debt Repayment Schedule As of 12/31/09

										Princ	ipa	Repayment S	Sch	edule				
						1/1/2010		1/1/2011		1/1/2012		12/31/2012		12/31/2013		1/1/2015		
						to		to		to		to		to		and		
			Out	standing Balance														
Debt Instrument	Rate	Maturity		as of 12/31/09		12/31/2010		12/31/2011		12/30/2012	_	12/30/2013	_	12/31/2014		Thereafter		Total
American United Life	5.000%	3/4/2010	s	5,000,000	s	5,000,000	s	-	Ş		S	-	Ş		s		\$	5,000,000
American United Life	7.400%	3/1/2021	s	6,800,000	s	400,000	s	400,000	s	400,000	s	400,000	\$	400,000	S	4,800,000	\$	6,800,000
BFA Revenue Bond (2005 Series A)	4.700%	10/1/2035	S	12,125,000	S	-	\$		\$		S	-	\$	-	S	12,125,000	\$	12,125,000
BFA Revenue Bond (2005 Series BC-3)	5.000%	4/1/2018	S	7,500,000	\$	-	\$		S		s	-	\$	-	\$	7,500,000	\$	7,500,000
BFA Revenue Bond (2005 Series BC-4)	5.375%	4/1/2035	S	12,500,000			\$				\$		\$		\$	12,500,000		12,500,000
BFA Revenue Bond (Series 2005A)	4.700%	1/1/2035	\$	1,810,000	S		\$		-		\$				S	1,810,000		1,810,000
BFA Revenue Bond (Series 2005B)	4.600%	1/1/2030		2,335,000			S		-		s				S	2,335,000		2,335,000
BFA Revenue Bond (Series 2005C)	4.500%	1/1/2025	S	1,205,000	S	-	S		S		S	-	S	-	S	1,205,000	S	1,205,000
BFA 1997 Revenue Bond	6.300%	1/1/2022	s	3,600,000	S	200,000	S	200,000	s	200,000	S	200,000	\$	200,000	S	2,600,000	S	3,600,000
BFA Revenue Bond (2005 Series B-1)	3.850%	10/1/2035	S		S		S		s		\$		\$	-	S		S	
Unsecured NH SRF - Hubbard/East Derry Wate	3.800%	5/1/2022	S	272,562	\$	22,250	S	22,250	s	22,250	\$	22,250	\$	22,250	S	161,312	s	272,562
Unsecured NH SRF - Twin Ridge	2.315%	4/1/2013	S	49,593	s	15,270	S	15,628	s	15,993	s	2,702	S	-	s	-	S	49,593
Unsecured NH SRF - WTP Contract #4	4.488%	10/1/2029	S	2.976,693	s	95,882	s	100,275	S	104,870	S	109,675	S	114,698	S	2,451,292	S	2,976,693
			S	56,173,848	\$	5,733,402	S	738,154	S	743,113	S	734,627	\$	736.948	s	47.487.604	s	56,173,848
Debt Discount on 2005 Series A Bonds			s	(312,219)														
			S	55,861,629	-													

Pennichuck Water Works, Inc. Cost of Short-Term Debt For the Thirteen Months Ended December 31, 2009

		Dec-08	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-05	Sep-09	Oct-09	Nov-09	Dec-09	13 Month Average
2223-300-001	INTERCO PAY/REC. PENN CORP.														
2233-300-001	INTERCO PAY/REC: PWW/PCP	2,227,398	2,334,745	4,113,596	4,542,036	5,468,691	6,511,381	7,688,696	7,904,479	8,964,844	8,840,457	8,720,312	6,269,945	(1.417,117)	
2223-400-001	INTERCO PAY/REC: PWW/TSC											2			
2233-400-001	INTERCO PAY/REC: PWW/TSC	(606,939)	(608,876)	(610,422)	(612,388)	(614,167)	(618,291)	(621,618)	(623 953)	(625,826)	(628,554)	(630,209)	(631,970)	(634,071)	
2223-500-001	INTERCO PAY/REC: PWW/PWS			۳.	*	•						-			
2233-500-001	INTERCO PAY/REC: PWW/PWS	(4,832,114)	(5,004,168)	(5,193,190)	(5,386,366)	(5,567,772)	(5,825,712)	(6,039,469)	(6.205.532)	(6,368,016)	(6,548,919)	(6,744.384)	(6,908,254)	(7.138,958)	
2223-600-001	INTERCO PAY/REC: PWW/PAC		-			-	-	14	-		-		-		
2233-600-001	INTERCO PAY/REC PWW/PAC	(2,732,152)	(2,806,054)	(2 867,287)	(2,935,623)	(2,998,393)	(3.067 15?)	(3.147,971)	(3,220,458)	(3.309,792)	(3,429,351)	(3,504,190)	(3,575,675)	(3,661,556)	
2223-700-001	INTERCO PAY/REC. PWW/PEU	(35)				(*)					+				
2233-700-001	INTERCO PAY/REC PWW/PEU	(4,667,807)	(4,843,462)	(5,030,525)	(5.289,325)	(5,590,897)	(5,800,361)	(6,008,141)	(6,210,224)	(6,410,499)	(7,279,118)	(7,442,233)	(7,601,647)	(7,792,577)	
	Pennichuck Interco Net Liability	(10,611,650)	(10,927,816)	(9,587,829)	(9 681 667)	(9,302,530)	(8,800,140)	(8,128,503)	(8,355,689)	(7.749,290)	(9.045,484)	(9 600,704)	(12,447,602)	(20.638.273)	(10,375,168)

H\PWW 2010 Rate Case\1604 01 Schedules\2009 Short Term Dept #24

Schedule 6

(25) Parent Company Information – 2009, 2008, 2007, 2006 and 2005 Annual Reports to Shareholders contained in this binder. 2009 and 2008 Form 10-K and Form 10-Q contained in this binder under section 10.

Summary of 2009 Allocated Costs Year to Date Costs through December 31, 2009 Pennichuck Corporation and Subsidiaries (Dollar amounts in \$000's)

	<u>P</u>	enn Water	Penn East		Pittsfield	North Country		Total <u>Regulated</u>	Cor	Ops(PWSC)	Real Estate(TSC)		Total
Allocated Corporate Costs	s	730,207 S	146,131	s	17,929 S	31,61	2 \$	925,879	s	42,095	5 7.241	S	975,215
%		74.9%	15.0%		1.8%	3.2	10	94.9%		4.3%	0.7%		100.0%
Allocated Return on Common Assets		427,734	85,673		9,898	18,33	8 S	541,643		26,124	1,385	\$	569,152
		75.2%	15,1%		1.7%	3.2	10	95.2%		4.6%	0.2%		100.0%
Allocated Pennichuck Water Costs - Work Orders		1,002,474	192,399		29,325	51,33	9 S	1,275,537		250,249		S	1,525,786
%		65.7%	12.6%		1.9%	3.4	10	83.6%		16.4%	0.0%		100.0%
Allocated Pennichuck Water Costs - Management Fee		4,210,674	836,699		101,201	187,40	\$	5,335,974		363,556	15,536	S	5,715,066
%		73.7%	14.6%		1.8%	3.3	10	93.4%		6.4%	0.3%		100.0%
Total Allocated 2009 Costs	s	6,371.091 S	1,260,902	s	158,353 \$	\$ 288,68	a s	8,079,035	s	682,025	\$ 24,162	s	8,785,222
94	-	72.5%	14.4%		1.8%	3.3	%	92.0%		7.8%	0.3%		100.0%

Page 1

Pennichuck Water Works Operating Expense Allocation (to other Subsidiary Companies) For Month Ending 12/31/09

						Applicable to:			C Sheing
Full Year Amounts (to be allocated)	YTD EXPENSES	Tier Allocation Required Special Allocation	Tier 1 (All)	Tier 2 (Regulated + PWSC)	Tier 3 (PWW+PEU+ PWSC)	Tier 4 (Regulated)	PWSC Only	PAC Only	Wages & Fringes Onl (budgeted
Vages									
Officers Salanes & Wages	1,177,257	1	1,177,257	2					
Officers Salaries Transferred Out	(200,579)	1	(200,579)			-			
Superintendence (PAC) - C Sheing	58,937	7 100% to PAC as Direct				2			58.93
Salaries - Engineering	532,346	4	14			532 346	2	-	
Office Salaries and Wages - IS	258,152	1	258,152		-				
Office Salanes and Wages - Acctg	568,779	1	568,779		-			1	2
Office Salaries and Wages - Admin	293,652	1	293,652		19	-			
Office Salaries and Wages - C/S	529,117	2		529,117	-	-			
		23.80% of BR to utilities							
Office Salaries and Wages - BR	26,249	4 based on timesheets				26,249			÷
		76.20% of BR to PWSC							
Office Salaries and Wages - BR	84,042	6 based on time sheets 100% to PWSC as	÷			1	84,042	۲	
Office Salaries and Wages - Other PWSC		6 Direct							-
Officer and Office Salaries - TSC		7 100% to TSC		-		-			
ess: Capitalized Overhead Exec & IS	(28,893)	1	(28,893)			-		÷.	
ess: Capitalized Overnead Engineering	(138,857)	4			-	(138,857)			
Benefits (Based on 12/31/08 Schedule)									
Officers Salaries & Wages	451,243	1	451,243						
Officers Salaries Transferred Out	(76,882)	3	(76,882)		-	-			1
Superintendence (PAC) - C Sheing	22,591	7 100% to PAC as Direct							22,59
Salaries - Engineering	204,048	4				204,048	-	-	
Office Salaries and Wages - IS	98,950	1	98,950			-			
Office Salaries and Wages - Acctg	218,013	1	218,013	-		-		1	
Office Salaries and Wages - Admin	112,557	1	112,557						+
Office Salaries and Wages - C/S	202,811	2		202,811				а <i>с</i>	
		23.80% of BR to utilities							
Office Salaries and Wages - BR	10,061	4 based on timesheets		•		10,061		-	
		76.20% of BR to PWSC							
Office Salaries and Wages - BR	32,213	6 based on time sheets 100% to PWSC as		•		*	32,213	1.	
Office Salanes and Wages - Other PWSC		6 Direct				-			
Officer and Office Salanes - TSC		7 100% to TSC						-	
Less: Capitalized Overhead Exec & IS	(11,075)	1	(11,075)			-			
Less. Capitalized Overhead Engineering	(53,224)	4				(53,224)			

PENNICHUCK WATER G/A EXPENSES ALLOCATED

						Dollars	Applicable to:				
Full Year Budgeted Amounts (to be allocated) - Tier		Tier Allocation Required	Special Allocation	Tier 1 (All)	<u>Tier 2</u> (Regulated + PWSC)	Tier 3 (PWW+PEU+ PWSC)	Tier 4 (Regulated)	PWSC Only	PAC Only	C Sheing Wages & Fringes Only (budgeted specifically on	
Facilities - Manchester Street		12.7									
Leasehold Amort Exp	675	1			6.5	55			-		
HECOP III Fit-up Amort Exp	-	1		-		-	-	-			
Office Supplies & Expense	35,990	3		35,990	872	71					
Office Equipment Rental	28,196	1		28,195	-		-		-		
Rental Exp HECOP III	322,795	1		322,795			575	18 L	÷		
Manchester St Phone	22,865	1		22,865	-	•	•	-			
HECOP III Fit-up Allowance	(23,705)	1		(23,705)	-	-		•	5	-	
Maintenance Manchester St	29,153	1		29,153	354					30	
Office Equipment maintenance	13,227	<u>.</u>		13,227						121	
Miscellaneous Charges											
Senior Management Vehicles	3,144	1		3,144	-						
Senior Management Fuel Purchased	9,120	1		9,120	× .						
Senior Management Vehicle Registrations	2,186	1		2,186	123						
Courier & Express Mail Expense	101	1		101	3 7 2	(*)	100	3 - 5			
Outside Svcs (Supervision/Spec Svcs)	142,869	1		142,869	2 - 2		0.00				
Meetings and Conventions	32,297	1		32,297	÷.					. +	
License Fees	19,488	1		19,488				-			
Meals	5,645	1		5,645	2	125	623	1/27		121	
Recruiter Fees	689	1		689			-	2.5		-	
Engineering Dept Expense	4,558	4		(4)		14.1	4,558			-	
Engineering Vehicles	6,753	4			-	-	6,753	-			
Engineering - Fuel Purchased	14,740	4				-	14,740	1.0			
Engineering - Vehicle Registration	1,793	4			2.	125	1,793	122	-	-	
Maint of Communication Equip	8,909	2			8,909						
Computer Maintenance	237,586	1		237,586		5 .	18	190			
Depreciation - 2403 & Amort											
Comm Depreciation	50,722	2			50,722	142		1.2	1	1.42	
Computer Depreciation	300,192	1		300,192							
Office Furniture Depreciation	39,667	1		39,667	-		-	20	14	2.42	
Leasehold Amort Exp	45,411	1		45,411	-	4. - 1				15	
HECOP III Fit-up Amort Exp	23,705	1		23,705	-			-		(#)	
Amort Recruiter Fees (Def Chgs)	39,337	1		39,337							
Synergen Training 2007 (Def Chgs)	7,652	1		7.652							
Total Allocable Expenses	5,796,594	1		4,198,784	791,559		608.467	116,255		81 528	5,796,59

Tier 1 - use the corporate expense allocation between TSC, PWSC and regulated utilities. The allocation among utilities will be based on total assets and customers.

Tier 2 - allocate to PWW, PEU, PAC and PWSC based on total assets and customers

Tier 3 - allocate to PWW, PEU and PWSC based on total assets and customers

Tier 4 - allocate to the regulated utilities (PWW, PEU and PAC) based on total assets and customers.

(1) Retention/Bonus, Overtime, Ment increases and summer temp help are included in Officers' and Office Salaries

(2) Outside Services include temporary help from temporary services providers

(3) Effectively, all Admin & Gen Expense (incl. Engineering) are allocated less Insurance, Regulatory Commission, Memberships, Misc General, Public Relations and Chantable Contributions and Union Benefits

		PWW	PEU	Pittsfield	North Country	Total Regulated	Con Ops (PWS)1	Real Estate	Total
Revenues ⁴	\$	23,403,250 \$	5,037,925 \$	604,498	947,769	\$ 29,993,442 \$ 91.54%	2,770,212 8.46%	\$. 0.00%	\$ 32,763,654 100.00%
Employees (FTE's) - 2009 (including summer help)						105 98 59%	1 5 1.41%	0 200 0	107 100.00%
Square Footage - w/ add/1 lease space Manchester Street Facility ⁵						17,891 91,91%	1,574 8,09%	0 2000	19,465 100.00%
Total Assets ²	s	136,548,832 \$ 79,65%	25,439,853 S 14 84%	3,194,767 1 86%	6,259 194 3.65%	\$ 171,442,648 \$ 98,34%	310,320 0.18%	\$ 2,589,362 1 49%	\$ 174,342,328 100,01%
Customers ³		26,189 78.10%	5,558 16,58%	649 1.94%	1,135 3 38%	33,531 100.00%			
Average Percentage		78.88%	15.71%	1.90%	3 52%	95 10%	4 54%	0 37%	100 01%
Allocation of Allocable Expenses Effective Allocation %		3,148,982 75.00%	627,241 14,94%	75.860 1.81%	140,540 3.35%	3,992,623	190,625 4,54%	15,536 0.37%	

- Based on December 2009 Preliminary Less Intercompany Account Balances per Chanie/Larry 5/07

³ - Based on December 2009 Actuals

⁴ - Based on December 2009 Preliminary

5 - Effective 5/31/08 TSC will not be charged square footage

		PWW	PEU	Pittsfield	North Country	Total Regulated	Con Ops (PWS) 1	Real Estate (TSC)	Total	
Fotal Assets ²	s	142,808,027 \$ 83,30%	25,439,853 5 14,84%	3,194,767 1.85%	\$ 6.259,194 3.65%	\$ 171.442.646 \$ 99.82%	310,320 0 18%	\$- 0.00%	\$ 171,752.965	
Customers ³		26,189 78,10%	5,558 16,58%	649 1.94%	1,135 3 38%	33,531 85,86%	5,521 14,14%	c	39,052	
Average Percentage		80 70%	15.71%	7 90%	3 52%	92 84%	7 16%		100 00%	Check 1
Allocation of Allocable Expenses Effective Allocation %		579,602 73.22%	115,450 14,59%	13,963 1 76%	25,868 3 27%	734,883	56,676 7.16%	0 N/A	S 791,559	S

	PWW	PEU	Pittsfield	North Country		Con Ops (PWS)	Real Estate (TSC)	Total	
fotal Assets ²	\$ 142.808,027 84.72%	and the second se	- Ronora		s	310.320 0.18%		\$ 168,558,199 99.95%	
Customers ³	26,189 70.27%	5,558 14,91%				5,521 14.81%		37,268 99 99%	
verage Percentage	77 50%	15.00%				7 50%		100.00%	Check Tot
Allocation of Allocable Expenses Effective Allocation %	\$ #DIV/01	5 . #DIV/01	0 N/A		S	#DIV/0'	0 N/A	5.	\$

H \PWW 2010 Rate Case\1604.01 Schedules\Mgmt Fee Allocation 12 31.09 - with NC Allocation-Adjustment #26

PENNICHUCK WATER G/A EXPENSES ALLOCATED

Allocation Calculation - Tier 4 (Regulated Companies)

1

		PWW	 PEU	 Pittsfield	No	rth Country	Con Ops (PWS)	(TSC) ¹		Total	
Total Assets ²	s	142,808,027 80.36%	25,439,853 14.32%	\$ 3,194,767 1.80%		6,259,194 3,52%			S 1	77,701,840 100.00%	
Customers ³		26,189 78.10%	5,558 16 58%	649 1.94%		1,135 3.38%				33,531 100.00%	
Average Percentage		79.23%	15.45%	1.87%		3.45%				100.00%	Chark Tot
Allocation of Allocable Expenses Effective Allocation %	s	482,089 79,23%	94,008 15.45%	\$ 11,378 1.87%	Ş	20,992 3.45%	0 N/A	0 N/A	s	608,467	Check Tot S

	PWW	PEU	Pittsfield	North Country	Con Ops (PWS)	Real Estate	Total	Check Total
Direct Allocable Costs	0	0			116,255	0	116,255	\$ -
	N/A	N/A				N/A		

						Real Estate				
Summary of Allocations	PWW	PEU	Pittsfield	North Country	Con Ops (PWS)	(TSC)	Totals			
Tier 1	3,148,982	527,241	75,860	140,540	190,625	15,536	4,198,784			
Tier 2	579,602	115,450	13,963	25,868	56,676		791,559			
Tier 3	-	1.51		-		-	-			
Tier 4	482,089	94,008	11,378	20,992		-	608,467			
								unallocated		
PWSC only and PAC only				-	116,255		116,255	PAC	Total	Check Tota
Total Allocations	4,210,674	836,699	101,201	187,400	363,556	15.536	5,715,066	81,528	5 796 594	
	73.68%	14.64%	1.77%	3.28%	6.36%	0 27%	100.00%			

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PENNICHUCK WATER G/A EXPENSES ALLOCATED

2009 Benefits	Total Dollars	Portion	Union Wage Portion	Allocation Method		
Officer's Life Insurance	13,249	13,249		Specific		
Pension - DB Plan	1,029.892	642,817		Allocated based on pro		
Group Pension 401K	183,919	114,795		Allocated based on pro		
Post Retirement Health Expense	149,051	93,032		Allocated based on pro		
Post Employment Health Expense	116,950	72,995		Allocated based on pro		
Group Health Insurance	1,122,036	561,018		Based on actual partici		
Health Insurance: Opt Out	11,875	6,498		Allocated based on pro		
Group Dental	136,443	68,222		Based on actual partici		
Sroup Life/Disability Insurance	14,820	8,109	6,711	Allocated based on pro	-rata headcounts	
Employee Benefits/Section 125	7,828	4,283	3.545	Allocated based on pro	-rata headcounts	
Misc Employee Benefits	37,614	20,581	17,033	Allocated based on pro	-rata headcounts	
Tuition Reimbursements	9,066	4,961	4,105	Allocated based on pro	-rata neadcounts	
Training Educational Seminars	64,234	35,147	29,087	Allocated based on pro	-rata headcounts	
Boot & Clothing Allowance-OPS	203,558	-	203,558	Allocated based on pro	-rata wages	
Boot & Clothing Allowance-CS-Union	4,171		4,171	Allocated based on pro	-rata wages	
Boot & Clothing Allowance-WTP	86,337		86,337	Allocated based on pro	-rata wages	
Union Sick Time	52,901	-	52,901	Allocated based on pro	-rata wages	
Vacation Earned YTD (per Acc Vac Rpt) Union Only	12,340			From LG's calculation		
SERP	(36,357)	(36,357)		Specific		
Payroll Taxes:		A COMPACT OF A		Service Children		
Employer FICA/Medicare	498,361	293,447	204,914	Allocated based on pro	-rata wages	
FUTA	5.185	3,236		Allocated based on pro		
SUI	15 582	9 7 2 6		Allocated based on pro		
Total Benefits	3,739,055	1,915,759	1,823,295	-		
Benefits % (of wages)	52.3%	42.92%	67.85%			
Total Wages thru 12/31/09	7,126,998	4,448,385	2,678,613	Wages per Payroll (AD	P)	
Less: Accrued Wages as of 12/31/08	(77,213)	(48,528)	(28,685)	Year End Payroll Accru	ual Entry	
Add: Accrued Wages thru current mo-end	100 674	63,361	37,314	Current Month Payroll	Accrual	
Grand Total Wages	7 150 459	4,463,217	2,687,242			
%	100.0%	52 4%	37.6%			
Total Headcount	106	58	48			
(Excluding Summer Help)	100.0%	54.7%	45.3%			
PWSC Customers	Operations	Water Supply	Billing	Cust Svc	Customers	Customers
Hudson	0.25	0.25			5,827	2,91
Salisbury	0.25	-	0.25	0.25	3,476	2,60
Hyannis		÷.,	0.25			
Wilton	0.25	0.25				
						5.52

Note: Customer Counts based on Tara King email dated 2/19/09

Pennichuck Water Works Work Order Allocation of Operations and Production Expenses For Month Ending 12/31/09

Full Year Amounts (to be allocated)	
Wages	
Superintendence - WTP	209,722
Office Salaries & Wages: WTP	170,315
Purification Labor	182,050
Superintendence - Operations	227,615
Office Salaries - Operations	97,632
Benefits	
Superintendence - WTP	80,386
Office Salaries & Wages: WTP	65,282
Purification Labor	69,780
Superintendence - Operations	87,245
Office Salaries - Operations	37,422
Facilities - Will Street	
Maint: Meter Department	1 665
Will Street Parking	1,665
Will Street Office Supplies	13,669
Will Street Gas	5,872
Will Street Electric	5,672
Will Street Phone	17,196
Miscellaneous Charges	10000000-00
Misc Gen Exp Ops	6.001
Misc T&D Materials & Supplies	6,081 14,499
Stores Expense	
Small Tools Expense	5,667
OPS - Non-Union Vehicles	16,521 7,914
OPS - Non-Union Vehicle Registration	7,914
WTP - Non-Union Vehicles	9,822
WTP - Non-Union Vehicle Registration	336
Misc. Transport Expense	58,924
Non-Union Vehicle Fuel Costs	29,549
Vactor Machine	25,545
Misc Gen Equipment Exp	13,802
Depreciation - 2304	
Will Street Facility	10.032
Tools, Shop & Garage	10,032
Other Tangible Equipment-Misc Equip	17,147
Non-Union Transporation Depreciation	43,702
Total Allocable Expenses	1,525,786
i otar Allocable Expenses	1,525,786

					2009 Work	order Costs							
	PWW Capital	070 WTP	080 OPS	Fleet	PWW	PWS	PWS Jobbing	PAC Capital	PAC	PEU Capital	PEU	Total	
		Maintenance	Maintenance		Jobbing	Maintenance	5		Maintenance	FEU Capital	Maintenance	IOLAI	
Labor	58,288.08	585,635.92	901,864.86	46,363.82	44,993.53	396,519.13	64,870.09	4,234.46	152,558.97	24,176.57	295,251.19	2,574,756.62	
Contractor Clearing	7,604.28		9,327.72	126,328.67	56,539.64	and the second	542,677.80	500.00	•	3,977.74	793.81	747,749.66	
Inventory: Pipes & Fittings	20,345.37		48,282.20	-	46,863.90	202.26	13,121.50	1,036.21	6,763.47	8,287,11	14,682.90	159,584.92	
Inventory: Meters	76,691.12		3,148.47	-	452.40	5,795.30	36,608.20	5,551.47	64.32	18,764.16		147,075.44	
Inventory: Misc T&D	4,032.84	98.32	5,257.36	-	1,732.74		874.91	186.58	1,318.84	952.84	1,685.48	16,139.91	
Inventory: Chemicals		628,465.23		the second second	-		24,489.86	-	383.02	*	57,036.55	710,374.66	
Inventory: Fleet	-		4.43	2,732.00								2,736.43	
Misc T&D Supplies	-			-	2,345.48		457.00	•	-	•		2,802.48	
Truck	21,287.22	48,951.63	153,257.63	1,045.27	14,549.92	117,112.96	15,903.16	1,416.38	40,314.24	8,585.42	98,049.05	520,472.88	
Backhoe	6,589.00	697.75	16,037.75	-	6,180.50		2,882.50	405.00	5,264.75	2,164.75	8,753.25	48,975.25	
Compressor	40.50	-	4,789.38	-		54.00	331.00				721.50	5,936.38	
Inspection Fees				-	39,736.23	-			-	-		39,736.23	
Overhead	4,553.13				45,426.64			313.64		1,646.80	·	51,940.21	
Labor Overhead	38,558.31	389,799.27	600,281.25	30,859.76	43,697.29	249,959.25	42,764.06	2,814.30	90,959.59	15,976.89	192,150.01	1,697,819.98	
Misc General Equipment	251.25					40.00	132.50	75.00		20.00	135.00	653.75	
Total Costs	238,241.10	1,653,648.12	1,742,251.05	207,329.52	302,518.27	769,682.90	745,112.58	16,533.04	297,627.20	84,552.28	669,258.74	6,726,754.80	
Total Costs w/o OH & CWIP	226,083.69	1,653,648.12	1,732,923.33	81,000.85	200,551.99	769,682.90	202,434.78	15,719.40	297,627.20	78,927.74	668,464.93	5,927,064.93	
-													
% of Total	3.54%	24.58%	25.90%	3.08%	4.50%	11.44%	11.08%		4.42%	1.26%	9.95%	100.00%	
% of Total w/o OH & CWIP	3.81%	27.90%	29.24%	1.37%	3.38%	12.99%	3.42%	0.27%	5.02%	1.33%	11.28%	100.00%	
Ovhd Allocable to Work Orders													
1,525,786	58,200	425,694	446,101	20,852	51,627	198,137	52,112	4,047	76,617	20,318	172,081	1,525,786	
Totals by Company:													
PWW	58,200	425,694	445,101	20,852	51,627							1,002,474	65.7%
PEU					,					20,318	172,081	192,399	12.6%
PAC								4,047	76,617			80,664	5.3%
PWS						198,137	52,112					250,249	16.4%
Total Overhead	58,200	425,694	446,101	20,852	51,627	198,137	52,112		76,617	20,318	172,081	1,525,786	100.0%
						,							
% Labor	2.26%	22.75%	35.03%	1.80%	1.75%	15.40%	2.52%	0.16%	5.93%	0.94%	11.47%	100.00%	
% Labor	2.20%	22.1370	55.05 %	1.00 %	1.7 5 %	15.40 %	4. 34. 7	0.10%	5.55%	0.5476	11.47 70	100.00%	
**070, 080 & Fleet Labor Overhead	has been calculat	ted per Charlie.											
				612 - NC	8,767.57					570 - PAC	110,352.04	37 08%	28,407.49
				620 - PAC	0,101,51					670 - NC	187,275,16	62.92%	48,209,51
				620 - NC	-					0/0 - NC	297,627.20	100.00%	76,617.00
				621 - NC				80,664.00			2.57,021.20	100.0076	10,011.00
				630 - PAC	-			\$0,664.00		NC	12,156.75	77.34%	3,129.79
				650 - PAC	427.11					PAC	3,562,65	22.66%	917.21
				650 - NC	2,388.31					PAC	15,719.40	100.00%	4.047.00
				651 - PAC	784.41						13,713,40	100.00%	4,047.00
				651 - PAC	307.04								
				653 - PAC	1,389,40								80,664.00
				653 - NC	436,68								00,004.00
				654 - NC	257.15								
				654 - PAC	961.73								
					15,719.40								

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Return on Assets

Pennichuck Water Works Return on Common Assets Allocation (to other Subsidiary Companies) For Month Ending 12/31/09

Effective Tax Rate - current 41.69%

	7.38%					Dollars	Applicable to:			
uli Year Amounts (to be allocated)	Rate of Return	Net Book Value	Tier Allocation Required	Tier 1 (All)	Tier 2 (Regulated + PWSC)	Tier 3 (PWW+PEU+ PWSC)	Tier 4 (Regulated)	PWSC Only	PAC Only	(budgeted specifically o TSC P/L)
Office Furniture & Equipment	23,494	318.343.51	1	23.494	12			~		
ransportation Equipment	91,783	1.243,676,44	2		91 783	-				
ools, Shop & Garage Equipment	9,530	129,136 35	3			9.530				(4)
Construction Meters	164	2.227.89	2		164					
Power Operated Equipment	9.321	126,306,58	2		9 321					
communication Equipment	48 067	651,315,29	4		0.021		48.067			
omputer Equipment	60,543	820 360 84	-	60 543			40,007			
Other Plant and Misc Equipment	20.467	277.326.64	4	00,040			20.467			
Vill Street Office	158	2.143.22	3			158	20,407			
	15.372	208,298,40	3				-			
Vill Street Expansion	393		3	200	-	15,372				242
easehold Improvement - Manchester St	393	5,331.92	1	393			-		-	(#)
Deterred Pension Costs	280 383	3.799.234		280,383				(a)		
Deferred Post Employment Health	8.543	115,760	1	8,543	-					
eferred Post Retirement Health	(3.568)	(48,344)	1	(3.568)						
Deterred SERP	42,753	579,308	1	42,753						
EBA Trust - Union	33 119		1	33,119	· · ·		5			
EBA Trust - Non-union	14,927	202,268		14,927						
mployer Recruiter Fees	1,285	17.411	1	1,285					1.54	
Inion Negotiations - 2006 & 2007	157	2,123	1	157				1.5		
2004 Compensation Study			1							
Synergen Training - 2007	518	7.015		518						180) 1911
2008 Compensation Study	1,390		1	1,390					2	
coo companiation cloby		1	2 ·	1.030						
106 & FAS 158 Costs (net of taxes at 39 61%)										
Deferred Pension Costs		3,799,234.00								
Deferred Post Employment Health		115,760 47								
Deferred Post Retirement Health		(48,343,53)								
Deferred SERP		579,307.83								
Less: Accrued Liability Pension - ST										
Less: Accrued Liability Pension - LT		(4,031,374)								
Less: Post Employment Health Liability - ST		(40,800)								
Less: Post Employment Health Liability - LT		(813,901)								
Less: Accrued Liability SERP		(800,785)								
VEBA Trust - Union		448,763.14								
VEBA Trust - Non-union		202,267 72								
Less: Post Retirement Liability Health - ST		A State of Second Concern								
Less: Post Retirement Liability Health - LT		(1,493,355)								
Subtotal		(2.083.226)								
Less: Tax Impact at current effective tax rate		868,497	1							
Net Impact Unfunded FAS 106 & FAS 158 Costs	(89,647) (1,214,729	1	(89,647)	•		÷		-	•
Total Allocable Expenses	569,152	7,712,115,21	1 -	374,290	101,268	25,060	68.534			

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Tier 1 - use the corporate expense allocation between TSC, PWSC and regulated utilities. The allocation among utilities will be based on total assets and customers.

Tier 2 - allocate to PWW, PEU, PAC and PWSC based on total assets and customers Tier 3 - allocate to PWW, PEU and PWSC based on total assets and customers

Tier 4 - allocate to the regulated utilities (PWW, PEU and PAC) based on total assets and customers.

Note: Laboratory Equipment not included. Currently, PWW charges a \$15 fee for all lab work which is considered to be a competitive price and \$5 higher than charged by the State of New Hampshire.

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cation Calculation - Tier 1 (All Companies)

	_	PWW	PEU	Pittsfield	North Country	Total Regulated	Con Ops (PWS)1	Real Estate	Total	
'evenues"		23,403,250	5,037,925	604,498	947,769	\$ 29.993.442 91.54%	\$ 2,770,212 8.46%	s - 0.00%	\$ 32,763,654 100 D0%	
mployees (FTE's) - 2009						105	15	0	107	
icluding summar help)						98 59%	1.41%	0.00%	100.00%	
quare Footage - w/ addt'i lease space						17,891	1,574	0	19,465	
lanchester Street Facility						91 91%	8 09%	0 00%	100 00%	
btal Assets ²	s	136,548,832 S	25,439,853 \$	3,194,767	6.259,194	\$ 171,442,646	S 310.320	\$ 2,589,352	S 174,342,328	
		79.65%	14.84%	1.86%	3 65%	98.34%	0 18%	1 49%	100.01%	
ustomers ³		26,189	5,558	649	1,135	33 531				
		78 10%	16.58%	1.94%	3 38%	100 00%				
werage Percentage		78.88%	15.71%	1.90%	3.52%	95 10%	4.54%	0.37%	100 01%	Check
location of Allocable Expenses		280,708	55,914	6,762	12,528	355.912	16,993	1,385	\$ 374,290	S
ffective Allocation %		75.00%	14.94%	1.81%	3.35%		4 54%	0 37%		

1 - TSC employees not counted as their payroll and benefits are charged directly, PWS - 100% of 1 employee and 50% of 1 employee charged directly and not counted

2 - Based on December 2009 Preliminary Less Intercompany Account Balances per Charlie/Larry 5/07

3 - Based on December 2009 Actuals

5 - Effective 5/31/08 TSC will not be charged square footage

		PWW	PEU	Pittsfield	North Country	Total Regulated	Con Ops (PWS) 1	Real Estate (TSC)	Total	
otal Assets ²	s	136,548,832 \$ 79,65%	25,439,853 \$ 14,84%	3,194,767 S 1.86%	6,259,194 3.65%	\$ 171,442,646 99,82%	5 310,320 0,18%	s <u>-</u> 0.00%	\$ 171,752,986 100,00%	
Customers'		26,189 78,10%	5,558 16,58%	649 1.94%	1,135 3.38%	33,531 85.86%	5,521 14,14%	0	39,052	
werage Percentage		78.88%	15,71%	1.90%	3.52%	92.84%	7.16%		100.00%	Check To
Allocation of Allocable Expenses		74,152 73.22%	14,770 14,59%	1,786 1,76%	3,309 3,27%	94,017	7,251 7 16%	0 N/A	S 101.256	S

						Con Ops	Real Estate		
		PWW	PEU	Pittsfield	North Country	(PWS)	(TSC)	Total	
Total Assets ²	s	136,548,832 S	25,439,853			\$ 310,320		S 152,299,005	
		84,13%	15.67%			0 19%		%66 66	
Customers ²		26,189	5,558			5.521		37.268	
		70.27%	14.91%			14 81%		%55.55	
Average Percentage		17.20%	15.29%			7.50%		%56.56	
Allocation of Allocable Expenses Effective Allocation %	s	19,348 S 77,21%	3,832 15,29%	0 N/A		s 1,880 7,50%	0 NIA	s 25.060	S Seck Total
Allocation Calculation - Tier 4 (Regulated Companies)	ies]		į	Sime 1		Con Ops	Keal Estate		
e	1		- 50	ĩ	LINON	(SMA)	(190)	Iotal	
Total Assets"	ŝ	135.548.832 S	25,439,853 \$ 15,40%	s 3,194,767 1.93%	5 6,259,194			\$ 165,183,452 99 99%	
Customers		26,189	5,558	649				32,396	
		80.84%	17.16%	2.00%				100.00%	
Average Percentage		81.75%	15.28%	1.97%	3.65%			100.00%	the second second
Allocation of Allocable Expenses	s	53,526 S		S 1,350	s	0	0	S 68.534	S · ·
Effective Allocation %		78.10%	15.28%	1.97%	3 65%	NA	NIA		
Specific Allocation Calculations - Tier 5-7									
						Con Ops	Keal Estate		
	I	MMM	PEU	Pittsfield	North Country	(SMd)	(ISC)	Total	Check Total
Direct Allocable Costs		D	D	•			0 NIA		•

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Return on Assets

						Real Estate			
Summary of Allocations	PWW	PEU	Pittsfield	North Country	North Country Con Ops (PWS)	(TSC)	Totals		
Tier 1	280,708	55,914	6.762	12,528		1.385	374,290		
Tier 2	74,152	14,770	1,786	3,309	3 7,251	•	101,268		
Tier 3	19,348	3,832	•		1,880		25,060		
Tier 4	53,526	11,157	1.350	2,501	•	•	68.534		
March Part PAC Malv								Unallocated	Check Total
Total Allocations	427 734	85.673	9,898	18,338	3 26,124	1,385	569.152		
	75.15%	15.05%	1.74%	3 22%	6 4.59%	0.24%	100.00%		
Full Year Amounts	Annual Amts	Monthly Amts							
PWW operating expense allocation - PWW	S (141,418)	S (11.784)							
PWW operating expense allocation - PEU	S 85,673	\$ 7,139							
PWW operating expense allocation - Pittsfield	S 9,898	S 825							
PWW operating expense allocation - North Country	S 18,338	S 1,528							
PWW operating expense allocation - PCP	• •								
PWW operating expense allocation - PWS	S 26,124	\$ 2.177							
PWW operating expense allocation - TSC	S 1.385	S 115							

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Check Totals

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Pennichuck Corporation Mgmt Fee Expense Allocation (to other Subsidiary Companies) For Month Ending 12/31/09

Professional Fees	114,502
Prof Fees & Services: SOX Consult Fee	60,370
D&O Insurance	172,958
Annual Report Cost	34,965
Auditors Expense/SEC Legal	270,888
Corp Governance Legal/American Stock Transfer	42,053
Directors Fees & Meetings/Corporate Secretary	205,052
EDGAR Filing/NASDAQ/All Other Misc	74,427
YTD Twelve Months Ending 12/31/09	975,215

Allocation Calculation - level 1 (All Companies)

		PWW	PEU	Pittsfield	North Country	Total	Regulated	Con Ops (PWS)	Real Estate (TSC)	Total	
Revenues December 2009 Prelims	s	23,403,250 \$ 71.43%	5,037,925 S 15.38%	604,498 1.85%	\$ 947,769 2.89%	5	29,993,442	5 2,770,212 8,46%	s 0.00%	\$ 32,763,654 100.00%	
Total Assets December 2009 Prelims	s	135,548,832 \$ 78.32%	25,439,853 S 14,59%	3,194,767 1.83%	\$ 6,259.194 3.59%	S	171,442,646	5 310,320 0.18%		\$ 174,342,328 100,00%	
Average Percentage		74.88%	14.98%	1.84%	3.24%			4.32%	0.74%	100.00%	Check
Allocation of Allocable Expenses		730,207	146,131	17,929	31,612	s	925,879	42,095	7,241	\$ 975,215	Total S

	Y	TD Costs	Curr	rent Balance		Monthly Adj
PCP Mamt Fee Expense Allocation - PCP	S	(975,215)	s	(975,225)	-	10
PCP Mgmt Fee Expense Allocation - PWW	S	730,207		730,977		(770
PCP Mgmt Fee Expense Allocation - PEU PCP Mgmt Fee Expense Allocation - PAC	s	146,131 49,541		145,605		526
	S			49,366		
PCP Momt Fee Expense Allocation - PWS	S	42,095		42,090		5
PCP Mgmt Fee Expense Allocation - TSC	s	7,241		7,187		54
Check Totals	s		S		\$	-

Step Allocation of Benefits

		Non-Union	Union Wage	
2008 Benefits	Total Dollars	Wage Portion	Portion	cation Method
Officer's Life Insurance	11,249	11,249	-	Specific
Pension - DB Plan	760,957	486,577		Allocated based on pro-rata wages
Group Pension: 401K	171,892	109,912	61,980	Allocated based on pro-rata wages
Post Retirement Health Expense	190,035	121,513	68,522	Allocated based on pro-rata wages
Post Employment Health Expense	95,457	61,038	34,419	Allocated based on pro-rata wages
Employee Service Awards	-)-	2	Allocated based on pro-rata headcounts
Group Health Insurance	1,045,956	522,978	522,978	Based on actual participation (HR)
Health Insurance: Opt Out	15,458	8,524	6,934	Allocated based on pro-rata headcounts
Group Dental	132,857	66,428	66,428	Based on actual participation (HR)
Group Life/Disability Insurance	22,203	12,243	9,960	Allocated based on pro-rata headcounts
Employee Benefits/Section 125	7,224	3,983	3,241	Allocated based on pro-rata headcounts
Misc Employee Benefits	46,394	25,582	20,812	Allocated based on pro-rata headcounts
Employee Relations		-	÷.	Allocated based on pro-rata headcounts
Tuition Reimbursements	9,243	5,097	4,146	Allocated based on pro-rata headcounts
Training Educational Seminars	38,237	21,084	17,153	Allocated based on pro-rata headcounts
Boot & Clothing Allowance-OPS	187,991	-	187,991	Allocated based on pro-rata wages
Boot & Clothing Allowance-CS-Union	3,833	-	3,833	Allocated based on pro-rata wages
Boot & Clothing Allowance-WTP	84,387	-	84,387	Allocated based on pro-rata wages
Union Sick Time	52,925	-	52,925	Allocated based on pro-rata wages
Vacation Earned YTD (per Acc Vac Rpt) Union Only	137,192	-	137,192	From LG's calculation
SERP	49,101	49,101	-	Specific
Payroll Taxes:				
Employer FICA/Medicare	509,654	303,673		Allocated based on pro-rata wages
FUTA	6,464	4,133		Allocated based on pro-rata wages
SUI	4,501	2,878		Allocated based on pro-rata wages
Total Benefits	3,583,209	1,815,993	1,767,216	-
Benefits % (of wages)	48.5%	38.33%	66.56%	0
Total Wages thru 12/31/08	7,467,472	4,774,907	2,692,565	Wages per Payroll (ADP)
Less: Accrued Wages as of 12/31/07	(151,622)	(85,559)	(66,063)	Year End Payroll Accrual Entry
Add: Accrued Wages thru current mo-end	77,213		28,685	Current Month Payroll Accrual
Grand Total Wages	7,393,063	4,737,877	2,655,187	
%	100.0%	64.1%	35.9%	
Total Headcount	107	59) 43	8
(Excluding Summer Help)	100.0%	55.1%	44.9%	6

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(27) Uniform Statistical Report – Not Applicable.

(28) Summary Work Papers – To be submitted with testimony and supporting schedules in 1604-06.