

STATE OF NEW HAMPSHIRE  
BEFORE THE  
NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION  
CITY OF NASHUA'S PETITION FOR VALUATION PURSUANT TO RSA 38:9  
Docket No. DW04-048

DIRECT TESTIMONY OF GEORGE E. SANSOUCY

- Q. What is your name and what is your association with the City of Nashua?
- A. My name is George E. Sansoucy. I am a consultant and my firm, George E. Sansoucy, P.E., LLC, has been engaged by the City of Nashua to advise it on matters concerning the City's proceeding to acquire the water utility assets of Pennichuck.
- Q. What is your educational background and work experience?
- A. I am a registered professional engineer in the State of New Hampshire. A resume of my qualifications is attached.
- Q. What experience do you have with the municipalization of water utilities?
- A. I was the principal technical advisor and negotiator for the Town of Hudson in its taking of the assets of Consumers New Hampshire Water Company and for Ashtabula County, Ohio, in its taking of assets of the Consumers Ohio Water Company's Ashtabula Division.
- Q. What is the purpose of your testimony?
- A. The purpose of my testimony is to describe the assets Nashua seeks to purchase from PWW, PEU and PAC; to describe the impact PWW's proposed capital investments will have on its future rate structure; to describe what the current financial status of PEU means for its future rate structure; to describe the impact on ratepayers if Nashua acquires all of the assets of PWW, PEU and PAC; and to describe the impact on rate payers if Nashua's acquisition is limited either to PWW or the so-called core system, which Nashua defines as all property and facilities hydraulically connected to the treatment plant. I will not attempt to discuss at this time the value of these assets, although for purposes of discussing

future rates, I have assumed an acquisition price of \$81 million, which is consistent with some recent sales of water systems in New England. A final determination of value will require discovery.

- Q. Please elaborate on the assets being sought by the City in this proceeding.
- A. For each of the utilities to be acquired, the City seeks generally to acquire all the assets (real and personal) of each utility that comprise a complete and functional public water system, or collection of water systems, with all the appurtenances, accessories and records that would be expected of facilities operated with good utility practices.

The following descriptions are illustrative but not necessarily exhaustive. Where specific assets are listed they are the result of examination of public records and subject to revision. The absence of any asset does not mean that the City does not wish to acquire that asset pursuant to this proceeding.<sup>1</sup>

**Pennichuck Water Works, Inc. Assets**

Pennichuck Water Works, Inc. (PWW) consists of a water treatment plant, wells, interconnections and a water transmission and distribution system that services the City of Nashua and customers in neighboring communities. The system served by the water treatment plant is designated the “core” system. The systems not directly connected to the core system are the “satellite” systems that are identified by the following names:

System Name	Location
Amherst <sup>2</sup>	Amherst
Ashley Commons	Milford
Atherton Commons	Amherst
Autumn Woods	Salem
Badger Hill <sup>3</sup>	Milford

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<sup>1</sup> Annual Reports to the NH PUC, PUC Orders, NH DES One-stop Database and the Pennichuck Corp. web site.

<sup>2</sup> Former Amherst Village District

<sup>3</sup> NH PUC Docket No. DW 00-285

System Name	Location
Bedford Water Company	Bedford
Bon Terrain	Amherst
Cabot Preserve/Greenfield Farms	Bedford
Drew Woods/Bliss /Hubbard Hill/Birchfield	Derry
Dunlap Woods	Bedford
English Woods	Bedford
Glenn Ridge	Derry
Glennwoodlands	Epping
Great Bay	Newmarket
Great Brook	Milford
Hi-Lo Estates	Derry
Little Pond	Bedford
Maple Haven	Derry
Powder Hill	Bedford
Redfield Estates	Derry
Richardson	Derry
Sargent Woods	Newton
Soughegan Woods	Amherst
Sweet Hill	Plaistow
Twin Ridge/Rolling Hills	Plaistow
Valleyfield <sup>4</sup>	Plaistow & Newton

The core system has over 400 miles of mains and five storage tanks as well as pumping stations and the water treatment plant.

The assets to be acquired are:

Water supply, treatment, transmission and distribution facilities

All the land, land rights, buildings and any other real property of the Company.

The water treatment plant with all of its associated supply ponds including the connection to the Merrimack River.

All wells for the core and each and every satellite system.

All pumps, pumping stations, pressure regulating devices, storage tanks, and treatment equipment.

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<sup>4</sup> NH PUC Docket No. DW01-001

All mains, pipes, services, hydrants, valves, and meters.

### Records

All operating manuals, specification sheets, manufacturer's instructions both in electronic and written form for every component of the water supply, treatment, transmission and distribution facilities at the system level and every sublevel.

All continuing property records both in electronic and written form with all subsidiary records, ledgers, journals, and the like and supporting plans and specifications for every entry in the records.

All work orders, completed and open.

All repair and maintenance records.

All records of purchases of services and materials.

All hydrant, meter, service, valve and other similar records for all components of the facilities both in electronic and written form.

All customer account information including billing history both in electronic and written form.

All drawings, plans and specifications for every component of the water supply, treatment, transmission and distribution facilities.

All logs, data sheets, recordings and other records of every test performed on every component of the water supply, treatment, transmission and distribution facilities.

All engineering and/or design studies whether preliminary or final, complete or incomplete together with all supporting data, work papers, analyses, etc. related to every component of the water supply, treatment, transmission and distribution facilities.

### Parts and equipment

All laboratory and testing equipment located within the water treatment plant and at any well site or pumping station.

All meter reading devices with associated hardware and software.

All tools, fixtures, equipment, materials and supplies used to operate or maintain any component of the water supply, treatment, transmission and distribution facilities, including, but not limited to, all equipment, devices, computers, programs and historical data for SCADA or similar systems.

Land and Buildings

All land, land rights, buildings and other real property specifically excluding any leasehold interest in the 25 Manchester Street, Merrimack, building.

**Pennichuck East Utility, Inc. Assets**

Pennichuck East Utility, Inc. consists of a group of smaller water systems, the majority of which were systems owned by Consumers New Hampshire Water Company when Consumers was acquired by the Town of Hudson who sold them to Pennichuck East Utility in 1998. The systems that make up Pennichuck East Utility are:

System Name	Location
Atkinson (Pioneer Commerce Park)	Atkinson
Avery Estates	Londonderry
Beaver Hollow	Sandown
Brook Park	Londonderry
Cohas Landing	Londonderry
East Derry/Farmstead	Derry
Gage Hill	Pelham
Green Hills	Raymond
Hardwood	Windham
Harvest Village	Londonderry
Hidden Valley	Windham
Liberty Tree	Raymond
Litchfield	Litchfield
Londonderry	Londonderry
Maple Hills	Derry

System Name	Location
Ministerial	Londonderry
Nesenkeag	Londonderry
Oakwood Terrace	Derry
Pelham	Pelham
Pine Haven	Derry
R&B	Londonderry
Rolling Hills	Plaistow
Sawmill	Litchfield
Shadybrook/Goldenbrook	Windham
Smythe Woods	Hooksett
Spring Wood	Derry
Stonegate/Williamsburg	Pelham
W&E/Artesian	Windham
WESCO	Hooksett
White Rock	Bow

In aggregate these systems have approximately 120 miles of transmission and distribution mains. Thirty miles of the mains are 10-inch diameter or larger.

The assets to be acquired are:

Water supply, treatment, transmission and distribution facilities

All the land, land rights, buildings and any other real property of the Company.

All wells, pumps, pumping stations, pressure regulating devices, storage tanks, and treatment equipment.

All mains, pipes, services, hydrants, valves, and meters.

Records

All operating manuals, specification sheets, manufacturer's instructions both in electronic and written form for every component of the water supply, treatment, transmission and distribution facilities at the system level and every sublevel.

All continuing property records both in electronic and written form with all subsidiary records, ledgers, journals, and the like and supporting plans and specifications for every entry in the records.

All work orders, completed and open.

All repair and maintenance records.

All records of purchases of services and materials.

All hydrant, meter, service, valve and other similar records for all components of the facilities both in electronic and written form.

All customer account information including billing history both in electronic and written form.

All drawings, plans and specifications for every component of the water supply, treatment, transmission and distribution facilities.

All logs, data sheets, recordings and other records of every test performed on every component of the water supply, treatment, transmission and distribution facilities.

All engineering and/or design studies whether preliminary or final, complete or incomplete together with all supporting data, work papers, analyses, etc. related to every component of the water supply, treatment, transmission and distribution facilities.

#### Parts and equipment

All laboratory and testing equipment located within the water treatment plant and at any well site or pumping station.

All meter reading devices with associated hardware and software.

All tools, fixtures, equipment, materials and supplies used to operate or maintain any component of the water supply, treatment, transmission and distribution facilities, including, but not limited to, all equipment, devices, computers, programs and historical data for SCADA or similar systems.

## Land and Buildings

All land, land rights, buildings and other real property.

## **Pittsfield Aqueduct Company Assets**

The Pittsfield Aqueduct Company consists of a supply pond, Berry Pond, a Microfloc Trimite® treatment plant installed in 1997 and approximately 13 miles of transmission and distribution mains. The Company is located entirely within the Town of Pittsfield and serves a single service area in and around the town center. The system is gravity fed from the pond through the treatment plant to customers.

The assets to be acquired are:

### Water supply, treatment, transmission and distribution facilities

The water treatment plant with all of its associated supply ponds, easements and rights of way.

All mains, pipes, services, hydrants, valves, pressure regulating devices and meters.

### Records

All operating manuals, specification sheets, manufacturer's instructions both in electronic and written form for every component of the water supply, treatment, transmission and distribution facilities at the system level and every sublevel.

All continuing property records both in electronic and written form with all subsidiary records, ledgers, journals, and the like and supporting plans and specifications for every entry in the records.

All work orders, completed and open.

All repair and maintenance records.

All records of purchases of services and materials.

All hydrant, meter, service, valve and other similar records for all components of the facilities both in electronic and written form.

All customer account information including billing history both in electronic and written form.

All drawings, plans and specifications for every component of the water supply, treatment, transmission and distribution facilities.

All logs, data sheets, recordings and other records of every test performed on every component of the water supply, treatment, transmission and distribution facilities.

All engineering and/or design studies whether preliminary or final, complete or incomplete together with all supporting data, work papers, analyses, etc. related to every component of the water supply, treatment, transmission and distribution facilities.

#### Parts and equipment

All laboratory and testing equipment located within the water treatment plant and at any well site or pumping station.

All meter reading devices with associated hardware and software.

All tools, fixtures, equipment, materials and supplies used to operate or maintain any component of the water supply, treatment, transmission and distribution facilities, including, but not limited to, all equipment, devices, computers, programs and historical data for SCADA or similar systems.

#### Land and Buildings

All land, land rights, buildings and other real property.

Q. Are you familiar with the Pennichuck Water Works (PWW) rate case DW 04-056 now pending at the PUC?

A. Yes, I am. This request for rate increases is driven by the capital investments that PWW has made in the past few years. These investments have not been revenue producing in the sense that they would generate additional income as a result of added investment. These investments are in part due to new drinking water regulations and in part to replace aging infrastructure. For some years, PWW's parent and sole shareholder, Pennichuck Corporation, has paid dividends rather than make investments in the PWW system which, because of its lack of growth, would have been largely non-revenue producing.

As an investor owned utility, it is PWW's duty to its investors to seek to earn an acceptable return on investments. PWW is allowed to earn approximately 8.6% on its investments but PWW is earning only a little over 6%. For this reason, PWW this spring requested approval from the NHPUC (Docket DW 04-056) for an an increase of 16% in its total charges to customers over the rates approved by the PUC on March 1, 2002 in Docket No. DW 01-0181.

Q. What are the long-term implications of the information filed in the current case?

A. The information filed by Pennichuck indicates that three years from now (2006) PWW would require a rate increase of approximately 50% over the amount being requested in DW 04-056 assuming the factors determining net operating income (O&M costs, etc.) remain the same as in the test year for the current rate case. An extrapolation from historical data and the rate case indicate that additional rate cases can be anticipated approximately every three years.

This increase is a simple consequence of the need- to make capital investments that will double their rate base in the next three years with virtually no growth in the amount of water sold, especially in the core system. These calculations are shown in Exhibit GES-1.

Q. What did you conclude about possible rate increases for Pennichuck East Utilities and Pittsfield Aqueduct Company?

A. At the present time, PEU appears to be earning about 4.7% on rate base which is less than the 8.58% rate of return allowed PWW in its temporary rates and less than the 6.2% rate of return that triggered PWW's current request to increase rates.

Using the logic of the case being argued in DW 04-056, it appears that Pennichuck would have been justified in requesting a rate increase of 41% based on a 2003 test year or would be justified in asking for a rate increase of 65% in 2006 as illustrated in Exhibit GES-2, with additional increases in subsequent years. Pennichuck's intentions with regard to PEU are not known.

The 2003 return on rate base for PAC is estimated to be 5.1% which is lower than the 6.2% that triggered the current PWW rate increase request. As shown in Exhibit GES-3 a rate increase of approximately 58% would be justified in 2006 followed by modest increases in subsequent years.

Q. Will the management of Pennichuck Corporation attempt to sell the company again and if so, why?

A. At the 2004 annual meeting of the stockholders of the Pennichuck Corporation, the company said that it was still in its best interest to become affiliated with a much larger company.

Even without the statement, it is obvious that the corporation needs to be sold. For the period 2004 to 2007, Pennichuck has identified the need to make approximately \$48 million in investments in PWW alone for plant that will not generate revenue from new customers. This is approximately equal to the net book value of at the beginning of 2004. It will be difficult for the Company to fund these improvements without diluting the equity of its shareholders.

Q. What are the implications of new ownership on the rates of Pennichuck Water Works, Pennichuck East Utilities and Pittsfield Aqueduct Company?

A. New owners of Pennichuck Corporation would almost certainly be companies located outside of New Hampshire and probably outside of the United States. Pennichuck clearly has been pursuing a strategy of allowing revenues from PWW to generate almost all of the dividends needed to meet its plans to avoid having to increase the legitimate but high rates in PEU.

A more distant owner might not have that same concern.

If Pennichuck was acquired by one of the large water utility companies, the new owner would be able to infuse new equity capital into the utilities more easily than Pennichuck Corporation could on its own. A shift to a larger portion of equity over debt, however, would tend to bias the weighted average cost of capital upwards with consequent increases in revenue requirements and rates. That calculation is too speculative to quantify at the present time.

Q. What will be the impact on rate payers if Nashua acquires all of the assets it is requesting?

A. The increase in rates will be significantly less than the likely future rate increases that will have to be charged by the Pennichuck utilities to maintain the systems and replace aging infrastructure. Moreover, in the long run, the community will benefit from ownership that focuses on quality of service and preservation of assets rather than on return to shareholders.

The impact can be best demonstrated by comparing the rates required from a financial plan for the Water utilities under municipal ownership with the likely rates that will have to be obtained by the Pennichuck utilities.

Q. Please describe the financial plan developed by the City of Nashua for the operation of the systems.

A. The financial plan begins with examination of the historic revenues and expenses of the Pennichuck utilities. Exhibits GES-4 through GES-6 were derived from

data taken from the annual reports to the N. H. Public Utilities Commission for 1999 through 2003 for PWW, 1998 through 2003 for PEU and 2000 through 2003 for PAC. Pennichuck acquired PEU in 1998 and there have been no rate increases for it under Pennichuck ownership. PAC was acquired by Pennichuck in 1998 while PAC was in the midst of constructing its first water treatment plant and revenues and expenses were not stable until 2000. There has been no rate increase for PAC. Rate increases were effective for PWW in 1999 and in 2002. In Exhibits GES-4 through GES-6 the amounts in the column headed "Trend to 2006" are a straight- line trend of the actual data (excluding 1998 PEU) that is used to select a "proforma" estimate for 2006.

Of particular importance is the fact that water consumption in PWW is declining while the number of customers is slowly growing. The net impact is that the only increases in metered water sale revenues come from rate increases. Likewise, water sales are flat for PAC.

With the information developed above, we created the Revenues portion of the Financial Plan shown in Exhibit GES-7 ("Consolidated Systems"), which is the summation of data in Exhibits GES-8 through GES-10 (PWW, PEU and PAC, respectively). Each system is modeled independently to recognize their different characteristics.

Operation and maintenance expense is projected to 2006 and is set at 80% of the amounts that would have been spent by the three utilities. The reduction is possible because of the elimination of corporate and regulatory expenses and by the fact that the work will be performed by skilled operating and management companies that have an incentive to reduce cost. It has been my experience, in both Hudson and Ashtabula, that by contracting out operation and maintenance, as the City intends to do, the cost savings are even greater than we have projected. For example, in Ashtabula, operation and maintenance expense was reduced by approximately 30%.

Provision is made for payments in lieu of taxes (PILOT's) to local governments at the same level that we anticipate would be paid by the Pennichuck utilities.

Consolidating the Capital Budget in PWW's current rate case, reviewing historical investment patterns and considering historic depreciation rates provides a basis for estimating capital repairs. For PWW, in Exhibit GES-11 we begin with the rate case capital budget for 2006 and 2007. The costs of the Water Treatment Plant Upgrade, UV Light Disinfection and the Fifield Tank will be paid with bond proceeds. Data processing will be contracted to the O&M Contractor and not require capital investment on the part of the City.

A review (see Exhibit GES-12) of historic capital investments by the three utilities is used to estimate going forward capital repair budgets.

The City's initial investment in the system will consist of debt for acquisition and startup costs and a \$30 million bond for the upgrade of the Water Treatment Plant and the construction of the Fifield Tank proposed by PWW. The acquisition price for the systems is assumed to be \$81 million plus issuance costs plus initial capital expenses for a total of \$87 million.

The acquisition price of \$81 million is based on an analysis of several recent sales in Massachusetts and New Hampshire that suggest that the market has paid about \$2,700 per customer for going concern water utilities and an estimate that the three utilities will have about 30,000 customers at the time of closing. It is also consistent with our earlier review of the value of these companies. A more comprehensive analysis and determination of value of the Pennichuck utilities will be made after we obtain discovery from them of documents and information not presently available to us in public filings with regulators and the SEC. For example, we will want to examine such things as the companies' continuing property records and financial information from which we can determine current earnings before interest (income), taxes, depreciation and amortization (EBITDA) and current net book value less contributions in aid of construction (CIAC), both of which are useful in establishing ratios which are indicators of value. For

purposes of this analysis, however, a value of \$81 million is as fair a determination of value as we can make with the information available to us.

It is apparent from this analysis that although rates will increase under municipal ownership they will not increase to the extent they would under continued ownership by Pennichuck. For example, through 2015, rates under municipal ownership of PWW we project would increase a total of 36.2 % (GES-8), while under Pennichuck ownership they are projected to increase a total of 77.44% (GES-1). For PEU the difference is a rate increase under municipal ownership of 77% (GES-9) and under continued Pennichuck ownership of 117.25% (GES-2); and for PAC 40% (GES-10) versus 71.11% (GES-3)

Q. Please describe what will happen to rates for the Pennichuck utilities if they continue to be owned by an investor-owned utility.

A. We have developed a set of likely scenarios of rate increases that Pennichuck would require if it were to pursue the same level of capital investment as is contemplated by the Municipal Financial Plan. These are attached as Exhibits GES-1 through GES-3. The most significant assumptions in these scenarios is that the Operation and Maintenance costs for Pennichuck would increase at the same rate at they would under municipal ownership and changes in CIAC and CIAC amortizations can be ignored because they are wash items in the analysis. It is assumed that the rate base and other data presented to the NH.PUC by PWW in its current rate case are correct and are used as a starting point. Our analysis assumes that Pennichuck will be allowed a return on rate base of 8.68%, its cost of debt will be 6.5% and total debt will be 55% of rate base.

Extrapolated as they are from publicly available information and being projections that are subject to change from future events, these scenarios are presented for the purpose of demonstrating that, all things being equal, the cost to ratepayers under municipal ownership is significantly less than under continued ownership by Pennichuck.

Q. What is the impact if Nashua is restricted to the acquisition of just Pennichuck Water Works?

A. Each of the Pennichuck Corporation's subsidiaries is a physically independent utility. Implicit in utility rate making is the principle that no group of rate-payers should subsidize another group of rate-payers and certainly no utility should subsidize another utility. I have been advised by counsel that because there is no connection between the companies, there is no issue of severance damages in the event that Nashua cannot acquire PEU and PAC. However, even if PEU and PAC were entitled to damages for the loss of operating efficiencies, they would not have a significant impact on the overall cost of acquiring PWW. An examination of Exhibits GES-1 and GES-8 shows again that under City ownership while rates would have to increase they would not rise as much as under continued Pennichuck ownership.

The fiduciary responsibility of the Board of Directors and management of the Pennichuck Corporation is to maximize the wealth of its shareholders. It appears that Pennichuck believed it could meet a goal of a regular increase in dividends and a steady stock price while accepting lower rates of return from PEU and PAC than it could legitimately claim from the NHPUC. One impact of this policy is that a disproportionate share of the cash that could have been invested in PWW infrastructure was being diverted to dividend payout.

It is probable, therefore, that Pennichuck would seek rate increases for PEU and PAC as soon as it no longer owned PWW. It appears from data in the 2003 Annual Report to the Public Utilities Commission that a rate increase of 41% could have been justified based on that year as a test year. That increase would rise to 52% for a 2004 test year if PEU made \$1.2 million of capital investment in 2004 plus the construction at the Williamsburg/Stonegate system. If no increase in rates occurs prior to 2006, I have projected a total increase in rates for PEU under continued Pennichuck ownership of 117.25% and for PAC 71.11% during the period 2006-2019 (GES-2 and GES-3). Because rates would not increase for

PEU and PAC as much under City ownership, I believe it is in the public interest for the City to acquire their assets, notwithstanding their location outside Nashua.

Q. What is the impact if Nashua is restricted to the acquisition of just those facilities that are hydraulically connected to the Nashua Water Treatment Plant?

A. I have again been advised by counsel that because there is no physical connection between the core system and the balance of the PWW system, there is no issue of severance damages. However even if there was severance, the value of those portions of the PWW system that are not hydraulically connected to the treatment plant are minor so the impact would be similar to what I described in response to the previous Question.

Q. What will be the impact on the balance of the rate-payers if Nashua is restricted to acquisition of just those facilities that are hydraulically connected to the Nashua Water Treatment Plant?

A. Because we don't know what PWW would do with those portions of the system if they were not conveyed, we don't have enough information to answer this question. We do know that if they were incorporated into PEU, the impact on rates would be similar to what I described in response to the prior question relating to the acquisition of just PWW.

Q. Does this conclude your testimony?

A. Yes.