



Robert F. Reilly
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Dear Messrs. Conner and Donovan:

We understand that you represent Pennichuck Water Works, Inc. ("PWW") and its parent Pennichuck Corporation in a condemnation proceeding ("the dispute") with the City of Nashua, New Hampshire ("Nashua" or "the City"). We understand that the City has filed a petition to condemn the PWW subsidiary of Pennichuck Corporation.

We understand that the dispute is pending before the New Hampshire Public Utilities Commission ("the PUC").

We understand that the dispute involves the valuation of all of the PWW business operations, including all of the tangible property and all of the intangible property of the PWW operating business, as of December 31, 2004.

INTRODUCTION

At your request, we performed an analysis of a report ("the 2004 Sansoucy Report") prepared by George E. Sansoucy, P.E., LLC ("Sansoucy") dated January 12, 2006 ("the appraisal report date"). The 2004 Sansoucy Report states that it presents the appraisal ("the 2004 Sansoucy Appraisal") of the real, personal, and intangible property of PWW as of December 31, 2004 ("the valuation date"). The 2004 Sansoucy Report also states that the purpose of the 2004 Sansoucy Appraisal is to estimate the market value of the assets owned by PWW that are subject to the dispute.¹

¹ The 2004 Sansoucy Report. 2.

As part of this analysis, we considered the valuation approaches, methods, and procedures used in the 2004 Sansoucy Report. During the course of this analysis, we identified fundamental errors in the 2004 Sansoucy Report. These fundamental errors are described in this report. Based on this analysis, we formed an opinion as to:

1. the appropriateness of the 2004 Sansoucy Report valuation approaches, methods, and procedures; and
2. the reliability of the 2004 Sansoucy Report fair market value conclusion.²

PURPOSE AND OBJECTIVE OF THE ANALYSIS

The objective of this analysis is to form an opinion as to:

1. the appropriateness of the 2004 Sansoucy Report valuation approaches, methods, and procedures; and
2. the reliability of the 2004 Sansoucy Report fair market value conclusion.

The purpose of this analysis is to provide an independent expert opinion regarding the 2004 Sansoucy Report to assist you in your representation of PWW in the dispute.

This analysis is not to be considered an appraisal or a review appraisal, as those terms are described by Uniform Standards of Professional Appraisal Practice ("USPAP").

ANALYSIS PROCEDURES

As part of our analysis, we relied on a collection of documents, including, but not limited to:

1. documents listed in our original appraisal report;
2. documents referenced in the following section of this report regarding the appearance of bias in the 2004 Sansoucy Report, including the direct testimony of Sansoucy and Glenn C. Walker ("Walker") dated as of the appraisal report date ("the Testimony"); and
3. an appraisal report ("the 1995 Sansoucy Report") prepared by Sansoucy that presents "the appraisal of all special purpose utility property owned by [PWW], in the City of Nashua, inclusive of land and land rights" ("the 1995 Sansoucy Appraisal").

² "In this appraisal, the term market value is considered to be synonymous with fair market value." The 2004 Sansoucy Report. 2.

ANALYSIS SUMMARY

I. Appearance of Bias in the 2004 Sansoucy Report

The 2004 Sansoucy Report contains an Appraisers Certificate signed by Walker and Sansoucy. That certificate is required by USPAP and "is an integral part of the appraisal review report."³ The 2004 Sansoucy Report certifies that it is unbiased and impartial:

- The reported analyses, opinions and conclusions are limited only by the reported assumptions and limiting conditions and *are our personal, impartial, and unbiased and professional analyses, opinions and conclusions.*
- We have no present or prospective interest in the property that is the subject of this report, and *no personal interest or bias with respect to the parties involved.*
- We have *no bias* with respect to the property that is the subject of this report or to the parties involved with this assignment.⁴

The 2004 Sansoucy Report states that the "analyses, opinions, and conclusions were developed, and this report has been prepared in conformity with the requirements of the *Uniform Standards of [Professional] Appraisal Practice.*"⁵

In the Testimony, Sansoucy states that he "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 [PWW]."⁶ As stated in the Testimony:

- Our testimony today demonstrates that acquisition of PWW's assets at their market value will allow Nashua to operate its water system under the proposed contracts for operation and maintenance will benefit the customers of the system by providing state of the art service while using market forces to reduce overhead and provide savings to the customers.⁷
- Our testimony filed today ... lends further support to Nashua's Petition by demonstrating that Nashua will provide high quality service while producing significant savings for the benefit of the customers of the system.⁸
- We have concluded that the public interest is served by Nashua purchasing PWW.⁹

³ "This Standards Rule contains binding requirements from which departure is not permitted." USPAP 2005 Edition. Standards Rule 10-3.

⁴ The 2004 Sansoucy Report. 62 (emphasis added). The 2004 Sansoucy Report and the Testimony state that the 2004 Sansoucy Report is "a complete appraisal utilizing a self-contained report format as these terms are defined in the Uniform Standards of Professional Appraisal Practice (USPAP)." (The 2004 Sansoucy Report. 2. The Testimony. 2.)

⁵ The 2004 Sansoucy Report. 62.

⁶ The Testimony. 1 (emphasis added).

⁷ *Id.* 2.

⁸ *Id.* 5.

⁹ *Id.* 12.

Also, other materials which have been provided to us indicate the appearance of bias in the 2004 Sansoucy Report:

- In the Budget Review Committee of Nashua meeting on March 16, 2004, Sansoucy implied that he viewed his role not as an unbiased, independent appraiser, but rather as an advocate for the City of Nashua who was retained to promote the transfer of the system with no rate impact:
 - “I work for the City of Nashua. My charge will be to present a plan that offers *no net harm to any ratepayer or the company*. That is the ultimate goal to prove the public interest;”¹⁰
 - “I will advance a set of rates that does not harm Nashua, does not harm anyone outside of Nashua and does not harm the company.”¹¹
 - “When I have done my job—my job if all goes well *I come back to you with a price that you can accept and a deal and a structure that you can live with* to go forward.”¹²
 - “The test of value—the ultimate test of value is no net harm. What is the no net harm standard—it is a very practical standard that we applied in Hudson, we applied in Ashtabula where the rate payers are not asked to carry a greater rate because of the sale, the company is not asked to give up or constrict assets, we pay fair market value for the assets, but we don’t overpay those assets so that there is a rate increase. *We will be going in with no rate increase as the standard of transfer of the value.*”¹³

These excerpts indicate that Sansoucy viewed his assignment as protecting the interests of the involved parties, trying to keep the rates static, and promoting the property transfer, and not as independently appraising the PWV assets.

- Sansoucy recommended that a regional water district be formed, even to the extent of recommending the name,¹⁴ because the regional effort “sweetens the deal”,¹⁵
- Sansoucy agreed to act as a litigation advisor in the condemnation proceedings, and has assisted in the legal proceedings:
 - He participated in the preparation of the condemnation petition.¹⁶
 - He drafted the RFPs.¹⁷
 - He provided “assistance for the preparation of a trial plan.”¹⁸

¹⁰ *Id.* 10 (emphasis added).

¹¹ *Id.*

¹² *Id.* 29 (emphasis added).

¹³ *Id.* 14 (emphasis added).

¹⁴ Pennichuck Water Special Committee. http://www.gonashua.com/Aldermen/Minutes/Penn/2004_03_31.htm.

¹⁵ 3/16/2004 Budget Review Committee. 10.

¹⁶ Deposition of Munck. 123-124.

¹⁷ Deposition of Sansoucy. 167.

- He agreed in his contract to “[a]ssist in the preparation of the trial plan for the main proceeding before the PUC.”¹⁹
- In his March 19, 2004 contract, in which Sansoucy agrees to “provide engineering consulting and valuation services to the City of Nashua,” Sansoucy agrees to provide the following services relating to the “Final Asset transfer to public ownership”:
 1. Provide asset descriptions for the purchase and sale documents. Assist with wording of transfer documents to assure that all the required elements of the assets of a functional water utility are included.
 2. Assist and participate with the City’s financial advisors in the preparation of materials to facilitate the optimum debt structure and cost for the acquisition, and the placement of tax exempt debt.
 3. Prepare final contracts for the operation, maintenance, and management of the publicly owned system including assisting with developing and hiring of the appropriate public staff.
 4. Assist with the development and adoption of a final rate ordinance and ordinances/rules governing the operation of the system.
 5. Assist with the final preparation of the capital improvement plan.
 6. Assist with closing activities including auditing the materials transferred for completeness.
 7. Provide diligence services to assure all documents are transferred.
 8. Set up customer account procedures and transfer customer balances.
 9. Set up contract accounts for CIAC reimbursements.
 10. Set up CIAC and contractor specifications for future construction.
 11. Miscellaneous requirements.²⁰

This list of services indicates that Sansoucy agreed to perform certain tasks *after the condemnation is completed*, thus potentially giving him a prospective interest in the outcome of the condemnation. This prospective interest in the outcome of the condemnation appears to be in conflict with the certification in the 2004 Sansoucy Report, which states, “We have no present or prospective interest in the property that is the subject of this report, and no personal interest or bias with respect to the parties involved.”

¹⁸ *Id.* 254.

¹⁹ N 208667. 3/19/2004 Contract between the City of Nashua and George E. Sansoucy, P.E., LLC. 4 of 9.

²⁰ N 208668. 3/19/2004 Contract between the City of Nashua and George E. Sansoucy, P.E., LLC. 5 of 9.

II. Standard of Value Considerations

Fair market value is “the price, expressed in terms of cash equivalents, at which property would change hands between a hypothetical willing and able buyer and a hypothetical willing and able seller, acting at arm’s length in an open and unrestricted market, when neither is under compulsion to buy or sell and when both have reasonable knowledge of the relevant facts.”²¹

The 2004 Sansoucy Report states that the purpose of the 2004 Sansoucy Appraisal is to estimate the market value of the assets owned by PWW that are subject to the dispute. In the 2004 Sansoucy Report, market value is considered to be synonymous with fair market value.²²

In order to accurately estimate the fair market value of the PWW operating assets as of December 31, 2004, an appraiser should:

- analyze the likely population of willing buyers for the PWW operating assets; and
- consider the significant difference between the fair market value standard of value and the historical cost (or “book value”) data that are used for state regulatory ratemaking purposes.

III. Fundamental Errors in the 2004 Sansoucy Report

Error 1: Failure to analyze the likely population of willing buyers for the PWW operating assets

Sansoucy fails to analyze the likely population of willing buyers for the PWW operating assets.

Based on the characteristics of (1) PWW and (2) the population of buyers that is likely to invest in a water system, the most likely population of hypothetical willing buyers of PWW includes public entities. This conclusion with regard to the likelihood of a public entity buyer is based, in part, on the following facts:

1. The vast majority (approximately 80 percent) of water systems in the U.S. are owned by public entities;²³
2. PWW is located in a geographic territory where Pennichuck Corporation is the principal investor-owned water supplier. Therefore, few investor-owned utility (“IOU”) buyers are likely to pursue an acquisition of PWW; and
3. There are numerous public entities that may acquire PWW. The first group of potential publicly owned buyers includes any incorporated New Hampshire city or town. In addition, Nashua is a potential buyer. Finally, any existing or yet-to-be formed district is also a legitimate potential acquirer. Each of these jurisdictions, as well as other jurisdictions in the surrounding area, represents a potential public entity buyer of PWW.

These considerations suggest that the likely population of hypothetical willing buyers of PWW includes not-for-profit public entities.

²¹ American Society of Appraisers. *Business Valuation Standards—Definitions*.

²² The 2004 Sansoucy Report. 2.

²³ From the American Water Works Association web site at <http://www.awwa.org/Advocacy/pressroom/waterfax.cfm>.

In any acquisition of a going concern business, the population of buyers with the greatest expected synergies will set the range of market prices. The expected acquisition synergies of a population of willing buyers can be strategic, operational, and/or financial. By considering the acquisition synergies of various populations (or categories) of buyers, the analyst can identify the most likely population of buyers for the subject assets.

In an actual acquisition offering, many types of buyers may bid for the target company. However, the category of buyers with the greatest expected synergies will set the price range that all serious potential bidders will have to match.

In the case of PWW, a not-for-profit public entity buyer (1) will not have to pay income taxes, (2) will have access to low-cost municipal financing, and (3) will not be subject to the same regulatory environment as an IOU buyer. Therefore, public entity buyers will set the range of market prices in which all potential buyers (both public entity and IOU) will have to bid.

Sansoucy fails to analyze the likely population of willing buyers for the PWW operating assets in the 2004 Sansoucy Report. In contrast, Sansoucy did analyze the likely population of willing buyers in the 1995 Sansoucy Report, in which Sansoucy also valued the PWW tangible assets.

As stated in the 1995 Sansoucy Report, "The highest and best use of [PWW's] distribution system and that portion of its transmission systems which serves inhabitants of the City of Nashua, is as a utility property owned and operated by a nontaxable municipal entity."²⁴ A nontaxable municipal entity is, of course, an example of a not-for-profit public entity. Therefore, Sansoucy contended in the 1995 Sansoucy Report that the likely population of hypothetical willing buyers of the PWW tangible assets included not-for-profit public entities.

In fact, in the 1995 Sansoucy Report, Sansoucy concluded different fair market values in the case of (1) a public-entity buyer and (2) an IOU buyer. He then concluded that a public-entity buyer should be assumed, given his highest and best use analysis conclusion. This conclusion provides further evidence that, in 1995, Sansoucy contended that the likely population of hypothetical willing buyers of PWW includes not-for-profit public entities.

However, without any support or explanation, the 2004 Sansoucy Report indicates that the likely population of hypothetical willing buyers of PWW includes only IOU buyers (with the characteristics of PWW). As described above, the most likely population of hypothetical willing buyers of PWW also includes (1) public entities and (2) IOUs without the characteristics of PWW.

We understand that in *Southern New Hampshire Water Company v. Town of Hudson*, 139 N.H. 139, 142 (1994), a case in which Sansoucy testified, the New Hampshire Supreme Court confirmed that the pool of hypothetical buyers for water companies in the state consists of both (1) municipalities and (2) private companies regulated by the PUC:

The utility's analysis, however, fundamentally and erroneously depends on the assumption that a purchaser of the utility's property would be regulated by the PUC. The town could acquire the utility's property, see RSA 38:3 (1988), and would not be as restricted in its earning power as a utility.

²⁴ The 1995 Sansoucy Report. 26.

We understand that in *Southern New Hampshire Water Co.*, 139 N.H. at 143, the court also recognized that the failure of an appraiser to account for both types of hypothetical purchasers will result in a conclusion that is not representative of fair market value:

Second, the utility's capitalized earnings approach, like its reproduction cost analysis, fails to consider an unregulated purchaser and, thus, overestimates the effect of PUC regulation on fair market value.

We will discuss below how the Sansoucy failure to analyze the likely population of willing buyers for the PWV operating assets affects the 2004 Sansoucy Report fair market value estimation of the PWV operating assets as of December 31, 2004.

Error 2: Failure to consider the significant difference between (1) the fair market value standard of value and (2) the historical cost (or "book value") data that are used for state regulatory ratemaking purposes

The 2004 Sansoucy Report fails to consider the significant difference between (1) the fair market value standard of value and (2) the historical cost (or "book value") data that are used for state regulatory ratemaking.

The PUC allows water utilities in the State of New Hampshire the opportunity to earn a specified rate of return on the original cost of their "rate base." According to the Pennichuck Corporation SEC Form 10-K, "New Hampshire law provides that utilities are entitled to charge rates which permit them to earn a reasonable return on the cost of the property employed in serving their customers, less accrued depreciation, contributed capital and deferred income taxes ('Rate Base')." ²⁵

Therefore, New Hampshire law provides that rate base is based on accounting book value. However, accounting book value is not at all related to the fair market value standard of value.

Rate base is not based on an actual appraisal of fair market value. Rather, rate base is based on (1) the historical cost of certain specified utility plant in service assets less (2) accounting (or "book") depreciation. Therefore, rate base is a statement of a utility's historical cost investment as defined by specific rules and regulations. "The original-cost-less-depreciation or net-book-cost is an historical bookkeeping methodology which ignores current market-place influences. The net-book-cost method is designed as an arithmetic method for the sole purpose of recovering investments made and measured on an original dollar basis." ²⁶

Fair market value is an appraisal concept of the current value-in-exchange between a willing buyer and a willing seller. In contrast, rate base is an accounting concept related to a statement of historical cost. The difference between rate base and fair market value is an important conceptual one:

1. rate base is an income concept that governs the relationship between the regulatory commission and the subject utility; and

²⁵ Pennichuck Corporation. December 31, 2004. SEC Form 10-K. 6.

²⁶ See *Public Serv. Co. of New Hampshire v. Town of Farmington*, Docket Nos. 1281-81 and 1940-82, 1990 WL 149479, *3 (N.H. Bd. Tax. Land. App. Feb. 9, 1990).

2. fair market value is an exchange concept that governs the relationship between the utility owner (i.e. the willing seller) and the entity purchasing the utility (i.e. the willing buyer).

A utility's historical cost is completely unrelated to the current fair market value of the utility's operating assets. "There is no theoretical support, conceptual reasoning, or empirical data to suggest that the value of a business enterprise (under any standard of value) will necessarily equal the company's accounting book value . . . As an accounting convention, the book value of a company is the historical cost of all of the company's assets—less total accumulated depreciation."²⁷

We will discuss below how the 2004 Sansoucy Report failure to consider the significant difference between the fair market value standard of value and the historical cost (or "book value") data affects the Sansoucy fair market value estimation of the PWW operating assets.

Asset-Based Valuation Approach

The next several errors relate to the 2004 Sansoucy Report asset-based approach valuation analysis.

The 2004 Sansoucy Report contains fundamental errors in the asset-based approach valuation analysis. These errors include:

- failure to estimate the value of the PWW intangible personal property;
- failure to perform (or obtain) an appraisal of the PWW operating real estate and real property interests;
- reliance on inaccurate and incomplete tangible personal property original cost data and acquisition date data; and
- failure to assign any weight to the asset-based approach value indication in the valuation conclusion.

Error 3: Failure to estimate the value of the PWW intangible personal property

The 2004 Sansoucy Report fails to estimate the value of the PWW intangible personal property.

The PWW operating assets consist of the PWW water source, storage, treatment, and distribution property, both tangible *and* intangible. The 2004 Sansoucy Report states that it presents the appraisal of the real, personal, and intangible property of PWW as of the valuation date.²⁸

However, the 2004 Sansoucy Report does not include any valuation analysis of any of the PWW intangible personal property. The only reference in the 2004 Sansoucy Report to intangible personal property is a \$176,000 adjustment to reflect an addition of unspecified intangible plant reflected in the PWW 2004 annual report.²⁹

²⁷ Pratt, Shannon P., Robert F. Reilly, and Robert P. Schweihs. 2000. *Valuing a Business: The Analysis and Appraisal of Closely Held Companies*. New York: McGraw-Hill. 308.

²⁸ The 2004 Sansoucy Report. 2.

²⁹ The 2004 Sansoucy Report. F-1.

The asset-based valuation approach is based on the economic principle that the value of assets operating as a business enterprise is equal to (1) the current value of all of the subject operating assets (both tangible property and intangible property) less (2) the current value of the subject liabilities (both recorded liabilities and contingent liabilities).

Based on the quantity and quality of the available data, there are a several categories of PWW intangible personal property that can be (1) discretely identified and (2) individually valued. These categories of intangible personal property assets include:

- Distribution maps and as-built engineering drawings;
- Water pumping rights;
- Water system records and reports;
- Synergen work order database;
- Water treatment laboratory reports and test data;
- Supervisory Control and Data Acquisition ("SCADA") computer software system; and
- Trained and assembled workforce.

Appendix A contains descriptions of each category of PWW intangible personal property that the 2004 Sansoucy Report fails to value. Each category of PWW intangible personal property is included in the PWW operating assets that are subject to the dispute.

Error 4: Failure to perform (or obtain) an appraisal of the PWW operating real estate and real property interests

The 2004 Sansoucy Report fails to include an appraisal of the PWW operating real estate and real property interests.

Instead, the 2004 Sansoucy Report estimates the value of the operating real estate and real property from "the 2004 assessment values established by the individual towns and adjusted for the corresponding equalization ratio."³⁰ The assessment values are based on assessment records as of April 2004, and the equalization ratios are published by the State of New Hampshire Department of Revenue Administration.

However, adjusting assessment values for the corresponding equalization ratios does not provide the fair market value of the PWW operating real estate and real property interests as of December 31, 2004. The adjustment of assessment values for the corresponding equalization ratios is not a recognized valuation method. Therefore, Sansoucy should have performed (or obtained) an appraisal of the PWW operating real estate and real property interests as of December 31, 2004.

³⁰ The 2004 Sansoucy Report. 43.

Error 5: Reliance on inaccurate and incomplete tangible personal property original cost data and acquisition date data

The 2004 Sansoucy Report relies on inaccurate and incomplete original cost data in the tangible personal property trended original cost analysis.

The 2004 Sansoucy Report uses the *Pennichuck Water Works, Inc. – GAAP Taxable Assets Reports*, also referred to as the Continuing Property Records (“CPR”), as the data source for the original costs used in his trended analysis.³¹ Based on our analysis of these data sources, we determined that (1) the original cost data and (2) the acquisition date data within the CPR were inaccurate and incomplete.

Due to the limitations of the computer program originally used to generate the CPR, the acquisition dates do not reflect the actual dates that assets were acquired. For example, some of the PWW assets date back to the late 1800’s. However, the PWW computer program would not accept dates prior to 1901. Also, in order to permit the computer application to correctly calculate depreciation, PWW had to enter acquisition dates for certain assets that were more recent than the actual acquisition date for that asset. Finally, because mass account items are grouped (regardless of size and age) and include adjustments for retirements and additions, the original cost and acquisition date information for those mass account items does not reflect actual original costs and actual acquisition dates.

In the 1995 Sansoucy Report, Sansoucy recognizes that a trended original cost analysis will not provide a reliable fair market value indication unless there are accurate data regarding original costs and acquisition dates.³² The 1995 Sansoucy Report did not rely on the CPR. Rather, the 1995 Sansoucy Report used the unit cost method to derive individual cost estimates for each asset listed on the PWW engineering records.³³

As reflected in a letter dated November 15, 2005, which is contained in Appendix D, PWW notified Sansoucy that the original cost and acquisition date data within the CPR are not correct.

The 2004 Sansoucy Report reliance on inaccurate and incomplete original cost data and acquisition date data in the trended original cost analysis results in an unreliable asset-based approach valuation analysis.

Error 6: Failure to assign any weight to the asset-based approach value indication in the valuation conclusion

The 2004 Sansoucy Report fails to assign any weight to the asset-based approach value indication in the valuation conclusion.

Based on the Budget Review minutes dated March 16, 2004, it appears that Sansoucy never had any intention of giving the asset-based approach any weight before he began his appraisal. In discussing the asset-based approach at that time, Sansoucy stated:

³¹ Although the 2004 Sansoucy Report also refers to the Main Pipe Inventory as a data source, the Report does not indicate what information, if any, was extracted from the Main Pipe Inventory. The Main Pipe Inventory, also referred to as the engineering records, is simply a list of the PWW pipes. No cost information is included in the Main Pipe Inventory. Therefore, it appears that Sansoucy relied exclusively on the CPR as the data source for his original cost information.

³² The 1995 Sansoucy Report. 10.

³³ The 1995 Sansoucy Report. 11.

The cost approach is used and we will do one. It will be part of the package. The PUC will want to consider it and look at it, but most importantly it will be used to help allocate value between towns, cities, and the three companies. It allocates value based on actual pipe. *It will not be weighted for value in our analysis*, but it will be presented because it is a very important tool in determining and spreading out the costs and assisting in no net harm standard.³⁴

This failure to assign any weight to the asset-based approach is unsupportable for the following reasons:

- The asset-based approach discretely identifies and individually values all of the tangible property and intangible property that are subject to the dispute;
- The asset-based approach directly values the PWW operating assets (unlike other valuation approaches that only indirectly value the subject operating assets); and
- The asset-based approach relies heavily on the cost approach to value the subject tangible property and intangible property. In the appraisal of special-purpose property, the cost approach is the preferred valuation approach. More specifically, the cost approach is most commonly used to estimate the market value of special-purpose property and other properties that are not frequently exchanged in the market.³⁵

Since PWW was built for the unique purpose of supplying potable water and fire protection to the residents of Nashua and ten surrounding New Hampshire municipalities west of the Merrimack River, the operating assets of PWW represent "special-purpose" property.

According to the 1995 Sansoucy Report, "Development of a reproduction cost, or the estimation of an exact duplicate of a particular item of property, or the substitution of a replacement item that provides similar function, is a relevant and *essential* method in the preparation of an estimate of fair market value of utility property. The New Hampshire Board of Tax and Land Appeal recognizes this method of valuation as appropriate for special purpose utility property."³⁶

The 2004 Sansoucy Report should have assigned some weight to the asset-based approach value indication in the valuation conclusion. This is because (1) the asset-based approach relies heavily on the cost approach to value the subject tangible property and (2) the cost approach is the preferred valuation approach in the appraisal of special-purpose property.

"The replacement cost new"³⁷ is generally the proper starting point for developing an opinion of value using the cost approach."³⁸ A replacement cost new less depreciation analysis is clearly a more appropriate starting point than a trended original cost less depreciation analysis, given that the original cost data and acquisition date data were (1) inaccurate and incomplete and (2) known by Sansoucy to be inaccurate and incomplete.

³⁴ 3/16/2004 Budget Review Committee. 15 (emphasis added).

³⁵ Appraisal Institute. *The Appraisal of Real Estate*. 354.

³⁶ The 1995 Sansoucy Report. 9. (emphasis added)

³⁷ The replacement cost new of a personal property asset is the total cost to create, at current prices, an asset having equal functionality or utility of the subject asset. However, the replacement asset would be created with modern methods and constructed according to current standards, state-of-the-art design and layout, and the highest available quality of workmanship. It is noteworthy that Functionality is an engineering concept that means the ability of the subject asset to perform the task for which it was designed. Utility is an economics concept that means the ability of the subject asset to provide an equivalent amount of satisfaction.

³⁸ American Society of Appraisers. *Valuing Machinery and Equipment*. 46.

The 2004 Sansoucy Report should have included a replacement cost new less depreciation analysis. As a part of this analysis:

1. the Main Pipe Inventory, also known as the engineering records, should have been used; and
2. observed depreciation, which is based upon inspection of the PWW operating assets, should have been used.

The 2004 Sansoucy Report failure to assign any weight to the asset-based approach value indication in the valuation conclusion is a fundamental error.

Sales Comparison Valuation Approach

The next several errors relate to the 2004 Sansoucy Report sales comparison approach valuation analysis.

The 2004 Sansoucy Report contains fundamental errors in the sales comparison approach valuation analysis. These errors include:

- reliance on only one factor—revenue—to determine sale transaction comparability;
- consideration of stale transactions that do not reflect the current market conditions;
- consideration of a non-consummated sale that is not, in fact, an actual sale transaction;
- consideration of transactions that are not sufficiently similar to the subject system to be considered “comparable” to PWW;
- reliance on the stock and debt method as confirmation of the sales comparison approach value indication; and
- weighting the sales comparison approach value indication in the valuation conclusion.

Error 7: Reliance on only one factor—revenue—to determine sale transaction comparability

The 2004 Sansoucy Report identified 28 water companies and/or systems that were acquired in the last decade. We examined the available data for each of the 28 transactions in order to determine whether the transactions were similar enough to the subject system to be considered comparable.

In making that comparability analysis, we looked at several different recognized comparability factors, including:

1. date of the transaction;
2. price;
3. number of customers;

4. population of the service area;
5. number of systems involved;
6. geographic location and regulatory environment;
7. source of supply;
8. age of the system; and
9. transaction type as an asset purchase or a stock purchase.

Of the 28 water companies, the 2004 Sansoucy Report apparently only relies on nine of these water companies, which “had revenues in excess of \$10 million and were considered to be representative of the value PWW would bring in a transaction.”³⁹ Therefore, the 2004 Sansoucy Report relies on only one comparability factor—revenue.

The 1995 Sansoucy Report states that “three key indicators emerge as important considerations in comparing the market sales to the subject property. These are: sale price per customer, sale price as a multiple of gross income, and ratio of sale price to net book plant being sold.”⁴⁰ In contrast, the 2004 Sansoucy Report only relies on the revenue comparability factor.

Of these nine water companies:

1. Four are stale transactions that do not reflect the current market conditions⁴¹.
2. Three are part of one multi-state transaction, which is not sufficiently similar to the subject system to be considered “comparable” to PWW.⁴²
3. One is a non-consummated sale that is not, in fact, an actual transaction⁴³.
4. The remaining one is the Southwest Water Co./Tecon Water Holdings LP transaction. However, this transaction is not sufficiently comparable.

This transaction involved the sale of a combined water and wastewater system serving Texas and Oklahoma. Tecon Water Holdings LP was an eastern Texas utility with 86 water systems and 11 wastewater systems in Texas and Oklahoma. Since Tecon Water Holdings LP served water and wastewater customers in both states, it was subject to the regulations of both state agencies at the time it was acquired by Southwest Water Co. PWW, which is only subject to the regulation of one state agency, does not conduct wastewater operations.

Considering the 2004 Sansoucy Report relies on the Southwest Water Co./Tecon Water Holdings LP transaction, it is noteworthy that Sansoucy did not rely on the Tilton-Northfield Water/Tilton

³⁹ The 2004 Sansoucy Report. 60.

⁴⁰ The 1995 Sansoucy Report. 127.

⁴¹ (1) Buyer: Illinois-American Water Co., Seller: Citizens Communications Co., Date: 2000; (2) Buyer: Pennsylvania-American Water Co., Seller: Pennsylvania Enterprises, Inc., Date: 1995; (3) Buyer: Kelda Group, Seller: Aquarion Co., Date: January 7, 2000; and (4) Buyer: Thames Water PLC, Seller: E-Town Corp., Date: September 30, 2000.

⁴² See Appendix C, “Sale Transactions that are not Sufficiently Comparable to the Subject System,” pages 5-6, paragraph 10.

⁴³ Philadelphia Suburban Co./Pennichuck Corp. stock offer.

& Northfield Aqueduct Co. transaction, which (1) took place in 2005, (2) concerned a New Hampshire buyer and seller, and (3) resulted in a transaction price of \$13,245, per customer.

The sales comparison approach is applicable when there are a sufficient number of reliable sale transactions within a recent time period. These sale transactions must take place within a recent period of time about the valuation date. This is because market conditions change over time. "[T]he sales comparison approach is usually not applied to special-purpose properties because few similar properties may be sold in a given market, even one that is geographically broad."⁴⁴

As stated in the 1995 Sansoucy Report, "Comparable sales or market sales analysis is an important part of the valuation process for land and buildings in a community, but major utility systems, such as water, gas, electric distribution, or telephone companies, are not commonly bought and sold. The theory behind the use of comparable sales requires that the property used for comparison must be substantially similar to that being valued and the sale must have occurred within a reasonably close time to the base date for the valuation."⁴⁵

Error 8: Consideration of stale transactions that do not reflect the current market conditions

The 2004 Sansoucy Report considers stale transactions that do not reflect the current market conditions for water company operating assets that exist as of the valuation date.

As previously stated, according to the 1995 Sansoucy Report, "The theory behind the use of comparable sales requires that ... the sale must have occurred within a reasonably close time to the base date for the valuation."⁴⁶

Twelve of the 28 transactions identified in the 2004 Sansoucy Report sales comparison approach analysis took place anywhere from five to ten years prior to the valuation date. These transactions are stale and do not reflect the current market conditions for water company operating assets that exist as of the valuation date. Therefore, the transactions are not comparable sales and do not provide a reliable indication of the PWV fair market value.

These twelve sale transactions are listed in Appendix B.

Error 9: Consideration of a non-consummated sale that is not, in fact, an actual sale transaction

The 2004 Sansoucy Report considers a non-consummated sale that is not, in fact, an actual sale transaction.

One of the 28 "transactions" identified in the 2004 Sansoucy Report sales comparison approach analysis is not, in fact, a completed sale transaction. An offer, noncompleted sale, or a sale that is called off typically does not qualify as a transaction, as an actual sale transaction never occurred.

This "transaction" is the Philadelphia Suburban Co./Pennichuck Corp. stock offer that is not, in fact, a completed sale transaction. The 2004 Sansoucy Report includes the 2001 offer of \$106 million for the

⁴⁴ Appraisal Institute. *The Appraisal of Real Estate*. 419.

⁴⁵ The 1995 Sansoucy Report. 13.

⁴⁶ The 1995 Sansoucy Report. 13.

exchange of Pennichuck Corporation stock for Philadelphia Suburban Company stock as a comparable sale transaction. The offer did not result in a consummated sale. Furthermore, this "transaction" was a proposed stock exchange transaction, not a proposed asset purchase transaction. There are fundamental risk and return investment differences between (1) stock and debt securities and (2) operating assets.

Typically, asset purchase transactions are at a higher price than corresponding stock exchange transactions. This is because asset purchase transactions include several economic benefits to the buyer not available in stock exchange transactions, including (1) depreciation of stepped-up basis of acquired assets, (2) ability to re leverage acquired assets, (3) avoidance of all contingent liabilities, and (4) avoidance of all built-in gain tax liability.

As of the valuation date, this proposed Philadelphia Suburban Co./Pennichuck Corp. merger transaction (1) was not a completed sale and, in fact, (2) was called off.

Error 10: Consideration of transactions that are not sufficiently similar to the subject system to be considered "comparable" to PWW

Although the 2004 Sansoucy Report initially identifies 28 transactions in the sales comparison approach, the 2004 Sansoucy Report only relies on 9 of the 28 transactions in the sales comparison approach analysis. Our analysis revealed that none of the 28 transactions initially identified are sufficiently similar to the subject system to be considered "comparable" to PWW.

As previously stated, according to the 1995 Sansoucy Report, "The theory behind the use of comparable sales requires that the property used for comparison must be substantially similar to that being valued ..."⁴⁷

Twelve of the 28 transactions initially identified in the 2004 Sansoucy Report took place anywhere from five to ten years prior to the valuation date. These transactions are stale and do not reflect the current market conditions for the water company operating assets existing as of the valuation date.

The remaining fifteen transactions also do not qualify as comparable sales. These fifteen transactions are described in Appendix C. It is noteworthy that four of these fifteen transactions are all part of the same transaction.

There are numerous operational and transactional differences between (1) PWW and (2) the companies and transactions identified in the 2004 Sansoucy Report which render the transactions unreliable as fair market value indicators. These differences include (among others):

- the acquired companies operate in different geographic areas, where supply and demand factors can be very different than in the PWW service area;
- the acquired companies operate in different regulatory environments than PWW; and
- many of the acquired companies are either significantly larger or smaller than Pennichuck.

The above-described differences were reported in publicly available information. Additional differences may exist between (1) the companies identified in the 2004 Sansoucy Report and (2) PWW that could

⁴⁷ The 1995 Sansoucy Report. 13.

only be discerned from a detailed examination of the acquired systems, such as the condition of the acquired assets and historical maintenance of and enhancements to the assets. Such differences may have a material impact on the value of the identified companies' underlying assets.

Because of (1) the differences identified above and (2) the uncertainty regarding the condition of the acquired assets, it is our opinion that the transactions identified in the 2004 Sansoucy Report do not qualify as comparable acquisition transactions.

Error 11: Reliance on the stock and debt method as confirmation of the sales comparison approach value indication

The 2004 Sansoucy Report reliance on the stock and debt method to confirm the sales comparison approach value indication is a fundamental error.

The stock and debt method is simply not an appropriate method for estimating the value of the PWW operating assets. This is because of the following fundamental differences between (1) stock and debt securities and (2) operating assets:

1. Stock and debt securities are liquid; operating assets are illiquid.
2. Stock and debt securities are not subject to rate regulation; operating assets are subject to rate regulation.
3. Stock and debt owners have limited liability; operating asset owners have unlimited liability.
4. Stock and debt owners can diversify their holdings; operating asset owners cannot diversify their holdings.

Accordingly, there are substantial analytical weaknesses associated with using the stock and debt method (which is designed to value securities) to confirm the valuation of operating assets. "[T]hese weaknesses are sometimes summarized by the assertion that 'the stock and debt method values the wrong thing.'"⁴⁸

The 2004 Sansoucy Report use of the stock and debt method values the wrong thing (i.e. securities and not operating assets). The use of the stock and debt method as confirmation of the sales comparison approach value indication is an error in the 2004 Sansoucy Report.

Error 12: Weighting the sales comparison approach value indication in the valuation conclusion

Given the 2004 Sansoucy Report (1) reliance on only one factor – revenues – to determine sale transaction comparability, (2) consideration of stale transactions that do not reflect the current market conditions, (3) consideration of a non-consummated sale that is not, in fact, an actual sale transaction, (4) consideration of transactions that are not sufficiently similar to the subject system to be considered "comparable" to PWW, and (5) reliance on the stock and debt method as confirmation of the sales comparison approach value indication, it is a fundamental error that the 2004 Sansoucy Report assigns weight to the sales comparison approach value indication in the value conclusion.

⁴⁸ *Id.* 779.

Income Valuation Approach

The next several errors relate to the 2004 Sansoucy Report income approach valuation analysis.

The 2004 Sansoucy Report contains fundamental errors in his income approach valuation analysis. These errors include:

- failure to use the most recent financial projections in projecting cash flow; and
- failure to use a cost of capital representative of the market of hypothetical willing buyers.

The income approach is based on the economic principle that the value of the operating business assets is equal to the present value of the expected economic income to be derived by the owners of the subject assets. As stated in the 2004 Sansoucy Report, "The elements of the income capitalization approach that impact value are the reliability of the anticipated future cash flows and the cost of capital associated with the particular investment."⁴⁹

The 2004 Sansoucy Report fails to use (1) the most recent financial projections available and (2) a market-derived cost of capital.

Error 13: Failure to use the most recent financial projections in projecting cash flow

The 2004 Sansoucy Report does not use the most current available (1) PWW financial statements and (2) PWW financial projections.

The 2004 Sansoucy Report uses the yield capitalization method, which involves the calculation of the present value of the discrete projection of economic income. The direct capitalization method estimates the value of the company by capitalizing (i.e., dividing) a single period estimate of economic income by a direct capitalization rate.

For the yield capitalization method analysis, the 2004 Sansoucy Report uses financial projections from the latest PWW rate case petition. However, the use of the rate case petition financial projections is inappropriate because the latest rate case petition was made on March 30, 2004. Therefore, financial projections from this petition are for the fiscal year ending December 31, 2004.

The use of the rate case projections is inappropriate because:

1. financial statements for the fiscal year ended December 31, 2004 were available as of the appraisal report date, and
2. financial projections for the fiscal years ending December 31, 2005 through December 31, 2009 were available as of the appraisal report date.

The 2004 Sansoucy Report cash flow projection is unreliable due to the fact that:

⁴⁹ The 2004 Sansoucy Report. 53.

1. the cash flow projection was for the fiscal year ending December 31, 2004 (as presented in the PWW rate case petition), yet
2. the actual cash flow for the fiscal year ended December 31, 2004 was available for use (as included in the PWW financial statements).

Moreover, the 2004 Sansoucy Report cash flow projection is inappropriate because more recent financial projections for the fiscal years ending December 31, 2005 through December 31, 2009 were available as of the appraisal report date. These more recent financial projections more accurately reflect the PWW projected results of operations as of the valuation date.

It is noteworthy that within the income approach, the discounted cash flow (“DCF”) method is a common yield capitalization method. The objective of the DCF method is to (1) estimate the present value of the future cash flow that the owner of the subject operating assets expects to receive and (2) convert that present value into a value conclusion.

The term “DCF method” as used in this analysis—and in the 2004 Sansoucy Report—should not be confused with the same term that is used in the context of estimating the cost of equity capital component of a present value discount rate. In other words, the DCF method can also be used to estimate the cost of equity capital. This cost of equity capital method is also commonly called the dividend yield plus capital gain yield method. It is within this context of estimating the cost of equity capital that the term “DCF method” is used for ratemaking purposes.

The purpose of this discussion, however, is to analyze the “DCF method” as that term is used in the 2004 Sansoucy Appraisal—and not to analyze the “DCF method” as that term is used for ratemaking purposes.

Error 14: Failure to use a cost of capital representative of the market of hypothetical willing buyers

The 2004 Sansoucy Report fails to use the cost of capital that is representative of the market of hypothetical buyers and instead, uses the PWW ratemaking requested rate of return.

The 2004 Sansoucy Report does not consider the weighted average cost of capital (“WACC”) of “the market,” where the market is represented by the likely population of hypothetical willing buyers. Therefore, the 2004 Sansoucy Report fails to correctly calculate the cost of capital of the hypothetical willing buyer.

A fair market value analysis requires that the WACC reflect the cost of capital of “the market,” where the market is represented by the likely population of hypothetical willing buyers. For PWW, the population of hypothetical willing buyers includes not-for-profit public entities, such as municipalities.

As the entities that stand to benefit most from an acquisition of PWW, not-for-profit public entities can afford to pay the highest price. Therefore, public entities will set the range of market prices that other willing buyers will have to surpass in order to acquire PWW.

Because the population of hypothetical buyers for PWW includes not-for-profit public entities, the not-for-profit WACC (and not the WACC for IOUs or the PWW ratemaking requested—or granted—rate of return) will set the “market” cost of capital in the fair market valuation.

Despite the fact that the 2004 Sansoucy Report fails to analyze the likely population of willing buyers for the PWW operating assets, the 2004 Sansoucy Report concludes (without any support or analysis) that the likely population of hypothetical willing buyers of PWW includes only IOU buyers with the characteristics of PWW. However, the most likely population of hypothetical willing buyers of PWW also includes (1) public entities and (2) IOUs without the characteristics of PWW.

In describing the capital structure in the WACC calculation, Sansoucy writes, "The capital structure of several companies engaged in the business of owning and operating water systems was used to develop a target capital structure for the subject property. The companies used in the analysis were all publicly traded and primarily engaged in the water business. These companies may vary from the subject because of size and other operating characteristics, however, as a whole these companies are generally reflective of the economic factors impacting the subject, and are reasonably comparable for purposes of estimating the capital structure for the subject."⁵⁰

More importantly, the 2004 Sansoucy Report adjusts the "market" WACC to make it more in line with the WACC that PWW requested, but, in fact, was not granted, in its March 30, 2004 rate case petition.⁵¹ This adjustment of the "market" WACC to make it more in line with the WACC requested in a rate case petition is inappropriate in a fair market value analysis.

As cited in the 1995 Sansoucy Report, "The choice of capitalization rates is dictated by the nature of the income stream to be capitalized. If the appraiser uses the rate of return allowed by the regulatory agency and capitalizes the regulatory agency's forecasted income at that rate, the resulting value estimate will be exactly equal to the utility's rate base. This result is a mathematical certainty and contributes nothing to the valuation process."⁵²

The 2004 Sansoucy Report arrives at the PWW rate of return by (1) making the adjustment to the "market" WACC to make it more in line with the WACC that PWW requested in its rate case petition and (2) tax-affecting the adjusted WACC. The 2004 Sansoucy Report cost of capital is, therefore, not a market-derived cost of capital at all. In contrast, it is the PWW tax-affected rate of return.

As recognized in the 1995 Sansoucy Report, incorporating the PWW rate of return (as the 2004 Sansoucy Report has done here) will result in a value estimate approximately equal to the PWW rate base. The PWW rate base is absolutely unrelated to the fair market value of the PWW operating assets.

Given the 2004 Sansoucy Report errors in calculating the cost of capital, (1) by considering the likely population of hypothetical willing buyers of PWW to include only IOU buyers with characteristics of PWW and (2) by adjusting the "market" WACC to make it nearly equal to the WACC that PWW requested in its rate case petition, the 2004 Sansoucy Report cost of capital calculation is fundamentally flawed. The 2004 Sansoucy Report cost of capital is, therefore, not appropriate for a fair market valuation.

⁵⁰ The 2004 Sansoucy Report. K-2.

⁵¹ The 2004 Sansoucy Report. K-6.

⁵² Woolery, Arlo. *Valuation of Railroad and Utility Property*. Lincoln Institute of Land Policy and Wichita Public Utility & Railroad Workshop. 35.

ANALYSIS CONCLUSIONS

In performing this analysis of the valuation approaches, methods, and procedures used in the 2004 Sansoucy Report, we identified the following fundamental errors:

- (1) Failure to analyze the likely population of willing buyers for the PWW operating assets;
 - Yet Sansoucy did analyze the likely population of willing buyers in the 1995 Sansoucy Report, in which Sansoucy also valued the PWW tangible assets.
- (2) Failure to consider the significant difference between (1) the fair market value standard of value and (2) the historical cost (or “book value”) data that are used for state regulatory ratemaking purposes;
- (3) Failure to estimate the value of the PWW intangible personal property;
- (4) Failure to perform (or obtain) an appraisal of the PWW operating real estate and real property interests;
- (5) Reliance on inaccurate and incomplete tangible personal property original cost data and acquisition date data;
 - Yet, in the 1995 Sansoucy Report, Sansoucy recognizes that a trended original cost analysis will not provide a reliable fair market value indication unless there are accurate data regarding original costs and acquisition dates.⁵³ The 1995 Sansoucy Report did not rely on the CPR. Rather, the 1995 Sansoucy Report used the unit cost method to derive individual cost estimates for each asset listed on the PWW engineering records.⁵⁴
- (6) Failure to assign any weight to the asset-based approach value indication in the valuation conclusion;
 - Yet, according to the 1995 Sansoucy Report, “Development of a reproduction cost, or the estimation of an exact duplicate of a particular item of property, or the substitution of a replacement item that provides similar function, is a relevant and *essential* method in the preparation of an estimate of fair market value of utility property. The New Hampshire Board of Tax and Land Appeal recognizes this method of valuation as appropriate for special purpose utility property.”⁵⁵
- (7) Reliance on only one factor—revenue—to determine sale transaction comparability;
 - Yet, the 1995 Sansoucy Report states that “three key indicators emerge as important considerations in comparing the market sales to the subject property. These are: sale price per customer, sale price as a multiple of gross income, and

⁵³ The 1995 Sansoucy Report. 10.

⁵⁴ The 1995 Sansoucy Report. 11.

⁵⁵ The 1995 Sansoucy Report. 9. (emphasis added)

ratio of sale price to net book plant being sold.”⁵⁶ In contrast, the 2004 Sansoucy Report only relies on the revenue comparability factor.

- (8) Consideration of stale transactions that do not reflect the current market conditions;
 - Yet, according to the 1995 Sansoucy Report, “The theory behind the use of comparable sales requires that ... the sale must have occurred within a reasonably close time to the base date for the valuation.”⁵⁷
- (9) Consideration of a non-consummated sale that is not, in fact, an actual sale transaction;
- (10) Consideration of transactions that are not sufficiently similar to the subject system to be considered “comparable” to PWV;
 - Yet, according to the 1995 Sansoucy Report, “The theory behind the use of comparable sales requires that the property used for comparison must be substantially similar to that being valued ...”⁵⁸
- (11) Reliance on the stock and debt method as confirmation of the sales comparison approach value indication;
- (12) Weighting the sales comparison approach value indication in the valuation conclusion;
- (13) Failure to use the most recent financial projections in projecting cash flow; and
- (14) Failure to use a cost of capital representative of the market of hypothetical willing buyers.
 - Yet, as cited in the 1995 Sansoucy Report, “The choice of capitalization rates is dictated by the nature of the income stream to be capitalized. If the appraiser uses the rate of return allowed by the regulatory agency and capitalizes the regulatory agency’s forecasted income at that rate, the resulting value estimate will be exactly equal to the utility’s rate base. This result is a mathematical certainty and contributes nothing to the valuation process.”⁵⁹

In addition, the materials we were provided appear to indicate that Sansoucy acted as an advocate for the City of Nashua rather than as an unbiased, independent appraiser. It appears that Sansoucy may have (1) a personal bias in favor of the City of Nashua, and (2) a potential personal interest in the outcome of the condemnation.

In our opinion, and based on our analysis, the 2004 Sansoucy Report is fundamentally flawed. The 2004 Sansoucy Report conclusion (1) is unreliable and (2) fails to provide a reliable conclusion of the fair market value of the PWV operating assets as of December 31, 2004.

⁵⁶ The 1995 Sansoucy Report. 127.

⁵⁷ The 1995 Sansoucy Report. 13.

⁵⁸ The 1995 Sansoucy Report. 13.

⁵⁹ Woolery, Arlo. *Valuation of Railroad and Utility Property*. Lincoln Institute of Land Policy and Wichita Public Utility & Railroad Workshop. 35.

SUMMARY AND CONCLUSION

For the reasons explained above, the 2004 Sansoucy Report is fundamentally flawed. Therefore, the 2004 Sansoucy Report is unreliable and fails to provide a reliable conclusion of the fair market value of the PWW operating assets as of December 31, 2004.

We are independent of PWW and all other parties associated with the dispute. We have no current or prospective financial interest in the subject assets. Our fee was in no way influenced by the results of this analysis.

This analysis is not to be considered an appraisal or a review appraisal, as those terms are described by USPAP.

For identification purposes only, the professional qualifications of the principal analyst are included herein as Appendix E.

Very truly yours,

WILLAMETTE MANAGEMENT ASSOCIATES

Robert Reilly

Robert F. Reilly

APPENDIX A
CATEGORIES OF PWW INTANGIBLE PERSONAL PROPERTY

CATEGORIES OF PWW INTANGIBLE PERSONAL PROPERTY

1. Distribution Maps and As-Built Engineering Drawings

The contemporaneous PWW distribution maps and as-built engineering drawings intangible personal property (the “maps and drawings”) describe the physical PWW distribution system.

The maps and drawings show the actual locations of, among other things, transmission and distribution mains, gates, hydrants, and pump stations. The maps and drawings also reference the size and material of the mains. Main easements are another feature presented on the maps and drawings.

The primary function of the maps and drawings is to provide main, gate, and hydrant locations for the daily maintenance and expansion of the PWW distribution system.

2. Water Pumping Rights

The core system of PWW is supplied by the following five water sources (the “water sources”):

- Holt Pond;
- Bowers Pond;
- Harris Pond;
- Supply Pond; and
- Merrimack River.

The Holt, Bowers, Harris, and Supply Ponds are the primary water sources. The Merrimack River is considered a secondary water source. This is because the primary water sources are supplemented during the summer by pumping water from the Merrimack River. The water is pumped by the pumping facility that PWW owns on the Merrimack River in Merrimack, New Hampshire.

A permit from the Army Corps of Engineers, which was extended through December 21, 2009, allows the pumping of water from the Merrimack River. The permit dictates that (1) if the river level is above 91.2 feet, then PWW may pump up to 30.0 million gallons per day and (2) if the river level is below 91.2 feet, then PWW may pump (a) up to 20.0 million gallons per day if the specified minimum flow is maintained and (b) up to 12.0 million gallons per day if the specified minimum flow is not maintained.

The pumping facility that PWW owns on the Merrimack River is capable of pumping up to 16.2 million gallons per day from the Merrimack River.

3. Water System Records and Reports

The PWW water system records and reports intangible personal property (the “records and reports”) include (1) meter cards, (2) gate valve records, (3) hydrant records, (4) service records, and (5) station check sheets.

Meter cards contain data related to the PWW meters, including (1) historical test data, (2) historical repair data, (3) size, (4) manufacturer, (5) number, (6) location, and (7) installation date. Types of meter cards include (1) new meter in service, (2) meter in service, and (3) meter out of service.

PWW employees refer to meter cards frequently in the normal course of business operations. For example, meter cards are used each time meters are installed, repaired, exchanged, or retired, and they are used to resolve customer disputes regarding meter accuracy.

Gate valve records contain data related to the gate valves of PWW, including (1) opening direction, (2) manufacturer, (3) inspection history, (4) size, (5) installation date, (6) purpose, and (7) tie information.

Hydrant records contain data related to the PWW hydrants, including (1) location, (2) type (public or private), (3) age, (4) opening direction, (5) manufacturer, (6) model, and (7) inspection history.

Service records contain data related to each PWW service connection, including (1) maintenance history, (2) measurements, (3) installation date, and (4) material type.

Station check sheets contain data related to station inspections by water treatment plant operators. The water treatment plant operators (1) perform a visual inspection, (2) fill chemical crocks, (3) clean, and (4) electronically record inspection data. This inspection data is then downloaded into the Ops32 database, which issues a station check sheet that shows the inspection data and points out any data that are outside of the established parameters.

4. Synergen Work Order Database

The PWW Synergen work order database intangible personal property (the “work orders”) contains a compendium of historical work orders. The work orders are continuously used to assist in the operation and maintenance of the PWW operating assets. The work order database tracks costs associated with the maintenance of the production, transmission, and distribution system, office and equipment maintenance, and customer accounting.

Moreover, the work order database tracks costs associated with special project work that continues for an unspecified period of time, such as a few months or a few years, for example. In addition, each work order provides information regarding, among other things, vehicle usage, inventory, and subcontractor costs.

Customer and contractor invoices are generated once each week from the work orders, and completed work orders are closed at the end of each month.

5. Water Treatment Laboratory Reports and Test Data

The PWW water treatment laboratory reports and test data intangible personal property (the “lab reports and test data”) consist of the following types of information:

- New Hampshire Department of Environmental Services (“NHDES”) monthly operating reports;
- NHDES water use reports;
- City monthly sludge reports;
- NHDES annual reports for sludge lagoon activity;
- New Hampshire Water Supply Engineering Bureau (“NHWSEB”) Disinfection/Disinfection Byproducts (“DDBP”) samples and chlorine residuals;
- NHWSEB water shed bacteria counts;
- City sludge analyses;
- NHWSEB emergency action plans;
- NHDES performance evaluation samples; and
- NHWSEB sampling waivers.

The NHDES monthly operating reports list (1) gallons treated, (2) hours of operation, (3) maximum turbidity, (4) minimum disinfection residual, (5) fluoride weight, and (6) measured daily fluoride. The water treatment process is based on these requirements.

The NHDES water use reports contain the monthly well flow totals.

The City monthly sludge reports determine the daily sludge pumpage from the water treatment plant. The water treatment plant operators record daily sludge pumpage, and total monthly sludge pumpage is entered in the monthly sludge reports, which are filed with the City.

The NHDES annual reports for sludge lagoon activity report the amount and consistency of the sludge that is pumped to the PWW drying lagoons.

The NHWSEB DDBP samples and chlorine residuals are collected by water treatment plant operators if chlorine is added to the water. This testing is required by the NHWSEB in order to comply with drinking water regulations.

The NHWSEB water shed bacteria counts from Merrimack River water are required by the NHWSEB as a condition of PWW ceasing the chlorination of the water from the Merrimack River. When Merrimack River water is used as a secondary water source, a weekly sample is analyzed for *E. coli* bacteria.

The City sludge analyses are performed twice per year on samples from the sludge holding tank, as required by the City in order to comply with regulations.

The NHWSEB emergency action plans are written plans, including contact information and pictures, which are used to provide instruction in case of an emergency. These plans are updated annually and filed with the NHWSEB.

The NHDES performance evaluation samples, which are analyzed for total coliform and *E. coli*, are taken twice per year. The results of these analyses are sent to the State Certification Officer of the NHDES for evaluation. Successful completion of this evaluation is the basis for laboratory certification.

The NHWSEB sampling waivers are granted in order to avoid yearly sampling of volatile organic compounds ("VOC") and semi-volatile organic compounds ("SOC"). The waiver process is not mandatory, and waivers are granted on the basis of past chemical monitoring data and the distribution of educational materials to property owners in predetermined zones. Once granted, these waivers may be renewed every three to six years.

6. SCADA Computer Software System

The PWW SCADA computer software system intangible personal property (the "SCADA system") monitors and controls the operations of the water treatment plant as well as almost all of the booster and well stations. The SCADA system functional design components include engineering drawings, database points (i.e., blocks), water treatment plant PLC programs, screens, remote sites, and communications.

Water treatment plant operators and other employees continuously utilize the SCADA system to monitor alarm conditions, check current parameters, and track historical trends. Moreover, the SCADA system interfaces with the Ops32 database, which provides information for statistical analyses and various reports.

Both the SCADA control technician (a PWW employee) and an outside contracted firm maintain the SCADA system. The outside contracted firm specializes in SCADA integration.

7. Trained and Assembled Workforce

The success of a business enterprise often depends on the training and experience of its assembled workforce. The PWW assembled workforce represents an essential and productive asset of the business and a valuable intangible asset to a willing buyer. There is significant value associated with the cost avoidance of not having to recruit, hire, and train an already assembled workforce.

The prospective cost avoided by having a trained and assembled workforce already in place represents the intangible value of an assembled workforce. Since the PWW workforce is already assembled and trained, a buyer of PWW would not have to incur the time, effort, or expense of hiring and training these employees.

APPENDIX B
STALE SALE TRANSACTIONS

STALE SALE TRANSACTIONS

1. Buyer: Pennichuck Corp.
Seller: Pittsfield Aquaduct Co.
Date: January 30, 1998
2. Buyer: Bridgeport Hydraulic (Aquarion)
Seller: Kent Water
Date: June 1, 1995
3. Buyer: Connecticut Water Service
Seller: Gallup Water Service
Date: April 16, 1999
4. Buyer: AquaSource Utility, Inc.
Seller: Eastern Conn. Regional Water Co.
Date: 1998
5. Buyer: Connecticut Water Service
Seller: Crystal Water Service
Date: September 29, 1999
6. Buyer: Aquarion Co.
Seller: Sea Cliff Water Co.
Date: May 30, 1996
7. Buyer: Bridgeport Hydraulic/Aquarion
Seller: NCWC + RWSC
Date: October 12, 1995
8. Buyer: Town of Hudson
Seller: Consumers Water Co.
Date: April 15, 1998
9. Buyer: Illinois-American Water Co.
Seller: Citizens Communications Co.
Date: 2000
10. Buyer: Pennsylvania-American Water Co.
Seller: Pennsylvania Enterprises, Inc.
Date: 1995
11. Buyer: Kelda Group
Seller: Aquarion Co.
Date: January 7, 2000
12. Buyer: Thames Water PLC
Seller: E-Town Corp.
Date: September 30, 2000

APPENDIX C

**SALE TRANSACTIONS THAT ARE NOT SUFFICIENTLY
COMPARABLE TO THE SUBJECT SYSTEM**

SALE TRANSACTIONS THAT ARE NOT SUFFICIENTLY COMPARABLE TO THE SUBJECT SYSTEM

1. Buyer: Pittsfield Aqueduct Co.
Seller: Integrated Water Co.

In this sale transaction, Pittsfield Aqueduct Co., a subsidiary of Pennichuck Corp., acquired the assets and franchise rights of the Locke Lake Colony water system in Barnstead, New Hampshire, the Birch Hill water system in Conway, New Hampshire, and the Sunrise Estates water system in Middleton, New Hampshire. These three water systems, all located in central New Hampshire, were operated by Integrated Water Systems, an affiliate of Central Water Company and Consolidated Water Company of Moultonboro, New Hampshire.

Consolidated Water Company provides water service to 207 customers in Birch Hill in the town of Conway and 83 customers in Sunrise Estates in the town of Middleton. Central Water Company provides water service to about 755 customers in Locke Lake Colony in the town of Barnstead. These systems are subject to the jurisdiction of the PUC.

Under the sale transaction agreement, Pittsfield Aqueduct Co. agreed to pay \$650,000 to Central Water Company for the assets of the water system at Locke Lake Colony and \$100,000 to Consolidated Water Company for the assets of the water systems at Birch Hill and Sunrise Estates.

As part of the agreement, Central Water Company and Consolidated Water Company will transfer to Pittsfield Aqueduct Co. as part of the water supply and distribution system facilities, underground piping, all pump house buildings or other structures, related real property, including easement rights and in some cases warranty deeds to parcels of land, storage tanks, and related equipment and franchises.

While Integrated Water Co. served approximately 1,000 customers, PWW serves approximately 25,000 customers.

Moreover, PWW earned operating revenue of approximately \$15.7 million, while Integrated Water Co. earned operating revenue of less than \$0.5 million.

2. Buyer: Tilton-Northfield Water
Seller: Tilton & Northfield Aqueduct Co.

This was a very small transaction involving a 921 customer New Hampshire system serving two towns with a total population of 7,000. Tilton & Northfield Aqueduct Co. was a water system serving 921 residents in the Towns of Tilton and Northfield, New Hampshire.

In April 2005, the residents of Tilton and Northfield acquired the water system from private owners, Kenneth and Barbara Money, for a purchase price of \$9.1 million and approximately \$3.1 million of assumed debt. This acquisition was approved by the PUC on December 9, 2005.

While Tilton & Northfield Aqueduct Co. served 921 customers in two New Hampshire towns with a total population of 7,000, PWW serves approximately 25,000 customers in a population area of approximately 254,000.

Moreover, for fiscal year 2004, PWW earned operating revenue of approximately \$15.7 million, while Tilton & Northfield Aqueduct Co. earned operating revenue of approximately \$1.1 million.

3. Buyer: Birmingham Utilities
Seller: AquaSource Utility, Inc.

This was a very small transaction involving a 2,100 customer AquaSource Utility, Inc. Connecticut system with approximately \$1.0 million in revenue. The Connecticut system consisted of 30 regulated water systems located in eastern Connecticut, as well as a non-regulated contract operations business that monitored and serviced another 51 water systems in eastern Connecticut.

In October 2003, Birmingham Utilities, a subsidiary of BIW Limited, purchased the Connecticut system for an aggregate purchase price of \$4.0 million.

For the fiscal year ended December 31, 2002, before it was acquired by Birmingham Utilities, the Connecticut system generated approximately \$1.0 million in revenue. In contrast, the PWW operating revenue was approximately \$15.7 million for fiscal year 2004.

While the Connecticut system served approximately 2,100 customers primarily from 63 wells, PWW serves approximately 25,000 customers from multiple water sources including four ponds, one river, and 44 wells.

4. Buyer: Town of Salisbury
Seller: American Water Works

This was a small transaction involving the sale of a 3,000 customer groundwater system in Massachusetts that shared offices with a separate water company. Salisbury Water Company, formerly a wholly owned subsidiary of American Water Works, provided water supply services to the Town of Salisbury, Massachusetts and surrounding communities.

In October 2001, American Water completed its sale of Salisbury Water Company to the Town of Salisbury, Massachusetts for an aggregate consideration of approximately \$11.6 million, including \$3.8 million in debt.

Salisbury Water Company served 3,034 water customers in Salisbury for the fiscal year ended December 31, 2000. In comparison, PWW serves approximately 25,000 customers. Salisbury Water Company consolidated revenue in 2000 was approximately \$1.9 million. In contrast, PWW operating revenue was approximately \$15.7 million for fiscal year 2004.

Salisbury Water Company shared personnel out of a common office with Hampton Water Works Co. in New Hampshire, although the two companies have separate water sources and distribution facilities. The Salisbury Water Company water supply source is predominantly ground water pumped through a network of wells. PWW uses multiple types of water sources including ponds, a river, and wells.

5. Buyer: Connecticut Water Service
Seller: Unionville Water Co.

In this transaction, Connecticut Water Service acquired Unionville Water Company in which Connecticut Water Service exchanged its common stock for all of the Unionville Water Company common stock in a total transaction value of about \$6.3 million. Unionville Water Company is now operated as a wholly-owned subsidiary of Connecticut Water Service.

Unionville Water Company, with fiscal year 2001 revenue of about \$2.4 million, serves approximately 19,000 people through about 5,600 service connections in the towns of Avon and Farmington in Connecticut. As a public water company in the State of Connecticut, the Unionville Water Company is regulated by numerous state and federal laws with respect to water quality and water resources, and the state Department of Public Utility Control authorizes water rates and quality of service.

Unionville Water Company consolidated revenue was approximately \$2.3 million. In contrast, PWV operating revenue was approximately \$15.7 million.

6. Buyer: Connecticut Water Service
Seller: Barnstable Water Co.

In this transaction, Connecticut Water Service acquired Barnstable Holding Company in which Connecticut Water Service exchanged its common stock for all of the Barnstable Holding Company common stock in a total transaction value of about \$6.5 million. Barnstable Holding Company, a non-operating holding company, is the majority owner of Barnstable Water Company and BARLACO.

Barnstable Water Company is a water company with ten active wells that provides water services to more than 7,200 customers in a population area of about 40,000 in Barnstable, Massachusetts. Barnstable Water Company is subject to the jurisdiction of the Massachusetts Department of Telecommunications and Energy, the Massachusetts Department of Environmental Protection and the Massachusetts Department of Public Health.

BARLACO is a separate real estate company owning 109 acres of non-watershed residential and commercial land in Hyannis and Barnstable, Massachusetts.

Barnstable Water Company consolidated revenue was approximately \$2.5 million. In contrast, PWV operating revenue was approximately \$15.7 million.

7. Buyer: Town of Barnstable
Seller: Connecticut Water Service, Inc.

In this transaction, the Town of Barnstable, Massachusetts ("the Town") agreed to purchase the assets of the Barnstable Water Company and BARLACO real estate holding company from Connecticut Water Service, Inc. The total value of the transaction was \$11 million in cash, with \$10 million received by the Barnstable Water Company for the water utility assets and associated liabilities and a separate additional \$1 million for the real estate assets of BARLACO.

Connecticut Water Service, Inc. also entered into a contract with the Town to provide full operating and management services for the Barnstable Holding Company water utility operation. Under this contract, the customers will continue to receive the same full range of field and customer services provided by Barnstable Water Company.

Barnstable Water Company is a water company with ten active wells that provides water services to more than 7,200 customers in a population area of about 40,000 in Barnstable, Massachusetts. Barnstable Water Company is subject to the jurisdiction of the Massachusetts Department of Telecommunications and Energy, the Massachusetts Department of Environmental Protection and the Massachusetts Department of Public Health.

BARLACO is a separate real estate company owning 109 acres of non-watershed residential and commercial land in Hyannis and Barnstable, Massachusetts.

While Barnstable Water Company served more than 7,200 customers primarily from ten wells, PWV serves approximately 25,000 customers from multiple water sources including four ponds, one river, and 44 wells.

8. Buyer: Fernandina Beach
Seller: Florida Public Utilities

This transaction involved the sale of a small 7,000 customer water system by Florida Public Utilities, an electric and natural gas utility. Florida Public Utilities incorporated on March 6, 1924, provided natural gas, propane gas, electricity, and water supply services to communities throughout Florida.

In March 2003, Florida Public Utilities sold its water operations to Fernandina Beach, Florida for an aggregate price of \$25.1 million, with the purpose of expanding its core electric and natural gas businesses. The assets of the Florida Public Utilities water segment amounted to less than 10 percent of its total assets at the time of the transaction.

For the fiscal year ended December 31, 2001, Florida Public Utilities had 6,966 water customers and operating revenue of approximately \$3.0 million.

In contrast, PWV serves approximately 25,000 customers and had operating revenue of \$15.7 for fiscal year 2004. Moreover, regulated water utilities, in addition to water management services, are a core business of the Pennichuck Corporation.

9. Buyer: Ashtabula County
Seller: Philadelphia Suburban

In this transaction, Consumers Ohio Water Company, a subsidiary of Philadelphia Suburban, sold a portion of its Ashtabula County, Ohio water system to Ashtabula County (the "County") for approximately \$16 million in cash.

Consumers Ohio Water Company owned and operated the water system in the unincorporated areas of Ashtabula County under an agreement with the County. Earlier in 2002, the County filed a condemnation action seeking to take these company assets. Subsequently, extensive

negotiations between Consumers Ohio Water Company and the County resulted in settlement of all outstanding actions. Consumers Ohio Water Company retained parts of the water system in the County which in total serves approximately 10,000 residents in two cities.

Consumers Ohio Water Company was paid an additional \$300,000 fee to manage the County's operations in the year after the transaction. The portion of the water system sold to the County represented less than 1% of Philadelphia Suburban total assets and accounted for an even smaller portion of its net income.

Philadelphia Suburban had 7,800 customers and operating revenue of approximately \$4.3 million. In contrast, PWW serves approximately 25,000 customers and had operating revenue of \$15.7.

10. Buyer: Aquarion Co.

Seller: Hampton Water Works Co., NY-American Water Works, MA-American Water Works, and CT-American Water Works

The 2004 Sansoucy Report incorrectly lists the four parts of this single sale transaction as four separate sale transactions; the 2004 Sansoucy Report makes no reference to the fact that this was a single sale transaction.⁶⁰

American Water Works is a subsidiary of RWE Thames Water (the water unit of German utility giant RWE). It is one of the largest water utility holding companies in the United States. Through its regulated utilities and its contract services division, American Water Works serves more than 18 million consumers in the United States, Canada, and Puerto Rico. The company also provides wastewater treatment in some of its service areas.

The company's products and services include:

- asset acquisition – the purchase of a municipal water and/or wastewater system, accompanied by ongoing water quality testing, meter reading, and billing and collection services;
- operations and maintenance – public-private partnerships with municipal and military government entities to operate and/or maintain their water and/or wastewater treatment facilities under contractual provisions;
- engineering and planning – provide oversight of design/build/operate projects and implement plant and process automation;
- developer services – design, build and/or operate small decentralized water and wastewater treatment plants for small communities; and
- homeowner services – water and sewer line protection programs.

On May 12, 2002, Kelda Group plc and its Aquarion Co. subsidiary announced the Aquarion Co. acquisition of American Water Works subsidiaries in Massachusetts, New York, and New

⁶⁰ The 2004 Sansoucy Report. 47. On "Comparison of Water System Sales" chart, numbers 17, 20, 21, and 24 are the four parts of this single sale transaction.

Hampshire. Concurrently, the Aquarion Co. BHC subsidiary closed the acquisition of CT-American Water Works.

The acquisitions were completed for a combined consideration of approximately \$120 million in cash, plus the assumption of \$104 million in debt. After the purchase, 64,000 customer accounts, or about 177,000 residents in 17 towns, were added to Aquarion Co.'s water utility customer base. Public utility commissions in Connecticut, New Hampshire, and New York approved the transaction, whereas regulatory approval was not required in Massachusetts.

The transaction is not comparable to PWW because it is mainly a strategic move for United Kingdom parent company Kelda Group plc's for expansion in the United States, specifically, in the New England area.

Moreover, Hampton Water Works Co., NY-American Water Works, MA-American Water Works, and CT-American Water Works had nearly 65,000 customers and operating revenue of approximately \$50.9 million. In contrast, PWW serves approximately 25,000 customers and had operating revenue of \$15.7.

11. Buyer: City of Beloit
Seller: Wisconsin Power & Light

Wisconsin Power & Light is one of the two utility business units of Alliant Energy Corporation, a public utility holding company headquartered in Madison, Wisconsin. Wisconsin Power & Light is engaged in the generation, distribution and sale of electric energy; and the purchase, distribution, transportation and sale of natural gas in selective markets. Nearly all of Wisconsin Power & Light's customers are located in south and central Wisconsin.

Wisconsin Power & Light operates in municipalities pursuant to permits of indefinite duration, which are regulated by Wisconsin law.

At December 31, 2003, Wisconsin Power & Light supplied electric and gas services to 436,976 and 172,615 (if excluding transportation and other) customers, respectively. Wisconsin Power & Light also provides water services in select markets and various other energy-related products and services including construction management services for wind farms.

In 2003, Wisconsin Power & Light had no single customer for which electric, gas, water and/or other sales accounted for 10% or more of the Wisconsin Power & Light consolidated revenues. At the end of 2003, Wisconsin Power & Light had 1,524 employees.

The City of Beloit acquisition of Wisconsin Power & Light is a relatively small transaction with a purchase price about \$20.85 million. The Wisconsin Power & Light water business was deemed peripheral to its core businesses including electric and natural gas.

In contrast, the PWW main franchise is to distribute water in multiple municipalities.

Moreover, Wisconsin Power & Light had operating revenue of approximately \$4.8 million. In contrast, PWW had operating revenue of \$15.7.

12. Buyer: Southwest Water Co.
Seller: Tecon Water Holdings LP

This transaction involved the sale of a combined water and wastewater system serving Texas and Oklahoma. Tecon Water Holdings LP was an eastern Texas utility with 86 water systems and 11 wastewater systems, serving 21,000 and 4,000 customers, respectively, in Texas and Oklahoma.

Since Tecon Water Holdings LP served customers in both states, it was subject to the regulations of both state agencies at the time it was acquired by Southwest Water Co. in July 2004 for a purchase price of \$63.0 million.

Tecon Water Holdings LP revenue for the fiscal year ended December 31, 2003 was approximately \$13.3 million, of which \$1.6 million was wastewater revenue. PWW, which is only subject to the regulation of one state agency, does not conduct wastewater operations.

APPENDIX D

**LETTER FROM SARAH KNOWLTON (PWW COUNSEL) TO
JUSTIN RICHARDSON (NASHUA COUNSEL)
REGARDING PWW CONTINUING PROPERTY RECORDS**



McLane, Graf,
Raulerson &
Middleton

Professional Association

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OFFICES IN:
MANCHESTER
CONCORD
PORTSMOUTH

November 15, 2005

By Electronic and First Class Mail

Justin Richardson
Upton & Hatfield, LLP
10 Centre Street
P.O. Box 1090
Concord, NH 03302-1090

Re: Pennichuck Water Works Continuing Property Records

Dear Justin:

I am writing in follow up to our telephone conversation last Thursday regarding Pennichuck Water Works, Inc.'s continuing property records ("CPR's"). As I have indicated in the past, in the ordinary course of its business, Pennichuck Water Works does not maintain its CPR's by the sub-accounts that you seek.

You inquired about AUS Consultant's 1996 depreciation study of Pennichuck Water Works, suggesting that it contained sub-account information. I have reviewed that depreciation study and determined that the use of an additional decimal point after account numbers in the study bears no correlation to the sub-account designations specified in the Chart of Accounts. While the 1996 study categorizes Pennichuck Water Works' property into the five functional areas identified in the sub-accounts (e.g. source of supply, transmission and distribution, etc.), my understanding is that AUS created this categorization on its own from the Company's CPR's. The Company does not have a copy of any underlying categorization that may have been created by AUS to generate these schedules. I would note that the information used by AUS to categorize the assets – the Company's continuing property records - has also been provided to Nashua in this case. Between the CPR's and information provided to Nashua in the data room, we believe that Nashua can determine the functional category of each asset based on the five functional categories identified in the instructions to the Chart of Accounts.

As we also mentioned last week, Nashua should be aware that the acquisition date and cost reflected on the CPR's does not in some cases match the actual acquisition date or the original cost of each asset. Some of the Pennichuck assets date to the late 1800's, but the

Justin Richardson
November 15, 2005
Page 2

computer program originally used to generate the CPR's did not accept a date prior to 1901. Also, in some cases with slowly depreciating assets, a more recent acquisition date may appear on the CPR's so that the CPR computer application could correctly calculate the years of depreciation remaining for the asset in question. Finally for mass account items, the acquisition date and the starting (original) balance do not necessarily reflect the original cost or acquisition date of the assets, since both entries are adjusted to reflect retirements and additions. These mass account items also at times lump together as a single asset different sizes and composition of material, such as pipe. As you know, Pennichuck Water Works has also provided Nashua with its engineering records listing the acquisition dates for mains, pipes, meters, hydrants, and services segregated by asset type and quantity. These acquisition dates are correct, and so the engineering records, rather than the CPR's, should be relied on for this purpose.

I hope this explanation is helpful.

Very truly yours,



Sarah B. Knowlton

cc: Donald L. Correll, CEO & President
Thomas J. Donovan, Esquire
Steven V. Camerino, Esquire

APPENDIX E

PROFESSIONAL QUALIFICATIONS OF THE PRINCIPAL ANALYST

He has performed financial advisory and economic analyses for various transactional purposes: identification of M&A targets, valuation of target company synergistic/strategic benefits, identification and assessment of divestiture/spin-off opportunities, economic analysis of alternative deal structures, negotiation of deal price and terms, fairness/solvency analysis of proposed transactions, and design and valuation of debt and equity instruments.

Robert has been accepted as an expert witness on over 100 occasions in various federal, state, and international courts and before various boards, commissions, and tribunals. This expert testimony related either to business, stock, and property valuation matters or to lost profits/economic damages matters. He has served as an expert witness in the following types of litigation: bankruptcy, breach of contract, condemnation/eminent domain, conservatorship, corporate dissolution, expropriation, federal income tax, gift and estate tax, intellectual property infringement, lender liability, marital dissolution, shareholder dissenter appraisal rights/shareholder oppression, property tax appeal, reasonableness of executive compensation, solvency and insolvency, stockholder suits, tort claims, wrongful death/personal injury, and reasonableness of royalty rates and/or transfer prices. He has served as a court-appointed arbitrator with respect to squeeze-out merger dissenting shareholder rights actions.

PREVIOUS EXPERIENCE

Prior to Willamette Management Associates, Robert was a partner and national director of the Deloitte & Touche (Big Four accounting firm) valuation practice. Prior to Deloitte & Touche, Robert was vice president of Arthur D. Little Valuation, Inc., a national appraisal firm. Prior to that, Robert was director of strategic planning for Huffy Corporation, a diversified manufacturing firm. Prior to that, he was a senior consultant for Booz, Allen & Hamilton, an international management consulting firm.

EDUCATION

Master of Business Administration, Finance, Columbia University Graduate School of Business
Bachelor of Arts, Economics, Columbia University

PROFESSIONAL AFFILIATIONS

Accredited in Business Valuation (ABV)—American Institute of Certified Public Accountants
Accredited Senior Appraiser (ASA)—American Society of Appraisers, in business valuation
Accredited Tax Advisor (ATA)—Accreditation Council for Accountancy & Taxation
Associate Member—Appraisal Institute
Certified Business Appraiser (CBA)—Institute of Business Appraisers
Certified Management Accountant (CMA)—National Association of Certified Management Accountants
Certified Public Accountant (CPA)—Ohio and Illinois
Certified Real Estate Appraiser (CREA)—National Association of Real Estate Appraisers
Certified Review Appraiser (CRA)—National Association of Review Appraisers and Mortgage Underwriters
Certified Valuation Consultant (CVC)—National Association of Review Appraisers and Mortgage Underwriters
Chartered Financial Analyst (CFA)—CFA Institute (formerly AIMR)
Enrolled Agent (EA)—licensed to practice before the Internal Revenue Service

Robert is a state certified general appraiser in the states of Georgia, Illinois, Kentucky, Michigan, New Hampshire, New Mexico, New York, Oklahoma, Oregon, Utah, and Virginia.

He has completed the following Appraisal Institute appraisal courses: 110—appraisal principles, 120—appraisal procedures, 210—residential case study, 310—basic income capitalization, 320—general applications, 400—USPAP update, 410—standards of professional practice A, 420—standards of professional appraisal practice B, 420—business practices and ethics, 430—standards of professional practice C, 510—advanced income capitalization, 520—highest and best use analysis, 530—advanced cost and sales comparison approaches, 540—report writing and valuation analysis, and 550—advanced applications.

Robert is a member of the American Bankruptcy Institute, American Economic Association, American Institute of Certified Public Accountants, American Society of Appraisers, Business Valuation Association, The ESOP Association, Illinois Society of Certified Public Accountants, Institute of Business Appraisers, Institute of Chartered Financial Analysts, Institute of Professionals in Taxation, Institute of Certified Management Accountants, International Association of Assessing Officers, National Association of Business Economists, National Association of Real Estate Appraisers, and Ohio Society of Certified Public Accountants.