

Summary of Testimony Related to Valuation

In accordance with N.H. Code of Admin. Rule Puc 202.11(d), the following summary provides an overview of the prefiled direct testimony related to valuation submitted by Pennichuck Water Works, Inc. (PWW), Pennichuck East Utility, Inc. (PEU), Pittsfield Aqueduct Company, Inc. (PAC), Pennichuck Water Service Corporation (PWSC) and Pennichuck Corporation (PNNW) (collectively the "Pennichuck Companies").

A. Robert F. Reilly, Richard W. Riethmiller, Harold Walker, III and Russell W. Thibeault

Robert F. Reilly, an appraiser with Willamette Management Associates, appraised the fair market value of all the operating assets of Pennichuck Water Works at \$248,400,000. Mr. Reilly valued all of the operating assets of PWW, including water source, storage, treatment and distribution property. Mr. Reilly provides an overview of his extensive business valuation experience and qualifications, including his experience in valuing public utility companies (including water companies), and sets forth the appraisal standards applicable to his report.

Mr. Reilly was assisted in his valuation of the tangible property of PWW by **Richard Riethmiller** (an independent consultant and experienced engineer) and **Harold Walker** (with Gannett Fleming). Also, **Russell Thibeault** assisted in valuing the land and cross country easements. (Mr. Riethmiller, Mr. Walker, and Mr. Thibeault have submitted separate testimony, summarized herein.)

Fair Market Valuation. Mr. Reilly defines "fair market value" as an *exchange concept*: the price at which the PWW operating assets would change hands between a willing buyer and a willing seller, when the former is not under any compulsion to buy and the latter is not under any compulsion to sell, and both parties have reasonable knowledge of the relevant facts. This fair market valuation is a different analysis from a simple determination of PWW's rate base, which is an *income concept* that governs the utility's relationship with this Commission. Because of the substantial differences between fair market value and rate base – for instance, the inclusion of contributions in aid of construction in a fair market valuation but the exclusion from rate base -- the two concepts have little logical connection to one another.

In order to set the fair market value of PWW's assets (the PWW System), Mr. Reilly determined the sorts of entities that comprise the population of hypothetical buyers for those assets, and then determined which sort of buyer would set the range of market prices. In the case of a sale of the PWW assets, the population of hypothetical buyers will include not-for-profit public entities: a New Hampshire city, town or district. A public entity will enjoy certain advantages: no income taxes, low-cost financing, no regulatory environment, and reduced property taxes. Mr. Reilly concludes that the not-for-profit public entities will set the range of purchase prices.

Mr. Reilly then discusses the three basic approaches to appraising the fair market value of a business enterprise—the asset based approach, the income approach and the sales comparison approach.

The Asset Based Approach (Asset Accumulation Method). As to the tangible assets of PWW, Mr. Riethmiller, with the assistance and cooperation of Mr. Walker, conducted the Replacement Cost New Less Depreciation (“RCNLD”) analysis. The tangible assets valued include the treatment plant, wells, pump stations, tanks, and the piping (transmission and distribution mains and services).

Mr. Walker’s testimony describes the first step in the replacement cost new (“RCN”) analysis: preparation of a detailed and comprehensive inventory of PWW’s tangible assets. Using that inventory, Mr. Walker conducted the inventory pricing phase of the analysis to calculate the RCN of the PWW System by determining, at current prices, what it would cost to replace it.

As Mr. Riethmiller explains in his testimony, he quantified the observed depreciation of the various assets of the PWW. The observed depreciation is a reduction in value that reflects the current condition of the asset by accounting for physical depreciation and functional obsolescence. Mr. Riethmiller describes the types of piping materials commonly used in the water industry and why those materials have considerable longevity, with many years of useful life. Then, Mr. Riethmiller describes his efforts to gather as much historical information regarding PWW System as possible. Based on that historical information, interviews, and other information, Mr. Riethmiller then confirmed the expected condition of the pipe and other assets through random sampling. By applying the observed depreciation to the RCN, he completed the RCNLD analysis.

PWW’s unimproved land and cross country easements were separately valued. For that analysis, Mr. Reilly relied on **Russell Thibeault** of Applied Economic Research, Inc. Mr. Thibeault is the President of Applied Economic Research, Inc., which provides real estate appraisal and economic consulting services to public and private clients. Mr. Thibeault explains that he was retained to determine the fair market value of PWW’s fee parcels and cross country easements as of December 31, 2005. His appraisal included the fee interest of 60 parcels in addition to 67 cross country easements owned by PWW. His appraisal did not include easements that were in public or private streets. Mr. Thibeault describes his appraisal methodology, his use of mass appraisal technique, and his reliance upon the comparable sales method of valuation. Based on his appraisal, Mr. Thibeault determined that the land parcels owned in fee by PWW have a fair market value of \$12,038,800. In addition, he determined that the cross country easements owned by PWW have a fair market value of \$863,700. The combined value of the fee parcels and easements is \$12,902,500.

Finally, Mr. Reilly separately valued the intangible assets of the PWW System. These intangible assets include the distribution maps, water pumping rights, databases, company records, and a trained and assembled workforce—all of which are necessary to operate the water system.

After accumulating these various bundles of assets (tangible and intangible, land and cross country easements, current assets), Mr. Reilly determined that an economic obsolescence factor should be applied to certain assets. This factor is the means by which an appraiser adjusts for external events that act to reduce the fair market value of the property. The economic obsolescence factor is based on the rate of return that the hypothetical buyer would expect to

earn on the property. After applying the economic obsolescence factor, Mr. Reilly arrives at an asset based value indicator of \$253,800,000 for the PWW assets.

The Income Approach (Discounted Cash Flow Method). The income approach assumes that the value of a business is the present worth of its future income. The discounted cash flow method relies on PWW's financial projections, adjusted for the expected financial performance of the hypothetical purchasers. Because the government entities in the population of hypothetical buyers will set the range of market prices, PWW's financial projections are adjusted to reflect that a governmental entity avoids certain expenses such as income taxes and pays lower property taxes than does its investor owned counterpart. Also, Mr. Reilly describes the build-up of the weighted average cost of capital for the hypothetical buyers (which will control the amount of income that the buyer could expect to earn). Based on the income approach, Mr. Reilly arrived at a value indicator of \$240,200,000 for the PWW assets.

Sales Comparison Approach (Guideline Merged and Acquired Company Method). The sales comparison approach uses sales of comparable properties to estimate the value of the subject assets. Mr. Reilly describes a number of guideline transactions that his research has located, and the reasons why these transactions are not sufficiently comparable to provide meaningful valuation guidance as to the PWW assets.

Valuation Conclusion of \$248,400,000. Mr. Reilly explains that he determined that the fair market value of PWW's operating assets is \$248,400,000 based on applying a 60% weight to the asset based approach and a 40% weight to the income based approach. He explains that he gave the asset based approach the greater weight because the assets being appraised are special purpose property (i.e. they were designed for the singular purpose of water distribution) and because of the quality of the RCNLD. He notes that he applied significant weight to the income based method because a buyer would rely heavily on the income generating capacity of the assets in making a purchasing decision. He gave no weight to the sales comparison approach because the properties examined were not sufficiently comparable to the PWW System to provide meaningful valuation guidance.

B. John F. Guastella

Mr. Guastella is the founder of Guastella Associates, Inc., a consulting firm that provides utility management, valuation and rate consulting services to both regulated and unregulated utilities. He is the former Director of the Water Division of the New York Public Service Commission. Mr. Guastella performed an analysis to determine the revenue requirement of the City of Nashua if it were to acquire the PWW water system at the fair market value determined by Mr. Reilly, PWW's valuation expert. Mr. Guastella then compares that revenue requirement to the forecasted revenue requirement of the water systems under continued ownership by PWW. As Mr. Guastella explains, his analysis assumes that Nashua would first issue revenue anticipation notes for a three year term and then refinance that debt over a twenty year term. That approach helps stabilize rates during the period under analysis. Mr. Guastella's analysis demonstrates that, at a purchase price of \$248,400,000, the revenue requirement for the PWW systems under Nashua ownership would be the same or even slightly above the revenue requirement for those systems under PWW ownership. He estimates Nashua's revenue

requirement to be 4.1% higher than that of PWW by 2014, calling for a commensurate Nashua rate increase above the amount required by PWW.