

**STATE OF NEW HAMPSHIRE**  
**BEFORE THE**  
**PUBLIC UTILITIES COMMISSION**

**City of Nashua: Taking Of Pennichuck Water Works, Inc.**

**Docket No. DW 04-048**

**REPLY TESTIMONY OF JOHN F. GUASTELLA**

**May 22, 2006**

1 **Q. Mr. Guastella, have you previously submitted direct testimony in this proceeding?**

2 A. Yes. I submitted testimony on January 12, 2006 as part of the direct case filed by  
3 Pennichuck Water Works, Inc. (“PWW”) or (the “Company”).

4 **Purpose of Testimony**

5 **Q. What is the purpose of this reply testimony?**

6 A. My previous direct testimony provided an estimate of the revenue requirement that would  
7 be necessary under the assumption that the City of Nashua acquired the “core” and  
8 community water systems of PWW at the market value of \$248,400,000 as determined by  
9 its valuation experts. At that time, however, because the costs of assets that were being  
10 determined by PWW’s other expert witnesses were not yet available, I was unable to  
11 complete my other assignment. Specifically, I was unable to estimate the rate or financial  
12 impact of such an acquisition on the other subsidiaries of Pennichuck Corporation that are  
13 parties to this case, namely; Pennichuck East Utility, Inc. (“PEU”), Pittsfield Aqueduct  
14 Company Inc. (“PAC”) and Pennichuck Water Service Corporation (“PWSC”). I have  
15 since completed that analysis, which was provided to the parties to this case in response to  
16 Data Request Nashua 3-11 and is now being presented as part of this reply testimony.

17 **Q. Does your reply testimony cover any other issues?**

18 A. Yes. I have made revisions to Attachment JFG-1 to my original direct testimony in order  
19 to reflect corrections which effectively offset each other and, therefore, do not have a  
20 significant impact on the results or conclusions regarding that analysis or my testimony. In  
21 addition, this reply testimony also addresses the revenue and rate increase projections  
22 submitted by Mr. George E. Sansoucy in his testimony of January 12, 2006.

1 **Impact of Nashua Taking on PEU, PAC and PWSC**

2 **Q. What are the results of your analysis of the impact on the rates of PEU and PAC if**  
3 **the City of Nashua were to acquire PWW?**

4 A. On the basis of my analysis of 2005 operations of these companies, I found that if the City  
5 of Nashua acquired PWW, PEU would have needed a rate increase of approximately 64%  
6 above the revenue requirement PEU would have had without the acquisition; and PAC  
7 would have needed a rate increase of about 66% above the revenue requirement it would  
8 have had without the acquisition.

9 **Q. What would be the impact on PWSC if the City of Nashua had acquired PWW?**

10 A. Also on the basis of an analysis of 2005 operations, PWSC's net income would have  
11 decreased from a profit of about \$151,000 to a loss of about \$265,000.

12 **Q. What would be the impact of that magnitude of a loss in PWSC's earnings?**

13 A. On the basis of discussions with Company personnel, it is likely that compensatory  
14 increases in PWSC's charges would raise them beyond a competitive level and, therefore,  
15 result in a loss of the entire business. In addition to the present value of the loss of that  
16 future cash flow, the loss of PWSC as a viable business would further impact PEU's and  
17 PAC's rates because they would have to absorb yet a larger portion of common costs.

18 **Q. Is there any mechanism whereby the Public Utilities Commission could insulate**  
19 **PEU's and PAC's customers from the rate increases that would be required to**  
20 **compensate for the taking of PWW?**

21 A. Despite 44 years of experience in utility regulation and rate setting, I am not aware of any  
22 precedent or regulatory rate setting mechanism that exists for such a circumstance. The  
23 combined additional revenue requirement for PEU and PAC, beyond their "normal"

1 revenue requirement, is about \$3.4 million, not considering the further impact of the  
2 economies of scale related to the potential loss of PWSC as a viable business. This  
3 shortfall in revenue requirement is more than double the required return on their combined  
4 rate base, which is about \$1.64 million on a combined rate base of about \$18 million. If  
5 some type of fund were established to generate some \$3.4 million in the revenue  
6 requirement shortfall, and assuming a capitalization rate in the range of 6.5% and 8.5%, it  
7 would be in the approximate range of \$40 to \$50 million. Thus, if PEU's and PAC's  
8 customers were to be insulated from the rate increases related to an acquisition, in  
9 addition to establishing the acquisition price at market value, a \$40 to \$50 million payment  
10 into such a fund would also be necessary.

11 **Q. Is it your recommendation that such a mechanism be established?**

12 A. At this point in time, I am simply identifying and attempting to quantify a major issue that  
13 the PUC must consider in evaluating whether, under these unusual circumstances, this  
14 acquisition would be in the best interests of all of the customers.

15 **Q. Were schedules prepared by you or under your direction and supervision that**  
16 **summarize the results of your analysis?**

17 A. Yes. Attachment JFG-2, which is my response to Nashua 3-11 provided to the parties to  
18 this case in March, contains three schedules. The first two schedules contain similar  
19 statements of operations for PEU and PAC and the last schedule contains a profit and loss  
20 statement for PWSC.

21 **Q. Would you describe the first two schedules attached to the supplemental response to**  
22 **Nashua 3-11?**

1 A. These schedules contain the actual operating results for 2005 in the “2005 Per Book”  
2 column, which shows that in 2005 PEU’s rate of return was 3.74% and that PAC’s rate of  
3 return was 3.28%. The column entitled “2005 With Appropriate Revenue Levels” reflects  
4 the revenues needed to produce an 8.35% rate of return for PEU and an 8.67% rate of  
5 return for PAC, before an assumed acquisition by the City of Nashua. The last column  
6 entitled “2005 Without PWW Affiliation” contains the changes in operating expenses, rate  
7 base, rate of return and resulting revenue requirement, under an assumed acquisition of  
8 PWW. This reflects that PEU and PAC both needed rate increases (about 22.4% and  
9 32.8%, respectively) on the basis of 2005 operating results, before consideration of an  
10 acquisition. The acquisition of PWW by the City of Nashua would have required a further  
11 increase of 64% for PEU, or a total increase of 101% over 2005 revenues and a further  
12 increase of 66% for PAC, or a total increase of 120% over 2005 revenues.

13 **Q. Would you briefly describe the analysis that you performed in order to determine**  
14 **the rate impact on PEU and PAC under the assumption that the City of Nashua**  
15 **acquired PWW, as summarized in Attachment JFG-2?**

16 A. Yes. Under the current structure, PWW owns all “common use” assets and employs all  
17 utility personnel in the operation of all affiliated companies, and allocates the related cost  
18 to each. To determine what the costs would be if PWW were no longer sharing the  
19 capital and operating functions with PEU and PAC, we met with various Company  
20 personnel to compile information and analyze the operations. Each component of the  
21 operations of PWW, PEU and PAC, as well as PWSC was examined to determine the  
22 labor, materials, and other costs that would no longer be needed, and those that would be  
23 necessary for the remaining operations, and to determine the new level of costs. In effect,

1 while the total costs to be borne by the companies on a combined basis would be less  
2 because the largest of the systems would be taken, each of the remaining companies would  
3 ultimately bear a higher level of costs because of the loss in economies of scale.

4 **Q. Have you previously provided in response to data requests detailed explanations**  
5 **with respect to your analysis, along with schedules showing the various calculations**  
6 **that support the summary schedules contained in Attachment JFG-2?**

7 A. Yes. I am including Attachment JFG-3 with this testimony, which contains a copy of my  
8 response to a supplemental NH PUC Staff data request, Staff 4-22. My response answers  
9 each of Staff's inquiries and provides a narrative and detailed schedules that explain the  
10 analysis and calculations that support the results summarized in Attachment JFG-2.

11 **Revisions to Original Revenue Requirement Analysis**

12 **Q. Have you prepared revised schedules that reflect the corrections you have made to**  
13 **your original Attachment JFG- 1?**

14 A. Yes. I am including with this testimony "Attachment JFG-1 REVISED" which contains  
15 the results of the corrections to my original Schedules A, B, and C. Although no revisions  
16 were necessary with respect to Schedule D of the original Attachment JFG-1, I have  
17 included that schedule as well in order to have a complete set of schedules in this revised  
18 attachment.

19 **Q. Would you please explain the corrections that are reflected in Attachment JFG-1**  
20 **REVISED?**

21 A. Yes. The financial projections originally provided to me by the Company did not include  
22 the cost of utility plant related to its projection for contributions in aid of construction. I  
23 also found that a cell reference with respect to deferred tax credits contained a positive

1 instead of a negative formula in my calculation of rate base. Also, I had calculated a cost  
2 of debt of 7.84% instead of using the Company's actual projection of 6.97%. Adjusting  
3 for this information, results in revisions to the rate base, capital structure and overall rate  
4 of return, and the total revenue requirement. The net differences, however, did not  
5 significantly change the results of my analysis. Specifically, the differences between the  
6 revenue projections between PWW and a municipal operation of the water system as  
7 shown on Schedule A for the years 2008 through 2015 did not change at all for the years  
8 between 2008 and 2010; for the years 2011, 2012 and 2013 the original projections  
9 showed that the Municipal revenues would be slightly lower than PWW's revenues by a -  
10 .34%, -.36% and -.37%, respectively, and the revised figures are -.34%, -.35% and -.36%,  
11 respectively, or essentially no change; and, for 2014 and 2015 the original projections  
12 showed that the Municipal revenues would be slightly higher by 4.10% and 4.09%,  
13 respectively, and the revised figures now show that the municipal revenues would be  
14 slightly lower by -.37% and -.38%, respectively, which is insignificant considering that  
15 these are projections of all future customers and revenue requirement components.  
16 Accordingly, my original conclusion that there would essentially be no significant  
17 difference in terms of revenues under continued ownership by PWW or an acquisition by  
18 the City of Nashua at a market value of \$248,400,000 remains the same.

19 **Analysis of Sansoucy Revenue Requirement Projection**

20 **Q. What issues do you wish to address with respect to Mr. Sansoucy's revenues and**  
21 **rate increase projections?**

22 A. Mr. Ware has provided me with cost differentials between what Veolia and Mr. Sansoucy  
23 have projected for the operation of the water system by Nashua and what he believes are

1 more realistic cost levels. I took the adjustments for those costs that Mr. Ware indicated  
2 were either underestimated or overlooked by Mr. Sansoucy, and redid his revenue  
3 requirement analysis to reflect the new data. In redoing Mr. Sansoucy's analysis, I also  
4 found that there appears to be an error in Mr. Sansoucy's calculation of debt service, bond  
5 coverage and bond reserves because he did not correctly reduce the balances for the  
6 reinvestment of a portion of the bond reserves. I also found that Mr. Sansoucy's  
7 calculations of the percentages of the revenue increase were in error. In redoing Mr.  
8 Sansoucy's analysis, I merely addressed the adjustments and errors that I have just  
9 described. I did not modify his methodology and I am not endorsing it.

10 **Q. Have you prepared schedules that show your adjustments and corrections to Mr.**  
11 **Sansoucy's exhibits?**

12 A. Yes. Attachment JFG-4 essentially contains a replica of Mr. Sansoucy's Exhibits GES 4,  
13 5, 6 and 7, but with my adjustments and corrections.

14 **Q. Where do you reflect the adjustment to the operating expenses that were provided**  
15 **to you by the Company?**

16 A. GES Exhibit 4 – Adjusted & Corrected includes a column entitled “Pennichuck  
17 Adjustments” that contain those adjustments. They are added to Mr. Sansoucy's amount,  
18 shown in the next column, in order to begin 2007 with the adjusted amounts. I have also  
19 prepared a replica of the contents of GES Exhibit 5 for information purposes, but no  
20 changes were made to the figures.

21 **Q. Where do you correct the application of the bond reserve reinvestment amounts?**

22 A. That correction is made on GES Exhibit 6 – Corrected. The first revision is reflected in  
23 the year 2013 where I show the calculation of the beginning year balance at the top of the

1 column, by reducing the prior year balance of \$128,444 and the new bond issue amount of  
2 \$22,776 by the Reserve Reinvestment of \$6,654. It appears that Mr. Sansoucy's GES  
3 Exhibit 6 made that calculation for 2010, but did not do so for 2013 and beyond. This  
4 correction carries forward to subsequent years.

5 **Q. Where are your corrections of the errors in the percentage increases in revenues?**

6 A. It seems that all of the percentages shown on Mr. Sansoucy's GES Exhibit 7 are in error.  
7 For example, Attachment JFG-4 includes "GES Exhibit 7 - Adjusted and Corrected". The  
8 correct percentage rate increase for PWW in 2007 is shown on line 4 as 41%; Mr.  
9 Sansoucy's GES Exhibit 7 shows that percentage as 141%, although his testimony refers  
10 to the 41% increase. The same error of 100% was corrected with respect to the  
11 percentages for every year in lines 9, 13 and 14. In the "Total" column, after the 2036  
12 column, of my GES Exhibit 7 - Adjusted and Corrected the corrected percentages on lines  
13 4, 9, 13 and 14 are 125%, 98%, 125% and 98%; Mr. Sansoucy's GES Exhibit 7 shows  
14 erroneous percentages of 6756%, 5185%, 6756% and 5185%, respectively.

15 **Q. How do the adjustments and corrections impact Mr. Sansoucy's findings as**  
16 **reflected in GES Exhibit 7?**

17 A. It is difficult to determine what acquisition price is being assumed by Mr. Sansoucy. It  
18 appears that he is using what is essentially a price of \$145,000,000. With the adjustments  
19 and corrections I have discussed above, the differences between the rates of PWW and  
20 Nashua are significantly smaller than his exhibit shows. Of particular significance, is the  
21 fact that the differences in rates during the first 10 years are significantly less than the  
22 differences after 15, 20 or 30 years. I say this is particularly significant because the  
23 projections obviously become less and less reliable over time. I should also stress that the

1 differences between the rates for PWW and Nashua are highly dependent on the market  
2 value or acquisition price that is assumed. Obviously, Mr. Sansoucy's analysis assumes  
3 that the rates will be based on the market value asserted by the City in this case.

4 **Q. Have you prepared schedules similar to those in Attachment JFG-4, but using other**  
5 **assumed acquisition prices?**

6 A. Yes. Attachments JFG-5 and JFG-6 are revised versions of these schedules showing the  
7 results using acquisition prices of \$248,400,000 and \$196,700,000 (the mid-point between  
8 the City's and PWW's figures), respectively. Again, these schedules adopt Mr.  
9 Sansoucy's methodology, but with the same adjustments and corrections as in Attachment  
10 JFG-4.

11 **Q. What are the results of using Mr. Sansoucy's methodology, after adjustments and**  
12 **corrections, at the acquisition price of \$248,400,000?**

13 A. As shown on Attachment JFG-5, GES Exhibit 7 - Adjusted & Corrected, on the bottom  
14 line, the revenue requirement for Nashua would be higher than for PWW for the first 19  
15 years, and even after 30 years the dollar difference (a negative \$33,620, line 12) would  
16 still reflect an overall need for higher revenues under Nashua's ownership.

17 **Q. What are the results of using Mr. Sansoucy's methodology, after adjustments and**  
18 **corrections, at an acquisition price of \$196,700,000?**

19 A. As shown on Attachment JFG-6, GES Exhibit 7 - Adjusted & Corrected, on the bottom  
20 line, the revenue requirement for Nashua would be higher than for PWW for the first 12  
21 years, and the cumulative dollar difference, as shown on line 16, would not reverse until  
22 year 2031.

1 **Q. What do you conclude with respect to the various analyses of the impact on rates**  
2 **when considering an acquisition of PWW by Nashua?**

3 A. On the basis of my own projections of the rate impact as well as my review of the  
4 projections by Mr. Sansoucy, it is my opinion that the rate impact is not a determinative  
5 issue with respect to whether the acquisition would be in the best interest of the  
6 customers. It is of course well known that the purchase price must be established on the  
7 basis of the market value of the property, which is not dependent upon the affordability of  
8 the purchaser or the impact of future rates on customers. While the projections as to  
9 whether the rates would be higher or lower under an assumed acquisition of PWW by  
10 Nashua vary with an ultimate market value determination, the differences go in either  
11 direction and are not so significant to make a difference, especially considering the  
12 reliability of the projections when extending out to longer periods of time.

13 **Q. Does that conclude your testimony at this time?**

14 A. Yes.