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4 **PREFILED REBUTTAL TESTIMONY OF**  
5 **CHRISTOPHER P.N. WOODCOCK**

6 **Q: Are you the same Christopher Woodcock that prefiled testimony on behalf of**  
7 **the Kent County Water Authority?**

8 A: Yes I am.

9 **Q: Have you had an opportunity to review the testimony filed on behalf of the Di-**  
10 **vision of Public Utilities and Carriers?**

11 A: I have.

12 **Q: Do you agree with the positions taken by the Division's witnesses?**

13 A: Mr. Mancini appears to agree with position taken by the Authority on funding its IFR  
14 program. While Ms. Crane agrees with the overall increase in revenues requested  
15 by the Authority, she has recommended reductions to several items that would be  
16 made up in the IFR spending and she has recommended the Commission set rates  
17 based on water sales that are more than those I had proposed. I do not agree with  
18 the items she has recommended for reduction nor do I agree with the increased  
19 projection on water sales. The areas that Ms. Crane has recommended reductions  
20 to include:

- 21 • The inflation adjustment to chemical costs (Sch. ACC-6)
- 22 • Purchased water costs (Sch. ACC-7)
- 23 • Maintenance of mains (Sch. ACC-8)
- 24 • Office Supplies & Expenses (Sch. ACC-9)
- 25 • Operating Revenue Allowance (Sch. ACC-10)

1 **Water Sales/Revenues**

2 **Q: Please discuss the differences between the Authority and the Division on wa-**  
3 **ter sales and revenues.**

4 A: As discussed in my prefiled direct testimony, the Authority has proposed using the  
5 actual test year sales, adjusted for the loss of a known large customer (On Semi-  
6 conductor) that has announced it is leaving the system<sup>1</sup>. The Division has used a  
7 three year average plus a reduction for the loss of the same large customer.

8  
9 **Q: The Division states that you have used a three year average in the past and**  
10 **that it is common to use an average consumption to determine “normalized”**  
11 **levels of consumption. Do you agree?**

12 A: I indeed did use a three year average in the prior docket. However in this case I am  
13 recommending the use of the test year sales after billing adjustments and the re-  
14 moval of use by On Semiconductor. As I stated in my direct testimony, I believe  
15 this adjusted test year amount is a normal sales volume. I have found that in recent  
16 years the Division’s position in water rate filings has consistently been to recom-  
17 mend an increase in sales over those proposed by the water purveyors. This has  
18 resulted in higher estimates of revenues under the current and proposed rates and  
19 lower overall rates – the revenue requirements are divided by a larger number. In  
20 recent years, water utilities throughout RI have generally experienced a reduction in  
21 sales from prior years and lower than expected revenues. I think the recent dockets  
22 in Pawtucket, Newport and Woonsocket all demonstrate this rather clearly. The re-  
23 duction in revenues is bad enough for the water utilities, but coupled with the Divi-  
24 sion’s new position to reduce the operating revenue allowance, has resulted in an-  
25 nual revenues that are less than needed and more frequent and costly rate filings.

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<sup>1</sup> as of May 2005 they are saying early summer 2005

1 I also do not agree with the simple averaging proposed by the Division. I recognize  
2 that they have made the adjustment for a large account that is leaving and that they  
3 have projected a continued growth in the number of customers.

4  
5 While Ms. Crane suggests that temperature and rainfall are “the most significant  
6 factors that influence annual water use” she has made no attempt to show how  
7 these are relevant or impacted use in Kent County or even how these three years fit  
8 into normal temperature and rainfall years. The Division has not suggested if these  
9 years were normal or abnormal. The Division hasn’t suggested why a three year  
10 average was more appropriate than others they have suggested in other dockets.  
11 Simply looking at ACC-2, one can see that FY 2002 was much higher than the other  
12 two years. In fact, one would have to go back to 1996 to find another year when  
13 sales exceeded 4.5 million ccf. In looking back at prior years, the sales in FY 2002  
14 and FY 2003 were both above recent historic averages, tending to cause a higher  
15 result than is normal or to be expected. I do not believe the averaging used by the  
16 Division resulted in a representation of “normal” sales.

17  
18 Turning to the question of “common practice”, the American Water Works Associa-  
19 tion recognizes that there are other considerations in forecasting water use. I would  
20 characterize these as part of common practice. The considerations they list include:

- 21 • growth in the number of customers. The Division has considered this in  
22 part, but has only looked at a four<sup>2</sup> year trend
- 23 • non-recurring sales. The Division did accept our adjustment for this
- 24 • weather normalization. While the Division claims this is the most significant  
25 factor, they have presented no analysis to show which years were above or  
26 below normal or how the weather impacted use. Simply stating that it is the

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<sup>2</sup> Had the Division used four years of water sales rather than three it would have calculated lower sales volumes than those proposed on ACC-2.

1 most significant factor doesn't mean the three year average is at all appro-  
2 priate.

- 3 • conservation. While it is very difficult to quantify the impact of conservation,  
4 it is clear that the Authority has implemented strong conservation restric-  
5 tions in the past few years to prevent the waste of water and has recently  
6 strengthened the program due to the current water shortage. This factor is  
7 not taken into account by the Division at all.
- 8 • price. Most water uses are not particularly sensitive to price, but it is widely  
9 acknowledged that discretionary uses such as lawn irrigation are more sen-  
10 sitive to price. It is this very type of use that is so impacted by rainfall and  
11 temperature, yet the impact of price in helping to dampen these demands is  
12 not taken into account by the Division.

13  
14 **Q: Are there other reasons why you disagree with the Division's position on**  
15 **sales?**

16 A: Yes, as suggested on page 11, lines 9-17 of Ms. Crane's testimony and as stated in  
17 the response to Comm 1-11 (attached to Ms. Crane's testimony), the amounts pre-  
18 sented in the annual reports are gross water sales and do not reflect subsequent  
19 billing adjustments. The Division asked for the net or adjusted sales in a data re-  
20 quest that was subsequent to the filing of the Division's testimony. The response to  
21 Div 2-5 presents the adjusted sales, including the bulk water sales to Warwick.  
22 While I disagree with the averaging, particularly the inclusion of two particular high  
23 years, if the Commission does accept the Division's position it should average the  
24 net or adjusted sales, resulting in a lower retail sales value and less of an adjust-  
25 ment than that suggested by the Division.

26  
27 I also noted that there was a typographical error on Sch ACC-2 – line 7, the usage  
28 presented by the Authority was 3,9~~8~~4,152, not the 3,9~~6~~4,152. This correction re-  
29 duces the calculated adjustment by some \$41,000.

1

2 **Q: Do you have any concluding thoughts on this matter?**

3 A: Yes I do. Rhode Island's water utilities have experienced a reduction in sales in re-  
4 cent years that is probably due to many factors. Certainly the down turn in the  
5 economy, the loss of major manufacturers, and the increased attention to water  
6 conservation are factors that have contributed to this. I am concerned that the high  
7 sales estimates that have been used to establish new rates have not materialized.  
8 The failure to realize these estimated sales have resulted in a reduction in reve-  
9 nues. Because the rates are calculated based on higher sales estimates (\$/higher  
10 ccf), the rates that are approved are lower than they should be causing a further  
11 erosion in revenues. Lastly, water utilities have been provided lower operating  
12 revenue allowances, further removing any opportunity of achieving the revenues  
13 needed. This erosion of revenues has caused the State's water utilities to come  
14 back to the Commission with greater frequency and at greater cost to the rate pay-  
15 ers. I believe the Commission should give greater weight to the lower sales esti-  
16 mates that the utilities are putting forth and restore the 1.5% operating allowance on  
17 total revenues. At worst, this could result in some additional revenues that may al-  
18 low the water utilities to file less frequent rate cases, saving the rate payers in the  
19 long run.

20 **Expense Items**

21 **Q: Please discuss your differences with the Division's position on chemical**  
22 **costs.**

23 A: The Division has suggested two adjustments. The first (ACC-5) relates to an ad-  
24 justment related to increased sales. As I previously discussed, I believe the Divi-  
25 sion's sales projection is overly optimistic. If the Authority's position is accepted this  
26 increase by the Division is not needed. However, if the Commission accepts any  
27 increase in sales, there should be a corresponding increase in the chemical costs  
28 as the Division has proposed.

29

1 The second adjustment by the Division is the elimination of inflation adjustment of  
2 4%. First let me clear up what Ms. Crane has termed a contradiction between my  
3 testimony that the chemical costs were “the most recent unit costs” and a data re-  
4 sponse (Div 1-14) in which I noted that the chemical costs “were predicated on  
5 costs as of June 30, 2004”. This case was filed in January and supplemented in  
6 February 2005. The chemical use and cost data I used for the study was obtained  
7 in the later months of CY 2004. In some cases there were purchases shown after  
8 the test year, but no unit costs changed in those later months – the costs on June  
9 30, 2004 were the most recent costs.

10  
11 In response to Div 1-14 we noted that the price of chemicals is heavily influenced by  
12 energy costs. We mistakenly believed that this was a well know fact that the Divi-  
13 sion was aware of. The May 2001 Report on National Energy Policy by the National  
14 Energy Policy Development Group is full of references that show this connection.  
15 The chemical manufacturing industry is one of the six industries that consume ¾ of  
16 all industrial energy. The response to Div 1-14 also noted that the chemical com-  
17 panies had been adding an energy or fuel surcharge on their bills. If there is any  
18 question in the Commission’s mind regarding the influence that energy prices have  
19 on chemicals I would be glad to provide further documentation. However, I ask that  
20 such a showing be requested if the Commission believes it is necessary.

21 The Commission is well aware that energy prices have been rapidly increasing  
22 since last summer. The continuing impact on water utility chemical costs is certainly  
23 expected. I urge the Commission to reject the \$1,977 adjustment presented on  
24 Sch. ACC-6 and allow the Authority sufficient funds to pay for chemicals.

25  
26 **Q: The Division has recommended two adjustments to purchased water costs.**  
27 **Will you discuss these?**

28 A: The first adjustment presented on Sch. ACC-7 is an adjustment for the Division pro-  
29 jection of increased water sales over the test year amounts presented by the Au-

1       thority. As with their similar adjustment to chemical costs, we do not agree with the  
2       premise that sales will increase, thus we do not agree with the increased purchases  
3       and costs projected by the Division.  
4

5       The Division's second adjustment is to assume an unaccounted for water amount of  
6       10%. The Division has simply assumed that unaccounted for water will equal 10%  
7       of their projected sales and that the sales plus this 10% will equal the total pur-  
8       chases and production. The Division attached the response to Div 1-22 to Ms.  
9       Crane's testimony, which includes page 43 of the Authority's Annual Reports for  
10      several years. It shows the derivation of the unaccounted water percentages as-  
11      sumed and used by Ms. Crane. However, in Ms. Crane's calculations, there is no  
12      accounting of Authority use or unmetered water – items that are clearly presented  
13      on page 43 of the Annual Reports. Following the logic at the base of page 17 of  
14      Ms. Crane's testimony, the calculation of the test year unaccounted for water per-  
15      cent should be:

	<u>Ms. Crane Pg 17</u>	<u>Pg 43 FY 04</u>	
Supply (ccf)	4,748,309	4,856,277	(Excludes Warwick)
Sales (ccf)	3,984,152	3,984,152	
Unacctd For (ccf)	764,157	872,126	
Unaccounted (%)	16.1%	18.0%	

21  
22       Ms. Crane has compared apples to oranges to derive her second adjustment.  
23       Comparing the 16.1% figure on line 15 of page 17 on her prefiled testimony is  
24       analogous to the 18.0% calculated above – not the 8.4% shown on the Authority's  
25       report or her testimony. By mixing up numbers and leaving out others, she has  
26       grossly understated the Authority's purchased water cost. The Commission is  
27       urged to reject this miscalculated recommendation.  
28

1 **Q: Will you comment on the Division’s proposed adjustments to the Authority’s**  
2 **claim for the Maintenance of Mains and Office Supplies and Expenses?**

3 A: In both cases, the Division has simply looked at a three year average of past ex-  
4 penses in these categories and come to the conclusion that these items are more  
5 than the average so should be reduced. I found it interesting that the Division  
6 asked for 5 years of history yet ignored the first two years of Maintenance of Mains  
7 which were both higher than her “base cost” of \$412,681.

8  
9 I don’t think it is fair or reasonable to simply look at a history and pick out items that  
10 had a higher than normal increase and ignore the others. In FY 2003 the Authority  
11 had nearly \$42,000 of Supply labor and well maintenance, yet only had some  
12 \$16,600 in the test year. No extra funds were suggested for this. Hydrant main-  
13 tence in FY 2004 was far less than the previous years, yet there is no upward ad-  
14 justment from the Division to reflect this. Outside service costs dropped from more  
15 than \$184,000 in FY 2002 to some \$164,000 in FY 2003 to less than \$154,000 in  
16 FY 2004. The Authority is only seeking the test year amount (\$153,761) in the rate  
17 year, not an average with the higher amounts.

18  
19 If the Division believes that the Authority spent too much on the Maintenance of  
20 Mains or Office Supplies in the test year they should provide some basis other than  
21 it looks high compared to some other years.

22  
23 **Operating Revenue Allowance**

24 **Q: Please discuss your disagreement with the Division’s position to provide zero**  
25 **funds for an operating revenue allowance.**

26 A: The Division quotes from the prior Commission’s findings in Docket 2098 in decid-  
27 ing that KCWA’s Operating Revenue Allowance is no longer needed. (In KCWA’s  
28 subsequent filings, the cases were settled with no decision by the Commission.) I  
29 find it fascinating that a docket that is now over a dozen years old can be viewed as

1 guiding, while more recent dockets with similar circumstances are not. Clearly,  
2 since 1993, this Commission has provided other water utilities in Rhode Island with  
3 an allowance for operating revenue even though they have O&M Reserve require-  
4 ments similar to the Kent County Water Authority. I find the Commission's language  
5 in Docket No. 2098 as to the purpose of the allowance far more instructive: "... to  
6 mitigate cash flow problems, provide for unforeseen expenditures, or lost revenue  
7 due to water use curtailment." Recently it has been suggested that the operating  
8 revenue allowance was only to address the variability of expenses, and that no al-  
9 lowance was needed on fixed items like debt service or IFR. I think this quotation  
10 from 1993 clearly demonstrates that this was NOT the Commission's intent in pro-  
11 viding such an allowance. "Cash flow problems" have to do with the timing of re-  
12 ceipts and expenses, not whether an expense item is fixed or variable. "Lost reve-  
13 nue due to water use curtailment" again has nothing to do with fixed vs. variable ex-  
14 penses, but goes right to the heart of the matter. The variability in total revenues  
15 was a key element in establishing this allowance. Like other water utilities in Rhode  
16 Island and as pointed out in my supplemental testimony, the Kent County Water Au-  
17 thority's revenues vary from year to year and by far more than 1.5% on average.  
18 The allowance we have requested is only 0.75% of the total revenue requirement –  
19 far less than the use variation in just about every year.

20  
21 In my previous testimony I noted that the Commission has only been providing a  
22 1.5% allowance on expense excluding debt and IFR and despite my belief that this  
23 is not adequate, that is all we have requested here. I think the Division's position to  
24 provide absolutely nothing for an operating revenue allowance along with their high  
25 sales projection will almost certainly guarantee that the Kent County Water Author-  
26 ity will not realize sufficient revenues to cover the expenses the Commission finds  
27 reasonable in this docket.

28  
29 **Q: The Division suggests that the Authority's O&M Reserve Fund requirement**

1 **negates the need for an additional operating revenue allowance. Do you**  
2 **agree?**

3 A: I do not agree. First let me state that Ms. Crane has never suggested she is an ex-  
4 pert in municipal revenue bond financing and has claimed no past experience in de-  
5 veloping bond indentures or preparing certifications that utilities are meeting the re-  
6 quirements of such indentures. Her conclusion is based solely on a statement in a  
7 Commission decision that is more than 12 years old; it is not founded in any per-  
8 sonal expertise.

9  
10 As pointed out in my original prefiled testimony I have worked on a number of engi-  
11 neering and financial feasibility studies related to municipal revenue bonds. I  
12 worked closely with the Authority's bond counsel in developing and authoring much  
13 of the Authority's initial bond indenture<sup>3</sup>. That bond indenture has served as a  
14 model for subsequent bond indentures in Pawtucket and Woonsocket that I have  
15 also worked on. I perform annual reviews for a number of RI water utilities to en-  
16 sure that specified terms of the indentures are being met and have prepared finan-  
17 cial feasibility certificates for a number of recent water revenue bond issues in RI. I  
18 believe I am well aware of the terms and conditions of the trust indentures in gen-  
19 eral and of the Authority's indenture in particular.

20  
21 The Kent County Water Authority's Operation and Maintenance Reserve Fund es-  
22 tablished under Sections 502 and 511 of the Authority's General Bond Resolution  
23 does NOT serve an identical function to the operating reserve or revenue allow-  
24 ance. The O&M Reserve Fund can be used for specific purposes only: (1) to make  
25 principal and/or interest payments if there are insufficient amounts available in the  
26 debt service fund, debt service reserve fund, renewal and replacement reserve fund  
27 or the renewal and replacement account or (2) to make payments for operation and  
28 maintenance if the amounts in the operation and maintenance fund is insufficient.

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<sup>3</sup> The Commission can note my prefiled and oral testimony in Docket 2098 for more on this matter.

1 Unlike the 1.5% operating revenue allowance, the O&M Reserve Fund can not be  
2 used for other purposes such as payments towards IFR costs if revenues are insuf-  
3 ficient or to the O&M or R&R reserve funds. The O&M Reserve Fund is also quite  
4 different in that this fund or account may not simply be used up if revenues are in-  
5 sufficient – the fund must be repaid. It is only to be used for a short term cash flow.  
6 At the end of each fiscal year, the O&M Reserve Fund must have an amount on  
7 deposit equal to 25% of the Authority’s operating budget. While money can be  
8 withdrawn and used in an emergency, unlike the 1.5% operating reserve it must be  
9 paid back in the fiscal year. With the 1.5% operating reserve, a shortfall in sales  
10 and revenues can be covered by that reserve for the year and no repayment is  
11 needed. That is not the case with the O&M Reserve Fund established in the Au-  
12 thority’s General Bond Resolution.

13  
14 **Q: Couldn’t the Authority tap into the O&M Reserve Fund and apply for emer-**  
15 **gency rate relief to repay it in the year?**

16 A: Theoretically this is possible; however, practically I don’t think it is. First, the Au-  
17 thority would have to recognize the shortfall in revenues in sufficient time to prepare  
18 an emergency filing. It is unclear when this might be possible. For example, it  
19 would probably be unreasonable to suggest an emergency exists for the whole year  
20 if billings in the fall (three or four months into the fiscal year) are down. However,  
21 waiting until January or February might be too late – their may only be one billing  
22 left after emergency rates are approved, and that one quarter would not necessarily  
23 be sufficient to refund the O&M Reserve Fund so that 25% of the budget (the  
24 amount required in the bond resolution) is in the account on June 30. Under this  
25 scenario other expenses and restricted deposits must still be made in the year with  
26 revenues that are insufficient to cover those expenses. Assuming that funds would  
27 be left over to make all the normal payments and reimburse the O&M Reserve Fund  
28 by the end of the fiscal year is unlikely.

1 The O&M Reserve Fund should be viewed as an account that is only used in an ex-  
2 treme case or emergency. It should not be viewed as something that is used if gas  
3 prices rise, benefit expenses go up more than expected, or summer sales of water  
4 drop a few percent. I believe that the 1.5% operating revenue allowance estab-  
5 lished by the Commission was intended to fill this purpose.

6  
7 **Summary**

8 **Q: Has the Authority's position changed as a result of the testimony and exhibits**  
9 **filed by the Division?**

10 A: No it has not. I believe that the revenue requirements contained in my supplemen-  
11 tal testimony and exhibits are still appropriate and fair. I urge the Commission to  
12 accept the claimed revenue requirements and the rates we proposed.