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August 21, 2008

Ms. Luly Massaro, Clerk  
Public Utilities Commission  
89 Jefferson Boulevard  
Warwick, RI 02888

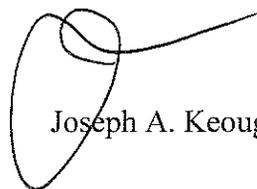
**Re: Pawtucket Water Supply Board – Docket No. 3945**

Dear Ms. Massaro:

Enclosed please find the Pawtucket Water Supply Board's Response to the Rhode Island Public Utilities Commission's Data Requests (Set 2).

Thank you for your attention to this matter.

Sincerely,



Joseph A. Keough, Jr.

JAK/kf  
Enclosure

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PAWTUCKET WATER SUPPLY BOARD  
Docket No. 3945

Pawtucket Water Supply Board's Response to  
the Rhode Island Public Utilities Commission's Data Requests  
Set 2

- 2-1. Please provide the amount paid to Earth Tech under the DBO contract for the period February 2007 through February 2008. Explain any change in the amount paid for the 12 month period July 2006 – June 2007 (\$1,236,302) and the 12 month period February 2007 – February 2008.**

RESPONSE: The amount paid to Earth Tech under the DBO contract for the period of February 2007 through February 2008 was \$1,260,547. See the attached Schedule Comm 2-1 which compares the amount paid for the 12 month period July 2006 – June 2007 and the 12 month period February 2007 – February 2008. This schedule provides the details for the change in the amount paid between the separate 12 month periods. The PWSB's share of the cost of a well sampling probe was also included in the 12 month cost for the period ended June 30, 2007.

Prepared by: R. Benson

**PWSB  
DBO Contract Costs**

**Schedule Comm 2-1**

|                               |             | # of<br>months | 12 Months<br>ended 6/30/07 |   | # of<br>months | 12 Months<br>ended 2/28/08 |
|-------------------------------|-------------|----------------|----------------------------|---|----------------|----------------------------|
|                               | Monthly Fee |                |                            |   |                |                            |
| Contract Year 3 Service Fee   | 101,749.19  | 8.0            | 813,993.52                 |   |                |                            |
| Service Fee Increase          | 3,288.25    |                | 1,644.12                   | A |                | -                          |
| Service Fee Calculation error | <u>8.89</u> |                | (8.89)                     | B |                | (8.89)                     |
| Contract Year 4 Service Fee   | 105,046.33  | 4.0            | 420,185.32                 |   | 12.0           | 1,260,555.96               |
| Cost for well sampling probe  |             |                | <u>487.50</u>              |   |                | <u>-</u>                   |
|                               |             |                | 1,236,301.57               |   |                | 1,260,547.07               |

Note A : The contract period begins 2/13, therefore the monthly increase of 3288.25 times 50% was billed for the period of February 14 - February 28

Note B: Earth Tech detected an error in their calculation of the Contract Year 3 Service Fee and did not bill the PWSB for their error.

PAWTUCKET WATER SUPPLY BOARD  
Docket No. 3945

Pawtucket Water Supply Board's Response to  
the Rhode Island Public Utilities Commission's Data Requests  
Set 2

**2-2. Please supply support and justification for the Contractor Estimate of \$1,640,770 for DBO cost for the period 2/08 – 2/09. (CPNW Sch. 1.1, pg 2)**

RESPONSE: The contractor calculation for the DBO cost \$1,640,770 for operating the new water treatment facility during the period of 2/08 – 2/09 is Proposal B from their letter dated January 24, 2008 which was provided as Schedule RB-10. The total cost is arrived as follows:

|                                 |               |
|---------------------------------|---------------|
| Annual Service Fee              | \$1,624,970   |
| Annual Cost of Performance Bond | <u>15,800</u> |
| Total DBO Cost                  | \$1,640,770   |

Prepared by: R. Benson

PAWTUCKET WATER SUPPLY BOARD  
Docket No. 3945

Pawtucket Water Supply Board's Response to  
the Rhode Island Public Utilities Commission's Data Requests  
Set 2

**2-3. Has the Contractor Estimate of \$1,640,770 for the period 2/08 – 2/09 been updated since the original filing date? If so, please explain.**

RESPONSE: The contractor letter dated January 24, 2008 provided as Schedule RB-10 is the official notification of the service cost for the period of 2/08 – 2/09. The terms Proposal A and Proposal B relate to the cost of operating the two water treatment facilities. Proposal A is the DBO cost for operating the Mill St. treatment facility which has now been shut down. Proposal B, in the amount of \$1,640,770, is the DBO annual cost for the period of 2/08 – 2/09 for operating the new water treatment facility placed in service on March 19, 2008.

Prepared by: R. Benson

PAWTUCKET WATER SUPPLY BOARD  
Docket No. 3945

Pawtucket Water Supply Board's Response to  
the Rhode Island Public Utilities Commission's Data Requests  
Set 2

**2-4. Please explain any difference in the DBO cost for the period 2/07 – 2/08 and the DBO cost estimate for the period 2/08 – 2/09.**

RESPONSE: The DBO cost for the period of 2/07 – 2/08 was based upon the annual cost for operating the original treatment facility in accordance with Option A as escalated according to the terms of the DBO contract. The new water treatment facility was placed in operation on March 19, 2008. Therefore, Option B of the contractor's cost proposal is the DBO cost of operating the new treatment facility. Also, see the replies above to the Commission's data requests 2-1, 2-2, 2-3 and 2-4.

Prepared by: R. Benson

PAWTUCKET WATER SUPPLY BOARD  
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Pawtucket Water Supply Board's Response to  
the Rhode Island Public Utilities Commission's Data Requests  
Set 2

- 2-5. Schedule RB-10, page 3 lists an annual service fee of \$1,174,405 under Proposal A and page 4 lists annual service fee of \$1,624,970 under Proposal B. How do these numbers correlate to the \$1,640,770 listed on CPNW Sch 1.1 as the annual contract estimate for 2/09-2/10?**

RESPONSE: Proposal A provides the annual service fee for Earth Tech to operate the original treatment facility. Proposal B provides the annual service fee for Earth Tech to operate the new water treatment facility. Since the new treatment facility was placed in service on March 19, 2008, Option A no longer applies. As of the date of Earth Tech's letter, January 24, 2008, the original treatment facility was still in operation and therefore, it was necessary for the contractor to provide quotes for operating both facilities. Since the new treatment facility is now in operation, the annual DBO cost of \$1,640,770 (see the response to 2-2 above) was the cost to be used on CPNW Schedule 1.1.

Prepared by: R. Benson

PAWTUCKET WATER SUPPLY BOARD  
Docket No. 3945

Pawtucket Water Supply Board's Response to  
the Rhode Island Public Utilities Commission's Data Requests  
Set 2

- 2-6. With regard the Debt Service Account, the Debt Service Reserve Fund, and the Stabilization Account of the Debt Service Fund, please:**
- a. Explain each of the three accounts/funds.**
  - b. Explain the funding mechanism of the three accounts/funds.**
  - c. Provide a reconciliation of each account/fund from the last rate case to the present.**
  - d. Provide a forecast reconciliation for each account/fund through the end of the rate year.**

RESPONSE:

a and b.

In accordance with the Trust Indenture, the debt service account is the restricted bank account used to meet the principal and interest payments for the Rhode Island Clean Water Finance Agency (RICWFA) Bonds only. This account must be funded monthly at specified levels throughout the year so the funds are on deposit to meet the scheduled principal and interest payments for the RICWFA Bonds. This account is funded from rate revenues and investment income earned from the debt service reserve fund accounts and the debt service account.

The debt service reserve fund(s) required by the Trust Indenture are reserve funds for each bond issue and provide funds for the payment of principal and interest should there be insufficient funds in the debt service account. The Trust Indenture defines the debt service reserve requirement. The trustee, Bank of New York, is responsible for managing the debt service reserve requirement. The trustee provides the PWSB with an annual summary calculating the debt service reserve account balances and any excess funds (i.e. from interest earned) are transferred to the debt service account. These accounts were funded from bond proceeds upon issuance of each RICWFA Bond Series. However, if funds are used from these reserve fund accounts to meet shortfalls in the debt service account, these account must be reimbursed from rate revenues.

The debt service stabilization account is a bank account required by the Trust Indenture for the PWSB's debt obligations other than RICWFA bonds. For instance this fund is used to pay for the PWSB's General Obligation (GO)

PAWTUCKET WATER SUPPLY BOARD

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Set 2

Bonds, the PWSB's lease/purchase obligations and RICWFA agency fees. This account is funded from f rate revenues and investment income.

The debt service sinking fund is a bank account required by the Trust Indenture. The PWSB is required to deposit \$1,000 each year toward the first scheduled principal payment for the Series 2003A, 2003B and 2005A Bonds. The first scheduled principal payment for the 2005A Series Bonds is due September 1, 2008 and the first scheduled principal payments for the 2003A and B Series Bonds are due September 1, 2025. This account is funded from the debt service account.

c. and d. See the attached Schedule RB-17.

Prepared by: R. Benson

PWMB  
 FY08 Rate Filing  
 Restricted Debt Service Account Balances

|  |        | Fiscal Year Ending June 30 |           |      |      |      |      |
|--|--------|----------------------------|-----------|------|------|------|------|
|  | 2005   | 2006                       | 2007      | 2008 | 2009 | 2010 | 2011 |
|  | FY05   | FY06                       | Test Year | FY08 | FY09 | FY10 | FY11 |
|  | Actual | Actual                     | Actual    |      |      |      |      |

2003A Debt Service Reserve Account

Beginning Cash Balance \$ 1,798,708.23 \$ 1,798,708.23 \$ 1,798,708.23 \$ 1,798,708.23 \$ 1,798,708.23 \$ 1,798,708.23 \$ 1,798,708.23

Additions

DSR Deposit from Bond Proceeds \$ 89,103.01 \$ 88,856.19 \$ 88,856.19 \$ 88,856.19 \$ 88,856.19 \$ 88,856.19 \$ 88,856.19  
 Estimated Investment Income (FY07 Actual) \$ 89,103.01 \$ 88,856.19 \$ 88,856.19 \$ 88,856.19 \$ 88,856.19 \$ 88,856.19 \$ 88,856.19  
**Total Additions \$ 89,103.01 \$ 88,856.19 \$ 88,856.19 \$ 88,856.19 \$ 88,856.19 \$ 88,856.19 \$ 88,856.19**

Deductions

Transfer misposted to Debt Service Sinking Fund \$ 89,103.01 \$ 88,856.19 \$ 43,934.45 \$ - \$ - \$ - \$ -  
 Transfer Income to Debt Service Account \$ 89,103.01 \$ 88,856.19 \$ 44,921.74 \$ 88,856.19 \$ 88,856.19 \$ 88,856.19 \$ 88,856.19  
**Total Deductions \$ 89,103.01 \$ 88,856.19 \$ 88,856.19 \$ 88,856.19 \$ 88,856.19 \$ 88,856.19 \$ 88,856.19**

Ending Cash Balance \$ 1,798,708.23 \$ 1,798,708.23 \$ 1,798,708.23 \$ 1,798,708.23 \$ 1,798,708.23 \$ 1,798,708.23 \$ 1,798,708.23

2003B Debt Service Reserve Account

Beginning Cash Balance \$ 767,439.05 \$ 779,906.28 \$ 774,014.07 \$ 777,940.96 \$ 777,940.96 \$ 777,940.96 \$ 777,940.96

Additions

DSR Deposit from Bond Proceeds \$ 12,467.23 \$ 28,612.75 \$ 37,965.55 \$ 38,061.61 \$ 38,061.61 \$ 38,061.61 \$ 38,061.61  
 Estimated Investment Income (FY07 Actual) \$ 12,467.23 \$ 28,612.75 \$ 37,965.55 \$ 38,061.61 \$ 38,061.61 \$ 38,061.61 \$ 38,061.61  
**Total Additions \$ 12,467.23 \$ 28,612.75 \$ 37,965.55 \$ 38,061.61 \$ 38,061.61 \$ 38,061.61 \$ 38,061.61**

Deductions

Transfer Income to Debt Service Account \$ - \$ 34,504.96 \$ 34,038.66 \$ 38,061.61 \$ 38,061.61 \$ 38,061.61 \$ 38,061.61  
**Total Deductions \$ - \$ 34,504.96 \$ 34,038.66 \$ 38,061.61 \$ 38,061.61 \$ 38,061.61 \$ 38,061.61**

Ending Cash Balance \$ 779,906.28 \$ 774,014.07 \$ 777,940.96 \$ 777,940.96 \$ 777,940.96 \$ 777,940.96 \$ 777,940.96

2004A Debt Service Reserve Account

Beginning Cash Balance \$ 3,161,656.45 \$ 3,142,356.08 \$ 3,129,482.42 \$ 3,180,830.34 \$ 3,180,830.34 \$ 3,180,830.34 \$ 3,180,830.34

Additions

DSR Deposit from Bond Proceeds \$ 102,196.26 \$ 120,823.26 \$ 118,959.56 \$ 119,927.55 \$ 119,927.55 \$ 119,927.55 \$ 119,927.55  
 Estimated Investment Income (FY07 Actual) \$ 102,196.26 \$ 120,823.26 \$ 118,959.56 \$ 119,927.55 \$ 119,927.55 \$ 119,927.55 \$ 119,927.55  
**Total Additions \$ 102,196.26 \$ 120,823.26 \$ 118,959.56 \$ 119,927.55 \$ 119,927.55 \$ 119,927.55 \$ 119,927.55**

Deductions

Transfer Income to Debt Service Account \$ 121,496.62 \$ 133,696.92 \$ 67,611.64 \$ 119,927.55 \$ 119,927.55 \$ 119,927.55 \$ 119,927.55  
**Total Deductions \$ 121,496.62 \$ 133,696.92 \$ 67,611.64 \$ 119,927.55 \$ 119,927.55 \$ 119,927.55 \$ 119,927.55**

Ending Cash Balance \$ 3,142,356.08 \$ 3,129,482.42 \$ 3,180,830.34 \$ 3,180,830.34 \$ 3,180,830.34 \$ 3,180,830.34 \$ 3,180,830.34

2005A Debt Service Reserve Account

Beginning Cash Balance \$ - \$ 2,271,591.03 \$ 2,278,527.66 \$ 2,254,290.01 \$ 2,254,290.01 \$ 2,254,290.01 \$ 2,254,290.01

Additions

DSR Deposit from Bond Proceeds \$ 2,242,643.00 \$ 105,500.43 \$ 83,244.24 \$ 82,799.12 \$ 82,799.12 \$ 82,799.12 \$ 82,799.12  
 Estimated Investment Income (FY07 Actual) \$ 28,948.03 \$ 105,500.43 \$ 83,244.24 \$ 82,799.12 \$ 82,799.12 \$ 82,799.12 \$ 82,799.12  
**Total Additions \$ 2,271,591.03 \$ 105,500.43 \$ 83,244.24 \$ 82,799.12 \$ 82,799.12 \$ 82,799.12 \$ 82,799.12**

Deductions

Transfer Income to Debt Service Account \$ - \$ 98,563.80 \$ 107,481.89 \$ 82,799.12 \$ 82,799.12 \$ 82,799.12 \$ 82,799.12  
**Total Deductions \$ - \$ 98,563.80 \$ 107,481.89 \$ 82,799.12 \$ 82,799.12 \$ 82,799.12 \$ 82,799.12**

Ending Cash Balance \$ 2,271,591.03 \$ 2,278,527.66 \$ 2,254,290.01 \$ 2,254,290.01 \$ 2,254,290.01 \$ 2,254,290.01 \$ 2,254,290.01

Total Ending Debt Service Reserve Cash Balance \$ 7,992,561.62 \$ 7,980,732.38 \$ 8,011,769.54 \$ 8,011,769.54 \$ 8,011,769.54 \$ 8,011,769.54 \$ 8,011,769.54

Note: These cash balances must remain on deposit until the last required debt service payment on each RICWFA Series Bond.

PWSS  
 FY08 Rate Filing  
 Restricted Debt Service Account Balances

|  |        | Fiscal Year Ending June 30 |           |      |      |      |      |
|--|--------|----------------------------|-----------|------|------|------|------|
|  | 2005   | 2006                       | 2007      | 2008 | 2009 | 2010 | 2011 |
|  | FY05   | FY06                       | Test Year | FY08 | FY09 | FY10 | FY11 |
|  | Actual | Actual                     | Actual    |      |      |      |      |

Debt Service Sinking Fund Account

|  |             |             |              |              |              |              |              |
|--|-------------|-------------|--------------|--------------|--------------|--------------|--------------|
| Beginning Cash Balance                               | \$ -        | \$ 2,022.72 | \$ 5,171.46  | \$ 52,926.15 | \$ 11,000.00 | \$ 10,000.00 | \$ 12,000.00 |
| <b>Additions</b>                                     |             |             |              |              |              |              |              |
| Transfer from Debt Service - 2003A principal         | \$ 1,000.00 | \$ 1,000.00 | \$ 1,000.00  | \$ 1,000.00  | \$ 1,000.00  | \$ 1,000.00  | \$ 1,000.00  |
| Transfer from Debt Service - 2003B principal         | \$ 1,000.00 | \$ 1,000.00 | \$ 1,000.00  | \$ 1,000.00  | \$ 1,000.00  | \$ 1,000.00  | \$ 1,000.00  |
| Transfer from Debt Service - 2005A principal         | \$ -        | \$ 1,000.00 | \$ 1,000.00  | \$ 1,000.00  | \$ -         | \$ -         | \$ -         |
| Transfers from Debt Service Fund                     | \$ 2,000.00 | \$ 3,000.00 | \$ 3,000.00  | \$ 3,000.00  | \$ 2,000.00  | \$ 2,000.00  | \$ 2,000.00  |
| Misposited transfer from Debt Service Sinking Fund   | \$ -        | \$ -        | \$ 43,934.45 | \$ -         | \$ -         | \$ -         | \$ -         |
| Investment Income                                    | \$ 22.72    | \$ 148.74   | \$ 820.24    | \$ 421.71    | \$ 515.90    | \$ 469.00    | \$ 562.80    |
| <b>Total Additions</b>                               | \$ 2,022.72 | \$ 3,148.74 | \$ 47,754.69 | \$ 3,421.71  | \$ 2,515.90  | \$ 2,469.00  | \$ 2,562.80  |
| <b>Deductions</b>                                    |             |             |              |              |              |              |              |
| Transfer to Debt Service - 2005A Principal           | \$ -        | \$ -        | \$ -         | \$ -         | \$ 3,000.00  | \$ -         | \$ -         |
| Transfer misposited transfer to Debt Service account | \$ -        | \$ -        | \$ -         | \$ 43,934.45 | \$ -         | \$ -         | \$ -         |
| Transfer Income to Debt Service Account              | \$ -        | \$ -        | \$ -         | \$ 1,413.41  | \$ 515.90    | \$ 469.00    | \$ 562.80    |
| <b>Total Deductions</b>                              | \$ -        | \$ -        | \$ -         | \$ 45,347.86 | \$ 3,515.90  | \$ 469.00    | \$ 562.80    |
| Ending Cash Balance                                  | \$ 2,022.72 | \$ 5,171.46 | \$ 52,926.15 | \$ 11,000.00 | \$ 10,000.00 | \$ 12,000.00 | \$ 14,000.00 |

Debt Service Stabilization Account

|  |      |                 |                 |                 |                 |                 |                 |
|--|------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Beginning Cash Balance                               | \$ - | \$ -            | \$ 2,685,740.31 | \$ 6,100,675.21 | \$ 4,652,824.99 | \$ 4,209,940.63 | \$ 2,811,126.82 |
| <b>Additions</b>                                     |      |                 |                 |                 |                 |                 |                 |
| From Rates - prior yr receipts transferred after y/e | \$ - | \$ 2,638,670.18 | \$ 3,860,353.73 | \$ 305,960.87   | \$ 149,780.64   | \$ 149,780.64   | \$ 149,780.64   |
| From Rates - current revenue collections             | \$ - | \$ -            | \$ -            | \$ 19,033.93    | \$ -            | \$ -            | \$ -            |
| Transfer from IFR Account                            | \$ - | \$ 47,070.13    | \$ 200,946.15   | \$ 288,868.52   | \$ 192,578.09   | \$ 173,408.06   | \$ 153,183.06   |
| Investment Income                                    | \$ - | \$ -            | \$ -            | \$ 288,868.52   | \$ -            | \$ -            | \$ -            |
| <b>Total Additions</b>                               | \$ - | \$ 2,685,740.31 | \$ 4,061,299.88 | \$ 744,825.32   | \$ 342,358.73   | \$ 323,188.70   | \$ 302,963.70   |
| <b>Deductions</b>                                    |      |                 |                 |                 |                 |                 |                 |
| Transfer to Debt service account                     | \$ - | \$ -            | \$ 122,316.62   | \$ 1,385,828.13 | \$ -            | \$ 952,529.00   | \$ -            |
| Payments to RICWFA for Bond Service Fees             | \$ - | \$ -            | \$ 146,590.86   | \$ 365,637.26   | \$ 370,094.38   | \$ 354,556.88   | \$ 338,676.88   |
| Payments to Banks - Trustee & Admin Fees             | \$ - | \$ -            | \$ 10,000.00    | \$ 13,850.00    | \$ 13,850.00    | \$ 13,850.00    | \$ 13,850.00    |
| Legal Fees - Continuing Disclosure                   | \$ - | \$ -            | \$ 1,349.14     | \$ 1,500.00     | \$ 1,500.00     | \$ 1,500.00     | \$ 1,500.00     |
| Misposited IFR expenses - reimbursed in 2008         | \$ - | \$ -            | \$ 19,033.93    | \$ -            | \$ -            | \$ -            | \$ -            |
| Capital Lease - purchase deposit                     | \$ - | \$ -            | \$ -            | \$ 150,726.00   | \$ -            | \$ -            | \$ -            |
| Capital Lease - principal & interest                 | \$ - | \$ -            | \$ -            | \$ -            | \$ 149,780.64   | \$ 149,780.64   | \$ 149,780.64   |
| Reimburse City of Paw - GO Bonds P&I                 | \$ - | \$ -            | \$ 347,074.43   | \$ 275,132.15   | \$ 250,018.07   | \$ 249,785.99   | \$ 248,993.28   |
| <b>Total Deductions</b>                              | \$ - | \$ -            | \$ 646,364.98   | \$ 2,192,675.54 | \$ 785,243.09   | \$ 1,722,002.51 | \$ 752,900.80   |
| Ending Cash Balance                                  | \$ - | \$ 2,685,740.31 | \$ 6,100,675.21 | \$ 4,652,824.99 | \$ 4,209,940.63 | \$ 2,811,126.82 | \$ 2,361,289.72 |

PWSS  
 FY08 Rate Filing  
 Restricted Debt Service Account Balances

|  |        | Fiscal Year Ending June 30 |           |      |      |      |      |
|--|--------|----------------------------|-----------|------|------|------|------|
|  | 2005   | 2006                       | 2007      | 2008 | 2009 | 2010 | 2011 |
|  | FY05   | FY06                       | Test Year | FY08 | FY09 | FY10 | FY11 |
|  | Actual | Actual                     | Actual    |      |      |      |      |

RICWFA Debt Service Account  
 Beginning Cash Balance, July 1

Additions

|  |               |               |               |                 |               |                 |               |
|--|---------------|---------------|---------------|-----------------|---------------|-----------------|---------------|
| Transfer income from 2003A DSR                   | \$ 89,103.01  | \$ 88,856.19  | \$ 44,921.74  | \$ 88,856.19    | \$ 88,856.19  | \$ 88,856.19    | \$ 88,856.19  |
| Transfer income from 2003B DSR                   | \$ -          | \$ 34,504.96  | \$ 34,038.56  | \$ 38,061.51    | \$ 38,061.61  | \$ 38,061.61    | \$ 38,061.61  |
| Transfer income from 2004A DSR                   | \$ 121,496.62 | \$ 133,696.92 | \$ 67,611.84  | \$ 119,927.55   | \$ 119,927.55 | \$ 119,927.55   | \$ 119,927.55 |
| Transfer income from 2005A DSR                   | \$ -          | \$ 98,563.80  | \$ 107,481.89 | \$ 82,799.12    | \$ 82,799.12  | \$ 82,799.12    | \$ 82,799.12  |
| Transfer income from Debt Service Sinking Fund   | \$ -          | \$ -          | \$ -          | \$ 1,413.41     | \$ 515.90     | \$ 469.00       | \$ 562.80     |
| Transfer from sinking fund - 2005 principal      | \$ -          | \$ -          | \$ -          | \$ -            | \$ 3,000.00   | \$ -            | \$ -          |
| Transfer from sinking fund - misposited transfer | \$ -          | \$ -          | \$ -          | \$ -            | \$ -          | \$ -            | \$ -          |
| Transfer from Debt Stabilization                 | \$ -          | \$ -          | \$ -          | \$ 43,934.45    | \$ -          | \$ -            | \$ -          |
|  | \$ -          | \$ -          | \$ 122,316.62 | \$ 1,385,828.13 | \$ -          | \$ 952,529.00   | \$ -          |
| subtotal Transfers                               | \$ 210,599.63 | \$ 356,921.87 | \$ 376,370.55 | \$ 1,760,820.46 | \$ 333,160.37 | \$ 1,282,642.47 | \$ 330,207.27 |

|  |                 |                 |                 |                 |                 |                 |                 |
|--|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| From Rates - prior yr receipts transferred after y/e | \$ -            | \$ -            | \$ -            | \$ 182,273.55   | \$ 5,736,014.00 | \$ 5,736,014.00 | \$ 5,736,014.00 |
| From Rates - current revenue collections             | \$ 2,824,775.35 | \$ 1,843,106.46 | \$ 2,187,282.60 | \$ 5,736,014.00 | \$ 142,780.47   | \$ 135,085.73   | \$ 126,641.57   |
| Investment Income                                    | \$ 21,116.24    | \$ 78,849.46    | \$ 52,062.19    | \$ 87,118.58    | \$ -            | \$ -            | \$ -            |
| Total Additions                                      | \$ 3,056,491.22 | \$ 2,277,577.79 | \$ 2,615,715.34 | \$ 7,766,226.59 | \$ 6,211,954.84 | \$ 7,153,742.20 | \$ 6,192,862.84 |

Deductions

|  |                 |                 |                 |                 |                 |                 |                 |
|--|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Excess transfer to IFR Restricted Account      | \$ -            | \$ 3,000.00     | \$ 3,000.00     | \$ 3,000.00     | \$ 2,000.00     | \$ 2,000.00     | \$ 2,000.00     |
| Transfer to Debt Service Sinking Acct          | \$ 2,000.00     | \$ 1,000.00     | \$ 800,000.00   | \$ 800,000.00   | \$ 3,075,000.00 | \$ 3,140,000.00 | \$ 3,212,000.00 |
| SRF Learn's principal payments due September 1 | \$ 1,000.00     | \$ 713,150.00   | \$ 1,511,718.73 | \$ 1,626,287.56 | \$ 1,687,021.05 | \$ 1,662,416.10 | \$ 1,634,341.40 |
| SRF Loan interest payments due September 1     | \$ 713,150.00   | \$ 1,233,708.35 | \$ 1,595,193.25 | \$ 1,670,332.41 | \$ 1,662,416.10 | \$ 1,534,341.40 | \$ 1,603,028.00 |
| SRF Loan interest payments due March 1         | \$ 52,344.51    | \$ 174,307.97   | \$ 130,752.56   | \$ -            | \$ -            | \$ -            | \$ -            |
| Payments to RICWFA for Bond Service Fees       | \$ 1,481,644.51 | \$ 2,125,166.32 | \$ 4,040,664.54 | \$ 4,099,619.97 | \$ 6,426,437.15 | \$ 6,438,757.50 | \$ 6,451,369.40 |
| Total Deductions                               | \$ 1,481,644.51 | \$ 2,125,166.32 | \$ 4,040,664.54 | \$ 4,099,619.97 | \$ 6,426,437.15 | \$ 6,438,757.50 | \$ 6,451,369.40 |

Ending Cash Balance, June 30

|  |                 |                 |               |                 |                 |                 |                 |
|--|-----------------|-----------------|---------------|-----------------|-----------------|-----------------|-----------------|
|  | \$ 2,089,256.80 | \$ 2,241,668.27 | \$ 816,719.07 | \$ 4,483,325.69 | \$ 4,268,843.38 | \$ 4,983,828.08 | \$ 4,725,321.52 |
|--|-----------------|-----------------|---------------|-----------------|-----------------|-----------------|-----------------|

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- 2-7. With regard to the response to Comm 1-10:**
- a. Does PWSB have a contract for the oil it purchases?**
  - b. If yes, what is the contract price?**
  - c. What is the term of the contract?**
  - d. What was the term & price of the prior contract?**
  - e. What quantity of fuel oil does PWSB expect to purchase in the rate year?**
  - f. If PWSB does not have a contract for fuel oil, explain why?**

**RESPONSE:**

- a. The PWSB, through the City of Pawtucket, utilizes the State of Rhode Island Master Price Agreement with Brennan Oil for its oil purchases.
- b. Under the current Master Price Agreement, the current per gallon price is "the Daily Posted Providence Terminal figure plus \$.0390 per gallon.
- c. The term of the current Master Price Agreement (#68M00333115) between the State of Rhode Island and Brennan Oil is August 2005 through July 2008. This MPA has been extended through September 15, 2008 while the State of RI obtains bids (Bid #7133884) for a new contract term. The bid opening is scheduled for September 3, 2008.
- d. The term of the prior Master Price Agreement between the State of Rhode Island and Brennan Oil was July 1, 2001 through June 30, 2002. The per gallon price was "the Daily Posted Providence Terminal figure plus \$.0444 per gallon from this prior MPA agreement.
- e. The PWSB purchased 3,064 gallons of #2 heating oil during the heating season for fiscal year 2008. We expect to purchase approximately the same number of gallons in the rate year provided similar heating demands in the rate year as in the most recent heating season.
- f. As stated in a) above, the PWSB issues an annual contract for its oil purchases with Brennan Oil based upon the State of RI Master Price Agreement.

Prepared by: R. Benson

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**2-8. Please be sure to include any updates for property tax, health care costs and rate case expense in PWSB rebuttal.**

RESPONSE: As requested by this item, property taxes, health care costs and rate case expenses were updated in the Rebuttal testimony of Mr. Benson.

Prepared by: R. Benson

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**2-9. Please update the response to Commission 1-15 and include copies of bills.**

RESPONSE: Commission item 1-15 requested when would the current property tax, health care and MERS rate information be available.

1. The current property tax rates and copies of the bills were provided with the rebuttal testimony of Mr. Benson.
2. There is no bill for health care costs. As explained in Mr. Benson's rebuttal testimony, the City's health coverage plan is a self insured program. The City posts a monthly journal entry recording health care costs to each City department and the PWSB. The FY09 health care expense rates were provided by the City to the PWSB and the health care costs updated accordingly in Mr. Benson's rebuttal testimony.
3. Finally, the City Finance Office provided the current MERS contribution rate for pension costs to the PWSB. Pension costs and related schedules were also updated in Mr. Benson's rebuttal testimony.

Prepared by: R. Benson

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**2-10. How are the amounts for Contractual Services – Management Fees (Acct 634) that are billed to PWSB derived?**

RESPONSE: At the end of each fiscal year the following City departments, Personnel, Payroll, Purchasing, Data Processing, Collections and Accounting provide a cost allocation of their labor and related expenses to the PWSB based upon a percentage of time. The City Finance Office prepares one journal entry reallocating these costs to this expense account. The City provides a copy of the journal entry with its supporting documentation to the PWSB.

Prepared by: R. Benson

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**2-11. Please explain how Mr. Woodcock's calculation of lost and unaccounted for water reflects water used in fire fighting.**

Response: Please refer to CPNW Sch. 2.2 and CPNW Sch. 3.3. Mr. Woodcock first determined the unaccounted for water (CPNW Sch. 2.2) by taking total plant production less: (a) retail sales, (b) wholesale sales, (c) water used to flush the system, (d) water used for fire fighting, and (e) water used for construction. The net result after these deductions is the unaccounted for water of 608,358 shown on CPNW Sch. 2.2.

On CPNW Sch. 3.3 the unaccounted for water (608,358) is split between retail and wholesale customers. The wholesale customers are assigned unaccounted for water based on 5.54% (the miles of pipe greater than 12") times the unaccounted for water of 608,358 (after the deduction of water used for fire fighting as noted above) times the 13.8% wholesale use  $(645,763 \text{ wholesale} / (645,763 + 4,020,061) \text{ retail plus wholesale}) = 13.8\%$ .

The water associated with fire fighting (26,483) was assigned 100% to the retail service along with the remainder of the unaccounted for water. The water used for fire fighting is all within the retail system. Any water used for fire fighting by wholesale customers is measured on their wholesale water meters and accounted for already within the wholesale sales.

(Note that the above numbers and calculations refer to the exhibits in Mr. Woodcock's direct testimony. While the methodology will not change, the numbers in Mr. Woodcock's rebuttal exhibits may differ as a result of revisions after review of the Division's direct testimony and exhibits.)

Prepared By. C. Woodcock

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**2-12. Please explain how Mr. Woodcock's calculation of lost and unaccounted for water accounts for customer service connections and how the inch-miles of pipe does not.**

Response: The inch-mile method of allocating unaccounted for water between wholesale and retail accounts was developed in RI PUC Docket 2048 over 15 years ago. In that docket I suggested in my direct testimony (on behalf of a wholesale intervenor) that unaccounted for water should be considered in allocating costs. In surrebuttal filings both the Division (Mr. Mierzwa, the Division's expert in this case) and I suggested that unaccounted for water be split between retail and wholesale customers using "relative inch-miles of pipe." Since that decision on December 30, 1992, water utilities in Rhode Island have been using the "inch-mile" method to allocate costs between retail and wholesale accounts. There was no research or analysis that formed the basis for considering the diameter of pipe in this calculation.

In developing the allocations using miles and size of pipe, I only had access to the miles of *mains* by size in the annual reports of the Providence Water Supply Board. This same information was readily available in all other water utility cases. There was no reported information on the length of service pipes that go from the water main in the street to the curbstop or to the customers' water meters. As a result, the length of service pipe was not included in any of the inch-mile calculations historically presented to the Commission. It is widely acknowledged however, that service pipes are a major and significant source of leaks and therefore contribute to the retail unaccounted for water. Since the water sales to wholesale customers are typically measured at or near city lines before subsequent distribution through mains and service pipes, the water sales to wholesale customers already include any water that may subsequently be lost through leaks in the wholesaler's customer's service pipes. That is NOT true for retail accounts where water sales are measured *AFTER* the water goes through the service pipes to homes and businesses.

In my proposed allocations of unaccounted for water I have included the length of service pipes in the calculations. This is different than the prior methods where the length of the service pipe was ignored. The industry accepted methods and literature on unaccounted for water clearly recognize that water is lost through service connections. On CPNW Sch. 2.0 page 2 of 2 I have included the miles of service pipe along with the miles of other water mains to reflect the fact that the service pipes are a significant factor in the amount of unaccounted for water. The losses from service pipes must be explicitly recognized to assure that Pawtucket does not unfairly over charge its wholesale customers.

Prepared By. C. Woodcock

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**2-13. With regard to Mr. Woodcock's and the inch-mile method calculations, how does each method take in to account the utility's own use of unmetered water?**

Response: Either method can be used to allocate unaccounted for water whether it includes or excludes a utility's own use. As indicated in the response to Commission Data Request 2-12, the inch-mile method that Mr. Mierzwa and I "created" in 1992 was simply a means to recognize that some of the unaccounted for water is fully the responsibility of retail customers, while some is the responsibility of both wholesale and retail customers. Using just the miles of pipe plus service lines is another method to recognize that some of the unaccounted for water is totally a retail responsibility and some is a joint retail/wholesale responsibility. I believe we have clearly demonstrated that the method I have proposed in this docket that only accounts for pipe length and includes service pipe lengths (as recognized by the AWWA) is more appropriate and widely accepted than the method created in 1992.

As discussed in the response to Commission data request 2-11, there are other "accounted for" or unmetered uses that should also be considered. The water used for fire fighting within the PWSB retail system should be assigned to retail customers – it is unmetered and not billed to anyone, but it is used for and should be the responsibility of the retail customers. Water used for fire fighting within Cumberland's wholesale system is measured on the Cumberland wholesale meter and is already charged to them and reflected in the allocations.

A utility's own use of unmetered water includes several different uses. It can include water used in treatment processes, water used for construction, and water used when mains are cleaned and flushed. In the case of the utility's own use, I believe it is appropriate to assign this to all users. Cumberland customers benefit from internal uses, the water used in construction of new pipes that transmit water to Cumberland, and in the flushing of pipes that benefit Cumberland customers. Unlike water used for retail fire fighting that should only be assigned to the retail customers that benefit from it, the unmetered, utility uses benefit both retail and wholesale customers.

Prepared By. C. Woodcock

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**2-14. Did PWSB construct a water audit such as was performed by the City of Philadelphia and discussed in the AWWA Committee report referenced in the footnote on page 20 of Mr. Woodcock's direct testimony? If yes, provide the findings. If not, why not?**

Response: No. In the past, the PUC approved rates for the purchase of leak detection equipment but not personnel to operate the equipment. Since there would be no personnel available to operate the equipment, the equipment has not been purchased.

In the current rate request we have budgeted for a private company to conduct leak survey on the system. Also, the aggressive capital program that we have conducted has included the rehab of 75-80% of the entire transmission and distribution system. It is our opinion that this program has addressed most of the leaks in the system and we plan on using a private firm to verify this assumption in the coming year. As our distribution system rehab nears completion, it is our intention to complete leak detection surveys on 25% of the system every year.

Prepared By. C. Woodcock and J. DeCelles

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**2-15. It appears from CPNW Sch. 3.3 that Mr. Woodcock added the length of distribution mains, service connections, 86.2% of transmission lines and estimated fire hydrants and then performed a calculation to derive unaccounted for water. Please provide the calculation in full and explain how it is supported by the articles cited in Mr. Woodcock's testimony.**

Response: Please refer to the response to Commission Data Request 2-11 for additional information on the calculations – the explanation of how the unaccounted for water was assigned to wholesale customers. The balance was assigned to retail customers.

For the retail customers the item labeled “unaccounted for water”<sup>1</sup> consists of two components.

- All water used for fire fighting was assigned to retail customers. This is water that is only used by and only beneficial to the retail customers. (26,483 ccf/year) This allocation is unrelated to the articles I cited; it is unmetered water but it is accounted for in the sense that there is an estimate of the amount. It is not included in the amount labeled unaccounted for water on CPNW Sch. 2.2.
- The total volume of unaccounted for that was allocated was 608,358 ccf/year (CPNW Sch 2.2). This is the water that is discussed in the articles cited in my direct testimony. It was allocated to the retail customers as follows:
  - The total unaccounted for water volume (608,358) was first assigned to the retail distribution system (retail customers only) based on the length water mains 12” or less plus service pipes as compared to the total length of all pipes (94.46%). ( $608,358 \times .9446 = 574,655$  ccf/yr)
  - The balance of the unaccounted for water is associated with transmission mains – pipes greater than 12”. These pipes represent 5.54% of the total length of all mains plus service pipes. (see CPNW Sch 2.0 page 2). This was further split between retail and wholesale based on water sales. The retail sales are 86.16% of the total retail plus wholesale sales. ( $608,358 \times .0554 \times .8616 = 29,039$ )
- When the components are added they result in 603,694 ccf of unaccounted for water plus 26,483 ccf of water used for fire fighting for a total of 630,177 ccf added to the retail sales for purposes of allocations.

I believe that the calculations that use miles of pipe and not size, plus the number and length of service connections (or the private pipe from curb stop to house as discussed

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<sup>1</sup> Actually includes unaccounted for water plus water used for fire fighting for retail customers that is accounted for.

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below) are supported by the articles that were cited as discussed below. These articles provide the accepted methodology to determine water losses. That methodology clearly states that the losses are proportional to (a) the length of pipe with *NO* consideration of diameter and (B) the number and length of service connections.

- The AWWA Water Loss Control Committee Report in the August 2003 Journal of the American Water Works Association<sup>2</sup> that is cited and referenced in other citations presents what is now the industry accepted method (BMP or Best Management Practice) for tracking and control of unnecessary water losses. As the article notes (page 66) “The article also offers an internationally recognized methodology developed through the International Water Association (IWA) with AWWA as a major participant. This methodology is designed specifically for measuring and evaluating both valid water consumption and unnecessary water loss.” “These methods represent an advancement in technology and policy and are submitted as current best management practices (BMPs) available in the emerging discipline of water loss control.”
- The Water Audit Methodology (presented at <http://www.awwa.org/Resources/Content.cfm?ItemNumber=588>) in Table 2 presents performance indicators. The sixth item is unavoidable annual real losses or “a theoretical reference value representing the technical low limit of leakage that could be achieved if all of today’s best technology could be successfully applied.” The key element is the formula that is used to derive the unavoidable annual real loss (UARL). That formula (also presented on Table 2 of the referenced document) says that the  $UARL = (5.41L_m + 0.15NC + 7.5L_p) \times P$  where:
  - $L_m$  = **length** of water mains in miles<sup>3</sup>
  - $N_c$  = number of service connections
  - $L_p$  = **total length of private pipe**, miles =  $N_c \times$  average distance from curbstop to customer meter
  - $P$  = average pressure in the system, psi

The key point of this equation is that the unavoidable water losses (leakage or unaccounted for water) are proportional to (A) the length of pipe (*NOT the length times diameter* – simply the length), (B) the number of service connections, and (C) the length of service pipes (the private pipes from the curbstop to customer’s meter). Again it is important to note that this Best Management Practice that has been accepted by the AWWA and the IWA

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<sup>2</sup> <http://www.cuwcc.org/technical/bmp03/AWWA-Worldwide-BMPs-WaterLossControl-Aug2003.pdf>

<sup>3</sup> Note that there is no mention of size or diameter

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says that length of pipe and service connections are relevant and that the diameter or size of pipes is NOT a factor.

(The numbers presented in this response are based on the exhibits as filed with PWSB's direct testimony. They likely will be updated in rebuttal testimony and exhibits, but the methodology will be the same.)

Prepared By. C. Woodcock