

**BEFORE THE
STATE OF NEW JERSEY
BOARD OF PUBLIC UTILITIES**

In the Matter of:

**THE PETITION OF UNITED WATER)
NEW JERSEY, INC. FOR APPROVAL)
OF INCREASE BASE TARIFF RATES) BPU DKT NO. WR09120987
AND CHARGES FOR WATER SERVICE,)
AND OTHER TARIFF PROVISIONS)**

**DIRECT TESTIMONY OF MITCHELL I. SEROTA
ON BEHALF OF THE
NEW JERSEY DEPARTMENT OF THE PUBLIC ADVOCATE
DIVISION OF RATE COUNSEL**

**STEFANIE A. BRAND, ESQ.
ACTING PUBLIC ADVOCATE
DIRECTOR, DIVISION OF RATE COUNSEL**

**31 CLINTON STREET, 11TH FLOOR
NEWARK, NEW JERSEY 07101**

Filed: June 8, 2010

UNITED WATER NEW JERSEY, INC.
BPU Docket No. WR09120987
Direct Testimony of Mitchell I. Serota

TABLE OF CONTENTS

	<u>Page</u>
I. STATEMENT OF QUALIFICATIONS	1
II. SCOPE AND PURPOSE OF TESTIMONY	3
III. PENSION EXPENSE	4

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

I. STATEMENT OF QUALIFICATIONS

Q. WOULD YOU STATE YOUR NAME AND ADDRESS?

A. My name is Mitchell I. Serota and my business address is 5215 Old Orchard Rd., Suite 750, Skokie, IL 60077.

Q. WHAT IS YOUR PRESENT OCCUPATION?

A. I am President and founder of Mitchell I. Serota & Associates, Inc., a consulting actuarial firm. I am a subcontractor to NovaRest, Inc.

Q. WHAT IS YOUR REGULATORY EXPERIENCE?

A. I have prepared and presented testimony in the rate proceedings involving Public Service Electric & Gas Company, BPU Docket No. GR09050422, Rockland Electric Company, BPU Docket No. ER09080668, Atlantic City Electric Company, BPU Docket No. ER09080664 and South Jersey Gas Company, BPU Docket No. GR10010035.

Q. WHAT OTHER PROFESSIONAL EXPERIENCE HAVE YOU HAD?

A. Currently, I am one of 24 actuaries nationwide on the Pension Committee of the American Academy of Actuaries. The committee addresses actuarial issues affecting public and private pension plans, while monitoring federal tax, PBGC, and other ERISA-related developments. It consults with Congress and relevant regulatory agencies on the effect of regulation on employer pensions and retirement security, and comments on pending

1 legislation and regulations. I am a Member of the American Academy of Actuaries and a
2 Fellow both of the Society of Actuaries and the Conference of Actuaries in Public Practice.
3 I am an Enrolled Actuary under ERISA.

4
5 Prior to the establishment of Serota & Associates in 1988, I was Vice President of
6 Alexander & Alexander Consulting Group and Vice President of Johnson & Higgins, Inc.,
7 both international consulting actuarial firms. As a Consulting Actuary, my responsibilities
8 have included meeting with clients, understanding their Human Resource needs and their
9 financial goals, and tailoring employee benefits programs to fit their specific circumstances. I
10 also perform pension valuations for United States corporations with domestic or foreign
11 pension plans; analyze and immunize investment portfolios, research markets for asset
12 management; analyze self-funded group medical and long-term disability programs; value
13 liabilities for post-retirement medical plans; train and supervise employees.

14
15 **Q. WHAT IS YOUR EDUCATIONAL BACKGROUND?**

16 A. I earned a Ph. D. from the University of Chicago, Department of History (1976). I also
17 received a Master of Arts from the University of Chicago Division of Social Sciences
18 (1972). In addition, I hold two Bachelors of Science from the Massachusetts Institute of
19 Technology, one in Mathematics (1971), the other in Humanities and Science (1971). I am
20 a Visiting Professor of History at Carthage College in Kenosha, Wisconsin.

21

II. SCOPE AND PURPOSE OF TESTIMONY

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

Q. WHAT IS THE SCOPE AND PURPOSE OF THIS TESTIMONY?

A. I was engaged by the New Jersey Department of the Public Advocate, Division of Rate Counsel (“Rate Counsel”) to conduct a review and analysis and present testimony regarding the Pension Costs proposed by United Water New Jersey, Inc. (“UWNJ” or “the Company”) as part of its base rate filing.

The purpose of this testimony is to present to the New Jersey Board of Public Utilities (“BPU” or “the Board”) Rate Counsel’s recommended position regarding an appropriate level for the expense of the Company’s Pension Plan.

In developing this testimony, I have reviewed UWNJ’s filings, supporting testimonies and exhibits, and responses to initial and follow-up data requests issued by Rate Counsel and the BPU Staff with regard to Pension Expense.

Q. WAS THIS TESTIMONY PREPARED BY YOU OR UNDER YOUR DIRECT SUPERVISION?

A. Yes, this testimony was prepared by me.

III. PENSION EXPENSE

1
2
3 **Q. WHAT IS YOUR UNDERSTANDING AS TO THE AMOUNT OF PENSION**
4 **EXPENSE THAT UWNJ IS ASKING TO INCORPORATE INTO ITS BASE RATE**
5 **DETERMINATION?**

6 A. According to the Actuarial Expense Reports for the 2009 Plan Year, United Water
7 Resources, Inc.’s (“UWRI”) 2009 total system Pension cost was \$16,516,573.¹ UWNJ is
8 requesting that its revenue requirement in this case incorporate UWNJ’s actual test year
9 Pension Expense. The Company’s requested revenue requirement for Pension Expense
10 appears to be \$3,918,105, but no linkage is provided between that figure and the Pension
11 Expense of UWRI. In quantifying its adjustments, Rate Counsel assumed that these total
12 system costs were the bases for the pension costs reflected in UWNJ’s test year actual
13 results.²

14 **Q. DO YOU AGREE WITH USING THE ENTIRE PENSION AS A BASIS FOR**
15 **SETTING RATES? IF NOT, WHAT IS YOUR ALTERNATIVE?**

16 A. No, I do not. I believe the Pension Expense, for purposes of setting rates, should be
17 reduced by \$1,816,171. The testimony of Robert Henkes reflects the effect of these
18 reductions upon the rates for UWNJ.

19
20 **Q. HOW DID YOU ARRIVE AT THE FIGURE OF \$1.8 MILLION? PLEASE**
21 **EXPLAIN HOW PENSION EXPENSE IS DETERMINED.**

¹ RCR-PENN-1 (update)

² If these total system costs were not the bases for UWNJ’s test year pension costs, the Company should provide Rate Counsel with documentation showing how the UWNJ costs were derived and providing a link between UWNJ costs and total system costs per the actuarial reports.

1 A. My testimony from this point through page 9 is rather technical. I have therefore structured
2 it to present the reader with the important points necessary to understand pension
3 expensing and pension funding. I first address the actuarial methods and assumptions that
4 are used in determining an appropriate amount to expense on corporate books and then
5 compare and contrast them to the actuarial methods and assumptions used in determining a
6 cash contribution within the confines of the Employee Retirement Income Security Act of
7 1974 (“ERISA”).

8

9 **Q. WHAT IS THE DIFFERENCE BETWEEN PENSION EXPENSE AND PENSION**
10 **CONTRIBUTIONS FOR A GIVEN PLAN YEAR?**

11 A. Pension Expense is an amount that is put in the corporate books to indicate the cost of
12 maintaining a pension plan according to Generally Accepted Accounting Principles
13 (“GAAP”) and the Financial Accounting Standards Board (“FASB”) *Statements 35, 87, 88,*
14 *132 and 158.* Pension Cash Contributions are the actual cash amounts which the Company
15 deposits in a Qualified Trust for the pension plan each year. These contributions are
16 calculated by the plan actuary in accordance with ERISA. Each year the actuary calculates
17 a Minimum Funding Requirement and a Maximum Tax-deductible Contribution. The
18 Pension Expense and the Pension Cash Contributions for a Plan Year need not be equal.
19 As will be demonstrated later, the Pension Expense and the Pension Cash Contributions
20 have not been the same for United Water Resources, Inc. for the last decade, at least.

21

22 **Q. WHAT IS AN ACTUARIAL FUNDING METHOD? DESCRIBE THE**
23 **ACTUARIAL FUNDING METHODS USED FOR DETERMINING PENSION**

1 **EXPENSE AND HOW DO THEY COMPARE TO ACTUARIAL FUNDING**
2 **METHODS FOR DETERMINING CASH CONTRIBUTIONS.**

3 A. An actuarial funding method is a technique to divide the total cost of a pension plan into
4 payments attributable to past service of the plan participants and payments attributable to
5 future service of plan participants.

6 Under the accounting standard in FASB *Statement 87* (as modified by FASB *Statement*
7 *158*), the actuary must use the Projected Unit Credit actuarial method (“PUC”) for
8 determining the liability of the pension plan. This is done in the following simplified
9 manner. Using the Plan formula, which may be found in the Plan Document or Summary
10 Plan Description, the retirement benefit is projected to the retirement age for each plan
11 participant. This projection includes an assumption regarding future pay increases over the
12 working lifetime of each active plan participant until retirement. The Present Value of
13 Future Benefits (“PVFB”) is calculated for each plan participant. This is the value, as of a
14 specific date (usually the first or last day of the Plan Year), of the projected cash flow,
15 represented by the stream of future retirement payments to the plan participant. The PUC
16 then divides this PVFB into future service costs and past service costs by pro-rating the
17 PVFB over the service which that plan participant has given to the Corporation at the time
18 of the calculation.³ The sum of the Past Service Costs of all plan participants (active,
19 retired, disabled, terminated but vested in a future benefit) is called the Projected Benefit
20 Obligation (“PBO”). The PBO measures liability in terms of how much money would

³ For a very simplified example, if the PVFB for an individual participant is \$90,000, the participant has worked 20 years and has 10 years remaining to retirement, the Projected Unit Credit method would assign \$60,000 as past service cost ($\$90,000 \times 20/30$) and \$30,000 as future service cost ($\$90,000 \times 10/30$). The Service Cost is the value (or cost) of one year of service of the participant. In this case, the Service Cost would be \$3,000 ($\$90,000$ divided by 30).

1 theoretically be in the Trust, at a given point in time, if the plan sponsor had funded the
2 retirement benefits of the plan participants on a level basis over each participant’s expected
3 working lifetime.

4 Both the FASB and ERISA require the use of the Unit Credit actuarial method (“UC”), as
5 distinguished from the PUC, for additional, but different, purposes. The UC basically
6 examines the present value of the Accrued Benefits earned to date and ignores benefits that
7 may or may not accrue during the working lifetime of the active participants. It then
8 measures the liability of the retirement benefits earned at the time of the specific date. For
9 FASB *Statement 87*, this liability is called the Accumulated Benefit Obligation (“ABO”).⁴

10 Under the ERISA standard, newly modified by the Pension Protection Act of 2006
11 (“PPA”), the actuary must use the UC for determining the Target Benefit Liability.⁵

12 Not only do the accounting methodology and the ERISA methodology employ different
13 actuarial methods with different results; they also have different discounting mechanisms.
14 Discounting is the technique used to assign future payments an equivalent present day
15 value. On the one hand, the concept of an interest rate discount is familiar because it is
16 well accepted that the payment of \$100 ten years in the future has much less value than the
17 payment of \$100 today. Actuarial techniques and methods also incorporate the likelihood
18 of actually receiving that \$100 in the future. Thus, there are actuarial assumptions
19 regarding the likelihood of continuing to work for the Corporation (turnover rates), retiring
20 at an age other than 65 (retirement rates), becoming disabled (disability rates), and living to

⁴ In the example above [refer to footnote], the ABO for the participant might be in the vicinity of \$40,000.

⁵ In the example above, the Target Benefit Liability might be in the vicinity of \$45,000.

1 receive the retirement benefits during a given year (mortality rates). Another level of
2 complexity in this calculation comes from the effect of a salary scale, which is used to
3 account for the fact that participants' salaries increase over time.

4 Under the FASB *Statement 87* standard, the discount rate is established by the auditor and
5 the CFO of the corporation with the advice of the actuary. Under the ERISA standard, the
6 discount rate is set by the Department of the Treasury each month. Under FASB *Statement*
7 *87*, the other actuarial assumptions are also set by the auditor and CFO with the advice of
8 the actuary. Under ERISA, the mortality table is also dictated by the Department of the
9 Treasury each year, but the other assumptions are left under the domain of the actuary.

10
11 **Q. HOW DOES UWNJ FUND ITS PENSION PLAN?**

12 A. Every year, United Water Resources, Inc. ("UWRI") makes a cash contribution to the
13 qualified pension plan it sponsors. The plan must follow the specifications of ERISA as
14 regarding a Minimum Funding Requirement and a Maximum Tax-deductible Contribution.
15 UWRI has hired an Enrolled Actuary to calculate the range of acceptable contributions
16 under ERISA and to certify that UWRI has indeed contributed an amount within the
17 specified range for a given plan year.

18
19 **Q. WHAT IS THE PROJECTED BENEFIT OBLIGATION AND ITS RELATIONSHIP**
20 **TO THE REQUIREMENTS UNDER ERISA?**

21 A. The PBO is an accounting concept. While it is based on generally accepted actuarial
22 techniques for measuring the liability of a pension plan, it differs importantly from the

1 generally accepted actuarial techniques used for determining minimum required
2 contributions and maximum tax-deductible contributions under ERISA.

3 Once the PBO is established under FASB *Statements 87/158*, it is compared to the Fair
4 Value of the Plan Assets to determine the Funded Status of the Plan. Under ERISA, the
5 Target Benefit Liability is compared to the Actuarial Value of Assets to determine the
6 Funding Shortfall. While there is no accounting requirement for the plan sponsor to bring
7 the assets up to the level of the PBO, there is an ERISA requirement to eliminate the
8 Funding Shortfall over roughly seven years.

9 FASB *Statements 87/158* set forth rules for determining the Pension Expense for a given
10 year. The Pension Expense is comprised of a Service Cost, an Interest Cost, an offsetting
11 Investment return credit, and an amortization of actuarial gains and losses and of the
12 impact of any plan amendment.

13 ERISA, under the Pension Protection Act (“PPA”), sets forth rules for determining the
14 Minimum Required Contribution (“MRC”) and the Maximum Tax Deductible
15 Contribution. The components of the MRC are the Target Normal Cost (which is
16 comparable to the Service Cost under FAS87) and an amortization of the Funding Shortfall
17 over 7 years. The MRC may be reduced by any Funding Standard Carryover Balance from
18 pre-PPA years or by any Prefunding Balance from PPA years. The Maximum Tax
19 Deductible Contribution concept may be simplified for this testimony as an additional
20 buffer of 50% greater than the Funding Target.

21 To summarize, the annual Pension Expense is determined by the actuary under the
22 direction of the corporate CFO and the auditor. The annual cash contribution to comply
23 with ERISA is a range determined by the actuary under strict IRS guidelines, but the plan

1 sponsor may choose the actual amount of cash contribution within the range calculated by
2 the actuary.

3
4 **Q. CAN YOU COMPARE THE AMOUNT OF PENSION EXPENSE TO THE**
5 **AMOUNT OF CASH CONTRIBUTION TO THE PLAN?**

6 A. The Plan was adequately funded under the E.R.I.S.A standards so that the Corporation did
7 not need to contribute any cash to the Trust until the 2009 Plan Year. The Pension Expense
8 for the last few plan Years is shown as follows:

9

	Pension Expense	Cash Contribution
2007	\$ 4,099,038	\$0
2008	\$ 2,899,559	\$0
2009	\$16,561,573	uncertain

10
11 The estimated cash contribution for 2009 is unknown, as it was stated as \$4,827,132,
12 \$2,212,388 (discounted value) and \$5,130,759 at various places in the 2009 valuation
13 report.⁶

14 **Q. WHAT IS YOUR BASIS FOR REDUCING THE AMOUNT OF PENSION**
15 **EXPENSE FOR RATE PURPOSES?**

16 A. I believe the United Water Resources Retirement Plan Committee (“Committee”) accepted
17 risk on behalf of the Pension Trust that resulted in poor performance in the 2008 fiscal
18 year. It is my contention that the ratepayers should not be required to subsidize the losses
19 associated with the investments in the Pension Trust. My goal in this testimony is to
20 ascertain UWNJ’s Pension Expense if the assets had been invested in a risk-less

⁶ RCR-PENN-1, update, pages 8, 11 and 18, respectively.

1 environment. The calculations supporting this figure are presented later in this testimony
2 and as an attached spreadsheet.

3

4 **Q. HOW HAVE THE ASSETS BEEN INVESTED?**

5 A. The UWRI Committee drafted a “Statement of Investment Policy and Guidelines.”⁷ The
6 Statement presented a policy of investing 55% in Equity (20% in domestic; 20% in
7 international, 15% in Alternative Investments) and 45% in Fixed Income.⁸ The generic
8 asset allocation in the investment industry is 60% equity and 40% bonds. The UWNJ
9 investment philosophy does not stray far from the norm, all things being equal. As point
10 of fact, the investments at the end of 2007 were 68% equity and 31% fixed income.⁹

11 The Funding philosophy of the Statement was summarized as follows: “It is the goal of the
12 Committee to maintain an adequate but not excessive funding level for each plan consistent
13 with requirements.”¹⁰

14

15 **Q. WAS THE GOAL MET?**

16 A. The Pension Plan was funded at 100.3% of the PBO at end of 2007 and 110.1% of the
17 ABO at that time. Common practice upon fully funding the PBO is to at least consider
18 modifying the asset portfolio to a less risky one, one based on Liability Driven Investing
19 for instance, to lock in the gains that had been achieved. Interestingly enough, the author
20 of the Statement addressed the concept that liability cash flows could match asset cash

⁷ RCR-PENN-5, updated March 31, 2010.

⁸ RCR-PENN-5, p 3.

⁹ RCR-PENN-1, update, p. 17 (“2009” report).

¹⁰ RCR-PENN-5, p. 2.

1 flows: “The average weighted duration of the long-term fixed income portfolio should
2 approximate the average weighted duration of the Plan’s liabilities. . .”¹¹

3 The almost 36% downturn in the equity market during 2008 certainly had a severe effect
4 on the asset performance of the UWRI Pension Trust. Its return on investment was
5 negative 30.11%. The result was that the Plan was only funded to 64.0% of PBO at the end
6 of 2008.¹² The investment balance in the portfolio shifted dramatically, but closed to the
7 recommendation. At the end of 2008, equity represented 62%, and fixed income, 38%.¹³

8 As far as annual expenses were concerned, the UWRI booked \$4.1 million in 2007 and
9 \$2.9 million in 2008. The expense for 2009 was set at \$16.5 million.¹⁴ The unexpected
10 increase has a dramatic effect on the petition for increased utility rates.

11
12 **Q. DIDN’T MANY PENSION PLAN TRUSTS ACROSS THE NATION SUFFER THE**
13 **SAME DEGREE OF LOSS IN THEIR ASSETS?**

14 A. Absolutely. The issue is not so much the drop in asset value as the attempt by UWNJ to
15 have the ratepayers subsidize the loss of asset value in the Pension Trust. Inclusion of the
16 investment loss in Pension Expense is an attempt by UWNJ to have a portion of its Pension
17 Trust bailed out or subsidized by the ratepayers. The ratepayers themselves, who also
18 might have suffered large losses in the equity market, have no comparable source of
19 income to bail themselves out: they must re-build their assets as best they can. My
20 recommendation to the Board is that UWRI be treated in the identical fashion to any other

¹¹ Ibid., p. 4.

¹² Ibid.

¹³ RCR-PENN-1, update, p. 17.

¹⁴ RCR-PENN-1 and RCR-PENN-1 update.

1 investor, and not be accorded the special treatment of having the ratepayers subsidize their
2 asset losses.

3 This is especially true given that UWRI’s pension fund earned millions of dollars
4 from 1996 through 2008, which in turn reduced the annual Pension Expense to the point
5 that the Expense became an income item on the corporate balance sheet. The benefit of
6 this “income” was enjoyed exclusively by UWRI’s shareholders. Specifically, from 1996
7 through 2008, under the *Statement of Financial Accounting Standards #87*, UWRI’s
8 pension fund accrued pension expense credits of \$48,063,350, while ratepayers only
9 received \$2,431,621 in such credits.¹⁵ UWRI reflected the difference of approximately
10 \$45.5 million as income, which benefited shareholders through increased stock prices,
11 increased dividends, or both. Ratepayers, meanwhile, received minimal benefit during
12 these twelve years that UWRI was enjoying great profits from its pension fund. To accept
13 the level of Pension Expense being requested by UWRI would retroactively validate a
14 perverse incentive: when they gambled and succeeded, there was no rate reduction; now
15 that they have lost, they are asking the ratepayers to recoup their losses.¹⁶

16 Fundamentally, the Company is proposing that the responsibility for investment be shifted
17 from the Investment Committee to the ratepayer. This shifting of burden is in direct
18 conflict with the fundamentals of Financial Economics, to say nothing of plain common
19 sense. It is not up to the ratepayers to subsidize a downturn in the UWRI Pension Trust. It
20 is more suitable for the losses to be sustained by the stockholders.

¹⁵ RCR-A-81.

¹⁶ Paraphrase of Nobel Laureate in Economics Joseph E. Stiglitz, “Harsh lessons we may need to learn again”, China Daily, 2009-12-31.

1 **Q. DID THE UWRI PENSION/COMPENSATION COMMITTEE FOLLOW THE**
2 **PRUDENT STANDARD OF FIDUCIARY RESPONSIBILITY?**

3
4 A. It is crucial to distinguish between prudence and risk. No one is accusing the Committee of
5 abdicating its fiduciary responsibility as regards the “prudent man rule,” because there
6 were too many other investment managers following the exact same strategy. The
7 Committee is resting on the herd mentality argument: because other plan sponsors were
8 investing in a comparable fashion, they were all considered “prudent” relative to each
9 other. Moreover, the 68/31 investment balance, although “prudent” and banal, had a large
10 component of inherent risk in it. It is that risk component which we endeavor to quantify.

11
12 **Q. WHAT CHOICE DID THE PENSION/COMPENSATION COMMITTEE HAVE IN**
13 **PURSUING ITS INVESTMENT POLICY? WERE NOT ALL INVESTMENT**
14 **MANAGERS FOLLOWING THE SAME STRATEGY?**

15 A. Although many investment managers were following the strategy of heavy investment in
16 equities, not all were. An alternative mainstream consulting perspective would advise that
17 at the beginning of 2008, the Committee would have reviewed its investment strategy in
18 light of the fact that the PBO was 100% funded by Trust assets. The following chart
19 illustrates an actuarial approach to investing¹⁷:

20

21

INVESTMENT STRATEGIES FOR PLANS
--

¹⁷ “Stand By Your Plan,” presented by R. Evan Inglis, Conference of Consulting Actuaries, Session 49, November 4, 2009.

Plan Benchmark	Investment Strategy
Assets > Present Value of Benefits	Overfunded => Eliminate investment risk
Assets > [Funding Target + Present Value of 5 years of normal cost]	Well funded => Minimal investment risk
Assets < 90% of [Funding Target + Present Value of 5 years of normal cost]	Funded status not a constraint for investment risk

1
2 Given that the UWRI pension plan was 100% funded, the Committee could have chosen to
3 reduce the investment risk of the portfolio.

4 **Q. HOW DO INVESTMENT LOSSES IN 2008 AFFECT THE PENSION EXPENSE?**

5 A. In calculating Pension Expense every year, the Corporation’s actuary calculates the
6 Expected Return on Assets. To the extent that the Expected Return on Assets exceeds the
7 Actual Return, an “actuarial loss” develops. This loss is recognized over a period of time,
8 in UWNJ’s case, 10.75 years for the Pension Plan. The Pension Expense is thus increased
9 by approximately 9.3% of the actuarial loss.

10
11 **Q. WHAT IS YOUR PROPOSED TREATMENT OF PENSION EXPENSE FOR RATE**
12 **MAKING PURPOSES?**

13 A. I believe the whole notion of using the entire Pension Expense for ratemaking is based on
14 an overly technical smokescreen of what factors actually go into the process of calculating
15 the Pension Expense. One of the components of Pension Expense consists of amortization
16 of gains and losses, which has historically been a small correcting mechanism. After the
17 close of the 2008 Plan Year, this amortization blossomed to almost one-half of the total

1 Pension Expense, which in turn had more than quintupled over the Expense for 2008!¹⁸

2 Therefore, I propose that the Pension Expense for UWNJ should be separated into two
3 portions for purposes of developing base rates. The “legitimate portion” of Pension
4 Expense should be based on all factors unrelated to investment risk. The second portion,
5 which should be discarded for purposes of ratemaking, is the part related directly to the risk
6 of the assets in the portfolio.

7 To put a monetary value on the risk of the assets, I compare the actuary’s expected return
8 on asset assumption, 8.50% for 2008, to the discount rate, which is supposed to be
9 indicative of high-grade bonds. For the 2008 Pension Expense, the actuary used a discount
10 rate of 6.45%.

11
12 **Q. HOW DID YOU ARRIVE AT THE FIGURE OF \$1,816,171 FOR THE**
13 **REDUCTION IN PENSION EXPENSE?**

14 A. In the attached spreadsheet, I have examined the components of Pension Expense for the
15 qualified plan to establish and reconfirm the figures offered as Pension Expense for 2009.
16 Of primary significance, the actuarial valuation reports presented a line item showing the
17 loss of assets for the plan. For 2008, the loss in asset value, net of all other considerations,
18 amounted to \$67.8 million. In contrast, the Pension Expense had built in an assumption
19 that the assets would gain \$19.1 million. The difference between the two figures, \$86.9
20 million is considered an actuarial loss due to assets.¹⁹ This actuarial loss is amortized over
21 10.75 years. It increases the Pension Expense of the Corporation by \$8.1 million per year.

¹⁸ RCR-PENN-1, update, page 7.

¹⁹ We are subtracting the difference between the expected gain and the actual gain. Because the actual gain was a

1 The assumption that the assets would gain \$19.1 million was based on the assumption that
2 the assets would return 8.50%. This assumption presumes a degree of risk relative to the
3 rate by which liabilities were discounted, 6.45%. My contention is that in order to *quantify*
4 *the risk of the portfolio*, the rate of return should be comparable to the long-term rate of
5 investment grade corporate bonds, which forms the basis for the discount rate. Therefore, I
6 calculated the Pension Expense assuming that the return on assets would mimic the liability
7 discount rate.²⁰ Instead of a \$86.9 million actuarial loss, I value the risk component of the
8 assets at a \$82.3 million loss. When amortized over 10.75 years, the Pension Expense due
9 to the risk level of the assets is \$7.6 million for 2009.

10 We were not provided a document which shows how the Pension Expense translates into
11 the test year revenue requirement for rate making purposes. The proposed revenue
12 requirement is \$3,918,105. The most recent Pension Expense available from the actuary is
13 \$16,516,573 as of the beginning of 2009. The ratio is 23.72%. We multiplied the \$7.6
14 million loss by the 23.72% ratio to arrive at the suggested reduction of the revenue
15 requirement by \$1,816,171 for the test year and the following 10 years. This reduction
16 forms the basis for the figures presented in Mr. Henkes' testimony.

17
18 **Q. DOES THE INVESTMENT PERFORMANCE OF 2009 CHANGE YOUR**
19 **ANALYSIS?**

20 The assets in the Trust likely did rebound somewhat in 2009. We were not provided with
21 any response to our discovery request to find out how assets did indeed perform.

loss, in this case we are looking at subtracting a negative number. Consider that if I expect to receive \$3 and wind up losing \$8 instead, my position is \$11 worse than what I expected it to be.

²⁰ The FAS87 discount rate was 6.50% for 2009. The discount rate is used to determine the Pension & Benefits Obligation, Service Cost and all related components. The higher the discount rate, the lower the liabilities and costs.

1 We also note that the Benefits Advisory Committee recommended that the Pension Plan be
2 amended to implement a “soft freeze” effective 1/1/2010. “No new employees or rehired
3 employees will be eligible to participate in the pension plans. The amendment was
4 approved.”²¹ By excluding new employees from its pension plan, the Company is taking
5 action to mitigate its pension risk from the liability side. Ratepayers should not be required
6 to absorb the risk from the asset side.

7
8 **Q. DO YOU HAVE ANY COMMENTARY REGARDING THE EXPENSE FOR THE**
9 **OPEB PLAN?**

10 A. I used a similar method to determine the amount by which the OPEB Expense should be
11 reduced for purposes of rate making. However, it was decided that my proposed reduction
12 in OPEB Expense for ratemaking purposes was too small to discuss further.

13
14 **Q. DR. SEROTA, DOES THIS CONCLUDE YOUR TESTIMONY?**

15 A. Yes, it does at this time. Upon receipt of UWNJ’s Pension Expense figures for 2010, with
16 full documentation of how the figures were derived, I reserve the right to amend my
17 testimony.

²¹ RCR-PENN-5, Minutes of Benefits Committee Meeting, October 26, 2009.

PENSION EXPENSE SCHEUDLE

United Water Resources, Inc.

		PENN-1 beginning of year:	PENN-1 from January 1, 2008 report, 5/09 2007	PENN-1 report 4/10 2008	PENN-1 report 4/10 2009
Pension Expense from AON documentation	Service Cost		\$ 5,755,048	\$ 5,770,629	\$ 6,006,390
	Interest Cost		\$ 13,609,959	\$ 14,481,285	\$ 14,649,894
	Return on Assets Amortization		\$ (18,022,354)	\$ (19,141,159)	\$ (12,438,983)
	Prior Service Cost (Gain)/Loss		\$ 439,239	\$ 453,963	\$ 466,990
			\$ 2,317,146	\$ 1,334,841	\$ 7,832,282
Bottom Line	Net Periodic Pension Cost (NPPC)		\$ 4,099,038	\$ 2,899,559	\$ 16,516,573
	NPPC recognized on 12 + 0				
	United Water's Pension Expense				4080133 \$ 3,918,105
Pension Status from AON documentation	ABO		\$ (211,337,431)	\$ (209,448,310)	\$ (215,602,920)
	PBO		\$ (233,678,222)	\$ (231,458,626)	\$ (235,749,983)
	Market value of Assets		\$ 217,527,653	\$ 232,132,683	\$ 150,973,923
	Funded Status		\$ (16,150,569)	\$ 674,057	\$ (84,776,060)
	Unrecog (g)/l		\$ 47,153,247	\$ 27,165,849	\$ 110,170,370
	Unrecog past service cost		\$ 3,507,333	\$ 3,068,094	\$ 2,614,131
	(Accrued) Benefit Cost		\$ 34,510,011	\$ 30,908,000	\$ 28,008,441
	Additional Unrecognized G/(L) from one year to the next (financial and demographic)		(17,513,441) \$	(83,004,521)	
Assets/PBO	Funding Percentage PBO		93.09%	100.29%	64.04%
	Funding Percentage ABO		102.93%	110.83%	70.02%
	Actuarially assumed Discount rate		6.00%	6.45%	6.50%
	Actuarially determined Expected Return on assets		8.50%	8.50%	8.25%
	Approximate return on assets		13.01%	-30.11%	
	Cash contribution		\$ -	\$ -	uncertain
	Return on investments (exhibit 5)		\$ 27,583,979	\$ (67,807,601)	not provided
	Expected Return per AON		\$ 18,022,354	\$ 19,141,159	\$ 12,438,983
	Actuarial Gain(Loss) on Plan Assets		\$ 9,561,625	\$ (86,948,760)	#VALUE!
	Remaining Service for Pension			10.754	10
	Annual Amortization of gain/(loss) in Pension Expense			(8,085,248)	#VALUE!
	Expected Return per prevailing discount rate		\$ 12,721,662	\$ 14,524,762	\$ 9,800,411
	Actuarial Gain(Loss) on Plan Assets (value of risk)		\$ 14,862,317	\$ (82,332,363)	#VALUE!
	Remaining Service for Pension			10.754	10
	Proposed Reduction in Pension Expense			\$ (7,655,976)	#VALUE!
	Ratio of revenue requirement to Pension Expense			23.7223%	
	Proposed Reduction in revenue requirement			\$ (1,816,171)	
	Unrecognized gain/loss			\$ 110,170,370	
	10% of PBO			\$ (23,574,998.30)	
	difference to amortize			\$ 86,595,371.70	
	actuary's annual amortization			8052081	
	years to amortize			10.754	