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Patrick C. Lynch, Attorney General

March 13, 2008

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

Re: Docket No. 3905

Dear Ms. Massaro:

Enclosed for filing with the Commission, please find the Direct Testimony of Thomas S. Catlin.

Very truly yours,

Leo J. Wold
Special Assistant Attorney General

cc: Stephen Scialabba, Chief Accountant, DPUC
Service List

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BEFORE THE
PUBLIC UTILITIES COMMISSION
OF RHODE ISLAND

2008 MAR 19 PM 1

THE NARRAGANSETT) DOCKET NO. 3905
BAY COMMISSION)

DIRECT TESTIMONY
OF
THOMAS S. CATLIN

ON BEHALF OF THE
DIVISION OF PUBLIC UTILITIES AND CARRIERS

MARCH 2008

EXETER

ASSOCIATES, INC.
5565 Sterrett Place
Suite 310
Columbia, Maryland 21044

TABLE OF CONTENTS

	<u>PAGE</u>
Introduction.....	1
Summary and Recommendations	4
Volumetric User Fee Revenue.....	6
Employee Health Insurance	8
Biosolids Disposal Costs	9
Maintenance & Service Agreements	10
Liability and Workers' Compensation Expense	11
Laboratory Supplies.....	13
Regulatory Expense	13
Tunnel Pump Station Electricity Costs.....	14
Revenue Stability Fund.....	15
Debt Service Compliance Filings	18
Rate Design.....	19

BEFORE THE
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THE NARRAGANSETT)
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Direct Testimony of Thomas S. Catlin

Introduction

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Q. WOULD YOU PLEASE STATE YOUR NAME AND BUSINESS ADDRESS?

A. My name is Thomas S. Catlin. I am a principal with Exeter Associates, Inc. Our offices are located at 5565 Sterrett Place, Suite 310, Columbia, Maryland 21044. Exeter is a firm of consulting economists specializing in issues pertaining to public utilities.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.

A. I hold a Master of Science Degree in Water Resources Engineering and Management from Arizona State University (1976). Major areas of study for this degree included pricing policy, economics, and management. I received my Bachelor of Science Degree in Physics and Math from the State University of New York at Stony Brook in 1974. I have also completed graduate courses in financial and management accounting.

Q. WOULD YOU PLEASE DESCRIBE YOUR PROFESSIONAL EXPERIENCE?

A. From August 1976 until June 1977, I was employed by Arthur Beard Engineers in Phoenix, Arizona, where, among other responsibilities, I conducted economic

1 feasibility, financial and implementation analyses in conjunction with utility.
2 construction projects. I also served as project engineer for two utility valuation
3 studies.

4 From June 1977 until September 1981, I was employed by Camp Dresser &
5 McKee, Inc. Prior to transferring to the Management Consulting Division of CDM in
6 April 1978, I was involved in both project administration and design. My project
7 administration responsibilities included budget preparation and labor and cost
8 monitoring and forecasting. As a member of CDM's Management Consulting
9 Division, I performed cost of service, rate, and financial studies on approximately 15
10 municipal and private water, wastewater and storm drainage utilities. These projects
11 included: determining total costs of service; developing capital asset and depreciation
12 bases; preparing cost allocation studies; evaluating alternative rate structures and
13 designing rates; preparing bill analyses; developing cost and revenue projections; and
14 preparing rate filings and expert testimony.

15 In September 1981, I accepted a position as a utility rates analyst with Exeter
16 Associates, Inc. I became a principal and vice-president of the firm in 1984. Since
17 joining Exeter, I have continued to be involved in the analysis of the operations of
18 public utilities, with particular emphasis on utility rate regulation. I have been
19 extensively involved in the review and analysis of utility rate filings, as well as other
20 types of proceedings before state and federal regulatory authorities. My work in
21 utility rate filings has focused on revenue requirements issues, but has also addressed
22 service cost and rate design matters. I have also been involved in analyzing affiliate
23 relations, alternative regulatory mechanisms, and regulatory restructuring issues.

1 This experience has involved electric, natural gas transmission and distribution, and
2 telephone utilities, as well as water and wastewater companies.

3 Q. HAVE YOU PREVIOUSLY TESTIFIED IN REGULATORY PROCEEDINGS
4 ON UTILITY RATES?

5 A. Yes. I have previously presented testimony on more than 200 occasions before the
6 Federal Energy Regulatory Commission and the public utility commissions of Arizona,
7 California, Colorado, Delaware, the District of Columbia, Florida, Idaho, Illinois,
8 Indiana, Kentucky, Louisiana, Maine, Maryland, Montana, Nevada, New Jersey, Ohio,
9 Oklahoma, Pennsylvania, Utah, Virginia and West Virginia, as well as before this
10 Commission. I have also filed rate case evidence by affidavit with the Connecticut
11 Department of Public Utility Control.

12 Q. ARE YOU A MEMBER OF ANY PROFESSIONAL SOCIETIES?

13 A. Yes. I am a member of the American Water Works Association (AWWA) and the
14 Chesapeake Section of the AWWA. I serve on the AWWA's Rates and Charges
15 Committee and the AWWA Water Utility Council's Technical Advisory Group on
16 Economics.

17 Q. ON WHOSE BEHALF ARE YOU APPEARING?

18 A. I am presenting testimony on behalf of the Division of Public Utilities and Carriers (the
19 Division).

20 Q. DO YOU HAVE PREVIOUS EXPERIENCE IN MATTERS INVOLVING THE
21 NARRAGANSETT BAY COMMISSION?

22 A. Yes, I presented testimony on behalf of the Division in the Narragansett Bay
23 Commission's (NBC's) general rate case in Docket No. 3162, its abbreviated rate
24 proceeding in Docket No. 3409, in the Commission's examination of issues related to the

1 implementation of a CSO abatement fee or stormwater fee by NBC in Docket No. 3432,
2 NBC's last general rate case in Docket No. 3483, its abbreviated rate filing in Docket No.
3 3592, its compliance filing on Docket No. 3639, its abbreviated rate filing in Docket No.
4 3707, its compliance rate filing in docket No. 3775 and its general rate filing in Docket
5 No. 3797.

6 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

7 A. Exeter Associates was retained by the Division to assist it in the evaluation of the General
8 Rate Filing submitted by NBC on December 3, 2007. This testimony presents my
9 findings and recommendations both with regard to the overall revenue increase to which
10 NBC is entitled and with regard to the design of rates to recover those additional
11 revenues.

12 Q. HAVE YOU PREPARED SCHEDULES TO ACCOMPANY YOUR
13 TESTIMONY?

14 A. Yes. I have prepared Schedules TSC-1 through TSC-11. Schedule TSC-1 provides a
15 summary of revenues and expenses under present and proposed rates. Schedules TSC-2
16 through TSC-10 present my adjustments to NBC's claimed revenues and operating
17 expenses. Schedules TSC-11 and TSC-12 set forth my findings and recommendations
18 with regard to rate design.

19
20 **Summary and Recommendations**

21 Q. PLEASE SUMMARIZE THE RATE RELIEF REQUESTED BY NBC IN ITS
22 FILING.

23 A. As discussed in the testimony of NBC witness Walter E. Edge, NBC's filing seeks an
24 increase in revenues of \$10,924,164, which represents an overall revenue increase of

1 16.48 percent. To develop its claim, NBC utilized the results for fiscal year (FY) 2007 as
2 the test year. NBC then adjusted the test year cost of service to reflect changes to become
3 effective for a FY 2009 rate year.

4 Q. PLEASE SUMMARIZE YOUR FINDINGS AND RECOMMENDATIONS.

5 A. As shown on Schedule TSC-1, I have determined the NBC's overall revenue requirement
6 to be \$75,250,473. This represents an increase over revenues at present rates of
7 \$7,456,231. The revenue increase that I have identified is \$3,467,931 less than the
8 revenue increase of \$10,924,164 requested by NBC. This difference is the result of the
9 adjustments to NBC's claimed revenues and operating expenses that are summarized on
10 Schedule TSC-2.

11 With regard to the development of rates to recover the NBC's overall cost of
12 service, I am accepting NBC's proposal that existing rates other than septage charges,
13 BOD/TSS surcharges, connection permit fees and pretreatment (discharge) permit fees be
14 increased on an across-the-board uniform percentage basis.

15 Q. WHAT TIME PERIODS HAVE YOU UTILIZED IN MAKING YOUR
16 DETERMINATION OF NBC'S REVENUE REQUIREMENTS?

17 A. Consistent with NBC's filing, I have utilized a test year ended June 30, 2007 and a rate
18 year ending June 30, 2009 as the basis for determining NBC's revenue requirements and
19 the revenue increase necessary to recover those requirements.

20 Q. HOW IS THE REMAINDER OF YOUR TESTIMONY ORGANIZED?

21 A. The remainder of my testimony is organized into sections corresponding to the issue or
22 topic being addressed. These sections are set forth in the Table of Contents for this
23 testimony.

Volumetric User Fee Revenue

1

2 Q.

HOW DID NBC PROJECT RATE YEAR REVENUE FROM VOLUMETRIC
OR CONSUMPTION BASED USER FEES?

3

4 A.

In its filing, NBC developed its rate year revenues from consumption based charges starting with actual volumes for the test year ended June 30, 2007. NBC then reduced these volumes for two years at one-half the annual rate of decline from FY 2004 through 2007.

5

6 Q.

WHAT ADJUSTMENT ARE YOU PROPOSING TO MAKE TO THIS
PROJECTION?

7

8 A.

I am proposing to adjust rate year revenues to include volumetric user fee revenues based on actual test year consumption. Because of the lag in billing, revenues in the fiscal year beginning July 1, 2006 reflect water usage volumes in the late spring and summer of 2006. As shown on the following table, during the months of April through September of

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Month	2005	2006	2007	Normal
April	5.56	3.01	8.38	4.32
May	4.48	7.20	2.94	3.72
June	1.20	11.07	3.35	3.52
July	2.16	2.62	3.42	3.20
August	4.83	4.65	1.42	3.99
September	2.97	2.89	2.45	3.80
April-Sept.	21.20	31.44	21.96	22.55

Source: [http://www/nrcc.cornell.edu/climate/Climate summary.html](http://www/nrcc.cornell.edu/climate/Climate%20summary.html)

14

15

2006, rainfall was well above normal. This almost certainly caused water consumption to be well below normal during those months. As a result, NBC's consumption based user

1 fees in FY 2007 would have been below normal. This is borne out by the fact that
2 residential, commercial and total consumption billing units in the first six months of FY
3 2008 are greater than the first six months of FY 2007. (Consumption billing units in the
4 first six months of FY 2008 would reflect consumption in the late spring and summer of
5 2007, when rainfall was close to normal.)

6 Q. WHY DID YOU UTILIZE FY 2007 VOLUMES GIVEN THAT THEY ARE
7 LIKELY TO HAVE BEEN BELOW NORMAL?

8 A. I recognize that consumption has declined since 2004. However, the decline in overall
9 consumption prior to FY 2007 was only 1.5 percent per year. Inclusion of the below
10 normal FY 2007 volumes in the calculation of the trend in consumption causes the
11 decline in consumption to be overstated, in addition to causing the starting point for
12 projecting rate year consumption to be understated. If FY 2006 was used as the starting
13 point and rate year consumption was projected based on the trend from FY 2004 to FY
14 2006, the resulting consumption would be greater than the consumption in the test year.
15 Accordingly, I am proposing to utilize test year consumption billing units as a
16 conservative estimate for the rate year.

17 Q. HAVE YOU PREPARED A SCHEDULE SHOWING THE EFFECT OF YOUR
18 ADJUSTMENT?

19 A. Yes. On Schedule TSC-3, I have provided a calculation of revenues at present rates
20 based on test year volumetric billing units and end of test year dwelling units and meter
21 counts.¹ As shown on this schedule, my adjustment to volumetric billing units increases
22 user fee revenue by \$1,494,144. This adjustment reverses Mr. Edge's rate year

¹ The dwelling units and meter counts used on Schedule TSC-3 are identical to those utilized in NBC's filing.
I have included the calculation of total user fee revenues for completeness.

1 adjustment to reduce projected consumption levels as calculated on Schedule WEE-2B
2 and summarized on Schedule WEE-1.

3
4 **Employee Health Insurance**

5 Q. WHAT CHANGES ARE YOU PROPOSING TO MAKE TO EMPLOYEE
6 HEALTH INSURANCE COSTS?

7 A. I am proposing to make four adjustments to NBC's rate year claim for employee health
8 insurance costs. First, I reflected the revised insurance premium amounts provided in
9 response to DIV 1-21. NBC revised its projection of rate year premiums to correct an
10 error in its original calculation of the premiums used in its filing on Schedule WEE-5.

11 Second, I have revised the number of employees for which premiums are
12 included. In its filing, NBC has based salary and wage levels on the average number of
13 employees in the test year. This average is 241.8 employees.² However, NBC included
14 premiums for 244 employees. To be consistent with the average number of employees
15 over the course of the year, I have adjusted the number of employees for which health
16 insurance premiums are included to 242. I based the number of employees receiving
17 each type of coverage on the counts as of the most recent date available as provided in
18 response to DIV 1-20 and then adjusted to reflect average employee levels.

19 Third, I have adjusted the level of employee co-payments to reflect the increase in
20 wage levels from the test year to the rate year. Employee co-payments are based on a
21 percentage of each employee's salary. NBC adjusted the level of co-payments to
22 recognize that the percentage of an employee's salary that must be contributed from the
23 test year to the rate year is increasing. However, an adjustment was not made to

² For the 12 months ending December 2007, the average employee level was 241.4 employees.

1 recognize that the salaries to which that percentage applies are also increasing.
2 Therefore, I have adjusted the level of employee co-payments to reflect the claimed rate
3 year wage increase of 4.25 percent. (Because NBC utilized the co-payment level from a
4 "current payroll" in calculating the effect of the increase in the employee payroll
5 percentage, the increase in wage rates from FY 2007 to FY 2008 has been implicitly
6 recognized.)

7 Finally, I have increased the amount of employee co-payments to reflect the level
8 that would exist without a cap on those payments for non-union employees. In its filing,
9 NBC has recognized a 7.5 percent cap on the percentage of the total premium that must
10 be paid by all employees. While the 7.5 percent cap is a contractual limit for bargaining
11 unit employees, the same limitation does not apply to non-union employees. Based on
12 my experience elsewhere, it is not unusual for employers to require employees to bear
13 much more than 7.5 percent of their health insurance premiums. Eliminating this cap
14 increases contributions by \$50,000.

15 Q. WHAT IS THE EFFECT OF YOUR CHANGES TO EMPLOYEE HEALTH
16 INSURANCE COSTS?

17 A. As shown on Schedule TSC-4, the four revisions I have identified reduce projected
18 employee health insurance costs for the rate year by \$112,586.

19
20 **Biosolids Disposal Costs**

21 Q. PLEASE EXPLAIN THE ADJUSTMENT YOU HAVE MADE TO BIOSOLIDS
22 DISPOSAL COSTS.

23 A. The rate per ton that NBC pays for biosolids disposal is subject to adjustment annually
24 based on the damage in the Consumer Price Index (CPI) for New England from

1 November to November. In its filing, NBC used an estimate of the increase in the CPI
2 from November 2006 to November 2007 to project the biosolids disposal rate for 2008
3 and from November 2007 to 2008 to project the rate for 2009. Subsequent to that time,
4 the actual CPI for November 2007 and the resulting 2008 biosolids disposal rate have
5 become known. In addition, projected inflation for 2008 is now higher than that assumed
6 by NBC in projecting the 2009 rate. Accordingly, I have revised the projection of
7 biosolids disposal costs to reflect these changes.

8 Q. HAVE YOU PREPARED A SCHEDULE SHOWING THE CALCULATION
9 OF YOUR ADJUSTMENT?

10 A. Yes. The calculation of my adjustment is shown on Schedule TSC-5. As presented
11 there, I have calculated biosolids disposal costs for the first half of the rate year (July-
12 December 2008) based on the actual rate in effect for 2008. For the second half of the
13 rate year, I have increased the 2008 biosolids disposal rate by 3 percent. This represents
14 the projected increase in the CPI for 2008 based on February 2008 Blue Chip Economic
15 Indicators consensus forecast. As shown on Schedule TSC-5, updating the actual 2008
16 and projected 2009 biosolids disposal rates increases projected disposal costs for the rate
17 year by \$36,520 compared to NBC's filed claim.

18
19 **Maintenance & Service Agreements**

20 Q. WHAT ADJUSTMENT ARE YOU PROPOSING TO MAKE TO
21 MAINTENANCE AND SERVICE AGREEMENT COSTS?

22 A. In its filing, NBC projected rate year maintenance and service agreement costs by
23 escalating test year costs by a 12 percent growth rate for two years. The 12 percent
24 growth rate was based on the average annual growth in maintenance and service contract

1 costs for the three years from FY 2004 to FY 2007 and is largely the result of the
2 30 percent increase that occurred from FY 2004 to FY 2005. As shown on Schedule
3 WEE-7, NBC projected maintenance and service agreement costs of \$571,006 in
4 FY 2008 and \$639,527 in the FY 2009 rate year.

5 I am proposing to revise the projection of rate year maintenance and service
6 agreements to reflect the actual costs associated with the agreements in place in FY 2008.
7 As shown on my Schedule TSC-6, NBC now expects maintenance and service agreement
8 costs in FY 2008 to be \$510,459. Based on these costs, I have updated the three-year
9 historical growth rate and applied this growth rate of 1.12 percent to FY 2008 costs to
10 produce an estimate of \$516,176. This results in a reduction of \$123,351 to NBC's
11 claimed allowance for maintenance and service contracts.

12
13 **Liability and Workers' Compensation Expense**

14 Q. HOW DID NBC DEVELOP ITS CLAIM FOR LIABILITY AND WORKERS'
15 COMPENSATION INSURANCE EXPENSE FOR THE RATE YEAR?

16 A. NBC separately projected the liability and workers' compensation components of its
17 insurance account expense. In each case, NBC calculated the average annual growth rate
18 for the two years from FY 2006 to FY 2008. It then applied these average growth rates to
19 FY 2008 insurance costs to arrive at FY 2009 rate year expense estimates. For liability
20 issuance, NBC used a growth rate of 4.71 percent based on increase of 9.25 percent from
21 FY 2006 to FY 2007 and 0.14 percent from FY 2007. For workers' compensation, NBC
22 used a growth rate of 28.00 percent based on the average of increases of 47.13 percent
23 from FY 2006 to FY 2007 and 8.87 percent from FY 2007 to FY 2008.

1 Q. WHAT ADJUSTMENT ARE YOU PROPOSING TO MAKE TO PROJECTED
2 LIABILITY AND WORKERS' COMPENSATION INSURANCE EXPENSE?

3 A. I am proposing to revise the projection of rate year liability and workers' compensation
4 insurance expense by utilizing three-year average escalation rates rather than the two year
5 growth rates utilized by NBC.³ Utilizing three years as the basis for calculating the
6 escalation rate is consistent with the time period that was utilized on NBC's filing for
7 health insurance, maintenance and service contracts as well as consumption billing units.
8 In addition, the two-year averages utilized by NBC are biased by the abnormally high
9 increases from FY 2006 to FY 2007. The use of three years of costs eliminates this bias.

10 Q. HAVE YOU PREPARED A SCHEDULE SHOWING THE DEVELOPMENT
11 OF YOUR PROJECTION OF RATE YEAR LIABILITY AND WORKERS'
12 COMPENSATION INSURANCE COSTS?

13 A. Yes. My analysis is presented on Schedule TSC-7. As shown there, I have projected FY
14 2009 rate year liability insurance expense of \$374,572 by escalating FY 2008 costs by
15 1.50 percent based on the growth rate experienced for the period FY 2004 to FY 2008.
16 I have estimated rate year workers' compensation insurance expense of \$546,281 by
17 escalating FY 2008 costs by 19.74 percent based on the growth rate experienced from
18 FY 2005 through FY 2008. As noted previously, I utilized four years of experience for
19 liability insurance to avoid the use of a negative growth rate. Had I also used the four-
20 year rather than three-year growth rate for workers' compensation, this would have
21 resulted in a lower rate year estimate for these costs. Overall, my projection of rate year
22 insurance expense is \$49,525 less than NBC's projection based on two years' experience.

³ Because FY 2005 liability insurance expense was greater than the FY 2008 expense, the three-year growth rate is negative. Rather than using this rate, I have utilized the four-year rate for the period FY 2004 through FY 2008 for liability insurance expense.

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Laboratory Supplies

Q. HOW DID NBC PROJECT LABORATORY SUPPLIES EXPENSE FOR THE RATE YEAR?

A. NBC projected rate year laboratory (lab) supplies expense by applying a 12.72 percent per year growth rate to FY 2007 expense for two years. This 12.72 percent growth rate was based on the average of the increase of 17.14 percent from FY 2005 to FY 2006 and 8.31 percent from FY 2006 to FY 2007. To be consistent with the general manner in which other expenses were escalated to rate year levels, it would be appropriate to utilize a three-year escalation rate. However, the three-year escalation rate of 12.90 percent differs only slightly compared to the two-year average utilized by NBC and the resulting expense difference as *de minimus*.

Regulatory Expense

Q. PLEASE EXPLAIN YOUR ADJUSTMENT TO REGULATORY EXPENSE.

A. I have made two adjustments to NBC's projection of regulatory expense for the rate year. First, I have reduced permit fees to exclude FY 2006 RIPDES permit fees paid in July 2007, including \$6,100 for Bucklin Point and \$100 for Field's Point. (The first \$6,000 for Field's Point was paid in June 2006.) The FY 2007 RIPDES permit fees for both plants were paid in June 2007.

My second adjustment to regulatory expenses relates to the projected PUC Assessment for FY 2009. NBC applied a 13 percent per year increase to the FY 2007 assessment to project a rate year expense of \$203,461. I am proposing to utilize the PUC Assessment equal to the FY 2008 assessment of \$179,011 as the basis for my

1 recommended allowance. Based on information provided by the Division, it is expected
2 that the PUC's FY 2009 Assessment will not increase because the massive Rhode Island
3 state budget deficit will result in a variety of expense reduction measures that will limit
4 any increase in the PUC's FY 2009 budget. To be conservative, however, I have
5 included an inflationary increase of 3 percent.

6 As shown on Schedule TSC-8, setting the rate year PUC assessment at the FY
7 2008 level of \$179,011 adjusted for inflation results in a reduction of \$19,080 to NBC's
8 projection. Adding my adjustment to exclude FY 2006 RIPDES Permit Fees of \$6,200
9 results in a total reduction in regulatory expense for the rate year of \$25,280.

10
11 **Tunnel Pump Station Electricity Costs**

12 Q. HOW DID NBC DETERMINE ITS CLAIM FOR THE COSTS OF
13 ELECTRICITY FOR THE NEW CSO PHASE I FACILITIES TUNNEL PUMP
14 STATION?

15 A. NBC estimated the rate year costs for the Tunnel Pump Station on the projected
16 maximum annual electricity usage for each piece of equipment. The full year costs were
17 multiplied by 75 percent to determine the costs applicable to the nine months of the first
18 year operation that are included in the rate year.

19 Q. WHAT ADJUSTMENT ARE YOU PROPOSING TO THIS CLAIM?

20 A. NBC's use of an estimate of electricity costs based on the maximum usage of each piece
21 of equipment is not realistic or appropriate to include as the basis for setting rates. If
22 such an estimate was included in rates on a continual basis, NBC would consistently over
23 recover its actual electricity costs. To reflect a more normal expectation of the costs of
24 electricity for the Tunnel Pump Station, I am proposing to utilize the average of the

1 maximum and minimum expected electricity costs. As shown on Schedule TSC-9, this
2 adjustment reduces rate year electricity costs by \$31,044.

3
4 **Revenue Stability Fund**

5 Q. PLEASE SUMMARIZE NBC'S PROPOSED REVENUE STABILITY FUND.

6 A. NBC is proposing to establish an "Operating Reserve for Revenue Stability Fund"
7 (Revenue Stability Fund or Reserve) as an alternative to the O&M reserve fund which it
8 proposed in its last rate case in Docket No. 3797. NBC is proposing to fund this Reserve
9 over time at a rate of approximately 2 percent of NBC's overall revenue requirement until
10 funding reached a level equal to 25 percent of annual operation and maintenance (O&M)
11 costs. Monies in the Revenue Stability Fund would not be available to pay for expenses
12 in excess the approved revenue requirement as established by this Commission. Instead,
13 the funds would only be available for use if NBC's revenues were significantly less than
14 the PUC authorized revenue requirement. NBC is proposing to establish a separate
15 interest bearing account for the Revenue Stability Fund. Because the Reserve will be
16 directly funded with ratepayer money and not indirectly through the debt service
17 coverage allowance carry-forward, Mr. Edge notes that, unlike the previously requested
18 O&M Reserve Fund, interest earned on the Revenue Stability Fund will be available to
19 benefit the ratepayers.

20 Q. DOES NBC'S NEW PROPOSAL ADDRESS THE CONCERNS YOU RAISED
21 IN THE LAST DOCKET REGARDING THE PROPOSAL TO ESTABLISH
22 THE O&M RESERVE FUND?

23 A. No. The current proposal does addresses the issue I raised in the last docket regarding
24 setting aside another \$8 million to \$9 million of funds with none of the interest available

1 to offset the cost of service. However, it does not address my concern that the
2 establishment of the reserve would result in an increase in the costs to ratepayers. In
3 NBC's last case, I noted that the proposal to fund an O&M reserve using money from the
4 debt service coverage allowance would have required an additional \$8 to \$9 million of
5 debt service to fund capital projects that would otherwise have been paid for with those
6 dollars. That, in turn would have resulted in additional debt service to be paid for by
7 ratepayers. Instead of issuing additional bonds, NBC's proposal in this case is effectively
8 to borrow the \$8 to \$9 million from ratepayers by requiring ratepayers to contribute an
9 additional \$1.5 million a year for the next five to six years.

10 Q. WHAT IS YOUR RECOMMENDATION AS TO HOW ANY RESERVE
11 SHOULD BE FUNDED?

12 A. I believe that requiring the ratepayers to fund the reserve and effectively loan NBC \$8 to
13 \$9 million in perpetuity is more costly to ratepayers than NBC funding the reserve
14 through additional bonds. Therefore, if an O&M Reserve or a Revenue Stability Fund is
15 established, it should be funded from the debt service coverage carry-forward, not
16 directly from rates. Although the interest earned on the reserve would not be available to
17 offset the cost of service, it can be used to maintain the reserve at 25 percent of total
18 O&M expense.

19 Q. DO YOU HAVE ANY OTHER RECOMMENDATIONS?

20 A. Yes. In its last case, NBC agreed that a operating reserve allowance of less than the
21 traditional 1.5 percent of operating expenses excluding debt service would be reasonable
22 if the Commission approved its proposal to establish a separate O&M Reserve Fund. If
23 the Commission approves a Revenue Stability Fund (or an O&M Reserve Fund) in this
24 proceeding, the operating reserve allowance should be reduced because that separate

1 reserve fund will be available to address significant revenue shortfalls. Accordingly, I
2 recommend that the operating revenue allowance be set at one percent of operating
3 expenses excluding debt service. This is consistent with the Commission's decision in
4 the Providence Water Supply Board's (PWSB's) recent proceeding in Docket No. 3832.
5 There, the Commission authorized an operating revenue allowance of 3.0 percent of
6 operating expenses (PWSB does not have a separate debt service coverage allowance),
7 with two percent of that allowance going into a separate funded reserve to cover revenue
8 shortfalls and one percent being treated as the traditional operating revenue allowance.

9 Q. WHAT AFFECT WOULD THESE CHANGES HAVE ON NBC'S RATE
10 YEAR COST OF SERVICE?

11 A. As shown on Schedule TSC-10, funding the Revenue Stability Fund from the debt
12 service coverage carry-forward reduces rate year costs by \$1.5 million and eliminates
13 \$7,000 of interest income that Mr. Edge included as being earned on the fund balance.
14 Hence, the net reduction in revenue requirements is \$1,493,000.

15 The effect of reducing the operating reserve allowance from 1.5 percent to 1.0
16 percent varies depending on the allowed cost of service. Based on NBC's rate year
17 operating expenses excluding debt service prior to the Division's adjustments, the effect
18 is to reduce the allowance by \$172,469. Based on the Division's adjusted operating
19 expenses excluding debt service, the effect is to reduce the allowance by \$170,927.
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Debt Service Compliance Filings

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Q. NBC HAS SOUGHT APPROVAL TO CONTINUE TO BE ALLOWED TO MAKE COMPLIANCE FILINGS FOR ADJUSTING RATES TO RECOVER DEBT SERVICE COSTS FOR ADDITIONAL DEBT. WHAT IS THE DIVISION'S POSITION WITH REGARD TO THIS REQUEST?

A. The Division does not object to NBC's request to extend the term of allowing compliance filings to address the recovery of additional debt service costs if the same conditions as adopted in the Report and Order in Docket No. 3483 also continue to apply. As set forth at page 26 of that Order, these conditions are as follows.

NBC must file a notice for the rate increase proposed in these compliance filings at least sixty days prior to its effective date and comply with the requirements of R.I.G.L. Section 39-3-11 so as to give the Commission adequate time to ensure the accuracy of the proposed rate increase and conduct any prudence review it may wish to undertake at that time. These proposed rate increases in the compliance filings will only be for debt service and debt service coverage for CIP projects. As part of these compliance filings, NBC must file: (1) a revised limited cost of service schedule reflecting the changes to the affected revenue and expense accounts; (2) testimony and schedules in support of the debt service, and debt service coverage proposed as well as current and projected annual debt service payment schedules; (3) a summary of funds currently available for the CIP program and the projected funding needed for the rate year period; (4) a summary of funding received from RICWFA, including funds requested, received, the interest rate, and repayment schedules; (5) a summary of how prior years' debt service coverage funds were utilized; (6) a calculation of new rates based on a uniform percentage increase to

1 rates; and (7) a showing of compliance with prior Commission orders and the
2 requirements of Section 2.11 of the Commission's Rule of Practice and Procedure.

3
4 **Rate Design**

5 Q. HOW ARE YOU PROPOSING TO DESIGN RATES TO RECOVER THE
6 REVENUE INCREASE THAT YOU HAVE IDENTIFIED ON BEHALF OF
7 THE DIVISION?

8 A. I am proposing that the rates necessary to generate the revenue increase that I have
9 identified be developed by increasing rates on a uniform percentage basis. This uniform
10 percentage increase would be applied to both flat fees and measured usage fees for
11 residential, commercial and industrial customers. I have excluded connection permit
12 fees, septage fees, BOD/TSS surcharges and discharge permit fees consistent with the
13 procedure that NBC has proposed to recover its proposed increase.

14 Q. HAVE YOU PREPARED SCHEDULES SHOWING THE CALCULATION OF
15 YOUR PROPOSED RATES?

16 A. Yes. Schedule TSC-11 shows the derivation of the uniform percentage increase in
17 existing rates necessary to generate the required rate increase. As shown on that
18 schedule, the overall percentage increase in rates is 11.58 percent.

19 Schedule TSC-12 shows the calculation of the proposed rates based on the
20 application of the 11.58 percent increase to the current rates. Schedule TSC-12 also
21 provides a proof of revenue at proposed rates.

22 Q. DOES THIS COMPLETE YOUR DIRECT TESTIMONY?

23 A. Yes, it does.

**BEFORE THE
PUBLIC UTILITIES COMMISSION
OF RHODE ISLAND**

**THE NARRAGANSETT)
BAY COMMISSION) DOCKET NO. 3905**

**SCHEDULES ACCOMPANYING THE
DIRECT TESTIMONY
OF
THOMAS S. CATLIN**

**ON BEHALF OF THE
DIVISION OF PUBLIC UTILITIES AND CARRIERS**

MARCH 2008

EXETER
ASSOCIATES, INC.
5565 Sterrett Place
Suite 310
Columbia, Maryland 21044

THE NARRAGANSETT BAY COMMISSION

Summary of Revenues and Expenses at
Present and Proposed Rates
Rate Year Ended June 30, 2009

	Test Year Amount Per NBC	NBC Rate Year Adjustments	Rate Year Amount Per NBC	Division Adjustments	Rate Year at Present Rates	Allowable Rate Increase	Rate Year at Proposed Rates
Revenue							
User Fee Revenue	\$ 64,383,218	\$ (1,494,144)	\$ 62,889,074	\$ 1,494,144	\$ 64,383,218	\$ 7,456,231	\$ 71,839,449
Other Service Revenue	2,497,190	-	\$ 2,497,190	-	2,497,190	-	2,497,190
Miscellaneous	913,834	7,000	\$ 920,834	(7,000)	913,834	-	913,834
Total Revenue	\$ 67,794,242	\$ (1,487,144)	\$ 66,307,098	\$ 1,487,144	\$ 67,794,242	\$ 7,456,231	\$ 75,250,473
Expenses							
Personnel Services	15,994,777	1,755,255	17,750,032	(112,586)	17,637,446	-	17,637,446
Operating Supplies & Expenses	11,188,426	2,670,449	13,858,875	(167,400)	13,691,475	-	13,691,475
Professional Services	2,709,794	165,405	2,875,199	(25,280)	2,849,919	-	2,849,919
Capital Outlays	1,929,744	(1,929,744)	-	-	-	-	-
Amortization	9,690	-	9,690	-	9,690	-	9,690
Debt Related Costs	26,562	-	26,562	-	26,562	-	26,562
Debt Service	30,832,125	1,722,671	32,554,796	-	32,554,796	-	32,554,796
Debt Coverage	7,708,031	430,668	8,138,699	-	8,138,699	-	8,138,699
Total Expenses	\$ 70,399,149	\$ 4,814,704	\$ 75,213,853	\$ (305,265)	\$ 74,908,588	\$ -	\$ 74,908,588
Operating Reserve	208,619	308,788	517,407	(175,522)	341,885	-	341,885
Revenue Stability Fund	-	1,500,000	1,500,000	(1,500,000)	-	-	-
Total Cost of Service	\$ 70,607,768	\$ 6,623,492	\$ 77,231,260	\$ (1,980,787)	\$ 75,250,473	\$ -	\$ 75,250,473
Revenue Surplus/(Deficiency)	\$ (2,813,526)	\$ (8,110,636)	\$ (10,924,162)	\$ 3,467,931	\$ (7,456,231)	\$ 7,456,231	\$ -

THE NARRAGANSETT BAY COMMISSION

Summary of Division Adjustments to
 Rate Year Revenues and Expenses at Present Rates
 Rate Year Ended June 30, 2009

<u>Description</u>	<u>Amount</u>	<u>Source</u>
<u>Revenue Adjustments</u>		
Residential Measured Use Fees	\$ 1,494,144	Schedule TSC-3
Interest Income	(7,000)	Schedule TSC-10
Total Revenue Adjustments	<u>\$ 1,487,144</u>	
<u>Expense Adjustments</u>		
Health Benefits Costs	(112,586)	Schedule TSC-4
Biosolids Disposal Costs	36,520	Schedule TSC-5
Maintenance & Service Agreements	(123,351)	Schedule TSC-6
Insurance Premiums	(49,525)	Schedule TSC-7
Regulatory Expense	(25,280)	Schedule TSC-8
Electricity Costs	(31,044)	Schedule TSC-9
Revenue Stability Fund	(1,500,000)	Schedule TSC-10
Operating Reserve	<u>(175,522)</u>	See Note (1)
Total Expense Adjustments	\$ (1,980,787)	
Total Division Adjustments to Operating Income	<u>\$ 3,467,931</u>	

Note:

(1) Adjusted to reflect 1.0% of Division Operating Expenses excluding debt costs per Schedule TSC-1. Refer to testimony for explanation.

THE NARRAGANSETT BAY COMMISSION

Adjustment to Consumption Based User Fee Revenue
 to Reflect Test Year Volumetric Billing Units
 Rate Year Ended June 30, 2009

<u>User Fee Revenues</u>	<u>Units</u>	<u>Docket 3797 Rates</u>	<u>Revenue at Present Rates</u>
Residential			
Dwelling Units	116,795	\$ 112.35	\$ 13,121,918
Consumption	9,711,064	\$ 2.309	\$ 22,422,847
Non-Residential - Metered Accounts			
5/8"	3,827	\$ 253	968,120
3/4"	973	378	367,780
1"	1,089	628	683,644
1 1/2"	839	1,259	1,056,130
2"	1,685	2,013	3,391,518
3"	76	3,771	285,043
4"	38	6,285	240,393
6"	56	12,574	707,239
8"	18	20,118	372,169
10"	1	28,920	36,130
Total Flat Fees from Metered Accounts	8,602		\$ 8,108,166
Commercial Consumption	5,780,405	\$ 3.349	\$ 19,358,576
Industrial Consumption	637,116	\$ 2.153	\$ 1,371,711
Total User Fee Revenue at Current Rates			\$ 64,383,218
Revenues at Present Rates per NBC			\$ 62,889,074
Adjustment to Revenues at Present Rates			\$ 1,494,144

Notes:

(1) Per Schedule WEE-2B.

THE NARRAGANSETT BAY COMMISSION

Adjustment to Health Benefits Costs
to Reflect Revised Premium and Employee Levels
Rate Year Ended June 30, 2009

	Rate Year Premium (1)	Number of Members (2)	Annual Cost Per Division	Amount Per NBC (3)	Adjustment
<u>Medical Insurance</u>					
HMO Family	\$ 540.70	15	\$ 210,873		
Single	197.87	8	41,157		
PPO Family	\$ 600.75	154	2,405,403		
Single	219.84	50	285,792		
Waiver	\$ 2,500	15	37,500		
Total		<u>242</u>	<u>\$2,980,725</u>	\$ 3,033,183	\$ (52,458)
<u>Dental Insurance</u>					
Family	\$ 38.67	179	179,970		
Single	13.96	58	21,052		
Waiver	110.00	5	550		
Total		<u>242</u>	<u>\$ 201,572</u>	\$ 203,574	\$ (2,002)
Total Rate Year Premiums			<u>\$3,182,297</u>	<u>\$ 3,236,757</u>	<u>\$ (54,460)</u>
Less: Employee Co-Payments (4)			<u>(249,313)</u>	<u>(191,188)</u>	<u>\$ (58,125)</u>
Net Rate Year Premiums			<u>\$2,932,983</u>	<u>\$ 3,045,569</u>	<u>\$ (112,586)</u>

Notes:

- (1) Revised premiums per the response to DIV I-21.
- (2) Employee levels per the response to DIV 1-20, adjusted to reflect average annual employee levels.
- (3) Per Schedule WEE-5.
- (4) Reflects 4.25% increase over NBC estimate for FY 2008 wage increase plus \$50,000 increase due to elimination of cap on non-union employee contributions per response to DIV IV-6.

THE NARRAGANSETT BAY COMMISSION

Adjustment to Biosolids Disposal Costs
 Rate Year Ended June 30, 2009

	<u>7/1/2008 12/31/2008</u>	<u>1/1/2009 to 6/30/2009</u>	<u>Total Cost</u>
Field's Point-Dry Tons (1)	4,834.0	4,834.0	
Field's Point Tunnel Impact (1)	109.0	219.0	
Bucklin Point-Dry Tons (1)	<u>1,204.0</u>	<u>1,204.0</u>	
Total Biosolids for Disposal-Dry Tons	6,147.0	6,257.0	
Rate per Ton (2)	<u>\$ 390.89</u>	<u>\$ 402.62</u>	
Biosolids Disposal Costs	\$ 2,402,801	\$ 2,519,173	\$ 4,921,974
Amount per NBC (1)			<u>4,885,454</u>
Adjustment to Rate Year Expense			<u>\$ 36,520</u>

Notes:

(1) Per Schedule WEE-6.

(2) Revised rate for 2008 per response to DIV 1-26. Projected 2009 rate based on projected increase in CPI for 2008 based on Blue Chip Economic Indicators consensus forecast of February 10, 2008.

THE NARRAGANSETT BAY COMMISSION
Adjustment to Maintenance & Service Agreement Costs
Rate Year Ended June 30, 2009

	<u>Amount</u>
Maintenance & Service Agreement Expense	
FY 2005	\$ 493,658
FY 2006	416,867
FY 2007	509,827
FY 2008	<u>510,459</u>
Average Annual Increase	<u>1.12%</u>
FY 2008 Maintenance & Service Agreement Expense	\$ 510,459
Escalation Rate	<u>1.0112</u>
Estimated Rate Year Expense	\$ 516,176
Amount per NBC (2)	<u>639,527</u>
Adjustment to Rate Year Expense	<u>\$ (123,351)</u>

Notes:

(1) Per Schedule WEE-7 and the response to DIV 1-28.

(2) Per Schedule WEE-7.

THE NARRAGANSETT BAY COMMISSION

Adjustment to Insurance Expense
 to Reflect Three Year Average Increase
 Rate Year Ended June 30, 2009

	Liability Insurance (1)	Workers' Compensation Insurance (1)
FY 2004	\$ 347,689	\$ 246,501
FY 2005	375,827	265,731
FY 2006	337,257	284,825
FY 2007	368,536	419,906
FY 2008	<u>369,036</u>	<u>456,223</u>
Average Annual Increase for the 4 years 2004-2008	1.50%	16.64%
Average Annual Increase for the 3 years 2005-2008	<u>-0.61%</u>	<u>19.74%</u>
FY 2008 Insurance Expense	\$ 369,036	\$ 456,223
Escalation Rate (2)	<u>1.0150</u>	<u>1.1974</u>
Estimated Rate Year Expense	\$ 374,572	\$ 546,281
Amount per NBC (3)	<u>386,400</u>	<u>583,978</u>
Adjustment to Rate Year Expense	\$ (11,828)	\$ (37,697)
Combined Total		<u>\$ (49,525)</u>

Notes:

- (1) Amounts per Schedule WEE-8 except FY 2004 and FY 2005 per response to DIV 1-32.
- (2) Liability escalation based on the four year rate in lieu of utilizing the negative rate for the period from FY 2005 to FY 2008.
- (3) Per Schedule WEE-8.

THE NARRAGANSETT BAY COMMISSION

Adjustment to Regulatory Expense
Rate Year Ended June 30, 2009

	<u>Amount</u>
PUC Assessment-FY 2008 (1)	\$ 179,011
Projected Growth from FY 2008 to FY 2009 (2)	<u>3.00%</u>
Rate Year PUC Assessment	\$ 184,381
Assessment per NBC (3)	<u>203,461</u>
Adjustment to PUC Assessment	\$ (19,080)
Exclude FY 2006 RIPDES Permit Fees (4)	<u>(6,200)</u>
Total Adjustment to Regulatory Expense	<u><u>\$ (25,280)</u></u>

Notes:

- (1) Per PUC records.
- (2) Refer to testimony. Reflects expectation that PUC FY 2009 budget will be subject to reductions due to state budget deficit.
- (3) Per Schedule WEE-13.
- (4) Reflects elimination of FY 2006 RIPDES permit fees paid in July 2007 as shown in response to DIV 1-42.

THE NARRAGANSETT BAY COMMISSION

Adjustment to Tunnel Pump Station Electricity Expense
Rate Year Ended June 30, 2009

	<u>Amount</u>
Maximum Requirments Expense (1)	\$ 275,863
Minimum Requirements Expense (2)	<u>216,259</u>
Average of Maximum and Minimum Expense	\$ 246,061
Amount per NBC (2)	<u>275,863</u>
Adjustment to Reflect Average Expense	\$ (29,802)
Gross Earnings Tax at 4.1666%	<u>(1,242)</u>
Total Adjustment to Expense	<u><u>\$ (31,044)</u></u>

Notes:

(1) Per Schedule WEE-10.

(2) Per response to DIV IV-3.

THE NARRAGANSETT BAY COMMISSION

Adjustment to Reflect Funding of Revenue Stability Fund
from Debt Service Coverage Carry-Forward
Rate Year Ended June 30, 2009

	<u>Amount (1)</u>
Eliminate Rate Funding of Revenue Stability Fund	\$ (1,500,000)
Eliminate Interest Income on Fund Balance	<u>(7,000)</u>
Net Cost of Service Effect	<u>\$ (1,493,000)</u>

Note:

(1) Amounts per Schedule WEE-1

THE NARRAGANSETT BAY COMMISSION

Calculation of Uniform Percentage Increase in Rates
Required to Generate Additional Revenues
Rate Year Ended June 30, 2009

Overall Revenue Increase Required (1)	<u>\$ 7,456,231</u>
Revenues from Services Subject to Increase (2)	
Flat Fees-Residential	\$ 13,121,918
Measured Fees-Residential	22,422,847
Flat Fees-Commercial and Industrial	8,108,166
Measured Fees-Commercial	19,358,576
Measured Fees-Industrial	1,371,711
Discharge Permit Fees	-
Connection Permit Fees	-
BOD/TSS Surcharge	-
Septage Fees	-
Total Revenues from Services Subject to Increase	<u>\$ 64,383,218</u>
Uniform Percentage Increase	<u>11.58%</u>

Notes:

(1) Per Schedule TSC-1.

(2) Per Schedule WEE-15.

THE NARRAGANSETT BAY COMMISSION

Calculation of Proposed Rates and
Proof of Revenues at Proposed Rates
Rate Year Ended June 30, 2009

	<u>Current Rate</u>	<u>Percent Increase</u>	<u>Proposed Rate</u>	<u>Billing Units (1)</u>	<u>Revenue at Proposed Rates</u>
Flat Fees					
Residential	\$ 112.35	11.58%	\$ 125.36	116,795	\$ 14,641,421
Commercial & Industrial					
Meter Size					
5/8"	\$ 253.00	11.58%	282.00	3,827	1,079,090
3/4"	\$ 378.00	11.58%	422.00	973	410,591
1"	\$ 628.00	11.58%	701.00	1,089	763,112
1.5"	\$ 1,259.00	11.58%	1,405.00	839	1,178,605
2"	\$ 2,013.00	11.58%	2,246.00	1,685	3,784,078
3"	\$ 3,771.00	11.58%	4,208.00	76	318,075
4"	\$ 6,285.00	11.58%	7,013.00	38	268,238
6"	\$ 12,574.00	11.58%	14,030.00	56	789,133
8"	\$ 20,118.00	11.58%	22,448.00	18	415,273
10"	\$ 28,920.00	11.58%	32,269.00	1	40,314
Total Commercial & Industrial Flat Fees				8,602	\$ 9,046,508
Measured Fees					
Residential	\$ 2,309	11.58%	2,576	9,711,064	25,015,701
Commercial	3,349	11.58%	3,737	5,780,405	21,601,373
Industrial	2,153	11.58%	2,402	637,116	1,530,353
Total Measured Fees					\$ 48,147,427
Other Revenue					
Discharge Permit Fees	-	11.58%	-		-
Connection Permit Fees	-	11.58%	-		-
BOD/TSS Surcharge	-	11.58%	-		-
Septage Fees	-	11.58%	-		-
					\$ -
Total Service Revenue					\$ 71,835,356
Target Revenue (2)					71,839,449
Variance					\$ (4,093)

Notes:

(1) Per Schedule WEE-14

(2) Per Schedule TSC-11. Target equals revenue at present rates plus required increase.