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RHODE ISLAND PUBLIC UTILITIES COMMISSION
DOCKET NO. 4128
CITY OF NEWPORT WATER DIVISION
PREFILED SURREBUTTAL TESTIMONY OF
CHRISTOPHER P.N. WOODCOCK

- 1 • the distinction of distribution vs. treatment pumping and why those cost
- 2 should be viewed and allocated separately,
- 3 • why expediency is an insufficient reason to employ shortcuts (such as com-
- 4 bining all the line item details), and
- 5 • prior stipulations by the parties

6 Because these issues have repeatedly asserted themselves over the last three
7 decades, I disagree with Mr. Smith's contention that the historical context is unim-
8 portant or irrelevant.

9
10 **Q: What are the major issues that are still outstanding between the parties?**

11 A: There are three main areas involving outstanding issues:

- 12 1. The daily demand study is an essential element of the cost of service study. In
13 2003 (Docket 3578), Newport stipulated that it would not seek to charge Ports-
14 mouth with peak costs related to treatment without a daily demand study. An
15 exhibit to Newport's stipulation outlined detailed requirements for any such de-
16 mand study. Newport Water did not file this study as part of this docket, and in-
17 stead provided a brief summary which was referenced but not used in a spread-
18 sheet provided as part of a data request (see PWFD set #1 and Navy 1-9 for ex-
19 ample). After extensive discovery, some details of Newport's study are available.
20 Those details reveal the study to be flawed, inconsistent with the agreed upon
21 requirements, and essentially unusable.
- 22 2. The derivation of the class demands from Newport's billing records is also flawed
23 and is not an acceptable substitute for the promised and required demand study.
24 While the billing data may provide some useful information, as used by Newport,
25 the application is incorrect.
- 26 3. The cost allocation studies submitted by Newport and the Division contain nu-
27 merous flaws and errors. While some of these were corrected in Mr. Smith's re-
28 buttal submission, there are others that I believe are significant.

1 **Cost Allocation Study**

2 **Q: Starting with the cost allocation studies, will you itemize the flaws and errors**
3 **you believe are present?**

4 A: In his rebuttal testimony, Mr. Smith addressed a number of the issues I raised in my
5 direct testimony and corrected some of the errors identified by my testimony. Addi-
6 tionally, Mr. Mierzwa's direct testimony addressed some, but not all, of the issues
7 raised by my direct testimony. (While I had discussed some issues with Mr.
8 Mierzwa prior to our submitting direct testimony, he had not seen all my concerns
9 prior to submitting his direct testimony and exhibits.) The issues below reflect those
10 issues that either were not corrected by Mr. Smith in his rebuttal testimony, or were
11 not addressed by Mr. Mierzwa in his direct testimony.

- 12 1. RFC/JDM Sch B-9: The increment of extra capacity maximum hour use for each
13 customer class should be the difference between the class maximum hour de-
14 mands and the class maximum day demands, not the maximum hour minus the
15 average day. This is presented in the AWWA Manual that was the basis for the
16 base-extra capacity method used to derive this model. This error was in the Di-
17 vision's and Newport's direct filing but corrected in Newport's rebuttal filing.
- 18 2. RFC/JDM Sch B-10: In determining the allocation percentages that are used to
19 allocate costs to the base, maximum day, and maximum hour functions
20 (RFC/JDM Sch B-1) the volumes and rates of water use that are the basis for
21 these percentages should be based on the overall coincident system demands,
22 not the sum of the non-coincident demands from each class. This too is pre-
23 sented in the AWWA Manual. This error was in the Division's and Newport's di-
24 rect filing but corrected in Newport's rebuttal filing.
- 25 3. RFC/JDM Sch B-7: In determining the maximum day to maximum month ratios
26 for FY 2008 and FY 2009, the incorrect numbers of days in the month were
27 used. This error was in the Division's and Newport's direct filing but corrected in
28 Newport's rebuttal filing.
- 29 4. RFC/JDM Sch B-1: Newport and the Division did not allocate the detailed line
30 items costs; rather for many categories, the detailed line-item costs were lumped

1 together resulting in a loss of precision in the allocation of costs. The other regu-
2 lated water utilities in Rhode Island that I am familiar with all allocate the detailed
3 line items in their cost of service studies.

4 5. RFC/JDM Sch B-2: Costs associated with distribution pumping were not split out
5 as requested in the prior dockets. Some pumping stations are used for retail
6 purposes (distribution pumping) only and should not be allocated to Portsmouth.
7 While some costs were identified, not all were. For example, no capital pumping
8 costs are identified. Moreover, those costs that are identified are allocated ex-
9 exactly the same as treatment costs and assigned in part to Portsmouth. The iden-
10 tification of the costs was a meaningless exercise because the Division and
11 Newport simply allocated the retail distribution pumping as if it were treatment,
12 incorrectly assigning a portion to Portsmouth. Neither the Division's nor New-
13 port's rebuttal model corrected this issue.²

14 6. RFC/JDM Sch B-2: While both parties removed the direct transmission and dis-
15 tribution costs from the amounts allocated to Portsmouth, neither removed any of
16 the administrative overhead associated with T&D. As noted in my direct testi-
17 mony, the Administration costs represent more than 25% of all O&M costs. They
18 are associated with the administration of all the other costs, yet neither the Divi-
19 sion nor Newport has removed any of the administration costs that are associ-
20 ated with T&D from the allocation to Portsmouth. My direct testimony also refer-
21 enced the response to PWFD 1-18 where Newport concedes this link. Neither
22 the Division's nor Newport's rebuttal model corrected this issue.

23 7. As noted on page 28 of my direct testimony, "While we know there are costs as-
24 sociated with operating and maintaining hydrants, services and meters, none of
25 the T&D costs are assigned to these functions." I looked at the costs of other
26 regulated water utilities in RI and found that at least 10% and usually far more of
27 the T&D costs are associated with meters and services. It also seems that

² The Commission should recall Ms. Forgue's testimony in Docket 4025: "Therefore, Newport has not identified pumping costs separately from treatment. Newport Water will address the pumping costs with the demand study and cost allocation study that will be completed submitted in the Fall of 2009." Docket 4025, Forgue Rebuttal at 10-11.

1 some 7-10% of T&D costs are typically related to hydrant maintenance and op-
2 erations. Neither the Division nor Newport allocated any T&D costs to meters,
3 services or hydrants³. This issue has no direct impact on the amounts charged
4 to Portsmouth; they are all retail costs that are internal to the retail metered
5 rates, the fire service charges, or the retail base (meter) charges. Because
6 these are a fixed source of revenues, however, Portsmouth believes it is in New-
7 port Water's interest to provide a more stable revenue source by assigning the
8 full and proper amounts to the base and fire protection charges. If Newport Wa-
9 ter has a more stable revenue source, all customers, including Portsmouth, ben-
10 efit. I believe that Newport should examine the accounting of its T&D resources
11 (labor and materials) and come up with a better accounting of the T&D associ-
12 ated with meters, services, and hydrants to more fairly assign its retail costs.

13 8. RFC/JDM Sch B-1: Within the administrative cost detail that is presented on
14 RFC/JDM Sch A-1 are a number of administrative costs associated with labor.
15 These include items such as Accrued Benefits Buy-out (\$175,000), Retiree In-
16 surance Coverage (\$347,200) and Worker's Compensation Insurance
17 (\$114,000) that are only related to Newport's labor costs and have nothing to do
18 with costs such as materials, parts, chemicals, or power. As such they should be
19 allocated based on all other direct labor costs (non-administrative labor) that are
20 allocated. This is typical for the regulated RI water utilities. The Division and
21 Newport have allocated these costs based on all other costs that could be di-
22 rectly allocated, including materials, parts, chemicals, and power costs that have
23 nothing to do with these labor-related expenses.

24 9. RFC/JDM Sch B-1: Within the Administration costs are over \$300,000 of City
25 Service (Legal & Administrative) costs that the parties have spent considerable
26 time refining. These costs are derived from the cost allocation manual devel-
27 oped by the City as modified by the Commission's last Report and Order. The

³ Although there is \$14,500 of Fire Protection costs assigned to hydrants, this is less than 1.5% of the T&D costs and appears to be far out of line with other RI water utilities.

1 bases for these costs are varied, but known. Some (such as collections) are
2 based on billings and should be directly assigned to the billing costs rather than
3 allocated based on all other costs.

4 10. RFC/JDM Sch B-2: In determining the breakdown of costs between public and
5 private fire protection, neither the Division nor Newport Water considered the
6 cost of public hydrants. These costs should only be assigned to the public fire
7 service (hydrant) charges. The cost of maintaining, repairing, operating and pur-
8 chasing public fire hydrants should have no impact on the private fire service
9 charges.

10 **Q: Are there issues you raised where there is now agreement among the par-**
11 **ties?**

12 **A:** Yes. I believe there are several such areas.

- 13 1. The treatment of unaccounted-for water is acceptable to Portsmouth. While it
14 does not follow the methods outlined by the Commission in its decision in Docket
15 No. 3945 (Pawtucket Water), it does not impact Portsmouth.
- 16 2. Portsmouth had suggested using the volumes of water delivered from storage ra-
17 ther than the treatment facility to determine the amount of water that enters the
18 system. Because it is the cost of the treatment plants that is being allocated,
19 however, we agree with the Division and Newport positions on that matter.
- 20 3. Newport and the Division used the average of several years' system demands
21 while I had suggested using the maximum values. I agree with the positions of
22 the Division and Newport on this matter.
- 23 4. I had raised a question about Newport's change in their historic allocation of
24 treatment costs from a base only cost to base and maximum day. I am satisfied
25 with Newport's response to this change.

26
27 I also note that, with respect to Newport's initial filing, there were a number of
28 changes recommended by the Division and accepted by Newport with which I
29 agreed. In fact, with the exception of the T&D costs assigned to the Navy, each of

1 Mr. Mierzwa's recommendations accepted by Mr. Smith was a revision I had also
2 recommended.

3 **Q: Do you know if the parties have changed their positions since they last filed**
4 **testimony in this docket?**

5 A: I understand that the parties have agreed to most of the revisions I have discussed
6 above. I understand that Newport Water is looking into the costs of meters, ser-
7 vices and hydrants to see if it can identify the costs associated with these services.
8 I also understand that Mr. Smith was going to ask Newport Water to determine the
9 capital costs associated with the distribution pumping stations.

10

11 If these items have been addressed to the satisfaction of all parties, I believe we
12 will have a cost allocation model that can be used in developing cost based rates
13 going forward.

14

15 **Q: Can Newport's revised cost allocation model be used?**

16 A: No. One of the critical elements that determines the allocations to the various cus-
17 tomer classes is the demand associated with each class. The parties recognized
18 this when they stipulated to the daily demand study in Docket 3578. The settle-
19 ment, which was approved by the Commission, required Newport Water to submit a
20 proper demand study (as described in an attachment to the settlement) if it wished
21 to charge Portsmouth with any peak costs. I do not believe Newport Water has
22 provided a study that satisfies the requirements imposed by the Commission, and
23 agreed to by Newport Water, in Docket 3578.

24

25 **Q: Doesn't the testimony in this case suggest that such a study is rather un-**
26 **usual?**

27 A: Yes. However, the circumstances are also unusual. As pointed out in my direct
28 testimony there is a rather long and detailed history to this subject. Moreover,

1 Newport is unique in that it is a summer resort community that does not experience
2 the demand typical of other utilities. For example, Ms. Forgue testified in Docket
3 3818 (page 6, line 7) that a “disproportionate share of Newport’s water sales occur
4 in the summer months due to the influx of tourists.” As a result, demand data from
5 elsewhere is likely not applicable to Newport.

6
7 Newport also has two large customers – Portsmouth and the Navy – each with dif-
8 ferent demands and only one of which – Portsmouth – that provides quite detailed
9 demand data to Newport.

10
11 In the case of Newport’s retail customers, there is no good demand information and
12 the meter reading frequency is such that normal methods of estimating demands
13 from billing records are not practical. Typically, monthly water use is needed to de-
14 rive customer class demands from billing records. Newport’s historic records were
15 tri-annual (three billings per year) and only recently were converted to “semi-
16 quarterly”.

17
18
19
20 **Q: What do you mean by “semi-quarterly”?**

21 **A:** In its response to PWFD 6-1, Newport explains that it “attempts to obtain three ac-
22 tual reads per year for each account.” If Newport does get three actual meter read-
23 ings each year, then the meter reading at the end of one quarter’s use is an esti-
24 mate; and thus the use for that period is an estimate. Further, the use for the next
25 quarter is also an estimate because the beginning meter reading (from the prior pe-
26 riod) is an estimate. As a result, with three actual meter readings and one esti-
27 mated meter reading, two of the four quarterly uses are based on estimated read-
28 ings, and only two of the usage amounts are based on an actual beginning and ac-
29 tual ending meter reading.

1 The response to PWFD 6-1(b) raises even more concerns about the use of the re-
2 tail billing data. Newport's submissions in this docket (RFC Sch D-1) show 13,890
3 quarterly accounts (55,560 quarterly bills per year). The response to PWFD 6-1(b)
4 shows the 14,773 "scheduled estimates" discussed above.⁴ In addition, Newport
5 has also said that there was another 12,110 of "non-scheduled estimates. This is
6 almost equal to the amount of scheduled estimated readings. Over 18 months,
7 Newport estimated nearly 1/3 of all its bills. With this many estimated meter read-
8 ings, the number of actual quarterly uses (where there is a real before and after
9 reading) is less than half. Depending on when the non-scheduled estimates oc-
10 curred, some accounts could have no actual readings.

11
12 **Q: Do you know how the number of estimated billings compares to other water**
13 **utilities in RI?**

14 A: From the response to PWFD 6-1, we know that Newport's large percentage of es-
15 timated meter readings is unusual. This issue was raised in Docket 3818 when
16 Newport's estimated readings were about 19% (FY 2006) as compared to less than
17 2% with other RI water utilities (Docket 3818, Woodcock Direct at 29:13-15). That
18 percentage has not improved. I contacted the Kent County Water Authority, Provi-
19 dence Water, Pawtucket Water, East Providence, and Mr. McGlenn at the Ports-
20 mouth Water and Fire District. The percentage of estimated bills was less than 1%
21 for all of them except Pawtucket, which reported 2% or less. These are all far less
22 than the approximate 33% reported by Newport in its response to PWFD 6-1. Even
23 if Newport's "scheduled estimates" are removed, the non-scheduled estimates of
24 12,110 out of 66,810 is 18%. With such a large percentage of estimated meter
25 readings, the use of Newport's billing data to determine peak demands is of ques-
26 tionable value.

27

⁴ Because the response involved 18 months and not 12, the number is slightly more than 25% or one quarter of the annual billings.

1 **Q: Newport's response to PWFD 6-1(c) provided information on how Newport**
2 **derives an estimate if there is no meter reading. Does that response raise any**
3 **additional concerns with Newport's use of the billing data rather than infor-**
4 **mation from the stipulated daily demand study?**

5 A: Yes it does. Recall that Mr. Smith's analysis of billing records was offered as a
6 substitute for the daily demand study. The purpose of his analysis was to calculate
7 the maximum daily use and maximum hourly use by each customer class. The
8 AWWA Manual provides a method where these maximum daily and hourly de-
9 mands can be estimated using monthly billing records. Mr. Smith used quarterly
10 billing records that inherently smooth out the variations from month to month, es-
11 sentially masking the real peak demands. The quarterly uses are really an average
12 of three months of use, and they are not even the maximum month.

13
14 We now know that many of the quarterly uses (about 1/3) are really estimated. Mr.
15 Esten's explanation in response to PWFD 6-1(c) shows that all the estimates are
16 just an annual average use. For a peak summer quarter they do not look back at
17 the similar period where there was an actual use. Rather they simply calculate an
18 annual average. The impact of this is to smooth out any peak demands even more.

19
20 **Q: Please explain this.**

21 A: First, there is a problem with what is called quarterly billing. The implication of this
22 is a meter reading and billing approximately every 91 day quarter. The first period
23 in Mr. Esten's example (8/3/2009⁵ – 10/9/2009) is only 67 days and the next period
24 is 122 days. Mr. Smith assumed these were all normal calendar months. It turns
25 out that the individual billings are not all typical 90-92 day calendar month; rather
26 they can vary significantly.

27

⁵ It is assumed that Mr. Esten's 8/14 date is actually 8/3 to match the next line. If Mr. Esten's dates are correct, there are 11 missing days in the analysis.

1 Rather than examining Mr. Esten's example where the variations in days/quarterly
 2 billing period makes it more difficult to see, consider the following example;

Billing Period		Use	Days
11/6/08	2/5/09	4,500	91
2/5/09	5/7/09	5,000	91
5/7/09	8/6/09	6,500	91
8/6/09	11/5/09	<u>5,500</u>	<u>91</u>
Totals		21,500	364
Avg daily Use =			59.07
Estimated Billing period			
11/5/09	2/4/10		
days			91
times avg daily use			5,375

3
 4 If the bill is estimated for a typical 91 day quarter, the average quarterly use is
 5 5,375 gallons. If the estimate was for a winter quarter it seems too high, and if the
 6 estimate is for a summer quarter the estimate seems too low. Because Newport's
 7 estimating protocol is to base estimates on annual average use it smoothes out the
 8 winter lows and summer peaks, essentially masking the peak summer uses we are
 9 looking to determine. With the large number of estimates that Newport has, this
 10 presents yet another problem in using its billing data

11
 12 **Q: What are the implications of Newport's response to PWFD 6-1?**

13 A: I believe this confirms the large problems and errors that are present with Mr.
 14 Smith's analysis using the billing records to try to derive peak demands for New-
 15 port's retail customers, The "semi-quarterly" billing has numerous estimated uses
 16 that, due to the estimating process, smoothes out and masks the real peaks and
 17 variations in water use.

1 **Daily Demand Study**

2 **Q: Does the daily demand study conducted by Newport Water meet the provi-**
3 **sions of the stipulated agreement for this study?**

4 A: No.

5 **Q: In your direct testimony, you discuss the unusual weather during the period**
6 **of the demand study and Mr. Mason, in his direct testimony, also presented**
7 **some of the issues with the new meters. Shouldn't this excuse Newport Wa-**
8 **ter for its failure to have prepared an acceptable study?**

9 A: No. As outlined in Mr. Smith's testimony, Newport Water agreed to submit a proper
10 demand study prior to any attempt to assign certain costs to Portsmouth. This
11 agreement took place as part of the settlement in Docket 3578 – some six years
12 ago. Newport Water has had more than enough time and direction to decide if it
13 wanted to assign certain costs to Portsmouth and if so, develop a daily demand
14 study that conformed to the Commission-approved settlement. If Newport Water
15 had consulted the other parties and started the daily demand study in the spring of
16 2005 (about the time the new billing system was put in place) we would have three
17 or four somewhat normal years of data (2005 – 2008) and would not be concerned
18 with an unusual summer or the meter issues raised by Mr. Mason.

19
20 Newport certainly could have started earlier, as it has been long aware of the impor-
21 tance of completing a proper demand study. A review of my testimony in Docket
22 3578 shows that nearly the exact same issues that were raised in that docket are
23 still issues in this docket. See Docket 3578, Woodcock Testimony at 17:17-23,
24 18:20 – 19:11, 19:27 – 20:14, 20:23-27. In Docket 3818, again, the issue of the
25 demand study was raised. See Docket 3818, Newport Water Response to PWFD
26 1-15. In that response Mr. Smith admits discussions with me about the daily de-
27 mand study during the first quarter of 2006 and the installation of radio read devices
28 for the purposes of the daily demand study. The response to PWFD 1-15 in Docket
29 3818 suggests that Newport indeed did collect some data and that they "anticipated

1 that this data will be used in conjunction with data collected as part of a more formal
2 demand study that will take place over the next several years; however, the fact
3 that this data was collected during an unusually wet year may limit the degree to
4 which it can provide useful information regarding the demand characteristics of
5 Newport's customers."
6

7 **Q: Do you think Mr. Smith's comments about the "unusually wet" summer of**
8 **2006 have any bearing on this case?**

9 A: If the summer of 2006 was unusually wet and impacted the validity of that sum-
10 mer's data, then the summer of 2009 should certainly fall into the same category
11 and would also "limit the degree to which it can provide useful information regarding
12 the demand characteristics of Newport's customers." The Commission is well
13 aware of the unusually low water sales in the summer of 2009 and the impact it has
14 had on Rhode Island's water utilities.

15 **Q: What is your main concern with the daily demand study?**

16 A: The primary issue is that Newport Water did not prepare and submit the daily de-
17 mand study as was agreed to in the stipulation approved by the Commission in
18 Docket 3578. The stipulation states: "... Newport shall be required to submit a de-
19 mand study with any cost allocation study." I do not believe that there was any
20 doubt that the required demand study was an essential element of any cost alloca-
21 tion study. Newport, however, (a) did not submit it as part of the filing, (b) did not
22 use it in relation to the cost of service study, and (c) only provided details of the
23 study after multiple data requests.
24

25 **Q: Are there issues with the daily demand study that Newport conducted?**
26 **Should it be used for the allocation of costs in this docket?**

27 A: There are numerous problems with this "study" and, based on what we now know, it
28 should not be used. The primary problems are as follows:

- 1 1. As Mr. Mason testified, there were problems early on with a number of meters.
2 In response to PWFD 1-13, he states that he did not notify any parties (other
3 than Mr. Smith) of these problems until he submitted testimony in this docket.
- 4 2. As discussed in my direct testimony, the replacement accounts chosen by New-
5 port were not representative of those that were removed and were so drastically
6 different that the agreed upon protocol to derive a representative sample was
7 rendered meaningless.
- 8 • There were a number of large commercial meters in the initial group that
9 were replaced with small meters.
 - 10 • The average (2008/2009) annual use of the initial commercial sample that
11 was agreed on was 16,695,970 while the replacement commercial ac-
12 counts had an annual average of only 1,962,034. No one could possibly
13 suggest that these were similar.
 - 14 • An initial account (49 America's Cup Way) that included a restaurant, hotel
15 and marina (the type of account we had agreed was essential) was re-
16 moved and not replaced.
 - 17 • The initial residential accounts showed a 30% drop in use from FY 2008 to
18 FY 2009 while the replacement accounts showed a doubling of use during
19 the same time periods.
- 20 3. The lone Marina that shows up with the commercial accounts used a minimal
21 amount of water during the study; it was not particularly representative of the
22 type of account we had all been looking to include in the analysis. As a result
23 there was no real marina water use considered in the analysis, even though such
24 use could be expected to be significant during the summer.
- 25 4. I raised questions about two specific accounts in my direct testimony that ap-
26 peared to skew the demand study results: a residential account at 124 Harrison
27 Avenue and a meter at the Marriott Hotel. Newport did not address these in its
28 testimony, necessitating another data request. Newport's response to PWFD 4-
29 1, however, failed to answer Portsmouth's questions regarding the meter at the
30 Marriott Long Wharf and also contended that a residential account with a huge

1 leak provides representative results that should be used as a sample for residen-
2 tial water use⁶.

3 5. The response to Navy 1-5 shows that the month of highest residential demand
4 (July 2009) had 11.12 inches of rain compared to prior July rainfalls of 4.1, 2.5,
5 and 3.9 inches. Clearly July 2009 was unusually wet. The proceeding months of
6 May and June 2009 were also unusually wet, a condition that tends to dampen
7 peak demands. By Mr. Smith's own response to PWFD 1-15 in Docket 3818,
8 "data ... collected during an unusually wet year may limit the degree to which it
9 can provide useful information regarding the demand characteristics of New-
10 port's customers." It is exactly those "demand characteristics of Newport's cus-
11 tomers" that the daily demand study was supposed to capture.

12
13 **Q: What did you suggest the Commission do with the results of the daily de-
14 mand study?**

15 **A:** The results are essentially useless for the purpose for which they were gathered.
16 The unusual weather and deviation from the agreed upon representative sample
17 provide results that cannot be viewed as representative.

18
19 That said, the results may be of value in the context of an additional analysis con-
20 ducted according to the agreed upon protocols. Those were generally outlined in
21 Mr. Smith's letter dated January 12, 2008⁷ to myself, Mr. Catlin (Exeter Associates,
22 for the Division), and Mr. Allen (for the Navy). I believe the parties should again
23 agree to this protocol and that Newport should continue to collect daily demand da-
24 ta starting as soon as possible, on a truly representative sample. If Newport en-
25 counters problems with meters or readers, any and all replacements should be a

⁶ The suggestion of this assertion is that some 10% of Newport's residential water customers have leaks that cause their annual water use to be a full magnitude higher than the actual use (400,000 per year rather than 40,000).

⁷ Believed to be January 12, 2009.

1 similar type; and all parties should be notified immediately of any such proposed
2 replacements.

3
4 If the proper procedures are followed going forward, I believe it is possible to derive
5 representative demand data for Newport's retail customers that can be used in con-
6 junction with the actual information available from Portsmouth along with actual
7 readings of all the Navy meters. This data can be input into the agreed upon cost
8 allocation model in Newport's next general rate filing.

9 **Billing Data Demand Analysis**

10 **Q: Didn't Newport submit a form of demand analysis using their billing data?**

11 A: Yes, but that is not what the Commission-approved stipulation order required. It
12 was because the billing data was deemed unusable that the parties agreed to the
13 daily demand study. The "analysis" using Newport's billing data is flawed and is not
14 an acceptable substitute for the demand study required by the settlement in Docket
15 3578.

16
17 **Q: Did you address these issues in your direct testimony?**

18 A: Yes. However, Mr. Mierzwa had not seen them when he prepared his direct testi-
19 mony; the schedules he filed contained many of these same flaws as Mr. Smith's
20 direct filing. While Newport did have my testimony prior to their rebuttal testimony,
21 Mr. Smith failed to address most of the issues I raised and perpetuated them in his
22 rebuttal schedules.

23
24 **Q: What are the issues or flaws in the analyses based on billing records and
25 presented by the Division and Newport?**

26 A: The first issue I raised with the analysis based on billing records was Newport's
27 failed attempt to do this in Docket 2985. In that case Newport used its tri-annual
28 billing data and tried to average four months into equal monthly billings. I noted

1 that this was not dissimilar to what Newport (and the Division) did in RFC Sch 4 –
2 where it took tri-annual or quarterly billings⁸ and tried to treat them as monthly bill-
3 ings to derive class demands. The Commission rejected this approach in Docket
4 2985 stating “we direct Newport to immediately start accumulating the necessary
5 data, such as average day use and maximum-day use by rate class...” Mr. Smith
6 did not address this in his rebuttal testimony. His only mention of the Commission’s
7 past rejection of Newport’s attempts to use its billing information to derive customer
8 demands is his quoting of Exhibit 2 to the Docket 3578 Stipulation: “The Water
9 Demand Study is intended to satisfy the requirements imposed by the RI PUC in
10 Docket 2985.” Given that this was a Commission order imposed in Docket 2985, I
11 would have expected Newport to respond to this matter.
12

13 **Q: Why is this particular issue so important?**

14 A: In Docket 2985, Newport proposed customer demand factors that were derived
15 based on its billing data. This approach was rejected by the Commission in that
16 docket. Newport has proposed to do this again, essentially asking the Commission
17 to ignore its Order in Docket 2985 and its acceptance of Newport’s stipulation in
18 Docket 3578. Newport should not be allowed, however, to ignore the Commission’s
19 orders and its agreements with the other parties. The approach was rejected be-
20 fore and it should be rejected again.
21

22 **Q: What are the other issues you see with the customer demands Newport de-**
23 **derived from its billing records?**

24 A: There are a number of very significant problems that I view as fatal flaws.
25 1. Newport based its analysis on tri-annual and semi-quarterly billing data. The
26 AWWA Manual that Newport claims to have followed states that utilities that do
27 not have monthly data will get results that will be less accurate. In this case,
28 Newport does not even have quarterly billing data. Part of the period used in the

⁸ Where one out of 4 readings and thus half the quarterly uses are just estimates.

1 analysis used tri-annual billing. As discussed earlier, the “quarterly” billings are
2 not even true quarterly billings – only two of the four annual readings provide ac-
3 tual use data.

4 2. Newport did not use the water demand data from all their customers – it just took
5 the highest period of reported water use. It is likely that this period includes only
6 about 1/3 of the quarterly billed customers.

7 3. In response to a data request (PWFD 1-12), Newport states that the monthly bill-
8 ing records extracted for the study had “discrepancies.” The monthly accounts,
9 however, are included in the records Newport uses to establish its demand esti-
10 mates.

11 4. The billing records show the peak residential demands to be in October and No-
12 vember. Yet Newport’s production records filed in this case show the peaks to
13 be in July and August.

14 5. As discussed previously, the large number of estimated bills masks the peaks in
15 demand and, therefore, renders the billing records unreliable for purposes of es-
16 timating peak demands.

17
18 **Q: Didn’t Mr. Smith address these in his rebuttal testimony?**

19 A: Mr. Smith claims to be unconcerned with the AWWA Manual’s admonition that the
20 results “will likely be less accurate,” testifying that “just because the results will be
21 less accurate does not mean they should be ignored.” Not only are the results less
22 accurate, they are incorrect. Because they are incorrect, they should be ignored.
23 Newport agreed to a superior method (the Daily Demand Study) and should be held
24 to its agreement.

25
26 For the most part, Mr. Smith ignored the other issues I raised, and instead attacks
27 the corrections I presented that at least followed the method prescribed in the
28 AWWA Manual. I never intended, however, for the Commission to adopt my de-
29 mand estimates. While they are more accurate than Newport’s estimates, they also
30 are not correct and should not be used as the basis for new rates.

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I gave a detailed explanation and example of how Mr. Smith's calculations only looked at some of the customers and ignored the majority. This was not addressed in his rebuttal testimony. I think the Commission should conclude from that lack of response that Mr. Smith did ignore more than half of the retail customers and that he has no explanation as to why those he chose to use had peak demands in the fall when the system peaks are in the summer.

Conclusion

Q: In your prefiled direct testimony you concluded by asking the Commission to accept the basic cost allocation model you proposed (with some revisions) but not accept the demand data that goes into that model. Have you changed that recommendation?

A: No. I believe the parties may have worked out a good working cost allocation model, but I also believe it still needs the refinements I had laid out earlier: identification of operating and capital costs associated with distribution pumping and identification of meter, service and hydrant costs within T&D. However, the biggest shortcoming is the incorrect demand data for customer classes. This needs to be corrected and developed in conformance with the past Commission Orders and the stipulated agreements of the parties. Until that is completed, I do not believe that Newport Water will have met its burden of proof. The Commission should not order any changes in the metered rates; however, because the service charges are not dependant on the demand data, those could be changed at this time.

**Docket 4128 - City of Newport Water Division – Cost of Service Study/Rate Design
Updated 12/29/09**

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