

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF DELAWARE

IN THE MATTER OF THE APPLICATION)
OF TIDEWATER UTILITIES, INC. FOR A)
GENERAL RATE INCREASE) PSC DOCKET NO. 13-466
(Filed November 25, 2013))

DIRECT TESTIMONY AND EXHIBIT OF STAFF WITNESS

BRIAN KALCIC

REGARDING
COST OF SERVICE AND RATE DESIGN

May 20, 2014

1 **Q. Please state your name and business address.**

2 A. Brian Kalcic, 225 S. Meramec Avenue, Suite 720, St. Louis, Missouri 63105.

3

4 **Q. What is your occupation?**

5 A. I am an economist and consultant in the field of public utility regulation, and
6 principal of Excel Consulting. My qualifications are described in the Appendix to
7 this testimony.

8

9 **Q. On whose behalf are you testifying in this case?**

10 A. I am testifying on behalf of the Delaware Public Service Commission Staff
11 (“Staff”).

12

13 **Q. What is the subject of your testimony?**

14 A. Staff requested that I review the cost-of-service study and proposed rate design
15 submitted on behalf of Tidewater Utilities, Inc. (“Tidewater” or “Company”), and
16 develop an appropriate rate design that would recover Staff witness Constance S.
17 McDowell’s overall recommended revenue requirement of \$27.976 million.

18

19 **Q. How is your testimony organized?**

20 A. Section I of my testimony discusses Tidewater’s cost-of-service study. Section II
21 examines the Company’s proposed class revenue allocation and rate design, and
22 presents Staff’s recommended revenue allocation and rate design. Finally, Section
23 III addresses proposed changes to the Company’s tariff.

24

25 **Q. Please summarize your recommendations.**

26 A. Based upon my review of the Company's current tariff, rate filing and associated
27 discovery responses, I recommend:

28

29 • Rejection of the Company’s proposed class revenue allocation;

30

31 • Adoption of Staff’s recommended revenue allocation, which provides for
32 non-uniform increases to the Company’s rate classes; and

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34 • Implementation of Staff’s recommended rate design which includes non-
35 uniform increases to the Company’s current General Water Service charges.

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The specific details associated with my recommendations are discussed below.

I. Cost-of-Service Study

Q. Mr. Kalcic, did the Company submit a cost-of-service study (“COSS”) in this proceeding in support of its proposed rate structure?

A. Yes, it did. The Company prepared a COSS using the Base Extra-Capacity (“BEC”) cost methodology. The cost study is sponsored by Mr. Gary D. Shambaugh and presented in his Exhibit No. T-8.

Q. Please identify the Company’s current rate classes.

A. At the present time, Tidewater provides General Water Service (“GWS”), Private Fire Service and Public Fire Hydrant Service via separate rate schedules. In addition, the Company offers Bulk Water Contract Sales (“Contract Sales”) service to three (3) customers via individual contract rates.

Q. Are all of Tidewater’s rate classes included in its COSS?

A. No. The cost study includes only the GWS, Private Fire Service and Public Fire Hydrant Service classes. However, Mr. Shambaugh sponsors three separate wholesale rate analyses in support of the Company’s proposed Contract Sales rates.

Q. What does the Company’s COSS indicate with respect to class revenue requirements?

A. Table 1 below compares present revenue to allocated cost of service, by customer class, at Tidewater’s filed revenue requirement level.

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Table 1
(\$000)

<i>Class</i>	<i>Present Rate Revenue</i>	<i>Allocated Cost of Service</i>	<i>Cost-Based Increase</i>
	(1)	(2)	(3) = (2) - (1)
General Water	\$21,086.3	\$25,499.8	\$4,413.5
Public Fire	\$1,863.7	\$1,596.2	(\$267.5)
Private Fire	<u>\$976.3</u>	<u>\$314.6</u>	<u>(\$661.7)</u>
Total	\$23,926.3	\$27,410.6	\$3,484.3

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Source: Exhibit No. T-8, Schedules 6 and 11.

As shown in Table 1, the Company's COSS indicates that the Public and Private Fire classes are contributing revenues in excess of their allocated cost of service. On the other hand, the GWS class is contributing revenue below its allocated cost of service.

12 **Q. Does Staff recommend any changes to the Company's COSS methodology at this time?**

14 A. No. Staff finds the Company's BEC methodology to be reasonable, and has used Tidewater's COSS results as a guide to develop Staff's recommended revenue allocation in this proceeding.

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II. Class Revenue Allocation & Rate Design

20 **Q. Does the Company propose to utilize the results of its COSS in developing its rate structure proposals in this proceeding?**

22 A. Only in part. The Company is requesting an overall base rate increase of 14.4%. Mr. Shambaugh proposes to assign the Public Fire Hydrant class an increase of 18.3%, or approximately 1.3 times the system average. Since the Public Fire class is over-contributing, the Company's proposed increase would not move this class closer to cost of service.

1 The Private Fire class would receive a decrease of 22.6%, which is
2 intended to eliminate approximately one-third of the subsidy that the class provides
3 to GWS customers. The GWS class would receive a residual increase of
4 approximately 16.0%.

5
6 **Q. How does Tidewater seek to recover its proposed revenue increase *within* each
7 rate class?**

8 A. Except for the GWS class, Tidewater is proposing to assign a uniform revenue
9 adjustment to all tariff charges within each rate class. For GWS customers, the
10 Company proposes to assign a 15.7% increase to all (fixed) facilities charges, and
11 to assign an average increase of 16.1% to GWS consumption charges.

12
13 **Q. Do you agree with the Company's overall rate design approach?**

14 A. No. First, I disagree with Tidewater's proposal to assign a rate decrease to the
15 Private Fire class in the case where the Company would receive an overall increase.
16 By definition, the Company's proposed decrease to Private Fire requires
17 Tidewater's remaining classes to bear a combined increase *in excess of the*
18 *Company's overall revenue adjustment*. In my view, this type of proposal violates
19 the traditional ratemaking principle of gradualism. Instead, I propose to assign no
20 increase to the Private Fire class.

21 Second, since the Public Fire Protection class is contributing revenues in
22 excess of its indicated cost of service, I also propose to assign no increase to this
23 class.

24 Third, the evidence in this case indicates that Tidewater's (direct) GWS
25 customer-related costs total \$5.596 million, at the Company's requested revenue
26 requirement level.¹ At the same time, the Company's current GWS facility charge
27 revenues (excluding the DSIC) are \$8.323 million, which means that Tidewater's
28 current facilities charges are set significantly above cost at this time. Therefore, I
29 recommend that any increase to Tidewater's present GWS facilities charges be
30 limited to one-half of the overall GWS class increase in this proceeding..
31

¹ See Exhibit No. T-8, Schedule 9, at line 4.

1 **Q. Mr. Kalcic, have you developed a recommended class revenue allocation that**
2 **recovers Staff's recommended revenue requirement in this proceeding?**

3 A. Yes, I have. My recommended revenue allocation is designed to recover Ms.
4 McDowell's recommended revenue requirement of \$27.976 million, which equates
5 to an overall recommended base revenue increase of \$1.056 million or 3.92%.
6 Staff's recommended class revenue allocation is shown in Schedule BK-1.

7
8 **Q. Please describe Schedule BK-1.**

9 A. Schedule BK-1 begins with the Company's pro forma class revenues, as shown in
10 column (1). Column (2) reflects Staff's recommended pro forma revenue
11 adjustments (if any), as sponsored by Staff witness Jason Smith. Column (3) sums
12 columns (1) and (2) to arrive at Staff's pro forma present revenues, by class.
13 Column (4) shows my recommended revenue increases. Column (5) shows my
14 recommended level of class revenues, after rate design. Finally, column (6)
15 provides my recommended percentage change in rate revenue, by class.

16
17 **Q. How did you determine your recommended class revenue increases shown in**
18 **column (4) of Schedule BK-1?**

19 A. In order to move all rate classes towards cost of service, I first assigned no increase
20 to the Company's Public Fire Hydrant and Private Fire Protection classes. Second,
21 I assigned the system average increase in rate revenue (i.e., the overall percentage
22 increase exclusive of Other Operating Revenues) to Tidewater's Contract Sales
23 rates and Connection Fees. Third, I assigned the GWS class an increase of 4.51%,
24 which is the residual increase necessary to implement Staff's overall recommended
25 revenue requirement.

26
27 **Q. Is your recommendation to apply a system average increase to the Company's**
28 **Contract Sales customers and Connection Fees consistent with Tidewater's**
29 **proposal?**

30 A. Yes, it is.

31
32 **Q. Mr. Kalcic, have you developed rates to implement your recommended class**
33 **revenue allocation?**

1 A. Yes, I have. Schedule BK-2 provides my recommended rate design and proof of
2 revenue.

3

4 **Q. Please explain Schedule BK-2, page 1 of 2.**

5 A. Page 1 of Schedule BK-2 presents my recommended rate design and proof of
6 revenue for the Company's GWS (lines 1-15) and Contract Sales (lines 16-19)
7 classes.

8 Staff's recommended GWS facilities charge revenue is derived on lines 1-
9 10. As discussed above, my recommended facilities charges reflect an increase of
10 one-half the overall GWS class increase, or approximately 2.26%, across all meter
11 sizes. My recommended GWS consumption charges are shown on lines 11-14. All
12 GWS consumption charges reflect an increase of 5.98%, which is the residual
13 increase necessary to implement the overall GWS class target increase of 4.51%
14 shown on Schedule BK-1.

15 Staff's recommended Contract Sales rates and revenues are shown on lines
16 16-19 of Schedule BK-2, page 1 of 2. Consistent with the above discussion, the
17 Company's existing contract rates were assigned Staff's recommended system
18 average increase in rate revenue of 3.97%.

19

20 **Q. Continuing with Schedule BK-2, page 2 of 2, please discuss your recommended
21 Public Hydrant Service and Private Fire Protection charges.**

22 A. Since I recommend that neither class receive a base rate increase in this proceeding,
23 my recommended rates shown on lines 1-7 are unchanged from present rate levels.

24

25 **Q. How did you develop your recommended Connection Fees?**

26 A. The Company's Connection Fees are based on meter size. My recommended fees
27 are shown on lines 8 through 12 of Schedule BK-2, page 2 of 2. Within rounding,
28 all Connection Fees receive a system average increase in rate revenue of 3.97%.

29

30 **Q. Do you have a recommendation in the event that the Commission awards
31 Tidewater a revenue increase that differs from Staff's recommended level?**

32 A. Yes. In that event, I would advocate that the recommended class increases shown
33 in column (4) of Schedule BK-1 be adjusted proportionately.

34

1 **III. Proposed Tariff Changes**

2
3 **Q. Mr. Kalcic, is Tidewater proposing any changes to its existing tariff language?**

4 **A.** Yes. Due to an increase in the number of installed irrigation well systems,
5 Tidewater is proposing to strengthen its existing tariff language in Section 3.6 Cross
6 Connection Control, so as to “mitigate the possibility of system cross contamination
7 issues.”² Under the Company’s proposal, Section 3.6 would read as follows
8 **(additions in bold):**

9
10 3.6 **CROSS CONNECTION CONTROL**

- 11
12 **a) A cross connection is any pipe, valve or other physical connection or**
13 **other arrangement or device connecting the pipelines of the**
14 **Company, or facilities directly or indirectly connected therewith, to**
15 **and with pipes or fixtures by which any contamination might be**
16 **admitted or drawn from lines other than the Company’s into the**
17 **distribution system of the Company, or into lines connected**
18 **therewith.**
- 19
20 **b) No direct connection of pumping equipment for any purpose or**
21 **cross-connection with any other piping system will be allowed unless**
22 **approved in writing by the Company.**
- 23
24 **c) The Company reserves the right to require any customer, owner or**
25 **tenant to install, at their expense, and as part of a service connection**
26 **such equipment or material which it deems necessary and as may be**
27 **acceptable or required from time to time by any regulatory agency**
28 **or good engineering practice, to prevent backflow into the water**
29 **supply and minimize or eliminate contamination of its water supply**
30 **system.**
- 31

² See Tidewater’s response to PSC-RD-14(b).

1 **d) Backflow preventers shall be required in all domestic, commercial,**
2 **industrial, public and municipal services where water is used in any**
3 **process which, in the opinion of the Company, could constitute a**
4 **cross-connection and/or health hazard. Customer shall install**
5 **backflow preventers on their service lines when they connect any**
6 **irrigation system or equipment on their property. All backflow**
7 **prevention equipment must be approved by the Company prior to**
8 **installation.** ~~Customers shall install backflow prevention equipment on~~
9 ~~their service lines when they connect any irrigation system or equipment~~
10 ~~on their property. All backflow prevention equipment must be approved~~
11 ~~by the Company prior to installation.~~

12
13 **e) Upon issuance of a non-potable water well permit and installation of**
14 **such non-potable well on customer’s property, and in accordance**
15 **with Title 7 Chapter 60 §6075 (d), the Company may inspect the**
16 **well at any reasonable time to insure that there are not**
17 **interconnections with any portion of any building’s plumbing**
18 **and/or the Company’s water service connection. Additionally, the**
19 **Company may conduct an inspection for interconnections with a**
20 **non-potable well upon valid reasons including suspicious water**
21 **usage.**

22
23 **Q. How does Tidewater interpret “any irrigation system or equipment” in Section**
24 **3.6(d), for purposes of requiring a customer to install a backflow preventer?**

25 A. In response to PSC-RD-15(a) and (b), Tidewater explains that “all irrigation
26 systems that are connected to the Company’s water system shall have backflow
27 prevention in order to protect both the customer and the Company from having
28 water flow back into the system.” Such systems would include an in-ground system
29 that uses Company water as a sole source of (irrigation) supply.

30
31 **Q. Does Tidewater routinely install a backflow preventer at the customer’s meter**
32 **pit?**

Direct Testimony of Brian Kalcic

1 A. Yes.³ However, the Company’s proposed tariff changes are intended to further
2 protect the *customer* and the public from possible cross contamination from the
3 customer’s irrigation system.
4

5 **Q. Does Staff have any concerns with the Company’s proposed tariff language?**

6 A. Staff has one minor concern. The proposed language in Section 3.6 (c) would
7 require a tenant to install appropriate backflow prevention equipment. In Staff’s
8 view, it is not reasonable to expect a tenant (i.e., non-property owner) to incur the
9 expense associated with the required installation. Staff recommends striking the
10 reference to “tenant” in Section 3.6 (c).
11

12 **Q. Does this conclude your direct testimony?**

13 A. Yes.

³ See Tidewater’s response to PSC-RD-15(c).

APPENDIX

Qualifications of Brian Kalcic

Mr. Kalcic graduated from Benedictine University with a Bachelor of Arts degree in Economics in December 1974. In May 1977 he received a Master of Arts degree in Economics from Washington University, St. Louis. In addition, he has completed all course requirements at Washington University for a Ph.D. in Economics.

From 1977 to 1982, Mr. Kalcic taught courses in economics at both Washington University and Webster University, including Microeconomic and Macroeconomic Theory, Labor Economics and Public Finance.

During 1980 and 1981, Mr. Kalcic was a consultant to the Equal Employment Opportunity Commission, St. Louis District Office. His responsibilities included data collection and organization, statistical analysis and trial testimony.

From 1982 to 1996, Mr. Kalcic was employed by the firm of Cook, Eisdorfer & Associates, Inc. During that time, he participated in the analysis of electric, gas and water utility rate case filings. His primary responsibilities included cost-of-service and economic analysis, model building, and statistical analysis.

In March 1996, Mr. Kalcic founded Excel Consulting, a consulting practice which offers business and regulatory services.

Mr. Kalcic has previously testified before the state regulatory commissions of Delaware, Kansas, Kentucky, Maine, Massachusetts, Minnesota, Missouri, New Jersey, New York, Ohio, Oregon, Pennsylvania, Texas, and the Bonneville Power Administration.

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Schedules Accompanying the
Direct Testimony of Staff Witness

BRIAN KALCIC

May 20, 2014

TIDEWATER UTILITIES, INC.

**Staff Recommended Allocation of its
Recommended Adjustment in Total Revenue
(Test Period Ending June 30, 2014)**

Line No.	Description	Company Pro Forma Revenue (1)	Staff Adjustments (2)	Staff Pro Forma Revenue (3)	Staff Recommended Increase (4)	Staff Recommended Revenue (5)	Percent Increase (6)
1	General Water Service	\$ 21,086,326	\$ (137,140)	\$ 20,949,186	\$ 944,434	\$ 21,893,620	4.51%
2	Public Fire Protection	1,863,736	(12,121)	1,851,615	0	1,851,615	0.00%
3	Private Fire Protection	976,304	(6,350)	969,954	0	969,954	0.00%
4	Contract Sales	1,261,117	0	1,261,117	50,107	1,311,224	3.97%
5	Connection Fees	1,541,077	0	1,541,077	61,229	1,602,306	3.97%
6	Other Operating Revenues	346,975	0	346,975	0	346,975	0.00%
7	Rounding	=	=	=	(12)	(12)	
8	Total Revenues	\$ 27,075,535	\$ (155,611)	\$ 26,919,924	\$ 1,055,758	\$ 27,975,682	3.92%

Source: Tidewater Sch. 8B, pg. 1
Sch. JRS-1 (1) + (2)
Sch. BK-2 (5) - (3)
(4) / (3)

TIDEWATER UTILITIES, INC.

**Staff Recommended Rates and Proof of Revenue
General Water Service and Contract Sales
(Test Period Ending June 30, 2014)**

Line No.	GWS Facility Charge	Meter Size	Test Period Customers	Test Period Bills	Present		Recommended	
					Rate	Revenue	Rate	Revenue
1		5/8	31,931	127,724	\$ 52.86	\$ 6,751,482	\$ 54.05	\$ 6,903,474
2		3/4	89	358	\$ 52.86	18,906	54.05	19,331
3		1	2,902	11,608	\$ 88.11	1,022,782	90.10	1,045,882
4		1 1/2	94	378	\$ 158.64	59,891	162.22	61,243
5		2	307	1,228	\$ 246.75	302,999	252.31	309,827
6		3	32	127	\$ 475.89	60,518	486.62	61,882
7		4	4	16	\$ 740.28	11,767	756.97	12,033
8		6	4	16	\$ 1,445.28	22,974	1,477.86	23,492
9		8	2	8	\$ 2,256.06	17,931	2,306.91	18,335
10						\$ 8,269,251		\$ 8,455,501
GWS Consumption Charge (1,000 gallons)								
11		Apartments & Comm.	163,844		\$ 8.1519	\$ 1,335,643	\$ 8.6393	\$ 1,415,501
12		GMS	517,432		\$ 7.9469	4,111,978	8.4221	4,357,862
13		5,001 - 20,000	629,685		\$ 8.0493	5,068,523	8.5306	5,371,590
14		Over 20,000	265,440		\$ 8.1517	2,163,790	8.6391	2,293,166
15		Total GWS				\$ 12,679,934		\$ 13,438,119
						\$ 20,949,185		\$ 21,893,620
Contract Sales								
Test Period (1,000 gallons)								
16		DAFB	87,261		\$ 11.8718	\$ 1,035,945	\$ 12.3435	\$ 1,077,106
17		Southern Shores	19,598		\$ 5.4335	\$ 106,486	\$ 5.6494	\$ 110,717
18		Oceanview	25,524		\$ 4.6500	\$ 118,687	\$ 4.8347	\$ 123,401
19		Total Contract Sales				\$ 1,261,117		\$ 1,311,224

TIDEWATER UTILITIES, INC.

**Staff Recommended Rates and Proof of Revenue
Public and Private Fire Protection, Connection Fees & Other Revenues
(Test Period Ending June 30, 2014)**

Line No.	Public Fire Protection	Test Period Customers	Test Period Bills	Present		Recommended	
				Rate	Revenue	Rate	Revenue
1	Total Public	30,676	122,705	\$ 15.09	\$ 1,851,615	\$ 15.09	\$ 1,851,615
Private Fire Protection - Facility Charge							
	Meter						
2	1"	1	4	\$ 28.67	\$ 115	\$ 28.67	\$ 115
3	2"	54	214	\$ 100.35	21,508	\$ 100.35	21,508
4	4"	131	524	\$ 425.28	222,810	\$ 425.28	222,810
5	6"	150	599	\$ 950.90	569,899	\$ 950.90	569,899
6	8"	23	92	\$ 1,691.55	155,623	\$ 1,691.55	155,623
7	Total Private	358	1,434		\$ 969,954		\$ 969,954
Connection Fees - Size & No. of Connections							
8	5/8" & 3/4"		1,043	\$956.45	\$ 997,577	\$ 994.45	\$ 1,037,211
9	1"		375	\$1,350.98	506,618	\$ 1,404.66	\$ 526,748
10	1.5"		2	\$2,379.19	4,758	\$ 2,473.72	\$ 4,947
11	2"		1	\$2,690.03	2,690	\$ 2,796.91	\$ 2,797
12	6"		2	\$14,716.93	29,434	\$ 15,301.65	\$ 30,603
13	Total Connection Fees				\$ 1,541,077		\$ 1,602,306
Other Revenues							
14	Turn on/Turn off				\$ 268,844		\$ 268,844
15	Penalty				53,307		53,307
16	Return Check				24,821		24,821
17	Service Fees				3		3
18	Total Other Revenues				\$ 346,975		\$ 346,975
19	Total Revenues				\$26,919,923		\$27,975,694