

Docket No. 15-2025-01  
DPU Exhibit 2.0  
William Duncan  
June 19, 2015

**- BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH -**

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<b>IN THE MATTER OF THE</b>	)	<b>DOCKET NO. 15-2025-01</b>
<b>APPLICATION OF DAMMERON</b>	)	
<b>VALLEY WATER WORKS, LLC FOR A</b>	)	<b>DPU Exhibit No. 2.0</b>
<b>CULINARY WATER RATE CASE AND</b>	)	
<b>AN EXPANSION OF SERVICE AREA</b>	)	

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**DIRECT TESTIMONY**

**OF**

**WILLIAM DUNCAN**

**DIVISION OF PUBLIC UTILITIES  
DEPARTMENT OF COMMERCE  
STATE OF UTAH**

**June 19, 2015**

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1 **Q. Please state your name, address and by whom you are employed.**

2 A. My name is William Duncan. I am Manager of the Telecommunications and Water  
3 Section for the Utah Division of Public Utilities (DPU). My business address is  
4 160 E. 300 South, Salt Lake City, Utah, 84111.

5 **Q. What is the purpose of your testimony?**

6 A. My testimony will describe the policies and guiding principles of the DPU in  
7 advocating a rate structure for water companies regulated by the Public Service  
8 Commission of Utah (Commission). My testimony will also address how the rate  
9 model utilized by the DPU achieves the DPU's policy objectives.

10 **Q. What are the DPU's main policy objectives?**

11 A. The DPU has several policy objectives defined in Utah Code section 54- 4a-6  
12 including:  
13 (1) Promote the safe, healthy, economic, efficient, and reliable operation of all  
14 public utilities and their services, instrumentalities, equipment, and facilities;  
15 (2) provide for just, reasonable, and adequate rates, charges, classifications, rules,  
16 regulations, practices, and services of public utilities;  
17 (3) Make the regulatory process as simple and understandable as possible so that it  
18 is acceptable to the public; feasible, expeditious, and efficient to apply; and  
19 designed to minimize controversies over interpretation and application;

20 (4) For purposes of guiding the activities of the Division of Public Utilities, the  
21 phrase “just, reasonable, and adequate” encompasses, but is not limited to the  
22 following criteria:

23 (a) Maintain the financial integrity of public utilities by assuring a sufficient and  
24 fair rate of return;

25 b) Promote efficient management and operation of public utilities;

26 (c) Protect the long-range interest of consumers in obtaining continued quality and  
27 adequate levels of service at the lowest cost consistent with the other provisions of  
28 Subsection (4).

29 (d) Provide for fair apportionment of the total cost of service among customer  
30 categories and individual customers and prevent undue discrimination in rate  
31 relationships;

32 (e) Promote stability in rate levels for customers and revenue requirements for  
33 utilities from year to year; and

34 (f) Protect against wasteful use of public utility services.

35 **Q. In satisfying the policy objectives set forth above, has the DPU set certain**  
36 **policy goals related to water companies?**

37 A. The DPU has two primary objectives or goals it hopes to achieve through the rate  
38 setting process for water companies. The first objective is promoting financial  
39 sustainability for the water company which will help ensure reliable service at just  
40 and reasonable rates.

41 The second objective of the DPU is to encourage water conservation. The DPU  
42 attempts to achieve these goals by adopting an increasing block rate structure for  
43 water usage, and separating recovery of fixed, system related costs from  
44 volumetric charges related to water usage.

45 **Q. Please describe how the DPU rate model promotes the goal of financial**  
46 **sustainability?**

47 A. The DPU rate model promotes this goal through these four principles:

48 1 – Customer rates generally should be set to recover all of the reasonable and  
49 prudent costs that the water company incurs in providing service. We discourage  
50 the practice of relying on developer subsidies to recover costs. The only deviation  
51 from this would be for a start-up company in the initial years of providing service  
52 that may need a developer subsidy until there are enough residents to support the  
53 company.

54 2 – Fixed costs are generally recovered through fixed rates. Water companies  
55 should not attempt to recover fixed costs through volumetric rates. These fixed  
56 costs should be divided between fixed standby costs and fixed user costs. Standby  
57 customer rates would include only the fixed system costs, and connected customer  
58 rates would include the fixed standby and the fixed user costs.

59 3 – Variable costs should be recovered through consumption rates. The basic  
60 consumption rate is set at the incremental cost of producing and delivering water.

61 4 – The establishment and continual funding of a capital reserve account.

62 **Q. Please explain what the capital reserve account is and how it is funded?**

63 A. The capital reserve account is a fund dedicated to the repair and replacement of  
64 infrastructure. It is funded from two sources. First, depreciation expense is one of  
65 the fixed costs that is recovered through standby rates. This expense is collected  
66 every month (or every other month in some cases) from both standby and  
67 connected customers. The DPU believes that these funds should be deposited  
68 monthly into the capital reserve account. The second funding source is from  
69 amounts billed in conservation rates that are over and above the incremental  
70 variable cost of providing service. Conservation rates will be discussed later in this  
71 testimony.

72 **Q. How does the capital reserve account contribute to the water company's financial**  
73 **sustainability?**

74 Establishment of a capital reserve account allows the water company to respond  
75 quickly to emergencies and reduces the need for special assessments and expedited  
76 rate cases in the event of infrastructure failure. If started early in the life of a  
77 company, it would reduce the need for borrowing to repair and replace  
78 infrastructure. The Commission has authority to require any public utility to  
79 establish such an account, see the Utah Code at Section 54-4-24.

80 **Q. How does the DPU promote its second major policy objective related to water**  
81 **companies of encouraging water conservation?**

82 A. The DPU rate model promotes water conservation in two ways:

83 First, the DPU proposes a base rate that does not include a minimum usage  
84 amount. For example, many water company rate schedules in the past have  
85 included a certain number of gallons included in the base rate – normally around  
86 6,000 to 12,000 gallons per month. This gives the consumer no incentive to use  
87 less than that minimum. The current DPU model proposes that a consumer pay the  
88 consumption rate for every 1000 gallons used per month up to the first 12,000 per  
89 month at the cost of producing that water. With this model a consumer using only  
90 3,000 gallons pays for only 3,000 gallons.

91 Second, the DPU proposes an increasing tier rate for usage over 12,000 gallons per  
92 month. These tiers would normally be priced as a 50% - 100% increase above the  
93 previous tier. These would be known as conservation rates or conservation tiers.  
94 For example, a normal progression may look like this, where \$1.00/1000 gallons  
95 represents the variable cost of production:

96	0 – 12,000 gallons/month	\$1.00 per 1000 gallons
97	12 – 24,000 gallons/month	\$1.50 per 1000 gallons
98	24 – 36,000 gallons/month	\$2.25 per 1000 gallons
99	36 – 48,000 gallons/month	\$3.38 per 1000 gallons
100	Above 48,000 gallons/month	\$5.06 per 1000 gallons

101 The DPU believes that a rate structure similar to this would encourage water  
102 conservation. Individual circumstances may cause the DPU to advocate a different  
103 rate progression.

104 **Q. Why does the DPU allow 12,000 gallons per month at cost for the first tier?**

105 A. The Division of Drinking Water estimates that .45 acre feet of water per year is  
106 needed for indoor use. Since an acre foot of water contains approximately 325,000  
107 gallons, then  $325,000 \times .45 = 146,250$  gallons annually.  $146,250/12 = 12,187$   
108 gallons/month is needed for a typical residential use. The DPU simply rounded that  
109 amount down to 12,000 gallons/month and uses multiples of that amount for the  
110 tiers.

111 **Q. Earlier in your testimony, you mentioned using these conservation rates as a**  
112 **funding source for the capital reserve account. Please elaborate.**

113 A. Since all variable costs of providing service are recovered in the consumption rate,  
114 amounts billed over that rate would be above cost. The DPU believes it is  
115 appropriate to transfer these incremental funds to the capital reserve account, since  
116 consumers using larger amounts of water are causing more wear and tear to the  
117 water system, and should contribute more funding for the repair and replacement  
118 of that infrastructure.

119 **Q. If the water company is collecting revenue above cost, does that constitute**  
120 **overearning?**

121 A. If the excess revenue were going to benefit the owners or shareholders of a  
122 company it would be considered overearning. However the DPU recommends that  
123 this revenue remain in the company, in the capital reserve account to benefit all  
124 customers.

125 **Q. Has the DPU used this rate model in this proceeding?**

126 A. Yes. The testimony of Mark Long will show the application of these polices and  
127 rate model in this proceeding.

128 **Q. Does that conclude your testimony?**

129 A. Yes.

130