DEPARTMENT OF PUBLIC SERVICE REGULATION
BEFORE THE PUBLIC SERVICE COMMISSION OF
THE STATE OF MONTANA

*****

IN THE MATTER OF Joint Application of Liberty Utilities Co., Liberty WWH, Inc., Western Water Holdings, LLC, and Mountain Water Company for Approval of a Sale and Transfer of Stock	REGULATORY DIVISION DOCKET NO. D2014.12.99

DIRECT TESTIMONY

OF

CRAIG CLOSE, HDR INC.

ON BEHALF OF

THE CITY OF MISSOULA

November 4, 2015

TABLE OF CONTENTS

I. INTRODUCTION AND RESUME 2
II. PURPOSE OF TESTIMONY 2
III. TESTIMONY 3
A. Mountain Water System Condition 3
B. Rate Impact of the Algonquin Sale 14
C. Analysis of the Algonquin Due Diligence Materials 20

EXHIBITS

A. Copy of Craig Close's trial testimony in *City of Missoula vs. Mountain Water Co., et al*
B. Photographs of site visit. This exhibit will be provided via thumbdrives
C. HDR Rate Analysis

I. INTRODUCTION AND RESUME

Q. PLEASE STATE YOUR NAME, EDUCATIONAL BACKGROUND, AND EMPLOYMENT EXPERIENCE WITH YOUR CURRENT EMPLOYER.

A. My name is Craig Close. I am a board certified environmental engineer through the American Academy of Environmental Engineers, and I am the Director of Utility Management Services for HDR Engineering Company ("HDR"). Formerly, I was the Vice President of Operations and Engineering for the Western Region of American Water Works Service Company, Inc., which served roughly 26 communities, 500,000 people, in four states. I have specialized, engineering expertise in the area of utility operation and management. *Tr. Transcr. 7:8-10-3 (March 23, 2015) (attached in full as Exhibit A).*

II. PURPOSE OF TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY TO BE SUBMITTED TO THE PUBLIC SERVICE COMMISSION?

A. The primary purpose of my testimony is to express concerns and opposition to continued private ownership of Mountain Water Company, due to inefficiencies, deferred maintenance, capital expenses, accelerated depreciation, and significant water leakage all significantly below industry standards. I will also address rate impacts based on continued private ownership versus public ownership and concerns raised upon review of the Algonquin due diligence materials.

III. TESTIMONY

A. MOUNTAIN WATER SYSTEM CONDITION

Q. HAVE YOU INVESTIGATED THE CURRENT CONDITION OF THE MOUNTAIN WATER COMPANY'S WATER DELIVERY SYSTEM?

A. Yes. HDR was hired by the City of Missoula to assess the condition of the Water System assets, review the financial operations of Mountain Water and compare those operations to industry standards. I led a team of professionals at HDR who completed this analysis, including an on-site inspection of the above ground assets of Mountain Water Company. *Tr. Transcr. 7:11-16 (March 23, 2015) (photos of the site visit and Mountain Water's assets are Exhibit B, included with this testimony on thumbdrives).*

Q. DID YOU IDENTIFY CONCERNS REGARDING THE FINANCIAL OPERATIONS OF MOUNTAIN WATER COMPANY?

A. Yes. Regulated utilities earn a profit (authorized rate of return on equity) on capital expenditures approved by the public service commission ("PSC"). Regulated utilities do not earn a profit on operational expenses. For every dollar spent on operations and maintenance ("O&M") costs, the utility gets a dollar back in rates. Regulated utilities only make a profit on O&M expenses if they come in under budget. *Tr. Transcr. 10:12-12:10 (March 23, 2015).*

Regulated utilities maximize profits by: (1) maximizing the amount that they capitalize (as opposed to categorizing as O&M) to earn a rate of return; and (2) maximizing depreciation which the utility takes as additional profit, (3) deferring routine maintenance, and (4) capitalizing maintenance activities (e.g. tank painting) and

utility plant cost of removals. *Tr. Transcr. 12:11-13:8 (March 23, 2015).* I found evidence of questionable capital expenditures and accelerated depreciation. *Tr. Transcr. 13:14-21:4 (March 23, 2015).*

Repairs, replacements, removals, supplies and office items should not be capitalized and should be scrutinized by the PSC. In reviewing capital expenditures, I noted items that were questionable in terms of what should be actually capitalized. *Tr. Transcr. 13:14-15:5 (March 23, 2015).*

The accruals charged to depreciation versus book cost of plant removals also leads to the conclusion that there was accelerated depreciation (i.e. additional profit) in the years 2010-2013. *Tr. Transcr. 15:6-21:4 (March 23, 2015).*

Q. DID YOU IDENTIFY CONCERNS RELATED TO THE CURRENT CONDITION OF MOUNTAIN WATER COMPANY'S WATER DELIVERY SYSTEM?

A. Yes. HDR physically inspected the assets of Mountain Water in order to complete the condition assessment. Counsel for Mountain Water, however, would not allow underground samples of Mountain Water's pipes or other buried assets. *Tr. Transcr. 153:19-154:10 (March 23, 2015).*

Almost 50% of the Water System mains are 45 years and older. And the main pipe materials are such that probably 20% of the Water System mains have exceeded their useful life. *Tr. Transcr. 24:2-5 (March 23, 2015).*

The piping and wells are the backbone of the system. There has been substantial deferred maintenance of these key assets. Mountain Water has not been replacing

assets as they are nearing or have reached the end of their useful life. As a consequence, the major assets are more susceptible to unexpected failures and service outages. *Tr. Transcr. 26:9-15 (March 23, 2015).*

A well run utility has leakage less than 15% by volume. Some states have set goals where they have to maintain water leakage or water loss less than 10%. The average, however, within the industry is 20 to 25%. Mountain Water's percentage of water loss is more than double the industry standard for leakage. *Tr. Transcr. 26:24-27:6 (March 23, 2015).*

Q. BASED ON YOUR REVIEW, WHAT IS THE CURRENT LEVEL OF LEAKAGE IN MOUNTAIN WATER'S SYSTEM?

A. Based on all the data received and evaluated as set forth in Mountain Water's own reports, the leakage at Mountain Water is likely over 50%, or in the range of 49% to 56%. *Tr. Transcr. 27:10-14 (March 23, 2015).*

Q. BASED ON HDR'S ASSESSMENT, HOW WOULD YOU RATE MOUNTAIN WATER'S WELLS?

A. Overall, the well assets are rated from fair to poor. Most of the pumping equipment is antiquated and is either reaching or has reached the end of its useful life. There was a substantial amount of seriously corroded piping. The HVAC systems were all in extremely poor condition and many need to be replaced immediately. There were considerable problems with the chemical feed systems. *Tr. Transcr. 31:17-32:1 (March 23, 2015).*

Mountain Water's own energy efficiency test records confirm the well pumps and booster pump are operating well below expected efficiency industry standards. *Tr. Transcr. 32:3-23, 76:7-78:15 (March 23, 2015).* There would be considerable cost savings if Mountain Water upgraded the well and booster pumps. *Tr. Transcr. 78:13-15 (March 23, 2015).* The photos admitted during the condemnation proceeding provide credible evidence of chronic deferred maintenance. *Tr. Transcr. 32:24-70:22 (March 23, 2015).* Capital investment in the range of $4 to $7 million is needed just to bring the wells up to reasonable industry standards. *Tr. Transcr. 70:4-8 (March 23, 2015).*

The employees have done a remarkable job of maintaining operation of these facilities, given the obvious limited resources (funding for both capital and O&M) authorized by the owners to properly maintain and prolong the life of the assets. *Tr. Transcr. 71:1-6 (March 23, 2015).*

It was obvious that Mountain Water requires a higher standard for developer contributed assets. *Tr. Transcr. 68:25-69:23 (March 23, 2015).* Pay backs to developers every year are added to the rate base and are passed through to the rate payers even if no additional customers or revenue are generated. Mountain Water also benefits from claimed depreciation on developer contributed assets that have been added to rate base through the payments to developers. *Tr. Transcr. 75:1-76:6 (March 23, 2015).*

Q. DID YOU IDENTIFY CONCERNS REGARDING THE NUMBER OF UNMETERED CUSTOMER'S IN MOUNTAIN WATER'S SYSTEM?

A. Yes. Industry standards dictate that all consumer connections should be metered for conservation and to better operate the system. *Tr. Transcr. 79:15-21 (March 23, 2015).*

A significant percent of customers (19%) remain unmetered. Most of the meters have been fully depreciated, which means the meters have reached or exceeded their useful life. Meters typically have a life of 15-25 years. The average age of Mountain Water's meters is over 20 years old. While 81% of the system is metered, only 40% of the water is being measured through meters. The large amount of unmetered use confirms the amount of leakage in the system and should be remedied to address leakage. *Tr. Transcr. 78:16-81:13 (March 23, 2015).*

The capital expenditures needed to fully meter the Water System and to bring the old meters up to industry standards is in the range of $16 to $20 million. *Tr. Transcr. 82:13-19 (March 23, 2015).*

Q. DID YOU IDENTIFY CONCERNS RELATED TO THE SERVICE LINES CONNECTING CUSTOMERS TO MOUNTAIN WATER'S SYSTEM?

A. Yes. Seventy-five percent of service lines are galvanized steel and have exceeded their useful life. Most of the service lines are greater than 50 years old. *Tr. Transcr. 83:1-84:5 (March 23, 2015).*

Mountain Water provided no support for the proposition that 50% of leakage is coming from the service lines. It would be almost impossible to get 2.25 billion gallons of water loss per year thought the service lines. *Tr. Transcr. 84:6-24 (March 23, 2015).*

Service lines do leak, however, and will be a continuously growing problem as the galvanized service lines continue to corrode and need to be replaced. *Tr. Trasncr. 85:3-8 (March 23, 2015).*

The cost of bringing service lines up to industry standards is in the range of $20 to $30 million. *Tr. Transcr. 85:9-15 (March 23, 2015).*

Q. DID YOU IDENTIFY CONCERNS RELATED TO MOUNTAIN WATER'S MAINTENANCE OF THE RATTLESNAKE DAMS AND INTAKE DAM?

A. Yes. HDR's inspection of the Rattlesnake Dams and Intake Dam revealed serious concerns related to leakage, seepage, slope stability, erosion of the embankments, and spillway problems. There is a significant risk of failure under peak flows. There is considerable risk of non-recoverable environmental damage to both the vegetation and particularly to the trout fishery habitat. *Tr. Transcr. 86:21- 90:8 (March 23, 2015).*

Mountain Water's Dam Inspection Reports performed by Hydrometrics confirmed HDR's findings and establish that Mountain Water has continually deferred recommended and necessary maintenance. *Tr. Transcr. 90:9-94:14 (March 23, 2015).*

On October 10, 2014, Hydrometrics provided Mountain Water a safety assessment of the top 10 safety priorities in need of immediate repair. These are the same safety recommendations from the annual inspections that had been repeatedly deferred. The cost of immediate repairs needed to bring the dams up to minimum safety standards is estimated to be $3 million. *Tr. Transcr. 90:9-94:14 (March 23, 2015).* HDR's overall recommendation, though, is that all the dams be notched and removed from service.

Q. HOW DOES THE LEAKAGE IN MOUNTAIN WATER'S SYSTEM COMPARE TO INDUSTRY STANDARDS?

A. Leakage of 50% or more is "unprecedented" in terms of the size, the amount of water by volume that Mountain Water is losing, and considering how small a system this is with only roughly 319 miles of main. The amount of leakage in Mountain Water's system is greater than I have seen anywhere across the country. *Tr. Transcr. 100:9-20 (March 23, 2015).*

Mountain Water is losing over 4 billion gallons of water per year. The amount of water loss worsened from 2013 to 2014. *Tr. Transcr. 101:9-102:16 (March 23, 2015).* Mountain Water loses more water than is delivers to customers or sells. Pumping this additional water that is lost to leakage costs ratepayers over $600,000 in power costs alone not to mention the additional rate of return on the significant additional wells that are need to pump this lost water. Mountain Water should not be able to earn a return on this additional unnecessary utility plant and should not be reimbursed for the excess power costs.

While Mountain Water has done some testing to identify leakage, they have only tested 27 miles of main which is less than 10% of the system. This is not a sufficient amount of testing to claim Mountain Water has identified the source of 50% leakage in the system. *Tr. Transcr. 103:11-104:10 (March 23, 2015).*

The American Water Works Association ("AWWA") has developed a software program for water companies to track leakage and compare themselves to similar agencies through what is referred to as an Infrastructure Leakage Index ("ILI") rating.

The average ILI rating per AWWA's study is 3.57. Mountain Water has an ILI rating of 18-20 range based upon factors including percent of volume water loss greater than 50%. Mountain Water is exceeding the data seen from other agencies across the country for both the ILI rating and water loss by volume. *Tr. Transcr. 104:25-109:7 (March 23, 2015).*

By all the available measures, Mountain Water is "off the scale" from what other agencies across the country are experiencing in terms of reasonable leakage. *Tr. Transcr. 109:8-111:10 (March 23, 2015).*

Any ILI rating above 8 indicates the need for immediate action to address the inefficient use of water as a resource, which creates a cost burden for rate payers. *Tr. Transcr. 111:11-112:4 (March 23, 2015).*

Mountain Water's ILI worksheets for 2010 show annual water loss of 4.2 to 4.6 billion gallons, non-revenue water loss by volume of 51.5% to 56.9% and ILI ratings of 18.76 to 21.28. *Tr. Transcr. 113:16-115:10 (March 23, 2015).*

Mountain Water's ILI worksheets for 2011 show annual water loss of 4.6 billion gallons, non-revenue water loss by volume of 55.7% and an ILI rating of 21.66. *Tr. Transcr. 116:2-22 (March 23, 2015).*

Mountain Water's ILI worksheets for 2012 show annual water loss of 4.5 billion gallons, non-revenue water loss by volume of 53.8% and an ILI rating of 20.47. *Tr. Transcr. 116:23-117 (March 23, 2015).*

Mountain Water's ILI worksheets for 2013 show annual water loss of 4.2 billion gallons, non-revenue water loss by volume of 49.4% and an ILI rating of 18.77. *Tr. Transcr. 117:21-118:13 (March 23, 2015).*

Mountain Water is producing more water that is leaking into the ground than they are actually selling to their customers. *Tr. Transcr. 81:1-3 (March 23, 2015).*

Q. IS MOUNTAIN WATER USING EXCESS WELLS IN ORDER TO COMPENSATE FOR LEAKAGE?

A. Yes. Mountain Water has built up excess wells, which are added to the rate base causing excess operational costs, in order to compensate for leakage. *Tr. Transcr. 72:10-74:1 (March 23, 2015).*

Mountain Water has invested and put into capital and into rate base millions of dollars' worth of additional facilities just to pump water for leakage. The cost to customers is significant. First, there is the profit Mountain Water earns on the rate of return on the extra capital investment in excess wells. Plus, over $600,000 is being spent on pumping the water that is mostly going back into the ground, in addition to all the maintenance costs to maintain the extra well facilities. *Tr. Transcr. 72:17-73:6 (March 23, 2015).*

If the leakage were to be fixed, Mountain Water would not need all the wells in current operation, which would reduce costs. Closing wells would reduce rate base, reduce the rate of return, and reduce customer rates. *Tr. Transcr. 73:7-74:1 (March 23, 2015).*

Q. DID YOU IDENTIFY CONCERNS RELATED TO LACK OF SUFFICIENT STORAGE IN MOUNTAIN WATER'S SYSTEM?

A. Yes. The Water System barely has enough storage. Mountain Water is also using excess wells to augment the lack of storage and to support fire flows. *Tr. Transcr. 74:2-25 (March 23, 2015).*

Q. DOES THE AMOUNT OF LEAKAGE IN MOUNTAIN WATER'S SYSTEM CREATE CONCERNS REGARDING CONTAMINATION?

A. Yes. Given the amount of leakage, there is a concern that leaking water may convey ground contaminants down into the aquifer. *Tr. Transcr. 181:25-184:13 (March 23, 2015).*

Q. IS MOUNTAIN WATER NON-COMPLIANT WITH INDUSTRY STANDARDS RELATED TO WATER LEAKAGE?

A. Yes, Mountain Water in not compliant with industry standards related to water leakage. Mountain Water's historic and current water loss far exceeds and is considerably worse than industry standards. *Tr. Transcr. 119:15-23 (March 23, 2015).*

Q. IS MOUNTAIN WATER IN VIOLATION OF INDUSTRY STANDARDS RELATED TO CAPTIAL INVESTMENT INTO PHYSICAL STRUCTURES?

A. Yes, Mountain Water is violating industry standards related to capital investment into physical structures. Mountain Water is behind in terms of making capital investment into their critical assets which are the backbone of the system. There is an obvious need for capital investment to bring the system up to industry standards. *Tr. Transcr. 119:24-120:8 (March 23, 2015).*

Q. IS MOUNTAIN WATER NON-COMPLIANT WITH INDUSTRY STANDARDS RELATED TO MAINTENANCE PRACTICES?

A. Yes, Mountain Water is not compliant with industry standards relating to maintenance practices. Mountain Water is not meeting industry standards regarding maintenance practices. There is a considerable amount of deferred maintenance. Substantial, routine maintenance is needed. *Tr. Transcr. 120:9-16 (March 23, 2015).*

The owners of Mountain Water have underfunded capital improvements. *Tr. Transcr. 120:17-22 (March 23, 2015).*

A considerable amount of capital investment is needed to bring the system up to industry standards. The ranges estimated include:

a. Wells: $3.7 to $6.9 million

b. Booster stations: $930,000 to $1.8 million

c. Pipelines: $25 to $34 million

d. Service Lines & meters: $30 to $40 million

Investment in the total range of $66 to $95 million is needed just to catch up and bring the system up to industry standards. *Tr. Transcr. 121:10-22 (March 23, 2015).*

Q. GIVEN THE CONDITION OF MOUNTAIN WATER'S SYSTEM, IS THERE AN INCREASED RISK OF SYSTEM FAILURES?

A. Yes. There is a high risk of failures given the age, leakage and material type of Mountain Water's primary assets. The concern is that you have a major main break, rupture, that could blow out a road, damage property, or injure people. *Tr. Transcr. 184:15-185:12 (March 23, 2015).*

B. RATE IMPACT OF THE ALGONQUIN SALE

Q. WILL CUSTOMER RATES BE AFFECTED IF THE PSC APPROVES THE PROPOSED SALE?

A. Yes. In response to the data requests, Western Water, Mountain Water, and Liberty repeatedly assert that the proposed sale will not affect Mountain Water's rates and that Liberty will not seek an acquisition adjustment if the sale is approved (*See, e.g.*, WWH/MWC's and Liberty's responses to CITY-002 through CITY-006 and Liberty's response to CITY-014, CITY-021, and CITY-023). Liberty, for example, claims: "For purposes of this docket . . ., the costs borne by Mountain Water will not be affected because its rates will not be adjusted as part of this acquisition." (Liberty's response to CITY-014.) These assertions are misleading.

No prudent prospective owner of a water utility would make such an investment unless it could recover its acquisition cost. The only potential mechanisms through which a water utility can generate revenue in order to recover those costs are (1) rates charged to customers; (2) selling assets outside of what is in the rate base (e.g., surface water rights, wells put out of service, etc.); (3) reducing staff, capital expenditures, or operations and maintenance costs; (4) separating the production side of the system (e.g., wells) in order to create a wholesale company that sells water to different purveyors, including the current Mountain Water service area; (5) offering non-regulated services to customers; or (6) re-selling the system at a higher price—i.e. "flipping" it, as Carlyle is attempting to do with this proposed sale. Liberty has repeatedly stated that it wishes to be the long-term owner of the water system and does not intend to flip the water

system. Assuming this representation is true, the only way for Liberty to recover its acquisition cost is through rate increases, selling off assets outside the rate base, cutting capital expenditures and other costs, or creating a new wholesale company. Of these scenarios, rate increases is certainly Liberty's most likely avenue for recovering the acquisition cost. Indeed, as Liberty acknowledges in its briefing related to PSC-033(b): "The impact of Liberty's ownership will be dealt with fully in future rate cases . . . ." (Liberty's Response to the City's Motion to Compel a Response to PSC-031(a) and PSC-033(b), p. 6.)

Q. WHAT WOULD THE RATE IMPACT BE IF THE ALGONQUIN PURCHASE WAS APPROVED BY THE PSC?

A. There would need to be substantial rate increases if the PSC approves the Algonquin transaction. In October 2014 the City of Missoula requested that HDR prepare a proforma rate analysis of the Mountain Water to determine the range of the anticipated water rate increases if Algonquin Power and Utilities Corp. ("Algonquin") were to purchase the system at a price of $100 million, or if the Carlyle Infrastructure Partners LP continued private ownership. HDR developed financial models to reflect four different ownership scenarios, including three private ownership options and one city (public) ownership option. Each of the three private ownership options included the same level of annual capital investment as the public ownership option. The memo this testimony is based upon is provided, in-full, including all assumptions and outputs, in Appendix C.

In developing the models, HDR considered the ownership scenario and the regulatory environment in which rates would be set. The primary difference between a privately owned utility and a government-owned (public) utility is the method in which capital investment is recovered. For a privately owned utility, a debt to equity ratio of 60% debt to 40% equity must be maintained and the rate of return on the investment is set by the regulatory agency. For a government-owned (public) utility where capital is funded with bond proceeds, the same ratios do not need to be met and only the debt service and any other bond covenant must be met. This tends to make the government-owned utility scenario cheaper to the rate payer when compared to a privately owned utility scenario.

Based on the two different types of ownership being considered for the models, HDR considered two different approaches - the utility basis approach and the cash-needs approach. For private ownership with regulatory oversight, the utility basis approach is described by AWWA's Principles of Water Rates, Fees and Charges (M1 Manual), as "typically mandated for Investor-owned water utilities," The utility basis approach considers expenses including taxes, rate base, depreciation and rate of return. HDR used this approach for the private ownership model.

For the government-owned scenario, the cash-needs approach, which is described in the M1 Manual, as being "used by government-owned utilities" and represents the "total revenues required by the utility to meet its annual cash expenditures," was used. The cash-needs approach considers expenses, not including taxes, debt service and debt service coverage and no depreciation.

In each of the scenarios the basis for the 2012 and 2013 costs is primarily the Mountain Water Company PSC Annual Reports, with a few modifications as recommended by City of Missoula staff.

HDR developed two models to evaluate water rate impacts under two different capital scenarios. The first model assumes capital investments of $90 million annualized over 10 years, while the second model assumes capital investments of $60 million annualized over 10 years. The model evaluates rate impacts for the four different ownership scenarios, listed as Options 1 - 4. The capital scenarios are designated as (A) and (B). With the exception of the capital investment amounts, the assumptions and structure of the two models are the same.

Options 1 -4, described below:

Option 1 (A&B): Reflects a Utility Basis Approach as defined by the M1 Manual. Assumes that Rate Base is increased by the difference in a $100 million purchase price and the existing rate base; includes additional $6 Million to $9 Million in annual capital investment over the 10-year period.

Option 2 (A&B): Reflects a Utility Basis Approach as defined by the M1 Manual. Assumes the difference in the purchase price of $100 million and the existing rate base is amortized over 30 years (included in Acquisition Adjustment); Includes additional $6 Million to $9 Million in annual capital investment over the 10-year period.

Option 3 (A&B): Reflects a Utility Basis Approach as defined by the M1 Manual. Assumes that the purchase price is not allowed in Rate Base;

includes additional $6 Million to $9 Million in annual capital investment over the 10-year period.

Option 4 (A&B): Reflects a Cash Basis Approach as defined by the M1 Manual. Assumes the city purchases the system at a cost of $50 million; therefore debt service is estimated for both the purchase price and an additional $6 Million to $9 Million in annual capital investment over the 10-year period.

The summary of the models is provided in Table 1. As can be seen from the summary, Option 1 generates the need for the highest rate increase in 2015. This is due to the increase of $100 million to the rate base. Option 2 generates the next highest rate increase in 2015. Again in this option the increase is caused by the purchase price being included in the rate base. Option 4 results in the lowest rate impacts for the system.

Table 2 shows a comparison of sample bills resulting from the projected rates for 2015 for each of the Options. Table 3 shows the projected increase in rates over the previous year. Sample bill results for 2016 through 2024 can be found within the model. Copies of each of the models are attached to the memo for reference.

Essentially, it can be deduced from the results that the city-owned scenario provides the lowest rate impact due to the lower revenue requirement. In fact, under Option A ($90 million in capital investment), there will be no need for a rate increase for seven years. Further, under Option B ($60 million in capital

investment), there will be no need for a rate increase for more than ten years. In the privately-owned scenarios the revenues requirements are about $17 million plus the return on rate base while in the government-owned scenario the revenue requirements are about $14 million plus coverage. In effect, private ownership requires rate increases from day one.

TABLE 1

Summary of Options

Item	2015	2016	2017	2018	2019
Rate Base Comparison					
Option 1	$ 105,998,031	$ 113,417,254	$ 120,939,185	$ 128,556,474	$ 136,261,328
Option 2	$ 48,792,269	$ 54,211,492	$ 61,733,423	$ 69,350,712	$ 77,055,566
Option 3	$ 44,760,691	$ 52,169,914	$ 59,691,845	$ 67,309,134	$ 75,013,988
Option 4	n/a	n/a	n/a	n/a	n/a
Rate of Return Comparison					
Option 1	$ 9,804,818	$ 10,491,096	$ 11,186,875	$ 11,891,474	$ 12,604,173
Option 2	$ 4,328,285	$ 5,014,563	$ 5,710,342	$ 6,414,941	$ 7,127,640
Option 3	$ 4,139,439	$ 4,825,717	$ 5,521,496	$ 6,226,095	$ 6,938,794
Option 4	n/a	n/a	n/a	n/a	n/a
Debt Service Coverage					
Option 4	2.31	2.04	1.90	1.75	1.65
Percentage Rate Increases (increases applied to minimum & volume charges)					
Option 1	35.90%	4.35%	4.25%	4.16%	4.06%
Option 2	9.31%	5.57%	5.36%	5.20%	5.04%
Option 3	8.40%	5.62%	5.43%	5.25%	5.08%
Option 4	0.00%	0.00%	0.00%	0.00%	0.00%
Revenue Requirement					
Option 1 (incl. depr & taxes)	$ 18,672,860	$ 19,400,555	$ 20,162,220	$ 20,959,591	$ 21,794,497
Option 2 (incl. depr & taxes)	$ 18,672,860	$ 19,400,555	$ 20,162,220	$ 20,959,591	$ 21,794,497
Option 3 (inc. depr & taxes)	$ 18,672,860	$ 19,400,555	$ 20,162,220	$ 20,959,591	$ 21,794,497
Option 4 (incl. Debt Service)	$ 14,182,921	$ 15,110,620	$ 15,760,833	$ 16,501,720	$ 17,111,633

TABLE 2

Sample Bill Comparison

Item		Current Rates	2015 Rates Option 1	Option 2	Option 3	Option 4
Residential 5/8" Meter	Cubic Feet					
	10	$ 37.30	$ 50.73	$ 40.61	$ 40.46	$ 37.22
	20	$ 57.36	$ 77.95	$ 62.78	$ 62.18	$ 57.36
	50	$ 117.45	$ 159.61	$ 128.38	$ 127.31	$ 117.45
	100	$ 217.69	$ 295.71	$ 237.86	$ 235.97	$ 217.69
Business - 1" meter						
	25	$ 89.37	$ 121.44	$ 97.69	$ 98.87	$ 89.37
	50	$ 139.44	$ 189.50	$ 152.43	$ 151.15	$ 139.44
	75	$ 189.52	$ 257.55	$ 207.16	$ 205.43	$ 189.52
Public Authority - 2" meter						
	400	$ 921.11	$ 1,251.77	$ 1,006.89	$ 998.45	$ 921.11
	500	$ 1,121.41	$ 1,523.97	$ 1,225.85	$ 1,215.57	$ 1,121.41
	650	$ 1,421.86	$ 1,932.27	$ 1,554.28	$ 1,541.24	$ 1,421.86
Irrigation - 1" meter						
	400	$ 840.49	$ 1,142.21	$ 918.75	$ 911.08	$ 840.49
	500	$ 1,040.79	$ 1,414.41	$ 1,137.72	$ 1,128.18	$ 1,040.79
	650	$ 1,341.24	$ 1,822.71	$ 1,466.15	$ 1,453.85	$ 1,341.24

TABLE 3

Increase / (Decrease) in Sample Bills

Item		Current Rates	2015 Rates Option 1	Option 2	Option 3	Option 4
Residential 5/8" Meter	Cubic Feet					
	10		$ 13.43	$ 3.48	$ 3.13	$ -
	20		$ 20.59	$ 5.34	$ 4.82	$ -
	50		$ 42.16	$ 10.94	$ 9.86	$ -
	100		$ 78.11	$ 20.26	$ 18.27	$ -
Business - 1" meter						
	25		$ 32.08	$ 8.32	$ 7.50	$ -
	50		$ 50.06	$ 12.99	$ 11.71	$ -
	75		$ 68.03	$ 17.65	$ 15.91	$ -
Public Authority - 2" meter						
	400		$ 330.66	$ 85.78	$ 77.34	$ -
	500		$ 402.56	$ 104.44	$ 94.16	$ -
	650		$ 510.41	$ 132.42	$ 119.38	$ -
Irrigation - 1" meter						
	400		$ 301.72	$ 78.27	$ 70.57	$ -
	500		$ 373.62	$ 96.93	$ 87.39	$ -
	650		$ 481.47	$ 124.91	$ 112.61	$ -

1

2 *C. ANALYSIS OF THE ALGONQUIN DUE DILIGENCE MATERIALS*

3 **Q. UPON REVIEW OF THE ALGONQUIN DUE DILIGENCE**

4 **MATERIALS, DO YOU HAVE ANY CONCERNS REGARDING THE**

5 **PROPOSED TRANSACTION?**

A. Yes. Upon review of the materials provided by Algonquin, I believe this transaction will harm the consumer. [redacted]

1 [redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

1 [redacted]

[redacted]	[redacted]

[redacted]

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

[redacted]

17

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

| | | |

1 [redacted]

[redacted]

15

16 **Q. DO YOU BELIEVE YOU HAVE HAD AN OPPORTUNITY TO REVIEW ALL**

17 **THE DOCUMENTS THAT ARE RELEVANT TO THIS MATTER AND YOUR**

18 **TESTIMONY?**

1 **A.** No. Western Water, Mountain Water, and Liberty have withheld broad
2 categories of documents that are relevant to the matters I have discussed above. I
3 respectfully request that the PSC allow me to supplement my testimony if the PSC
4 compels Western Water, Mountain Water, or Liberty to fully respond to the data
5 requests in this case.

CERTIFICATE OF SERVICE

This is to certify that the foregoing was duly served by mail and email upon the following counsel of record at their addresses this 6th day of November 2015:

Thorvald A. Nelson Nikolas S. Stoffel Holland & Hart LLP 6380 South Fiddlers Green Circle Suite 500 Greenwood Village, CO 80111 tnelson@hollandhart.com nsstoffel@hollandhart.com	Michael Green John M. Semmens CROWLEY FLECK PLLP 100 North Park, Suite 300 P.O. Box 797 Helena, MT 59624-0797 mgreen@crowleyfleck.com jsemmens@crowleyfleck.com
Robert Nelson Monica Tranel Montana Consumer Counsel 111 North Last Chance Gulch, Suite 1B P.O. Box. 201703 Helena, MT 59620-1703 robnelson@mt.gov mtranel@mt.gov	Laura Farkas Jeramiah Langston Public Service Commission 1701 Prospect Avenue Helena, MT 59620-2601 lfarkas@mt.gov jlangston@mt.gov **ORIGINAL SENT VIA OVERNIGHT DELIVERY**

Kate M. Palmer