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BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF GEM STATE WATER COMPANY LLC'S APPLICATION FOR AN ORDER AUTHORIZING AN INCREASE IN ITS RATES AND CHARGES FOR WATER SERVICE IN THE STATE OF IDAHO	**CASE NO. GSW-W-22-01** **COMMENTS OF THE COMMISSION STAFF**

The Staff of the Idaho Public Utilities Commission ("Commission") comments as follows on Gem State Water Company, LLC's Application.

BACKGROUND

On July 21, 2022, Gem State Water Company, LLC ("Company" or "Gem State Water") filed an Application requesting Commission authorization to increase its rates and charges for water service. The Company is a wholly owned subsidiary of NW Natural Water Company, LLC ("NW Natural Water"), which itself is a wholly owned subsidiary of NW Natural Holdings Company ("NW Natural"). As of September 1, 2022, the Company served 1,040 customers.

The Company requested its Application be processed by Modified Procedure and that any changes to its rates and charges be effective for bills rendered on or after September 1, 2022. The Company stated its proposed rate increase would increase Company revenues by $402,000 or 69.9%. Application at 1.

The Company requested to incorporate the partial consolidation of rates into four systems and incorporate proposed rates for the 1 1/2-inch and 2-inch meter customers. The proposed consolidation of rates and charges also applies to minimum customer volumes. Application at 1 and 2.

On September 6, 2022, the Commission issued a Notice of Application, a Notice of Intervention Deadline, and a Notice of Suspension of the Proposed Effective Date for 30 days plus five months under *Idaho Code* § 61-622. Order No. 35498. No party intervened in this case.

STAFF REVIEW

Overview

Commission Staff ("Staff") recommends a total revenue requirement of $682,248, an increase in the Company's annual revenues of $107,648 or 18.7%. This revenue requirement is based on a 9.5% Return on Equity ("ROE") and a hypothetical capital structure consisting of 45% debt and 55% equity for a Weighted Average Cost of Capital ("WACC") of 7.41% applied to net rate base of $944,552.

System Descriptions

Between 2019 and 2021, the Company acquired eight small non-contiguous water systems located along a corridor of land between Athol, Idaho to the north and Coeur d'Alene, Idaho to the south. The systems are briefly described below, moving from the northernmost system to the southernmost.

Spirit Lake East ("SLE") is north and west of Athol and was acquired in 2019. It serves 344 connections to residences on ten-acre forested parcels.

Lynnwood Estates ("LE") is on the northern edge of Athol and was acquired concurrently with SLE in 2019. It serves 47 connections to residences on five-acre forested parcels.

Bitterroot ("BR") is located about four miles south of Athol and was acquired in 2020. It serves 129 connections to residences on five-acre parcels. BR is physically interconnected with the Rickel Water ("RW") system.

RW is immediately south and east of BR, and was acquired concurrently with BR. It serves 39 connections to residences on five-acre parcels.

Bar Circle "S" ("BCS") is about eight miles south of BR and was acquired in 2019. It serves 253 connections to residences on five-acre parcels, as well as Garwood Elementary School.

Diamond Bar Estates ("DB") is about three miles south of BCS, and four miles east of Rathdrum, Idaho. It was acquired concurrently with BR in 2019. It serves 57 connections to residences on five-acre flat parcels.

Happy Valley ("HV") is about five miles southwest of DB, and five miles northwest of Coeur d'Alene. It was acquired concurrently with BR and RW in 2020. It consists of 24 connections to residences on five and ten-acre flat parcels.

Troy Hoffman ("TH") is located within the Coeur d'Alene city limits between Fourth and Fifteenth Street, and Dalton Avenue and Day Road. It was acquired in 2021 and consists of 147 connections to residences on 1/4-acre parcels.

The eight systems are in various stages of readiness. Only BCS appears to be fully compliant with the Idaho Department of Environmental Quality ("DEQ") standards for community water systems. The other seven systems will require various levels of investment to bring them into full compliance with DEQ. Four systems (SLE, LE, HV, TH) will require a backup well to be drilled. Five systems (SLE, LE, BR, RW, HV) cannot meet the Maximum Day Demand ("MDD") requirement if one pump fails. Six systems (LE, BR, RW, DB, HV, TH) need emergency power and water storage upgrades to enhance service reliability and fire protection capabilities. Most systems have manually read meters that cannot be accessed in the winter, and some meters have access problems throughout the year. All of the systems will require substantial future investments to become fully compliant and reliable.

The needed improvements notwithstanding, many system deficiencies have been corrected by the Company since it assumed ownership. Extensive electrical repairs were completed to the DB pumps in compliance with Order No. 33578.[1] Response to Staff Production Request No. 20. In addition, the Company has constructed a backup well in the DB system and other related deficiencies have been addressed with the DEQ, in compliance with Order No. 34416.[2] Response to Staff Production Request No. 21. For the BR system, a Water Facility Plan has been conditionally approved by the DEQ, thereby eliminating the system's disapproved status, in compliance with Order No. 34616.[3] Response to Staff Production Request No. 22. For the TH

[1] Case No. DIA-W-15-01.
[2] Case Nos. DIA-W-19-01 and BCS-W-19-01 Acquisition by Gem State Water for Transfer of CPCN No. 413 and 296 were filed concurrently.
[3] Case No. GSW-W-19-01 Approval of Acquisition of Assets of Happy Valley and Bitterroot Amendment of CPCNs.

system, the Company completed a meter replacement program to address the issue of inaccessible meters. Response to Staff Production Request No. 23 at 3.

Allocation Method

In its Application, the Company used the number of customers to allocate costs over the different water systems. This method is common among small water utilities and is the method Staff used to allocate its adjustments. The Company has eight regulated water systems in Idaho, making up 65% of its total customers, and two systems that are not regulated by the Commission which make up the reaming 35%. Table No. 1 – Allocation Method.

Table No. 1 – Allocation Method

No.	Water Systems	Customers	Composition
1	Spirit Lake	344	22%
2	Lynnwood Estates	47	3%
3	Bitterroot	129	8%
4	Rickel	39	2%
5	Bar Circle "S"	253	16%
6	Diamond bar Estates	57	4%
7	Happy Valley	24	1%
8	Troy Hoffman	147	9%
	Total Regulated ID	**1,040**	**65%**
9	Gem State Infrastructure ("GSI")	515	32%
10	Pelican Point – Washington State	47	3%
	Total	**1,602**	**100%**

Revenue Requirement

Revenues

Staff recommends a total revenue requirement of $682,248, which is an 18.7% increase in billed revenue, and a total expense allowance, including taxes and depreciation, of $598,651. The Company's test year revenue included $574,600 in billed metered residential revenue. Staff does not propose any adjustments to the Company's test year revenues. Attachment No. 1, lines 2-5.

Operating Expenses

Salary

In its Application, the Company included pro forma employee costs. The Application outlines the amount charged to all entities included in Table No. 1. Staff used the 65% customer allocation factor for Idaho regulated entities and included the amounts allocated to Idaho only. The Company included seven employees, five full-time and two part-time. One of the part-time employees is not employed year-round. The Company also included a pro forma adjustment of 364 hours of overtime, $300 in other compensation, insurance expense, and a matching 401(k) expense.

Staff recommends several adjustments to the Company's salary expense. First, Staff recommends an adjustment to overtime hours reducing overtime pay. Second, Staff recommends an adjustment to actual salaries based on hours and the ability to hire. Third, Staff recommends an adjustment to the workers' compensation premium calculation. Lastly, Staff recommends adjusting the Company's 401(k) matching expense to the actual expenses incurred during the test year. The combined adjustments remove $50,921 from the Company's payroll expenses. The details of each adjustment are described in more detail below and outlined in Table No. 2 – Salary Adjustment. Attachment No. 1 – Staff Adj. No. 1.

Table No. 2 – Salary Adjustments

Overtime Adjustment	$(6,255)
Employee Time and Hiring Adjustment	$(27,169)
Insurance Expense Adjustment	$(8,568)
Workers' Compensation Premium Adjustment	$(1,660)
401(k) Match to Actual Adjustment	$(4,685)
Other Salary Adjustment – Payroll Taxes	$(2,584)
Total	**$(50,921)**

Overtime Adjustment

In response to Production Request No. 45, the Company stated that it had overstated the pro forma overtime hours. Instead of 364 hours of overtime, the Company stated that 132 hours would be more accurate because several employees are on a salary and do not receive overtime pay. Using the 132 overtime hours instead of 364 reduces the Company's overtime payroll expense by $6,255.

Employee Time and Hiring Availability

The Company included a part-time office administrative assistant and a part-time seasonal employee in its pro forma payroll calculations. The Company calculated the hours for the part-time office position at 40 hours per week for the entire year. Because this is a part-time position, Staff reduced the hours to 30 hours per week. Additionally, in the summer of 2022, the Company was unable to fill the seasonal employee position. One of the significant functions of this position was to assist with reading meters. As the Company moves to radio-read meters the need for this employee will decrease. Because the Company was unable to fill this position, Staff recommends removing this employee's salary from payroll expenses. The effect of this adjustment reduces the Company's payroll expense by $27,169 and decreases insurance expense by $8,568.

Worker's Compensation Premium

In calculating the worker's compensation premium for its employees, the Company used two different rates: one for the office staff and one for the field staff. The Company applied the office staff rate for half of the salary of the billing administrator and the field staff rate for the other half. The Company also applied the field staff rate to the part-time office employee. Because the job duties of the billing administrator and part-time office employee do not include any field work, Staff recalculated the worker's compensation premium for these two employees at the office rate, which reduces the expense by $1,660.

401(k) Match Contributions

In its proposed revenue requirement, the Company included a pro forma adjustment to its 401(k) matching contributions. Staff opposes this adjustment because the amount is not known and measurable. The amount of future 401(k) contributions subject to the employer matching contributions cannot be calculated with any certainty as employees can change their contribution rate throughout the year. Additionally, employees can discontinue their own 401(k) contributions; therefore, they would not be eligible to receive a company matching contribution. In Order No. 29838, the Commission confirmed that 401(k) matching contributions are not known and measurable. Therefore, Staff removed the pro forma amount and recommends the Company recover the actual 401(k) matching contributions incurred during the test year. This adjustment reduces the Company's payroll expenses by $4,685.

Payroll Taxes

Adjustments to payroll expenses have a corresponding adjustment to payroll taxes. The net impact of the payroll adjustments above also reduces the Company's payroll taxes by $2,584.

Lease Adjustment

In its Application, the Company included a pro forma lease expense of $48,000 for renting office space. In response to Staff's Production Request No. 7, the Company attached a copy of the lease agreement signed in August of 2022 with an annual lease amount of $20,592. Staff adjusted the Company's rental property and equipment expense account by $27,408, the difference in pro forma lease amount requested and the actual lease amount. Attachment No. 1 – Staff Adj. No. 2.

Water Testing

Water testing requirements vary from year to year with the least frequent test required every nine years. It has been standard practice to calculate expenses using a nine-year rotation schedule, which essentially averages the annual recovery over the nine-year period. The Company reported $1,623 in water testing expenses during the test year. Staff calculated the annual amount to be recovered over a nine-year period to be $5,664, therefore, Staff proposes an adjustment to increase the Company's water testing expenses by $3,741. Attachment No. 1 – Staff Adj. No. 4.

Depreciation

The Company reported net depreciation expense of $114,917. After evaluating the Company's depreciable assets, Staff adjusted the depreciation life of 24 different plant assets to better align with National Association of Regulatory Utility Commissioners ("NARUC") depreciation rates. The sum of these adjustments resulted in a net depreciation expense adjustment of $40,230. Attachment No. 1 – Staff Adj. No. 6 and Attachment No. 2 – Depreciation Adjustment.

Miscellaneous Expense

The Company included $49,021 in Miscellaneous expenses in the test year, of which $40,749 was in one account titled "General Operating Expenses (Wash)." The Company stated that these expenses were mostly a double counting of expenses for its Pelican Point water system located in Washington. Staff recommends that these expenses be removed from the Company's revenue requirement as Idaho customers should not pay for expenses of a Washington system. This adjustment reduces operating expenses by $40,749. Attachment No. 1 – Staff Adj. No. 10.

Geographic Information System ("GIS")

The Company started a GIS project to map all its water systems. GIS provides many benefits but, due to poor record keeping for the systems prior to the Company's ownership, mapping all the water systems will be a long-term project. The Company stated that 17% of the Operator 1's work time has been solely committed to this project. Staff recommends adjusting 17% of the Operator 1's payroll expenses and recording them to Construction Work in Progress until the project is completed and placed in service. Table No. 3 – GIS Labor Adjustment. Staff recommends $8,101 of Operator 1's salary, insurance benefits, workman's compensation premium, and payroll taxes be capitalized and recovered after the GIS project is complete and functional. Attachment No. 1 – Staff Adj. No. 11.

Table No. 3 – GIS Labor Adjustment

GIS Labor Adjustment	$(6,037)
GIS Employee Benefits Adjustment	$(1,620)
GIS Other Salary – Payroll Tax Adjustment	$(444)
Total	**$(8,101)**

Gross Revenue Conversion Factor

The gross revenue conversion factor is based on revenue-sensitive items that change as revenue changes, including uncollectibles, Commission regulatory fees, Idaho state income taxes, and federal income taxes. The gross revenue conversion factor converts the Company's net operating deficiency into the additional revenues necessary to collect from customers to earn its authorized rate of return after accounting for all the revenue-sensitive items previously mentioned. Staff adjusted the Company's gross revenue conversion factor to account for various changes. In calculating the gross revenue conversion factor, the Company used an outdated Commission assessment rate of 0.2529%. In Order No. 35372, issued on April 14, 2022, the Commission approved an assessment rate of 0.1995%. Staff recommends using the current assessment rate of 0.1995% for the gross revenue conversion factor. Additionally, the Company included a 6% Idaho corporate tax rate in its calculations. On September 1, 2022, House Bill 1 reduced the corporate tax rate to 5.8%. Staff recommends using the Idaho state tax rate of 5.8% for gross revenue conversion factor calculation. Table No. 4 below shows the calculation of Staff's recommended gross revenue conversion factor.

Table No. 4 – Gross Revenue Conversion Factor

Line No.			**Application**		**Staff Adj**
1	Total Gross Revenues		1.000000		1.000000
2	**Less Regulatory Fees (percentage)**		**0.002529**		**0.001995**
3	Net Revenue		0.997471		0.998005
4	**State Income Tax**	**6.0%**	**0.059848**	**5.8%**	**0.057884**
5	Federal Income Tax Base		0.937623		0.940121
6	Federal Income Tax	21.0%	0.196901		0.197425
7	Net Operating Revenue		0.740722		0.742695
8	Net Income to Gross Revenue Multiplier		**1.35003**		**1.34645**

Rate Base

Plant-in-Service

The Company reported Plant-in-Service of $2,763,722 and an accumulated depreciation balance of $1,428,485, for a net Plant-in-Service balance of $1,335,237. As outlined below, Staff recommends an adjustment of $275,107 to Plant-in-Service and $1,118 from accumulated depreciation.

Prudency of Capital Projects

Staff reviewed the prudency of capital investments claimed since each system's last rate case, including the new company truck and the meter replacement program. Staff recommends removal of $182,464[4] of the $1,019,796 proposed as incremental Plant-in-Service, while allowing $837,332 for rate recovery. Attachment No. 1 – Staff Adj. No. 12.

The Company claimed $185,780 in capital investments for the BCS system since its last rate case in 2010. However, most of the amount is for investments made before the Company

[4] Difference between Attachment No. 1 and amount in Staff Comments is due to rounding.

acquired the system. The Company was unable to provide any supporting details for the investments, including a simple description of each investment. Response to Staff Production Request No. 47 at 3. The Company merely asserts the amount of each investment, the accounting category, and the date of acquisition. Without additional justification from the Company, Staff cannot determine the prudence of these investments and recommends disallowing the BCS capital investments for 2010, 2011, 2017, and 2018 for a combined total of $162,310.

The Company also claimed $74,973 in capital investments for the SLE system since its last rate case in 2013. Like BCS, some of this amount is for investments made. Two items only described as "Misc. Equip" and a third with no description at all total $26,098. The Company did not provide any supporting details for the investments. Response to Staff Production Request No. 47 at 2. Without additional justification from the Company, Staff recommends disallowing the SLE capital investments described as "Misc. Equip" for 2017 and 2018, and the single blank description in 2016 for a combined total of $20,155.

The single biggest capital investment claimed by the Company is for the installation of a backup well, well pump, booster pump, and electrical infrastructure for the DB system. This $452,481 investment was necessary to address DEQ deficiencies and to comply with Commission Order No. 34416. Staff believes these installations were prudent and cost-effective.

The remaining $384,851 of new capital investment includes items such as new pumps, new meters, customer billing software, electronic payment software, remote system monitoring, and network security. Staff reviewed the new capital investments and concurs that the new items were needed, and the expenses incurred were prudent.

In sum, Staff recommends that the $837,332 of new investments, in addition to the $1,596,675 of investments approved in previous rate cases, be determined prudent.

Company Vehicle

In May of 2022, the Company purchased a 2019 Ford F-350 for $87,150. The truck was purchased for hauling large payloads including portable generators, tools, pumps, and other heavy equipment. Prior to the purchase, the Company was using employees' personal vehicles to perform these activities. The Application listed several risks associated with using employees' personal vehicles for work related activities. These risks include:

1. Relying on employees to maintain personal vehicles used in utility operations.
2. Challenges related to succession planning for employees who leave because a successor is required to own a vehicle suitable for work related activities.
3. A limited fleet if an employee is not available during vacation or sick time.

Staff agrees that the use of employees' personal vehicles is not sustainable, and that the purchase of the truck was necessary for maintaining safe and reliable service.

After evaluating the market value of trucks with similar year, mileage, and make, Staff concluded that the truck was overvalued by $9,058. The price adjustment was calculated by using the Company's truck price before tax and other fees and reducing it by the average market price of three online truck listings with similar year, mileage, and make. The truck prices used in the analysis were found on the Edmunds and Carfax websites. Attachment No. 3 – Company Truck Adjustment.

In its Application, the Company failed to allocate a portion of the truck to its Washington subsidiary, Pelican Point Water and Gem State Infrastructure ("GSI"), a non-regulated service company. Using the Company's allocation method, Staff calculated an adjustment by multiplying the total truck price by the percent of customers in Pelican Point Water and GSI. Staff recommends an adjustment of $27,830 for the allocated portion to GSI and Pelican Point and a $5,270 adjustment to depreciation expense. In total, Staff recommends an adjustment of $36,888 from Plant-in-Service and a $5,270 adjustment from depreciation expense. Attachment No. 1 – Staff Adj. No. 3.

Well Pump Depreciation Adjustment

In July of 2021, the Company purchased two pumps for redundant reliability purposes. During the on-site audit, Staff discovered that the two pumps were included in the Company's Plant-in-Service but should have been placed in the Materials and Supplies inventory account. Both pumps have a deprecation life of 25 years and a total cost basis of $55,753.

To address the error, Staff reduced the Company's Plant-in-Service by $55,753 and added $55,753 to the Company's materials and supplies inventory account. Because the pumps were removed from Plant-in-Service, Staff also reduced depreciation expense by $2,230 and added back $1,118 in accumulated depreciation. Attachment No. 1 – Staff Adj. No. 5.

Contributions in Aid of Construction ("CIAC")

The Company failed to account for CIAC on the books for the TH, SLE systems, and BR which merged with RW in 2018. Order No. 34027. For each of the three water systems, Staff recommends that CIAC be amortized at the 35-year meter depreciation rate.

The Application included a remaining unamortized CIAC of $9,307 for TH, but with no amortization expense. However, SLE reported in its 2014 Annual Report a net CIAC of $70,050 and the BR/RW 2018 Annual Report presents a net CIAC of $158,231. Without any supporting evidence that the CIAC amounts have been fully amortized, Staff recommends including the SLE and BR/RW net CIAC amounts to offset Plant-in-Service by $237,588. Table No. 5 – CIAC and CIAC Amortization Expense Schedule.

Because no amortization schedule existed on the Company's books for the CIAC, Staff recommends that $6,889 in total amortization expense be placed in account 407 – Other Amortization as presented in Attachment No. 1 – Staff Adj. No. 7, No. 8, and No. 9. The amortization of contributions will reduce depreciation expense by a total of $6,889.

Table No. 5 – CIAC and CIAC Amortization Expense Schedule

System	**Original Contributions**	**Company's Booked CIAC**	**Staff Adj. to CIAC**	**Accum. CIAC Amort.**	**Amort. Period in Years**	**Amort. Expense Schedule**
Troy Hoffman	$12,859	$9,307	$0	$0	35	$367
SLE	$70,050	$0	$70,050	$0	35	$2,001
BR/RW	$173,250	$0	$173,250	$15,019	35	$4,521
Total	**$256,159**	**$9,307**	**$243,300**	**$15,019**		**$6,889**

Working Capital

Working capital represents the amount of cash and liquid assets that can be used to pay expenses and short-term liabilities. It can be included in net rate base for the Company to earn a return if it can show that the Company's owners were the source of the cash and liquid assets. For small water companies, use of the l/8th method for calculating working capital is widely accepted. The l/8th method calculates the amount of time between when the owners of a company have to pay operating expenses and when recovery occurs from customers, which is generally 45 days, or 1/8 of a year. Multiplying the amount of annual operating expenses by 1/8 provides a reasonable proxy for the amount of working capital to include in rate base for a small water utility. This a common practice for small water utilities who cannot perform a more complex analysis such as a lead-lag study. With this calculation, Staff recommends a working capital of $69,726. Attachment No. 1 – Working Capital at 2, Line No. 34.

Rate of Return

ROE

The Company proposed a 10.2% ROE in its Application. The Company based this request on the Commission-approved ROE for Falls Water Company, Inc., another subsidiary of NW Natural Water, Order No. 34925. The Company also claimed that its proposed hypothetical capital structure of 55% equity/45% debt justified a higher than usual ROE.

Determining a proper ROE is not an exact science. The objective of establishing a reasonable ROE is to provide the Company with comparable earnings to other similar companies, allowing the Company to maintain its financial integrity and continue to attract the capital needed to maintain service. However, a fair return established at one time may not be applicable at a different time because of changing business risks, economic factors, and alternative investment opportunities.

The Company's method and results of the calculation of its proposed ROE are limited. ROE should be based on a detailed analysis of the Company's individual situation and not on blanket statements and concepts. Though the Company proposed a hypothetical capital structure, this proposed structure is typical for utility companies and does not justify special treatment in the ROE calculation. Because the Company is a wholly owned subsidiary of NW Natural, investors are not able to invest in directly. Evaluating the Company in isolation excludes the benefits of having a large parent Company with better access to the capital markets and a credit rating from major rating agencies. NW Natural's Credit rating is A1 from Moody's and AA- from Standard and Poor's ("S&P"), both of which are well into investment grade.

Staff used several methods to create a reasonable range for an appropriate ROE, including the Discounted Cash Flow ("DCF") method and the Capital Asset Pricing Model ("CAPM"). Staff also compared the results of these two methods to the ROE agreed to in a settlement in NW Natural Gas Company's, a wholly owned subsidiary of NW Natural, most recent rate case in Oregon. Details of each analysis are included as Attachment No. 4 – Return on Equity.

DCF Method

The DCF Method is premised on the theory that investors value a stock based on its future stream of cash flows through dividends and growth. For the DCF Method to be useful in this case, it is best to evaluate investor sentiment in NW Natural's stock. NW Natural is the entity issuing stock for this organization. NW Natural's stock price closed at $45.47 on December 16, 2022. The 52-week high was $57.63 and low was $42.37. The fact that the current stock price is towards the bottom of the 52-week range implies that investors are not necessarily willing to purchase NW Natural's stock. Therefore, the DCF method may provide an analysis that understates the return expected by investors.

There are 3 variables in calculating a DCF:

1. Stock Price (Staff's analysis is based on price on 12/16/2022, $45.47);
2. Dividend amount (declared of $1.93 per share); and
3. Growth rate (Staff used the average growth rate of dividends over the last six years, or 0.51%).

Using the three variables, Staff calculated a DCF ROE of 4.754%. This is dramatically lower than the Company's proposed ROE. The DCF ROE is primarily driven by the lack of dividend growth, which is also driven by the lack of earnings growth.

CAPM

The final analysis Staff used to calculate a proper ROE was the CAPM. This model is premised on the theory that riskier investments require a higher return than less risky investments. The model describes the relationship between the expected return and risk of the investment. The expected return is equal to a risk-free return plus a risk premium, or the difference between the risk-free return and the market return. The risk premium is then multiplied by a risk measurement, or Beta, to establish the amount above the risk-free return required to attract investments. The CAPM formula is:

Expected Return = Risk-free Return + [Beta x (Expected Return on Market – Risk-free Return)]

For the risk-free rate of return, Staff used the one-year and 30-year treasury rates for 2022. One-year treasury rates are used as an absolute risk-free rate, while the 30-year treasury rates are used as an analog of a risk-free rate with the impact of inflation included. Staff also used the most recent treasury rates available as well as the annual average which smooths out market volatility.

For the market return, Staff used the return from the S&P 500 over the last ten years. This is comparing relatively large and well-established companies as a surrogate for equivalent returns. Staff also used the entire stock market returns since 2010 as a surrogate for equivalent market returns. The Beta for Northwest Natural was reported as 0.53 by Yahoo Finance on December 16, 2022.[5]

The variables result in a range of a CAPM ROE from 4.94% to 9.89% with an average CAPM ROE of 7.32%.

Established ROE

The main source of revenue for NW Natural comes from its subsidiary, NW Natural Gas Company. In 2020 and 2022, NW Natural Gas Company established a 9.4% ROE in its settled general rate cases. The "Established ROE" method can be used to determine an ROE that the parent company may expect for its primary regulated utilities. Thus, in this case, NW Natural, the parent company of Gem State Water, could expect a similar ROE of 9.4%.

Rate of Return and Capital Structure

Staff's analysis results in a ROE range from 4.754% to 9.89%. Staff recommends the Commission approve an ROE of 9.5%, which is at the higher end of the analysis and greater than what NW Natural settled on in its last two Oregon general rate cases. The 9.5% ROE reflects that Gem State Water, due to its small size and disparate systems, is at a slightly higher risk for financial failure than NW Natural, while recognizing the benefit of equity raised by a large parent company with easier access to capital.

An ROE of 9.5% produces a WACC of 7.41% when using the Company's proposed capital structure. The proposed capital structure fairly represents an appropriate structure of investor-owned utilities and matches other NW Natural owned water system's capital structure. Table No. 6 – Rate of Return and Capital Structure.

[5] https://finance.yahoo.com/quote/NWN/

Table No. 6 – Rate of Return and Capital Structure

Description	Amount	Percent of Total Capital	Cost	Company Proposed WACC	Staff Proposed Cost	Staff Proposed WACC
Debt	$454,478	45.00%	4.86%	2.19%	4.86%	2.19%
Equity	$555,461	55.00%	10.20%	5.61%	**9.50%**	**5.22%**
Total	$1,009,939	100.00%		7.80%		**7.41%**

Rate Design

In its Application, the Company proposed to consolidate the eight separate water systems into four consolidated rates for both the basic charge and volumetric charge. The Company also requested that the adjusted rates be based on the American Water Works Association ("AWWA") meter factor. Larger meter sizes create a larger demand and costs to the system, thus the need for higher charges and higher minimum allotted usage. Staff agrees that the AWWA meter factor, as outlined in the Application, should be applied across all water systems that have 1 1/2-inch and 2-inch metered customers.

The Company is also proposing to implement irrigation rates. The Company is not currently differentiating irrigation customers from residential customers. Staff recommends that the irrigation rates for current irrigation customers be approved as filed and only be applied during the spring and summer months. Attachment No. 5 – Rate Structure at 3.

<u>Consolidation Criteria</u>

Consolidation of rates is necessary to mitigate future rate shock as investments are required. Consolidation also provides operational benefits such as reducing system level tracking of time, materials, and equipment, while ensuring the costs are being allocated properly. Consolidation may also reduce administrative burden and improve customer service. On top of the items the Company identified in the Application, Staff has applied additional criteria to determine if consolidating rates is an appropriate rate structure. The following are criteria that Staff used to determine whether consolidation was appropriate:

1. Expected investments and impact on customer rates;
2. Administrative ease;
3. Revenue stability; and

4. Conservation.

Staff weighed each criterion against different rate options, including the Company's proposal, and recommends a partial consolidation of customer rates. Staff recognizes that fully consolidating rates in this case would result in severe rate shock to customers in specific water systems and will require additional rate cases. However, Staff's proposal is a step towards consolidation. Staff recommends an increase to both the basic monthly charge and volumetric rates, and a decrease in the allotted usage included in the monthly basic charge for most customers as a step towards full rate consolidation. Attachment No. 5 – Rate Structure.

Expected investments

The Company anticipates investing one to five million dollars into various water systems within the next five years. Without consolidating rates, customers of the water systems that require extensive upgrades would experience severe rate shock with increases above 300%. Consolidating rates will spread those costs over a larger customer base and mitigate rate shock in the future.

Administrative Ease

The Company stated that consolidating the water systems into four water rates would be easier to understand for customers and the Company. It may also reduce staffing hours and provide additional efficiencies to offset future rate increases. Staff's recommended rate design accomplishes the goal of administrative efficiency by consolidating rates into three groups with two separate volumetric rates.

Revenue Stability

The Company is expected to make large investments in each system, including radio-read meters, added storage, and redundant water supply. By moving to a consolidated rate structure, revenue stability will be achieved and may allow the Company to make investments at a more rapid rate than it is currently.

Staff's proposed increase to the basic monthly charge will allow the Company to collect 47% of its revenue through the basic monthly charge. Staff recommends increasing the basic monthly charge for customers who currently pay less than $32.00.

Conservation

Public water systems are required to have a redundant source of water. If water conservation is encouraged, utilities managing public water systems may avoid expensive investments in additional sources of water. Therefore, rates should be designed to encourage conservation. Staff recommends rate structures that allow utilities to recover fixed costs and, simultaneously, encourage conservation.

Without a rate structure that encourages conservation, the Company may be required to buy more water which will increase customer rates. High usage customers increase rates for all customers. Staff's proposed rate structure provides a price signal to high usage water users to conserve.

Rate Structure

The majority of the Company's customers have large lots ranging from one-acre to twenty-acres with no access to water other than what is supplied by the Company. To minimize the need to add additional access to water, Staff is recommending a rate design that considers each of the four consolidation criteria enumerated above by Staff. The rate design includes a fixed monthly charge with a decrease in the allotted volume, and multiple volumetric rates.

Without radio-read meters, the Company cannot provide 12 months of usage data. Reading meters is not possible during the winter months for some water systems. Without 12 months of usage data, it is not appropriate to implement a block rate structure. If the Company provides 12 months of usage data, Staff may support additional rate blocks with increased volumetric rates to further encourage conservation. The Company is planning to transition to radio-read meters across all water systems and has already installed radio-read meters for the entire TH system.

Basic Charge

The basic charge in the Company's tariffs includes a flat fixed rate which includes an allotted volume. For example, LE, HV, and BR have allotted volumes greater than 10,000 gallons included in their basic charge. As outlined in the Application, there has not been a rate increase or a rate adjustment for several water systems. To encourage conservation and move to consolidation, Staff recommends increasing all basic monthly rates and decreasing allotted volume levels.

Staff recommends Staff's proposed basic monthly charge and proposed allotted volume as outlined in Attachment No. 5. Staff has provided a comparison of the current rates, the Company's proposed rates, and Staff's proposed rates reflecting differences in basic charges and allotted volumes.

Volume Charge

The final adjustment to rates is the increase to the volumetric rate. The Company's Application proposes that the systems that are consolidated into a common group share the same volumetric rate. The Application moves the volume charge from eight rates to four rates. Because current high-water users have high allotted volumes and low volumetric rates, there is no incentive for customers to conserve. Staff's recommended volumetric rates move customers closer to a fully consolidated volumetric rate for all water users. Attachment No. 5 – Rate Structure at 1, Line Nos. 13 to 29.

Summary

Staff's proposed rate structure and consolidation includes the following: (1) adjusted basic charge for all 1-inch meter, 1 1/2-inch meter and 2-inch meter customers; (2) new rates for irrigation meters (as proposed); and (3) Staff's proposed basic charge, volumetric rates, and allotted volumes. Staff recommends the following rate structure:

1. Basic Charge:
    a. A basic charge of $32.00 for SLE, BCS, HV, BR, RW and TH systems;
    b. No basic charge changes for LE and DB systems;
    c. A $64.00 1 1/2-inch meter basic charge for SLE, BCS and HV systems; and,
    d. A $102.40 2-inch meter basic charge for SLE, BCS and HV systems.
2. Volumetric Rate:
    a. No volumetric rate change for SLE and BCS systems; and
    b. A $1.624 volumetric rate for the remaining six water system.

3. Allotted Volume:
    a. A 7,500 gallon allotted volume be included within the basic charge with any excess usage charged at Staff's recommended volumetric rates for the SLE, BCS, DB, TH systems;
    b. A 10,000 gallon allotted volume be included within the basic charge with any excess usage charged at Staff's recommended volumetric rates for the BR and RW systems;
    c. A 15,000 gallon allotted volume be included within the basic charge with excess usage charged at Staff's proposed volumetric rates for HV 1 1/2-inch meter customers; and,
    d. A 48,000 gallon allotted volume be included within the basic charge with excess usage charged at Staff's recommended volumetric rates for all 2-inch metered non-irrigation customers.
4. Irrigation Service:
    a. The irrigation rate as filed (the allotted volume as proposed by the Company be included within the basic charge and the volumetric rate for usage in excess of the allotted volume for 1-inch meter, 1 1/2-inch meter, and 2-inch meters).

Non-Recurring Charges

The Company proposes to standardize the new connection ("hook up") fee for all water systems at a rate of $5,500, plus the cost to bore or trench across the road, if required. The legacy fees for this service range from $458 to $6,000, depending on the system. The Company confirmed that there is no preexisting service infrastructure installed for undeveloped lots within any of its eight systems, so the scope of work to install a new connection will be consistent. Response to Staff Production Request No. 63. Staff reviewed recent third-party bids to install a new water connection and the values ranged from $5,328 to $8,800. None of these bids included the cost to bore or trench across a road. Therefore, Staff concurs with the Company's proposed hook up fee for new connections.

The Company also proposed new tariff language that requires customers to pay the accumulated monthly charge or base rate if they disconnect and then reconnect service within 12-months at the same premise. Staff concurs that rates are based on continuous service, and customers should not be able to disconnect for a season and then reconnect to avoid the monthly charge.

Finally, Staff concurs with the Company's proposal to keep the late payment charge, reconnection fees, and return check fees unchanged from the original tariff.

CUSTOMER NOTIFICATION, PRESS RELEASE, WORKSHOP, AND CUSTOMER COMMENTS

Customer Notification and Press Release

The Company submitted a Press Release and Customer Notice with the Application. The customer notice was included as an insert in the customer billing sent to July 27, 2022. A press release was published in the Coeur d'Alene Press on July 29, 2022. The Customer Notice failed to mention the availability of the RSS Feed as outlined in the Commission's Rules of Procedure, IDAPA 31.01.01, Rule 125.01.d. However, the volume of customer comments received either by email to the Commission Secretary or the Case Comment Form on the Commission website suggest that customers had sufficient notification and the ability to follow case progress.

Public Customer Workshop

A customer workshop was held on the campus of North Idaho College in Coeur d'Alene, Idaho on Tuesday, November 15, 2022, beginning at 6:00 pm. There were approximately thirty-five people in attendance as well as Company representatives. The Customers represented most of the different water systems and their concerns echoed those presented in customer comments submitted to the case record.

Customer Comments

As of January 3, 2023, 101 customer comments have been received. The majority of the customers, eighty-eight, were against the high percentage increases proposed by the Company. Customers spoke against both the increase in the monthly charge and the amount charged for water used above the usage allowance. Customers raised concerns about the decreased monthly allowance for water. Customers also cited the high inflation rate and the effect on customers with limited income. A minority of customers recommended a phased-in approach to the increase in rates, spread over time.

Customers also expressed concerns about low water pressure, lack of backup power during outages, lack of backup wells, and response to emergency calls.

STAFF RECOMMENDATION

Based on Staff's audit and analysis of the Company's Application and system, Staff recommends an annual revenue requirement of $682,248, consisting of a rate base of $944,552, a ROE of 9.5%, and a WACC of 7.41%. Staff recommends the Company collect its revenue with the metered rate design proposed by Staff in Attachment No. 5.

Respectfully submitted this 11th day of January 2023.

Riley Newton
Deputy Attorney General

Technical Staff: Travis Culbertson
Michael Eldred
Chris Hecht
Ty Johnson
Matt Suess
Joseph Terry
Jolene Bossard

i:umisc/comments/gsww22.1rnrm comments

ATTACHMENT NO. 1

TO

COMMENTS OF THE

COMMISSION STAFF

IN

CASE NO. GSW-W-22-01

Line No.		Company Case	Staff Adj No. 1 Salary et al. Adj	Staff Adj No. 2 Lease Adj	Staff Adj No. 3 Company Vehicle Adj	Staff Adj No. 4 Water Testing Adj	Staff Adj No. 5 Remove Inventory from Dep	Staff Adj No. 6 Depreciation Adj	Staff Adj No. 7 Troy Hoffman CIAC	Staff Adj No. 8 Amort SPL CIAC	Staff Adj No. 9 Bitterroot CIAC	Staff Adj No. 10 Misc. Adj.	Staff Adj No. 11 GIS Labor Adjustment Salary'	Staff Adj No. 12 Plant-in-Service BCS/SLE	Staff Position
1	**Income**														
2	**400 · Operating Revenue**														
3	**461.1 · Metered Residential**	572,799													572,799
4	**464 · Other Water Sales Revenue**	1,801													1,801
5	**Total 400 · Operating Revenue**	574,600	-	-	-	-	-	-	-	-	-	-	-	-	574,600
6	**Total Income**	574,600	-	-	-	-	-	-	-	-	-	-	-	-	574,600
7	**Expense**														
8	**601.1-6 Labor - Operation & Maintenance**	127,673	(25,695)										(6,037)		95,942
9	**601.7 Labor - Customer Accounts**	18,694	(1,965)												16,729
10	**601.8 Labor - Administrative & General**	92,662	(5,763)												86,899
11	**604 · Employee Benefits**	65,329	(14,913)										(1,620)		48,796
12	**610 · Purchased Water**	5,086													5,086
13	**615-16 · Electrical Power & Fuel for Power**	88,731													88,731
14	**618 · Chemicals**	791													791
15	**620.1-6 · M&S - O&M**	15,891													15,891
16	**620.7-6 · M&S - A&G**	50,385													50,385
17	**620.7 · Postage**	-													-
18	**620.8 · Office**	-													-
19	**620.81 · Telephone Expense**	-													-
20	**620.82 · Bank service charges**	-													-
21	**620.83 · Office Utilites Expense**	-													-
22	**631.1-34 · Contracting Services - Professional**	72,849													72,849
23	**635 · Contracting Services - Water Testing**	1,923				3,741									5,664
24	**636 - Contracted Services - Other**	9,148													9,148
25	**641-42 · Rental of Property & Equipment**	59,319		(27,408)											31,911
26	**650 · Transportation Expense**	6,572													6,572
27	**656 · Insurance Expense**	14,146													14,146
28	**675 · Miscellaneous**	49,021										(40,749)			8,272
29	**Total Expense**	678,221	(48,337)	(27,408)	-	3,741	-	-	-	-	-	(40,749)	(7,657)	-	557,811
30	**Net Ordinary Income**	(103,620)	48,337	27,408	-	(3,741)	-	-	-	-	-	40,749	7,657	-	16,789
31	**Other Income/Expense**														
32	**Other Expense**														-
33	**403 · Depreciation Expense**	114,917			(5,270)		(2,230)	(40,230)							67,187
34	**407 - Other Amortization Expense**								(367)	(2,001)	(4,521)				(6,889)
35	**408 · Taxes**														-
36	**408.11 · Property Taxes**	21,322													21,322
37	**408.12 · Payroll Taxes**	18,469	(2,584)										(444)		15,442
38	**408.13 · Other Taxes**	4,077													4,077
39	**Total 408 · Taxes**	43,868	(2,584)	-	-	-	-	-	-	-	-	-	(444)	-	40,841
40	**Income Taxes**	(74,409)													(74,409)
41	**408.10 · Regulatory Fee**	-													-
42	**409.10 · Federal Income Tax**	-													-
43	**409.11 · State Income Tax**	-													-
44	**Total Other Expense**	84,376	(2,584)	-	(5,270)	-	(2,230)	(40,230)	(367)	(2,001)	(4,521)	-	(444)	-	26,729
45	**Net Other Income**	(84,376)	2,584	-	5,270	-	2,230	40,230	367	2,001	4,521	-	444	-	(26,729)
46	**NET Income**	**(187,996)**	**50,921**	**27,408**	**5,270**	**(3,741)**	**2,230**	**40,230**	**367**	**2,001**	**4,521**	**40,749**	**8,101**	**-**	**(9,940)**

Line No.		Company Case	Staff Adj No. 1 Salary et al. Adj	Staff Adj No. 2 Lease Adj	Staff Adj No. 3 Company Vehicle Adj	Staff Adj No. 4 Water Testing Adj	Staff Adj No. 5 Remove Inventory from Dep	Staff Adj No. 6 Depreciation Adj	Staff Adj No. 7 Troy Hoffman CIAC	Staff Adj No. 8 Amort SPL CIAC	Staff Adj No. 9 Bitterroot CIAC	Staff Adj No. 10 Misc. Adj.	Staff Adj No. 11 GIS Labor Adjustment Salary'	Staff Adj No. 12 Plant-in-Service BCS/SLE	Staff Position
1	**Plant-in-Service**														
2	**301 - Organization**	-													-
3	**302 - Franchises and Consents**	-													-
4	**303 - Land & Land Rights**	14,545													14,545
5	**304 - Structures & Improvements**	40,438													40,438
6	**305 - Collecting & Impounding Reserviors**	120,672													120,672
7	**307 - Wells**	1,365,304												(147,969)	1,217,335
8	**309 - Supply Mains**	84,319													84,319
9	**310 - Generators**	140,880													140,880
10	**311 - Pumps & Accessories**	410,891					(55,753)								355,138
11	**320 - Purification Systems**	1,504													1,504
12	**330 - Distribution Reserviors & Standpipes**	7,195													7,195
13	**331 - Trans. & Distrib. Mains & Accessories**	140,252												(14,342)	125,910
14	**332 - Services**	-													-
15	**334 - Meters**	129,431													129,431
16	**335 - Hydrants**	4,405													4,405
17	**339 - Other Plant and Misc Equip**	117,626			(36,888)									(20,155)	60,583
18	**340 - Office Equipment**	120,834													120,834
19	**343 - Tools & Equipment**	11,523													11,523
20	**345 - Power Operated Equipment**	42,352													42,352
21	**346 - Communications Equipment**	5,728													5,728
22	**347 - Miscellaneous Equipment**	3,168													3,168
23	**348 - Other Tangible Property**	2,655													2,655
24		-													-
25	**Total Plant-in-Service**	2,763,722	-	-	(36,888)	-	(55,753)	-	-	-	-	-	-	(182,466)	2,488,615
26	**Less Accumulated Depreciation**	(1,428,485)					1,118								(1,427,367)
27	**Net Plant-in-Service**	1,335,237	-	-	(36,888)	-	(54,635)	-	-	-	-	-	-	(182,466)	1,061,248
28	**Less Contributions in Ad of Construction**														
29	**Gross Contributions (12/31/2021)**	9,307								70,050	173,250				252,607
30	**Less Accumulated Amortization (12/31/2019)**	-									15,019				15,019
31	**Net Contributions in Aid of Construction**	9,307	-	-	-	-	-	-	-	70,050	158,231	-	-	-	237,588
32															-
33	**Net Plant-in-Service**	1,325,930	-	-	(36,888)	-	(54,635)	-	-	(70,050)	(158,231)	-	-	(182,466)	823,660
34	**Working Capital (1/8 of Op. and Maint. Expense)**	84,778	(6,042)	(3,426)	-	468	-	-	-	-	-	(5,094)	(957)	-	69,726
35	**Materials and Supplies**	-					55,753								55,753
36	**Deferred Taxes**	(4,587)													(4,587)
37	**Total Rate Base**	1,406,120	(6,042)	(3,426)	(36,888)	468	1,118	-	-	(70,050)	(158,231)	(5,094)	(957)	(182,466)	944,552

CALCULATION OF REVENUE REQUIREMENT

Line No.		Company	Staff
1	Rate Base	1,406,120	**944,552**
2	Required Rate of Return	7.80%	7.41%
3	Net Operating Income Requirement	109,635	70,010
4	Net Operating Income Realized	(187,996)	(9,940)
5	Net Operating Income Deficiency	297,631	79,950
6	Net Operating Income Deficiency	297,631	79,950
7	Gross up Factor	1.35003	1.34645
8	Total Incremental Revenue Requirement	401,812	107,648
9	Revenues at existing rates	574,600	574,600
10	Total Revenue Requirement	976,412	**682,248**
11	Percent Increase Required	69.9%	**18.7%**

ATTACHMENT NO. 2

TO

COMMENTS OF THE

COMMISSION STAFF

IN

CASE NO. GSW-W-22-01

Depreciation Adjustment

Line No.	Account No.	Account Type	Basis	Company Estimated Life	Company Depreciation Expense	Staff Adjusted Life	Adjusted Depreciation Expense	Depreciation Adjustment
1	304	Structures and Improvements	$ 708	15.0	$ 47	20.0	$ 35	$ (12)
2	304	Structures and Improvements	$ 12,506	4.0	$ 3,127	20.0	$ 625	$ (2,501)
3	305	Collecting and Impounding Reservoir	$ 39,818	25.0	$ 1,593	50.0	$ 796	$ (796)
4	307	Wells and Springs	$ 505	14.0	$ 36	25.0	$ 20	$ (16)
5	307	Wells and Springs	$ 9,427	14.0	$ 673	25.0	$ 377	$ (296)
6	307	Wells and Springs	$ 22,268	7.0	$ 3,181	25.0	$ 891	$ (2,290)
7	307	Wells and Springs	$ 67,030	14.0	$ 4,788	25.0	$ 2,681	$ (2,107)
8	309	Supply Mains	$ 49,496	4.0	$ 12,374	25.0	$ 1,980	$ (10,394)
9	310	Power Generation Equipment	$ 11,600	7.0	$ 1,657	15.0	$ 773	$ (884)
10	310	Power Generation Equipment	$ 69	7.0	$ 10	15.0	$ 5	$ (5)
11	310	Power Generation Equipment	$ 1,957	7.0	$ 280	15.0	$ 130	$ (149)
12	311	Pumping Equipment	$ 150	10.0	$ 15	20.0	$ 8	$ (8)
13	311	Pumping Equipment	$ 210	10.0	$ 21	20.0	$ 11	$ (11)
14	311	Pumping Equipment	$ 795	10.0	$ 79	25.0	$ 32	$ (48)
15	311	Pumping Equipment	$ 150	10.0	$ 15	25.0	$ 6	$ (9)
16	311	Pumping Equipment	$ 11,000	4.0	$ 2,750	25.0	$ 440	$ (2,310)
17	311	Pumping Equipment	$ 19,638	3.0	$ 6,546	25.0	$ 786	$ (5,760)
18	331	Transmission and Distribution Mains	$ 90,870	33.0	$ 2,754	50.0	$ 1,817	$ (936)
19	331	Transmission and Distribution Mains	$ 14,342	33.0	$ 435	50.0	$ 287	$ (148)
20	334	Meters and Meter Installation	$ 2,381	7.0	$ 340	20.0	$ 119	$ (221)
21	334	Meters and Meter Installation	$ 6,725	3.0	$ 2,242	20.0	$ 336	$ (1,905)
22	339	Other Plant and Equipment	$ 7,041	6.9	$ 1,017	10.0	$ 704	$ (313)
23	339	Other Plant and Equipment	$ 11,931	6.9	$ 1,723	10.0	$ 1,193	$ (530)
24	340	Office Furniture and Equipment	$ 57,200	5.0	$ 11,440	20.0	$ 2,860	$ (8,580)
25		**Total Depreciation Expense Adjustment**			$ 57,142		$ 16,912	**$ (40,230)**

ATTACHMENT NO. 3

TO

COMMENTS OF THE

COMMISSION STAFF

IN

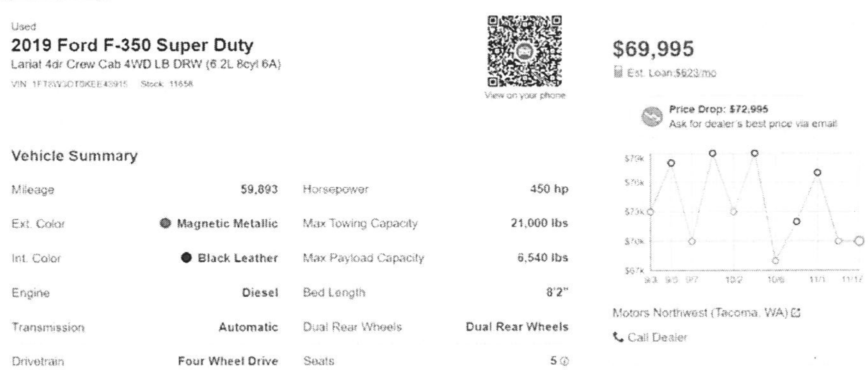
CASE NO. GSW-W-22-01

2019 Ford F-150 Super Duty Crew Cab XL	GSW Purchase Price	Market Avg Truck Price	Price Adjustment	Allocation Adjustment	Total Truck Adjustment
Price before tax and other fees	$ 74,995	$ 65,937	$ (9,058)	$ (27,830)	
Commerical Warranty	$ 5,495				
Commercial Maint.	$ 1,935				
Tax	$ 4,512				
Non Tax Fee	$ 14				
Doc Fee	$ 199				
Total Truck Price	$ 87,150		$ (9,058)	$ (27,830)	$ (36,888)
Adjustment (Percent of Total)			10%	32%	42%
Dep Effect 7 year life			$ (1,294)	$ (3,976)	$ (5,270)

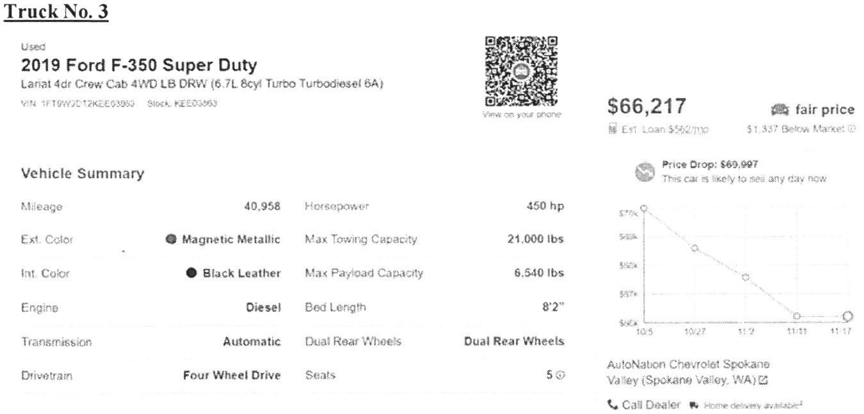
Truck Price Comparison	The Company's Truck	Truck No. 1 From Carfax	Truck No. 2 From Edmunds	Truck No. 3 From Edmunds	Avg Truck No. 1 - 3	Diff of Company's Truck and Avg Truck
Price before tax and other fees	$ 74,995	$ 61,599	$ 69,995	$ 66,217	$ 65,937	$ (9,058)
Year	2019	2019	2019	2019		
Mileage	35,977	39,049	59,893	40,958		
Make	Ford F-350 XL 4x4 SD Crew, Dual Rear Wheel	Ford F-350 Lariat 4X4 SD Crew, Dual Rear Wheel	Ford F-350 Lariat 4X4 SD Crew, Dual Rear Wheel	Ford F-350 Lariat 4X4 SD Crew, Dual Rear Wheel		

Truck No. 1

Truck No. 2



Truck No. 3



ATTACHMENT NO. 4

TO

COMMENTS OF THE

COMMISSION STAFF

IN

CASE NO. GSW-W-22-01

Discounted Cash Flow ("DCF") for NW Natural

Share Price as of 12/16/22	$ 45.47
52 Week high	$ 57.63
52 Week Low	$ 42.37

Summary of Variables - DCF

Share Price	$ 45.47
Dividends	$ 1.93
Growth Rate	0.510%
ROE	**4.754%**

Capital Asset Pricing Method ("CAPM")

Risk-free Rate of Return

		Average Risk Free		Latest Risk Free	
		1 Yr	30 Yr	1 Yr	30 Yr
S&P	10 Years	4.94%	5.11%	5.85%	5.30%
Total Market Return since	2010	8.98%	9.16%	9.89%	9.34%

Market Return

Return On Market	10 Years
S&P 500	6.91%
Years starting	2010
All Market	14.54%

Beta 0.53

Reference: https://finance.yahoo.com/quote/NWN/

CAPM ROE

Minimum	4.94%
Maximum	9.89%
Average	7.32%

ROE Authorized by Oregon Public Utilities Commission

2020	9.4%
2022	9.4%

ATTACHMENT NO. 5

TO

COMMENTS OF THE

COMMISSION STAFF

IN

CASE NO. GSW-W-22-01

Line No.	Water System	PRESENT Basic Charge Revenue	PRESENT Volume Charge Revenue	PRESENT Total	Company Proposed Rate Structure Basic Charge Revenue	Company Proposed Volume Charge Revenue	Company Proposed Total	Company Proposed % Increase	Staff Proposed Rate Structure Basic Charge Revenue	Staff Proposed Volume Charge Revenue	Staff Proposed Total	Staff Proposed % Increase
1	Bitterroots Water Company	$ 28,392	$ 35,061	$ 63,453	$ 47,320	$ 72,830	$ 120,150		$ 43,264	$ 41,500	$ 84,764	
2	Rickel Water Company	$ 11,970	$ 9,441	$ 21,411	$ 13,965	$ 29,072	$ 43,037		$ 12,768	$ 16,566	$ 29,334	
3	Bitterroots Water Company	$ 40,362	$ 44,501	$ 84,863	$ 61,285	$ 101,902	$ 163,187	92%	$ 56,032	$ 58,066	$ 114,098	34%
4	Bar Circle "S" Water Company	$ 67,588	$ 112,495	$ 180,083	$ 86,240	$ 146,114	$ 232,354	29%	$ 78,848	$ 112,495	$ 191,343	6%
5	Spirit Lake East	$ 92,031	$ 95,425	$ 187,456	$ 126,070	$ 208,870	$ 334,940	79%	$ 115,264	$ 98,406	$ 213,670	14%
6	Diamond Bar Estates	$ 25,666	$ 30,463	$ 56,129	$ 21,910	$ 57,636	$ 79,546	42%	$ 25,666	$ 41,417	$ 67,083	20%
7	Happy Valley Water Systems	$ 6,021	$ 6,002	$ 12,023	$ 7,805	$ 29,439	$ 37,244	210%	$ 7,136	$ 15,314	$ 22,450	87%
8	Lynnwood Estates Subdivision	$ 9,695	$ 2,839	$ 12,534	$ 9,695	$ 23,234	$ 32,929	163%	$ 9,695	$ 7,398	$ 17,093	36%
9	Troy Hoffman Water Corporation	$ 23,925	$ 17,586	$ 41,511	$ 30,450	$ 65,163	$ 95,613	130%	$ 27,840	$ 28,764	$ 56,604	36%
10	Total	$ 265,288	$ 309,312	$ 574,600	$ 343,455	$ 632,359	$ 975,814	69.8%	$ 320,481	$ 361,860	$ 682,341	18.8%
11		46%	54%		35%	65%			47%	53%		
12		**Meter Size**	**Fixed Monthly**	**Volume Rate**	**Fixed Monthly**	**Volume Rate**	**Fixed % Increase**	**Volume %**	**Fixed Monthly**	**Volume Rate**	**Fixed % Increase**	**Volume %**
13	Spirit Lake East	1 Inch	$ 25.55	$ 2.33	$ 35.00	$ 5.100	37%	119%	$ 32.00	$ 2.330	25%	0%
14	Spirit Lake East	1-1/2 Inch	$ 25.55	$ 2.33	$ 70.00	$ 5.100	174%	119%	$ 64.00	$ 2.330	150%	0%
15	Spirit Lake East	2 Inch	$ 25.55	$ 2.33	$ 112.00	$ 5.100	338%	119%	$ 102.40	$ 2.330	301%	0%
16	Lynnwood Estates Subdivision	1 Inch	$ 35.00		$ 35.00	$ 5.100	0%		$ 35.00	$ 1.624	0%	
17	First Block 20,001 to 100,000			$ 1.00				410%		$ -		62%
18	Second Block 100,001 to 200,00			$ 2.00				155%		$ -		-19%
19	Third Block over 200,001			$ 3.00				70%		$ -		-46%
20	Bar Circle "S" Water Company	1 Inch	$ 27.43	$ 1.74	$ 35.00	$ 2.260	28%	30%	$ 32.00	$ 1.740	17%	0%
21	Bar Circle "S" Water Company	1-1/2 Inch	$ 27.43	$ 1.74	$ 70.00	$ 2.260	155%	30%	$ 64.00	$ 1.740	133%	0%
22	Bar Circle "S" Water Company	2 Inch	$ 27.43	$ 1.74	$ 112.00	$ 2.260	308%	30%	$ 102.40	$ 1.740	273%	0%
23	Diamond Bar Estates	1 Inch	$ 41.00	$ 1.16	$ 35.00	$ 2.260	-15%	95%	$ 41.00	$ 1.624	0%	40%
24	Happy Valley Water Systems	1 Inch	$ 27.00	$ 0.70	$ 35.00	$ 2.850	30%	307%	$ 32.00	$ 1.624	19%	132%
25	Happy Valley Water Systems	1-1/2 Inch	$ 27.00	$ 0.70	$ 70.00	$ 2.850	159%	307%	$ 64.00	$ 1.624	137%	132%
26	Happy Valley Water Systems	2 Inch	$ 27.00	$ 0.70	$ 112.00	$ 2.850	315%	307%	$ 102.40	$ 1.624	279%	132%
27	Bitterroots Water Company	1 Inch	$ 21.00	$ 1.73	$ 35.00	$ 2.850	67%	65%	$ 32.00	$ 1.624	52%	-6%
28	Rickel Water Company	1 Inch	$ 30.00	$ 1.10	$ 35.00	$ 2.850	17%	159%	$ 32.00	$ 1.624	7%	48%
29	Troy Hoffman Water Corporation	1 Inch	$ 27.50	$ 1.12	$ 35.00	$ 4.150	27%	271%	$ 32.00	$ 1.624	16%	45%

Rate Structure

Line No.	Water System	PRESENT Meter Size	PRESENT Allotted Volume	Company Proposed Rate Structure Allotted Volume	Company Proposed Rate Structure Volume %	Staff Proposed Rate Structure Allotted Volume	Staff Proposed Rate Structure Volume %
1	Spirit Lake East	1 Inch	8,000	8,000	0%	7,500	-6%
2	Spirit Lake East	1-1/2 Inch	8,000	20,000	150%	15,000	88%
3	Spirit Lake East	2 Inch	8,000	32,000	300%	48,000	500%
4	Lynnwood Estates Subdivision	1 Inch	20,000	8,000	-60%	15,000	-25%
5	Bar Circle "S" Water Company	1 Inch	7,500	7,500	0%	7,500	0%
6	Bar Circle "S" Water Company	1-1/2 Inch	7,500	20,000	167%	15,000	100%
7	Bar Circle "S" Water Company	2 Inch	7,500	32,000	327%	48,000	540%
8	Diamond Bar Estates	1 Inch	5,500	7,500	36%	7,500	36%
9	Happy Valley Water Systems	1 Inch	20,000	10,000	-50%	15,000	-25%
10	Happy Valley Water Systems	1-1/2 Inch	20,000	20,000	0%	30,000	50%
11	Happy Valley Water Systems	2 Inch	20,000	32,000	60%	48,000	140%
12	Bitterroots Water Company	1 Inch	15,000	10,000	-33%	10,000	-33%
13	Rickel Water Company	1 Inch	15,000	10,000	-33%	10,000	-33%
14	Troy Hoffman Water Corporation	1 Inch	10,000	10,000	0%	7,500	-25%

Line No.	Water System	PRESENT Meter Size	PRESENT Allotted Volume	PRESENT Basic Charge	Company Proposed Rate Structure Allotted Volume	Company Proposed Rate Structure Basic Charge	Staff Proposed Rate Structure Allotted Volume	Staff Proposed Rate Structure Basic Charge	Staff Proposed Rate Structure Increase %
1	Irrigation Service - Diamond Bar	1 Inch	-	$ -	7,500	$ 35.00	7,500	$ 35.00	0%
2	Irrigation Service - Diamond Bar	1-1/2 Inch	-	$ -	20,000	$ 70.00	20,000	$ 70.00	0%
3	Irrigation Service - Diamond Bar	2 Inch	-	$ -	32,000	$ 112.00	32,000	$ 112.00	0%

CERTIFICATE OF SERVICE

I HEREBY CERTIFY THAT I HAVE THIS 11TH DAY OF JANUARY 2023, SERVED THE FOREGOING **COMMENTS OF THE COMMISSION STAFF,** IN CASE NO. GSW-W-22-01, BY E-MAILING A COPY THEREOF TO THE FOLLOWING:

LESLIE ABRAMS-RAYNER
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COEUR D'ALENE ID 83816
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Jo Nelson
SECRETARY