

**BEFORE THE  
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND  
TRANSPORTATION COMMISSION,**

**DOCKET UW-240151**

**Complainant,**

**v.**

**CASCADIA WATER, LLC,**

**Respondent.**

**WATER CONSUMER ADVOCATES OF WASHINGTON, INTERVENOR**

**DIRECT TESTIMONY OF BLAINE C. GILLES**

**Rate of Return, Cost of Capital, Imprudent Investments,**

**Single Tariff Pricing, Litigation Expenses**

**Exhibit BCG-1T**

**November 20, 2024**

**DIRECT TESTIMONY OF BLAINE C. GILLES**

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**I. WITNESS QUALIFICATIONS**

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

A: Blaine Gilles, 70 Green Valley Lane, Sequim, Washington 98382

**Q. By whom are you employed and what is your position?**

A: For purposes of this testimony, I am operating as an independent consultant. I am also employed as the President of AERAS Technologies, LLC a firm that provides emission control services to the maritime shipping industry.

**Q: Can you describe your professional background as it relates to this case?**

A: Yes. I have been actively involved in the study, regulation and operation of regulated industries for over 30 years. I completed my Ph.D. in Economics, with a concentration in Industrial Organization, in 1992. My doctoral thesis examined the engineering economics of long-distance competition in the transition from regulated monopoly to competition. While completing my PhD I served as an economic analyst for the Illinois Commerce Commission's Policy Analysis and Research Division, where I participated in the rate of return regulation of telecommunications carriers and investigated and reported on alternatives to rate of return regulation. Additionally, I taught a variety of collegiate-level courses in economics, including Microeconomic Theory and Industrial Organization, which included analysis of regulatory regimes and practices for regulating public utilities. After completing my doctorate I joined Williams Communications Group, a subsidiary of the Williams Companies, a gas pipeline firm. At the time, Williams owned one of only four nationwide fiber-optic networks through its subsidiary, Williams Communications. At Williams, I led their regulatory & public policy group and later assumed a

1 management role in the Network Planning department. In the latter role, I was  
2 responsible for negotiating and managing purchase agreements with other carriers  
3 totaling ~\$800 million per annum.

4 In 1996 I joined Ameritech Corporation as it prepared to launch its own facilities-based  
5 long-distance service. As Director of National Regulatory affairs, I obtained operating  
6 licenses for Ameritech's long-distance subsidiary and offered expert testimony in related  
7 regulatory proceedings. I later served as the Director of Transport Product management,  
8 responsible for the design, pricing and P&L of Ameritech's data services products. The  
9 revenues from this product line exceeded \$1 billion per year. At the time, these services  
10 were subject to "price cap" regulation, one of the alternatives to rate of return regulation  
11 for monopoly utility enterprises.

12 Finally, as Ameritech prepared its own network facilities to provide long-distance  
13 service, I took on the role of Director of Network Access and Transport for Ameritech  
14 Communications Inc. ("ACI"), Ameritech's long-distance subsidiary. In this role, I  
15 negotiated and managed all of ACI's wholesale telecommunications service agreements,  
16 and had significant planning responsibilities for ACI's fiber and switching infrastructure.

17 In late 1999, I rejoined the Williams Companies which, having sold its long-distance  
18 subsidiary to WorldCom five years earlier, was constructing a new national fiber optic  
19 network. When I began, Williams Communications (later renamed "WilTel") was in  
20 startup mode and my responsibilities focused on creating and negotiating service  
21 contracts for domestic and international carrier services. As the service infrastructure  
22 began to take shape, I was tasked with forming a voice services business unit responsible

1 for sales, marketing, traffic management, contracting, and other functions related to the  
2 creation of a profitable wholesale voice services business. Between 2000 and 2006, this  
3 business grew to over \$1.3 billion per year in annual revenue.

4 I left WilTel in 2006, a few months after its acquisition by Level 3 Communications, and  
5 formed a consulting business. As a consultant I have provided management consulting  
6 services to a variety of clients including McKinsey & Company, Leucadia National  
7 Corporation, AT&T, the United States Securities & Exchange Commission and the U.S.  
8 Justice Department. I serve as Senior Advisor to Pacific Economics Group Research, a  
9 consulting firm that specializes in formulating and implementing alternatives to rate-of-  
10 return regulation for large utilities. These strategies recognize the potential distortions,  
11 costs and other difficulties inherent in implementing and maintaining a rate-of-return  
12 regulatory regime and attempt to achieve economically desirable outcomes. These  
13 alternatives to traditional rate of return regulation, also known as performance-based  
14 regulation (“PBR”) are company specialties. I have assisted the Pacific Economics Group  
15 Research in its educational activities for regulators in conjunction with the Edison  
16 Electric Institute. A few years ago, I prepared and presented a paper on the impact of  
17 regulation on innovation in conjunction with two researchers from the Edison Electric  
18 Institute.

19 Most recently I have been involved in two startup firms focused on environmental  
20 quality. For several years I served as president of Conversion Energy Systems, a firm  
21 developing gasification technology to extract energy from plastic waste. Currently I am  
22 President of AERAS Technologies, LLC a firm that has designed, constructed and

1 operates a marine-based platform that extracts and eliminates airborne pollutants from  
2 large oceangoing vessels, like containerships and tankers.

3  
4 My academic training and professional experience have provided me with a broad range  
5 of expertise in regulatory economics & public policy, executive management and  
6 decision making. I have specific expertise in the engineering economics, industry  
7 practices which govern the provision of regulated services. In addition, I have extensive  
8 experience in the financial aspects of running a regulated business, including dealing with  
9 capital and operating expenses, revenue recognition, sales compensation, contracting and  
10 credit.

11 **Q: What is the purpose of your testimony?**

12 A: I have been asked to discuss the economics and practice of rate base/rate of return  
13 regulation and opine on Cascadia's request for substantial increases to the rate base in this  
14 case.

## 15 **II. RATE OF RETURN FACTORS**

16 **Q: What is rate-of-return regulation and why is it used?**

17 A: Rate of Return Regulation (“RoR”) is a system for controlling prices and economic  
18 returns of a regulated monopoly business. The underlying economic problem is that in  
19 certain industries where capital costs are high and there are substantial scale economies, it  
20 is more efficient to have a single firm serve all customers than to have multiple  
21 competitors serve those same customers. For example, a single gas distribution utility

1 operating and maintaining a network of gas lines that services all homes in an urban area  
2 is likely to have much lower costs and impose far fewer inconveniences to the public than  
3 having smaller firms with multiple gas distribution networks compete against each other.  
4 Such circumstances are sometimes termed a “natural monopoly.”

5 Under RoR, the regulator generally establishes a “statutory monopoly”— a regime in  
6 which direct competitors (say an alternative gas company) will not be licensed to operate  
7 so the monopoly utility is not subject to direct competition. In exchange for this  
8 protected monopoly status, the utility is subject to RoR where the goal is to set prices  
9 such that the utility can earn back its expenses in addition to its economic cost of capital.

10 **Q: What is the “economic cost of capital”?**

11 A. In a market economy, attracting investment requires that a particular opportunity generate  
12 expected returns that equal or exceed those of other similarly risky investments. If not,  
13 that opportunity will fail to attract funding as investors put their money toward  
14 alternatives that are expected to generate higher returns or where they bear lower risks.  
15 This economic cost of an investment is sometimes called the “opportunity cost” because  
16 it represents the cost of an investment in terms of the best opportunity given up to pursue  
17 it.

18 For example, let us say that a particular investment is expected to generate a 10% return,  
19 but there is a 50% risk that it will generate no return at all. Then the expected returns of  
20 that investment are 5% (10% times the 50% risk factor). If investors can purchase a  
21 treasury bill having no risk that generates a return of 6%, then investors will purchase

1 treasury bills, and the hypothetical investment will not receive funding. In other words,  
2 the economic cost (a.k.a. Opportunity Cost) of this particular investment is 6%, so if it  
3 does not generate returns that exceed this cost, it will not attract investment.

4 **Q: How does this concept apply to rate of return regulation?**

5 A: Under RoR the regulator has the task of setting prices such that the regulated monopoly  
6 earns back its expenses plus recouping the economic costs of its capital investments. In  
7 other words, prices are set such that the regulated monopoly generates a return on  
8 investment that is equal to that of other similarly risky investments so that its returns  
9 equal or slightly exceed the opportunity costs of its investments.

10 This task requires substantial diligence and investigation on the part of the regulator  
11 because it must: 1) establish that the monopoly's expenses are not excessive; 2) establish  
12 the economic cost of capital of the monopoly firm; and 3) ensure that the monopolist's  
13 capital expenditures are actually useful and prudent.

14 Importantly, none of these tasks are trivial and ratepayers can be negatively impacted if  
15 the critical empirical components of the RoR are not established accurately. These  
16 critical components include establishing the value of the monopolist's capital assets on  
17 which it is allowed to earn a return (the "rate base"), determining whether the  
18 monopoly's accounting is correct, determining the rate of return that will allow the  
19 monopoly to earn back its economic cost of capital and determining whether new  
20 investments that the monopoly may wish to add to the rate base are prudent.



1 **Q. What analysis is required of the regulatory commission in implementing rate of**  
2 **return regulation?**

3 A: Properly implementing RoR places a significant burden on the regulator. First, there are  
4 accounting issues. The regulator must ensure that depreciation rates approximate the  
5 service lives of capital assets as closely as possible and the regulator must ensure that the  
6 accounting for expenses and capital is accurate. Second, there are economic issues.  
7 Economic analysis is required to determine the returns of similarly-risky investments to  
8 determine the economic costs of the regulated monopolist's capital investments. Finally,  
9 there are economic and management oversight issues. As I explain later, there are  
10 incentives for the monopolist under RoR to overspend. To limit this behavior, thorough  
11 examination of a detailed long-term capital plan and working papers laying out the cost-  
12 benefit analysis of individual projects is needed to determine the efficacy of new capital  
13 investments.

14 **Q: What potential issues arise if the regulator does not correctly establish the**  
15 **monopoly's cost of capital and set a rate of return equal to it?**

16 A: If the rate of return is set too low then the firm will fail to attract the investment needed to  
17 undertake projects that would benefit ratepayer customers. There would be a tendency to  
18 underinvest and allow plant and equipment to deteriorate.

19 On the other hand, if the rate of return significantly exceeds the underlying economic cost  
20 then the monopoly is incentivized to spend money on investments that are not  
21 economically justified. Over time this may lead to early retirements of existing capital,

1 pursuit of capital investments that are not justified on a cost-benefit basis, and other  
2 behaviors designed to maximize the size of the rate base.

3 This incentive toward over-investment in capital is well-documented in the literature of  
4 regulatory economics. In the 1960's, Leland Johnson and Harvey Averch wrote a seminal  
5 paper outlining the incentives for rate of return regulated monopolies to over-expand their  
6 rate bases in pursuit of higher returns for their shareholders. See Averch, Harvey;  
7 Johnson, Leland L., *Behavior of the Firm Under Regulatory Constraint*, American  
8 Economic Review. **52** (5): 1052–1069 (1962). This tendency toward inflation of the rate  
9 bases has been termed the “Averch-Johnson Effect.”

10 **Q: What forms can Averch-Johnson type effects take?**

11 A. There are numerous potential effects. For example, existing capital that is almost fully  
12 depreciated generates little return for the monopoly utility. Rather than keeping and  
13 maintaining existing capital and deferring its replacement for as long as possible— as  
14 would a firm in a competitive market— the utility may be incentivized to retire existing  
15 capital before the end of its useful life to maximize the size of the rate base. Competitive  
16 firms do deep cost-benefit analysis of individual investment opportunities to determine  
17 whether they generate returns that justify the expenditure of their limited capital funds. If  
18 the regulator allows capital expenditures into the rate base with little scrutiny, there is no  
19 incentive for the monopolist to undertake such analysis.

20 The monopolist may be incentivized to "gold plate" and invest in expensive solutions to a  
21 problem rather than expending the effort to determine the most cost effective one. For

1 example, purchasing a new truck rather than repair an existing one, investing in complex  
2 digital metering systems rather than simple analog ones, etc.

3 The monopolist may also be incentivized to expand capacity based on potential future  
4 demand rather than carefully forecasted capital requirements or engage in a variety of  
5 other behaviors designed to push the limits of what regulators may deem plausible  
6 increases in the monopolist's capital stock.

7 **Q: Are there other issues with rate of return regulation that are important to the**  
8 **Commission's review of this case?**

9 A: Yes. The goal of RoR is to establish a set of prices, restrictions and other incentives that  
10 result in investments and prices similar to those that would prevail in a competitive  
11 market, where firms compete to attract customers and projects within those firms  
12 compete for those firm's limited capital resources.

13 However, despite these laudable goals, RoR is basically "cost plus" regulation. As such  
14 the regulated monopolist has few incentives to reduce cost unless they are imposed by the  
15 regulator. Competitive firms are highly incentivized to minimize expenses as they lead  
16 directly to increased profits. For a regulated monopoly on the other hand, the benefit of  
17 operational cost reduction is transitory. It will enjoy the benefit of such a cost reduction  
18 only until the next rate case when prices are adjusted to match cost.

19 For this reason, the responsibility falls to the regulator to determine not only whether  
20 expenses (salaries, corporate overheads, third party expenses, etc.) are accounted for  
21 properly but whether their level is justifiable. Likewise, the regulator must assess the



1 produce a total 8 required return or Weighted Average Cost of Capital (“WACC”)  
2 of 8.97%.

3 See Rowell, Exh. MJR-1T at 16:6-9. Cascadia originally proposed a capital structure of  
4 60/40 equity to debt, then agreed with Staff to accept a capital structure of 50/50 prior to  
5 the public hearing, and now has changed its capital structure numbers to 66/34.

6 This manipulation of the assumed capital structure of Cascadia is problematic. NWN  
7 Cascadia’s corporate parent is the supplier of all financing to Cascadia, both debt and  
8 equity. As such Cascadia is not going to the “market” for either debt or equity financing.  
9 In this case, NWN is incentivized to manipulate the instruments of its financing to seek  
10 higher returns. The Staff has apparently recognized this already, and in other  
11 jurisdictions regulators sometimes fix the debt-equity ratio at 50:50 to prevent it.

12 Mr. Rowell, in his testimony, does perform some analysis and comparisons of the type  
13 that would be expected in a rate case. To begin with, this justification and analysis  
14 should have been a fundamental component of Cascadia’s initial rate case filing.

15 Additionally, the Commission Staff has undertaken analysis and concluded, I’m advised,  
16 that an appropriate ROR would be 6.46%. I’m also advised Public Counsel has retained  
17 an expert who will testify Cascadia’s requested ROR is too high.

18 My own analysis leads me to concur with Staff and Public Counsel. Witness Rowell’s  
19 underlying assumptions are calibrated to overstate Cascadia’s economic costs. To begin  
20 with his analysis is based on two false premises. First, he repeatedly indicates that the  
21 risks and costs associated with Cascadia are those of a small independent water utility.

22 However, Cascadia is a subsidiary of a very large corporate entity. Its cost of capital,

1 access to financial resources, economies of operation and business risk profile are those  
2 of a large, regulated monopoly utility. Thus, the firms that he bases his analysis on are  
3 not similar to NWN/Cascadia.

4 Indeed, the rationale behind allowing smaller water systems to be purchased by larger  
5 entities like Cascadia/NWN is precisely because they have lower capital costs and better  
6 risk profiles than small independent entities.

7 Second, Rowell implies that operating a portfolio of smaller water systems is inherently  
8 riskier than operating a large integrated gas utility. There are numerous reasons to  
9 believe that this is not the case. First, since the water systems in NWN's portfolio are  
10 largely not interconnected a service issue impacting one system does not impact the  
11 others. Demand from most consumers is fairly consistent across the calendar year.

12 Cascadia does not pay a third party for water—its resource cost is zero and demand and  
13 cost for its service is therefore not subject to input price fluctuations. Water is largely  
14 inert, and the water systems are mostly in semi-rural areas. Thus, a system failure or leak  
15 is unlikely to cause substantial property loss or other damages. Finally, Cascadia users  
16 have no alternatives but to purchasing water from the utility.

17 Relatively speaking NWN's primary business, natural gas distribution, is riskier in  
18 numerous ways. The gas system is interconnected, a failure in one part of the system  
19 may impact thousands of consumers. NWN, and its customers, must pay for NWN's  
20 highly variable input cost (natural gas) which can lead to fluctuations in demand and  
21 substitution of electric power for gas power in some applications. Moreover, failure to  
22 adequately forecast input pricing can lead to revenue shortfalls. "Regulatory lag," the

1 time between significant cost changes and the time where rates can be altered to account  
2 for these changes can be significant and can significantly impact the regulated firm's  
3 finances. Natural gas, despite being delivered by a monopoly utility has a close substitute  
4 in electric power. Over time, with the advent of heat pumps and electrically power  
5 appliances, consumers are shifting away from use of gas as a heat and energy source.  
6 Demand for gas is highly seasonal, demand is much higher during winter heating months,  
7 than during the rest of the year and volumes are highly dependent on weather. To the  
8 extent that climate change is causing warmer winters, it is decreasing the average number  
9 of heating days per year and hence gas demand. Finally, gas is combustible and system  
10 failures or leaks can create substantial liabilities for the utility.

11 For all these reasons, NWN's investments in small water systems are likely to be among  
12 the least risky in their portfolio. As such the cost of capital and return on equity for  
13 NWN's water businesses should be substantially lower than for their gas business. **The**  
14 **regulated rate of return for NWN's gas business is therefore the upper bound on**  
15 **what should be allowed for Cascadia.**

16 **Q. Have you undertaken any analysis of NWN's cost of capital**

17 A. Yes. Examining Rowell's assumptions, comparisons of recent rate cases and  
18 analysis of Rowell's calculations reveals that they consistently overstate NWN's cost of  
19 capital calculation above its underlying economic costs.

20 First, as I noted above, Rowell asserts repeatedly that Cascadia is a small "high risk"  
21 utility. See Rowell, Exh. MJR-1T at 21:15-16 and 39:8-15. However, this is simply not  
22 true. In its 2023 Annual Report, NWN states:

1 "Today, NW Natural Water is one of the 20 largest privately-owned water utilities  
2 in the United States based on customer count. "

3 It also states that,

4 "Through our disciplined strategy, we closed four new utilities acquisitions, most  
5 notably expanding into a high-growth, major Phoenix, Arizona suburb. We also  
6 increased our investment in the largest privately-owned water utility in Oregon. In  
7 2023, NW Natural Water added 10,400 customers for an overall growth rate of  
8 12.7% and an organic growth rate of 2.0%."

9 See Exh. BCG-3 at 8. This depiction of NWN's depiction of its rapidly growing water  
10 portfolio appears to be at odds with Rowell's assertion that Cascadia is a small, "high-  
11 risk" utility.

12 As a subsidiary of NWN, Cascadia has access to NWN's capital resources at NWN's cost  
13 of capital. Moreover, as I indicated earlier, Cascadia's business is inherently less risky  
14 than the gas side of NWN's portfolio. Northwest Natural Gas (NWN), Cascadia's parent,  
15 is a publicly traded utility focused primarily on natural gas distribution. Over the past  
16 year NWN's ROE has averaged a bit over 7.5%, and was recently 6.76%. In other  
17 words, the 10.9% currently requested by Cascadia is 61% higher than what its parent is  
18 earning in its other endeavors. A much more modest rate of return would still be  
19 significantly higher than that earned by its corporate parent and should therefore be  
20 sufficient to attract the financial resources necessary to fund the continued development  
21 of Cascadia's water infrastructure. Importantly, as I indicated at the outset, allowing



1 Cascadia to earn excessive returns will simply encourage it to continue excessive  
2 spending, leading to further negative consequences of Averch-Johnson effects.

3 Some recent examples underscore this point.

4 Calwater, a utility with water subsidiaries in California, Hawaii, New Mexico, Texas and  
5 Washington, announced that it:

6 [I]ntends to file for and—if approved—implement new rates based on an  
7 authorized 9.57% return on equity, with a 4.23% cost of debt and **an authorized**  
8 **rate of return of 7.08%**. Cal Water's previous return on equity was 9.20%, with a  
9 cost of debt of 5.51% and authorized rate of return of 7.48% for the period of  
10 January 2018 to July 30, 2023.

11 See Exh. BCG-4.

12 Sunriver, another water utility owned by NWN, Cascadia's parent, filed a rate case in  
13 Oregon on December 31, 2023 requesting an assumed 40:60 debt/equity ratio with a  
14 5.31% cost of debt and a requested ROE of 10%, with an **8.124% request return on**  
15 **rate base**. Given that both Sunriver and Cascadia are 100% equity funded, and are  
16 subsidiaries of the same corporate parent, their costs of debt and capital are identical. See  
17 Exh. BCG-5 at 6 (Q.14) and 9 (Q. 25). Moreover, in Washington, debt is available for  
18 water utility uses at rates as low as 2.5%.

1 **Q: NWN witness Rowell uses the capital asset pricing model (CAPM) to estimate**  
2 **Cascadia's cost of capital. Have you done such an analysis?**

3 A: Yes. The economic cost of a utility's capital depends on the utility's risk profile relative  
4 to other investments, and its ability to generate income using financial resources on  
5 alternative investments. Neither of these is straightforward to assess. One method  
6 commonly used by economists and financial analysts is the "Capital Asset Pricing  
7 Model" ("CAPM"). CAPM postulates that a firm's economic cost of capital is the risk-  
8 free return available in the market plus a "risk premium" to account for the business risk  
9 undertaken by the firm. In this model the utility's required return on equity ("ROE") is  
10 as follows:

$$11 \quad \text{RoE} = Rf + (\beta \times MRP);$$

12 where,  $Rf$  is the risk-free rate,  $MRP$  is the market risk premium and  $\beta$  is the equity beta  
13 for the asset in question.  $\beta$  is an assessment of the relative risk of the asset. A reasonable  
14 metric for the risk-free rate ( $Rf$ ), is the yield on 10-year U.S. Treasury Bills. At present,  
15 this is 4.25%, and until 2022, this yield rarely topped 2%. (At present the 20-year rate is  
16 about 4.5%). All computations below were made based data available on November 15,  
17 2024.

18 Betas are generally not measured for the water sector specifically. However, there are  
19 good reasons to believe that the risks inherent in the water industry are substantially  
20 lower than electricity or gas. Water plant is located underground and not generally  
21 subject to wind, water, fire, gas leaks and other events that can substantially increase the  
22 risks of operating an electrical or gas distribution facility. Moreover, most water utilities

1 “own” the source of the resource they are distributing so they are not subject to potential  
2 input price shocks that can trigger substantial changes in the investment performance of  
3 gas and non-integrated power utilities. Finally, the plant itself (reservoirs and distribution  
4 facilities) are typically long-lived and require less maintenance capital over the course of  
5 their lives than in a typical gas or electricity utility. Thus, their risk of incurring  
6 unanticipated future cost increases in such maintenance capital is substantially lower.

7 The Dow Jones UTIL (utility average beta) is 0.59. A beta of 1 signifies risk equal to  
8 that of the broader market. Utilities are generally less risky than the broader market.

9 NWN’s beta is currently 0.57, slightly lower than that of the Dow Jones utility index.

10 (One would expect the risk of its water subsidiaries to be substantially lower than that of  
11 its gas distribution assets for the reasons noted above). In the below estimate I used a  
12 risk-adjusted beta for the "Low Case" that is 10% lower than NWN's market-based beta  
13 or 0.52.

14 The Market Risk Premium captures the difference between the expected equity market  
15 rate of return and the risk-free rate. (It generally falls between 4.5% and 7.5%)

16 Using these metrics yields ROE numbers that range from:

17 o Low case (risk adjusted beta and low MRP):  $ROE = 4.25\% + (.52 \times 4.5\%) =$   
18  $6.59\%$

19 o Medium Case (NWN beta and low MRP):  $ROE = 4.25\% + (.57 \times 4.5\%) = 6.82\%$

20 o High Case (NWN beta and high MRP).  $ROE = 4.25\% + (.57 \times 7.5\%) = 8.53\%$

21 Note: These results are from the current post-pandemic environment characterized by  
22 substantially increased interest rates and higher betas. If we looked back prior to the

1 pandemic utility betas were substantially lower as was the risk-free rate. ROEs for water  
2 utilities during that period would likely have been less than 5%.

3 **Q: How do your estimates of CAPM differ from those of NWN witness Rowell?**

4 A: There are a few differences. First, Mr. Rowell estimates that market risk premium  
5 (MRP) by looking backward over 42 years. This is simply a guess on his part as there is  
6 no economic theory to support the notion that market risk premiums in the future will be  
7 identical to those in the past. But the analyst must choose some method as this is not a  
8 readily available empirical number. For that reason, I have shown a range of MRPs. The  
9 “high case” MRP I computed of 8.53% is higher than that of Mr. Rowell. See Exh. MJR-  
10 10, “Cost of Capital Schedule 8 (where he uses a risk factor of 8.02%.

11 Second, Mr. Rowell's computations are based on estimates of risk based on Value Line  
12 betas for a "Proxy Group" of small water utilities. To justify this, he reiterates the  
13 unsubstantiated claim that risks of Cascadia are higher than those of NWN and that he is  
14 using the Value Line betas associated with the "Proxy Group" of utilities he has chosen.  
15 As NWN is the source of all of Cascadia's funding, and NWN is deciding what capital  
16 expenditures to make, this is simply not necessary. The Beta for NWN, a publicly traded  
17 company is readily available. As I have indicated above, the business risk inherent in  
18 NWN's water utility portfolio, if anything, is lower than of the rest of the firm so if any  
19 adjustment is done to the NWN beta, it should be in a downward direction. Cascadia  
20 benefits from having a large corporate parent, which is presumably the reason for  
21 allowing NWN subsidiaries to acquire smaller water systems. NWN benefits from having  
22 lower risk, potentially growing and stable water utilities with peak revenues during the

1 summer months when gas demand is low, thus smoothing its annual revenue profile. Its  
2 business risk and financing options are those of a large, diversified utility, and its  
3 ratepayers should benefit from this. Yet the average Beta in Mr. Rowell's Proxy Group is  
4 0.81, substantially higher than that of NWN.

5 **Q: Do you have any other comments regarding Cascadia's proposed weighted average**  
6 **cost of capital**

7 A: Yes. First, Cascadia began this case by proposing a 12% cost of equity and a 60/40  
8 debt/equity ratio. It also claimed a 10.5% cost of debt. It did not provide any analysis to  
9 justify this cost of equity nor its cost of debt. Upon scrutiny, and after much effort by  
10 Advocates and Staff, the company has shifted its argument to a lower cost of equity  
11 number and a lower cost of debt number, but has readjusted the debt equity ratio to  
12 34%:66% with no justification.

13 This is simply a shell game. NWN provides substantially all funding for Cascadia and  
14 unilaterally determines whether this funding will be in the form of a debt or equity  
15 instrument. In fact, by NWN Cascadia's own admission, its cost of debt is no higher than  
16 5.22%. If this is the case, debt funding should be the preferred method of financing the  
17 utility. Due to the "moral hazard" involved in utilities and their corporate parents in  
18 setting debt equity ratios to maximize returns, some other states mandate that the utility  
19 use a 50:50 debt to equity ratio as the basis for rate cases. I recommend that the same  
20 approach be adopted here, as it will prevent "gaming" by the utility and its corporate  
21 parent to inflate returns. This is especially important as there are external sources of low-  
22 cost debt financing available for rural water utilities in Washington.

1 Using Mr. Rowell's own figures (at p. 41) and a 50:50 debt to equity ratio, the Weighted  
2 Average Cost of Capital would be:

3  $(5.22\% \times 50\%) + (10.9\% \times 50\%) = 8.06\%$ .

4 Using the numbers from the "High Case" of the CAPM model would yield:

5  $(5.22\% \times 50\%) + (8.53\% \times 50\%) = 6.87\%$ .

6 The recent Calwater rate case resulted in a figure between these two estimates, and they  
7 are more in line with NWN's market return on equity. In my opinion this is where  
8 Cascadia's return should set as the result of this case as it provides adequate incentives for  
9 Cascadia and its parent to continue investing, but not so high a return as to attract  
10 overinvestment as I discussed in my description of the Averch-Johnson Effect.

11 **IV. PRUDENCE REVIEW**

12 **Q: What is the importance of a prudence review in the conduct of a rate case?**

13 A: As I noted earlier, there is substantial economic incentive on the part of the regulated firm  
14 to expand the size of the rate base whenever possible, because this valuation is the only  
15 mechanism by which the firm can generate more earnings for its shareholders. The cost-  
16 plus nature of this regulatory scheme means that, to guard against inflation of the rate  
17 base, the regulator must carefully assess the utility's capital plans, the cost effectiveness  
18 of those plans, the effectiveness of the utility in implementing those plans, and the cost-  
19 benefit analysis associated with individual investments.

20 The regulated firm cannot be counted on to undertake these actions without regulatory  
21 scrutiny because the incentive structure of RoR financially rewards the firm for making

1 excessive increases to the rate base. The phrase used in regulatory economics "used and  
2 useful" connotes that capital that is incorporated into the rate base must actually be  
3 deployed and operating and it must be of scale that meets its immediate business needs.  
4 This is the essence of a "prudence review."

5 **Q: What is best practice for a regulated utility regarding rate cases and capital planning**  
6 **for a regulated utility like Cascadia?**

7 A: In his testimony Mr. Rowell quotes J.B. Marvic:

8 "Ordinarily, businesses are not allowed to deduct the full costs of capital  
9 expenditures in the year the expenses are incurred. Therefore, 22 the substantial  
10 outlays of capital required for such purchases must be carefully planned out,  
11 usually years in advance. That way, companies can avoid overextending  
12 themselves financially and creating cash flow problems. For capital-intensive  
13 companies, proper management of capital expenditures is crucial for survival and  
14 growth. Effective management requires striking the right balance between the  
15 need for resources in the future and the ability to generate profits in the present."

16 See Rowell, MJR-1T at 19:20 – 20:7.

17 As a general statement this is true for capital intensive enterprises in competitive markets.  
18 However, Cascadia and NWN are not in competitive markets, they are monopolies under  
19 a cost-plus form of regulation. Thus, the ability to generate profits and increase them  
20 over time is a direct function of the utility's ability to add assets to the rate base. The

1 balancing act described in this quote is thus quite different for a regulated monopolist  
2 than it is for a profit-maximizing firm in a competitive market.

3 To ensure that the utility is not engaged in overinvestment to enhance its return to  
4 shareholders at the expense of consumers, the regulator must scrutinize the capital  
5 improvement plans, expenditures, and deployment of capital by the utility. The utility  
6 should be sharing its capital deployment plan with its ratepaying customers and with the  
7 Commission in advance of making significant capital expenditures, and as with any  
8 capital-intensive business it should be conducting detailed cost-benefit analyses of any  
9 substantial capital expenditures it plans to make.

10 **Q: Is Cascadia following this best practice of providing information on its significant**  
11 **capital expenditures before undertaking them?**

12 A: Unfortunately, no. Cascadia states it projects capital improvements of \$3-\$4  
13 million per year for the next 5 years. See Exh. BCG-6, Cascadia response to PC DR 6.  
14 Cascadia has not produced any capital improvement plan explaining these numbers, and  
15 it objects to answering questions about them. See Exh. BCG-7, Cascadia response to  
16 WCAW DR 69. See also, Exh. BCG-8, Cascadia response to PC DR 21.

17 When Advocates moved to compel an explanation of these significant spending  
18 projections, Cascadia replied

19 The Commission does not need to make a prudence determination on future  
20 capital spending estimates to determine the prudence of the investments included  
21 in Cascadia Water's rate case. The Commission reviews the prudence of



1 investments retrospectively, and the review is based on what a reasonable utility  
2 knew or should have known at the time the decision was made to move forward  
3 with the project, which gives a level of certainty to utilities and investors, who  
4 contribute funds towards these investments.

5 See Exh. BCG-9, Cascadia, Response to Motion to Compel at 4.

6 Cascadia's position means that the only mechanism for the Commission to hold Cascadia  
7 responsible for its planning, or lack thereof, is to deny inclusion of capital expenditures in  
8 the rate base after the funds have been expended and let Cascadia shareholders bear the  
9 risk of imprudent capital decisions. This puts unreasonable pressure on the Commission  
10 to either approve previous investments—no matter how imprudent-- or deny them from  
11 the rate base, to the financial peril of the utility upon which the ratepayers are dependent  
12 upon for service.

13 Other states have recognized the gamesmanship involved in the capital planning and  
14 approval process and require that regulated firms provide detailed documentation of their  
15 future capital plans. In California for example, water quality improvement projects are  
16 governed by California Public Utilities Commission's "Standard Practice U-36-W. See  
17 Exh. BCG-10. This policy requires that the utility provide the public and the  
18 Commission advance notice of improvement projects that will "increase the rate  
19 base...by more than 10%," and that the utility present an "Advice Letter" that includes,  
20 among other things, the review of alternative solutions, cost, financing possibilities,  
21 impact on rates and schedule for making improvements. In other words, the utility is  
22 required to present a pro-forma capital plan.

1 Implementing rules that require prior approval of significant capital projects before they  
2 are undertaken would have likely averted many of the issues confronting the Commission  
3 in this proceeding and it is my opinion that Washington should adopt a similar policy.

4 **Q: What is your assessment of the evidence provided justifying the key capital**  
5 **expenditures involved in this rate case?**

6 A. Cascadia has provided little or no economic evidence to support the major expenditures  
7 at issue in this case. In a firm in a competitive market, and the businesses I have led,  
8 there would have been substantial work done in forecasting demand, validating those  
9 forecasts, performing cost benefit analysis of individual projects to show that they would  
10 have the effect of lowering cost sufficient to reap a return over a reasonably short period,  
11 examination of alternatives to, or impacts of deferring major capital expenditures, least-  
12 cost analyses of meeting regulatory requirements, and an overall concern for maximizing  
13 service quality at minimum cost. A well-run utility would produce the same work  
14 product. To date, Cascadia has provided little evidence that such analyses were  
15 undertaken and has provided little evidence of any results from such analysis. See Exh.  
16 BCG-11, Cascadia responses to WCAW DR 70-74.

17 This should be deeply concerning to the Commission as Cascadia is seeking to roughly  
18 double the size of the rate base and cannot provide the basic analyses that would underpin  
19 good business decision making practice in any context.

20 The major capital expansions that are driving Cascadia's request for increased rates in  
21 this proceeding are: 1) Expansion of reservoir capacity, booster pumps and water mains  
22 for demand that does not yet exist; 2) Replacement of facilities where the ability to keep

1 those facilities in service and extend their lives through maintenance was not carefully  
2 studied (it is my understanding that DOH did not request or require much of this  
3 investment); 3) Deployment of sophisticated metering and SCADA systems appropriate  
4 to large urban settings with thousands of customers to a largely rural and small customer  
5 base without any cost-benefit analysis; and 4) Deployment of stand-alone generators  
6 without cost-benefit analysis of their benefit to consumers.

7 **Q. Has Cascadia provided evidence that the capital improvements at issue herein were**  
8 **necessary?**

9 A. No. Cascadia has not produced the capital improvement plans, cost benefit analyses, or  
10 analyses of alternative options necessary to demonstrate that its capital improvements  
11 were necessary.

12 Originally Cascadia claimed its improvements were necessary because DOH required  
13 them directly or they were required to meet the standards in the DOH Water System  
14 Design Manual. Public Counsel asked Cascadia to:

15 [I]dentify those [assets] that the Washington State Department of Health required  
16 through a direct order or that were necessary because of overdue compliance (e.g.,  
17 meter installation). Please do not include assets that the Department of Health  
18 only recommended.

19 Cascadia responded:

1           There are two categories of assets relevant to this question. First, there are assets  
2           associated with projects mandated by enforcement or corrective action plans from  
3           the Washington State Department of Health. Those projects are:

4           (1) Estates (Clallam County) – Reservoir – This project was required due to the  
5           issues and directive that came about due to the sanitary survey and follow-up  
6           underwater reservoir inspection due to multiple cracks and root infiltration in  
7           the existing underground reservoirs. ...

8           Second, there are assets installed because of requirements to bring systems  
9           into compliance with DOH minimum design standards.

10          See Exh. BCG-12, Cascadia response to PC IR-1.

11          As regards the Estates reservoir project, Cascadia had already decided to undertake that  
12          project. Contrary to Cascadia’s assertion, DOH did not require reservoir replacement.

13          Knowing that Cascadia already planned to replace the reservoir, DOH stated:

14                 Submit a corrective action plan for engineering design and construction of the  
15                 proposed tank. Tank 2, the larger tank, has several locations on the north side and  
16                 one on the east side that are leaking. ODW is aware Cascadia Water plans to  
17                 replace both buried reservoirs with an above ground storage tank.

18                 **If a new tank is not proposed**, hire a qualified structural inspector to evaluate the  
19                 reservoir. Submit a copy of the inspection results and a corrective action plan  
20                 describing how you will address the inspector’s findings. If a new tank is not  
21                 proposed, hire a qualified structural inspector to evaluate the reservoir.

1 See Exh. BCG-13 , Cascadia response to WCAW DR 13, Att. 3 (emphasis added).  
2 Cascadia’s consulting engineer acknowledged Cascadia planned to replace the Estates  
3 reservoirs.

4 Although there is no indication that leakage is a current concern based upon  
5 routine coliform monitoring, **the company plan** on installing a new above ground  
6 reservoir and discontinuing use of the existing below ground reservoir.

7 See Exh. BCG-14, letter of Jeffrey Tasoff to DOH (emphasis added). The important  
8 point here is that Cascadia attempted to justify the necessity of the Estates reservoir  
9 replacement by saying DOH required it, when DOH did no such thing.

10 Cascadia also claimed it was required to do the rest of its major improvements because it  
11 is required to comply with DOH Design Manual standards. Again, the necessity of these  
12 improvements was not buttressed by capital improvement plans, analyses of alternative  
13 options or cost-benefit analyses. Cascadia’s assertion that the DOH Design Manual  
14 required improvements led to Advocates asking:

15 Please produce all documents from DOH requiring Cascadia to bring systems into  
16 compliance with DOH minimum design standards for each of the eight p Please  
17 produce all documents from DOH requiring Cascadia to bring systems into  
18 compliance with DOH minimum design standards for each of the eight projects  
19 referenced by Cascadia in its response.

20 Response:

1 The document from DOH requiring Cascadia Water to bring systems into  
2 compliance with DOH minimum design standards for each of the eight projects  
3 referenced by Cascadia Water in its response is the DOH Water System Design  
4 Manual (UW-240151 WCAW DR 42 Attachment 1). When Cascadia Water  
5 undertook each of the eight projects, **it was a requirement** to make sure that  
6 project was in compliance with DOH minimum design standards per section 1.5  
7 Minimum System Design Requirements. ... **The fact that we must bring**  
8 **systems into compliance with DOH minimum design standards is a**  
9 **regulatory/legal reality**

10 See Exhs. BCG-15 and 16, Cascadia's responses to WCAW DR 42 and 43 (emphasis  
11 added).

12 Cascadia no longer claims that the Design Manual required any improvements. In fact, it  
13 disavowed its prior responses to Public Counsel:

14 **These informal data requests were provided in an effort to reach a settlement**  
15 **with Staff, Public Counsel, and Advocates, and were not part of the formal**  
16 **discovery process** which started on September 11, 2024, pursuant to Order 02.

17 See Exh. BCG-17, Cascadia response to WCAW DR 10 (emphasis added). This begs the  
18 question whether Cascadia was attempting to give straightforward answers to critical  
19 questions, or merely to position itself for an expected settlement before the Commission  
20 suspended this matter.

1 Finally, Cascadia no longer contends that the DOH Design Manual required compliance,  
2 acknowledging that it provides guidelines. Culley Lehman now testifies only that:

3 All projects described in this testimony follow the guidance of the DOH Water  
4 System Design Manual.

5 See Lehman, Exh. CJL-1T at 6:4-6 and 10:6-7.

6 Thus, DOH did not say these improvements were required or necessary, either directly or  
7 indirectly.

8 Finally, Cascadia states replacing reservoirs was necessary because they were leaking.  
9 But Cascadia's consulting engineer recognized that concrete reservoirs leak. In fact,  
10 DOH considers leakage of as much as 10% averaged over three years to be acceptable.  
11 See Exh. BCG-13 at 4. Mr. Lehman merely states reservoirs leaked and offers no  
12 evidence that they leaked to the extent DOH cared.

13 Cascadia has not provided sufficient evidence that its capital improvements were  
14 necessary, reasonable or prudent.

15 **Q: Are Cascadia's recent capital investments in replacement reservoirs used and**  
16 **useful?**

17 A. Cascadia's evidence in this case, underscores some significant issues. For  
18 example, it appears that that the three replacement reservoirs and pump infrastructure is  
19 sized to a level significantly beyond that required by its current ratepayers. The three  
20 new reservoirs, with greater booster pump capacity and larger distribution mains are

1 designed to provide capacity for the maximum connections possible, according to  
2 Cascadia's engineer.

3 Thus, for example, the Estates system currently has 367 actual users and has been  
4 approved for up to 480 connections. But the reservoir, booster pumps and mains were  
5 designed for 520 hypothetical users, based primarily on Cascadia's water rights. See  
6 BCG Exh.18, Cascadia response to WCAW DR 47, Att. 3 at Par. 2.6, Capacity Summary.

7 Likewise, DOH summarized the CAL Waterworks reservoir replacement project as  
8 follows:

9 This project includes demolition of the existing 40,000-gallon reservoir and  
10 construction of a 79,400-gallon reinforced circular concrete reservoir to serve 193  
11 ERUs for future growth, replacement of the pumphouse, booster pumps, pressure  
12 tanks, and providing a loop in the distribution.

13 See Exh. BCG-19, Cascadia response to WCAW DR 53, Att. 1. CAL Waterworks  
14 currently has 100 active connections and 121 approved connections. See Exh. CJL-8 at  
15 5. Thus, Cascadia has almost doubled capacity for hypothetical future expansion.

16 While it is often more efficient to build additional capacity to meet forecasted demand.  
17 Cascadia has provided no long-term capital plan or supporting forecast that demonstrates  
18 the need for such capacity expansions. This expansion was not pre-approved by the  
19 Commission or DOH. There are no working papers that support the need or likelihood of  
20 this hypothetical expansion, or if it is consistent with other regulations to which Cascadia  
21 is subject. Cascadia offers no analysis or forecast demonstrating when such additional  
22 capacity will be needed. In other words, this additional capacity is not currently used and



1 is not currently useful. The most appropriate way of signaling to the utility that a change  
2 in behavior is needed, and to protect ratepayers from this undue burden is to deny that  
3 portion of the investment that represents excess capacity from inclusion in the rate base  
4 until such time that demand increases to require it.

5 Cascadia has not provided any evidence that it carefully examined the costs and benefits  
6 of testing, repairing and maintaining existing facilities rather than the wholesale  
7 replacement of existing reservoirs. To reiterate my prior point, in a well-run firm, great  
8 pains would have been taken to preserve existing infrastructure as long as practicable--  
9 there is no evidence that this activity took place at Cascadia.

10 **Q. Are Cascadia's investments in SCADA systems prudent?**

11 A. From my background in telecommunications networking, I am familiar with remote  
12 surveillance, telemetry and metering systems. Cascadia appears to install SCADA  
13 systems as a matter of course when it purchases a new water system. Cascadia claims  
14 nearly a quarter of a million dollars in this rate case for SCADA systems and will pay  
15 more to maintain, monitor and protect these systems from hacking. This is a substantial  
16 sum for systems that cover only a portion of 4,000 connections.

17 In a competitive firm concerned about cost effectiveness, one would have expected a  
18 detailed cost-benefit analysis showing the economic and service benefits of deploying  
19 this new metering system. To my knowledge no such analysis was conducted.

20 **Q. Are Cascadia's investments in standby generators prudent?**

1 A. Cascadia installed new standby generators in ten water systems at a cost of \$702,151 for  
2 purchase, installation, propane, etc. Standby generators are not required by DOH.  
3 Cascadia claimed that most of its systems “experience power loss frequently” and that  
4 unspecified contaminants could potentially enter a water distribution system during  
5 power outages due to loss of pressure, which would then require a boil advisory. Electric  
6 company records show, however, that those systems experienced minimal (between zero  
7 and eleven) outages in the past four years. See Exh. BCG-20, letters and data from  
8 electricity providers. Further, although Cascadia acknowledges its duty to send a boil  
9 advisory if a power outage causes a loss of pressure, its records show it has not sent out  
10 any boil advisory due to an unforeseen power outage. See Exh. BCG-21, Cascadia  
11 responses to WCAW DR 113-117; see also BCG 22, Cascadia response to PC IR 2, and  
12 BCG 23, Cascadia response to WUTC IR

13 According to Cascadia it has not documented the impact of past power outages, their  
14 frequency or duration. Therefore, Cascadia offers no evidence of the benefit Cascadia  
15 customers might derive other than hypothetical risks which, to date, have not occurred.

16 **Q: Are the expenditures and lack of support indicative of the Averch-Johnson**  
17 **distortions you noted earlier?**

18 A: Yes, these expenditures occurring without prior approval and absence of plans, analyses  
19 and documentation to support them are part and parcel of the distortions caused by a rate  
20 of return regulatory regime that is not being carefully managed. As I described at the  
21 outset of my testimony, the incentives and distortions created by rate of return cost plus  
22 regulation are well-known and well-understood by regulatory economists. Absent action

1 by the Commission in this case to countervail this behavior the result will be to massively  
2 and rapidly increase the size of the rate base relative to the size of the customer  
3 population, with potentially more increases to come in the near future.

4 The cases noted above show a company that is not incentivized to curtail its capital  
5 expenditures, is not creating detailed business cases to support those expenditures, and is  
6 not providing the necessary evidence for the Commission to determine the prudence and  
7 efficacy of those expenditures. The only mechanism available to the Commission under  
8 these circumstances is to deny inclusion of substantial portions of these capital  
9 expenditures into the rate base.

#### 10 V. SINGLE TARIFF PRICING

11 **Q: Cascadia has requested a move to "Single Tariff Pricing" for 20 "Island Systems"**  
12 **and 9 other systems on the Olympic Peninsula. What factors should the**  
13 **Commission take into account in determining whether to adopt this proposal?**

14 **A:** From an economic efficiency standpoint, the main focus in setting tariff rates should be  
15 establishing a regime based on "cost causation." In other words, if there are substantial  
16 differences in providing services to Group A versus Group B, then the rates charged to  
17 each group should reflect those differences. In instances where the costs of servicing the  
18 two groups will converge in the not-distant future or where billing is particularly costly or  
19 confusing this might mitigate in favor of establishing a single tariff. For example, if two  
20 water systems are at the edge of a growing urban area and they will soon be

1 interconnected with the infrastructure of the urban water system, their costs will converge  
2 as will the service infrastructure that supports them.

3 If, however, Group A and Group B are physically separate, are not and will not be  
4 interconnected in the near future and the costs of servicing each group are significantly  
5 different and are likely to remain so, forcing their rates to converge is undesirable for  
6 several reasons. First, let us say that the costs of servicing Group A are substantially  
7 lower than Group B. Perhaps this is because water resources are much more plentiful in  
8 Area A because the ratepayers in Area A had previously funded a capacity expansion.  
9 Rather than reaping the benefits of moving to an area with more plentiful water resources  
10 or having made a previous investment in expanding those resources, they are now being  
11 asked to subsidize ratepayers in Area B who made no such investment, and they are being  
12 discouraged from using those resources by the relatively high price caused by the  
13 subsidy.

14 In the future, despite having fewer water resources, home buyers will be incentivized by  
15 this subsidy to move into Area B despite its relatively low water resources, placing  
16 further burdens on those resources and will be encouraged to use more water.

17 This same single-tariff pricing problem in the insurance field has led to overbuilding of  
18 housing along beachfronts. While it may have seemed "fairer" to charge everyone the  
19 same rate for insurance, not accounting for differentials in risk results in higher costs for  
20 low-risk homeowners and encourages more high-risk construction.

21 In terms of "rate simplicity" and billing, the current tariff regime is extremely simple, can  
22 be managed on a spreadsheet (that already exists) and is, for the most part, automated.

1 Single tariff pricing should only be approved by the Commission if Cascadia  
2 demonstrates: (a) that the costs of servicing the consumers in the pricing groups being  
3 integrated are either similar or likely to converge in the near future, (b) that the water  
4 systems of the pricing groups being integrated are going to be interconnected and operate  
5 on a common infrastructure in the near future or the costs of billing and managing  
6 multiple tariffs are significant and measurably and demonstrably different from single  
7 tariff pricing to an extent that they offset the potential distortions of violating the cost  
8 causation principle.

## 9 VI. LITIGATION EXPENSES

10 **Q. Do you believe Cascadia should be allowed to include its litigation expenses herein**  
11 **in this or a future rate base?**

12 A. No. As I have indicated repeatedly, this litigation exists solely because the Commission  
13 suspended this rate case because Cascadia did not meet even the lowest standards for  
14 submission of a valid rate case. It did not provide analysis demonstrating its actual cost  
15 of capital. It did not provide documentation demonstrating the necessity of its capital  
16 expenditures and that it had considered reasonable alternatives to those expenditures. It  
17 did not provide forecast information demonstrating the necessity of its capital expansions.  
18 It did not provide a cost-benefit analysis demonstrating the efficacy of its metering  
19 program. In short, it provided virtually none of the requisite information that a regulated  
20 firm in a rate case would be expected to provide to support a rate case.

21 These are red flags indicating that Cascadia is not being operated effectively, as a well-  
22 run firm utility would have the requisite evidence and documentation in abundance.

1 Running the firm properly is the responsibility of Cascadia and its shareholders.  
2 Allowing Cascadia to force its customers to pay its attorneys' fees and litigation costs  
3 sends that the signal that this bad management practice can continue, and that Cascadia  
4 may continue to make unilateral and unjustified decisions regarding capital expansion  
5 without Commission oversight, and make consumers hesitant to object to imprudent and  
6 unreasonable capital expenditures.

## 7 VII. RECOMMENDATIONS

8 **Q: Can you summarize your recommendations?**

9 **A:** Yes. Based on the evidence I have seen, I recommend that:

- 10 1. The Commission should set the Rate of Return on equity no higher than NWN receives in  
11 its riskier natural gas cases, and as supported by the empirical and comparative evidence  
12 this should fall within the range of 6-7%. The Commission should further mandate a  
13 capital structure of 50% equity and 50% debt for this and for future rate cases to halt any  
14 attempts at gaming the capital structure to increase returns.
- 15 2. The Commission should deny inclusion of that portion of Cascadia's capital  
16 expenditures for capacity that are not currently needed to service existing customers.  
17 Cascadia can petition for increases in this allowance as additional demand is realized and  
18 documented.
- 19 3. To the extent that Cascadia cannot justify its other prior capital expenditures, they should  
20 be denied in full or in part from inclusion in the rate base.
- 21 4. To prevent the recurrence of such cases, the Commission should put in place a set of  
22 rules requiring that Cascadia and other Washington water utilities provide forecast data,

1 cost-benefit analysis, and other documentation justifying significant capital expenditures  
2 (those that would increase the size of the rate base by more than 10%) for public review  
3 and Commission approval before they are undertaken.

4 5. Cascadia should not be allowed to include recoup any of the costs of this litigation from  
5 its ratepayers.

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