BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

UG 388

In the Matter of	)
	)
NORTHWEST NATURAL GAS COMPANY,	)
dba NW NATURAL	)
	)
Request for a General Rate Revision.	)

OPENING TESTIMONY OF

BRADLEY G. MULLINS

ON BEHALF OF

ALLIANCE OF WESTERN ENERGY CONSUMERS

REDACTED VERSION

April 17, 2020

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EXHIBIT LIST

I. INTRODUCTION AND SUMMARY

Q. PLEASE STATE YOUR NAME AND OCCUPATION.

A. My name is Bradley G. Mullins. I am a Consultant for MW Analytics, an independent consulting firm representing utility customers before state public utility commissions in the Northwest and Intermountain West. My witness qualification statement can be found at Exhibit AWEC/101.

Q. PLEASE IDENTIFY THE PARTY ON WHOSE BEHALF YOU ARE TESTIFYING.

A. I am testifying on behalf of the Alliance of Western Energy Consumers ("AWEC"). AWEC is a non-profit trade association whose members are large energy users in the Western United States, including customers receiving gas sales and gas transportation services from Northwest Natural Gas Company *dba* NW Natural ("NW Natural").

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. I discuss my initial review of NW Natural's proposed $71,466,572 or 18.9% margin revenue requirement increase, including several adjustments to its initial proposal. I also discuss my review of NW Natural's proposed investment activities at the Mist Storage facility.

Further, I respond to NW Natural's proposal to spread the approved increase on an "equal percent of margin basis" with an extra $3,600,000 allocated between above- and below-parity rate schedules.

Q. PLEASE SUMMARIZE YOUR TESTIMONY.

A. For the Mist Storage facility, I recommend NW Natural classify all investment related to the Mist Storage facility as a storage investment in FERC Account 363.11 Liquefaction Equipment-LINN. I also recommend that a portion the ongoing Mist Storage investment and costs also be allocated to wholesale storage service[1] customers. Finally, I recommend NW Natural conduct a study evaluating the incremental expenses associated with Mist Storage in the long run incremental cost ("LRIC") model prior to filing its next rate case.

. For rate spread, I recommend using NW Natural's class cost of service study results and rejecting NW Natural's proposal spread the increase on an equal percent of margin basis. Given the significant differences between the class parity ratios, however, I recommend a Customer Impact Offset ("CIO") adjustment, capping the overall increase for any rate schedule at 150% of the average margin rate increase. I also recommend applying a floor at 0%, removing the potential for a rate reduction for certain classes, even though certain classes should receive rate reductions based on the LRIC study.

Finally, I recommend several adjustments for revenue requirement as discussed below. These adjustments, in conjunction with the March 11, 2020 cost of capital settlement and Mist Storage Facility issues discussed above, reduce the margin revenue requirement increase to $46,480,173 or a 12.3% margin increase. The specific adjustments are detailed below.

[1] i.e. Interstate/Intrastate Storage Services

Table 1
Revenue Requirement Recommendation
($000)

NW Natural Initial Proposal	**71,447**
% Margin	*18.9%*
Impact of Adjustments	
ROE Settlement	(7,010)
Storage Expense	(1,244)
Headquarters Expense	(165)
Account 930, Misc Expense	(1,775)
Non-Labor O&M Escalation	(2,682)
Oct 2020 Rate Base Measurement	(4,196)
Storage Rate Base	(1,148)
Account 367, Mains	(2,271)
Floatation Adjustment	(4,834)
Interest Coordination	359
Total Adjustments	**(24,966)**
Adjusted Revenue Requirement	**46,480**
Adjusted % Margin	*12.3%*

II. MIST STORAGE COST

Q. WHAT IS THE MIST STORAGE FACILITY AND HOW DOES IT IMPACT NW NATURAL'S REQUESTED RATE INCREASE?

A. As discussed at Anderson/13, NW Natural's investment in the Mist Storage facility is a key driver of its requested rate increase. The Mist Storage facility is owned and operated by NW Natural. NW Natural uses the storage facility to serve the gas requirements of its sales customers, and sales customers benefit from the facility by allowing NW Natural to purchase and store less expensive gas in the summer to be used later in the heating season. Transportation customers do not similarly benefit from the Mist Storage facility because they purchase their own gas commodity from third parties. NW Natural also uses the facility to provide wholesale storage services, including for customers served on NW Natural's Tariff Schedule 90, for the North Mist Expansion.

Q. WHAT AMOUNT OF CAPITAL ADDITIONS DOES NW NATURAL PROPOSE FOR THE MIST STORAGE FACILITY?

A. In response to AWEC Data Request 36, NW Natural detailed all forecasted capital additions associated with the Mist Storage facility. I have summarized that response in Exhibit AWEC/102. In total, between November 2020 and October 2021, NW Natural proposes $41,478,591 in capital additions related to the Mist Storage Facility. Relative to the overall $308,455,050 in proposed capital additions over that same period, the Mist Storage investment represents about 13.4% of NW Natural's total capital budget.

Q. WHY IS NW NATURAL MAKING THESE INVESTMENTS?

A. NW Natural describes the Mist Storage investments as including the replacement of an old dehydrator, which was described in NW Natural's 2016 Integrated Resource Plan. This description, however, understates the scope and the scale of the projects identified in response to AWEC Data Request 36 and summarized in Exhibit AWEC/102. NW Natural's actual investments includes items such as a new gasoline tank, electrical system updates, instrument and controls upgrades, and a new standby generator. These upgrades and updates are well beyond replacing an old dehydrator.

Q. WHEN ARE THESE MIST STORAGE INVESTMENTS EXPECTED TO COME ONLINE?

A. Approximately 86% or $35,601,114, of the Mist Storage investments are expected to come online in October 2020. This schedule, however, may be impacted by Covid-19. Accordingly, if the projects are delayed at all, they will not be online by the November 1, 2020 rate effective date.

a. Mist Storage FERC Classification

Q. DID NW NATURAL CLASSIFY ALL OF THESE INVESTMENTS AS STORAGE PLANT IN ITS FERC ACCOUNTING?

A. No. For every Mist Storage investment, NW Natural classified just 60% to Local Storage Plant and classified 40% of the Mist Storage Investment to Distribution Plant. This was true for every investment and every month of the pro forma period reviewed in AWEC/102. As noted, 60% of the amount was classified to FERC Account 363.11 Liquefaction Equipment-LINN and 40% of the amount was classified to FERC Account 376.11 Mains < 4". Account 363.11 Liquefaction Equipment-LINN is the primary storage account used for the Mist Storage investments. Account 376.11 Mains <4" is a major distribution account and includes many non-storage investments, such as the Kuebler Blvd. Reinforcement.

Q. DO YOU AGREE WITH THIS CLASSIFICATION?

A. No. AWEC recommends all Mist Storage investments be classified as a Local Storage Plant in FERC Account 363.11 Liquefaction Equipment-LINN. For example, a project such as Mist Corrosion and Abatement that is related to storage is a storage investment, and therefore, should be classified as a storage investment, not as a distribution investment.

Q. HAVE MIST STORAGE COSTS BEEN CLASSIFIED AS DISTRIBUTION IN THE PAST?

A. In performing this analysis, I did not review the classification of historical investments for the Mist Storage facility. Notwithstanding, given NW Natural's response to AWEC Data Request 36, it is possible that Mist Storage costs have been classified as distribution plant in the past. If so, AWEC recommends all historical Mist Storage investment amounts be reviewed as well.

b. Mist Operating Expenses

Q. WHAT AMOUNT OF OPERATING EXPENSES ARE INCLUDED IN REVENUE REQUIREMENT FOR MIST STORAGE FOR THE BASE PERIOD?

A. In response to AWEC Data Request 37, NW Natural detailed all operating expenses associated with Mist Storage in the 2019 Base Period. In Attachment 1 to NW Natural's response to AWEC Data Request 37, it identified $2,703,840 of Mist Storage expenses in the Base Period. This response included only nine months of data, so it is unclear if there was an error in this response.

Q. HOW MUCH MIST OPERATING EXPENSES HAS NW NATURAL FORECASTED IN THE TEST PERIOD?

A. In response to AWEC Data Request 38, NW Natural detailed the amount of Mist Storage expenses it proposes to include in the October 2021 Test Period. In Attachment 1 to NW Natural's response to AWEC Data Request 38, it identified $5,173,462 in Mist Storage Expenses in the Test Period. Thus, based on NW Natural's response, Mist Storage costs were nearly two times the base period amount from AWEC Data Request 37. If the response to AWEC Data Request 37 were annualized, the base period storage expense would equal about $4,055,760, meaning the test period costs are $1,117,702 higher than the base period amount.

Q. WHAT IS DRIVING THIS INCREASE?

A. While NW Natural discussed the need for a new dehydrator, it did not necessarily elaborate on the drivers of the increased O&M expense associated with Mist Storage.

Q. WHAT DO YOU RECOMMEND?

A. Routine replacement activities such as replacing an old dehydrator will not necessarily increase operations and maintenance expenses. In fact, replacing an old piece of equipment with a new piece of equipment should reduce operations and maintenance expense, due to the improved efficiency and increased life span of the new equipment. Accordingly, I recommend no pro-forma adjustment to storage O&M expenses for the Mist Storage facility in the test period. The impact of this adjustment is an approximate $1,244,356 reduction to revenue requirement.

c. Wholesale Storage Services

Q. WHAT AMOUNT OF THE MIST STORAGE REVENUE REQUIREMENT WAS ALLOCATED TO WHOLESALE CUSTOMERS?

A. It is not clear how the Mist Storage facility costs are being allocated between retail customers and wholesale storage services. However, it is clear that none of the amounts NW Natural identified in response to AWEC data requests 36 through 38 were allocated to wholesale storage customers. Further, in Confidential AWEC Data Request 32 Attachment 2, NW Natural identified all 2019 revenues incurred by month and by counterparty associated with the Mist Storage and the North Mist Expansion. NW Natural confirmed that these revenues were also not included as an offset to revenue requirement.

Q. DO YOU AGREE WITH NW NATURAL'S APPROACH?

A. No. Without reviewing all the costs associated with the Mist Storage facility, including cost associated with the expansion, it is not possible to ascertain whether the Schedule 90 revenues are reasonable. Further, based on the descriptions in AWEC/102, the Mist Storage investments that NW Natural included in the rate case may be better considered to be attributable to the overall betterment of the Mist Storage Facility benefitting all customers of that facility, including wholesale customers.

Q. WHAT DOCUMENTATION DID NW NATURAL PROVIDE TO SUPPORT THESE INVESTMENTS?

A. In response to Staff Data Request 137 Confidential Supplemental Attachment 1, NW Natural provided some project documentation for the Mist dehydrator. From the documentation, it was not clear if this investment would impact only retail customers. It would seem inefficient to undertake an investment of this scale and scope for a joint facility without considering the costs and benefits applicable to the overall storage facility, rather than focusing only on a single well or set of wells.

Q. WHAT DO YOU RECOMMEND?

A. I recommend that all ongoing and future Mist Storage investments be split between retail sales customers and wholesale storage services based on the proportionate dth/day withdrawal rights of the two customer classes. At this time, I am unable to calculate a precise percentage for this, due in part to NW Natural designating the sales data in AWEC Data Request 32 Attachment 2 as highly confidential. Accordingly, I have used an allocation ratio of 25/75 between retail and wholesale customers and will update this value in Sur-Rebuttal Testimony.

d. <u>Incremental Storage Costs</u>

Q. WHAT RATE SPREAD ISSUE HAVE YOU IDENTIFIED WITH RESPECT TO NW NATURAL'S STORAGE COSTS?

A. As discussed in Wyman/26:20-27:10, NW Natural considers storage costs in the LRIC class cost of service model. The allocation is based on NW Natural's average recall investment in 2015 spread volumetrically to each gas sales rate schedule. Rather than using contemporaneous data, however, NW Natural bases its storage costs in the LRIC model on 2015 values, and escalates the amount to 2020 using an Handy Whitman Index.

Q. DO YOU AGREE WITH NW NATURAL'S ASSUMPTION?

A. No. It may be that NW Natural has not had any recall investments since 2015. Notwithstanding, actual storage costs have increased more quickly than the rate assumed in the LRIC. As we are seeing with the Mist Storage facility, building incremental storage is very expensive. NW Natural use of a 2015 recall investment is not necessarily consistent with the costs that ratepayers are seeing in revenue requirement in connection with the Mist Storage facility.

Q. WHAT DO YOU RECOMMEND?

A. As discussed below, the margin parity ratios of NW Natural's different rate classes vary from (-)50.7% to +54.0%. If the Commission were to adhere to the rate spread suggested by the LRIC model, some customers would see very large rate increases, while others would see large reductions. Accordingly, AWEC is not proposing a rate spread adjustment for storage costs at this time even though such an adjustment is appropriate. AWEC may propose such an adjustment once it reviews the opening testimony of other parties. Notwithstanding, given the amount of divergence in NW Natural's cost of service study already, however, AWEC recommends that NW Natural commit to studying the storage cost allocator used in the LRIC prior filing to its next general rate case.

III. RATE SPREAD

Q. PLEASE SUMMARIZE NW NATURAL'S PROPOSED RATE SPREAD?

A. NW Natural has proposed an equal percent of margin rate spread to all customers. NW Natural, however, proposes a secondary $3,600,000 allocation between above and below parity rate schedules in an attempt to address the wide range of parity ratios calculated in its filing. NW Natural's proposal however does not address the significant subsidies that are embedded in NW Natural's rates because it would move above parity rate schedules further away from parity.

Q. WHY HAS NW NATURAL IGNORED THE RESULTS OF ITS COST OF SERVICE STUDY RESULTS?

A. The cost of service study results show that certain customer classes should receive large rate reductions while other classes should be subject to large rate increases. Presumably, NW Natural believed that it was appropriate to equalize the rate increase between customers. At Wyman/36:15-17 NW Natural states "strict application of cost study results, given such a change in the short-run would violate principles of rate shock and smoothing, neither of which are in the Company's or the customer's interests."

Q. HOW DOES NW NATURAL'S RATE SPREAD COMPARE TO THE COST OF SERVICE STUDY RESULTS?

A. Table 2 below provides a comparison between NW Natural's rate spread and the cost of service study results.

Table 2
Comparison of NW Natural's proposed rate spread
to the cost of service study results

Perecent Margin Rate Increase By Rate Class		Filed LRIC	Corr. LRIC	NW Nat Prop.
02	Residential Sales Firm	18.9%	18.1%	18.9%
03CSF	Commercial Sales Firm	54.9%	54.0%	23.5%
03ISF	Industrial Sales Firm	-35.9%	-35.6%	10.9%
27R	Commercial Sales Firm	11.1%	10.7%	18.9%
31CSF	Commercial Sales Firm	-32.0%	-31.7%	10.9%
31CTF	Commercial Transportation Firm	-34.3%	-35.0%	10.9%
31ISF	Industrial Sales Firm	-35.6%	-34.7%	10.9%
31ITF	Industrial Transportation Firm	-40.9%	-41.5%	10.9%
32CSF	Commercial Sales Firm	-41.0%	-40.0%	10.9%
32ISF	Industrial Sales Firm	-55.6%	-53.5%	10.9%
32CTF	Commercial Transportation Firm	-45.5%	-46.1%	10.9%
32ITF	Industrial Transportation Firm	-28.6%	-29.4%	10.9%
32CSI	Commercial Sales Interruptible	-108.7%	-50.7%	10.9%
32ISI	Industrial Sales Interruptible	-99.3%	-40.5%	10.9%
32CTI / 32I	Transportation Interruptible	-36.3%	-37.0%	10.9%
33T	Transportation	0.0%	0.0%	0.0%
Total		18.9%	18.9%	18.9%

As demonstrated above, several rate schedules would need to be reduced by around 50% to bring those customer classes to parity. Accordingly, NW Natural's proposal to increase these customers rates will only move them further from parity and perpetuate the existing subsidies for the foreseeable future. It should be noted here that I corrected an apparent error in how the percent margin rate increase was calculated. NW Natural's formula for calculating the margin rate increase percentage calculation included the impact of gas commodity costs. This error resulted in some rate schedules being allocated a margin rate reduction of more than 100%, an impossible result. In addition, NW Natural's target revenue did not correspond to its calculated revenue requirement increase. I have corrected those errors in the second column of Table 2, above.

a. <u>Customer Impact Offset</u>

Q. IS AN EQUAL PERCENT OF MARGIN RATE INCREASE APPROPRIATE IN THIS CASE?

A. No. In cases such as this one, where some customers are served at rates much higher than the cost to serve those customers, while other customers are served at rates much lower than the cost to serve those customers, a customer impact offset ("CIO") adjustment has been applied to rate spread, rather than using an equal percent of margin allocation. If it is the desire is to avoid rate shock while also making movement towards cost of service, a CIO can be used. Using a CIO can bring rate classes closer to parity, while mitigating rate shock for rate schedules with higher rate impacts.

Q. HOW IS A CIO ADJUSTMENT DIFFERENT FROM NW NATURAL'S PROPOSAL?

A. A CIO adjustment starts with the cost of service study results, but applies a cap, a floor or some other mechanism to the rate increase applied to a particular customer class. For example, it may be desirable to cap the average increase at 150% of the average rate increase. In such a scenario, the revenue increase for classes over the cap would be reduced to the cap level, and the reduction in revenue reapplied to the remaining rate schedules in proportion to margin revenues. This approach can be preferable because it will move the rate classes more closely to the desired parity ratios. It also uses a rational approach for spreading the revenue impact of the rate mitigation, rather than ignoring cost causation and the LRIC results by arbitrarily fixing all rate schedules at the same level.

Q. HAVE YOU PERFORMED THIS CALCULATION?

A. Yes. Table 3 below details AWEC's proposed rate spread using a CIO adjustment based on NW Natural's initial filing and applying a cap at 150% and a floor at zero.

Table 3
AWEC Proposed CIO
Based on NW Natural Initial Filing.

		Cor. LRIC Results	Cap at 150%	Recover Shortfall	Results After Cap	Floor at zero	Spread Surplus	Results After Floor
02	Residential Sales Firm	18.1%	0.0%	7.2%	25.3%	0.0%	-5.9%	19.4%
03CSF	Commercial Sales Firm	54.0%	-25.7%	0.0%	28.3%	0.0%	0.0%	28.3%
03ISF	Industrial Sales Firm	-35.6%	0.0%	3.9%	-31.7%	31.7%	0.0%	0.0%
27R	Commercial Sales Firm	10.7%	0.0%	6.7%	17.4%	0.0%	-4.1%	13.3%
31CSF	Commercial Sales Firm	-31.7%	0.0%	4.1%	-27.5%	27.5%	0.0%	0.0%
31CTF	Commercial Transportation Firm	-35.0%	0.0%	3.9%	-31.1%	31.1%	0.0%	0.0%
31ISF	Industrial Sales Firm	-34.7%	0.0%	4.0%	-30.7%	30.7%	0.0%	0.0%
31ITF	Industrial Transportation Firm	-41.5%	0.0%	3.5%	-38.0%	38.0%	0.0%	0.0%
32CSF	Commercial Sales Firm	-40.0%	0.0%	3.6%	-36.3%	36.3%	0.0%	0.0%
32ISF	Industrial Sales Firm	-53.5%	0.0%	2.8%	-50.6%	50.6%	0.0%	0.0%
32CTF	Commercial Transportation Firm	-46.1%	0.0%	3.3%	-42.8%	42.8%	0.0%	0.0%
32ITF	Industrial Transportation Firm	-29.4%	0.0%	4.3%	-25.1%	25.1%	0.0%	0.0%
32CSI	Commercial Sales Interruptible	-50.7%	0.0%	3.0%	-47.7%	47.7%	0.0%	0.0%
32ISI	Industrial Sales Interruptible	-40.5%	0.0%	3.6%	-36.9%	36.9%	0.0%	0.0%
32CTI /	Transportation Interruptible	-37.0%	0.0%	3.8%	-33.2%	33.2%	0.0%	0.0%
33T	Transportation	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total		18.9%	-5.3%	5.3%	18.9%	4.0%	-4.0%	18.9%

In Table 3 above, I detail my recommendation for applying a CIO adjustment to this case. Starting with the LRIC results, a cap is applied at 150% of the average rate increase. The average rate increase was 18.9% in the initial filing so the cap was set in this instance at 28.3%. The revenue shortfall from the cap was then spread to the remaining rate schedules based on the proportion of revenues for each schedule to determine the results after the CIO.

Second, since after applying the CIO some customer classes would still recognize a reduction, I recommend applying a floor at zero. The surplus revenues from the floor were then spread based on a percentage of margin revenues to customers not subject to the floor, excluding schedule 03 CSF, which was subject to the cap.

Q. PLEASE SUMMARIZE YOUR RECOMMENDATION?

A. For the rate spread in this case, I recommend a CIO cap and a floor be used in the manner detailed in Table 3, above. In Exhibit AWEC/103 I have provided further detail supporting this calculation, including rate spread based on my proposed revenue requirement discussed below.

IV. REVENUE REQUIREMENT

Q. HOW IS THIS SECTION OF YOUR TESTIMONY ORGANIZED?

A. In this section of testimony, I discuss my recommended adjustments to NW Natural's revenue requirement. I have provided a revenue requirement summary in Exhibit AWEC/104.

Q. WHAT WAS THE SCOPE OF YOUR REVENUE REQUIREMENT REVIEW?

A. I reviewed NW Natural's filing and testimony, including capital additions, operating expenses, and rate base amounts included in its filing. I also conducted several rounds of discovery and reviewed NW Natural's responses to my discovery, as well as reviewing the discovery and responses to discovery of other parties.

a. Rate Base Measurement Date

Q. HOW DOES NW NATURAL PROPOSE TO MEASURE RATE BASE?

A. NW Natural has developed a capital forecast starting with plant balances as of September 30, 2019. It then developed a schedule of expected capital expenditures over the period October 1, 2019 through October 31, 2021. Using that schedule, NW Natural proposed to calculate its rate base on the average monthly balance over the period October 1, 2020, through October 31, 2021.

Q. DO YOU AGREE WITH THAT MEASUREMENT DATE?

A. No. Including plant additions in rates which are not expected until a distant period in the future runs too far afield of the known and measurable and used and useful standards to be appropriately considered in rates. My understanding is that rates must be based on plant that is used and useful under Oregon law. If the capital is not forecasted to be in service by the rate effective date, the capital should not be included in rates. Further, given the distant timing of the in service dates, ratepayers do not have any way to verify that the capital is actually placed into service, or the prudence of the underlying expenditures.

Q. WHAT DO YOU PROPOSE?

A. I recommend that NW Natural be required to use a rate base measurement no later than the rate effective date of November 1, 2020.

Q. WHAT IS THE IMPACT OF THIS ADJUSTMENT?

A. I relied on NW Natural's Exhibit NW Natural/1000 WP 02 to calculate the impact of this adjustment. I adjusted rate base by eliminating the incremental net plant in NW Natural's forecast beyond November 1, 2020. Further, I estimated the impact on depreciation expense, based on the incremental plant balances using NW Natural's workpapers. Removing the incremental capital and reserves beyond the rate effective date results in an $23,289,544 reduction to rate base and a corresponding $1,717,008 reduction to depreciation expenses. The result is a $4,195,919 reduction to revenue requirement relative to NW Natural's initial filing.

Q. IS NW NATURAL ON TRACK TO COMPLETE ALL OF THE PROJECTS IT IDENTIFIED IN NW NATURAL/1000 WP 02 BY NOVEMBER 1, 2020?

A. NW Natural identified many projects it expects to come online by November 1, 2020. Notwithstanding, given the current public health situation from Covid-19, my understanding is that NW Natural field crews are only working on essential or emergency projects.

Accordingly, it is likely that many projects NW Natural identified may not be completed by November 1, 2020. Due to this uncertainty, AWEC requests that for each capital project that the Commission approves, NW Natural be required to provide an officers' affidavit affirming: (a) that each discrete project included in rate base has actually been placed into service as of the rate effective date; and (b) the amount of capital that has actually been placed into service. This will provide ratepayers with greater certainty over the capital that is being included in rates.

b. <u>Account 367, Mains</u>

Q. WHAT AMOUNT OF CAPITAL ADDITIONS DOES NATURAL PROPOSE FOR ACCOUNT 367 MAINS?

A. Over the 12-months ending October 2020, NW Natural forecasts capital additions of $46,326,852 in FERC Account 367 Mains.

Q. HOW DOES THE FORECAST COMPARE TO HISTORICAL CAPITAL SPENDING FOR THIS CATEGORY OF COSTS?

A. In AWEC Data Request 21, NW Natural provided the historical rate base for each FERC account over the period 2016 through 2019. Over the period 2016 through 2019, the net capital spending (i.e. the increase in gross plant), for account 367 Mains, was only $9,210,221. Thus, the capital spending rate NW Natural proposed for this account is over five times the historical average.

Q. WHAT IS DRIVING THE INCREASE RELATIVE TO THE HISTORICAL AVERAGE?

A. NW Natural forecasts two distinct categories of capital expenditures--discrete projects and run-rate capital. For account 367 Mains, NW Natural identified 26 discrete capital projects of size varying from $30,446 for the TriMet Division Street Transit Project to $11,756,158 for the Sandy Feeder Project. The Sandy Feeder Project was discussed at Karney/3, and is designed to improve distribution system pressures and reliability for firm service customers in Sandy, Oregon. In addition to the discrete capital items NW Natural also includes $5,125,438 in run-rate capital items.

Q. HOW DOES NW NATURAL DISTINGUISH BETWEEN A DISCRETE AND RUN RATE CAPITAL ITEM?

A. From what I have reviewed, it appears that NW Natural has no clear methodology for distinguishing between run rate and discrete capital items. Since NW Natural includes capital for projects as small as $30,446 it is clear that the distinction is not based on the size of the project. NW Natural's calculation of run rate capital also appears to be arbitrary due to the large scope of discrete projects NW Natural identified. If NW Natural was able to identify every single project that it will undertake in 2020, there would be no need to use the run rate capital forecast. Further, in this case, the discrete capital items are already much greater than the overall historical run rate for the account.

Q. WHAT DO YOU RECOMMEND?

A. I recommend adjusting the budget for Account 367 Mains to include one discrete capital project, the Sandy Feeder Project. Further, I recommend considering all other potential projects within the context of an overall run rate for the account equal to $9,210,221 of capital additions per year. After including $11,756,158 for the Sandy Feeder project, I recommend a total budget of $20,966,379 for this account over the 12-months ending October 31, 2020. The impact of this budget reduction is a $2,271,250 reduction to revenue requirement.

c. <u>New Headquarters: 250 Taylor</u>

Q. PLEASE DESCRIBE NW NATURAL'S NEW HEADQUARTERS LEASE?

A. As discussed in the Direct Testimony of NW Natural witness Pipes, NW Natural is in the process of moving into its new headquarters. Mr. Pipes describes the process that NW Natural undertook when evaluating moving its headquarters, as well as many of the lease costs and investments.

Q. WHAT COSTS HAS NW NATURAL PROPOSED TO INCLUDE IN REVENUE REQUIREMENT FOR THE LEASE?

A. The amount of operating expenses associated with the new headquarters was detailed in response to AWEC data request 48, Attachment 3. NW Natural detailed $10,537,133 in Oregon Allocated expenses associated with the new lease compared to $6,232,287 of operating expenses for the old lease. Further, in AWEC Data Request 48, Attachment 4, NW Natural detailed $21,360,626 of leasehold improvements included in rate base.

Q. IS AWEC CONCERNED WITH THE COST OF THE NEW LEASE?

A. Yes. AWEC is concerned that NW Natural has selected a location in the middle of downtown Portland with some of the highest real estate prices in the region.

Q. WHY DID NW NATURAL SELECT SUCH AN EXPENSIVE LOCATION?

A. NW Natural's decision making process was documented in witness Pipes testimony. While AWEC is concerned with the cost and the extravagance of the new location, AWEC does not oppose NW Natural's decision to move from its old building. It is true that NW Natural has excluded costs associated with its barbeque, fireplace, water feature, wine cooler and its boardroom table, but that does not negate the existence of those features, which provides insight into the mindset of NW Natural when it designed its headquarters at this premier location. Notwithstanding, AWEC does have concerns with how the cost of the new headquarters is being allocated to utility services. Specifically, AWEC is concerned with how NW Natural will account for the revenues associated with subleasing space on the first two floors of the building. Further, a portion of the building will be occupied by employees of NW

Natural's non-utility affiliates, which should be considered in determining the lease expense attributable to rate payers.

Q. HOW MUCH SQUARE FOOTAGE WILL NW NATURAL BE LEASING?

A. Based on its response to AWEC Data Request 46, NW natural will be leasing 179,685 square feet. Of that amount NW Natural plans to sublease 1,456 square feet of retail space on floor 1 and 7,158 square feet of office space on floor 2.

Q. HOW DID NW NATURAL CONSIDER THE SUBLEASED SPACE IN REVENUE REQUIREMENT?

A. NW Natural reduced the lease expense by 4.8% for the proportion of square feet attributable to the subleased portion of the building.

Q. DID NW NATURAL ATTRIBUTE ANY TENANT IMPROVEMENTS TO THE SUBLEASED SPACE?

A. No. Given the scope of the tenant improvements at issue, I recommend a portion of the tenant improvement also be allocated to the subleased portion of the building. For purposes of calculating the adjustment, I have assumed that 4.8% of the total capital additions were attributable to subleased space.

Q. WILL NW NATURAL'S AFFILIATES ALSO OCCUPY THE SPACE?

A. As noted in the response to AWEC Data Request 46, several employees of NW Natural affiliates are expected to occupy space at the new headquarters. For example, the NW Natural affiliate Gill Ranch Storage already maintains its headquarters at 250 SW Taylor Street. This can be noted on the affiliate's website at http://gillranchstorage.com/contact-us/corporate-office. NW Natural has been trying to sell this affiliate, but with the PG&E wildfire bankruptcy, the sale has been postponed.

Q. HOW MANY GILL RANCH EMPLOYEES WILL WORK AT THE NEW HEADQUARTERS?

A. NW Natural identified only two affiliate gas storage employees who will be working at the new headquarters. Notwithstanding, many NW Natural employees at the headquarters will be providing services to the Gill Ranch Storage and other affiliates. For example, the Gill storage website lists the following contact information:

> "Gill Ranch Storage, LLC
> Corporate Office 250 SW Taylor Street, Portland, OR 97204
> info.nwngs@nwnatural.com 866.537.9245
>
> Marketing Inquiries
> Scott Gibson, Manager of Sales, Marketing & Capacity,
> sgibson.nwngs@nwnatural.com 503.226.4211 x5868
>
> Credit Inquiries
> Ashlee Minty, Credit Manager, ashlee.minty@nwnatural.com 503.226.4211 x5851
>
> Nomination and Billing Inquiries
> scheduling.nwngs@nwnatural.com 503.220.2414
>
> Media Inquiries
> Melissa Moore, Corporate Communications Manager, msm@nwnatural.com 503.220.2436"

Based on this list of NW Natural contacts for only Gill Ranch Storage, it appears that more than 2 individuals will be providing services to affiliates in the test period from NW Natural's new headquarters.

Q. DO EXECUTIVES SPEND ON AFFILIATE MATTERS?

A. Yes. The time tracking for the executive team was provided in response to Staff Data Request 224, Attachment 1. The attachment shows, for example, that NW Natural's CEO spend about 6.51 hours per month on affiliate matters. When assigning the cost of the new lease, however, NW Natural did not account for this time. The intercompany allocations NW Natural proposes are based on historical lease costs. Since the costs of the new lease are materially higher than the historical lease costs, the intercompany allocations for these employees are likely understated.

Q. WHAT DO YOU RECOMMEND?

A. For this testimony, I have relied on NW Natural's response to AWEC Data Request 46, and allocated the headquarters lease expense to the three affiliate employees identified based on an average workstation space of 76 square feet or 228 square feet.

Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?

A. Assigning 228 square feet to affiliate employees and attributing the tenant improvements to subleased space results in an approximate $164,750 reduction to revenue requirement. This amount is likely understated because it does not account for NW Natural's other affiliates.

d. <u>Non-Labor Operations and Maintenance Escalation</u>

Q. HOW DOES NW NATURAL FORECAST O&M EXPENSES?

A. NW Natural includes a blend of a fundamentals based O&M forecast and interpolated data using inflationary factors. Thus, NW Natural would forecast project specific O&M Costs for some O&M accounts, and rely on escalators for other accounts using a Consumer Price Index ("CPI") forecast.

Q. DO YOU AGREE WITH THIS APPROACH?

A. No. By combining escalators and a project specific forecast, NW Natural will overstate its O&M costs because the increase associated with the project specific forecast, will otherwise already be captured in the escalation assumption amount.

Q. IS IT APPROPRIATE TO ASSUME ANY ESCALATION GIVEN THE CURRENT CIRCUMSTANCES?

A. No. Given the uncertainty surrounding the current economic crisis, I believe it would be inappropriate to consider any generic escalation amounts in the context of revenue requirement. While the impacts the current economic situation are still unknown, past indications of consumer prices are not necessarily a good expectation of the future in the current environment.

Q. WHERE DID NW NATURAL PROVIDE ITS O&M MODEL?

A. NW Natural provided its O&M model in response to Staff Data Request 282.

Q. WHAT DO YOU RECOMMEND?

A. Given the current circumstances, I recommend removing all CPI escalation amounts from the O&M model. The impact of removing this escalation is an approximate $2,682,154 reduction to revenue requirement.

e. <u>Account 930, Miscellaneous General Expense</u>

Q. WHAT AMOUNTS ARE INCLUDED IN REVENUE REQUIREMENT FOR ACCOUNT 903 MISCELLANEOUS GENERAL EXPENSE?

A. NW Natural proposed to include $3,686,499 in test period revenue requirement for Account 930 Miscellaneous General Expense. In Confidential Attachment 2 to AWEC Data Request 9, NW Natural detailed the components that make up its forecast for this account.

Q. WHAT ISSUES HAVE YOU IDENTIFIED WITH RESPECT TO THESE BOARD OF DIRECTOR FEES?

A. With respect to board of directors' fees, I recommend those amounts be split 50/50 between shareholders and ratepayers in recognition that much of the board's time is spent benefitting shareholders, not necessarily ratepayers. This is particularly true as NW Natural is now being operated as a holding company and is acquiring many new entities, particularly water utilities.

Q. WHAT IS INCLUDED IN THE CATEGORY "OTHER"?

A. It is not clear. In the base period the "other" category included items such as monthly online WSJ subscriptions for directors, invitations for board holiday event, and iPad chargers for directors.

Q. WHAT DO YOU RECOMMEND FOR THESE OTHER EXPENSES?

A. Since I cannot tie the "other" amounts NW Natural identified to utility services, I recommend the "other" expense amount be removed from revenue requirement.

Q WHAT IS THE IMPACT OF YOUR RECOMMENDATION?

A. The impact of applying 50/50 sharing for directors' fees and removing the "other" expense category is an approximate $1,775,153 reduction to revenue requirement.

f. <u>Stock Issuance Costs</u>

Q. WHAT EQUITY ISSUANCE COSTS HAS NW NATURAL INCLUDED IN REVENUE REQUIREMENT?

A. NW Natural has proposed to include stock issuance costs of $3,430,000 in revenue requirement. This amount was calculated by taking the average amount of stock issuance costs experienced over the period 2019 through 2021.

Q. WHAT TYPE OF EXPENDITURES WERE INCLUDED IN THE STOCK ISSUANCE AMOUNT?

A. The Common stock issuance expense includes underwriting fees, issuance discounts, and accounting and legal fees.

Q. ARE THESE AMOUNTS APPROPRIATELY REFLECTED IN RESULTS OF OPERATIONS?

A. No. Stock issuance costs are not appropriately considered an operating expense and therefore not appropriately considered in operating results. Both GAAP and tax accounting require stock issuance costs to be treated as a reduction in the proceeds of the stock sale. Stock issuance costs are considered the equivalent of selling the stock at a discount, and thus, those costs do not create an expense that is eligible for recovery through rates.

Q. DOES A UTILITY'S COST OF EQUITY COMPENSATE FOR THESE COSTS?

A. Yes. The cost of issuing common stock is a factor that is considered when cost of capital and return on equity are established. Since parties agreed to an overall return on equity of 9.4% it would be inappropriate for NW Natural to be provided with a greater return through the stock issuance costs.

Q. HAS THIS ISSUE BEEN LITIGATED FOR PURPOSES OF TAX ACCOUNTING?

A. Yes. There are a number of cases where, for tax accounting, it has been established that a company could not deduct stock issuance costs against net operating income. *Barbour Coal Co. v. Commissioner,* 74 F.2d 163 (10^{th} Cir. 1934) is an example of such a case.

Q. WHAT IS THE REVENUE REQUIREMENT IMPACT OF THIS ADJUSTMENT?

A. Removing the stock issuance costs results in a $4,833,731, reduction to revenue requirement.

V. COVID-19 PUBLIC HEALTH SITUATION

Q. IS IT APPROPRIATE FOR UTILITIES TO DEFER COSTS ASSOCIATED WITH THE COVID-19?

A. No. In Docket No. UM 2068, NW Natural filed for an application to defer costs associated with the "COVID-19 Public Health Emergency." To date, however, there has been no clear indication regarding the impacts of COVID-19 public health situation on public utilities. According, AWEC is concerned with NW Natural using a deferral in the context of the COVID-19 situation because the situation is related to public health, not public utility services. The purpose of a deferral is to match costs and benefits, not to eliminate risk. While NW Natural may be impacted by the economic fall-out resulting from the crisis, those economic risks associated with declining use and throughput, are this risk borne by shareholders not the ratepayers. Lost margins from a recession are not appropriate costs for deferral.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

UG 388

In the Matter of	)
	)
NORTHWEST NATURAL GAS COMPANY,	)
dba NW NATURAL	)
	)
Request for a General Rate Revision.	)

EXHIBIT AWEC/101

April 17, 2020

QUALIFICATIONS OF BRADLEY G. MULLINS

Q. PLEASE STATE PROVIDE AN OVERVIEW OF YOUR EDUCATIONAL AND WORK EXPERIENCE?

A. I am the Principal Consultant of MW Analytics, a professional consulting practice that represents utility customers in regulatory proceedings before state utility commissions throughout the West. I have been performing independent energy and utilities consulting services for approximately six years and have provided services to utility customers on matters such as revenue requirement, power cost forecasting, and rate development. I have a Master of Accounting degree from the University of Utah. After obtaining my master's degree, I worked at Deloitte in San Jose, California, where I specialized in performing research and development tax credit studies. I later worked at PacifiCorp as an analyst involved in power cost forecasting.

Q. PLEASE PROVIDE A LIST OF YOUR REGULATORY APPEARANCES.

A. I have sponsored testimony in regulatory jurisdictions around the United States, including the following proceedings:

- <u>In re Portland General Electric Company, Renewable Resource Automatic Adjustment Clause (Schedule 122).</u> Or. PUC Docket No. UE 370.
- <u>In re Public Utility Commission of Oregon, Investigation of the Recovery of Capital Costs Consistent with Commission Legal Authority and the Public Interest,</u> Or.PUC Docket No. UM 2004.
- <u>Avista Corporation 2020 General Rate Case,</u> Wa.UTC Docket No. UE-190334 (Cons.).
- <u>In re Cascade Natural Gas Corporation Application for Approval of a Safety Cost Recovery Mechanism,</u> Or. PUC Docket No. UM 2026.
- <u>In re Avista Corporation, Request for a General Rate Revision,</u> Or.PUC Docket No. UG 366.
- <u>In re Portland General Electric, 2020 Annual Update Tariff (Schedule 125),</u> Or.PUC Docket No UE 359.
- <u>In re PacifiCorp 2020 Transition Adjustment Mechanism,</u> Or.PUC Docket No. UE 356.
- <u>In re PacifiCorp 2020 Renewable Adjustment Clause,</u> Or.PUC Docket No. UE 352.
- <u>2020 Joint Power and Transmission Rate Proceeding,</u> Bonneville Power Administration, Case No. BP-20.

- In the Matter of the Application of MSG Las Vegas, LLC for a Proposed Transaction with a Provider of New Electric Resources, PUC Nv. Docket No. 18-10034.
- Puget Sound Energy 2018 Expedited Rate Filing, Wa.UTC Dockets UE-180899/UG-180900 (Cons.).
- Georgia Pacific Gypsum LLC's Application to Purchase Energy, Capacity, and/or Ancillary Services from a Provider of New Electric Resources, PUC Nv. Docket No. 18-09015.
- Joint Application of Nevada Power Company d/b/a NV Energy for approval of their 2018-2038 Triennial Integrated Resource Plan and 2019-2021 Energy Supply Plan, PUCN Docket No. 18-06003.
- In re Cascade Natural Gas Corporation Request for a General Rate Revision, Or.PUC, Docket No. UG 347.
- In re Portland General Electric Company Request for a General Rate Revision, Or.PUC Docket No UE 335.
- In re Northwest Natural Gas Company, dba NW Natural, Request for a General Rate Revision, Or.PUC Docket No. UG 344.
- In re Cascade Natural Gas Corporation Request for a General Rate Revision, Wa.UTC, Docket No. UE-170929.
- In the Matter of Hydro One Limited, Application for Authorization to Exercise Substantial Influence over the Policies and Actions of Avista Corporation, Or.PUC, Docket No. UM 1897.
- In re PacifiCorp, dba Pacific Power, 2016 Power Cost Adjustment Mechanism, Or.PUC, Docket No. UE 327.
- In re Avista Corporation 2018 General Rate Case, Wa.UTC Dockets UE-170485 and UG-170486 (Consolidated).
- Application of Nevada Power Company d/b/a NV Energy for authority to adjust its annual revenue requirement for general rates charged to all classes of electric customers and for relief properly related thereto, PUCN. Docket No. 17-06003.
- In re the Application of Rocky Mountain Power for Authority to Decrease Current Rates by $15.7 Million to Refund Deferred Net Power Costs Under Tariff Schedule 95 Energy Cost Adjustment Mechanism and to Decrease Current Rates By $528 Thousand Under Tariff Schedule 93, REC and SO2 Revenue Adjustment Mechanism, Wy. PSC, Docket No. 20000-514-EA-17 (Record No. 14696).
- In re the 2018 General Rate Case of Puget Sound Energy, Wa.UTC, Docket No. 170033 (Cons.).
- In re PacifiCorp, dba Pacific Power, 2018 Transition Adjustment Mechanism, Or.PUC, Docket No. UE 323.
- In re Portland General Electric Company, Request for a General Rate Revision, Or.PUC, Docket No. UE 319.
- In re Portland General Electric Company, Application for Transportation Electrification Programs, Or.PUC, UM 1811.
- In re Pacific Power & Light Company, Application for Transportation Electrification Programs, Or.PUC, Docket No. UM 1810.

- In re the Public Utility Commission of Oregon, Investigation to Examine PacifiCorp, dba Pacific Power's Non-Standard Avoided Cost Pricing, Or.PUC, Docket No. UM 1802.
- In re Pacific Power & Light Co., Revisions to Tariff WN U-75, Advice No. 16-05, to modify the Company's existing tariffs governing permanent disconnection and removal procedures, Wa.UTC, Docket No. UE-161204.
- In re Puget Sound Energy's Revisions to Tariff WN U-60, Adding Schedule 451, Implementing a New Retail Wheeling Service, Wa.UTC, Docket No. UE-161123.
- 2018 Joint Power and Transmission Rate Proceeding, Bonneville Power Administration, Case No. BP-18.
- In re Portland General Electric Company Application for Approval of Sale of Harborton Restoration Project Property, Or.PUC, Docket No. UP 334 (Cons.).
- In re An Investigation of Policies Related to Renewable Distributed Electric Generation, Ar.PSC, Matter No. 16-028-U.
- In re Net Metering and the Implementation of Act 827 of 2015, Ar.PSC, Matter No. 16-027-R.
- In re the Application of Rocky Mountain Power for Approval of the 2016 Energy Balancing Account, Ut.PSC, Docket No. 16-035-01
- In re Avista Corporation Request for a General Rate Revision, Wa.UTC, Docket No. UE-160228 (Cons.).
- In re the Application of Rocky Mountain Power to Decrease Current Rates by $2.7 Million to Recover Deferred Net Power Costs Pursuant to Tariff Schedule 95 and to Increase Rates by $50 Thousand Pursuant to Tariff Schedule 93, Wy.PSC, Docket No. 20000-292-EA-16.
- In re PacifiCorp, dba Pacific Power, 2017 Transition Adjustment Mechanism, Or.PUC, Docket No. UE 307.
- In re Portland General Electric Company, 2017 Annual Power Cost Update Tariff (Schedule 125), Or.PUC, Docket No. UE 308.
- In re PacifiCorp, Request to Initiate an Investigation of Multi-Jurisdictional Issues and Approve an Inter-Jurisdictional Cost Allocation Protocol, Or.PUC, UM 1050.
- In re Pacific Power & Light Company, General rate increase for electric services, Wa.UTC, Docket No. UE-152253.
- In The Matter of the Application of Rocky Mountain Power for Authority of a General Rate Increase in Its Retail Electric Utility Service Rates in Wyoming of $32.4 Million Per Year or 4.5 Percent, Wy.PSC, Docket No. 20000-469-ER-15.
- In re Avista Corporation, General Rate Increase for Electric Services, Wa.UTC, Docket No. UE-150204.
- In re the Application of Rocky Mountain Power to Decrease Rates by $17.6 Million to Recover Deferred Net Power Costs Pursuant to Tariff Schedule 95 to Decrease Rates by $4.7 Million Pursuant to Tariff Schedule 93, Wy.PSC, Docket No. 20000-472-EA-15.
- Formal complaint of The Walla Walla Country Club against Pacific Power & Light Company for refusal to provide disconnection under Commission-approved terms and fees, as mandated under Company tariff rules, Wa.UTC, Docket No. UE-143932.

- In re PacifiCorp, dba Pacific Power, 2016 Transition Adjustment Mechanism, Or.PUC, Docket No. UE 296.
- In re Portland General Electric Company, Request for a General Rate Revision, Or.PUC, Docket No. UE 294.
- In re Portland General Electric Company and PacifiCorp dba Pacific Power, Request for Generic Power Cost Adjustment Mechanism Investigation, Or.PUC, Docket No. UM 1662.
- In re PacifiCorp, dba Pacific Power, Application for Approval of Deer Creek Mine Transaction, Or.PUC, Docket No. UM 1712.
- In re Public Utility Commission of Oregon, Investigation to Explore Issues Related to a Renewable Generator's Contribution to Capacity, Or.PUC, Docket No. UM 1719.
- In re Portland General Electric Company, Application for Deferral Accounting of Excess Pension Costs and Carrying Costs on Cash Contributions, Or.PUC, Docket No. UM 1623.
- 2016 Joint Power and Transmission Rate Proceeding, Bonneville Power Administration, Case No. BP-16.
- In re Puget Sound Energy, Petition to Update Methodologies Used to Allocate Electric Cost of Service and for Electric Rate Design Purposes, Wa.UTC, Docket No. UE-141368.
- In re Pacific Power & Light Company, Request for a General Rate Revision Resulting in an Overall Price Change of 8.5 Percent, or $27.2 Million, Wa.UTC, Docket No. UE-140762.
- In re Puget Sound Energy, Revises the Power Cost Rate in WN U-60, Tariff G, Schedule 95, to reflect a decrease of $9,554,847 in the Company's overall normalized power supply costs, Wa.UTC, Docket No. UE-141141.
- In re the Application of Rocky Mountain Power for Authority to Increase Its Retail Electric Utility Service Rates in Wyoming Approximately $36.1 Million Per Year or 5.3 Percent, Wy.PSC, Docket No. 20000-446-ER-14.
- In re Avista Corporation, General Rate Increase for Electric Services, RE, Tariff WN U-28, Which Proposes an Overall Net Electric Billed Increase of 5.5 Percent Effective January 1, 2015, Wa.UTC, Docket No. UE-140188.
- In re PacifiCorp, dba Pacific Power, Application for Deferred Accounting and Prudence Determination Associated with the Energy Imbalance Market, Or.PUC, Docket No. UM 1689.
- In re PacifiCorp, dba Pacific Power, 2015 Transition Adjustment Mechanism, Or.PUC, Docket No. UE 287.
- In re Portland General Electric Company, Request for a General Rate Revision, Or.PUC, Docket No. UE 283.
- In re Portland General Electric Company's Net Variable Power Costs (NVPC) and Annual Power Cost Update (APCU), Or.PUC, Docket No. UE 286.
- In re Portland General Electric Company 2014 Schedule 145 Boardman Power Plant Operating Adjustment, Or.PUC, Docket No. UE 281.
- In re PacifiCorp, dba Pacific Power, Transition Adjustment, Five-Year Cost of Service Opt-Out (adopting testimony of Donald W. Schoenbeck), Or.PUC, Docket No. UE 267.

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

UG 388

In the Matter of	)
	)
NORTHWEST NATURAL GAS COMPANY,	)
dba NW NATURAL	)
	)
Request for a General Rate Revision.	)

EXHIBIT AWEC/102

April 17, 2020

Summary of AWEC Data Request 36
Mist investment in pro-forma period

	Annual 11-2019 to 10-2020
STORAGE AND LOCAL PLANT:	
363.11 LIQUEFACTION EQUIP. - LINN	
201663 Mist Large Dehydrator	13,700,116
201746 Mist Gasoline Tank	7,150
201756 Mist Compressor Rebuild 500	456,397
201758 Mist Fiber Network	786,244
201812 Mist Standby Generator	1,308,351
201983 Mist Compressor Study & Replacement	413,425
202008 Mist Corrosion Abatement Phase 3	12,782
202029 Mist Well Rework	1,899,541
202029-2 Mist Well Rework 2020	1,841,282
202029-3 Mist Well Rework 2021	-
990047 Mist Pipeline Upgrades	-
990139 Mist Electrical Systems Updates	1,496,993
990140 Mist Instrument and Controls Upgrade Ph. 2	1,080,437
990228 Mist Valve Control Upgrades	950,599
990237 Mist Corrossion Abatement 4	1,049,081
990580 Mist Compressor Replacement	-
Run Rate/Small Project Applicant 18 - Mist Betterments	(115,243)
Storage And Local Plant Sub-total	**24,887,155**
DISTRIBUTION PLANT	
376.11 MAINS < 4"	
201663 Mist Large Dehydrator	9,133,411
201746 Mist Gasoline Tank	4,767
201756 Mist Compressor Rebuild 500	304,265
201758 Mist Fiber Network	524,163
201812 Mist Standby Generator	872,234
201983 Mist Compressor Study & Replacement	275,617
202008 Mist Corrosion Abatement Phase 3	8,521
202029 Mist Well Rework	1,266,361
202029-2 Mist Well Rework 2020	1,227,521
202029-3 Mist Well Rework 2021	-
990047 Mist Pipeline Upgrades	-
990139 Mist Electrical Systems Updates	997,995
990140 Mist Instrument and Controls Upgrade Ph. 2	720,291
990228 Mist Valve Control Upgrades	633,733
990237 Mist Corrossion Abatement 4	699,387
990580 Mist Compressor Replacement	-
Run Rate/Small Project Applicant 18 - Mist Betterments	(76,829)
Distribution Plant Subtotal	**16,591,436**
Grand Total Mist Storage	**41,478,591**
Storage %	*60%*
Distribution %	*40%*
Total Capital Budget	308,455,050
Mist as % of Total Capital	13.4%

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

UG 388

In the Matter of	)
	)
NORTHWEST NATURAL GAS COMPANY,	)
dba NW NATURAL	)
	)
Request for a General Rate Revision.	)

EXHIBIT AWEC/103

April 17, 2020

Customer Impact Offset Adjustment
- Based on NW Natural's initial filing, corrected

		Current	Target Increase (LRIC)		Cap Rate Impact		Reallocate Shortfall			Target (After Cap)		Apply Floor		Reallocate Surplus			Target (After Cap and Floor)	
Class		Margin	%	Margin	at 28.3%	Margin	Alloc%	%	Margin	%	Margin	at 0.0%	Margin	Alloc%	%	Margin	%	Margin
02	Residential Sales Firm	254,772,129	18.1%	46,203,560	0.0%	-	91.2%	7.2%	18,236,201	25.3%	64,439,761	0.0%	-	99.8%	-5.9%	(15,113,470)	19.4%	49,326,291
03CSF	Commercial Sales Firm	77,838,498	54.0%	42,038,634	-25.7%	(20,003,107)	0.0%	0.0%	-	28.3%	22,035,527	0.0%	-	0.0%	0.0%	-	28.3%	22,035,527
03ISF	Industrial Sales Firm	1,940,175	-35.6%	(690,094)	0.0%	-	0.4%	3.9%	75,743	-31.7%	(614,352)	31.7%	614,352	0.0%	0.0%	-	0.0%	-
27R	Commercial Sales Firm	637,828	10.7%	67,960	0.0%	-	0.2%	6.7%	42,764	17.4%	110,724	0.0%	-	0.2%	-4.1%	(25,969)	13.3%	84,755
31CSF	Commercial Sales Firm	7,852,361	-31.7%	(2,485,370)	0.0%	-	1.6%	4.1%	325,187	-27.5%	(2,160,183)	27.5%	2,160,183	0.0%	0.0%	-	0.0%	-
31CTF	Commercial Transportation Fir	1,031,425	-35.0%	(361,088)	0.0%	-	0.2%	3.9%	40,616	-31.1%	(320,472)	31.1%	320,472	0.0%	0.0%	-	0.0%	-
31ISF	Industrial Sales Firm	3,031,708	-34.7%	(1,051,818)	0.0%	-	0.6%	4.0%	119,962	-30.7%	(931,856)	30.7%	931,856	0.0%	0.0%	-	0.0%	(0)
31ITF	Industrial Transportation Firm	123,711	-41.5%	(51,364)	0.0%	-	0.0%	3.5%	4,384	-38.0%	(46,980)	38.0%	46,980	0.0%	0.0%	-	0.0%	-
32CSF	Commercial Sales Firm	10,535,052	-40.0%	(4,212,571)	0.0%	-	1.9%	3.6%	383,081	-36.3%	(3,829,490)	36.3%	3,829,490	0.0%	0.0%	-	0.0%	0
32ISF	Industrial Sales Firm	2,329,451	-53.5%	(1,245,439)	0.0%	-	0.3%	2.8%	65,681	-50.6%	(1,179,759)	50.6%	1,179,759	0.0%	0.0%	-	0.0%	-
32CTF	Commercial Transportation Fir	1,174,671	-46.1%	(541,392)	0.0%	-	0.2%	3.3%	38,371	-42.8%	(503,021)	42.8%	503,021	0.0%	0.0%	-	0.0%	-
32ITF	Industrial Transportation Firm	6,628,135	-29.4%	(1,946,702)	0.0%	-	1.4%	4.3%	283,649	-25.1%	(1,663,053)	25.1%	1,663,053	0.0%	0.0%	-	0.0%	-
32CSI	Commercial Sales Interruptible	1,803,595	-50.7%	(914,415)	0.0%	-	0.3%	3.0%	53,876	-47.7%	(860,539)	47.7%	860,539	0.0%	0.0%	-	0.0%	-
32ISI	Industrial Sales Interruptible	2,302,847	-40.5%	(933,014)	0.0%	-	0.4%	3.6%	82,999	-36.9%	(850,016)	36.9%	850,016	0.0%	0.0%	-	0.0%	-
32CTI / 32IT	Transportation Interruptible	6,566,209	-37.0%	(2,430,314)	0.0%	-	1.3%	3.8%	250,595	-33.2%	(2,179,719)	33.2%	2,179,719	0.0%	0.0%	-	0.0%	-
33T	Transportation	-	0.0%	-	0.0%	-	0.0%	0.0%	-	0.0%	-	0.0%	-	0.0%	0.0%	-	0.0%	-
		378,567,792	18.9%	71,446,573	-5.3%	(20,003,107)	100.00%	5.3%	20,003,107	18.9%	71,446,573	4.0%	15,139,439	100.00%	-4.0%	(15,139,439)	18.9%	71,446,573

Customer Impact Offset Adjustment
- Based on AWEC Rev. Req.

		Current	Target Increase (LRIC)		Cap Rate Impact		Reallocate Shortfall			Target (After Cap)		Apply Floor		Reallocate Surplus			Target (After Cap and Floor)	
Class		Margin	%	Margin	at 18.4%	Margin	Alloc%	%	Margin	%	Margin	at 0.0%	Margin	Alloc%	%	Margin	%	Margin
02	Residential Sales Firm	254,772,129	11.6%	29,505,694	0.0%	-	91.2%	7.5%	19,192,952	19.1%	48,698,646	0.0%	-	99.8%	-6.5%	(16,602,519)	12.6%	32,096,127
03CSF	Commercial Sales Firm	77,838,498	45.5%	35,387,957	-27.0%	(21,052,558)	0.0%	0.0%	-	18.4%	14,335,399	0.0%	-	0.0%	0.0%	-	18.4%	14,335,399
03ISF	Industrial Sales Firm	1,940,175	-39.1%	(759,448)	0.0%	-	0.4%	4.1%	79,717	-35.0%	(679,731)	35.0%	679,731	0.0%	0.0%	-	0.0%	-
27R	Commercial Sales Firm	637,828	4.5%	28,804	0.0%	-	0.2%	7.1%	45,007	11.6%	73,811	0.0%	-	0.2%	-3.9%	(25,164)	7.6%	48,647
31CSF	Commercial Sales Firm	7,852,361	-35.4%	(2,783,126)	0.0%	-	1.6%	4.4%	342,248	-31.1%	(2,440,878)	31.1%	2,440,878	0.0%	0.0%	-	0.0%	-
31CTF	Commercial Transportation Fir	1,031,425	-38.6%	(398,278)	0.0%	-	0.2%	4.1%	42,747	-34.5%	(355,531)	34.5%	355,531	0.0%	0.0%	-	0.0%	-
31ISF	Industrial Sales Firm	3,031,708	-38.3%	(1,161,661)	0.0%	-	0.6%	4.2%	126,256	-34.2%	(1,035,405)	34.2%	1,035,405	0.0%	0.0%	-	0.0%	-
31ITF	Industrial Transportation Firm	123,711	-44.8%	(55,378)	0.0%	-	0.0%	3.7%	4,614	-41.0%	(50,764)	41.0%	50,764	0.0%	0.0%	-	0.0%	-
32CSF	Commercial Sales Firm	10,535,052	-43.3%	(4,563,336)	0.0%	-	1.9%	3.8%	403,179	-39.5%	(4,160,157)	39.5%	4,160,157	0.0%	0.0%	-	0.0%	(0)
32ISF	Industrial Sales Firm	2,329,451	-56.0%	(1,305,579)	0.0%	-	0.3%	3.0%	69,126	-53.1%	(1,236,453)	53.1%	1,236,453	0.0%	0.0%	-	0.0%	-
32CTF	Commercial Transportation Fir	1,174,671	-49.1%	(576,526)	0.0%	-	0.2%	3.4%	40,384	-45.6%	(536,142)	45.6%	536,142	0.0%	0.0%	-	0.0%	-
32ITF	Industrial Transportation Firm	6,628,135	-33.3%	(2,206,424)	0.0%	-	1.4%	4.5%	298,531	-28.8%	(1,907,893)	28.8%	1,907,893	0.0%	0.0%	-	0.0%	-
32CSI	Commercial Sales Interruptible	1,803,595	-53.4%	(963,746)	0.0%	-	0.3%	3.1%	56,702	-50.3%	(907,044)	50.3%	907,044	0.0%	0.0%	-	0.0%	-
32ISI	Industrial Sales Interruptible	2,302,847	-43.8%	(1,009,012)	0.0%	-	0.4%	3.8%	87,353	-40.0%	(921,659)	40.0%	921,659	0.0%	0.0%	-	0.0%	-
32CTI / 32IT	Transportation Interruptible	6,566,209	-40.5%	(2,659,770)	0.0%	-	1.3%	4.0%	263,742	-36.5%	(2,396,027)	36.5%	2,396,027	0.0%	0.0%	-	0.0%	-
33T	Transportation	-	0.0%	-	0.0%	-	0.0%	0.0%	-	0.0%	-	0.0%	-	0.0%	0.0%	-	0.0%	-
		378,567,792	12.3%	46,480,173	-5.6%	(21,052,558)	100.00%	5.6%	21,052,558	12.3%	46,480,173	4.4%	16,627,683	100.00%	-4.4%	(16,627,683)	12.3%	46,480,173

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

UG 388

In the Matter of	)
	)
NORTHWEST NATURAL GAS COMPANY, dba NW NATURAL	)
	)
Request for a General Rate Revision.	)

EXHIBIT AWEC/104

April 17, 2020

Natural Gas Revenue Requirement Summary ($000)

Line	Adj. No.	Description	NW Natural Filing Net Oper. Income	NW Natural Filing Rate Base	NW Natural Filing Rev. Req. Def. / (Suf.)	AWEC Proposed Net Oper. Income	AWEC Proposed Rate Base	AWEC Proposed Rev. Req. Def. / (Suf.)
1		**Per Book Results (Y/E Dec. 2019)**	**$88,663**	**$1,214,410**	**(5,834)**	**$88,663**	**1,214,410**	**(5,834)**
Adjustments:								
2	(a)	Customer and use Forecast Adjustment	7,574	-	(10,674)	7,574	-	(10,674)
3	(b)	Misc Revs Adjustment	(2,068)	-	2,914	(2,068)	-	2,914
4	(c)	Uncollectible Adjustment	12	-	(16)	12	-	(16)
5	(d)	Forecast O&M Adjustment	(21,295)	-	30,011	(21,295)	-	30,011
6	A1	Adjust Storage Expense	-	-	-	883	-	(1,244)
7	A2	Adjust Headquarters Expense	-	-	-	7	(1,580)	(165)
8	A3	Account 930, Misc Expense	-	-	-	1,260	-	(1,775)
9	A4	Remove O&M Escalation	-	-	-	1,903	-	(2,682)
10	(e)	Property Tax Adjustment	(2,081)	-	2,933	(2,081)	-	2,933
11	(f)	Other Tax Adjustment	(527)	-	743	(527)	-	743
12	(g)	Capital Forecast Adjustment	(8,983)	249,394	37,122	(8,983)	249,394	37,122
13	A5	Oct 2020 Rate Base Measurement			-	1,356	(23,290)	(4,196)
14	A6	Adjust Storage Rate Base			-	141	(9,678)	(1,148)
15	A7	Account 367, Mains			-	285	(19,062)	(2,271)
16	(h)	Other Rate Base Adjustment	49	7,891	705	49	7,891	705
17	(i)	Change in M-1s & ITC Adjustment	(1,206)	-	1,699	(1,206)	-	1,699
18	(j)	Flotation Adjustment	(3,430)	-	4,834	(3,430)	-	4,834
19	A8	Remove Floatation Adjustment			-	3,430	-	(4,834)
20		Interest Coordination			-	(254)	-	359
21		**Restated Results**	**56,706**	**1,471,695**	**64,437**	**65,717**	**1,418,086**	**46,480**
22		**Pro Forma Results**	**56,706**	**1,471,695**	**64,437**	**65,717**	**1,418,086**	**46,480**
23				Filed:	**$71,447**			
24				ROE Impact	**(7,010)**			

Natural Gas Revenue Requirement Summary ($000)

Line	Adj. No.	Description	Impact of AWEC Adjustments: Pre-Tax Net Oper. Income	Net Oper. Income	Rate Base	Rev. Req. Def. / (Suf.)	AWEC Position
1		**Per Book Results (Y/E Dec. 2019)**					
Adjustments:							
2	(a)	Customer and use Forecast Adjustment	-	-	-	-	
3	(b)	Misc Revs Adjustment	-	-	-	-	
4	(c)	Uncollectible Adjustment	-	-	-	-	
5	(d)	Forecast O&M Adjustment	-	-	-	-	
6	A1	Adjust Storage Expense	1,118	883	-	(1,244)	
7	A2	Adjust Headquarters Expense	9	7	(1,580)	(165)	
8	A3	Account 930, Misc Expense	1,594	1,260	-	(1,775)	
9	A4	Remove O&M Escalation	2,409	1,903	-	(2,682)	
10	(e)	Property Tax Adjustment	-	-	-	-	
11	(f)	Other Tax Adjustment	-	-	-	-	
12	(g)	Capital Forecast Adjustment	-	-	-	-	
13	A5	Oct 2020 Rate Base Measurement	1,717	1,356	(23,290)	(4,196)	
14	A6	Adjust Storage Rate Base	178	141	(9,678)	(1,148)	
15	A7	Account 367, Mains	361	285	(19,062)	(2,271)	
16	(h)	Other Rate Base Adjustment	-	-	-	-	
17	(i)	Change in M-1s & ITC Adjustment	-	-	-	-	
18	(j)	Flotation Adjustment	-	-	-	-	
19	A8	Remove Floatation Adjustment	-	3,430	-	(4,834)	
20		Interest Coordination	-	(254)	-	359	
21		**Restated Results**	**7,386**	**9,011**	**(53,610)**	**(17,956)**	
22		**Pro Forma Results**	**7,386**	**9,011**	**(53,610)**	**(17,956)**	
23							
24							

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

UG 388

In the Matter of	)
	)
NORTHWEST NATURAL GAS COMPANY,	)
dba NW NATURAL	)
	)
Request for a General Rate Revision.	)

EXHIBIT AWEC/105

REDACTED

April 17, 2020

NW Natural®

Rates & Regulatory Affairs
UG 388
2020 OR General Rate Revision
Data Request Response

Request No.: UG 388 AWEC DR 3

3. Reference NWN/Exhibit 1012: Please provide invoice level detail supporting all leasehold improvements that NW Natural has recognized through January 31, 2020.

Response:

Please refer to the attached file, "UG 388 AWEC DR 3 Attachment 1." Note that this file contains debits and credits that together represent the net balance of Tenant Improvements incurred through January 31, 2020 for the Company's headquarters Move project. Credits identified as landlord transfers represent an offsetting tenant improvement allowance per the Company's 250 Taylor lease agreement. Allowances are identified with the label, "Leasehold to A/R from Landlord Transfer," in the *Cost Category* column.

Further, note that this file includes non-invoiced costs such as construction overhead, labor, AFUDC, and taxes that are applied to invoiced items in separate line items. The elements identified as taxes represent capitalized property taxes.

Finally, please note that the total leasehold improvements identified in the attachment are not netted against the net gain on the Truck Lot property sale. To find this netted amount, please refer to the file, "UG 388 AWEC DR 2 Attachment 1."

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Request No.: UG 388 AWEC DR 4

4. Please identify the start date of NW Natural's lease for its new headquarters on Taylor Street.

Response:

Our lease commencement date at 250 Taylor is December 13, 2019.

Rates & Regulatory Affairs
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Data Request Response

Request No.: UG 388 AWEC DR 5

5. Please identify the date that NW Natural will begin paying rent for its new headquarters located on Taylor Street.

Response:

NW Natural will begin making payments on the lease at 250 Taylor on June 1, 2020. Please see NW Natural/500/Pipes/Page 37/Lines 11-12.

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Rates & Regulatory Affairs
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Data Request Response

Request No.: UG 388 AWEC DR 7

7. Please identify the date that the lease for NW Natural's old headquarters will terminate.

Response:

The date that the lease for NW Natural's lease at One Pacific Square will terminate is May 31, 2020. Please refer to NW Natural/500, Pipes/Page 5/lines 17-18.

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Data Request Response

Request No.: UG 388 AWEC DR 9

9. Reference FERC account 930, Miscellaneous General Expense: Please provide invoice level detail supporting the $3,046,897 in base period costs incurred in the referenced account. Please also identify all proforma calculations used to derive the test period amount of $ 3,686,499 for the referenced account.

Response:

See Confidential UG 388 AWEC DR 9 Attachment 1 for FERC account 930 Base Year expense detail. This detail includes 12 months of actuals (January 2019 through December 2019), as compared to the original base year amount above which was calculated using 9 months of actuals (January 2019 through September 2019) and 3 months of forecasted expenses (October 2019 through December 2019).

Confidential UG 388 AWEC DR 9 Attachment 2 provides more detail on how test period amounts were derived for this FERC account.

Protected Information
Subject to General Protective Order

[redacted]

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Data Request Response

Request No.: UG 388 AWEC DR 11

11. Please calculate the impact of Oregon Corporate Activity Tax assuming it had been included in in base revenue requirement.

Response:

The Oregon Corporate Activity Tax ("CAT") is excluded from the base revenue requirement. However, please refer to the NW Natural deferral CAT application in UM 2044, filed on December 23, 2019, for the estimated liability amount of approximately $2.5 million. Please see attached "UG 388 AWEC DR 11 Attachment 1" for a filed copy of the deferral application.

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Rates & Regulatory Affairs
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Request No.: UG 388 AWEC DR 21

21. Please identify NW Natural's actual gross plant balances and accumulated depreciation reserve balances by FERC account as of December 31, 2016, December 31, 2017, December 31, 2018, December 31, 2019. Please separately identify the Oregon and Washington jurisdictional costs using a format similar to NW Natural Exhibit 1000 WP2.

Response:

Please see "UG 388 AWEC DR 21 Attachment 1" for actual gross plant balances and accumulated depreciation reserve balances by FERC account for December 31, 2016, December 31, 2017, December 31, 2018, and December 31, 2019. Starting on Excel row 199, Oregon and Washington jurisdictional gross plant and accumulated depreciation have been separately identified, similar to NW Natural Exhibit 1000 WP2.

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Rates & Regulatory Affairs
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Request No.: UG 388 AWEC DR 27

27. Please provide an entity relationship diagram or chart showing each entity that is owned or affiliated with NW Natural's Holding company and the respective ownership percentages. Please also detail the SAP company code for each entity.

Response:

Please see Confidential UG 388 AWEC DR 27 Attachment 1 for the entity relationship diagram. Unless otherwise noted, subsidiaries are wholly owned directly or indirectly by Northwest Natural Holding Company.

The following is the SAP company code for each entity that has an SAP company code. Any entity identified in Confidential UG 388 AWEC DR Attachment 1 that is not identified below does not have an SAP company code.

1000	NW Natural Holding Compan
2000	NNG Financial Corporation
3000	Northwest Energy Corporat
3500	NWN Gas Reserves, LLC
4000	GILL RANCH STORAGE LLC
4900	NW Natural Gas Storage, L
4949	NWN Energy LLC
5000	Northwest Natural Gas Com
6000	NW Natural Water Co LLC
6100	NW Water Oregon Co
6110	Sunriver Water Company
6111	Sunriver Environmental Co
6200	NWN Water of Washington
6210	Suncadia Water Company
6211	Suncadia Environmental
6300	NWN Water of Idaho
6400	NW Natural Water of Texas

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Data Request Response

Request No.: UG 388 AWEC DR 32

32. Please describe how the revenues and costs associated with the North Mist Storage facility are considered in NW Natural's proposed revenue requirement. Please also identify all 2019 revenues incurred by month and by counterparty associated with the Mist Storage facility and the North Mist Storage Expansion.

Response:

All revenues and costs associated with the North Mist Storage facility are based on Schedule 90, which is a cost of service schedule, and therefore are not included in NW Natural's proposed revenue requirement in this rate case (UG 388). Cost of service schedule revenues and costs should not be comingled with other utility rate payers.

"UG 388 AWEC DR 32 Attachment 1" outlines all 2019 North Mist Storage Expansion revenues accrued by month.

The following FERC accounts include North Mist assets and they are not included in the proposed revenue requirement in this rate case (UG 388): 117.2, 303.6, 350.3, 350.4, 351.1, 352.4, 352.5, 352.6, 352.7, 353.1, 354.7, 355.1, 365.3, 391.5, 376.13, and 367.27. None of these FERC accounts are included in workpaper "UG388 – Exh. 1000 – WP2 – Gross Plant, Accum Deprec and Deprec Exp – CONFIDENTIAL," which is used to determine rate base.

"Highly Confidential UG 388 AWEC DR 32 Attachment 2" outlines all 2019 Mist Interstate/Intrastate Storage Service revenues by month and by counterparty. It is the Company's interpretation that AWEC is asking for revenues accrued by month and counterparty to mean Interstate/Intrastate Storage Services, not the utility's use of the Mist facility. NW Natural will provide this highly confidential information subject to the modified protective order in this proceeding.

All dollar amounts in attachments 1 and 2 are not included in NW Natural's proposed revenue requirement in this rate case (UG 388).

UG 388 AWEC DR 32 Attachment 2
Revenue by Customer Page 1 of 1

[redacted]

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Rates & Regulatory Affairs
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2020 OR General Rate Revision
Data Request Response

Request No.: UG 388 AWEC DR 36

36. For each project in AWEC Data Request 20, please identify whether the project is associated with the Mist Storage Facility. For each project identified, please explain why the project has not been excluded from revenue requirement and applied to a Firm Storage rate schedule as NW Natural described in response to AWEC Data Request 32.

Response:

See UG 388 AWEC DR 36 Attachment 1, which is AWEC DR 20 highlighted for projects associated with Mist Storage Facility.

The Company's response to AWEC DR 32 did not refer to a "firm storage rate schedule." However, the response to AWEC DR 32 did describe the exclusion of costs for the North Mist operations. Those operations are in fact provided under rate schedule 90 as a "FIRM STORAGE SERVICE WITH NO-NOTICE WITHDRAWAL." That rate schedule is used for service to a single customer, includes cost of service ratemaking, and has been segregated from the ratemaking for other customers. Not including a known error as discussed in the Company's response to AWEC DR 39, the revenues, costs, and investment for North Mist have been completely excluded from this rate case. The Mist Storage Facility projects identified in AWEC DR 20 were all applicable to core customers, and not to the provision of service under rate schedule 90, and so they are not applied to that rate schedule.

NW Natural®

Rates & Regulatory Affairs
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2020 OR General Rate Revision
Data Request Response

Request No.: UG 388 AWEC DR 37

37. In NW Natural/1007, Page 1, Line 23, NW Natural identified $6,901,977 of Total System storage expenses in revenue requirement in the Base Year. Please identify all historical expenditures included in this amount and attributable to the Mist Storage Facility. Please provide detail similar to NW Natural's response to OPUC Data Request 57. Please also explain why the amounts were not applied to a Firm Storage rate schedule as NW Natural described in response to AWEC Data Request 32.

Response:

Please see "UG 388 AWEC DR 37 Attachment 1" for the January – September 2019 historical Mist Storage Facility expenditures that were included in the Total System storage expenses of $6,901,977.

The Company's response to AWEC DR 32 did not refer to a "firm storage rate schedule." However, the response to AWEC DR 32 did describe the exclusion of costs for the North Mist operations. Those operations are in fact provided under rate schedule 90 as a "FIRM STORAGE SERVICE WITH NO-NOTICE WITHDRAWAL." That rate schedule is used for service to a single customer, includes cost of service ratemaking, and has been segregated from the ratemaking for other customers. Not including a known error as discussed in the Company's response to AWEC DR 39, the revenues, costs, and investment for North Mist have been completely excluded from this rate case. The mist projects identified in AWEC DR 20 were all applicable to core customers, and not to the provision of service under rate schedule 90, and so they are not applied to that rate schedule.

NW Natural

UG 388 DR 37 Attachment 1

FERC Accounts	Sum of Jan-Sep 2019	
816	$	239,773.95
818	$	138,504.87
819	$	0.05
820	$	1,909,635.16
821	$	(283.67)
832	$	137,477.73
834	$	203,178.51
840	$	75,553.82
Grand Total	**$**	**2,703,840.42**

NW Natural®

Rates & Regulatory Affairs
UG 388
2020 OR General Rate Revision
Data Request Response

Request No.: UG 388 AWEC DR 38

38. In NW Natural/1007, Page 3, Line 23 NW Natural identified $8,404,172 of Total System storage expenses in the Test Year. Please identify all forecast expenditures included in this amount, which are attributable to the Mist Storage Facility, including project or department level detail. Please also explain why the amounts were not applied to a Firm Storage rate schedule as NW Natural described in response to AWEC Data Request 32.

Response:

Please see “UG 388 DR 38 Attachment 1” for all forecast expenditures attributed to the Mist Storage Facility that are included in the Total System storage expenses amount of $8.4 million in the Test Year.

The Company’s response to AWEC DR 32 did not refer to a “firm storage rate schedule.” However, the response to AWEC DR 32 did describe the exclusion of costs for the North Mist operations. Those operations are in fact provided under rate schedule 90 as a “FIRM STORAGE SERVICE WITH NO-NOTICE WITHDRAWAL.” That rate schedule is used for service to a single customer, includes cost of service ratemaking, and has been segregated from the ratemaking for other customers. Not including known errors as discussed in the Company’s response to AWEC DR 39, the revenues, costs, and investment for North Mist have been completely excluded from this rate case. The Mist projects identified in AWEC DR 20 were all applicable to core customers, and not to the provision of service under rate schedule 90, and so they are not applied to that rate schedule.

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Rates & Regulatory Affairs
UG 388
2020 OR General Rate Revision
Data Request Response

Request No.: UG 388 AWEC DR 45

45. In NW Natural's response to Staff Data Request 121, Attachment 1 (Excel Rows 9, 11 and 22), NW Natural shows that it has historically allocated costs to NWN Gas Storage and Gill Ranch. Please provide an explanation for why NW Natural assumed no cost allocation to NWN Gas Storage and Gill Ranch in the 2020 test period in the attachment.

Response:

NW Natural assumed no cost allocation to NWN Gas Storage and Gill Ranch in the Test Year in the attachment as NWN Holdings is expecting to sell Gill Ranch before the Test Year begins. All costs allocated to Gill Ranch and NWN Gas Storage are the results of activities on their behalf which will not be continuing.

Rates & Regulatory Affairs
UG 388
2020 OR General Rate Revision
Data Request Response

Request No.: UG 388 AWEC DR 46

46. Please provide the following information related to NW Natural's new headquarters at 250 S.W. Taylor St.:

a. Please identify the total square footage of the building.

b. Please provide the total square footage that NW Natural is leasing.

c. Please identify the total square footage to be occupied by NW Natural's regulated operations.

d. For each floor NW Natural is leasing, please provide a floor plan showing the location of each regulated and non-regulated department that will be occupying space in the building, including unused space or areas that will be subleased.

e. Please identify the total amount square footage of floor space that NW Natural plans to sublease and the expected revenues from the subleasing activity in 2021.

f. Please identify the Number of employees in NW Natural's regulated operations that will be based out of the new headquarters.

g. Please identify each employee of a NW Natural affiliate (e.g. Gill Ranch and NWN Gas Storage) based out of the new headquarters.

Response:

a. NW Natural's new operations center at 250 S. W. Taylor Street is 230,920 square feet, including the below grade parking garage.

b. Of the total square footage, there are 179,685 rentable square feet (RSF) that NW Natural is leasing.

c. NW Natural regulated operations signed a lease covering all the building's RSF. In the Test Year, regulated operations will not occupy the two sublease spaces. See the Company's response to part (e) for a description and size of these spaces. Additionally, the Company anticipates that three workstations will be occupied in the Test Year by employees of NW Natural's affiliates, as indicated in the Company's responses to parts (d) and (g). The space assigned to each workstation is roughly 76 square feet.

d. Please refer to "UG 388 AWEC DR 46 Attachment 1" for floor plans covering all building RSF. Sublease space is indicated on Floors 01 and 02. Workstations associated with non-regulated affiliated interests NW Natural Gas Storage and NW Natural Water are indicated on Floors 03 and 09.

e. There are two sublease spaces in the building:

- Floor 01 retail space - 1,456 square feet. The Company projects 2021 revenue to be $52,500. Please note: The filed revenue requirement does not include lease expenses for this space. See *NW Natural/904 Davilla/Page 1*.

- Floor 02 office space - 7,158 square feet. This space is currently unoccupied; therefore, sublease revenue is undetermined. Please note: The filed revenue requirement does not include lease expenses for this space. See *NW Natural/904 Davilla/Page 1*.

f. Approximately 619 NW Natural employees associated with its regulated operations will be based out of 250 Taylor. This number may increase if our FTE count increases in the Test Year.

g. Three NW Natural affiliate employees will be based at 250 Taylor in the Test Year. Employee titles and affiliations are listed below:

- Gas Storage Engineering – Operations & Project Management Manager, NW Natural Gas Storage

- Gas Supply and Utility Support Services – Business Support Analyst 3, NW Natural Gas Storage

- Director of Finance and Accounting, NW Natural Water

Please note: When NW Natural Gas Company employees charge time to affiliates, this time includes a 27.5% overhead rate that captures non-payroll expenses associated with those employees.

NW Natural®

Rates & Regulatory Affairs
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2020 OR General Rate Revision
Data Request Response

Request No.: UG 388 AWEC DR 47

47. Does NW Natural provide any of its affiliates with information technology or telecommunications services, such as web hosting, email hosting, phone or other networking service? If yes, please identify the nature of the service performed and the amount of intercompany costs NW Natural recorded in the base period.

Response:

Yes, NW Natural does provide some of its affiliates with information technology and telecommunications services.

NW Natural provides Gas Storage with SAP, network, Microsoft office, file shares, and support which in some cases are charged directly by the vendors, and in other cases are charged via intercompany. Any physical employee support related to IT would be charged intercompany via shared services. The amount of intercompany costs recorded in the base period was $36,515.

Suncadia and Sunriver are using our SAP system and limited connectivity via VPN or VDI, but have independence on all other networks, hardware and software. Support is provided by external IT contractor staff whose costs are charged directly to the affiliate and are not intercompany transactions. SAP licenses are charged directly to the affiliates from the vendor. In the base period there were no intercompany costs as all services were incremental and purchased directly (incremental SAP licenses, etc.).

The other water utilities pay their own way and are provided support via external IT contractors. In the base period, there were NW Natural shared services support costs of $92,376 for information services and technology for all of the water companies combined, including IT network setup, phones, and in certain instances SAP.

NW Natural®

Rates & Regulatory Affairs
UG 388
2020 OR General Rate Revision
<u>Data Request Response</u>

<u>Request No.</u>: UG 388 AWEC DR 48

48. Please provide all presentation materials and spreadsheets from the 2020-03-03 technical workshop.

<u>Response:</u>

Please see the topic and attachment assignment below.

Workpaper Flow Chart – UG 388 AWEC DR 48 Attachment 1

250 Taylor Overview – UG 388 AWEC DR 48 Attachment 2

Lease Expense Walk – UG 388 AWEC DR 48 Attachment 3

Capital Expenditures Chart – UG 388 AWEC DR 48 Attachment 4

Application of Truck Lot – UG 388 AWEC DR 48 Attachment 5

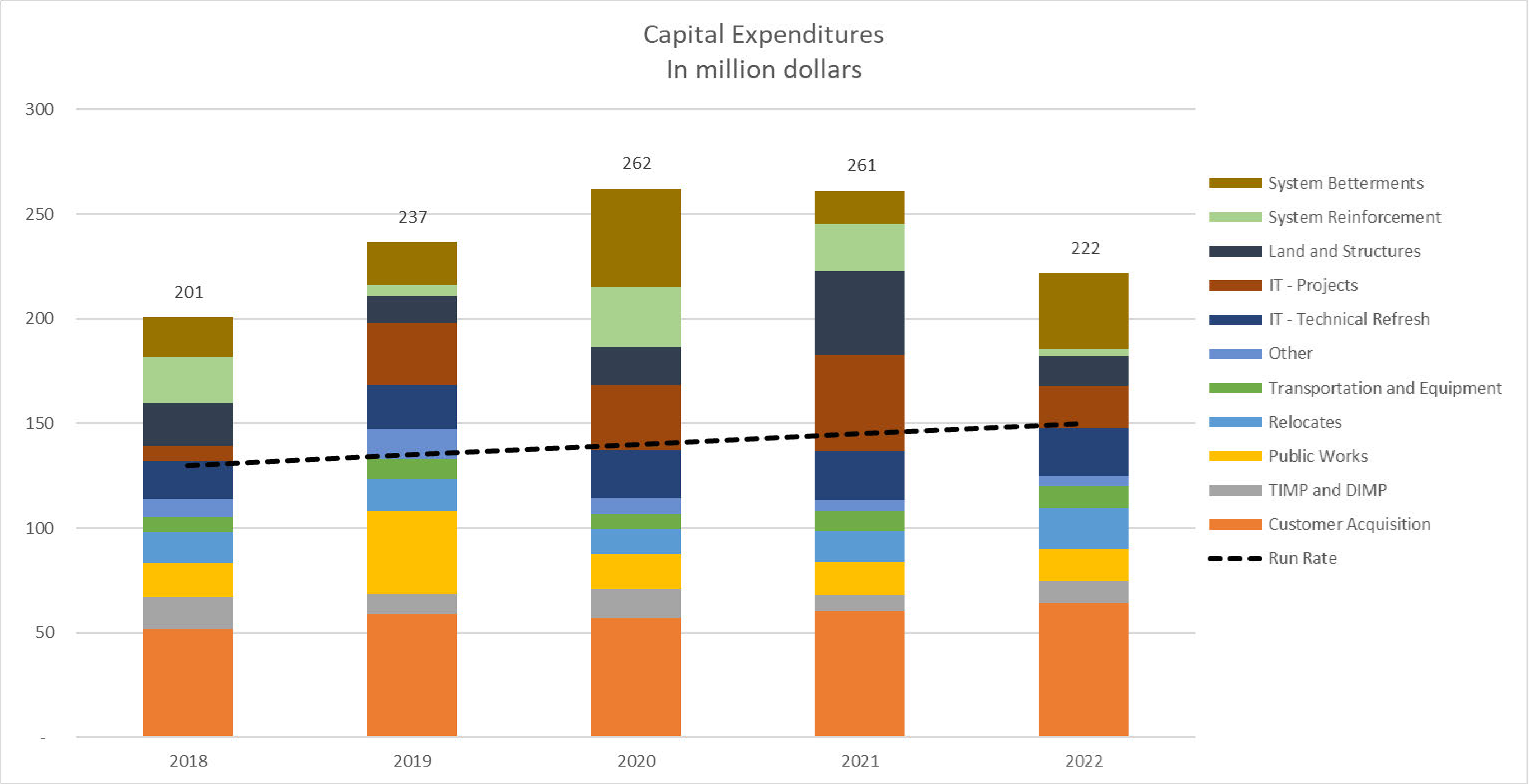
O&M Model – Confidential UG 388 OPUC DR 282 Attachment 1

Allocation of Building Space (250 Taylor)	*Sq. Ft.*	*Sq. Ft. %*
Utility Office Space Sq. Ft.	171,071	*95.2%*
Sublease Office Space Sq. Ft.	7,158	4.0%
Sublease Retail Space Sq. Ft.	1,456	0.8%
Total Sq. Feet of Office Space	179,685	100.0%

Reference	(A)		(B)	(C)	(D)	(E)	(F)	(G)	(H)
Calculation				= (A) * (B)		= (C) * (D)		= (E) * (F)	= (E) - (G)
	Test Year								
250 Taylor Test Year HQ Expense Detail	Total O&M Expense		Utility Allocation %	Total Utility Exp.	OR State Allocation	OR Total Utility Exp.	Capital Admin. Transfer %	Capital Admin. Transfer $	Net OR O&M Expense
Lease Expense (FERC 931)									
Office Building	$6,135,241	[1]	95.2%	$5,841,121	88.62%	$5,176,360	35.00%	$1,811,726	$3,364,634
Storage	$15,012	[2]	100.0%	$15,012	88.62%	$13,304	35.00%	$4,656	$8,647
Property Tax	$3,474,750	[3]	95.2%	$3,308,172	88.62%	$2,931,679	35.00%	$1,026,088	$1,905,591
Management/Administration Fees	$276,906	[4]	95.2%	$263,631	88.62%	$233,628	35.00%	$81,770	$151,858
Total Lease Exp.	$9,901,909			$9,427,937		$8,354,970		$2,924,240	$5,430,731
Tenant Improvement (TI) Amort. Exp. (FERC 931)	$1,130,914	[5]	100.0%	$1,130,914	88.62%	$1,002,208	35.00%	$350,773	$651,435
Operating Expense (FERC 935)									
Contract Work	$786,464	[6]	95.2%	$748,761	88.35%	$661,520	35.00%	$231,532	$429,988
Utilities	$193,484	[7]	95.2%	$184,209	88.35%	$162,746	35.00%	$56,961	$105,785
Repairs & Maintenance	$184,574	[8]	95.2%	$175,725	88.35%	$155,251	35.00%	$54,338	$100,913
Total Operating Expense	$1,164,522			$1,108,695		$979,518		$342,831	$636,686
Company Vehicle Parking (FERC 921)	$227,717	[9]	100.0%	$227,717	88.02%	$200,437	0.00%	$0	$200,437
Total Test Year Headquarters Expense	$12,425,063			$11,895,264		$10,537,133		$3,617,844	$6,919,289

Reference	(I)		(J)	(K)	(L)	(M)	(N)	(O)	(P)
Calculation				= (I) * (J)		= (K) * (L)		= (M) * (N)	= (M) - (O)
	Base Year								
One Pacific Square Base Year HQ Expense Detail	Total O&M Expense		Utility Allocation %	Total Utility Exp.	OR State Allocation	OR Total Utility Exp.	Capital Admin. Transfer %	Capital Admin. Transfer $	Net OR O&M Expense
Lease Expense (FERC 931)									
Office Building	$4,507,195	[10]	100.0%	$4,507,195	88.62%	$3,994,244	35.00%	$1,397,985	$2,596,259
Tenant Improvement (TI) Amort. Exp. (FERC 931)	$44,238	[11]	100.0%	$44,238	88.62%	$39,204	35.00%	$13,721	$25,482
Operating Expense (FERC 935)									
Utilities	$207,733	[12]	100.0%	$207,733	88.35%	$183,529	35.00%	$64,235	$119,294
Repairs & Maintenance	$26,279	[13]	100.0%	$26,279	88.35%	$23,217	35.00%	$8,126	$15,091
Total Operating Expense	$234,012			$234,012		$206,746		$72,361	$134,385
Company Vehicle Parking (FERC 921)	$73,451	[14]	100.0%	$73,451	88.02%	$64,651	0.00%	$0	$64,651
Total Base Year Headquarters Expense	$4,858,896			$4,858,896		$4,304,846		$1,484,068	$2,820,778
Difference between Test Year and Base Year	$7,566,166			$7,036,367		$6,232,287		$2,133,776	
OR O&M Test Year Increase									$4,098,511

[1] Exhibit I. Lease Agreement between Third and Taylor Office Owner LLC and Northwest Natural Gas Company
[2] Lease Agreement between Third and Taylor Office Owner LLC and Northwest Natural Gas Company. Page 6
[3] Test Year forecast based on comparative building tax rate times building valuation estimate.
[4] Mgmt. Fee: Article 4. Lease Agreement between Third and Taylor Office Owner, LLC. and NW Natural Gas Company. Page 9; Admin. Fee: Non-mgmt. staff percentage of labor allocated by Prop. Mgmt Firm.
[5] Tenant Improvement amortized over 20 year life of lease agreement
[6] Contract Work includes Janitorial, Landscaping & Security services. See *NW Natural/500* for more details
[7] Utilities: Waste Disposal: $12.2K; Electric: $164.0K; Water: $17.3K. (Electric and Water forecast from Glumac study: NW Natural 250 Taylor Utility Analysis) See *NW Natural/500* for more details
[8] Repairs & Maintenance: $0.65/sq. ft. annually 1st year of operations, $1.30/sq. ft./year beginning year 2
[9] Parking expense of 9 spots at new HQ building for visitor and company use parking and 60 parking spots at the Keller Auditorium parking garage for company vehicles. See *NW Natural/500* for more details.
[10] One Pacific Square (OPS) lease expense includes common area maintenance (Contract Work (i.e. security, janitorial), Property Taxes, Mgmt./Admin Fees)
[11] Amortization of Tenant Improvement expense at OPS (current HQ)
[12] Base Year projected expense
[13] Base Year projected expense
[14] Base Year projected expense


Capital Expenditures
In million dollars
300
250
200
150
100
50
-
201
237
262
261
222
2018
2019
2020
2021
2022
System Betterments
System Reinforcement
Land and Structures
IT - Projects
IT - Technical Refresh
Other
Transportation and Equipment
Relocates
Public Works
TIMP and DIMP
Customer Acquisition
Run Rate

NW Natural®

Rates & Regulatory Affairs
UG 388
2020 OR General Rate Revision
Data Request Response

Request No.: UG 388 OPUC DR 137

137. Regarding the major distribution system and facility storage projects presented in testimony (Karney, 400/3-4): …f. Regarding the Mist Large Dehydration Project, (i) Please provide the project budget details (e.g. materials, labor, contract services, engineering, AFUDC, construction overhead, etc.) as of the date of the Company's update of its 2016 IRP Action Plan. (Karney, 400/36)

Supplemental Response:

f(i). The Company's response to this data request stated, in relevant part: "The Company and Burns and McDonnell are currently reviewing the final design and associated costs. A change order will be created to capture any additional costs above what has been approved in the move to execution document. This data request will be supplemented once that change order has been approved."

The Company and Burns and McDonnell have completed their review of the final design and associated costs. Please see Confidential UG 388 OPUC DR 137 Supplemental Attachment 1 for a copy of the change order approved by the Company on February 27, 2020. Once the Company and Burns and McDonnell have fully executed the document memorializing their agreed-upon final design and associated costs, the Company will amend this response by removing the confidential designation from Supplemental Attachment 1.

This supplemental response also serves as the Company's supplemental response to UG 388 OPUC DR 246.

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Rates & Regulatory Affairs
UG 388
2020 OR General Rate Revision
Data Request Response

Request No.: UG 388 OPUC DR 224

224. Please provide the following information separately, by month, for each NW Natural Officer in 2019:
e. Hours billed to each affiliate and NW Natural non-utility project; and
f. Payroll and overhead dollars allocated to each affiliate and NW Natural non-utility project.

Response:

See UG 388 OPUC DR 224 Attachment 1.

Hours and direct payroll plus payroll overheads are reported in the level of detail that is charged out of the Utility via our HRIS time reporting system and billed to the affiliates, consistent with our Cost Allocation Manual.