7. LEASES

Lease Revenue

Leasing revenue primarily consists of NW Natural's North Mist natural gas storage agreement with PGE which is billed under an OPUC-approved rate schedule and includes an initial 30-year term beginning May 2019 with options to extend, totaling up to an additional 50 years upon mutual agreement of the parties. Under U.S. GAAP, this agreement is classified as a sales-type lease and qualifies for regulatory accounting deferral treatment. The investment in the storage facility is included in rate base under a separately established cost-of-service tariff, with revenues recognized according to the tariff schedule. As such, the selling profit that was calculated upon commencement as part of the sale-type lease recognition was deferred and will be amortized over the lease term. Billing rates under the cost-of-service tariff will be updated annually to reflect current information including depreciable asset levels, forecasted operating expenses, and the results of regulatory proceedings, as applicable, and revenue received under this agreement is recognized as operating revenue on the consolidated statements of comprehensive income. There are no variable payments or residual value guarantees. The lease does not contain an option to purchase the underlying assets.

NW Natural also maintains a sales-type lease for specialized compressor facilities to provide high pressure compressed natural gas (CNG) services. Lease payments are outlined in an OPUC-approved rate schedule over a 10-year term. There are no variable payments or residual value guarantees. The selling profit computed upon lease commencement was not significant.

Our lessor portfolio also contains small leases of property owned by NW Natural to third parties. These transactions are accounted for as operating leases and the revenue is recognized over the term of the lease agreement.

The components of lease revenue at NW Natural were as follows:

	Year ended December 31,							
In thousands		2021		2020				
Lease revenue				-				
Operating leases	\$	80	\$	88				
Sales-type leases		17,471		18,355				
Total lease revenue	\$	17,551	\$	18,443				

Additionally, lease revenue of \$0.5 million was recognized for each of the years ended December 31, 2021 and 2020 related to operating leases associated with non-utility property rentals. Lease revenue related to these leases was presented in other income (expense), net on the consolidated statements of comprehensive income as it is non-operating income.

Total future minimum lease payments to be received under non-cancelable leases at December 31, 2021 are as follows:

In thousands	Operating		Sales-Type		Total
NW Natural:					
2022	\$ 577	\$	17,026	\$	17,603
2023	74		16,557		16,631
2024	74		15,867		15,941
2025	66		15,306		15,372
2026	36		14,901		14,937
Thereafter	 22		236,820		236,842
Total minimum lease payments	\$ 849	\$	316,477	\$	317,326
Less: imputed interest			177,160		
Total leases receivable		\$	139,317		
Other NW Holdings:					
2022	\$ 50	\$	_	\$	50
2023	51				51
2024	52		_		52
2025	53		_		53
2026	56		-		56
Thereafter	 914		_		914
Total minimum lease payments	\$ 1,176	\$	_	\$	1,176
NW Holdings:					
2022	\$ 627	\$	17,026	\$	17,653
2023	125		16,557		16,682
2024	126		15,867		15,993
2025	119		15,306		15,425
2026	92		14,901		14,993
Thereafter	 936		236,820		237,756
Total minimum lease payments	\$ 2,025	\$	316,477	\$	318,502
Less: imputed interest	 		177,160		
Total leases receivable		\$	139,317		

The total leases receivable above is reported under the NGD segment and the short- and long-term portions are included within other current assets and assets under sales-type leases on the consolidated balance sheets, respectively. The total amount of unguaranteed residual assets was \$4.7 million and \$4.3 million at December 31, 2021 and 2020, respectively, and is included in assets under sales-type leases on the consolidated balance sheets. Additionally, under regulatory accounting, the revenues and expenses associated with these agreements are presented on the consolidated statements of comprehensive income such that their presentation aligns with similar regulated activities at NW Natural.

Lease Expense

Operating Leases

We have operating leases for land, buildings and equipment. Our primary lease is for NW Natural's headquarters and operations center. Our leases have remaining lease terms of one year to 18 years. Many of our lease agreements include options to extend the lease, which we do not include in our minimum lease terms unless they are reasonably certain to be exercised. Short-term leases with a term of 12 months or less are not recorded on the balance sheet.

As most of our leases do not provide an implicit rate and are entered into by NW Natural, we use an estimated discount rate representing the rate we would have incurred to finance the funds necessary to purchase the leased asset and is based on information available at the lease commencement date in determining the present value of lease payments.

The components of lease expense, a portion of which is capitalized, were as follows:

		Year ended December 31, 2021						
In thousands		Other NW Natural (NW Holdings) NW Holdin						
Operating lease expense	\$	6,859	\$ 5	8 \$	6,917			
Short-term lease expense	•	1,220		_	1,220			

	 Year ended December 31, 2020					
	Other					
In thousands	NW Natural	(NW Holdings)		NW Holdings		
Operating lease expense	\$ 4,381	\$ 12	25 \$	4,506		
Short-term lease expense	1,010		-	1,010		

Supplemental balance sheet information related to operating leases as of December 31, 2021 is as follows:

In thousands	NW Natural	Other (NW Holdings)	NW Holdings
Operating lease right of use assets	\$ 74,987	\$ 62	\$ 75,049
Operating lease liabilities - current liabilities	\$ 1,273	\$ 23	\$ 1,296
Operating lease liabilities - non-current liabilities	79,431	37	79,468
Total operating lease liabilities	\$ 80,704	\$ 60	\$ 80,764

Supplemental balance sheet information related to operating leases as of December 31, 2020 is as follows:

In thousands	NW Natural	Other (NW Holdings)	NW Holdings
Operating lease right of use assets	\$ 77,328	\$ 118	\$ 77,446
Operating lease liabilities - current liabilities	\$ 1,054	\$ 51	\$ 1,105
Operating lease liabilities - non-current liabilities	80,559	62	80,621
Total operating lease liabilities	\$ 81,613	\$ 113	\$ 81,726

The weighted-average remaining lease terms and weighted-average discount rates for the operating leases at NW Natural were as follows:

	2021	2020
Weighted-average remaining lease term (years)	18.2	19.2
Weighted-average discount rate	7.2 %	7.2 %

Headquarters and Operations Center Lease

NW Natural commenced a 20-year operating lease agreement in March 2020 for a new headquarters and operations center in Portland, Oregon. There is an option to extend the term of the lease for two additional periods of seven years. There is a material timing difference between the minimum lease payments and expense recognition as calculated under operating lease accounting rules. OPUC issued an order allowing us to align our expense recognition with cash payments for ratemaking purposes. We recorded the difference between the minimum lease payments and the aggregate of the imputed interest on the finance lease obligation and amortization of the right-of-use asset as a regulatory asset on our balance sheet. The balance of the regulatory asset was \$5.7 million and \$4.2 million as of December 31, 2021 and 2020, respectively.

Maturities of operating lease liabilities at December 31, 2021 were as follows:

In thousands	NW Natural	Other (NW Holdings)	NW Holdings
2022	\$ 6,968	\$ 24	\$ 6,992
2023	7,013	6	7,019
2024	7,150	6	7,156
2025	7,185	6	7,191
2026	7,353	6	7,359
Thereafter	116,431	18	116,449
Total lease payments	152,100	66	152,166
Less: imputed interest	71,396	6	71,402
Total lease obligations	80,704	60	80,764
Less: current obligations	1,273	23	1,296
Long-term lease obligations	\$ 79,431	\$ 37	\$ 79,468

As of December 31, 2021, finance lease liabilities with maturities of less than one year were \$0.3 million at NW Natural.

Cash Flow Information

Supplemental cash flow information related to leases was as follows:

	 Year ended December 31, 2021					
In thousands	NW Natural		Other (NW Holdings)		NW Holdings	
Cash paid for amounts included in the measurement of lease liabilities						
Operating cash flows from operating leases	\$ 6,840	\$	58	\$	6,898	
Finance cash flows from finance leases	801		-		801	
Right of use assets obtained in exchange for lease obligations						
Operating leases	\$ 223	\$	_	\$	223	
Finance leases	314		_		314	
	 Ye	ar er	nded December 31, 2	020		
In thousands	NW Natural		Other (NW Holdings)		NW Holdings	
Cash paid for amounts included in the measurement of lease liabilities						
Operating cash flows from operating leases	\$ 4,466	\$	131	\$	4,597	
Finance cash flows from finance leases	835		_		835	
Right of use assets obtained in exchange for lease obligations						

Finance Leases

NW Natural also leases building storage spaces for use as a gas meter room in order to provide natural gas to multifamily or mixed use developments. These contracts are accounted for as finance leases and typically involve a one-time upfront payment with no remaining liability. The right of use asset for finance leases was \$2.1 million and \$1.8 million at December 31, 2021 and 2020, respectively.

\$

78,539

1,386

51

78,590

1,386

8. STOCK-BASED COMPENSATION

Stock-based compensation plans are designed to promote stock ownership in NW Holdings by employees and officers of NW Holdings and its affiliates. These compensation plans include a Long Term Incentive Plan (LTIP), an ESPP, and a terminated Restated Stock Option Plan (SOP).

Long Term Incentive Plan

Operating leases

Finance leases

The LTIP is intended to provide a flexible, competitive compensation program for eligible officers and key employees. Under the LTIP, shares of NW Holdings common stock are authorized for equity incentive grants in the form of stock, restricted stock, restricted stock units, stock options, or performance shares. An aggregate of 1,100,000 shares were authorized for issuance as of December 31, 2021. Shares awarded under the LTIP may be purchased on the open market or issued as original shares.

Of the 1,100,000 shares of common stock authorized for LTIP awards at December 31, 2021, there were 345,012 shares available for issuance under any type of award. This assumes market, performance, and service-based grants currently outstanding are awarded at the target level. There were no outstanding grants of restricted stock or stock options under the LTIP at December 31, 2021 or 2020. The LTIP stock awards are compensatory awards for which compensation expense is based on the fair value of stock awards, with expense being recognized over the performance and vesting period of the outstanding awards. Forfeitures are recognized as they occur.

Performance Shares

LTIP performance shares incorporate a combination of market, performance, and service-based factors. The following table summarizes performance share expense information:

Dollars in thousands	Shares ⁽¹⁾	Expe	nse During Award Year ⁽²⁾	I	otal Expense for Award
Estimated award:					
2019-2021 grant ⁽³⁾	37,430	\$	1,322	\$	1,322
Actual award:					
2018-2020 grant	31,600	\$	2,137	\$	2,137
2017-2019 grant	41 537	\$	572	\$	1 971

⁽¹⁾ In addition to common stock shares, a participant also receives a dividend equivalent cash payment equal to the number of shares of common stock received on the award payout multiplied by the aggregate cash dividends paid per share during the performance period.

- (2) Amount represents the expense recognized in the third year of the vesting period noted above. For the 2019-2021 grant, mutual understanding of the award's key terms was established in the third year of the vesting period, triggering full expense recognition in 2021.
- (3) This represents the estimated number of shares to be awarded as of December 31, 2021 as certain performance share measures have been achieved. Amounts are subject to change with final payout amounts authorized by the Board of Directors in February 2022.

The aggregate number of performance shares granted and outstanding at the target and maximum levels were as follows:

Dollars in thousands	Performance Share		2021	
Performance Period	Target Maximum			Expense
2019-21	35,170	70,340	\$	1,322
2020-22	_	_		-
2021-23	_	-		_
Total	35,170	70,340	\$	1,322

Performance share awards are based on the achievement of a three-year ROIC threshold that must be met and a cumulative EPS factor, which can be modified by a TSR factor relative to the performance of the Russell 2500 Utilities Index (2019-2021 and 2020-2022 performance share awards) or a specified peer group (2021-2023 performance share awards) over the three-year performance period. The performance period allows for one of the performance factors to remain variable until the first quarter of the third year of the award period. As the performance factor will not be approved until the first quarter of 2022 and 2023, there is not a mutual understanding of the awards' key terms and conditions between NW Natural and the participants as of December 31, 2021, and therefore, no expense was recognized for the 2020-2022 and 2021-2023 performance period. NW Natural will calculate the grant date fair value and recognize expense once the final performance factor has been approved. If the target is achieved for the 2020-2022 and 2021-2023 awards, NW Holdings would grant for accounting purposes 31,830 and 56,335 shares in the first quarter of 2022 and 2023, respectively.

Compensation expense is recognized in accordance with accounting standards for stock-based compensation and calculated based on performance levels achieved and an estimated fair value using the Monte-Carlo method. Due to there not being a mutual understanding of the 2020-2022 and 2021-2023 awards' key terms and conditions as noted above, the grant date fair value has not yet been determined and no non-vested shares existed at December 31, 2021. The weighted-average grant date fair value of non-vested shares associated with the 2019-2021 awards was \$44.64 per share at December 31, 2021. The weighted-average grant date fair value of shares vested during the year was \$44.64 per share and there were no performance shares granted during the year and no unrecognized compensation expense for accounting purposes as of December 31, 2021.

Restricted Stock Units

In 2012, RSUs began being granted under the LTIP instead of stock options under the Restated SOP. Generally, the RSUs awarded are forfeitable and include a performance-based threshold as well as a vesting period of four years from the grant date. The majority of our RSU grants obligate NW Holdings, upon vesting, to issue the RSU holder one share of common stock. The grant may also include a cash payment equal to the total amount of dividends paid per share between the grant date and vesting date of that portion of the RSU depending on the structure of the award agreement. The fair value of an RSU is equal to the closing market price of NW Holdings' common stock on the grant date. During 2021, total RSU expense was \$2.0 million compared to \$2.0 million in 2020 and \$1.8 million in 2019. As of December 31, 2021, there was \$3.5 million of unrecognized compensation cost from grants of RSUs, which is expected to be recognized over a period extending through 2025.

Information regarding the RSU activity is summarized as follows:

	Number of RSUs	Weighted - Average Price Per RSU
Nonvested, December 31, 2018	82,680 \$	A PARTICIPATION OF THE PROPERTY OF THE PARTICIPATION OF THE PARTICIPATIO
Granted	36,018	65.29
Vested	(35,778)	54.22
Forfeited	(3,187)	63.89
Nonvested, December 31, 2019	79,733	61.17
Granted	33,594	55.58
Vested	(29,273)	59.29
Forfeited	(1,590)	69.71
Nonvested, December 31, 2020	82,464	59.40
Granted	38,160	49.16
Vested	(31,733)	60.06
Forfeited	(1,164)	46.82
Nonvested, December 31, 2021	87,727 \$	54.87

Restated Stock Option Plan

The Restated SOP was terminated with respect to new grants in 2012; however, options granted before the Restated SOP was terminated remained outstanding until the earlier of their expiration, forfeiture, or exercise. Options were exercisable for shares of NW Holdings common stock. As of December 31, 2021, there were no options exercisable or outstanding.

Information regarding the Restated SOP activity is summarized as follows:

	Option Shares	Weighted - Average Price Per Share	Intrinsic Value (In millions)
Balance outstanding and exercisable, December 31, 2018	55,938	\$ 44.96	\$ 0.9
Exercised	(45,000)	44.79	1.0
Forfeited	<u> </u>		n/a
Balance outstanding and exercisable, December 31, 2019	10,938	45.67	0.3
Exercised	(1,500)	45.24	—
Expired	_	_	n/a
Balance outstanding and exercisable, December 31, 2020	9,438	45.74	_
Exercised	(9,438)	45.74	_
Expired	_		n/a
Balance outstanding and exercisable, December 31, 2021		<u>\$</u>	\$

Employee Stock Purchase Plan

NW Holdings' ESPP allows employees of NW Holdings, NW Natural and certain designated subsidiaries to purchase common stock at 85% of the closing price on the trading day immediately preceding the initial offering date, which is set annually. For the 2021-2022 ESPP period, each eligible employee may purchase up to \$21,235 worth of stock through payroll deductions over a period defined by the Board of Directors, with shares issued at the end of the subscription period. **Stock-Based Compensation Expense**

Stock-based compensation expense is recognized as operations and maintenance expense or is capitalized as part of construction overhead at the entity at which the award recipient is employed. The following table summarizes the NW Holdings' financial statement impact, substantially all of which was recorded at NW Natural, of stock-based compensation under the LTIP, Restated SOP and ESPP:

In thousands	2021	2020	2019
Operations and maintenance expense, for stock-based compensation	\$ 3,272	\$ 3,525	\$ 2,172
Income tax benefit	(866)	(933)	(575)
Net stock-based compensation effect on net income (loss)	2,406	2,592	1,597
Amounts capitalized for stock-based compensation	\$ 344	\$ 841	\$ 430

9. DEBT

Short-Term Debt

The primary source of short-term liquidity for NW Holdings is cash balances, dividends from its operating subsidiaries, in particular NW Natural, available cash from a multi-year credit facility, and short-term credit facilities it may enter into from time to time.

The primary source of short-term liquidity for NW Natural is from the sale of commercial paper, available cash from a multi-year credit facility, and short-term credit facilities it may enter into from time to time. In addition to issuing commercial paper or entering into bank loans to meet working capital requirements, including seasonal requirements to finance gas purchases and accounts receivable, short-term debt may also be used to temporarily fund capital requirements. For NW Natural, commercial paper and bank loans are periodically refinanced through the sale of long-term debt or equity contributions from NW Holdings. Commercial paper, when outstanding, is sold through two commercial banks under an issuing and paying agency agreement and is supported by one or more unsecured revolving credit facilities. See "Credit Agreements" below.

In June 2021, NW Natural entered into a \$100.0 million 364-Day Term Loan Credit Agreement (Term Loan) and borrowed the full amount. All principal and interest under the Term Loan was repaid in December 2021.

At December 31, 2021 and 2020, NW Natural's short-term debt outstanding of \$245.5 million and \$231.5 million, respectively, consisted of commercial paper borrowings. At December 31, 2021 and 2020, NW Holdings' short-term debt outstanding of \$389.5 million and \$304.5 million, respectively, consisted of the commercial paper outstanding at NW Natural and \$144.0 million and \$73.0 million, respectively, of balances outstanding under the credit agreement at NW Holdings. The weighted average interest rate of commercial paper at NW Natural at December 31, 2021 and 2020 was 0.3% and 0.4%, respectively. The

weighted average interest rate on the credit agreement at NW Holdings at December 31, 2021 and 2020 was 1.1% and 1.2%, respectively.

The carrying cost of commercial paper approximates fair value using Level 2 inputs. See Note 2 for a description of the fair value hierarchy. At December 31, 2021, NW Natural's commercial paper had a maximum remaining maturity of 63 days and an average remaining maturity of 34 days.

Credit Agreements

NW Holdings

In November 2021, NW Holdings entered into an amended and restated \$200.0 million credit agreement, with a feature that allows NW Holdings to request increases in the total commitment amount, up to a maximum of \$300.0 million. The maturity date of the agreement is November 3, 2026, with an available extension of commitments for two additional one-year periods, subject to lender approval.

The NW Holdings credit agreement permits the issuance of letters of credit in an aggregate amount of up to \$40.0 million. The principal amount of borrowings under the credit agreement is due and payable on the maturity date. The credit agreement requires NW Holdings to maintain a consolidated indebtedness to total capitalization ratio of 70% or less. Failure to comply with this covenant would entitle the lenders to terminate their lending commitments and accelerate the maturity of all amounts outstanding. NW Holdings was in compliance with this covenant at December 31, 2021 and 2020.

The NW Holdings credit agreement also requires NW Holdings to maintain debt ratings (which are defined by a formula using NW Natural's credit ratings in the event NW Holdings does not have a credit rating) with Standard & Poor's (S&P) and Moody's Investors Service, Inc. (Moody's) and notify the lenders of any change in its senior unsecured debt ratings or senior secured debt ratings, as applicable, by such rating agencies. A change in NW Holdings' debt ratings by S&P or Moody's is not an event of default, nor is the maintenance of a specific minimum level of debt rating a condition of drawing upon the credit agreement. Rather, interest rates on any loans outstanding under the credit agreements are tied to debt ratings and therefore, a change in the debt rating would increase or decrease the cost of any loans under the credit agreements when ratings are changed. NW Holdings does not currently maintain ratings with S&P or Moody's.

There was \$144.0 million and \$73.0 million of outstanding balances under the NW Holdings agreement at December 31, 2021 and 2020, respectively. No letters of credit were issued or outstanding under the NW Holdings agreement at December 31, 2021 and 2020.

NW Natural

In November 2021, NW Natural entered into an amended and restated credit agreement for unsecured revolving loans totaling \$400.0 million, with a feature that allows NW Natural to request increases in the total commitment amount, up to a maximum of \$600.0 million. The maturity date of the agreement is November 3, 2026 with an available extension of commitments for two additional one-year periods, subject to lender approval. The credit agreement permits the issuance of letters of credit in an aggregate amount of up to \$60.0 million. The principal amount of borrowings under the credit agreement is due and payable on the maturity date. There were no outstanding balances under NW Natural's credit agreement and no letters of credit issued or outstanding at December 31, 2021 and 2020.

NW Natural's credit agreement require NW Natural to maintain a consolidated indebtedness to total capitalization ratio of 70% or less. Failure to comply with this covenant would entitle the lenders to terminate their lending commitments and accelerate the maturity of all amounts outstanding. NW Natural was in compliance with this covenant at December 31, 2021 and 2020.

The NW Natural credit agreement also requires NW Natural to maintain credit ratings with S&P and Moody's and notify the lenders of any change in NW Natural's senior unsecured debt ratings or senior secured debt ratings, as applicable, by such rating agencies. A change in NW Natural's debt ratings by S&P or Moody's is not an event of default, nor is the maintenance of a specific minimum level of debt rating a condition of drawing upon the credit agreement. Rather, interest rates on any loans outstanding under the credit agreement are tied to debt ratings and therefore, a change in the debt rating would increase or decrease the cost of any loans under the credit agreement when ratings are changed.

Long-Term Debt

NW Holdings

At December 31, 2021 and 2020, NW Holdings had long-term debt outstanding of \$1,044.9 million and \$955.4 million, respectively; which included \$8.3 million and \$7.5 million of unamortized debt issuance costs, respectively. NW Holdings' long-term debt is primarily comprised of debt held at its wholly-owned subsidiaries NW Natural (shown below) and NWN Water. Long-term debt at NWN Water is primarily comprised of a five-year term loan agreement for \$55.0 million, due in 2026. NWN Water entered into this agreement in June 2021 and the loan carried an interest rate of 0.90% at December 31, 2021, which is based upon the one-month LIBOR rate. The loan is guaranteed by NW Holdings and requires NW Holdings to maintain a consolidated indebtedness to total capitalization ratio of 70% or less. Failure to comply with this covenant would entitle the lenders to terminate their lending commitments and accelerate the maturity of all amounts outstanding. NW Holdings was in compliance with this covenant at December 31, 2021, with a consolidated indebtedness to total capitalization ratio of 60.5%.

In June 2019, NW Natural Water, a wholly-owned subsidiary of NW Holdings, entered into a two-year term loan agreement for \$35.0 million. The loan was repaid in June 2021 upon its maturity date.

NW Natural

NW Natural's issuance of First Mortgage Bonds, which includes NW Natural's medium-term notes, under the Mortgage and Deed of Trust (Mortgage) is limited by eligible property, adjusted net earnings, and other provisions of the Mortgage. The Mortgage constitutes a first mortgage lien on certain gas properties owned from time to time by NW Natural, including substantially all of NW Natural's NGD property.

Maturities and Outstanding Long-Term Debt

Retirement of long-term debt for each of the annual periods through December 31, 2026 and thereafter are as follows:

In thousands	Long-term del	ot maturities
NW Natural:		
2022	\$	_
2023		90,000
2024		_
2025		30,000
2026		55,000
Thereafter		819,700
Total	\$	994,700

The following table presents debt outstanding as of December 31:

In thousands	2021	2020
NW Natural:		
First Mortgage Bonds:		
9.050% Series due 2021	\$	\$ 10,000
3.176% Series due 2021	_	50,000
3.542% Series due 2023	50,000	50,000
5.620% Series due 2023	40,000	40,000
7.720% Series due 2025	20,000	20,000
6.520% Series due 2025	10,000	10,000
7.050% Series due 2026	20,000	20,000
3.211% Series due 2026	35,000	35,000
7.000% Series due 2027	20,000	20,000
2.822% Series due 2027	25,000	25,000
6.650% Series due 2027	19,700	19,700
6.650% Series due 2028	10,000	10,000
3.141% Series due 2029	50,000	50,000
7.740% Series due 2030	20,000	20,000
7.850% Series due 2030	10,000	10,000
5.820% Series due 2032	30,000	30,000
5.660% Series due 2033	40,000	40,000
5.250% Series due 2035	10,000	10,000
4.000% Series due 2042	50,000	50,000
4.136% Series due 2046	40,000	40,000
3.685% Series due 2047	75,000	75,000
4.110% Series due 2048	50,000	50,000
3.869% Series due 2049	90,000	90,000
3.600% Series due 2050	150,000	150,000
3.078% Series due 2051	130,000	
Long-term debt, gross	994,700	924,700
Less: current maturities	_	60,000
Total long-term debt	\$ 994,700	\$ 864,700

Fair Value of Long-Term Debt

NW Holdings' and NW Natural's outstanding debt does not trade in active markets. The fair value of debt is estimated using the value of outstanding debt at natural gas distribution companies with similar credit ratings, terms, and remaining maturities to NW Holdings' and NW Natural's debt that actively trade in public markets. Substantially all outstanding debt at NW Holdings is comprised of NW Natural debt. These valuations are based on Level 2 inputs as defined in the fair value hierarchy. See Note 2.

The following table provides an estimate of the fair value of long-term debt, including current maturities of long-term debt, using market prices in effect on the valuation date:

	 December 31,						
In thousands	2021		2020				
NW Natural:							
Gross long-term debt	\$ 994,700	\$	924,700				
Unamortized debt issuance costs	(8,205)		(7,480)				
Carrying amount	\$ 986,495	\$	917,220				
Estimated fair value ⁽¹⁾	\$ 1,110,741	\$	1,097,348				
NW Holdings:							
Gross long-term debt	\$ 1,053,241	\$	962,905				
Unamortized debt issuance costs	(8,309)		(7,480)				
Carrying amount	\$ 1,044,932	\$	955,425				
Estimated fair value ⁽¹⁾	\$ 1,174,500	\$	1,136,311				

⁽¹⁾ Estimated fair value does not include unamortized debt issuance costs.

10. PENSION AND OTHER POSTRETIREMENT BENEFIT COSTS

NW Natural maintains a qualified non-contributory defined benefit pension plan (Pension Plan) for all eligible employees, non-qualified supplemental pension plans for eligible executive officers and other key employees, and other postretirement employee benefit plans. NW Natural also has a qualified defined contribution plan (Retirement K Savings Plan) for all eligible employees. The Pension Plan and Retirement K Savings Plan have plan assets, which are held in qualified trusts to fund retirement benefits.

Effective January 1, 2007 and 2010, the Pension Plan and postretirement benefits for non-union employees and union employees, respectively, were closed to new participants. Non-union and union employees hired or re-hired after December 31, 2006 and 2009, respectively, and employees of NW Natural subsidiaries are provided an enhanced Retirement K Savings Plan benefit.

The following table provides a reconciliation of the changes in NW Natural's benefit obligations and fair value of plan assets, as applicable, for NW Natural's pension and other postretirement benefit plans, excluding the Retirement K Savings Plan, and a summary of the funded status and amounts recognized in NW Holdings' and NW Natural's consolidated balance sheets as of December 31:

				Postretiremen	t Ber	nefit Plans			
		Pension		Other E	its				
In thousands		2021		2020		2021		2020	
Reconciliation of change in benefit obligation:									
Obligation at January 1	\$	566,147	\$	515,668	\$	29,039	\$	29,568	
Service cost		6,982		6,614		238		258	
Interest cost		13,447		16,161		684		905	
Net actuarial (gain) loss		(18,587)		52,777		(688)		145	
Benefits paid		(25,371)		(25,073)		(2,050)		(1,837)	
Obligation at December 31	\$	542,618	\$	566,147	\$	27,223	\$	29,039	
	_								
Reconciliation of change in plan assets:									
Fair value of plan assets at January 1	\$	373,932	\$	313,051	\$	_	\$	_	
Actual return on plan assets		38,712		54,600		_		_	
Employer contributions		11,944		31,354		2,050		1,837	
Benefits paid		(25,371)		(25,073)		(2,050)		(1,837)	
Fair value of plan assets at December 31	\$	399,217	\$	373,932	\$	_	\$	_	
Funded status at December 31	\$	(143,401)	\$	(192,215)	\$	(27,223)	\$	(29,039)	
	_								

At December 31, 2021, the net liability (benefit obligations less market value of plan assets) for the Pension Plan decreased \$46.5 million compared to 2020. The decrease in the net pension liability is primarily due to the \$25.3 million increase in plan assets and the \$21.3 million decrease to the pension benefit obligation. The liability for non-qualified plans decreased \$2.3 million, and the liability for other postretirement benefits decreased \$1.8 million in 2021.

NW Natural's Pension Plan had a projected benefit obligation of \$503.9 million and \$525.1 million at December 31, 2021 and 2020, respectively, and fair values of plan assets of \$399.2 million and \$373.9 million, respectively. The plan had an accumulated benefit obligation of \$464.4 million and \$480.0 million at December 31, 2021 and 2020, respectively.

The following table presents amounts realized through regulatory assets or in other comprehensive loss (income) for the years ended December 31:

	Regulatory Assets											 Other Comprehensive Loss (Income)					
		F	ens	ion Benefits Other Postretirement Benefits Pension Benefits													
In thousands		2021		2020		2019		2021		2020		2019	2021		2020		2019
Net actuarial (gain) loss	\$	(32,258)	\$	16,170	\$	10,424	\$	(688)	\$	145	\$	1,809	\$ (812)	\$	3,873	\$	3,595
Amortization of:																	
Prior service (cost) credit		_		_		(7)		468		468		468	_		_		_
Actuarial loss		(21,250)		(18,627)		(14,057)		(645)		(607)		(369)	(1,225)		(923)		(648)
Total	\$	(53,508)	\$	(2,457)	\$	(3,640)	\$	(865)	\$	6	\$	1,908	\$ (2,037)	\$	2,950	\$	2,947

The following table presents amounts recognized in regulatory assets and accumulated other comprehensive loss (AOCL) at December 31:

			Regulato	AC	CL	CL			
	Pension	efits	Other Postreti	emer	nt Benefits	Pension	efits		
In thousands	2021		2020	2021		2020	2021		2020
Prior service cost (credit)	\$ _	\$	_	\$ (333)	\$	(801)	\$ _	\$	_
Net actuarial loss	112,182		164,446	5,834		7,167	15,399		17,434
Total	\$ 112,182	\$	164,446	\$ 5,501	\$	6,366	\$ 15,399	\$	17,434

The following table presents amounts recognized by NW Holdings and NW Natural in AOCL and the changes in AOCL related to NW Natural's non-qualified employee benefit plans:

	Year ended December 31,								
In thousands	2021								
Beginning balance	\$	(12,902)	\$	(10,733)					
Amounts reclassified to AOCL		812		(3,873)					
Amounts reclassified from AOCL:									
Amortization of actuarial losses		1,225		923					
Total reclassifications before tax		2,037		(2,950)					
Tax (benefit) expense		(539)		781					
Total reclassifications for the period		1,498		(2,169)					
Ending balance	\$	(11,404)	\$	(12,902)					

In 2022, NW Natural will amortize an estimated \$11.8 million from regulatory assets to net periodic benefit costs, consisting of \$12.1 million of actuarial losses offset by \$0.3 million of prior service credits.

The assumed discount rates for NW Natural's Pension Plan and other postretirement benefit plans were determined independently based on the FTSE Above Median Curve (discount rate curve), which uses high quality corporate bonds rated AA- or higher by S&P or Aa3 or higher by Moody's. The discount rate curve was applied to match the estimated cash flows in each of the plans to reflect the timing and amount of expected future benefit payments for these plans.

The assumed expected long-term rate of return on plan assets for the Pension Plan was developed using a weighted-average of the expected returns for the target asset portfolio. In developing the expected long-term rate of return assumption, consideration was given to the historical performance of each asset class in which the plan's assets are invested and the target asset allocation for plan assets.

The investment strategy and policies for Pension Plan assets held in the retirement trust fund were approved by the NW Natural Retirement Committee, which is composed of senior management with the assistance of an outside investment consultant. The policies set forth the guidelines and objectives governing the investment of plan assets. Plan assets are invested for total return

with appropriate consideration for liquidity, portfolio risk, and return expectations. All investments are expected to satisfy the prudent investments rule under the Employee Retirement Income Security Act of 1974. The approved asset classes may include cash and short-term investments, fixed income, common stock and convertible securities, absolute and real return strategies, and real estate. Plan assets may be invested in separately managed accounts or in commingled or mutual funds. Investment re-balancing takes place periodically as needed, or when significant cash flows occur, in order to maintain the allocation of assets within the stated target ranges. The retirement trust fund is not currently invested in NW Holdings or NW Natural securities.

The following table presents the Pension Plan asset target allocation at December 31, 2021:

Asset Category	Target Allocation
Long government/credit	20 %
U.S. large cap equity	18
Non-U.S. equity	18
Absolute return strategies	12
U.S. small/mid cap equity	10
Real estate funds	7
High yield bonds	5
Emerging markets equity	5
Emerging market debt	5

Non-qualified supplemental defined benefit plan obligations were \$38.7 million and \$41.0 million at December 31, 2021 and 2020, respectively. These plans are not subject to regulatory deferral, and the changes in actuarial gains and losses, prior service costs, and transition assets or obligations are recognized in AOCL, net of tax until they are amortized as a component of net periodic benefit cost. These are unfunded, non-qualified plans with no plan assets; however, a significant portion of the obligations is indirectly funded with company and trust-owned life insurance and other assets.

Other postretirement benefit plans are unfunded plans but are subject to regulatory deferral. The actuarial gains and losses, prior service costs, and transition assets or obligations for these plans are recognized as a regulatory asset.

Net periodic benefit costs consist of service costs, interest costs, the expected returns on plan assets, and the amortization of gains and losses and prior service costs. The gains and losses are the sum of the actuarial and asset gains and losses throughout the year and are amortized over the average remaining service period of active participants. The asset gains and losses are based in part on a market-related valuation of assets. The market-related valuation reflects differences between expected returns and actual investment returns with the differences recognized over a two-year period from the year in which they occur, thereby reducing year-to-year net periodic benefit cost volatility.

The service cost component of net periodic benefit cost for NW Natural pension and other postretirement benefit plans is recognized in operations and maintenance expense in the consolidated statements of comprehensive income. The other non-service cost components are recognized in other income (expense), net in the consolidated statements of comprehensive income. The following table provides the components of net periodic benefit cost for NW Natural's pension and other postretirement benefit plans for the years ended December 31:

	 Pension Benefits Other Postretirement Ber							enefits		
In thousands	2021		2020		2019		2021	2020		2019
Service cost	\$ 6,981	\$	6,614	\$	6,308	\$	238	\$ 258	\$	244
Interest cost	13,448		16,161		18,684		684	905		1,116
Expected return on plan assets	(24,232)		(21,865)		(20,854)		_	_		
Amortization of prior service cost (credit)	_		_		7		(468)	(468)		(468)
Amortization of net actuarial loss	22,475		19,550		14,704		645	607		368
Net periodic benefit cost	 18,672		20,460		18,849		1,099	1,302		1,260
Amount allocated to construction	 (3,015)		(2,798)		(2,493)		(93)	(98)		(86)
Net periodic benefit cost charged to expense	15,657		17,662		16,356		1,006	1,204		1,174
Regulatory pension disallowance	_		_		10,500		_	_		_
Amortization of regulatory balancing account	7,131		7,131		16,841					
Net amount charged to expense	\$ 22,788	\$	24,793	\$	43,697	\$	1,006	\$ 1,204	\$	1,174

Net periodic benefit costs are reduced by amounts capitalized to NGD plant. In addition, a certain amount of net periodic benefit costs were recorded to the regulatory balancing account, representing net periodic pension expense for the Pension Plan above the amount set in rates, as approved by the OPUC, from 2011 through October 31, 2018. Total amortization of the regulatory balancing account of \$7.1 million was recognized in each of the years ended December 31, 2021 and 2020, of which \$2.6 million was charged to operations and maintenance expense and \$4.5 million was charged to other income (expense).

The following table provides the assumptions used in measuring periodic benefit costs and benefit obligations for the years ended December 31:

	F	Pension Benefits		Other Postretirement Benefits						
	2021	2020	2019	2021	2020	2019				
Assumptions for net periodic benefit cost:										
Weighted-average discount rate	2.40 %	3.18 %	4.19 %	2.34 %	3.11 %	4.13 %				
Rate of increase in compensation	3.50 %	3.50 %	3.25-3.50%	n/a	n/a	n/a				
Expected long-term rate of return	7.25 %	7.25 %	7.50 %	n/a	n/a	n/a				
Assumptions for year-end funded status:										
Weighted-average discount rate	2.71 %	2.36 %	3.16 %	2.72 %	2.34 %	3.11 %				
Rate of increase in compensation ⁽¹⁾	3.50 %	3.50-6.50%	3.50-6.50%	n/a	n/a	n/a				
Expected long-term rate of return	7.00 %	7.25 %	7.25 %	n/a	n/a	n/a				

⁽¹⁾ Rate assumption was 6.50% in 2020 and 3.50% thereafter. The 2020 compensation increase assumption was a result of the 2019 execution of a collective bargaining agreement with unionized members of NW Natural effective December 1, 2019.

The assumed annual increase in health care cost trend rates used in measuring other postretirement benefits as of December 31, 2021 was 5.75%. These trend rates apply to both medical and prescription drugs. Medical costs and prescription drugs are assumed to decrease gradually each year to a rate of 4.75% by 2026.

Assumed health care cost trend rates can have a significant effect on the amounts reported for the health care plans; however, other postretirement benefit plans have a cap on the amount of costs reimbursable by NW Natural.

Mortality assumptions are reviewed annually and are updated for material changes as necessary. In 2021, mortality rate assumptions were updated from Pri-2012 mortality tables using scale MP-2020 to Pri-2012 mortality tables using scale MP-2021, which partially offset increases of the projected benefit obligation.

The following table provides information regarding employer contributions and benefit payments for NW Natural's Pension Plan, non-qualified pension plans, and other postretirement benefit plans for the years ended December 31, and estimated future contributions and payments:

In thousands	Pension Benefits	Other Benefits	
Employer Contributions:			
2020	31,362	\$ 1,83	37
2021	11,944	2,0	50
2022 (estimated)	2,335	1,6	54
Benefit Payments:			
2019	23,160	1,7	74
2020	25,073	1,83	37
2021	25,371	2,0	50
Estimated Future Benefit Payments:			
2022	23,210	1,6	54
2023	24,020	1,60	65
2024	24,728	1,6	54
2025	25,325	1,6	43
2026	25,824	1,60	06
2027-2031	133,617	7,6	40

Employer Contributions to Company-Sponsored Defined Benefit Pension Plan

NW Natural makes contributions to its Pension Plan based on actuarial assumptions and estimates, tax regulations, and funding requirements under federal law. The Pension Plan was underfunded by \$104.7 million at December 31, 2021. NW Natural made cash contributions totaling \$9.6 million to its Pension Plan for 2021. The American Rescue Plan, which was signed into law on March 11, 2021, includes a provision for pension relief that extends the amortization period for required contributions from 7 to 15 years and provides for the stabilization of interest rates used to calculate future required contributions. As a result, NW Natural does not expect to make any plan contributions during 2022.

Multiemployer Pension Plan

In addition to the NW Natural-sponsored Pension Plan presented above, prior to 2014 NW Natural contributed to a multiemployer pension plan for its NGD union employees known as the Western States Office and Professional Employees International Union Pension Fund (Western States Plan). That plan's employer identification number is 94-6076144. Effective December 22, 2013,

NW Natural withdrew from the plan, which was a noncash transaction. Vested participants will receive all benefits accrued through the date of withdrawal. As the plan was underfunded at the time of withdrawal, NW Natural was assessed a withdrawal liability of \$8.3 million, plus interest, which requires NW Natural to pay \$0.6 million each year to the plan for 20 years beginning in July 2014. The cost of the withdrawal liability was deferred to a regulatory account on the balance sheet.

Payments were \$0.4 million for 2021, and as of December 31, 2021, the liability balance was \$5.8 million. For 2020 and 2019, contributions to the plan were \$0.7 million and \$0.6 million, respectively, which was approximately 6% to 5% of the total contributions to the plan by all employer participants in those years.

Defined Contribution Plan

NW Natural's Retirement K Savings Plan is a qualified defined contribution plan under Internal Revenue Code Sections 401(a) and 401(k). NW Natural contributions totaled \$8.8 million, \$8.3 million, and \$7.0 million for 2021, 2020, and 2019, respectively.

Deferred Compensation Plans

NW Natural's supplemental deferred compensation plans for eligible officers and senior managers are non-qualified plans. These plans are designed to enhance the retirement savings of employees and to assist them in strengthening their financial security by providing an incentive to save and invest regularly.

Fair Value

Below is a description of the valuation methodologies used for assets measured at fair value. In cases where NW Natural's Pension Plan is invested through a collective trust fund or mutual fund, the fund's market value is utilized. Market values for investments directly owned are also utilized.

U.S. EQUITY. These are non-published net asset value (NAV) assets. The non-published NAV assets consist of commingled trusts where NAV is not published but the investment can be readily disposed of at NAV or market value. The underlying investments in this asset class includes investments primarily in U.S. common stocks.

INTERNATIONAL/GLOBAL EQUITY. These are Level 1 and non-published NAV assets. The Level 1 asset is a mutual fund, and the non-published NAV assets consist of commingled trusts where the NAV/unit price is not published, but the investment can be readily disposed of at the NAV/unit price. The mutual funds has a readily determinable fair value, including a published NAV, and the commingled trusts are valued at unit price. This asset class includes investments primarily in foreign equity common stocks.

LIABILITY HEDGING. These are non-published NAV assets. The non-published NAV assets consist of commingled trusts where NAV is not published but the investment can be readily disposed of at NAV or market value. The underlying investments in this asset class include long duration fixed income investments primarily in U.S. treasuries, U.S. government agencies, municipal securities, mortgage-backed securities, asset-backed securities, as well as U.S. and international investment-grade corporate bonds.

OPPORTUNISTIC. These are non-published NAV assets consisting of commingled trusts where the investments can be readily disposed of at unit price, and a hedge fund of funds where the valuation is not published. This hedge fund of funds is winding down. Based on recent dispositions, NW Natural believes the remaining investment is fairly valued. The hedge fund of funds is valued at the weighted average value of investments in various hedge funds, which in turn are valued at the closing price of the underlying securities. This asset class includes investments in emerging market debt, leveraged loans, REITs, high yield bonds, a commodities fund, and a hedge fund of funds.

CASH AND CASH EQUIVALENTS. These are Level 1 and non-published NAV assets. The Level 1 assets consist of cash in U.S. dollars, which can be readily disposed of at face value. The non-published NAV assets represent mutual funds without published NAV's but the investment can be readily disposed of at the NAV. The mutual funds are valued at the NAV of the shares held by the plan at the valuation date.

The preceding valuation methods may produce a fair value calculation that is not indicative of net realizable value or reflective of future fair values. Although we believe these valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain investments could result in a different fair value measurement at the reporting date.

Investment securities are exposed to various financial risks including interest rate, market, and credit risks. Due to the level of risk associated with certain investment securities, it is reasonably possible that changes in the values of NW Natural's investment securities will occur in the near term and such changes could materially affect NW Natural's investment account balances and the amounts reported as plan assets available for benefit payments.

The following tables present the fair value of NW Natural's Pension Plan assets, including outstanding receivables and liabilities, of NW Natural's retirement trust fund

December 31, 2021

					r	Non-Published	
Investments	Level 1	Level 2		Level 3		NAV ⁽¹⁾	Total
US equity	\$ _	\$ _	\$	_	\$	121,090	\$ 121,090
International / Global equity	35,456	-		-		88,078	123,534
Liability hedging	_	_		_		118,464	118,464
Opportunistic	_	_		_		33,808	33,808
Cash and cash equivalents	_	-		-		2,321	2,321
Total investments	\$ 35,456	\$ _	\$		\$	363,761	\$ 399,217
			De	cember 31, 202	0		
Investments	Level 1	Level 2	De	cember 31, 202 Level 3	_	Non-Published NAV ⁽¹⁾	Total
Investments US equity	\$ Level 1	\$ Level 2	Dec		_		\$ Total 117,764
	\$ 	\$	Dec	Level 3	١	NAV ⁽¹⁾	\$
US equity	\$ _	\$	S \$	Level 3	١	NAV ⁽¹⁾ 117,764	\$ 117,764
US equity International / Global equity	\$ _	\$	S \$	Level 3	١	NAV ⁽¹⁾ 117,764 78,092	\$ 117,764 117,206
US equity International / Global equity Liability hedging	\$ _	\$	\$	Level 3	١	NAV ⁽¹⁾ 117,764 78,092 111,041	\$ 117,764 117,206 111,041

	 Decem	ber 31	1
	 2021		2020
Receivables:			
Accrued interest and dividend income	\$ 	\$	6,429
Total receivables	 _		6,429
Liabilities:			
Due to broker for securities purchased	_		6,429
Total investment in retirement trust	\$ 399,217	\$	373,931

⁽¹⁾ The fair value for these investments is determined using Net Asset Value per share (NAV) as of December 31, as a practical expedient, and therefore they are not classified within the fair value hierarchy. These investments primarily consist of institutional investment products, for which the NAV is generally not publicly available.

11. INCOME TAX

In thousands

The following table provides a reconciliation between income taxes calculated at the statutory federal tax rate and the provision for income taxes reflected in the NW Holdings and NW Natural statements of comprehensive income or loss for December 31:

		NW Holdings			NW Natural	
Dollars in thousands	2021	2020	2019	2021	2020	2019
Income taxes at federal statutory rate	\$22,275	\$19,185	\$16,370	\$22,996	\$19,248	\$17,438
Increase (decrease):						
State income tax, net of federal	9,962	6,389	4,422	10,150	6,385	4,716
Differences required to be flowed-through by regulatory commissions	(4,655)	(3,960)	(5,772)	(4,738)	(3,960)	(5,772)
Regulatory settlement	_	_	(1,129)	_	_	(1,129)
Other, net	(176)	(532)	(1,249)	(75)	(578)	(1,188)
Total provision for income taxes	\$27,406	\$21,082	\$12,642	\$28,333	\$21,095	\$14,065
Effective tax rate	25.8%	23.1%	16.2%	25.9%	23.0%	16.9%

The NW Holdings and NW Natural effective income tax rates for 2021 compared to 2020 changed primarily due to Oregon Corporate Activity Tax (CAT), the majority of which is incurred because of Oregon regulated operations and for which rate recovery began on November 1, 2020.

The NW Holdings and NW Natural effective income tax rates for 2020 compared to 2019 changed primarily as a result of higher pre-tax income, Oregon CAT effective January 1, 2020, and amortization of excess deferred income tax benefits as ordered by regulatory commissions.

The provision for current and deferred income taxes consists of the following at December 31:

	N۱	N Holdings			NW Natural					
 2021		2020		2019		2021		2020		2019
\$ 6,508	\$	10,106	\$	5,530	\$	7,570	\$	11,092	\$	6,755
6,281		5,971		1,667		7,540		5,357		2,101
12,789		16,077		7,197		15,110		16,449		8,856
8,289		2,888		1,515		7,915		1,921		1,340
6,328		2,117		3,930		5,308		2,725		3,869
14,617		5,005		5,445		13,223		4,646		5,209
\$ 27,406	\$	21,082	\$	12,642	\$	28,333	\$	21,095	\$	14,065
\$	\$ 6,508 6,281 12,789 8,289 6,328 14,617	\$ 6,508 \$ 6,281 12,789 8,289 6,328 14,617	\$ 6,508 \$ 10,106 6,281 5,971 12,789 16,077 8,289 2,888 6,328 2,117 14,617 5,005	2021 2020 \$ 6,508 \$ 10,106 6,281 5,971 12,789 16,077 8,289 2,888 6,328 2,117 14,617 5,005	2021 2020 2019 \$ 6,508 \$ 10,106 \$ 5,530 6,281 5,971 1,667 12,789 16,077 7,197 8,289 2,888 1,515 6,328 2,117 3,930 14,617 5,005 5,445	2021 2020 2019 \$ 6,508 \$ 10,106 \$ 5,530 \$ 6,281 \$ 6,281 5,971 1,667 \$ 12,789 16,077 7,197 \$ 8,289 2,888 1,515 \$ 6,328 2,117 3,930 \$ 14,617 5,005 5,445	2021 2020 2019 2021 \$ 6,508 \$ 10,106 \$ 5,530 \$ 7,570 6,281 5,971 1,667 7,540 12,789 16,077 7,197 15,110 8,289 2,888 1,515 7,915 6,328 2,117 3,930 5,308 14,617 5,005 5,445 13,223	2021 2020 2019 2021 \$ 6,508 \$ 10,106 \$ 5,530 \$ 7,570 \$ 6,281 \$ 6,281 5,971 1,667 7,540 \$ 12,789 16,077 7,197 15,110 \$ 8,289 2,888 1,515 7,915 \$ 6,328 2,117 3,930 5,308 \$ 14,617 5,005 5,445 13,223	2021 2020 2019 2021 2020 \$ 6,508 \$ 10,106 \$ 5,530 \$ 7,570 \$ 11,092 6,281 5,971 1,667 7,540 5,357 12,789 16,077 7,197 15,110 16,449 8,289 2,888 1,515 7,915 1,921 6,328 2,117 3,930 5,308 2,725 14,617 5,005 5,445 13,223 4,646	2021 2020 2019 2021 2020 \$ 6,508 \$ 10,106 \$ 5,530 \$ 7,570 \$ 11,092 \$ 6,281 5,971 1,667 7,540 5,357 \$ 12,789 \$ 16,077 \$ 7,197 \$ 15,110 \$ 16,449 \$ 8,289 \$ 2,888 \$ 1,515 \$ 7,915 \$ 1,921 \$ 6,328 \$ 2,117 \$ 3,930 \$ 5,308 \$ 2,725 \$ 14,617 \$ 5,005 \$ 5,445 \$ 13,223 \$ 4,646

The following table summarizes the tax effect of significant items comprising NW Holdings and NW Natural's deferred income tax balances recorded at December 31:

		NW H	olding	js	NVV Natural				
In thousands	·	2021		2020		2021		2020	
Deferred tax liabilities:									
Plant and property	\$	310,471	\$	297,078	\$	303,928	\$	290,105	
Leases receivable		38,123		39,396		38,123		39,396	
Pension and postretirement obligations		23,097		25,066		23,097		25,066	
Income tax regulatory asset		14,818		17,104		14,818		17,104	
Lease right of use assets		21,362		21,613		21,350		21,596	
Other		7,793		_		8,003		_	
Total deferred income tax liabilities	\$	415,664	\$	400,257	\$	409,319	\$	393,267	
Deferred income tax assets:									
Income tax regulatory liability	\$	50,447	\$	52,590	\$	50,193	\$	52,366	
Lease liabilities		21,376		21,622		21,365		21,606	
Other intangible assets		3,484		4,485		_		—	
Net operating losses and credits carried forward		126		861		44		80	
Other		_		1,407		_		1,181	
Total deferred income tax assets	\$	75,433	\$	80,965	\$	71,602	\$	75,233	
Total net deferred income tax liabilities	\$	340,231	\$	319,292	\$	337,717	\$	318,034	

At December 31, 2021 and 2020, regulatory income tax assets of \$12.4 million and \$14.6 million, respectively, were recorded by NW Natural, a portion of which is recorded in current assets. These regulatory income tax assets primarily represent future rate recovery of deferred tax liabilities, resulting from differences in NGD plant financial statement and tax bases and NGD plant removal costs, which were previously flowed through for rate making purposes and to take into account the additional future taxes, which will be generated by that recovery. These deferred tax liabilities, and the associated regulatory income tax assets, are currently being recovered through customer rates. At December 31, 2021 and 2020, regulatory income tax assets of \$2.4 million and \$2.5 million, respectively, were recorded by NW Natural, representing future recovery of deferred tax liabilities resulting from the equity portion of AFUDC. At December 31, 2021 and 2020, regulatory income tax assets of \$0.4 million and \$1.7 million, respectively, were recorded by NW Natural, representing future recovery of Oregon CAT that was deferred between January 1, 2020 and October 31, 2020. In October 2020, the OPUC issued an order providing for recovery of deferred Oregon CAT as well as CAT incurred prospectively beginning November 1, 2020.

At December 31, 2021 and 2020, deferred tax assets of \$50.2 million and \$52.4 million, respectively, were recorded by NW Natural representing the future income tax benefit associated with the excess deferred income tax regulatory liability recorded as a result of the lower federal corporate income tax rate provided for by the Tax Cuts and Jobs Act (TCJA). At December 31, 2021 and 2020, regulatory liability balances representing the benefit of the change in deferred taxes as a result of the TCJA of \$189.6 million and \$197.8 million, respectively, were recorded by NW Natural.

NW Holdings and NW Natural assess the available positive and negative evidence to estimate if sufficient taxable income will be generated to utilize their respective existing deferred tax assets. Based upon this assessment, NW Holdings and NW Natural determined that it is more likely than not that all of their respective deferred tax assets recorded as of December 31, 2021 will be realized.

The Company estimates it has net operating loss (NOL) carryforwards of \$0.2 million for federal taxes and \$0.2 million for state taxes at December 31, 2021. We anticipate fully utilizing these NOL carryforward balances before they begin to expire in 2033 for federal and 2028 for state. California alternative minimum tax (AMT) credits and Idaho investment tax credits (ITC) of \$0.1 million are also available. The AMT credits do not expire. The ITC credits begin to expire in 2033.

Uncertain tax positions are accounted for in accordance with accounting standards that require an assessment of the anticipated settlement outcome of material uncertain tax positions taken in a prior year, or planned to be taken in the current year. Until such positions are sustained, the uncertain tax benefits resulting from such positions would not be recognized. No reserves for uncertain tax positions were recorded as of December 31, 2021, 2020, or 2019.

The federal income tax returns for tax years 2017 and earlier are closed by statute. The IRS Compliance Assurance Process (CAP) examination of the 2018 and 2019 tax years have been completed. There were no material changes to these returns as filed. The 2020 and 2021 tax years are currently under IRS CAP examination. The 2022 CAP application has been filed. Under the CAP program, NW Holdings and NW Natural work with the IRS to identify and resolve material tax matters before the tax return is filed each year.

As of December 31, 2021, income tax years 2017 through 2020 remain open for examination by the State of California. Income tax years 2018 through 2020 are open for examination by the State of Idaho. The State of Oregon examined the Oregon corporate income tax returns for tax years 2015, 2016, and 2017. No material changes occurred as a result of this examination. Tax years 2018 through 2020 are open for examination by the State of Oregon.

12. PROPERTY, PLANT, AND EQUIPMENT

The following table sets forth the major classifications of property, plant, and equipment and accumulated depreciation of continuing operations at December 31:

In thousands		2021		2020
NW Natural:				
NGD plant in service	\$	3,721,939	\$	3,548,543
NGD work in progress		135,398		63,901
Less: Accumulated depreciation		1,098,715		1,055,809
NGD plant, net		2,758,622		2,556,635
Other plant in service		69,332		66,300
Other construction work in progress		4,971		5,032
Less: Accumulated depreciation		20,646	_	19,637
Other plant, net		53,657		51,695
Total property, plant, and equipment	\$	2,812,279	\$	2,608,330
Other (NW Holdings):				
Other plant in service	\$	65,603	\$	50,263
Less: Accumulated depreciation		6,512		3,823
Other plant, net	_	59,091		46,440
NW Holdings:				
Total property, plant, and equipment	\$	2,871,370	\$	2,654,770
NW Natural:				
Capital expenditures in accrued liabilities	\$	37,537	\$	25,129
NW Holdings:				
Capital expenditures in accrued liabilities	\$	38,333	\$	25,129

Accumulated depreciation does not include the accumulated provision for asset removal costs of \$446.0 million and \$428.0 million at December 31, 2021 and 2020, respectively. These accrued asset removal costs are reflected on the balance sheet as regulatory liabilities. See Note 2.

<u>NW Holdings</u>

Other plant balances include long-lived assets associated with water operations and non-regulated activities not held by NW Natural or its subsidiaries.

NW Natural

Other plant balances include non-utility gas storage assets at the Mist facility and other long-lived assets not related to NGD.

The weighted average depreciation rate for NGD assets was 3.0% in 2021, 3.0% in 2020, and 2.9% in 2019. The weighted average depreciation rate for assets not related to NGD was 1.8% in 2021, 1.8% in 2020, and 1.8% in 2019.

13. INVESTMENTS

Investments include gas reserves, financial investments in life insurance policies, and equity method investments. The following table summarizes other investments at December 31:

	 NW H	oldings	<u> </u>	NVV Natural					
In thousands	2021		2020		2021		2020		
Investments in life insurance policies	\$ 48,178	\$	49,241	\$	48,178	\$	49,242		
Investments in gas reserves, non-current	26,608		34,484		26,608		34,484		
Investment in unconsolidated affiliates	14,492		18		_		_		
Total other investments	\$ 89,278	\$	83,743	\$	74,786	\$	83,726		

Investment in Life Insurance Policies

NW Natural has invested in key person life insurance contracts to provide an indirect funding vehicle for certain long-term employee and director benefit plan liabilities. The amount in the above table is reported at cash surrender value, net of policy loans.

NW Natural Gas Reserves

NW Natural has invested \$188 million through the gas reserves program in the Jonah Field located in Wyoming as of December 31, 2021. Gas reserves are stated at cost, net of regulatory amortization, with the associated deferred tax benefits of \$6.9 million and \$10.6 million, which are recorded as liabilities in the December 31, 2021 and 2020 consolidated balance sheets, respectively. NW Natural's investment is included in NW Holdings' and NW Natural's consolidated balance sheets under other current assets and other investments (non-current portion) with the maximum loss exposure limited to the investment balance. The amount of gas reserves included in other current assets was \$5.4 million and \$11.4 million as of December 31, 2021 and 2020, respectively. The investment in gas reserves provides long-term price protection and acted to hedge the cost of gas for approximately 4% and 5% of NGD gas supplies for the years ended December 31, 2021 and 2020, respectively.

Investments in Unconsolidated Affiliates

On December 17, 2021, NW Natural Water purchased a 37.3% ownership stake in Avion Water Company, Inc. (Avion Water), an investor-owned water utility for \$14.5 million. Avion Water operates in Bend, Oregon and the surrounding communities, serving approximately 15,000 customer connections and employing 35 people. The carrying value of the equity method investment is \$10.3 million higher than the underlying equity in the net assets of the investee at December 31, 2021 due to equity method goodwill.

On August 6, 2020, NWN Energy completed the sale of 100% of its interest in Trail West Holdings, LLC (TWH) to an unrelated third party for a purchase price of \$14.0 million, \$7.0 million of which was paid upon closing the transaction, and \$7.0 million of which was paid upon the one-year anniversary of the close date. The completion of the sale resulted in an after-tax gain of approximately \$0.5 million for the year ended December 31, 2020.

TWH was a variable interest entity reported under equity method accounting through its sale. The investment in TWH did not meet the criteria to be classified as held for sale or discontinued operations.

14. BUSINESS COMBINATIONS

2021 Business Combinations

During the year ended December 31, 2021, NWN Water and its subsidiaries completed four acquisitions qualifying as business combinations. The aggregate fair value of the preliminary consideration transferred for these acquisitions were not material and are not significant to NW Holdings' results of operations.

2020 Business Combinations

During the year ended December 31, 2020, NWN Water and its subsidiaries completed two significant acquisitions qualifying as business combinations. The aggregate fair value of the total cash consideration transferred for these acquisitions was \$38.1 million, most of which was allocated to property, plant and equipment and goodwill. These transactions align with NW Holdings' water sector strategy as it continues to expand its water services territories in the Pacific Northwest and beyond and included:

- Suncadia Water Company, LLC and Suncadia Environmental Company, LLC which were acquired by NWN Water of Washington on January 31, 2020, and
- T&W Water Service Company which was acquired by NWN Water of Texas on March 2, 2020.

As each of these acquisitions met the criteria of a business combination, an allocation of the consideration to the acquired net assets based on their estimated fair value as of the acquisition date was performed. In accordance with U.S. GAAP, the fair value determination involves management judgment in determining the significant estimates and assumptions used and was made using existing regulatory conditions for net assets associated with Suncadia Water Company, LLC and T&W Water Service Company, with the remaining difference from consideration transferred being recorded as goodwill.

Final goodwill of \$18.2 million was recognized from the acquisitions described above. No intangible assets aside from goodwill were acquired. The goodwill recognized is attributable to the regulated water utility service territories, experienced workforces, and the strategic benefits from both the water and wastewater utilities expected from growth in their service territories. The total amount of goodwill that is expected to be deductible for income tax purposes is approximately \$16.5 million. The acquisition costs associated with each business combination were expensed as incurred.

Other Business Combinations

During the year ended December 31, 2020, NWN Water completed three additional acquisitions, comprised of four water systems and one wastewater system, which qualified as business combinations. The aggregate fair value of the preliminary consideration transferred for these acquisitions was approximately \$1.5 million. These business combinations were not significant to NW Holdings' results of operations.

Goodwill

NW Holdings allocates goodwill to reporting units based on the expected benefit from the business combination. We perform an annual impairment assessment of goodwill at the reporting unit level, or more frequently if events and circumstances indicate that goodwill might be impaired. An impairment loss is recognized if the carrying value of a reporting unit's goodwill exceeds its fair value.

As a result of all acquisitions completed, total goodwill was \$70.6 million as of December 31, 2021 and \$69.2 million as of December 31, 2020. The increase in the goodwill balance was primarily due to additions associated with our acquisitions in the water sector. All of our goodwill is related to water and wastewater acquisitions and is included in the other category for segment reporting purposes. The annual impairment assessment of goodwill occurs in the fourth quarter of each year. There have been no impairments recognized to date.

15. DERIVATIVE INSTRUMENTS

NW Natural enters into financial derivative contracts to hedge a portion of the NGD segment's natural gas sales requirements. These contracts include swaps, options, and combinations of option contracts. These derivative financial instruments are primarily used to manage commodity price variability. A small portion of NW Natural's derivative hedging strategy involves foreign currency forward contracts.

NW Natural enters into these financial derivatives, up to prescribed limits, primarily to hedge price variability related to term physical gas supply contracts as well as to hedge spot purchases of natural gas. The foreign currency forward contracts are used to hedge the fluctuation in foreign currency exchange rates for pipeline demand charges paid in Canadian dollars.

In the normal course of business, NW Natural also enters into indexed-price physical forward natural gas commodity purchase contracts and options to meet the requirements of NGD customers. These contracts qualify for regulatory deferral accounting treatment.

NW Natural also enters into exchange contracts related to the third-party asset management of its gas portfolio, some of which are derivatives that do not qualify for hedge accounting or only partial regulatory deferral, but are subject to NW Natural's regulatory sharing agreement. These derivatives are recognized in operating revenues, net of amounts shared with NGD customers.

Notional Amounts

The following table presents the absolute notional amounts related to open positions on NW Natural derivative instruments:

		:1,		
In thousands		2021		2020
Natural gas (in therms):				
Financial		618,815		784,400
Physical		431,628		457,593
Foreign exchange	\$	6,268	\$	5,896

Purchased Gas Adjustment (PGA)

Derivatives entered into by NW Natural for the procurement or hedging of natural gas for future gas years generally receive regulatory deferral accounting treatment. In general, commodity hedging for the current gas year is completed prior to the start of the gas year, and hedge prices are reflected in the weighted-average cost of gas in the PGA filing. Rates and hedging approaches may vary between states due to different rate structures and mechanisms. In addition, as required with the Washington PGA filing, NW Natural incorporated and began implementing risk-responsive hedging strategies for its Washington gas supplies. Hedge contracts entered into after the start of the PGA period are subject to the PGA incentive sharing mechanism in Oregon. NW Natural entered the 2021-22 and 2020-21 gas years with forecasted sales volumes hedged at 60% and 53% in financial swap and option contracts, and 19% and 17% in physical gas supplies, respectively. Hedge contracts entered into prior to the PGA filing, in September 2021, were included in the PGA for the 2021-22 gas year. Hedge contracts entered into after the PGA filing, and related to subsequent gas years, may be included in future PGA filings and qualify for regulatory deferral.

Unrealized and Realized Gain/Loss

The following table reflects the income statement presentation for the unrealized gains and losses from NW Natural's derivative instruments, which also represents all derivative instruments at NW Holdings:

	Decembe	er 31,	, 2021	 Decembe	r 31, 2	:020
In thousands	Natural gas commodity Foreign exchange			Natural gas commodity	For	eign exchange
Benefit (expense) to cost of gas	\$ 36,539	\$	(26)	\$ 7,342	\$	312
Operating revenues (expense)	(26)			(1,212)		_
Amounts deferred to regulatory accounts on balance sheet	(36,517)		26	(6,306)		(312)
Total gain (loss) in pre-tax earnings	\$ (4)	\$		\$ (176)	\$	_

Unrealized Gain/Loss

Outstanding derivative instruments related to regulated NGD operations are deferred in accordance with regulatory accounting standards. The cost of foreign currency forward and natural gas derivative contracts are recognized immediately in the cost of gas; however, costs above or below the amount embedded in the current year PGA are subject to a regulatory deferral tariff and therefore, are recorded as a regulatory asset or liability.

Realized Gain/Loss

NW Natural realized net gains of \$50.9 million and \$2.3 million for the years ended December 31, 2021 and 2020, respectively, from the settlement of natural gas financial derivative contracts. Realized gains and losses offset the higher or lower cost of gas purchased, resulting in no incremental amounts to collect or refund to customers.

Credit Risk Management of Financial Derivatives Instruments

No collateral was posted with or by NW Natural counterparties as of December 31, 2021 or 2020. NW Natural attempts to minimize the potential exposure to collateral calls by diversifying counterparties and using credit limits to manage liquidity risk. Counterparties generally allow a certain credit limit threshold before requiring NW Natural to post collateral against unrealized loss positions. Given NW Natural's credit ratings, counterparty credit limits and portfolio diversification, it was not subject to collateral calls in 2021 or 2020. The collateral call exposure is set forth under credit support agreements, which generally contain credit limits. NW Natural could also be subject to collateral call exposure where it has agreed to provide adequate assurance, which is not specific as to the amount of credit limit allowed, but could potentially require additional collateral in the event of a material adverse change.

NW Natural's financial derivative instruments are subject to master netting arrangements; however, they are presented on a gross basis in the consolidated balance sheets. NW Natural and its counterparties have the ability to set-off obligations to each other under specified circumstances. Such circumstances may include a defaulting party, a credit change due to a merger affecting either party, or any other termination event.

If netted by counterparty, NW Natural's physical and financial derivative position would result in an asset of \$51.8 million and a liability of \$3.8 million as of December 31, 2021, and an asset of \$14.1 million and a liability of \$1.3 million as of December 31, 2020.

NW Natural is exposed to derivative credit and liquidity risk primarily through securing fixed price natural gas commodity swaps with financial counterparties. NW Natural utilizes master netting arrangements through International Swaps and Derivatives Association contracts to minimize this risk along with collateral support agreements with counterparties based on their credit ratings. In certain cases, NW Natural may require guarantees or letters of credit from counterparties to meet its minimum credit requirement standards.

NW Natural's financial derivatives policy requires counterparties to have an investment-grade credit rating at the time the derivative instrument is entered into, and specifies limits on the contract amount and duration based on each counterparty's credit rating. NW Natural does not speculate in derivatives. Derivatives are used to reduce NW Natural's net market risk and hedge exposure above risk tolerance limits. It is required that increases in market risk created by the use of derivatives is offset by the exposures they modify.

We actively monitor NW Natural's derivative credit exposure and place counterparties on hold for trading purposes or require other forms of credit assurance, such as letters of credit, cash collateral, or guarantees as circumstances warrant. The ongoing assessment of counterparty credit risk includes consideration of credit ratings, credit default swap spreads, bond market credit spreads, financial condition, government actions, and market news. A Monte Carlo simulation model is used to estimate the change in credit and liquidity risk from the volatility of natural gas prices. The results of the model are used to establish trading limits. NW Natural's outstanding financial derivatives at December 31, 2021 mature by October 31, 2024.

We could become materially exposed to credit risk with one or more of our counterparties if natural gas prices experience a significant increase. If a counterparty were to become insolvent or fail to perform on its obligations, we could suffer a material loss; however, we would expect such a loss to be eligible for regulatory deferral and rate recovery, subject to a prudence review. All of our existing counterparties currently have investment-grade credit ratings.

Fair Value

In accordance with fair value accounting, NW natural includes non-performance risk in calculating fair value adjustments. This includes a credit risk adjustment based on the credit spreads of NW Natural counterparties when in an unrealized gain position, or on NW Natural's own credit spread when it is in an unrealized loss position. The inputs in our valuation models include natural gas futures, volatility, credit default swap spreads, and interest rates. Additionally, the assessment of non-performance risk is generally derived from the credit default swap market and from bond market credit spreads. The impact of the credit risk adjustments for all outstanding derivatives was immaterial to the fair value calculation at December 31, 2021. As of December 31, 2021 and 2020, the net fair value was an asset of \$48.0 million and \$12.8 million, respectively, using significant other observable, or Level 2, inputs. No Level 3 inputs were used in our derivative valuations during the years ended December 31, 2021 and 2020.

16. COMMITMENTS AND CONTINGENCIES

Gas Purchase and Pipeline Capacity Purchase and Release Commitments

NW Natural has signed agreements providing for the reservation of firm pipeline capacity under which it is required to make fixed monthly payments for contracted capacity. The pricing component of the monthly payment is established, subject to change, by U.S. or Canadian regulatory bodies, or is established directly with private counterparties, as applicable. In addition, NW Natural has entered into long-term agreements to release firm pipeline capacity. NW Natural also enters into short-term and long-term gas purchase agreements.

In November 2021, NW Natural and a subsidiary of Archaea Energy entered into a long-term RNG purchase and sale agreement. Under the agreement, NW Natural committed to purchase the environmental attributes generated by Archaea related to up to ten million therms of RNG annually from its portfolio of RNG production facilities for a fixed fee for a period of 21 years. The agreement will commence in 2022, with the full annual quantity beginning in 2025.

The aggregate amounts of these agreements at NW Natural were as follows at December 31, 2021:

In thousands	Gas Purchase Agreements ⁽¹⁾	Pipeline Capacity Purchase Agreements	Pipeline Capacity Release Agreements
2022	\$ 168,296	\$ 85,335	\$ 7,596
2023	6,376	87,449	4,036
2024	6,426	80,923	4,036
2025	12,076	78,449	3,363
2026	12,133	63,608	_
Thereafter	203,500	507,666	_
Total	408,807	903,430	19,031
Less: Amount representing interest	44,571	119,202	382
Total at present value	\$ 364,236	\$ 784,228	\$ 18,649

⁽¹⁾ Gas purchase agreements include environmental attributes of RNG

Total fixed charges under capacity purchase agreements were \$82.9 million for 2021, \$81.8 million for 2020, and \$82.2 million for 2019, of which \$7.7 million, \$4.8 million, and \$4.3 million, respectively, related to capacity releases. In addition, per-unit charges are required to be paid based on the actual quantities shipped under the agreements. In certain take-or-pay purchase commitments, annual deficiencies may be offset by prepayments subject to recovery over a longer term if future purchases exceed the minimum annual requirements.

<u>Leases</u>

Refer to Note 7 for a discussion of lease commitments and contingencies.

Environmental Matters

Refer to Note 17 for a discussion of environmental commitments and contingencies.

17. ENVIRONMENTAL MATTERS

NW Natural owns, or previously owned, properties that may require environmental remediation or action. The range of loss for environmental liabilities is estimated based on current remediation technology, enacted laws and regulations, industry experience gained at similar sites, and an assessment of the probable level of involvement and financial condition of other potentially responsible parties (PRPs). When amounts are prudently expended related to site remediation of those sites described herein, NW Natural has recovery mechanisms in place to collect 96.7% of remediation costs allocable to Oregon customers and 3.3% of costs allocable to Washington customers.

These sites are subject to the remediation process prescribed by the Environmental Protection Agency (EPA) and the Oregon Department of Environmental Quality (ODEQ). The process begins with a remedial investigation (RI) to determine the nature and extent of contamination and then a risk assessment (RA) to establish whether the contamination at the site poses unacceptable risks to humans and the environment. Next, a feasibility study (FS) or an engineering evaluation/cost analysis (EE/CA) evaluates various remedial alternatives. It is at this point in the process when NW Natural is able to estimate a range of remediation costs and record a reasonable potential remediation liability, or make an adjustment to the existing liability. From this study, the regulatory agency selects a remedy and issues a Record of Decision (ROD). After a ROD is issued, NW Natural would seek to negotiate a consent decree or consent judgment for designing and implementing the remedy. NW Natural would have the ability to further refine estimates of remediation liabilities at that time.

Remediation may include treatment of contaminated media such as sediment, soil and groundwater, removal and disposal of media, institutional controls such as legal restrictions on future property use, or natural recovery. Following construction of the remedy, the EPA and ODEQ also have requirements for ongoing maintenance, monitoring and other post-remediation care that may continue for many years. Where appropriate and reasonably known, NW Natural will provide for these costs in the remediation liabilities described below.

Due to the numerous uncertainties surrounding the course of environmental remediation and the preliminary nature of several site investigations, in some cases, NW Natural may not be able to reasonably estimate the high end of the range of possible loss. In those cases, the nature of the possible loss has been disclosed, as has the fact that the high end of the range cannot be reasonably estimated where a range of potential loss is available. Unless there is an estimate within the range of possible losses that is more likely than other cost estimates within that range, NW Natural records the liability at the low end of this range. It is likely changes in these estimates and ranges will occur throughout the remediation process for each of these sites due to the continued evaluation and clarification concerning responsibility, the complexity of environmental laws and regulations and the determination by regulators of remediation alternatives. In addition to remediation costs, NW Natural could also be subject to

Natural Resource Damages (NRD) claims. NW Natural will assess the likelihood and probability of each claim and recognize a liability if deemed appropriate. Refer to "Other Portland Harbor" below.

Environmental Sites

The following table summarizes information regarding liabilities related to environmental sites, which are recorded in other current liabilities and other noncurrent liabilities in NW Natural's balance sheet at December 31:

	.iabilitie	s		bilities				
In thousands		2021		2020		2021		2020
Portland Harbor site:								-
Gasco/Siltronic Sediments	\$	7,582	\$	7,596	\$	42,076	\$	43,725
Other Portland Harbor		2,592		1,942		9,570		7,020
Gasco/Siltronic Upland site		15,711		14,887		36,215		40,250
Front Street site		1,100		3,816		811		1,107
Oregon Steel Mills		_		_		179		179
Total	\$	26,985	\$	28,241	\$	88,851	\$	92,281

Portland Harbor Site

The Portland Harbor is an EPA listed Superfund site that is approximately 10 miles long on the Willamette River and is adjacent to NW Natural's Gasco uplands site. NW Natural is one of over one hundred PRPs, each jointly and severally liable, at the Superfund site. In January 2017, the EPA issued its Record of Decision, which selects the remedy for the clean-up of the Portland Harbor site (Portland Harbor ROD). The Portland Harbor ROD estimates the present value total cost at approximately \$1.05 billion with an accuracy between -30% and +50% of actual costs.

NW Natural's potential liability is a portion of the costs of the remedy for the entire Portland Harbor Superfund site. The cost of that remedy is expected to be allocated among more than one hundred PRPs. NW Natural is participating in a non-binding allocation process with other PRPs in an effort to resolve its potential liability. The Portland Harbor ROD does not provide any additional clarification around allocation of costs among PRPs; accordingly, NW Natural has not modified any of the recorded liabilities at this time as a result of the issuance of the Portland Harbor ROD.

NW Natural manages its liability related to the Superfund site as two distinct remediation projects, the Gasco Sediments Site and Other Portland Harbor projects.

GASCO SEDIMENTS. In 2009, NW Natural and Siltronic Corporation entered into a separate Administrative Order on Consent with the EPA to evaluate and design specific remedies for sediments adjacent to the Gasco uplands and Siltronic uplands sites. NW Natural submitted a draft EE/CA to the EPA in May 2012 to provide the estimated cost of potential remedial alternatives for this site. In March 2020, NW Natural and the EPA amended the Administrative Order on Consent to include additional remedial design activities downstream of the Gasco sediments site and in the navigation channel. Siltronic Corporation is not a party to the amended order. In the second quarter of 2021, NW Natural began preliminary design discussions with the EPA for the Gasco sediments site. These preliminary design discussions did not include a cost estimate for cleanup. None of the alternatives in the EE/CA are more likely than others at this time, and NW Natural expects further design discussion and iteration with the EPA.

The estimated costs for the various sediment remedy alternatives in the draft EE/CA for the additional studies and design work needed before the cleanup can occur, and for regulatory oversight throughout the cleanup range from \$49.7 million to \$350 million. NW Natural has recorded a liability of \$49.7 million for the Gasco sediment clean-up, which reflects the low end of the range. At this time, we believe sediments at the Gasco sediments site represent the largest portion of NW Natural's liability related to the Portland Harbor site discussed above.

OTHER PORTLAND HARBOR. While we believe liabilities associated with the Gasco sediments site represent NW Natural's largest exposure, there are other potential exposures associated with the Portland Harbor ROD, including NRD costs and harborwide remedial design and cleanup costs (including downstream petroleum contamination), for which allocations among the PRPs have not yet been determined.

NW Natural and other parties have signed a cooperative agreement with the Portland Harbor Natural Resource Trustee council to participate in a phased NRD assessment to estimate liabilities to support an early restoration-based settlement of NRD claims. One member of this Trustee council, the Yakama Nation, withdrew from the council in 2009, and in 2017, filed suit against NW Natural and 29 other parties seeking remedial costs and NRD assessment costs associated with the Portland Harbor site, set forth in the complaint. The complaint seeks recovery of alleged costs totaling \$0.3 million in connection with the selection of a remedial action for the Portland Harbor site as well as declaratory judgment for unspecified future remedial action costs and for costs to assess the injury, loss or destruction of natural resources resulting from the release of hazardous substances at and from the Portland Harbor site. The Yakama Nation has filed two amended complaints addressing certain pleading defects and dismissing the State of Oregon. On the motion of NW Natural and certain other defendants the federal court has stayed the case

pending the outcome of the non-binding allocation proceeding discussed above. NW Natural has recorded a liability for NRD claims which is at the low end of the range of the potential liability; the high end of the range cannot be reasonably estimated at this time. The NRD liability is not included in the aforementioned range of costs provided in the Portland Harbor ROD.

Gasco Uplands Site

A predecessor of NW Natural, Portland Gas and Coke Company, owned a former gas manufacturing plant that was closed in 1958 (Gasco site) and is adjacent to the Portland Harbor site described above. The Gasco site has been under investigation by NW Natural for environmental contamination under the ODEQ Voluntary Cleanup Program (VCP). It is not included in the range of remedial costs for the Portland Harbor site noted above. The Gasco site is managed in two parts, the uplands portion and the groundwater source control action.

NW Natural submitted a revised Remedial Investigation Report for the uplands to ODEQ in May 2007. In March 2015, ODEQ approved the Risk Assessment (RA) for this site, enabling commencement of work on the FS in 2016. NW Natural has recognized a liability for the remediation of the uplands portion of the site which is at the low end of the range of potential liability; the high end of the range cannot be reasonably estimated at this time.

In October 2016, ODEQ and NW Natural agreed to amend their VCP agreement for the Gasco uplands to incorporate a portion of the Siltronic property formerly owned by Portland Gas & Coke between 1939 and 1960 into the Gasco RA and FS. Previously, NW Natural was conducting an investigation of manufactured gas plant constituents on the entire Siltronic uplands for ODEQ. Siltronic will be working with ODEQ directly on environmental impacts to the remainder of its property.

In September 2013, NW Natural completed construction of a groundwater source control system, including a water treatment station, at the Gasco site. NW Natural has estimated the cost associated with the ongoing operation of the system and has recognized a liability which is at the low end of the range of potential cost. NW Natural cannot estimate the high end of the range at this time due to the uncertainty associated with the duration of running the water treatment station, which is highly dependent on the remedy determined for both the upland portion as well as the final remedy for the Gasco sediments site.

Other Sites

In addition to those sites above, NW Natural has environmental exposures at three other sites: Central Service Center, Front Street and Oregon Steel Mills. NW Natural may have exposure at other sites that have not been identified at this time. Due to the uncertainty of the design of remediation, regulation, timing of the remediation and in the case of the Oregon Steel Mills site, pending litigation, liabilities for each of these sites have been recognized at their respective low end of the range of potential liability; the high end of the range could not be reasonably estimated at this time.

FRONT STREET SITE. The Front Street site was the former location of a gas manufacturing plant NW Natural operated (the former Portland Gas Manufacturing site, or PGM). At ODEQ's request, NW Natural conducted a sediment and source control investigation and provided findings to ODEQ. In December 2015, an FS on the former Portland Gas Manufacturing site was completed.

In July 2017, ODEQ issued the PGM ROD. The ROD specifies the selected remedy, which requires a combination of dredging, capping, treatment, and natural recovery. In addition, the selected remedy also requires institutional controls and long-term inspection and maintenance. Construction of the remedy began in July 2020 and was completed in October 2020. The first year of post-construction monitoring was completed in 2021 and demonstrated that the cap was intact and performing as designed. NW Natural has recognized an additional liability of \$1.9 million for munitions and design costs, regulatory and permitting issues, and post-construction work.

OREGON STEEL MILLS SITE. Refer to "Legal Proceedings," below.

Environmental Cost Deferral and Recovery

NW Natural has authorizations in Oregon and Washington to defer costs related to remediation of properties that are owned or were previously owned by NW Natural. In Oregon, a Site Remediation and Recovery Mechanism (SRRM) is currently in place to recover prudently incurred costs allocable to Oregon customers, subject to an earnings test. On October 21, 2019 the WUTC authorized an Environmental Cost Recovery Mechanism (ECRM) for recovery of prudently incurred costs allocable to Washington customers beginning November 1, 2019.

The following table presents information regarding the total regulatory asset deferred as of December 31:

In thousands	2021	2020
Deferred costs and interest ⁽¹⁾	\$ 45,122	\$ 44,516
Accrued site liabilities ⁽²⁾	115,773	120,352
Insurance proceeds and interest	(59,564)	(69,253)
Total regulatory asset deferral ⁽¹⁾	\$ 101,331	\$ 95,615
Current regulatory assets ⁽³⁾	\$ 6,694	\$ 4,992
Long-term regulatory assets ⁽³⁾	\$ 94,636	\$ 90,623

- (1) Includes pre-review and post-review deferred costs, amounts currently in amortization, and interest, net of amounts collected from customers.
- (2) Excludes 3.3% of the Front Street site liability as the OPUC only allows recovery of 96.7% of costs for those sites allocable to Oregon, including those that historically served only Oregon customers. Amounts excluded from regulatory assets were or \$0.1 million in 2021 and \$0.2 million in 2020.
- (3) Environmental costs relate to specific sites approved for regulatory deferral by the OPUC and WUTC. In Oregon, NW Natural earns a carrying charge on cash amounts paid, whereas amounts accrued but not yet paid do not earn a carrying charge until expended. It also accrues a carrying charge on insurance proceeds for amounts owed to customers. In Washington, neither the cash paid nor insurance proceeds received accrue a carrying charge. Current environmental costs represent remediation costs management expects to collect from customers in the next 12 months. Amounts included in this estimate are still subject to a prudence and earnings test review by the OPUC and do not include the \$5.0 million tariff rider. The amounts allocable to Oregon are recoverable through NGD rates, subject to an earnings test. See "Oregon SRRM" below.

Oregon SRRM

Collections From Oregon Customers

Under the SRRM collection process, there are three types of deferred environmental remediation expense:

- Pre-review This class of costs represents remediation spend that has not yet been deemed prudent by the OPUC. Carrying costs on these remediation
 expenses are recorded at NW Natural's authorized cost of capital. NW Natural anticipates the prudence review for annual costs and approval of the
 earnings test prescribed by the OPUC to occur by the third quarter of the following year.
- Post-review This class of costs represents remediation spend that has been deemed prudent and allowed after applying the earnings test, but is not yet included in amortization. NW Natural earns a carrying cost on these amounts at a rate equal to the five-year treasury rate plus 100 basis points.
- Amortization This class of costs represents amounts included in current customer rates for collection and is generally calculated as one-fifth of the post-review deferred balance. NW Natural earns a carrying cost equal to the amortization rate determined annually by the OPUC, which approximates a short-term borrowing rate.

In addition to the collection amount noted above, an order issued by the OPUC provides for the annual collection of \$5.0 million from Oregon customers through a tariff rider. As NW Natural collects amounts from customers, it recognizes these collections as revenue and separately amortizes an equal and offsetting amount of its deferred regulatory asset balance through the environmental remediation operating expense line shown separately in the operating expense section of the income statement.

NW Natural received total environmental insurance proceeds of approximately \$150 million as a result of settlements from litigation that was dismissed in July 2014. Under a 2015 OPUC order which established the SRRM, one-third of the Oregon allocated proceeds were applied to costs deferred through 2012 with the remaining two-thirds applied to costs at a rate of \$5.0 million per year plus interest over the following 20 years. NW Natural accrues interest on the Oregon allocated insurance proceeds in the customer's favor at a rate equal to the five-year treasury rate plus 100 basis points. As of December 31, 2021, NW Natural has applied \$90.0 million of insurance proceeds to prudently incurred remediation costs allocated to Oregon.

Environmental Earnings Test

To the extent NW Natural earns at or below its authorized Return on Equity (ROE) as defined by the SRRM, remediation expenses and interest in excess of the \$5.0 million tariff rider and \$5.0 million insurance proceeds are recoverable through the SRRM. To the extent NW Natural earns more than its authorized ROE in a year, it is required to cover environmental expenses and interest on expenses greater than the \$10.0 million with those earnings that exceed its authorized ROE.

Washington ECRM

Washington Deferral

On October 21, 2019, the WUTC issued an order (WUTC Order) establishing the ECRM which allows for recovery of past deferred and future prudently incurred environmental remediation costs allocable to Washington customers through application of insurance proceeds and collections from customers. Environmental remediation expenses relating to sites that previously served both Oregon and Washington customers are allocated between states with Washington customers receiving 3.3% percent of the costs and insurance proceeds.

In accordance with the WUTC Order, insurance proceeds were fully applied to costs incurred between December 2018 and June 2019 that were deemed prudent. Remaining insurance proceeds will be amortized over a 10.5 year period ending December 31, 2029. As of December 31, 2021, approximately \$3.6 million of proceeds have been applied to prudently incurred costs.

On an annual basis, NW Natural files for a prudence determination and a request to amortize costs to the extent that remediation expenses exceed the insurance amortization. After insurance proceeds are fully amortized, if in a particular year the request to collect deferred amounts exceeds one percent of Washington normalized revenues, then the excess will be collected over three years with interest.

Legal Proceedings

NW Holdings is not currently party to any direct claims or litigation, though in the future it may be subject to claims and litigation arising in the ordinary course of business.

NW Natural is subject to claims and litigation arising in the ordinary course of business, including the matters discussed above. Although the final outcome of any of these legal proceedings cannot be predicted with certainty, including the matter described below, NW Natural and NW Holdings do not expect that the ultimate disposition of any of these matters will have a material effect on financial condition, results of operations, or cash flows.

Oregon Steel Mills Site

In 2004, NW Natural was served with a third-party complaint by the Port of Portland (the Port) in a Multnomah County Circuit Court case, Oregon Steel Mills, Inc. v. The Port of Portland. The Port alleges that in the 1940s and 1950s petroleum wastes generated by NW Natural's predecessor, Portland Gas & Coke Company, and 10 other third-party defendants, were disposed of in a waste oil disposal facility operated by the United States or Shaver Transportation Company on property then owned by the Port and now owned by Evraz Oregon Steel Mills. The complaint seeks contribution for unspecified past remedial action costs incurred by the Port regarding the former waste oil disposal facility as well as a declaratory judgment allocating liability for future remedial action costs. No date has been set for trial. In August 2017, the case was stayed pending the outcome of the Portland Harbor allocation process or other mediation. Although the final outcome of this proceeding cannot be predicted with certainty, NW Natural and NW Holdings do not expect the ultimate disposition of this matter will have a material effect on NW Natural's or NW Holdings' financial condition, results of operations, or cash flows.

For additional information regarding other commitments and contingencies, see Note 16.

18. DISCONTINUED OPERATIONS

NW Holdings

On June 20, 2018, NWN Gas Storage, then a wholly-owned subsidiary of NW Natural, entered into a Purchase and Sale Agreement (the Agreement) that provided for the sale by NWN Gas Storage of all of the membership interests in Gill Ranch. Gill Ranch owns a 75% interest in the natural gas storage facility located near Fresno, California known as the Gill Ranch Gas Storage Facility.

On December 4, 2020, NWN Gas Storage closed the sale of all of the membership interests in Gill Ranch and received payment of the initial cash purchase price of \$13.5 million less the \$1.0 million deposit previously paid. Furthermore, additional payments to NWN Gas Storage may be made subject to a maximum amount of \$15.0 million in the aggregate (subject to a working capital adjustment) based on the economic performance of Gill Ranch for each full gas storage year (April 1 of one year through March 31 of the following year) occurring after the closing and the remaining portion of the 2020-2021 gas storage year and will continue until such time as the maximum amount has been paid. The fair value of this arrangement at the closing date was zero based on a discounted cash flow forecast. Subsequent changes in the fair value will be recorded in earnings. The completion of the sale resulted in an after-tax gain of \$5.9 million for the year ended December 31, 2020.

The following table presents the operating results of Gill Ranch and is presented net of tax on NW Holdings' consolidated statements of comprehensive income:

	NW Holdings Disco	ontinued Operations		
In thousands	2020	2019		
Revenues	\$ 10,193	\$ 5,301		
Expenses				
Operations and maintenance	7,931	8,587		
General taxes	198	219		
Depreciation and amortization	391	423		
Other expenses and interest	848	931		
Total expenses	9,368	10,160		
Income (loss) from discontinued operations	825	(4,859)		
Gain on sale of discontinued operations	8,027	_		
Income (loss) from discontinued operations before income tax	8,852	(4,859)		
Income tax expense (benefit) ⁽¹⁾	2,344	(1,283)		
Income (loss) from discontinued operations, net of tax	\$ 6,508	\$ (3,576)		

⁽¹⁾ Includes income tax expense of \$2.1 million related to the sale of Gill Ranch for the year ended December 31, 2020.

As a result of the disposition of the membership interests of Gill Ranch, there were no assets or liabilities classified as held for sale at December 31, 2020.

SCHEDULE I - CONDENSED FINANCIAL INFORMATION OF NORTHWEST NATURAL HOLDING COMPANY

NORTHWEST NATURAL HOLDING COMPANY

CONDENSED STATEMENTS OF COMPREHENSIVE INCOME (PARENT COMPANY ONLY)

	Year Ended December 31,							
In thousands		2021	2020	2019				
Operating expenses:								
Operations and maintenance	\$	4,837	\$ 771	\$ 2,747				
Total operating expenses		4,837	771	2,747				
Loss from operations		(4,837)	(771)	(2,747)				
Earnings from investment in subsidiaries, net of tax		83,072	78,450	64,328				
Other income (expense), net		(143)	57	(22)				
Interest expense, net		982	1,557	726				
Income before income taxes	-	77,110	76,179	60,833				
Income tax benefit		(1,556)	(602)	(902)				
Net income		78,666	76,781	61,735				
Other comprehensive income (loss) from subsidiaries, net of tax		1,498	(2,169)	(2,179)				
Comprehensive income	\$	80,164	\$ 74,612	\$ 59,556				

See Notes to Condensed Financial Statements

NORTHWEST NATURAL HOLDING COMPANY

CONDENSED BALANCE SHEETS (PARENT COMPANY ONLY)

	As of	As of December 31,						
In thousands	2021		2020					
Assets:								
Current assets:								
Cash and cash equivalents	·	65 \$	11,267					
Receivables from affiliates	2,1	80	14,738					
Income taxes receivable		_	6,000					
Other current assets	11,3	48	6,223					
Total current assets	13,7	93	38,228					
Non-current assets:	· · · · · · · · · · · · · · · · · · ·							
Investments in subsidiaries	1,080,9	49	936,184					
Other investments		42	17					
Deferred tax assets	3	83	171					
Other non-current assets	6	13	213					
Total non-current assets	1,081,9	87	936,585					
Total assets	\$ 1,095,7	80 \$	974,813					
Liabilities and equity:								
Current liabilities:								
Short-term debt	\$ 144,0	00 \$	73,000					
Accounts payable	2	86	119					
Payables to affiliates	16,1	05	12,912					
Other current liabilities	2	43	49					
Total current liabilities	160,6	34	86,080					
Total equity	935,1	46	888,733					
Total liabilities and equity	\$ 1,095,7		974,813					

See Notes to Condensed Financial Statements

NORTHWEST NATURAL HOLDING COMPANY

CONDENSED STATEMENTS OF CASH FLOWS (PARENT COMPANY ONLY)

	Year Ended December 31,							
In thousands		2021		2020		2019		
Operating activities:								
Net income	\$	78,666	\$	76,781	\$	61,735		
Adjustments to reconcile net income to cash used in operations:								
Equity in earnings of subsidiaries, net of tax		(83,072)		(78,450)		(64,328)		
Cash dividends received from subsidiaries		56,057		55,387		53,439		
Deferred income taxes		(212)		20		(198)		
Other		119		65		66		
Changes in assets and liabilities:								
Receivables from affiliates		12,558		(12,788)		846		
Income and other taxes		1,299		(7,451)		4,325		
Accounts payable		3,342		8,809		(5,177)		
Interest accrued		57		77		(32)		
Other, net		(313)		(364)		(346)		
Cash provided by operating activities	· ·	68,501		42,086		50,330		
Investing activities:								
Contributions to subsidiaries		(142,405)		(47,194)		(157,591)		
Return of capital from subsidiaries		26,000		19,000		35,000		
Cash used in investing activities		(116,405)	_	(28,194)		(122,591)		
Financing activities:								
Proceeds from common stock issued, net		17,501		_		92,956		
Changes in other short-term debt, net		71,000		49,000		24,000		
Cash dividend payments on common stock		(55,919)		(55,420)		(53,339)		
Other		4,320		3,676		4,752		
Cash provided by (used in) financing activities		36,902		(2,744)		68,369		
Increase (decrease) in cash and cash equivalents	·	(11,002)		11,148		(3,892)		
Cash, cash equivalents and restricted cash, beginning of period		11,267		119		4,011		
Cash, cash equivalents and restricted cash, end of period	\$	265	\$	11,267	\$	119		

See Notes to Condensed Financial Statements

NOTES TO CONDENSED FINANCIAL STATEMENTS

1. BASIS OF PRESENTATION

NW Holdings is an energy services holding company that conducts substantially all of its business operations through its subsidiaries, particularly NW Natural. These condensed financial statements and related footnotes have been prepared in accordance with Rule 12-04, Schedule I of Regulation S-X. These financial statements, in which NW Holdings' subsidiaries have been included using the equity method, should be read in conjunction with the consolidated financial statements and notes thereto of NW Holdings included in Item 8 of this Form 10-K.

Equity earnings of subsidiaries including earnings from NW Natural were \$83.1 million, \$78.5 million, and \$64.3 million for the years ended December 31, 2021, 2020, and 2019 respectively.

There were \$82.1 million, \$74.4 million and \$88.4 million of cash dividends paid to NW Holdings from wholly-owned subsidiaries for the years ended December 31, 2021, 2020 and 2019, respectively.

Other Comprehensive Income (Loss) from Subsidiaries Correction

During 2021, NW Holdings identified that activities related to other comprehensive income (loss) from subsidiaries had been excluded from the condensed statements of comprehensive income and condensed balance sheets. NW Holdings corrected the previously presented condensed balance sheet for the year ended December 31, 2020, and in doing so, decreased total equity by \$3.6 million with a corresponding decrease in investment in subsidiaries. In addition, the condensed statements of comprehensive income for the years ended December 31, 2020 and 2019 were corrected to include other comprehensive loss of \$2.2 million and \$2.2 million, respectively. NW Holdings has evaluated the effect of the misstatement, both qualitatively and quantitatively, and concluded that it did not have a material impact on, nor require amendment of, any previously filed condensed financial statements.

Condensed Statements of Cash Flows Correction

During 2020, NW Holdings identified that activities related to dividends received from subsidiaries had been reported as cash flows from financing activities and should have been presented as operating and investing activities. NW Holdings corrected the previously presented cash flows for dividends received from subsidiaries and in doing so, the statements of cash flows for the year ended December 31, 2019 was adjusted to decrease net cash flows used from financing activities by \$88.4 million, with a corresponding increase in net cash flows provided by operating and used in investing activities of \$53.4 million and \$35.0 million, respectively. NW Holdings has evaluated the effect of the misstatement, both qualitatively and quantitatively, and concluded that it did not have a material impact on, nor require amendment of, any previously filed condensed financial statements.

2. DEBT

For information concerning NW Holdings' debt obligations, see Note 9 to the consolidated financial statements included in Item 8 of this report.

NORTHWEST NATURAL HOLDING COMPANY

SCHEDULE II - VALUATION AND QUALIFYING ACCOUNTS AND RESERVES

COLUMN A	COLUM	IN B	COLUMN C			C		COLUMN D		COLUMN E
			Additions					Deductions		
In thousands (year ended December 31)	Balance beginning o			to costs and censes	С	harged to other accounts		Net write-offs		Balance at end of period
2021										
Reserves deducted in balance sheet from assets to which they apply:										
Allowance for uncollectible accounts	\$	3,219	\$	724	\$	(219)	\$	1,706	\$	2,018
2020										
Reserves deducted in balance sheet from assets to which they apply:										
Allowance for uncollectible accounts	\$	673	\$	890	\$	2,333	\$	677	\$	3,219
2019										
Reserves deducted in balance sheet from assets to which they apply:										
Allowance for uncollectible accounts	\$	977	\$	450	\$	_	\$	754	\$	673

NORTHWEST NATURAL GAS COMPANY

SCHEDULE II - VALUATION AND QUALIFYING ACCOUNTS AND RESERVES

COLUMN A COLUMN B COLUMN C		COLUMN D		COLUMN E					
		Additions			Deductions Net write-offs				
Balance at beginning of period		Charged to costs and expenses		Charged to other accounts			- Balance at end period		
\$	3,107	\$	780	\$	(219)	\$	1,706	\$	1,962
\$	672	\$	779	\$	2,333	\$	677	\$	3,107
\$	975	\$	450	\$	_	\$	753	\$	672
	Balabeginnin	Balance at beginning of period \$ 3,107	Balance at beginning of period \$ 3,107 \$ \$ 672 \$	Balance at beginning of period Charged to costs and expenses \$ 3,107 \$ 780 \$ 672 \$ 779	Balance at beginning of period Charged to costs and expenses \$ 3,107 \$ 780 \$ \$ 672 \$ 779 \$	Balance at beginning of period Charged to costs and expenses Charged to other accounts \$ 3,107 \$ 780 \$ (219) \$ 672 \$ 779 \$ 2,333	Balance at beginning of period Charged to costs and expenses Charged to other accounts \$ 3,107 \$ 780 \$ (219) \$ \$ 672 \$ 779 \$ 2,333 \$	Balance at beginning of period Charged to costs and expenses Charged to other accounts Net write-offs \$ 3,107 \$ 780 \$ (219) \$ 1,706 \$ 672 \$ 779 \$ 2,333 \$ 677	Balance at beginning of period Charged to costs and expenses Charged to other accounts Net write-offs \$ 3,107 \$ 780 \$ (219) \$ 1,706 \$ \$ 672 \$ 779 \$ 2,333 \$ 677 \$

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

(a) Evaluation of Disclosure Controls and Procedures

NW Holdings and NW Natural management, under the supervision and with the participation of the Chief Executive Officer and Chief Financial Officer, completed an evaluation of the effectiveness of the design and operation of disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as amended (the Exchange Act)). Based upon this evaluation, the Chief Executive Officer and Chief Financial Officer of each registrant have concluded that, as of the end of the period covered by this report, disclosure controls and procedures were effective to ensure that information required to be disclosed by each such registrant and included in reports filed or submitted under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the Securities and Exchange Commission (SEC) rules and forms and that such information is accumulated and communicated to management of each registrant, including the Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

(b) Changes in Internal Control Over Financial Reporting

NW Holdings and NW Natural management are responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in the Exchange Act Rule 13a-15(f). There have been no changes in internal control over financial reporting that occurred during the quarter ended December 31, 2021 that have materially affected, or are reasonably likely to materially affect, internal control over financial reporting for NW Holdings and NW Natural

The statements contained in Exhibit 31.1, Exhibit 31.2, Exhibit 31.3, and Exhibit 31.4 should be considered in light of, and read together with, the information set forth in this Item 9(a).

ITEM 9B. OTHER INFORMATION

This disclosure is intended to satisfy any obligation to provide disclosures pursuant to Item 5.03 of Form 8-K.

On February 24, 2022, the Board of NW Holdings approved the amendment and restatement of NW Holdings' Amended and Restated Bylaws (Bylaws). The amendments were made to Article II, Section 1 of the Bylaws to provide more flexibility in setting the date of an annual meeting of shareholders.

The Bylaws that were adopted by the Board of NW Holdings on February 24, 2022 are attached to this Annual Report on Form 10-K as Exhibit 3c.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The "Information Concerning Nominees and Continuing Directors" and "Corporate Governance" contained in NW Holdings' definitive Proxy Statement for the 2022 Annual Meeting of Shareholders is hereby incorporated by reference.

		EXECUTIVE OFFICERS
Name	Age at Dec. 31, 2021	Positions held during last five years ⁽¹⁾
David H. Anderson*	60	President and Chief Executive Officer ⁽²⁾ (2016-); Chief Operating Officer and President (2015-2016); Executive Vice President and Chief Operating Officer (2014-2015); Executive Vice President Operations and Regulation (2013-2014); Senior Vice President and Chief Financial Officer (2004-2013).
Frank H. Burkhartsmeyer*	57	Senior Vice President and Chief Financial Officer ⁽²⁾ (2017-); President and Chief Executive Officer of Renewables, Avangrid Renewables (2015-2017); Senior Vice President of Finance, Iberdrola Renewables Holdings, Inc. (2012-2015).
James R. Downing	52	Vice President and Chief Information Officer (2017-); Chief Information Officer, WorleyParsons (America's Division) (2016-2017); Executive Service Delivery Manager for SAP, British Petroleum (2011-2015).
Shawn M. Filippi*	49	Vice President, Chief Compliance Officer and Corporate Secretary ⁽²⁾ (2016-); Vice President and Corporate Secretary (2015-2016); Senior Legal Counsel (2011-2014); Assistant Corporate Secretary (2010-2014).
Kimberly A. Heiting	52	Senior Vice President, Operations and Chief Marketing Officer (2018-); Senior Vice President, Communications and Chief Marketing Officer (2018); Vice President, Communications and Chief Marketing Officer (2015-2018); Chief Marketing and Communications Officer (2013-2014); Chief Corporate Communications Officer (2011-2013).
Jon G. Huddleston	59	Vice President, Engineering and Utility Operations (2018-); Senior Director, Utility Operations (2014-2018); Director, Utility Operations (2013-2014); Process Director (2007-2013).
Justin B. Palfreyman	43	President, NW Natural RNG Holding Company, LLC (2021-); Vice President, Strategy and Business Development (2017-); President, NW Natural Water (2018-); Vice President, Business Development (2016-2017); Director, Power, Energy and Infrastructure Group, Lazard, Freres & Co. (2009-2016).
Melinda B. Rogers	56	Vice President, Chief Human Resources and Diversity Officer (2018-); Senior Director of Human Resources (2018); Senior Manager, Organizational Effectiveness and Talent Acquisition (2015-2017); Senior Associate, Point B (2014-2015); Director, Executive Development Center, Willamette University (2011-2014).
MardiLyn Saathoff*	65	Senior Vice President, Regulation and General Counsel ⁽²⁾ (2016-); Senior Vice President and General Counsel (2015-2016); Vice President, Legal, Risk and Compliance (2013-2014); Deputy General Counsel (2010-2013); Chief Governance Officer and Corporate Secretary (2008-2014).
David A. Weber	62	Vice President, Gas Supply and Utility Support Services (2019-); President and Chief Executive Officer, NW Natural Gas Storage, LLC (2011-); President and Chief Executive Officer, Gill Ranch Storage, LLC (2011-2020).
Kathryn M. Williams	46	Vice President, Public Affairs and Sustainability (2020-); Vice President, Public Affairs (2019-2020); Government and Community Affairs Director (2018-2019); State Affairs Manager, Port of Portland (2015-2018); Business and Rail Relations Manager, Port of Portland (2007-2015).
Brody J. Wilson*	42	Vice President, Chief Accounting Officer, Controller and Treasurer ⁽²⁾ (2017-); Chief Financial Officer (Interim), Treasurer (Interim), Chief Accounting Officer and Controller (2016-2017); Chief Accounting Officer, Controller and Assistant Treasurer (2016); Controller (2013-2016); Acting Controller (2013); Accounting Director (2012-2013).

DIRECTOR (NORTHWEST NATURAL GAS COMPANY ONLY)**							
Name	Positions held during last five years ⁽¹⁾						
Steven E. Wynne**	69	Executive Vice President, Moda, Inc., a privately-held healthcare insurance company (2012-); Director, JELD-WEN Holding Inc. (2012-); Director, Pendleton Woolen Mills, Inc. (2013-); Director, Lone Rock Resources, Inc. (2016-); Director, FLIR Systems, Inc. (1999-2021); Director, Citifyd Inc. (2013-2019); Trustee, Willamette University (1999-); Trustee, Portland Center Stage (2012-2019); Executive Vice President, JELD-WEN, Inc. (2011-2012); President and Chief Executive Officer, SBI International, Ltd. (2004-2007); Partner, Ater Wynne LLP (2001-2002; 2003-2004); President and Chief Executive Officer, Adidas America, Inc. (1995-2000).					
		Mr. Wynne's senior management experience with a variety of companies, board service on a number of public and private companies and longstanding legal practice in the areas of corporate finance, securities and mergers and acquisitions qualify him to provide insight and guidance in the areas of corporate governance, strategic planning, enterprise risk management, finance and					

operations.

Each executive officer serves successive annual terms; present terms end at the 2022 annual meeting. There are no family relationships among our executive officers, directors or any person chosen to become one of our officers or directors. NW Holdings and NW Natural have adopted a Code of Ethics (Code) applicable to all employees, officers, and directors that is available on our website at www.nwnaturalholdings.com. We intend to disclose on our website at www.nwnaturalholdings.com any amendments to the Code or waivers of the Code for executive officers and directors.

^{*} Executive Officer of Northwest Natural Holding Company and Northwest Natural Gas Company.

** Director of Northwest Natural Gas Company only (beginning 2018). All other directors of Northwest Natural Gas Company are also directors of Northwest Natural Holding Company, and information regarding all directors concurrently serving on the Board of Directors of Northwest Natural Gas Company and Northwest Natural Holding Company will be incorporated by reference to our definitive Proxy Statement for the

²⁰²² Annual Meeting of Shareholders.

(1) Unless otherwise specified, all positions held at Northwest Natural Gas Company.

(2) Position held at Northwest Natural Holding Company (beginning March 2018) and Northwest Natural Gas Company. In 2020, Ms. Saathoff's title at Northwest Natural Holding Company changed from Senior Vice President and General Counsel to Senior Vice President, Regulation and General Counsel.

ITEM 11. EXECUTIVE COMPENSATION

The information concerning "Executive Compensation", "Report of the Organization and Executive Compensation Committee", and "Compensation Committee Interlocks and Insider Participation" contained in NW Holdings' definitive Proxy Statement for the 2022 Annual Meeting of Shareholders is hereby incorporated by reference. Information related to Executive Officers as of December 31, 2021 is reflected in Part III, Item 10, above.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

As of February 17, 2022, NW Holdings owned 100% of the outstanding common stock of NW Natural.

The following table sets forth information regarding compensation plans under which equity securities of NW Holdings are authorized for issuance as of December 31, 2021 (see Note 8 to the Consolidated Financial Statements):

	(a) Number of securities to be issued upon exercise of outstanding options,	ex- outs	(b) ighted-average ercise price of tanding options,	(c) Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected
Plan Category	warrants and rights	wari	rants and rights	in column (a))
Equity compensation plans approved by security holders:				
Long Term Incentive Plan (LTIP) (1)(2)	211,062		n/a	345,012
Employee Stock Purchase Plan	37,360	\$	38.83	118,747
Equity compensation plans not approved by security holders:				
Executive Deferred Compensation Plan (EDCP)(3)	877		n/a	n/a
Directors Deferred Compensation Plan (DDCP)(3)	41,552		n/a	n/a
Deferred Compensation Plan for Directors and Executives (DCP)(4)	216,917		n/a	n/a
Total	507,768	_	<u>=</u>	463,759

- Awards may be granted under the LTIP as Performance Share Awards, Restricted Stock Units, or stock options. Shares issued pursuant to Performance Share Awards and Restricted Stock Units under the LTIP do not include an exercise price, but are payable when the award criteria are satisfied. The number of shares shown in column (a) include 87,727 Restricted Stock Units and 123,335 Performance Share Awards, reflecting the number of shares to be issued as performance share awards under outstanding Performance Share Awards if target performance levels are achieved. If the maximum awards were paid pursuant to the Performance Share Awards outstanding at December 31, 2021, the number of shares shown in column (a) would increase by 123,335 shares, reflecting the maximum share award of 200% of target, and the number of shares shown in column (c) would decrease by the same amount of shares. No stock options or other types of award have been issued under the LTIP.
- (2) The number of shares shown in column (c) includes shares that are available for future issuance under the LTIP as Restricted Stock Units or Performance Share Awards at December 31, 2021.
- (3) Prior to January 1, 2005, deferred amounts were credited, at the participant's election, to either a "cash account" or a "stock account." If deferred amounts were credited to stock accounts, such accounts were credited with a number of shares of NW Natural (now NW Holdings) common stock based on the purchase price of the common stock on the next purchase date under our Dividend Reinvestment and Direct Stock Purchase Plan, and such accounts were credited with additional shares based on the deemed reinvestment of dividends. Cash accounts are credited quarterly with interest at a rate equal to Moody's Average Corporate Bond Yield plus two percentage points, subject to a 6% minimum rate. At the election of the participant, deferred balances in the stock accounts are payable after termination of Board service or employment in a lump sum, in installments over a period not to exceed 10 years in the case of the DDCP, or 15 years in the case of the EDCP, or in a combination of lump sum and installments. Amounts credited to stock accounts are payable solely in shares of common stock and cash for fractional shares, and amounts in the above table represent the aggregate number of shares credited to participant's stock accounts. We have contributed common stock to the trustee of the Umbrella Trusts such that the Umbrella Trusts hold approximately the number of shares of common stock equal to the number of shares credited to all participants' stock accounts.
- Effective January 1, 2005, the EDCP and DDCP were closed to new participants and replaced with the DCP. The DCP continues the basic provisions of the EDCP and DDCP under which deferred amounts are credited to either a "cash account" or a "stock account." Stock accounts represent a right to receive shares of NW Holdings common stock on a deferred basis, and such accounts are credited with additional shares based on the deemed reinvestment of dividends. Effective January 1, 2007, cash accounts are credited quarterly with interest at a rate equal to Moody's Average Corporate Bond Yield. Our obligation to pay deferred compensation in accordance with the terms of the DCP will generally become due on a predetermined date during a participant's service if elected by such participant or on retirement, death, or other termination of service, and will be paid in a lump sum or in installments of five, 10, or 15 years as elected by the participant in accordance with the terms of the DCP. Amounts credited to stock accounts are payable solely in shares of common stock and cash for fractional shares, and amounts in the above table represent the aggregate number of shares credited to participants' stock accounts. We have contributed common stock to the trustee of the Supplemental Trust such that this trust holds approximately the number of common shares equal to the number of shares credited to all participants' stock accounts. The right of each participant in the DCP is that of a general, unsecured creditor of NW Natural.

The information captioned "Beneficial Ownership of Common Stock by Directors and Executive Officers" and "Security Ownership of Common Stock of Certain Beneficial Owners" contained in NW Holdings' definitive Proxy Statement for the 2022 Annual Meeting of Shareholders is incorporated herein by reference.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information captioned "Transactions with Related Persons" and "Corporate Governance" in NW Holdings' definitive Proxy Statement for the 2022 Annual Meeting of Shareholders is hereby incorporated by reference.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

NW Holdings

The information captioned "2021 and 2020 Audit Firm Fees" in NW Holdings' definitive Proxy Statement for the 2022 Annual Meeting of Shareholders is hereby incorporated by reference.

NW Natura

The following table shows the fees and expenses of NW Natural, paid or accrued for the integrated audits of the consolidated financial statements and other services provided by NW Natural's independent registered public accounting firm, PricewaterhouseCoopers LLP, for fiscal years 2021 and 2020:

In thousands	2021	2020
Audit Fees	\$ 1,268	\$ 1,273
Audit-Related Fees	172	31
Tax Fees	23	22
All Other Fees	4	3
Total	\$ 1,467	\$ 1,329

AUDIT FEES. This category includes fees and expenses for services rendered for the integrated audit of the consolidated financial statements included in the Annual Report on Form 10-K and the review of the quarterly financial statements included in the Quarterly Reports on Form 10-Q. The integrated audit includes the review of our internal control over financial reporting in compliance with Section 404 of the Sarbanes-Oxley Act of 2002 (Sarbanes-Oxley Act). In addition, amounts include fees for services routinely provided by the auditor in connection with regulatory filings, including issuance of consents and comfort letters relating to the registration of Company securities and assistance with the review of documents filed with the SEC.

AUDIT-RELATED FEES. This category includes fees for assurance and related services that are reasonably related to the performance of the audit or review of our financial statements and internal control over financial reporting, including fees and expenses related to consultations for financial accounting and reporting, fees for EPA assurance letters, and fees for system pre-implementation assessments.

TAX FEES. This category includes fees for tax compliance, and review services rendered for NW Natural's income tax returns.

ALL OTHER FEES. This category relates to services other than those described above. The amount reflects payments for accounting research tools in each of 2021 and 2020.

PRE-APPROVAL POLICY FOR AUDIT AND NON-AUDIT SERVICES. The Audit Committee of NW Natural approved or ratified 100 percent of 2021 and 2020 services for audit, audit-related, tax services and all other fees, including audit services relating to compliance with Section 404 of the Sarbanes-Oxley Act. The chair of the Audit Committee of NW Natural is authorized to pre-approve non-audit services between meetings of the Audit Committee and must report such approvals at the next Audit Committee meeting.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

- (a) The following documents are filed as part of this report:
 - 1. A list of all Financial Statements and Supplemental Schedules is incorporated by reference to Item 8.
 - 2. List of Exhibits filed:

Reference is made to the Exhibit Index commencing on page 140.

ITEM 16. FORM 10-K SUMMARY

None.

139

NORTHWEST NATURAL HOLDING COMPANY NORTHWEST NATURAL GAS COMPANY

Exhibit Index to Annual Report on Form 10-K For the Fiscal Year Ended December 31, 2021

For the Fiscal Year Ended December 31, 2021					
Exhibit N	Number Document				
<u>*3a.</u>	Amended and Restated Articles of Incorporation of Northwest Natural Holding Company (incorporated by reference to Exhibit 3.1 to the Form 8-K dated October 1, 2018, File No. 1-38681).				
<u>*3b.</u>	Amended and Restated Articles of Incorporation of Northwest Natural Gas Company (incorporated by reference to Exhibit 3b to Form 10-K for the year ended December 31, 2020).				
<u>3c.</u>	Amended and Restated Bylaws of Northwest Natural Holding Company.				
<u>3d.</u>	Amended and Restated Bylaws of Northwest Natural Gas Company.				
*4a.	Copy of Mortgage and Deed of Trust of Northwest Natural Gas Company, dated as of July 1, 1946 (Mortgage and Deed of Trust), to Bankers Trust (to whom Deutsche Bank Trust Company Americas is the successor), Trustee (incorporated by reference to Exhibit 7(j) in File No. 2-6494); and copies of Supplemental Indentures Nos. 1 through 14 to the Mortgage and Deed of Trust, dated respectively, as of June 1, 1949, March 1, 1954, April 1, 1956, February 1, 1959, July 1, 1961, January 1, 1964, March 1, 1966, December 1, 1969, April 1, 1971, January 1, 1975, December 1, 1975, July 1, 1981, June 1, 1985 and November 1, 1985 (incorporated by reference to Exhibit 4(d) in File No. 33-1929); Supplemental Indenture No. 15 to the Mortgage and Deed of Trust, dated as of July 1, 1986 (filed as Exhibit 4(c) in File No. 33-24168); Supplemental Indentures Nos. 16, 17 and 18 to the Mortgage and Deed of Trust, dated, respectively, as of November 1, 1988, October 1, 1989 and July 1, 1990 (incorporated by reference to Exhibit 4(c) in File No. 33-40482); Supplemental Indenture No. 19 to the Mortgage and Deed of Trust, dated as of June 1, 1991 (incorporated by reference to Exhibit 4(c) in File No. 33-64014).				
<u>*4b.</u>	Supplemental Indenture No. 20 to the Mortgage and Deed of Trust, dated as of June 1, 1993 (incorporated by reference to Exhibit 4a.(1) to Form 10-K for year ended December 31, 1993, File No. 0-00994).				
<u>*4c.</u>	Supplemental Indenture No. 21 to the Mortgage and Deed of Trust, dated as of October 15, 2012 (incorporated by reference to Exhibit 4.1 to Form 8-K dated October 26, 2012, File No. 1-15973).				
<u>*4d.</u>	Supplemental Indenture No. 22 to the Mortgage and Deed of Trust, dated as of November 1, 2016 (incorporated by reference to Exhibit 4.1 to Form 10-Q for the quarter ended September 30, 2016, File No. 1-15973).				
<u>*4e.</u>	Supplemental Indenture No. 23 to the Mortgage and Deed of Trust, dated as of September 1, 2018 (incorporated by reference to Exhibit 4(a) to Form 8-K dated September 10, 2018, File No. 1-15973).				
*4f.	Copy of Indenture, dated as of June 1, 1991, between Northwest Natural Gas Company and Bankers Trust Company (to whom Deutsche Bank Trust Company Americas is successor), Trustee, relating to Northwest Natural Gas Company's Unsecured Debt Securities (incorporated by reference to Exhibit 4(e) in File No. 33-64014).				
<u>*4g.</u>	Amended and Restated Credit Agreement, dated as of November 3, 2021, among Northwest Natural Holding Company and the lenders party thereto, with JPMorgan Chase Bank, N.A. as administrative agent and Bank of America, N.A., U.S. Bank National Association, and Wells Fargo Bank, National Association, as co-syndication agents (incorporated by reference to Exhibit 4.1 to Form 10-Q for the quarter ended September 30, 2021, File No. 1-38681).				
<u>*4h.</u>	Amended and Restated Credit Agreement, dated as of November 3, 2021, among Northwest Natural Gas Company and the lenders party thereto, with JPMorgan Chase Bank, N.A. as administrative agent and Bank of America, N.A., U.S. Bank National Association, and Wells Fargo Bank, National Association, as co-syndication agents (incorporated by reference to Exhibit 4.2 to Form 10-Q for the quarter ended September 30, 2021, File No. 1-15973).				
<u>*4i.</u>	Credit Agreement, dated as of June 10, 2021, among NW Natural Water Company, LLC, Northwest Natural Holding Company, the lenders party thereto, and Bank of America, N.A., as administrative agent (incorporated by reference to Exhibit 4.2 to the Form 8-K filed June 14, 2021, File No. 1-38681).				

<u>*4j.</u>	Credit Agreement, dated as of June 10, 2021, among Northwest Natural Gas Company, the lenders party thereto, and U.S. Bank National Association, as administrative agent (incorporated by reference to Exhibit 4.1 to the Form 8-K filed June 14, 2021, File No. 1-15973).
<u>*4k.</u>	Description of securities registered under Section 12 of the Exchange Act of 1934 (incorporated by reference to Exhibit 4i to Form 10-K for the
	year ended December 31, 2019, File No. 1-38681).
*40	But the second of the second o
<u>*10</u>	Purchase and Sale Agreement dated June 20, 2018, between NW Natural Gas Storage LLC and SENSA Holdings LLC (incorporated by reference to Exhibit 10 to Form 10-Q for the quarter ended June 30, 2018, File No. 1-15973).
*10.1	Fight Assessment & Developes and Calla Assessment dated Assid 20, 2000 between NAVA Natural Cas Character LLC and CENICA Haldings LLC
<u>*10.1</u>	Fifth Amendment to Purchase and Sale Agreement, dated April 29, 2020, between NW Natural Gas Storage, LLC and SENSA Holdings LLC, amending the Purchase and Sale Agreement, dated June 20, 2018, as amended (incorporated by reference to Exhibit 10.2 to the Form 10-Q for the quarter ended March 31, 2020, File No. 1-38681).
<u>*10.2</u>	Tenth Amendment to Purchase and Sale Agreement, dated December 4, 2020, between NW Natural Gas Storage LLC and SENSA Holdings LLC, amending the Purchase and Sale Agreement, dated June 20, 2018, as amended (incorporated by reference to Exhibit 10.1 to the Form 8-K filed December 7, 2020, File No. 1-38681).
<u>21</u>	Subsidiaries of Northwest Natural Holding Company.
<u>23a.</u>	Consent of PricewaterhouseCoopers LLP - NW Holdings.
<u>23b.</u>	Consent of PricewaterhouseCoopers LLP - NW Natural.
<u>31.1</u>	Certification of Principal Executive Officer of Northwest Natural Gas Company Pursuant to Rule 13a-14(a)/15d-14(a), Section 302 of the Sarbanes-Oxley Act of 2002.
24.0	0-45-45-45-45-45-45-45-45-45-45-45-45-45-
<u>31.2</u>	Certification of Principal Financial Officer of Northwest Natural Gas Company Pursuant to Rule 13a-14(a)/15d-14(a), Section 302 of the Sarbanes-Oxley Act of 2002.
31.3	Certification of Principal Executive Officer of Northwest Natural Holding Company Pursuant to Rule 13a-14(a)/15d-14(a). Section 302 of the
	Sarbanes-Oxley Act of 2002.
<u>31.4</u>	Certification of Principal Financial Officer of Northwest Natural Holding Company Pursuant to Rule 13a-14(a)/15d-14(a), Section 302 of the Sarbanes-Oxley Act of 2002.

<u>**32.1</u>	Certification of Principal Executive Officer and Principal Financial Officer of Northwest Natural Gas Company Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
<u>**32.2</u>	Certification of Principal Executive Officer and Principal Financial Officer of Northwest Natural Holding Company Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101	
101.	The following materials formatted in Inline Extensible Business Reporting Language (Inline XBRL): (i) Consolidated Statements of Income:
	(ii) Consolidated Statements of Cash Flows; and (iv) Related notes.
104.	The cover page from the Company's Annual Report on Form 10-K for the year ended December 31, 2021, formatted in Inline XBRL and contained in Exhibit 101.
Executive Co	ompensation Plans and Arrangements:
<u>*10a.</u>	Executive Supplemental Retirement Income Plan, 2018 Restatement (incorporated herein by reference to Exhibit 10.6 to the Form 8-K dated October 1, 2018, File No. 1-38681).

<u>*10b.</u>	Supplemental Executive Retirement Plan of Northwest Natural Gas Company, 2018 Restatement, as amended July 25, 2019 (incorporated by reference to Exhibit 10.1 to the Form 10-Q for the quarter ended June 30, 2019, File No. 1-15973).
<u>*10c.</u>	Northwest Natural Gas Company Supplemental Trust, effective January 1, 2005, restated as of October 1, 2018 (incorporated by reference to Exhibit 10.9 to the Form 8-K dated October 1, 2018, File No. 1-38681).
<u>*10d.</u>	Northwest Natural Gas Company Umbrella Trust for Directors, effective January 1, 1991, restated as of October 1, 2018 (incorporated by reference to Exhibit 10.11 to the Form 8-K dated October 1, 2018, File No. 1-38681).
<u>*10e.</u>	Northwest Natural Gas Company Umbrella Trust for Executives, effective January 1, 1988, restated as of October 1, 2018 (incorporated by reference to Exhibit 10.10 to the Form 8-K dated October 1, 2018, File No. 1-38681).
<u>*10f.</u>	Restated Stock Option Plan, as amended effective December 14, 2006 (incorporated by reference to Exhibit 10c to Form 10-K for 2006, File No. 1-15973).
<u>*10g.</u>	Form of Restated Stock Option Plan Agreement (incorporated by reference to Exhibit 10h to Form 10-K for 2009, File No. 1-15973).
<u>*10h.</u>	Executive Deferred Compensation Plan, effective as of January 1, 1987, restated as of October 1, 2018 (incorporated by reference to Exhibit 10.4 to the Form 8-K dated October 1, 2018, File No. 1-38681).
<u>*10i.</u>	Directors Deferred Compensation Plan, effective June 1, 1981, restated as of October 1, 2018 (incorporated by reference to Exhibit 10.5 to the Form 8-K dated October 1, 2018, File No. 1-38681).
<u>*10j.</u>	Deferred Compensation Plan for Directors and Executives, effective January 1, 2005, restated as of September 23, 2021 (incorporated by reference to Exhibit 10.1 to the Form 10-Q for the quarter ended September 30, 2021, File No. 1-38681).
<u>*10k.</u>	Form of Indemnity Agreement as entered into between Northwest Natural Gas Company and each director and certain executive officers (incorporated by reference to Exhibit 10l to Form 10-K for 2018, File No. 1-15973).
<u>*10l.</u>	Form of Indemnity Agreement as entered into between Northwest Natural Holding Company and each director and certain executive officers (incorporated by reference to Exhibit 10m to Form 10-K for 2018, File No. 1-38681).
<u>*10m.</u>	Non-Employee Directors Stock Compensation Plan, as amended effective December 15, 2005 (incorporated by reference to Exhibit 10.2 to Form 8-K dated December 16, 2005, File No. 1-15973).
<u>*10n.</u>	Executive Annual Incentive Plan, effective January 1, 2021 (incorporated by reference to Exhibit 10o to Form 10-K for 2020, File No. 1-15973).
<u>10o.</u>	Executive Annual Incentive Plan, effective January 1, 2022.
<u>*10p.</u>	Form of Change in Control Severance Agreement between Northwest Natural Gas Company and each executive officer, as amended and restated as of March 1, 2020 (incorporated by reference to Exhibit 10q to Form 10-K for 2019, File No. 1-15973).
<u>*10q.</u>	Northwest Natural Gas Company Long Term Incentive Plan, as amended and restated effective May 24, 2012 (incorporated by reference to Exhibit 10r to Form 10-K for 2012, File No. 1-15973).
<u>*10r.</u>	Northwest Natural Gas Company Long Term Incentive Plan, as amended and restated effective May 25, 2017 (incorporated by reference to Exhibit 10s to Form 10-K for 2017, File No. 1-15973).
<u>*10s.</u>	Northwest Natural Holding Company Long Term Incentive Plan, as amended and restated as of October 1, 2018 (incorporated by reference to Exhibit 10.1 to the Form 8-K dated October 1, 2018, File No. 1-38681).

<u>*10t.</u>	Form of Performance Share Long Term Incentive Award Agreement under Long Term Incentive Plan (2019-2021) (incorporated by reference to Exhibit 10z to Form 10-K for 2018, File No. 1-38681).
<u>*10u.</u>	Form of Performance Share Long Term Incentive Agreement under Long Term Incentive Plan (2020-2022) (incorporated by reference to Exhibit 10x to Form 10-K for 2019, File No. 1-38681).
<u>*10v.</u>	Form of Performance Share Long Term Incentive Agreement under Long Term Incentive Plan (2021-2023)(incorporated by reference to Exhibit 10w to Form 10-K for 2020, File No. 1-38681).
<u>10w.</u>	Form of Performance Share Long Term Incentive Agreement under Long Term Incentive Plan (2022-2024).
<u>*10x.</u>	Form of Consent dated December 14, 2006 entered into by each executive officer with respect to amendments to the Executive Supplemental Retirement Income Plan, the Supplemental Executive Retirement Plan and certain change in control severance agreements (incorporated by reference to Exhibit 10.1 to Form 8-K dated December 19, 2006, File No. 1-15973).
<u>*10y.</u>	Consent to Amendment of Deferred Compensation Plan for Directors and Executives, dated February 28, 2008 entered into by each executive officer (incorporated by reference to Exhibit 10bb to Form 10-K for 2007, File No. 1-15973).
<u>10z.</u>	Form of Restricted Stock Unit Award Agreement under Long Term Incentive Plan (2022).
<u>*10aa.</u>	Form of Restricted Stock Unit Award Agreement under Long Term Incentive Plan (2021) (incorporated by reference to Exhibit 10z to Form 10-K for 2020, File No. 1-38681).
<u>*10bb.</u>	Form of Restricted Stock Unit Award Agreement under Long Term Incentive Plan (2020) (incorporated by reference to Exhibit 10aa to Form 10-K for 2019, File No. 1-38681).
<u>*10cc.</u>	Form of Restricted Stock Unit Award Agreement under Long Term Incentive Plan (2019) (incorporated by reference to Exhibit 10cc to Form 10-K for 2018, File No. 1-38681).
<u>*10dd.</u>	Form of Restricted Stock Unit Award Agreement under Long Term Incentive Plan (2018) (incorporated by reference to Exhibit 10bb to Form 10-K for 2017, File No. 1-15973).
<u>*10ee.</u>	Severance Agreement between Northwest Natural Gas Company and an executive officer, dated August 1, 2016 (incorporated by reference to Exhibit 10.1 to Form 8-K dated July 29, 2016, File No. 1-15973).
<u>*10ff.</u>	Form of Restricted Stock Unit Award Agreement between Northwest Natural Gas Company and an executive officer dated as of July 27, 2016 (incorporated by reference to Exhibit 10.1 to Form 10-Q for the quarter ended June 30, 2016, File No. 1-15973).
<u>*10gg.</u>	Form of Severance Agreement between Northwest Natural Gas Company and an executive officer, dated May 17, 2017 (incorporated by reference to Exhibit 10.1 to Form 8-K dated April 24, 2017, File No. 1-15973).
<u>*10hh.</u>	Form of Special Restricted Stock Unit Agreement between Northwest Natural Gas Company and an executive officer, dated May 17, 2017 (incorporated by reference to Exhibit 10.2 to Form 8-K dated April 24, 2017, File No. 1-15973).
<u>*10ii.</u>	Form of Special Retention Restricted Stock Unit Agreement between Northwest Natural Gas Company and an executive officer, dated September 30, 2016 (incorporated by reference to Exhibit 10qq to Form 10-K for 2017, File No. 1-15973).
<u>*10jj.</u>	Cash Retention Agreement between Northwest Natural Gas Company and an executive officer, dated as of March 1, 2018 (incorporated by reference to Exhibit 10ss to Form 10-K for 2017, File No. 1-15973).
<u>*10kk.</u>	Annual Incentive Plan for NW Natural Gas Storage, LLC, as amended effective January 1, 2021 (incorporated by reference to Exhibit 10ll to Form 10-K for 2020, File No. 1-38681).

10II. Annual Incentive Plan for NW Natural Gas Storage, LLC, as amended effective January 1, 2022.

Long Term Incentive Plan for NW Natural Gas Storage, LLC, as amended effective January 1, 2016 (incorporated by reference to Exhibit 10pp to Form 10-K for 2016, File No. 1-15973). <u>*10mm.</u>

144

^{*}Incorporated by reference as indicated
**Pursuant to Item 601(b)(32)(ii) of Regulation S-K, this certificate is not being "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, each registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized. The signature for each undersigned company shall be deemed to relate only to matters having reference to such company and its subsidiaries.

NORTHWEST NATURAL HOLDING COMPANY

By: Is/ David H. Anderson
David H. Anderson
President and Chief Executive Officer
Date: February 25, 2022

NORTHWEST NATURAL GAS COMPANY

By: /s/ David H. Anderson
David H. Anderson
President and Chief Executive Officer
Date: February 25, 2022

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the date indicated. The signatures of each of the undersigned shall be deemed to relate only to matters having reference to the below named company and its subsidiaries.

NORTHWEST NATURAL HOLDING COMPANY

Signature	Title	Date
/s/ David H. Anderson David H. Anderson President and Chief Executive Officer	Principal Executive Officer and Director	February 25, 2022
/s/ Frank H. Burkhartsmeyer Frank H. Burkhartsmeyer	Principal Financial Officer	February 25, 2022
Senior Vice President and Chief Financial Officer /s/ Brody J. Wilson Brody J. Wilson	Principal Accounting Officer	February 25, 2022
Vice President, Treasurer, Chief Accounting Officer and Controller /s/ Timothy P. Boyle	Director)
Timothy P. Boyle)
/s/ Monica Enand Monica Enand	Director)))
/s/ Karen Lee Karen Lee	Director))
/s/ Dave McCurdy Dave McCurdy	Director)
/s/ Sandra McDonough Sandra McDonough	Director	February 25, 2022
/s/ Nathan I. Partain Nathan I. Partain	Director)))
/s/ Jane L. Peverett Jane L. Peverett	Director)))
/s/ Kenneth Thrasher Kenneth Thrasher	Director)))
/s/ Malia H. Wasson Malia H. Wasson	Director)
/s/ Charles A. Wilhoite Charles A. Wilhoite	Director)
Chanes A. Villiotte		J
	146	

NORTHWEST NATURAL GAS COMPANY

Signature	Title	Date
/s/ David H. Anderson David H. Anderson President and Chief Executive Officer	Principal Executive Officer and Director	February 25, 2022
/s/ Frank H. Burkhartsmeyer Frank H. Burkhartsmeyer Senior Vice President and Chief Financial Officer	Principal Financial Officer	February 25, 2022
/s/ Brody J. Wilson Brody J. Wilson Vice President, Treasurer, Chief Accounting Officer and Controller	Principal Accounting Officer	February 25, 2022
/s/ Timothy P. Boyle Timothy P. Boyle	Director)
/s/ Monica Enand Monica Enand	Director)))
/s/ Karen Lee Karen Lee	Director))
/s/ Dave McCurdy Dave McCurdy	Director))
/s/ Sandra McDonough Sandra McDonough	Director	February 25, 2022
/s/ Nathan I. Partain Nathan I. Partain	Director)))
/s/ Jane L. Peverett Jane L. Peverett	Director)))
/s/ Kenneth Thrasher Kenneth Thrasher	Director)))
/s/ Malia H. Wasson Malia H. Wasson	Director)))
/s/ Charles A. Wilhoite Charles A. Wilhoite	Director)))
/s/ Steven E. Wynne Steven E. Wynne	Director)

AMENDED AND RESTATED BYLAWS OF NORTHWEST NATURAL HOLDING COMPANY

ARTICLE I.

OFFICES

Section 1. Office. The principal office of the company shall be located in the City of Portland, Oregon. The company also may have offices at such other places both within and without the State of Oregon as the board of directors from time to time may determine.

Section 2. Registered Office. The registered office of the company required by law to be maintained in the state shall be at the same location as the principal office unless otherwise designated by resolution of the board of directors.

ARTICLE II.

MEETINGS OF SHAREHOLDERS

Section 1. Annual Meeting. The annual meeting of shareholders of the company for the election of directors and for the transaction of other business shall be held at the company's office in the City of Portland, Oregon, or such other place in that City or solely or partially by means of remote communication in accordance with Oregon law, as shall be determined by the board of directors, on the fourth Thursday of May in each year, unless such day shall be a legal holiday, in which event such meeting shall be held on the next business day. If such meeting shall not be held on such day in any year, it shall be held either within 60 days prior to such day or within 60 days thereafter on such day as shall be fixed by the board of directors and be specified in the notice of the meeting. Every such meeting shall be held at the hour of two o'clock p.m., or at such other hour as shall be fixed by the board and specified in such notice.

Section 2. Special Meetings. Special meetings of the shareholders of the company may be called by (i) the board of directors or (ii) the secretary of the company, following his or her receipt of one or more written demands to call a special meeting of the shareholders (a "Special Meeting Request Notice"), in accordance with and subject to this Section 2, from shareholders of record as of the record date fixed in accordance with this Section 2 who hold not less than one-tenth of all shares entitled to vote at the meeting (the "Requisite Percentage"). No shareholder may submit a Special Meeting Request Notice demanding that the secretary of the company call a special meeting of shareholders pursuant to this Section 2 unless such shareholder has first submitted a request in writing that the board of directors fix a record date (a "Demand Record Date") for the purpose of determining the shareholders entitled to demand that the secretary of the company call such special meeting, which request for a Demand Record Date shall be delivered to, or mailed and received by, the secretary of the company at the principal executive offices of the company. Within 10 days after receipt of a request to fix a Demand Record Date from any shareholder of record, the board of directors may adopt a resolution fixing a Demand Record Date for the purpose of determining the shareholders entitled to demand that the secretary of the company call a special meeting, which date shall not precede the date upon which the resolution fixing the Demand Record Date is adopted by the board of directors and which date shall not be more than 10 days after the date upon which the resolution fixing the record date is adopted by the board of directors. If no resolution fixing a Demand Record Date has been adopted by the board of directors within the 10 day period after the date on which such a request to fix a Demand Record Date was received, the Demand Record Date in respect thereof shall be deemed to be the 20th day after the date on which such a request was received. After receipt of a Special Meeting Request Notice signed by a shareholder or shareholders collectively holding the Requisite Percentage in compliance with this Section 2, the board of directors shall duly call, and determine the place, date and time of, a special meeting of shareholders for the purpose or purposes and to conduct the business specified in the Special Meeting Request Notice. The board of directors shall provide written notice of such special meeting to the shareholders in accordance with Article II, Section 3 of these bylaws. Each special meeting shall be held for such purposes, at such place in the City of Portland, Oregon or solely or partially by means of remote communication in accordance with Oregon law, and at such time as shall be specified in the notice thereof. The record date for notice and voting for such a special meeting shall be fixed in accordance with Article II, Section 4 of these bylaws. A shareholder may revoke a Special Meeting Request Notice by written revocation delivered to the secretary at any time prior to the related special meeting. If any such revocation(s) are received by the secretary after the secretary's receipt of Special Meeting Request Notices from the Requisite Percentage of shareholders, and as a result of such revocation(s) there no longer are unrevoked Special Meeting Request Notices from the Requisite Percentage of shareholders, then the board of directors shall have the discretion

to determine whether or not to proceed with such special meeting. Shareholders who nominate persons for election to the board of directors at a special meeting must also comply with the requirements set forth in Article II, Section 10 of these bylaws.

Section 3. Notice. Written or printed notice stating the place, day and hour of the meeting, and, in case of a meeting to be held by remote communication, the means of remote communications authorized by the board of directors for participation in such meeting, and, in case of a special meeting, the purpose or purposes for which the meeting is called, shall be delivered not less than 10 nor more than 50 days before the date of the meeting, either personally or by mail, by or at the direction of the board of directors or the persons calling the meeting, to each shareholder of record entitled to vote at such meeting.

Section 4. Fixing Record Date. For the purpose of determining shareholders entitled to notice of or to vote at any meeting of shareholders, or any adjournment thereof, or entitled to receive payment of any dividend, or in order to make a determination of shareholders for any other proper purpose, the board of directors may fix in advance a date as the record date for any such determination of shareholders, such date in any case to be not more than 50 days and, in the case of a meeting of shareholders, not less than 10 days prior to the date on which the particular action requiring such determination of shareholders is to be taken. If no record date is fixed for the determination of shareholders entitled to notice of or to vote at a meeting of shareholders entitled to receive payment of a dividend, the date on which notice of the meeting is mailed or the date on which the resolution of the board declaring such dividend is adopted, as the case may be, shall be the record date for such determination of shareholders. When a determination of shareholders entitled to vote at any meeting of shareholders has been made as provided in this section, such determination shall apply to any adjournment thereof. Notwithstanding anything in this Section 4 to the contrary, a Demand Record Date shall be fixed in accordance with Article II, Section 2 of these bylaws.

Section 5. Record of Shareholders. The officer or agent having charge of the transfer books for shares of the company shall make, no later than two business days after notice of each meeting of shareholders is given, a complete record of the shareholders entitled to vote at such meeting or any adjournment thereof, arranged in alphabetical order with the address of and the number of shares held by each, which record, for a period beginning two business days after notice of such meeting is given and continuing through the meeting, shall be kept on file at the registered office of the company; provided that if the meeting is to be held solely by means of remote communications, such record may instead be kept on file on a reasonably accessible electronic network at the election of the company. Such record shall be subject to inspection by any shareholder at any time during usual business hours. Such record also shall be produced and kept open at the time and place (if any) of the meeting and shall be subject to the inspection of any shareholder during the whole time of the meeting. The original transfer books for shares shall be prima facie evidence as to who are the shareholders entitled to examine such record or transfer books or to vote at any meeting of the shareholders.

Section 6. Quorum. A majority of the shares of the company entitled to vote, represented in person, by means of remote communication at a meeting held partially or completely by remote communication, or by proxy, shall constitute a quorum at all meetings of shareholders. If a quorum is present, in person, by means of remote communication, or by proxy, the affirmative vote of a majority of the shares represented at the meeting and entitled to vote on the subject matter shall be the act of the shareholders, unless the vote of a greater number, or voting by classes, is required by law or the Restated Articles of Incorporation.

If a quorum shall not be represented at any meeting of shareholders, the shareholders represented may adjourn the meeting from time to time without further notice. At such adjourned meeting, at which a quorum shall be present or represented, any business may be transacted which might have been transacted at the meeting as originally noticed. The shareholders represented at a duly organized meeting may continue to transact business until adjournment, notwithstanding the withdrawal of enough shareholders to leave less than a quorum.

Section 7. Voting. Each outstanding share, regardless of class, shall be entitled to one vote on each matter submitted to a vote at a meeting of shareholders, except to the extent that the voting rights of the shares of any class or classes are limited or denied by law or the Restated Articles of Incorporation. At each election of directors holders of shares of common stock have the right to cumulative voting as provided for in the Restated Articles of Incorporation. A shareholder may vote either in person, by means of remote communication at a meeting held partially or completely by remote communication, or by proxy. A shareholder may authorize a person or persons to act for the shareholder as proxy in any manner permitted by law. An authorization of a proxy is effective when received by the secretary of the company or other officer or agent authorized to tabulate votes.

Section 8. Conduct of Meetings. Every meeting of shareholders shall be presided over by the chair of the board, in his or her absence, by the vice-chair of the Board if that position be filled, in his or her absence, by the president, in their absence by a vice president or, if none be present, by a chair appointed by the shareholders present at the

meeting. The minutes of such meeting shall be recorded by the secretary or an assistant secretary but, if neither be present, by a secretary appointed for that purpose by the chair of the meeting. The board of directors may adopt by resolution such rules and regulations for the conduct of meetings of shareholders as it shall deem appropriate. Except to the extent inconsistent with such rules and regulations as adopted by the board of directors, the chair of any meeting of shareholders shall have the exclusive right and authority to prescribe such rules, regulations and procedures and to do all such acts as, in the judgment of such chair, are appropriate for the proper conduct of the meeting. Such rules, regulations or procedures, whether adopted by the board of directors or prescribed by the chair of the meeting, may include, without limitation, the following: (a) the establishment of an agenda or order of business for the meeting; (b) rules and procedures for maintaining order at the meeting and the safety of those present; (c) limitations on attendance at or participation in the meeting to shareholders of record of the company, their duly authorized and constituted proxies or such other persons as the chair of the meeting shall determine; (d) restrictions on entry to the meeting after the time fixed for the commencement thereof; and (e) limitations on the time allotted to questions or comments by participants. Unless and to the extent determined by the board of directors or the chair of the meetings of shareholders shall not be required to be held in accordance with the rules of parliamentary procedure.

Section 9. Proper Business for Meetings. (a) No business, including nominations of persons for election to the board of directors, shall be conducted at any meeting of shareholders that has not been properly brought before the meeting. To be properly brought before a special meeting of shareholders, business must be specified in the notice of meeting (or any supplement thereto) given by or at the direction of the board of directors or the persons calling the meeting. To be properly brought before an annual meeting of shareholders, business must be either (i) specified in the notice of meeting (or any supplement thereto) given by or at the direction of the board of directors, (ii) otherwise brought before the meeting by or at the direction of the board of directors or the chair of the board, or (iii) otherwise properly brought before the meeting by a shareholder. In addition to any other applicable requirements, for business to be properly brought before an annual meeting by a shareholder, the shareholder must have given timely notice thereof in writing to the secretary of the company. To be timely, a shareholder's notice must be delivered to the secretary at the principal executive office of the company not less than 90 days prior to the first anniversary of the previous year's annual meeting of shareholders; provided, however, that in the event that the date of the annual meeting is advanced by more than 30 days or delayed (other than as a result of adjournment) by more than 30 days from the anniversary of the previous year's annual meeting, notice by a shareholder to be timely must be delivered not later than the close of business on the later of the 90th day prior to such annual meeting or the 10th day following the day on which public announcement of the date of such meeting is first made (the "Proposal Notice Deadline"). For purposes of this section, "public announcement" shall mean disclosure in a press release reported by the Dow Jones News Service, Associated Press or comparable national news service or in a document publicly filed by the company with the Securities and Exchange Commission; (b) A shareholder's notice to the secretary (a "Proposal Notice") shall set forth (i) one or more matters appropriate for shareholder action that the shareholder proposes to bring before the meeting, (ii) a brief description of the matters desired to be brought before the meeting and the reasons for conducting such business at the meeting, (iii) the name and record address of the shareholder, (iv) the class and number of shares of the company that the shareholder owns or is entitled to vote and (v) any material interest of the shareholder in such matters; and (c) The chair of the meeting shall have the power and duty (i) to determine whether any proposed business was properly brought before the meeting in accordance with the procedures set forth in this Section 9, and (ii) if the chair determines that any proposed business was not brought before the meeting in compliance with this Section 9, to declare that such proposed business shall not be transacted. A shareholder shall update and supplement its Proposal Notice as necessary, from time to time, so that the information provided or required to be provided in such Proposal Notice pursuant to this Section 9 shall be true, correct and complete in all respects not only prior to the Proposal Notice Deadline but also at all times thereafter and prior to the meeting, and such update and supplement shall be received by the secretary of the company not later than the earlier of (i) five business days following the occurrence of any event, development or occurrence that would cause the information provided in the Proposal Notice to be not true, correct and complete in all respects, or (ii) ten business days prior to the publicly disclosed date of the meeting at which such proposed business contained therein is to be considered; provided, however, that should any such event, development or occurrence take place within ten business days prior to such meeting. such update and supplement shall be received by the secretary of the company not later than one business day following any such event, development or occurrence. For the avoidance of doubt, the updates required pursuant to the previous sentence do not cause a Proposal Notice that was not true, correct and complete in all respects and in compliance with this Section 9 when first delivered to the company prior to the Proposal Notice Deadline to thereafter be in proper form in accordance with this Section 9.

Section 10. Nomination of Director Candidates. (a) As provided by the Restated Articles of Incorporation, no person, except those persons nominated by the board, shall be eligible for election as a director at any annual or special meeting of shareholders unless a written request that his or her name be placed in nomination shall be received from a shareholder of record entitled to vote at such election by the secretary of the company not later than the latter of (i) the 30th day prior to the date fixed for the meeting, or (ii) the 10th day after the mailing of notice of that meeting, together with the written consent of the nominee to serve as a director (the "Nomination Notice Deadline"); (b) The chair of the meeting shall have the power and duty (i) to determine whether any proposed

nominee was properly brought before the meeting in accordance with the procedures set forth in this Section 10, and (ii) if the chair determines that any proposed nominee was not brought before the meeting in compliance with this Section 10, to declare that the nomination of such proposed nominee shall not be considered; (c) To be properly brought before the meeting, the written request that such nominee be placed in nomination (a "Nominating Notice") must contain (i) the name and record address of the shareholder, (ii) the class and number of shares of the company that the shareholder owns or is entitled to vote, and (iii) as to each person the shareholder proposes to nominate for election or re-election as a director, all information relating to the person that is required to be disclosed in solicitations of proxies for the election of directors in a contested election of directors, or that is otherwise required, in each case pursuant to Section 14 under the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder; (d) Compliance with this Section 10 shall be the exclusive means for a shareholder to nominate director candidates. A shareholder shall update and supplement its Nominating Notice as necessary, from time to time, so that the information provided or required to be provided in such notice pursuant to this Section 10 shall be true, correct and complete in all respects not only prior to the Nomination Notice Deadline but also at all times thereafter and prior to the meeting, and such update and supplement shall be received by the secretary of the company not later than the earlier of (i) five business days following the occurrence of any event, development or occurrence that would cause the information provided in the Nominating Notice to be not true, correct and complete in all respects, or (ii) ten business days prior to the publicly disclosed date of the meeting at which such nominations contained therein are to be considered; provided, however, that should any such event, development or occurrence take place within ten business days prior to such meeting, such update and supplement shall be received by the secretary of the company not later than one business day following any such event, development or occurrence. For the avoidance of doubt, the updates required pursuant to the previous sentence do not cause a Nominating Notice that was not true, correct and complete in all respects and in compliance with this Section 10 when first delivered to the company prior to the Nomination Notice Deadline to thereafter be in proper form in accordance with this Section 10.

Section 11. Participation at Meetings by Remote Communication. Shareholders and proxy holders that are not physically present for a meeting of shareholders may participate in the meeting, be deemed present in person, and vote if the board of directors authorizes participation by remote communication. Participation by remote communication is subject to guidelines and procedures that the board of directors adopts. Before the board of directors may authorize shareholders or proxy holders to participate by remote communication in a meeting of shareholders, the company shall implement measures to (a) verify that a person that is participating in the meeting by remote communication is a shareholder or a proxy holder; and (b) ensure that a shareholder or proxy holder may participate by remote communication in an effective manner. The company shall maintain a record of the vote or other action of a shareholder or proxy holder that participates in a meeting of shareholders by remote communication.

ARTICLE III.

BOARD OF DIRECTORS

Section 1. Directors. The business and affairs of the company shall be managed by its board of directors. The number of members of the board, their classification and terms of office, and the manner of their election and removal shall be determined as provided by the Restated Articles of Incorporation. Directors need not be residents of the State of Oregon or shareholders of the company. Unless otherwise determined by the board of directors, no person who has reached the age of 75 years shall be eligible to be elected a director.

Section 2. Chair and Vice-Chair of the Board. The board of directors may elect one of its members as chair of the board. The chair of the board, if that position be filled, shall preside at all meetings of the shareholders and the board of directors and shall have such other duties and responsibilities as may be prescribed by the board of directors. The board of directors may elect one of its members as vice-chair of the board. In the absence of the chair of the board, the vice-chair of the board, if that position be filled, shall preside at all meetings of the shareholders and the board of directors and shall have such other duties and responsibilities as may be prescribed by the board of directors. If the board of directors elects a vice-chair of the board, the board of directors shall specify in the resolution electing the vice-chair of the board the date on which the vice-chair of the board shall become chair of the board. If there shall be no chair of the board, or in his or her absence or disability, the vice-chair of the Board shall exercise the duties and responsibilities of that position. If there shall be no chair or vice-chair of the board, or in their absence or disability, unless otherwise determined by resolution of the board of directors, the chair of the governance committee shall exercise the duties and responsibilities of the chair of the board of directors, an independent board member designated by the chair of the board shall exercise the duties and responsibilities of that position. In the event that none of the chair of the board, the vice-chair of the board, nor the chair of the board's governance committee are present, and the chair of the board has not otherwise designated an independent board member to preside at the meeting and the board of

directors has not otherwise specified a chair by resolution, the board, by vote of the majority of the board members present at the meeting, whether or not a quorum, shall appoint a non-management independent director to preside at the meeting.

Section 3. Compensation. Directors shall receive such reasonable compensation for their services as may be fixed from time to time by resolution of the board of directors, and shall be reimbursed for their expenses properly incurred in the performance of their duties as directors. No such payment shall preclude any director from serving the company in any other capacity and receiving such reasonable compensation for such services as may be fixed by resolution of the board.

ARTICLE IV.

MEETINGS OF THE BOARD OF DIRECTORS

Section 1. Regular Meetings. Regular meetings of the board of directors shall be held in the company's offices at two o'clock p.m., Pacific Time, on the fourth Thursday of February, May, July and September, and on the third Thursday of December, or on such other date or at such other hour and place as shall be specified in the notice of meeting. The date, time and place for holding regular meetings of the board of directors may be changed upon the giving of notice to all directors by or at the request of the chair of the board or the president. The board may provide by resolution the time and place either within or without the State of Oregon for holding of meetings or may omit the holding of any meeting without other notice than such resolution.

Section 2. Special Meetings. Special meetings of the board of directors may be called by or at the request of the chair of the board, the chair of the governance committee, the president or any two directors. The person or persons authorized to call special meetings of the board may fix any place, either within or without the State of Oregon, as the place for holding any special meeting of the board called by them. Notice of the time and place of special meetings shall be given to each director at least one day in advance by the secretary or other officer performing his or her duties.

Section 3. Waiver of Notice. Any director may waive notice of any meeting. The attendance of a director at any meeting shall constitute a waiver of notice of such meeting, except where a director attends a meeting for the express purpose of objecting to the transaction of any business because the meeting is not lawfully called or convened. Except as otherwise provided by law or the Restated Articles of Incorporation, neither the business to be transacted at, nor the purpose of, any regular or special meeting of the board of directors need be specified in the notice or waiver of notice of such meeting.

Section 4. Quorum. A majority of the number of directors at any time fixed by resolution adopted by the affirmative vote of a majority of the entire board of directors shall constitute a quorum for the transaction of business. If a quorum shall not be present at any meeting of directors, the directors present may adjourn the meeting from time to time without further notice until a quorum shall be present.

Section 5. Manner of Participation and Acting. The board of directors or any committee thereof may permit any or all directors to participate in a regular or special meeting by, or conduct the meeting through, use of any means of communication by which all directors participating may simultaneously hear each other during the meeting. All directors participating in a meeting of the board of directors or any committee thereof by this means shall be deemed to be present in person at the meeting. Except as otherwise provided by law or the Restated Articles of Incorporation, the act of the majority of the directors present at a meeting at which a quorum is present shall be the act of the board of directors.

Section 6. Action Without a Meeting. Any action required or permitted to be taken at a meeting of the board of directors may be taken without a meeting if a consent in writing, setting forth the action so taken, shall be signed by all of the directors entitled to vote with respect to the subject matter thereof.

ARTICLE V.

COMMITTEES OF THE BOARD

Section 1. Governance Committee. The board of directors at any time, by resolution adopted by a majority of the board of directors, may appoint a governance committee composed of three or more independent directors. The board shall designate one member of the committee as chair. The chair of the board shall be a member of the

governance committee, provided, however, that the chair of the board may in his or her sole discretion designate in his or her place, the vice-chair of the board as a member of the governance committee. The committee shall have and may exercise all of the authority of the board of directors in the management of the company, except with respect to matters upon which by law only the board of directors may act. The committee's responsibilities shall include serving as the nominating committee of the board; making recommendations to the board on board and board committee composition and structure, including recommendations with respect to committee and committee chairmanship assignments; and conducting periodic board self-assessments, peer reviews of individual directors and evaluations of committee effectiveness. The committee shall also perform such other functions as the board by resolution from time to time may direct.

Section 2. Audit Committee. The board of directors at any time, by resolution adopted by a majority of the board of directors, may appoint an audit committee composed of three or more independent directors. The board shall designate one member of the committee as chair. The duties of the committee shall be to discuss and review with the company's independent auditors the annual audit of the company, including the scope of the audit, and report the results of this review to the board; to meet with the independent auditors at such other times as the committee shall deem to be advisable; and to perform such other functions as the board by resolution from time to time may direct.

Section 3. Organization and Executive Compensation Committee. The board of directors at any time, by resolution adopted by a majority of the board of directors, may appoint an organization and executive compensation committee composed of three or more independent directors. The board shall designate one member of the committee as chair. The duties of the committee shall be to discuss and review the management of the affairs of the company relating to its organization and to executive personnel and their compensation, and to perform such other functions as the board by resolution from time to time may direct.

Section 4. Finance Committee. The board of directors at any time, by resolution adopted by a majority of the board of directors, may appoint a finance committee composed of three or more directors, a majority of whom shall not be officers or retired officers of the company. The board shall designate one member of the committee who is not an officer or retired officer of the company as chair. The duties of the committee shall be to discuss and review the management of the affairs of the company relating to financing, including the development of financial planning goals and financial policy, and to perform such other functions as the board by resolution from time to time may direct.

Section 5. Public Affairs and Environmental Policy Committee. The board of directors at any time, by resolution adopted by a majority of the board of directors, may appoint from among its members a public affairs and environmental policy committee composed of three or more directors, a majority of whom shall not be officers or retired officers of the company. The board shall designate one member of the committee who is not an officer of the company as chair. The duties of the committee shall be (i) to consider, review and monitor significant matters of public interest and societal trends, and the company's community affairs, charitable contributions, diversity and equal employment opportunity compliance programs, and (ii) to monitor significant environmental issues affecting the company and to recommend to the board appropriate environmental policies. The committee shall also perform such other functions as the board by resolution from time to time may direct.

Section 6. Other Committees. The board of directors at any time, by resolution adopted by a majority of the board of directors, may appoint from among its members such other committees and the chairs thereof as it may deem to be advisable. Each such committee shall have such powers and authority as are set forth in the resolutions pertaining thereto from time to time adopted by the board.

Section 7. Changes of Size and Function. Subject to the provisions of law, the board of directors shall have the power at any time to increase or decrease the number of members of any committee, to fill vacancies thereon, to change any members thereof and to change the functions and terminate the existence thereof.

Section 8. Conduct of Meetings. Each committee shall conduct its meetings in accordance with the applicable provisions of these bylaws relating to the conduct of meetings of the board of directors. Each committee shall adopt such further rules and regulations regarding its conduct, keep such minutes and other records and appoint such subcommittees and assistants as it shall deem to be appropriate.

Section 9. Compensation. Persons serving on any committee shall receive such reasonable compensation for their services on such committee as may be fixed by resolution of the board of directors, provided that no person shall receive compensation for his or her services on any committee while serving as an officer of the company.

ARTICLE VI.

NOTICES

Section 1. Form and Manner. Whenever, under the provisions of law or the Restated Articles of Incorporation, notice is required to be given to any director or shareholder, unless otherwise specified, it shall be given in writing by mail addressed to such director or shareholder at his or her address as it appears on the stock transfer books or other records of the company, with postage thereon prepaid, and such notice shall be deemed to be delivered when deposited in the United States Mail. Notice to directors also may be given by telephone, via email, or in any other manner which is reasonably calculated to give adequate notice.

Section 2. Waiver. Whenever any notice whatever is required to be given under the provisions of law, the Restated Articles of Incorporation or these bylaws, a waiver thereof in writing signed by the person or persons entitled to such notice, whether before or after the time stated therein, shall be deemed equivalent to the giving of such notice.

ARTICLE VII.

OFFICERS

Section 1. Election. The board of directors, at its first meeting following the annual meeting of shareholders each year, shall elect a president and a secretary. At such meeting, or at any other time it shall deem appropriate, the board may elect one or more vice presidents and a treasurer. The board also may elect or appoint such other officers and agents as it may deem necessary. Any two or more offices may be held by the same person, except the offices of president and secretary.

Section 2. Compensation. The officers of the company shall receive such reasonable compensation for their services as from time to time may be fixed by resolution of the board of directors.

Section 3. Term. The term of office of all officers shall commence upon their election or appointment and shall continue until the first meeting of the board of directors following the annual meeting of shareholders and thereafter until their successors shall be elected or until their resignation or removal. A vacancy occurring in any office of the company for whatever reason may be filled by the board.

Section 4. Removal. Any officer or agent elected or appointed by the board of directors may be removed by the board whenever in its judgment the best interests of the company will be served thereby but such removal shall be without prejudice to the contract rights, if any, of the officer or agent so removed.

Section 5. President. Unless otherwise determined by the board of directors, the president shall be the chief executive officer of the company and, subject to the control of the board of directors, shall be responsible for the general administration and operation of the company. He shall have such other duties and responsibilities as may pertain to such office or be prescribed by the board of directors. In the absence or disability of the president, an officer designated by the board shall exercise the duties and responsibilities of the president.

In the event the offices of chief executive officer and president are not held by the same person, the chief executive officer shall exercise the duties and responsibilities of the president described in these bylaws.

Section 6. Vice Presidents. Each vice president shall have such duties and responsibilities as may be prescribed by the board of directors and the president. The board or the president may confer a special title upon a vice president.

Section 7. Secretary. The secretary shall record and keep the minutes of the shareholders in one or more books provided for that purpose; see that all notices are duly given in accordance with the provisions of these bylaws or as required by law; and perform such other duties as may be prescribed by the board or the president. The secretary shall have custody of the corporate seal of the company and shall affix the seal to any instrument requiring it and attest the same by his or her signature. The assistant secretaries shall have such duties as may be prescribed from time to time by the board, the president or the secretary. In the absence or disability of the secretary, his or her duties shall be performed by an assistant secretary.

Section 8. Treasurer. The treasurer shall have charge and custody and be responsible for all funds and securities of the company; deposit all moneys and other valuable effects in the name and to the credit of the company in such depositories as may be designated by the board of directors; and disburse the funds of the company as may be authorized by the board and take proper vouchers for such disbursements. The treasurer shall have such other duties as may be prescribed from time to time by the board or the president. In the absence or disability of the treasurer, his or her duties shall be performed by an assistant treasurer.

ARTICLE VIII.

CONTRACTS, LOANS, CHECKS AND DEPOSITS

- Section 1. Contracts. The board of directors by resolution may authorize any officer or officers, agent or agents, to enter into any contract or execute and deliver any instrument in the name of and on behalf of the company, and such authority may be general or confined to specific instances.
- Section 2. Loans. No loans shall be contracted on behalf of the company and no evidences of indebtedness shall be issued in its name unless authorized by a resolution of the board of directors. Such authority may be general or confined to specific instances.
- Section 3. Checks and Drafts. All checks, drafts or other orders for the payment of money, notes or other evidences of indebtedness issued in the name of the company shall be signed by such officer or officers, agent or agents of the company and in such manner as shall from time to time be determined by resolution of the board of directors.
- Section 4. Deposits. All funds of the company not otherwise employed shall be deposited from time to time to the credit of the company in such banks, trust companies or other depositories as the board of directors or officers of the company designated by the board may select, or be invested as authorized by the board.

ARTICLE IX.

CERTIFICATES FOR SHARES AND THEIR TRANSFER

Section 1. Certificates for Shares. The shares of the company shall be represented by certificates; provided, however, the board of directors may provide by resolution or resolutions that some or all of any or all classes or series of the company's shares shall be uncertificated shares. When shares are not represented by certificates then within a reasonable time after the issuance or transfer of such shares, the company shall send or cause to be sent to the shareholder to whom such shares have been issued or transferred a written statement of the information required by the laws of the State of Oregon to be on certificates.

Certificates representing shares of the company shall be issued only for whole numbers of shares and shall be in such form as the board of directors may, from time to time, prescribe in accordance with the laws of the State of Oregon. Such certificates shall be signed by the president or a vice president and by the secretary or an assistant secretary and sealed with the corporate seal or a facsimile thereof. The signatures of such officers upon a certificate may be facsimiles thereof. In case of a lost, destroyed or mutilated certificate a new one may be issued therefor upon such terms and indemnity to the company as the board may authorize.

- Section 2. Transfer. Shares of stock of the company shall be transferable on the books of the company by the holder of record thereof, or by his or her legal representative who shall furnish proper evidence of authority to transfer, or by his or her attorney thereunto authorized by duly executed power of attorney, and on surrender for cancellation of the certificates, if any, for such shares. The board of directors may appoint one or more transfer agents and registrars of stock of the company.
- Section 3. Owner of Record. The company shall be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends and to vote as such owner and shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of any other person, whether or not it shall have express or other notice thereof, except as otherwise provided by law.

ARTICLE X.

INDEMNIFICATION AND INSURANCE

Section 1. Indemnification. The company shall indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he or she is or was a director, officer, employee or agent of the company, or is or was serving at the request of the company as a director, officer, employee, agent or fiduciary of another corporation, partnership, joint venture, trust or other enterprise or any employee benefit plan, against expenses (including attorney's fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him or her in connection with the defense or settlement of such action, suit or proceeding to the fullest extent permissible under the Oregon Business Corporation Act or the indemnification provisions of any successor Act. The foregoing rights of indemnification shall not be exclusive of any other rights to which any such person so indemnified may be entitled, under any agreement, vote of shareholders or disinterested directors or otherwise, both as to action in his or her official capacity and as to action in another capacity while holding such office; shall continue as to a person who has ceased to be a director, officer, employee or agent; and shall inure to the benefit of the heirs, executors and administrators of such a person.

Section 2. Insurance. The company may purchase and maintain insurance (and pay the entire premium therefor) on behalf of any person who is or was a director, officer, employee or agent of the company, or is or was serving at the request of the company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against him or her and incurred by him or her in any such capacity or arising out of his or her status as such, whether or not the company would have the power to indemnify him or her against such liability under the provisions of the Oregon Business Corporation Act or any successor Act; and on behalf of any person who is or was a fiduciary under the Employee Retirement Income Security Act of 1974 with regard to an employee benefit plan of the company against any liability asserted against him or her and incurred by him or her in his or her fiduciary capacity.

ARTICLE XI.

SEAL

The corporate seal of the company shall be circular in form and shall bear an inscription containing the name of the company, the year of its organization, the state of its incorporation and the words "Corporate Seal."

ARTICLE XII.

AMENDMENTS

These bylaws, or any of them, may be altered, amended or repealed, or new bylaws adopted, by resolution of a majority of the board of directors, subject to repeal or change by action of the shareholders.

AMENDED AND RESTATED BYLAWS OF NORTHWEST NATURAL GAS COMPANY

ARTICLE I.

OFFICES

Section 1. Office. The principal office of the company shall be located in the City of Portland, Oregon. The company also may have offices at such other places both within and without the State of Oregon as the board of directors from time to time may determine.

Section 2. Registered Office. The registered office of the company required by law to be maintained in the state shall be at the same location as the principal office unless otherwise designated by resolution of the board of directors.

ARTICLE II.

MEETINGS OF SHAREHOLDERS

Section 1. Annual Meeting. The annual meeting of shareholders of the company for the election of directors and for the transaction of other business shall be held at the company's office in the City of Portland, Oregon, or such other place in that City or solely or partially by means of remote communication in accordance with Oregon law, as shall be determined by the board of directors, on the fourth Thursday of May in each year, unless such day shall be a legal holiday, in which event such meeting shall be held on the next business day. If such meeting shall not be held on such day in any year, it shall be held either within 60 days prior to such day or within 60 days thereafter on such day as shall be fixed by the board of directors and be specified in the notice of the meeting. Every such meeting shall be held at the hour of two o'clock p.m., or at such other hour as shall be fixed by the board and specified in such notice.

Section 2. Special Meetings. Special meetings of the shareholders of the company may be called by (i) the board of directors or (ii) the secretary of the company, following his or her receipt of one or more written demands to call a special meeting of the shareholders (a "Special Meeting Request Notice"), in accordance with and subject to this Section 2, from shareholders of record as of the record date fixed in accordance with this Section 2 who hold not less than one-tenth of all shares entitled to vote at the meeting (the "Requisite Percentage"). No shareholder may submit a Special Meeting Request Notice demanding that the secretary of the company call a special meeting of shareholders pursuant to this Section 2 unless such shareholder has first submitted a request in writing that the board of directors fix a record date (a "Demand Record Date") for the purpose of determining the shareholders entitled to demand that the secretary of the company call such special meeting, which request for a Demand Record Date shall be delivered to, or mailed and received by, the secretary of the company at the principal executive offices of the company. Within 10 days after receipt of a request to fix a Demand Record Date from any shareholder of record, the board of directors may adopt a resolution fixing a Demand Record Date for the purpose of determining the shareholders entitled to demand that the secretary of the company call a special meeting, which date shall not precede the date upon which the resolution fixing the Demand Record Date is adopted by the board of directors and which date shall not be more than 10 days after the date upon which the resolution fixing the record date is adopted by the board of directors. If no resolution fixing a Demand Record Date has been adopted by the board of directors within the 10 day period after the date on which such a request to fix a Demand Record Date was received, the Demand Record Date in respect thereof shall be deemed to be the 20th day after the date on which such a request was received. After receipt of a Special Meeting Request Notice signed by a shareholder or shareholders collectively holding the Requisite Percentage in compliance with this Section 2, the board of directors shall duly call, and determine the place, date and time of, a special meeting of shareholders for the purpose or purposes and to conduct the business specified in the Special Meeting Request Notice. The board of directors shall provide written notice of such special meeting to the shareholders in accordance with Article II, Section 3 of these bylaws. Each special meeting shall be held for such purposes, at such place in the City of Portland, Oregon or solely or partially by means of remote communication in accordance with Oregon law, and at such time as shall be specified in the notice thereof. The record date for notice and voting for such a special meeting shall be fixed in accordance with Article II, Section 4 of these bylaws. A shareholder may revoke a Special Meeting Request Notice by written revocation delivered to the secretary at any time prior to the related special meeting. If any such revocation(s) are received by the secretary after the secretary's receipt of Special Meeting Request Notices from the Requisite Percentage of shareholders, and as a result of such revocation(s) there no longer are unrevoked Special Meeting Request Notices from the Requisite Percentage of shareholders, then the board of directors shall have the discretion

to determine whether or not to proceed with such special meeting. Shareholders who nominate persons for election to the board of directors at a special meeting must also comply with the requirements set forth in Article II, Section 10 of these bylaws.

Section 3. Notice. Written or printed notice stating the place, day and hour of the meeting, and, in case of a meeting to be held by remote communication, the means of remote communications authorized by the board of directors for participation in such meeting, and, in case of a special meeting, the purpose or purposes for which the meeting is called, shall be delivered not less than 10 nor more than 50 days before the date of the meeting, either personally or by mail, by or at the direction of the board of directors or the persons calling the meeting, to each shareholder of record entitled to vote at such meeting.

Section 4. Fixing Record Date. For the purpose of determining shareholders entitled to notice of or to vote at any meeting of shareholders, or any adjournment thereof, or entitled to receive payment of any dividend, or in order to make a determination of shareholders for any other proper purpose, the board of directors may fix in advance a date as the record date for any such determination of shareholders, such date in any case to be not more than 50 days and, in the case of a meeting of shareholders, not less than 10 days prior to the date on which the particular action requiring such determination of shareholders is to be taken. If no record date is fixed for the determination of shareholders entitled to notice of or to vote at a meeting of shareholders, or shareholders entitled to receive payment of a dividend, the date on which notice of the meeting is mailed or the date on which the resolution of the board declaring such dividend is adopted, as the ease may be, shall be the record date for such determination of shareholders. When a determination of shareholders entitled to vote at any meeting of shareholders has been made as provided in this section, such determination shall apply to any adjournment thereof. Notwithstanding anything in this Section 4 to the contrary, a Demand Record Date shall be fixed in accordance with Article II, Section 2 of these bylaws.

Section 5. Record of Shareholders. The officer or agent having charge of the transfer books for shares of the company shall make, no later than two business days after notice of each meeting of shareholders is given, a complete record of the shareholders entitled to vote at such meeting or any adjournment thereof, arranged in alphabetical order with the address of and the number of shares held by each, which record, for a period beginning two business days after notice of such meeting is given and continuing through the meeting, shall be kept on file at the registered office of the company; provided that, if the meeting is to be held solely by means of remote communications, such record may instead be kept on file on a reasonably accessible electronic network at the election of the company. Such record shall be subject to inspection by any shareholder at any time during usual business hours. Such record also shall be produced and kept open at the time and place (if any) of the meeting and shall be subject to the inspection of any shareholder during the whole time of the meeting. The original transfer books for shares shall be prima facie evidence as to who are the shareholders entitled to examine such record or transfer books or to vote at any meeting of the shareholders.

Section 6. Quorum. A majority of the shares of the company entitled to vote, represented in person, by means of remote communication at a meeting held partially or completely by remote communication, or by proxy, shall constitute a quorum at all meetings of shareholders. If a quorum is present, in person, by means of remote communication, or by proxy, the affirmative vote of a majority of the shares represented at the meeting and entitled to vote on the subject matter shall be the act of the shareholders, unless the vote of a greater number, or voting by classes, is required by law or the Restated Articles of Incorporation.

If a quorum shall not be represented at any meeting of shareholders, the shareholders represented may adjourn the meeting from time to time without further notice. At such adjourned meeting, at which a quorum shall be present or represented, any business may be transacted which might have been transacted at the meeting as originally noticed. The shareholders represented at a duly organized meeting may continue to transact business until adjournment, notwithstanding the withdrawal of enough shareholders to leave less than a quorum.

Section 7. Voting. Each outstanding share, regardless of class, shall be entitled to one vote on each matter submitted to a vote at a meeting of shareholders, except to the extent that the voting rights of the shares of any class or classes are limited or denied by law or the Restated Articles of Incorporation. At each election of directors holders of shares of common stock have the right to cumulative voting as provided for in the Restated Articles of Incorporation. A shareholder may vote either in person, by means of remote communication at a meeting held partially or completely by remote communication, or by proxy. A shareholder may authorize a person or persons to act for the shareholder as proxy in any manner permitted by law. An authorization of a proxy is effective when received by the secretary of the company or other officer or agent authorized to tabulate votes.

Section 8. Conduct of Meetings. Every meeting of shareholders shall be presided over by the chair of the board, in his or her absence, by the vice-chair of the Board if that position be filled, in his or her absence, by the president, in their absence by a vice president or, if none be present, by a chair appointed by the shareholders present at the

meeting. The minutes of such meeting shall be recorded by the secretary or an assistant secretary but, if neither be present, by a secretary appointed for that purpose by the chair of the meeting. The board of directors may adopt by resolution such rules and regulations for the conduct of meetings of shareholders as it shall deem appropriate. Except to the extent inconsistent with such rules and regulations as adopted by the board of directors, the chair of any meeting of shareholders shall have the exclusive right and authority to prescribe such rules, regulations and procedures and to do all such acts as, in the judgment of such chair, are appropriate for the proper conduct of the meeting. Such rules, regulations or procedures, whether adopted by the board of directors or prescribed by the chair of the meeting, may include, without limitation, the following: (a) the establishment of an agenda or order of business for the meeting; (b) rules and procedures for maintaining order at the meeting and the safety of those present; (c) limitations on attendance at or participation in the meeting to shareholders of record of the company, their duly authorized and constituted proxies or such other persons as the chair of the meeting shall determine; (d) restrictions on entry to the meeting after the time fixed for the commencement thereof; and (e) limitations on the time allotted to questions or comments by participants. Unless and to the extent determined by the board of directors or the chair of the meetings of shareholders shall not be required to be held in accordance with the rules of parliamentary procedure.

Section 9. Proper Business for Meetings. (a) No business, including nominations of persons for election to the board of directors, shall be conducted at any meeting of shareholders that has not been properly brought before the meeting. To be properly brought before a special meeting of shareholders, business must be specified in the notice of meeting (or any supplement thereto) given by or at the direction of the board of directors or the persons calling the meeting. To be properly brought before an annual meeting of shareholders, business must be either (i) specified in the notice of meeting (or any supplement thereto) given by or at the direction of the board of directors, (ii) otherwise brought before the meeting by or at the direction of the board of directors or the chair of the board, or (iii) otherwise properly brought before the meeting by a shareholder. In addition to any other applicable requirements, for business to be properly brought before an annual meeting by a shareholder, the shareholder must have given timely notice thereof in writing to the secretary of the company. To be timely, a shareholder's notice must be delivered to the secretary at the principal executive office of the company not less than 90 days prior to the first anniversary of the previous year's annual meeting of shareholders; provided, however, that in the event that the date of the annual meeting is advanced by more than 30 days or delayed (other than as a result of adjournment) by more than 30 days from the anniversary of the previous year's annual meeting, notice by a shareholder to be timely must be delivered not later than the close of business on the later of the 90th day prior to such annual meeting or the 10th day following the day on which public announcement of the date of such meeting is first made (the "Proposal Notice Deadline"). For purposes of this section, "public announcement" shall mean disclosure in a press release reported by the Dow Jones News Service, Associated Press or comparable national news service or in a document publicly filed by the company with the Securities and Exchange Commission, (b) A shareholder's notice to the secretary (a "Proposal Notice") shall set forth (i) one or more matters appropriate for shareholder action that the shareholder proposes to bring before the meeting, (ii) a brief description of the matters desired to be brought before the meeting and the reasons for conducting such business at the meeting, (iii) the name and record address of the shareholder, (iv) the class and number of shares of the company that the shareholder owns or is entitled to vote and (v) any material interest of the shareholder in such matters; and (c) The chair of the meeting shall have the power and duty (i) to determine whether any proposed business was properly brought before the meeting in accordance with the procedures set forth in this Section 9, and (ii) if the chair determines that any proposed business was not brought before the meeting in compliance with this Section 9, to declare that such proposed business shall not be transacted. A shareholder shall update and supplement its Proposal Notice as necessary, from time to time, so that the information provided or required to be provided in such Proposal Notice pursuant to this Section 9 shall be true, correct and complete in all respects not only prior to the Proposal Notice Deadline but also at all times thereafter and prior to the meeting, and such update and supplement shall be received by the secretary of the company not later than the earlier of (i) five business days following the occurrence of any event, development or occurrence that would cause the information provided in the Proposal Notice to be not true, correct and complete in all respects, or (ii) ten business days prior to the publicly disclosed date of the meeting at which such proposed business contained therein is to be considered; provided, however, that should any such event, development or occurrence take place within ten business days prior to such meeting, such update and supplement shall be received by the secretary of the company not later than one business day following any such event, development or occurrence. For the avoidance of doubt, the updates required pursuant to the previous sentence do not cause a Proposal Notice that was not true, correct and complete in all respects and in compliance with this Section 9 when first delivered to the company prior to the Proposal Notice Deadline to thereafter be in proper form in accordance with this Section 9.

Section 10. Nomination of Director Candidates. (a) As provided by the Restated Articles of Incorporation, no person, except those persons nominated by the board, shall be eligible for election as a director at any annual or special meeting of shareholders unless a written request that his or her name be placed in nomination shall be received from a shareholder of record entitled to vote at such election by the secretary of the company not later than the latter of (i) the 30th day prior to the date fixed for the meeting, or (ii) the 10th day after the mailing of notice of that meeting, together with the written consent of the nominee to serve as a director (the "Nomination Notice Deadline"); (b) The chair of the meeting shall have the power and duty (i) to determine whether any proposed

nominee was properly brought before the meeting in accordance with the procedures set forth in this Section 10, and (ii) if the chair determines that any proposed nominee was not brought before the meeting in compliance with this Section 10, to declare that the nomination of such proposed nominee shall not be considered; (c) To be properly brought before the meeting, the written request that such nominee be placed in nomination (a "Nominating Notice") must contain (i) the name and record address of the shareholder, (ii) the class and number of shares of the company that the shareholder owns or is entitled to vote, and (iii) as to each person the shareholder proposes to nominate for election or re-election as a director, all information relating to the person that is required to be disclosed in solicitations of proxies for the election of directors in a contested election of directors, or that is otherwise required, in each case pursuant to Section 14 under the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder; (d) Compliance with this Section 10 shall be the exclusive means for a shareholder to nominate director candidates. A shareholder shall update and supplement its Nominating Notice as necessary, from time to time, so that the information provided or required to be provided in such notice pursuant to this Section 10 shall be true, correct and complete in all respects not only prior to the Nomination Notice Deadline but also at all times thereafter and prior to the meeting, and such update and supplement shall be received by the secretary of the company not later than the earlier of (i) five business days following the occurrence of any event, development or occurrence that would cause the information provided in the Nominating Notice to be not true, correct and complete in all respects, or (ii) ten business days prior to the publicly disclosed date of the meeting at which such nominations contained therein are to be considered; provided, however, that should any such event, development or occurrence take place within ten business days prior to such meeting, such update and supplement shall be received by the secretary of the company not later than one business day following any such event, development or occurrence. For the avoidance of doubt, the updates required pursuant to the previous sentence do not cause a Nominating Notice that was not true, correct and complete in all respects and in compliance with this Section 10 when first delivered to the company prior to the Nomination Notice Deadline to thereafter be in proper form in accordance with this Section 10.

Section 11. Participation at Meetings by Remote Communication. Shareholders and proxy holders that are not physically present for a meeting of shareholders may participate in the meeting, be deemed present in person, and vote if the board of directors authorizes participation by remote communication. Participation by remote communication is subject to guidelines and procedures that the board of directors adopts. Before the board of directors may authorize shareholders or proxy holders to participate by remote communication in a meeting of shareholders, the company shall implement measures to (a) verify that a person that is participating in the meeting by remote communication is a shareholder or a proxy holder; and (b) ensure that a shareholder or proxy holder may participate by remote communication in an effective manner. The company shall maintain a record of the vote or other action of a shareholder or proxy holder that participates in a meeting of shareholders by remote communication.

ARTICLE III.

BOARD OF DIRECTORS

Section 1. Directors. The business and affairs of the company shall be managed by its board of directors. The number of members of the board, their classification and terms of office, and the manner of their election and removal shall be determined as provided by the Restated Articles of Incorporation. Directors need not be residents of the State of Oregon or shareholders of the company. Unless otherwise determined by the board of directors, no person who has reached the age of 75 years shall be eligible to be elected a director.

Section 2. Chair and Vice-Chair of the Board. The board of directors may elect one of its members as chair of the board. The chair of the board, if that position be filled, shall preside at all meetings of the shareholders and the board of directors and shall have such other duties and responsibilities as may be prescribed by the board of directors. The board of directors may elect one of its members as vice-chair of the board. In the absence of the chair of the board, the vice-chair of the board, if that position be filled, shall preside at all meetings of the shareholders and the board of directors and shall have such other duties and responsibilities as may be prescribed by the board of directors. If the board of directors elects a vice-chair of the board, the board of directors shall specify in the resolution electing the vice-chair of the board the date on which the vice-chair of the board shall become chair of the board. If there shall be no chair of the board, or in his or her absence or disability, the vice-chair of the Board shall exercise the duties and responsibilities of that position. If there shall be no chair or vice-chair of the board, or in their absence or disability, unless otherwise determined by resolution of the board of directors, the chair of the governance committee shall exercise the duties and responsibilities of the chair of the board. In the absence of the chair of the board of directors, an independent board member designated by the chair of the board shall exercise the duties and responsibilities of that position. In the event that none of the chair of the board, the vice-chair of the board, nor the chair of the board's governance committee are present, and the chair of the board has not otherwise designated an independent board member to preside at the meeting and the board of

directors has not otherwise specified a chair by resolution, the board, by vote of the majority of the board members present at the meeting, whether or not a quorum, shall appoint a non-management independent director to preside at the meeting.

Section 3. Compensation. Directors shall receive such reasonable compensation for their services as may be fixed from time to time by resolution of the board of directors, and shall be reimbursed for their expenses properly incurred in the performance of their duties as directors. No such payment shall preclude any director from serving the company in any other capacity and receiving such reasonable compensation for such services as may be fixed by resolution of the board.

ARTICLE IV.

MEETINGS OF THE BOARD OF DIRECTORS

Section 1. Regular Meetings. Regular meetings of the board of directors shall be held in the company's offices at two o'clock p.m., Pacific Time, on the fourth Thursday of February, May, July and September, and on the third Thursday of December, or on such other date or at such other hour and place as shall be specified in the notice of meeting. The date, time and place for holding regular meetings of the board of directors may be changed upon the giving of notice to all directors by or at the request of the chair of the board or the president. The board may provide by resolution the time and place either within or without the State of Oregon for holding of meetings or may omit the holding of any meeting without other notice than such resolution.

Section 2. Special Meetings. Special meetings of the board of directors may be called by or at the request of the chair of the board, the chair of the governance committee, the president or any two directors. The person or persons authorized to call special meetings of the board may fix any place, either within or without the State of Oregon, as the place for holding any special meeting of the board called by them. Notice of the time and place of special meetings shall be given to each director at least one day in advance by the secretary or other officer performing his or her duties.

Section 3. Waiver of Notice. Any director may waive notice of any meeting. The attendance of a director at any meeting shall constitute a waiver of notice of such meeting, except where a director attends a meeting for the express purpose of objecting to the transaction of any business because the meeting is not lawfully called or convened. Except as otherwise provided by law or the Restated Articles of Incorporation, neither the business to be transacted at, nor the purpose of, any regular or special meeting of the board of directors need be specified in the notice or waiver of notice of such meeting.

Section 4. Quorum. A majority of the number of directors at any time fixed by resolution adopted by the affirmative vote of a majority of the entire board of directors shall constitute a quorum for the transaction of business. If a quorum shall not be present at any meeting of directors, the directors present may adjourn the meeting from time to time without further notice until a quorum shall be present.

Section 5. Manner of Participation and Acting. The board of directors or any committee thereof may permit any or all directors to participate in a regular or special meeting by, or conduct the meeting through, use of any means of communication by which all directors participating may simultaneously hear each other during the meeting. All directors participating in a meeting of the board of directors or any committee thereof by this means shall be deemed to be present in person at the meeting. Except as otherwise provided by law or the Restated Articles of Incorporation, the act of the majority of the directors present at a meeting at which a quorum is present shall be the act of the board of directors.

Section 6. Action Without a Meeting. Any action required or permitted to be taken at a meeting of the board of directors may be taken without a meeting if a consent in writing, setting forth the action so taken, shall be signed by all of the directors entitled to vote with respect to the subject matter thereof.

ARTICLE V.

COMMITTEES OF THE BOARD

Section 1. Governance Committee. The board of directors at any time, by resolution adopted by a majority of the board of directors, may appoint a governance committee composed of three or more independent directors. The board shall designate one member of the committee as chair. The chair of the board shall be a member of the

governance committee, provided, however, that the chair of the board may in his or her sole discretion designate in his or her place, the vice-chair of the board as a member of the governance committee. The committee shall have and may exercise all of the authority of the board of directors in the management of the company, except with respect to matters upon which by law only the board of directors may act. The committee's responsibilities shall include serving as the nominating committee of the board; making recommendations to the board on board and board committee composition and structure, including recommendations with respect to committee and committee chairmanship assignments; and conducting periodic board self-assessments, peer reviews of individual directors and evaluations of committee effectiveness. The committee shall also perform such other functions as the board by resolution from time to time may direct.

Section 2. Audit Committee. The board of directors at any time, by resolution adopted by a majority of the board of directors, may appoint an audit committee composed of three or more independent directors. The board shall designate one member of the committee as chair. The duties of the committee shall be to discuss and review with the company's independent auditors the annual audit of the company, including the scope of the audit, and report the results of this review to the board; to meet with the independent auditors at such other times as the committee shall deem to be advisable; and to perform such other functions as the board by resolution from time to time may direct.

Section 3. Organization and Executive Compensation Committee. The board of directors at any time, by resolution adopted by a majority of the board of directors, may appoint an organization and executive compensation committee composed of three or more independent directors. The board shall designate one member of the committee as chair. The duties of the committee shall be to discuss and review the management of the affairs of the company relating to its organization and to executive personnel and their compensation, and to perform such other functions as the board by resolution from time to time may direct.

Section 4. Finance Committee. The board of directors at any time, by resolution adopted by a majority of the board of directors, may appoint a finance committee composed of three or more directors, a majority of whom shall not be officers or retired officers of the company. The board shall designate one member of the committee who is not an officer or retired officer of the company as chair. The duties of the committee shall be to discuss and review the management of the affairs of the company relating to financing, including the development of financial planning goals and financial policy, and to perform such other functions as the board by resolution from time to time may direct.

Section 5. Public Affairs and Environmental Policy Committee. The board of directors at any time, by resolution adopted by a majority of the board of directors, may appoint from among its members a public affairs and environmental policy committee composed of three or more directors, a majority of whom shall not be officers or retired officers of the company. The board shall designate one member of the committee who is not an officer of the company as chair. The duties of the committee shall be (i) to consider, review and monitor significant matters of public interest and societal trends, and the company's community affairs, charitable contributions, diversity and equal employment opportunity compliance programs, and (ii) to monitor significant environmental issues affecting the company and to recommend to the board appropriate environmental policies. The committee shall also perform such other functions as the board by resolution from time to time may direct.

Section 6. Other Committees. The board of directors at any time, by resolution adopted by a majority of the board of directors, may appoint from among its members such other committees and the chairs thereof as it may deem to be advisable. Each such committee shall have such powers and authority as are set forth in the resolutions pertaining thereto from time to time adopted by the board.

Section 7. Changes of Size and Function. Subject to the provisions of law, the board of directors shall have the power at any time to increase or decrease the number of members of any committee, to fill vacancies thereon, to change any members thereof and to change the functions and terminate the existence thereof.

Section 8. Conduct of Meetings. Each committee shall conduct its meetings in accordance with the applicable provisions of these bylaws relating to the conduct of meetings of the board of directors. Each committee shall adopt such further rules and regulations regarding its conduct, keep such minutes and other records and appoint such subcommittees and assistants as it shall deem to be appropriate.

Section 9. Compensation. Persons serving on any committee shall receive such reasonable compensation for their services on such committee as may be fixed by resolution of the board of directors, provided that no person shall receive compensation for his or her services on any committee while serving as an officer of the company.

ARTICLE VI.

NOTICES

Section 1. Form and Manner. Whenever, under the provisions of law or the Restated Articles of Incorporation, notice is required to be given to any director or shareholder, unless otherwise specified, it shall be given in writing by mail addressed to such director or shareholder at his or her address as it appears on the stock transfer books or other records of the company, with postage thereon prepaid, and such notice shall be deemed to be delivered when deposited in the United States Mail. Notice to directors also may be given by telephone, via email, or in any other manner which is reasonably calculated to give adequate notice.

Section 2. Waiver. Whenever any notice whatever is required to be given under the provisions of law, the Restated Articles of Incorporation or these bylaws, a waiver thereof in writing signed by the person or persons entitled to such notice, whether before or after the time stated therein, shall be deemed equivalent to the giving of such notice.

ARTICLE VII.

OFFICERS

Section 1. Election. The board of directors, at its first meeting following the annual meeting of shareholders each year, shall elect a president and a secretary. At such meeting, or at any other time it shall deem appropriate, the board may elect one or more vice presidents and a treasurer. The board also may elect or appoint such other officers and agents as it may deem necessary. Any two or more offices may be held by the same person, except the offices of president and secretary.

Section 2. Compensation. The officers of the company shall receive such reasonable compensation for their services as from time to time may be fixed by resolution of the board of directors.

Section 3. Term. The term of office of all officers shall commence upon their election or appointment and shall continue until the first meeting of the board of directors following the annual meeting of shareholders and thereafter until their successors shall be elected or until their resignation or removal. A vacancy occurring in any office of the company for whatever reason may be filled by the board.

Section 4. Removal. Any officer or agent elected or appointed by the board of directors may be removed by the board whenever in its judgment the best interests of the company will be served thereby but such removal shall be without prejudice to the contract rights, if any, of the officer or agent so removed.

Section 5. President. Unless otherwise determined by the board of directors, the president shall be the chief executive officer of the company and, subject to the control of the board of directors, shall be responsible for the general administration and operation of the company. He shall have such other duties and responsibilities as may pertain to such office or be prescribed by the board of directors. In the absence or disability of the president, an officer designated by the board shall exercise the duties and responsibilities of the president.

In the event the offices of chief executive officer and president are not held by the same person, the chief executive officer shall exercise the duties and responsibilities of the president described in these bylaws.

Section 6. Vice Presidents. Each vice president shall have such duties and responsibilities as may be prescribed by the board of directors and the president. The board or the president may confer a special title upon a vice president.

Section 7. Secretary. The secretary shall record and keep the minutes of the shareholders in one or more books provided for that purpose; see that all notices are duly given in accordance with the provisions of these bylaws or as required by law; and perform such other duties as may be prescribed by the board or the president. The secretary shall have custody of the corporate seal of the company and shall affix the seal to any instrument requiring it and attest the same by his or her signature.

The assistant secretaries shall have such duties as may be prescribed from time to time by the board, the president or the secretary. In the absence or disability of the secretary, his or her duties shall be performed by an assistant secretary.

Section 8. Treasurer. The treasurer shall have charge and custody and be responsible for all funds and securities of the company; deposit all moneys and other valuable effects in the name and to the credit of the company in such depositories as may be designated by the board of directors; and disburse the funds of the company as may be

authorized by the board and take proper vouchers for such disbursements. The treasurer shall have such other duties as may be prescribed from time to time by the board or the president. In the absence or disability of the treasurer, his or her duties shall be performed by an assistant treasurer.

ARTICLE VIII.

CONTRACTS, LOANS, CHECKS AND DEPOSITS

- Section 1. Contracts. The board of directors by resolution may authorize any officer or officers, agent or agents, to enter into any contract or execute and deliver any instrument in the name of and on behalf of the company, and such authority may be general or confined to specific instances.
- Section 2. Loans. No loans shall be contracted on behalf of the company and no evidences of indebtedness shall be issued in its name unless authorized by a resolution of the board of directors. Such authority may be general or confined to specific instances.
- Section 3. Checks and Drafts. All checks, drafts or other orders for the payment of money, notes or other evidences of indebtedness issued in the name of the company shall be signed by such officer or officers, agent or agents of the company and in such manner as shall from time to time be determined by resolution of the board of directors.
- Section 4. Deposits. All funds of the company not otherwise employed shall be deposited from time to time to the credit of the company in such banks, trust companies or other depositories as the board of directors or officers of the company designated by the board may select, or be invested as authorized by the board.

ARTICLE IX.

CERTIFICATES FOR SHARES AND THEIR TRANSFER

Section 1. Certificates for Shares. The shares of the company shall be represented by certificates; provided, however, the board of directors may provide by resolution or resolutions that some or all of any or all classes or series of the company's shares shall be uncertificated shares. When shares are not represented by certificates then within a reasonable time after the issuance or transfer of such shares, the company shall send or cause to be sent to the shareholder to whom such shares have been issued or transferred a written statement of the information required by the laws of the State of Oregon to be on certificates.

Certificates representing shares of the company shall be issued only for whole numbers of shares and shall be in such form as the board of directors may, from time to time, prescribe in accordance with the laws of the State of Oregon. Such certificates shall be signed by the president or a vice president and by the secretary or an assistant secretary and sealed with the corporate seal or a facsimile thereof. The signatures of such officers upon a certificate may be facsimiles thereof. In case of a lost, destroyed or mutilated certificate a new one may be issued therefor upon such terms and indemnity to the company as the board may authorize.

Section 2. Transfer. Shares of stock of the company shall be transferable on the books of the company by the holder of record thereof, or by his or her legal representative who shall furnish proper evidence of authority to transfer, or by his or her attorney thereunto authorized by duly executed power of attorney, and on surrender for cancellation of the certificates, if any, for such shares. The board of directors may appoint one or more transfer agents and registrars of stock of the company.

Section 3. Owner of Record. The company shall be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends and to vote as such owner and shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of any other person, whether or not it shall have express or other notice thereof, except as otherwise provided by law.

ARTICLE X.

INDEMNIFICATION AND INSURANCE

Section 1. Indemnification. The company shall indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he or she is or was a director, officer, employee or agent of the company, or is or was serving at the request of the company as a director, officer, employee, agent or fiduciary of another corporation, partnership, joint venture, trust or other enterprise or any employee benefit plan, against expenses (including attorney's fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him or her in connection with the defense or settlement of such action, suit or proceeding to the fullest extent permissible under the Oregon Business Corporation Act or the indemnification provisions of any successor Act. The foregoing rights of indemnification shall not be exclusive of any other rights to which any such person so indemnified may be entitled, under any agreement, vote of shareholders or disinterested directors or otherwise, both as to action in his or her official capacity and as to action in another capacity while holding such office; shall continue as to a person who has ceased to be a director, officer, employee or agent; and shall inure to the benefit of the heirs, executors and administrators of such a person.

Section 2. Insurance. The company may purchase and maintain insurance (and pay the entire premium therefor) on behalf of any person who is or was a director, officer, employee or agent of the company, or is or was serving at the request of the company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against him or her and incurred by him or her in any such capacity or arising out of his or her status as such, whether or not the company would have the power to indemnify him or her against such liability under the provisions of the Oregon Business Corporation Act or any successor Act; and on behalf of any person who is or was a fiduciary under the Employee Retirement Income Security Act of 1974 with regard to an employee benefit plan of the company against any liability asserted against him or her and incurred by him or her in his or her fiduciary capacity.

ARTICLE XI.

SEAL

The corporate seal of the company shall be circular in form and shall bear an inscription containing the name of the company, the year of its organization, the state of its incorporation and the words "Corporate Seal."

ARTICLE XII.

AMENDMENTS

These bylaws, or any of them, may be altered, amended or repealed, or new bylaws adopted, by resolution of a majority of the board of directors, subject to repeal or change by action of the shareholders.

ANNUAL INCENTIVE PLAN NW Natural Gas Storage LLC ("company", or "the company")

PURPOSE

The purpose of the Annual Incentive Plan (AIP) is to recognize and reward Non-Bargaining Unit (NBU) employees who have performed well and contributed to successful company performance as measured by key performance indicators.

PROGRAM TERM

This Plan is an annual incentive plan and each new calendar year commences a new Program Term. Each Program Term will begin on January 1 and conclude on December 31.

PARTICIPATION

All NBU regular employees of the company are eligible to participate in the Annual Incentive Plan. For all purposes of this AIP, a person who is an employee of Northwest Natural Gas Company (NW Natural) on full-time assignment to the company and designated by the Company Board of Directors (BOD) shall be considered to be a regular employee of the company during the period of that full-time assignment. In these situations, a designated participant in this AIP shall not be eligible for incentive compensation from NW Natural.

NW Natural Oversight

If the President of NWNGS is considered by NW Natural to be an executive officer of NW Natural for purposes of public disclosure, any decision of the BOD under this AIP that affects an award to the President shall be subject to and conditioned upon the approval of that decision by the Board of Directors of NW Natural or as delegated by the Board of Directors of NW Natural to the Organization and Executive Compensation Committee.

To be eligible for an award the Participant must have been employed by the company in an NBU role for at least one month during the Program Term. In addition, the Participant must be employed on the date of the plan payout to be eligible for any award for the Program Term unless the Participants' employment is terminated prior to the payout date of the Program Term due to one of the following: retirement(*), disability or death, Board approved exception due disposition of an affiliated business which results in the participant's termination of employment with NWNGS. Prorated awards will be determined by prorating the Participant's final award by the number of days employed during the Program Term. In the case of a Board approved exception due to disposition of an affiliated business occurring during the Program Term, the participant's prorated award will be based upon their target award and not actual Company

1 | Page

performance for the Program Term. Such award will be paid within thirty (30) days following the completion of the transition period as defined by the Board. The disposition of Gill Ranch Storage qualifies as Board approved and the Board will define the end of the transition period. However, participating employees with Company approved Retention Agreements, will be eligible for prorated AIP awards consistent with such agreements.

Employees who transfer to or from employment or full-time assignment to Northwest Natural or another subsidiary will be eligible for a prorated award based upon the number of days they were eligible to participate in the AIP.

(*) Retirement is defined as a minimum of 5 years of service (with the company or with an affiliate company) and age and service equals 70.

INCENTIVE TARGETS

Target incentive award opportunities will be established by salary grade for each Plan Year and approved by the Board of Directors. The target incentive levels for each salary grade are shown in Exhibit I to the Plan document for the Plan Year. The target incentive opportunity is assigned by salary grade and calculated by multiplying the Target Incentive percentage times the following for each employee category:

NBU Salary Paid/Exempt - Annual Base Salary as of December 31st of the plan year

NBU Hourly Paid/Non-Exempt – Actual eligible earnings, including regular pay, overtime pay, & lump sum merit payments

INCENTIVE FORMULA

The formula for calculating the incentive award for the Program Term is as follows:

Participant Award =

Target Award X ((CPF X CPF Factor Weight) + (IPF X IPF Factor Weight))

COMPANY PERFORMANCE FACTOR (CPF)

The company performance goals in the Plan are intended to align the interest of Participants with those of the company. The goals and the formula for determining the Company Performance Factor will be established by the NW Natural Gas Storage, LLC Board of Directors (the "Board of Directors") at the start of each Program Term and set forth as Exhibit II. After the

2 | Page

goals and formula are established for a Program Term, the Board of Directors retains discretion to modify the goals and formula, including adjusting the calculation of any financial or other goal to eliminate the effects of significant extraordinary, non-recurring or unplanned items.

INDIVIDUAL PERFORMANCE FACTOR (IPF)

The IPF weight used in calculating the Individual Performance Factor will be established for each Participant by the President, subject to the approval of the Board of Directors at the beginning of the Program Term. Individual goals for each Participant will be established by the Participant's leader (subject to the approval of the President, and for the President subject to the approval of the Board of Directors) at the beginning of each Program Term. Performance against these goals will be assessed by the Participant's leader at the end of the Program Term (subject to the approval of the President, and for the President subject to the approval of the Board of Directors). This assessment will result in a rating on a scale of 0 to 1.5 (the "Individual Performance Factor"). The Participant will not receive an award if the Individual Performance Factor is less than 0.5.

ADMINISTRATION

Awards will be calculated and paid no later than March 15 following the end of the Program Term. Awards are subject to tax withholding unless the Participant made a prior election to defer the Award under the terms of the NW Natural Gas Company Deferred Compensation Plan for Directors and Executives if they are eligible for this plan. All awards shall be audited and approved by the Board of Directors prior to payment.

The Plan shall be administered by the Board of Directors. Except to the extent provided under "NW Natural Oversight" above. The Board of Directors shall have the exclusive authority and responsibility for all matters in connection with the operation and administration of the Plan. Except to the extent provided under "NW Natural Oversight: above. Decisions by the Board of Directors shall be final and binding upon all parties affected by the Plan, including the beneficiaries of Participants.

The Board of Directors may rely on information and recommendations provided by management. The Board of Directors may delegate to management the responsibility for decisions that it may make or actions that it may take under the terms of the Plan, subject to the Board of Directors reserved right to review such decisions or actions and modify them when necessary or appropriate under the circumstances. The Board of Directors shall not allow any employee to obtain control over decisions or actions that affect that employee's Plan benefits.

AMENDMENTS AND TERMINATION

The Board of Directors has the power to terminate this Plan at any time or to amend this Plan at any time and in any manner that it may deem advisable.

3 | Page

As amended effective October 1, 2018

NORTHWEST NATURAL GAS COMPANY EXECUTIVE ANNUAL INCENTIVE PLAN

This amended Executive Annual Incentive Plan (the "Plan") is executed by Northwest Natural Gas Company, an Oregon corporation (the "Company"), effective October 1, 2018. Effective October 1, 2018, the Company became a wholly-owned subsidiary of Northwest Natural Holding Company ("Parent") and holders of Company common stock became holders of Parent common stock ("Parent Common Stock").

PURPOSE OF PLAN

The success of the Company is dependent upon its ability to attract and retain the services of key executives of the highest competence and to provide incentives for superior performance. The purpose of the plan is to advance the interests of the Company and its shareholders through an incentive compensation program that will attract and retain key executives and motivate them to achieve performance goals.

PROGRAM TERM

This Plan is an annual incentive plan and each new calendar year commences a new Program Term. Each Program Term will begin on January 1 and conclude on December 31.

PARTICIPATION

All executive officers of the company and any other highly compensated employees as designated by the Company's Organization and Executive Compensation Committee (the "Committee") are eligible to receive awards ("Awards") under the Executive Annual Incentive Plan.

At the beginning of each Program Term, the Committee shall determine eligibility for Awards and establish for each participant, the target incentive level as a percentage of year-end annualized based salary ("Target Award"). This information will be set forth in Exhibit I of the Plan document for the Program Term. Each such participating employee shall be referred to as a "Participant."

To be eligible for payout of an Award the Participant must have a minimum of three months of service during the Program Term. If the Participant is a new employee or is newly eligible to participate in the Plan, that Participant must be in an eligible position on or before September 30 of the Program Term and will receive a prorated Award. In addition, the Participant must be employed by the Company or Parent on December 31 of the Program Term to be eligible for payout of the Award for the Program Term unless the Participant is eligible for a prorated Award as provided in the next sentence. Eligibility for a prorated Award occurs when a Participant has three or more months of participation in the Program Term but the Participant's employment is terminated prior to December 31 of the Program Term due to one of the following: Retirement (unless such Retirement results from a termination of the Participant's employment by the Company or Parent for Cause), disability and death. Prorated Awards will be determined by prorating the Participant's final Award by the number of days employed during the Program Term.

"Retirement" shall mean termination of employment after Participant is (a) age 62 with at least five years of service as an employee of the Company and Parent, or (b) age 55 with age

J:\LAD\Holding Company Formation\Plan and Trust Documents Effective 10.1.2018\Executive Annual Incentive Plan.docx

plus years of service (including fractions) as an employee of the Company and Parent totaling at least 70.

"Cause" shall mean (a) the willful and continued failure by a Participant to perform substantially the Participant's assigned duties with the Company or Parent (other than any such failure resulting from incapacity due to physical or mental illness) after a demand for substantial performance is delivered to the Participant by the Company or Parent which specifically identifies the manner in which the Participant has not substantially performed such duties, (b) willful commission by a Participant of an act of fraud or dishonesty resulting in economic or financial injury to the Company or Parent, (c) willful misconduct by a Participant that substantially impairs the Company's or Parent's business or reputation, or (d) willful gross negligence by a Participant in the performance of his or her duties.

In the event of a change in job position during the Program Term, the Committee may, in its discretion, increase or decrease the amount of a Participant's Award to reflect such change.

INCENTIVE FORMULA

The formula for calculating Awards for each Program Term is as follows:

COMPANY PERFORMANCE FACTOR

The Company performance goals in the Plan are intended to align the interest of Participants with those of the shareholders. The goals and the formula for determining the Company Performance Factor will be established by the Committee at the start of each Program Term and set forth as Exhibit II. The Committee may, at any time, approve adjustments to the calculation of the results under any Company performance goal to take into account such unanticipated circumstances or significant, non-recurring or unplanned events as the Committee may determine in its sole discretion, and such adjustments may increase or decrease the results. Possible circumstances that may be the basis for adjustments shall include, but not be limited to, any change in applicable accounting rules or principles; any gain or loss on the disposition of a business; impairment of assets; dilution caused by acquiring a business; tax changes and tax impacts of other changes; changes in applicable laws and regulations; changes in rate case timing; changes in the Company's structure; and any other circumstances outside of management's control.

PRIORITY/INDIVIDUAL PERFORMANCE FACTOR

The P/IPF weight used in calculating the Priority/Individual Performance Factor will be established for each Participant by the Committee at the beginning of the Program Term and set forth as part of Exhibit I. Also included in Exhibit I will be the CPF Factor Weight for the Company Performance Factor. Priority/Individual goals for each Participant will be established at the beginning of each Program Term and performance against these goals will be assessed by the Participant's superior and approved by the C.E.O. at the end of the Program Term. This assessment will result in a rating on a scale of 0% to 175%. This rating is called the Priority/Individual Performance Factor. The Participant will not receive a payout under the Priority/Individual Performance component of an Award if the Priority/Individual Performance Factor is less than 50%.

ADMINISTRATION

Award payouts will be calculated and paid no later than the March 15 following the end of the Program Term. Award payouts are subject to tax withholding unless the Participant made a prior election to defer the Award payout under the terms of the Deferred Compensation Plan for Directors and Executives ("DCP").

All Award payouts shall be audited by the Internal Audit department and approved by the Committee prior to payment.

The Plan shall be administered by the Committee. The Committee shall have the exclusive authority and responsibility for all matters in connection with the operation and administration of the Plan. Decisions by the Committee shall be final and binding upon all parties affected by the Plan, including the beneficiaries of Participants.

The Committee may rely on information and recommendations provided by management. The Committee may delegate to management the responsibility for decisions that it may make or actions that it may take under the terms of the Plan, subject to the Committee's reserved right to review such decisions or actions and modify them when necessary or appropriate under the circumstances. The Committee shall not allow any employee to obtain control over decisions or actions that affect that employee's Plan benefits.

RECOUPMENT ON EARNINGS RESTATEMENT

If at any time before a Change in Control and within three years after the payout of Awards for a Program Term, Parent's financial statements for that Program Term are the subject of a restatement due to the Misconduct of any person, each Participant who received an Award payout for that Program Term (whether or not such Participant was personally involved in such Misconduct) shall repay to the Company the Excess Bonus Compensation (as defined below). For purposes of the Plan, "Excess Bonus Compensation" for any Participant means the positive difference, if any, between (i) the Participant's Award payout as originally calculated, and (ii) the Participant's Award payout as recalculated with the results for Company performance goals being based on Parent's financial statements as restated. Excess Bonus Compensation shall not include any amounts in respect of any individual performance goals or in respect of Company performance goals that are not measured in whole or in part on financial results reported in Parent's financial statements. The Committee may, in its sole discretion, reduce the amount of Excess Bonus Compensation to be repaid by any Participant to take into account the tax consequences of such repayment for the Participant.

If any portion of an Award payout was deferred under the DCP, any Excess Bonus Compensation to be repaid with respect to that Award shall first be recovered by canceling all or a portion of the amount so deferred under the DCP and any interest credited under the DCP with respect to such cancelled amount. The Company may seek direct repayment from the Participant of any Excess Bonus Compensation not so recovered and may, to the extent permitted by applicable law, offset such Excess Bonus Compensation against any compensation or other amounts owed by the Company to the Participant. In particular, Excess Bonus Compensation may be recovered by offset against the after-tax proceeds of deferred compensation payouts under the DCP, the Company's Executive Supplemental Retirement Income Plan or the Company's Supplemental Executive Retirement Plan at the times such deferred compensation payouts occur under the terms of those plans. Excess Bonus Compensation that remains unpaid for more than 60 days after demand by the Company shall accrue interest at the rate used from time to time for crediting interest under the DCP.

"Misconduct" shall mean (a) willful commission by any person of an act of fraud or dishonesty or (b) willful gross negligence by any person in the performance of his or her duties.

"Change in Control" shall mean the occurrence of any of the following events:

(a) The consummation of:

- (i) any consolidation, merger or plan of share exchange involving Parent (a "Merger") as a result of which the holders of outstanding securities of Parent ordinarily having the right to vote for the election of directors ("Voting Securities") immediately prior to the Merger do not continue to hold at least 50% of the combined voting power of the outstanding Voting Securities of the surviving corporation or a parent corporation of the surviving corporation immediately after the Merger, disregarding any Voting Securities issued to or retained by such holders in respect of securities of any other party to the Merger;
- (ii) any consolidation, merger, plan of share exchange or other transaction involving the Company as a result of which Parent does not continue to hold, directly or indirectly. at least 50% of the outstanding securities of the Company ordinarily having the right to vote for the election of directors; or
- (iii) any sale, lease, exchange or other transfer (in one transaction or a series of related transactions) of all, or substantially all, the assets of Parent or the Company;
- (b) At any time during a period of two consecutive years, individuals who at the beginning of such period constituted Parent's Board of Directors ("Incumbent Directors") shall cease for any reason to constitute at least a majority thereof; provided, however, that the term "Incumbent Director" shall also include each new director elected during such two-year period whose nomination or election was approved by two-thirds of the Incumbent Directors then in office; or
- (c) Any person (as such term is used in Section 14(d) of the Securities Exchange Act of 1934, other than Parent or any employee benefit plan sponsored by Parent) shall, as a result of a tender or exchange offer, open market purchases or privately negotiated purchases from anyone other than Parent, have become the beneficial owner (within the meaning of Rule 13d-3 under the Securities Exchange Act of 1934), directly or indirectly, of Voting Securities representing twenty percent (20%) or more of the combined voting power of the then outstanding Voting Securities.

AMENDMENTS AND TERMINATION

The Board has the power to terminate this Plan at any time or to amend this Plan at any time and in any manner that it may deem advisable.

IN WITNESS WHEREOF this Plan was duly amended effective as of October 1, 2018.

NORTHWEST NATURAL GAS COMPANY

By: /s/ DAVID H. ANDERSON

David H. Anderson

President and Chief Executive Officer

Exhibit I Effective January 1, 2022

Participants, Target Awards and Individual Performance Program Term: January 1, 2022 – December 31, 2022

Exhibit II

Company Performance Factor Program Term: January 1, 2022 – December 31, 2022

Company Performance Factor Formula	Performance Fa	ctor Formula:
------------------------------------	----------------	---------------

2022 NI Results

_				-				
	Net Income Component	X 71.43%	+		Operations Component	X 28.57%	ш	Company Performance Factor
*		_		\				

Net Income Component:

The Net Income (NI) Component will be determined using the formula in Note 1 below using Holding Company consolidated NI results. The table shows values rounded.

NI Performance Component

	0%
	50%
	100%
	175%
Notes on NI Component:	
1) Values between those shown above will be interpolated using	g the formula shown below:
Regression Interpolation Line for NI between \$ and \$x where X is the NI results for the year.	is y =x –and line for NI between \$ and \$ is y =
2) Final NI Number will be rounded to two places to the right of the approved exceptions.	ne decimal. This will be the same number as reported to shareholders before any
94761942.2 0055570-00385 6	

Operations Component:

The Operations Component (which aligns with NBU incentive goals) for 2022 will be determined using the following formula and table:

2022 Operational Goals

Goals	Goal Performan	ice Rating	Goal Weight
Customer Satisfaction (Overall)	Cust. Sat.	Rating 0% 100% 200%	16.667%
Customer Satisfaction (Staff Interaction)	Cust. Sat.	<u>Rating</u> 0% 100% 200%	16.667%
Customer Growth (Total New Meter Sets)	Total New Meter Sets	<u>Rating</u> 0% 100% 200%	16.667%
Public Safety - Damages (% of calls w/response time less than 45 minutes)	% Call Rsp.	<u>Rating</u> 0% 100% 200%	16.667%
Public Safety - Odor Response (% of calls w/response time less than 45 minutes)	<u>% Call Rsp.</u>	<u>Rating</u> 0% 100% 200%	16.667%
Employee Safety Each factor weighted 50% DART Rate Days Away Restricted Time	DART Rate	<u>Rating</u> 0% 100% 200%	16.667%
PMVC No. of Preventable Motor Vehicle Collison (There will be no payout under this metric in the event of an on-the-job employee fatality due to a preventable safety incident)	<u>PMVC</u>	Rating 0% 100% 200%	13.33.78
TOTAL			100%

Notes on Operations Goals:

1) Goal ratings will be interpolated between amounts shown.

2) The Goal Performance Rating for each goal is limited to 200%.

3) The Operations Component is limited to 200% and the aggregate performance from this component for use in the EAIP is limited to 175%.

Final Notes on Company Performance Factor and General:

Final EAIP Participant Awards to participants will be rounded up to the nearest \$1,000.

Final NI results for 2022 could be adjusted for the impact of certain events as determined by the OECC.

94761942.2 0055570-00385 7

PERFORMANCE SHARE LONG TERM INCENTIVE AGREEMENT

This Agreement is entered into as of Febru	nary, 2022, between Northwest Natural Holding Company, an C)regon
corporation (the "Company"), and	("Recipient").	

On February 23, 2022, the Organization and Executive Compensation Committee (the "Committee") of the Company's Board of Directors (the "Board") authorized a performance-based stock award (the "Award") to Recipient pursuant to Section 6 of the Company's Long Term Incentive Plan (the "Plan"). Recipient desires to accept the Award subject to the terms and conditions of this Agreement.

NOW, THEREFORE, the parties agree as follows:

1. Award. Subject to the terms and conditions of this Agreement, the Company shall issue or otherwise deliver to the Recipient the number of shares of Common Stock of the Company (the "Performance Shares") determined under this Agreement based on (a) the performance of the Company during the three-year period from January 1, 2022 to December 31, 2024 (the "Award Period") as described in Section 2 and (b) Recipient's continued employment during the Award Period as described in Section 3. If the Company issues or otherwise delivers Performance Shares to Recipient, the Company shall also pay to Recipient the amount of cash determined under Section 4 (the "Dividend Equivalent Cash Award"). Recipient's "Target Share Amount" for purposes of this Agreement is ______ shares.

2. Performance Conditions.

2.1 <u>Payout Factor</u>. Subject to possible reduction under Section 3, the number of Performance Shares to be issued or otherwise delivered to Recipient shall be determined by multiplying the Payout Factor (as defined below) by the Target Share Amount. The "Payout Factor" shall be equal to (a) the TSR Modifier as determined under Section 2.2, multiplied by (b) the EPS Payout Factor as determined under Section 2.3 below; provided, however, that the Payout Factor shall not be greater than 200% and the Payout Factor shall be 0% if the ROIC Performance Threshold (as defined in Section 2.4 below) is not satisfied. Notwithstanding the foregoing, if a Change in Control (as defined in Section 3.7) occurs before the last day of the Award Period, the Payout Factor shall be 100%.

2.2 TSR Modifier.

(a) The "TSR Modifier" shall be determined under the table below based on the TSR Percentile Rank (as defined below) of the Company:

TSR Percentile Rank	TSR Modifier
less than 25%	75%
25% to 75%	100%
more than 75%	125%

(b) To determine the Company's "TSR Percentile Rank," the TSR of the Company and each of the Peer Group Companies (as defined below) shall be calculated, and the Peer Group Companies shall be ranked based on their respective TSR's from lowest to highest. If the Company's TSR is equal to the TSR of any other Peer Group Company, the Company's TSR Percentile Rank shall be equal to the number of Peer Group Companies with a lower TSR divided by the number that is one less than the total number of Peer Group Companies, with the resulting amount expressed as a percentage and rounded to the nearest tenth of a percentage point. If the Company's TSR is between the TSRs of any two Peer Group

Companies, the TSR Percentile Ranks of those two Peer Group Companies shall be determined as set forth in the preceding sentence, and the Company's TSR Percentile Rank shall be interpolated as follows. The excess of the Company's TSR over the TSR of the lower Peer Group Company shall be divided by the excess of the TSR of the higher Peer Group Company over the TSR of the lower Peer Group Company. The resulting fraction shall be multiplied by the difference between the TSR Percentile Ranks of the two Peer Group Companies. The product of that calculation shall be added to the TSR Percentile Rank of the lower Peer Group Company, and the resulting sum (rounded to the nearest tenth of a percentage point) shall be the Company's TSR Percentile Rank. The intent of this definition of TSR Percentile Rank is to produce the same result as calculated using the PERCENTRANK function in Microsoft Excel to determine the rank of the Company's TSR within the array consisting of the TSRs of the Peer Group Companies.

- (c) The "Peer Group Companies" consist of those companies set forth on Exhibit A that continue to have publicly-traded common stock through December 31, 2024.
- (d) The "TSR" for the Company and each Peer Group Company shall be calculated by (1) assuming that \$100 is invested in the common stock of the company at a price equal to the average of the closing market prices of the stock for the period from October 1, 2021 to December 31, 2021, (2) assuming that for each dividend paid on the stock during the Award Period, the amount equal to the dividend paid on the assumed number of shares held is reinvested in additional shares at a price equal to the closing market price of the stock on the ex-dividend date for the dividend, and (3) determining the final dollar value of the total assumed number of shares based on the average of the closing market prices of the stock for the period from October 1, 2024 to December 31, 2024. The "TSR" shall then equal the amount determined by subtracting \$100 from the foregoing final dollar value, dividing the result by 100 and expressing the resulting fraction as a percentage.
- (e) If during the Award Period any Peer Group Company enters into an agreement pursuant to which all or substantially all of the stock or assets of the Peer Group Company will be acquired by a third party (a "Signed Acquisition"), and if the Signed Acquisition is not completed by the end of the Award Period, then that company shall not be a Peer Group Company. If a Signed Acquisition of a Peer Group Company is terminated (other than in connection with the execution of another Signed Acquisition) before the end of the Award Period, then that company shall remain a Peer Group Company, and the TSR for that Peer Group Company shall be calculated as provided in Section 2.2(d), except that if the announcement of the termination of the Signed Acquisition occurs during the last three months of the Award Period, for purposes of determining the final dollar value under clause (3) of Section 2.2(d), the three-month period for which closing market prices are averaged shall be shortened to exclude any trading days preceding the announcement of the termination of the Signed Acquisition.

2.3 EPS Payout Factor.

(a) The "EPS Payout Factor" shall be determined under the table below based on the Cumulative EPS Achievement Percentage (as defined below) achieved by the Company for the Award Period:

2

Cumulative EPS Achievement

Percentage	EPS Payout Factor
less than 93%	0%
93%	40%
100%	100%
105% or more	185%

If the Company's Cumulative EPS Achievement Percentage is between any two data points set forth in the first column of the above table, the EPS Payout Factor shall be interpolated as follows. The excess of the Company's Cumulative EPS Achievement Percentage of the lower data point shall be divided by the excess of the Cumulative EPS Achievement Percentage of the higher data point over the Cumulative EPS Achievement Percentage of the lower data point. The resulting fraction shall be multiplied by the difference between the EPS Payout Factors in the above table corresponding to the two data points. The product of that calculation shall be rounded to the nearest hundredth of a percentage point and then added to the EPS Payout Factor in the above table corresponding to the lower data point, and the resulting sum shall be the EPS Payout Factor.

- (b) The Company's "Cumulative EPS Achievement Percentage" for the Award Period shall equal the Cumulative EPS (as defined below) divided by the Cumulative EPS Target (as defined below), expressed as a percentage and rounded to the nearest tenth of a percentage point.
- (c) The Company's "Cumulative EPS" for the Award Period shall equal the sum of the Company's diluted earnings per share of common stock ("EPS") for each of the three years in the Award Period. Subject to adjustment in accordance with Section 2.5 below, the Company's diluted earnings per share of common stock for any year shall be as set forth in the audited consolidated financial statements of the Company and its subsidiaries for that year. After giving effect to any adjustments required by Section 2.5, the EPS for each year shall be rounded to the nearest penny.
- (d) The Company's "Cumulative EPS Target" for the Award Period shall equal the sum of the EPS targets approved by the Committee for each of the three years in the Award Period. The EPS target for the first year of the Award Period as approved by the Committee is \$___. Within the first 90 days of the second year of the Award Period, the Committee shall approve the EPS target for that year. Within the first 90 days of the third year of the Award Period, the Committee shall approve the EPS target for that year.

2.4 ROIC Performance Threshold.

- (a) For purposes of this Agreement, the "ROIC Performance Threshold" shall be satisfied if the Company's Average ROIC (as defined below) for the Award Period is greater than or equal to %.
- (b) The Company's "Average ROIC" for the Award Period shall equal the simple average of the Company's ROIC (as defined below) for each of the three years in the Award Period, rounded to the nearest hundredth of a percentage point. The Company's "ROIC" for any year shall be calculated by dividing the Company's Adjusted Net Income (as defined below) for the year by the Company's Average Long Term Capital (as defined below) for the year, and rounding the result to the nearest hundredth of a percentage point. Subject to adjustment in accordance with Section 2.5 below, the Company's "Adjusted Net Income" for any

3

year shall be equal to the Company's net income for the year, increased by the Company's interest expense, net for the year and reduced by the Company's interest income (including net interest on deferred regulatory accounts) for the year, in each case as set forth in the Company's Annual Report on Form 10-K for that year. "Average Long Term Capital" for any year shall mean the average of the Company's Long Term Capital (as defined below) as of the last day of the year and the Company's Long Term Capital as of the last day of the prior year. Subject to adjustment in accordance with Section 2.5 below, "Long Term Capital" as of any date shall equal the sum of the Company's total shareholders' equity as of that date and the Company's long-term debt (including current maturities) as of that date, in each case as set forth on the audited consolidated balance sheet of the Company as of that date.

2.5 EPS and ROIC Adjustments. The Committee may, at any time, approve adjustments to the calculation of Cumulative EPS and/or Average ROIC to take into account such unanticipated circumstances or significant, non-recurring or unplanned events as the Committee may determine in its sole discretion, and such adjustments may increase or decrease Cumulative EPS and/or Average ROIC. Possible circumstances that may be the basis for adjustments shall include, but not be limited to, any change in applicable accounting rules or principles; any gain or loss on the disposition of a business; impairment of assets; dilution caused by Board approved business acquisition; tax changes and tax impacts of other changes; changes in applicable laws and regulations; changes in rate case timing; changes in the Company's structure; and any other circumstances outside of management's control.

3. Employment Condition.

- 3.1 Except as provided in Sections 3.2, 3.3 or 7.2, in order to receive a payout of Performance Shares, Recipient must be employed by the Company or any parent or subsidiary of the Company (the "Employer") on the last day of the Award Period.
- 3.2 If Recipient's employment by the Employer is terminated at any time prior to the end of the Award Period because of death, physical disability (within the meaning of Section 22(e)(3) of the Internal Revenue Code of 1986 (the "Code")), or Retirement (unless such Retirement results from a termination of Recipient's employment by the Employer for Cause), Recipient shall be entitled to receive a pro-rated award. The number of Performance Shares to be issued or otherwise delivered as a pro-rated award under this Section 3.2 shall be determined by multiplying the number of Performance Shares determined under Section 2 by a fraction, the numerator of which is the number of days Recipient was employed by Employer during the Award Period and the denominator of which is the number of days in the Award Period. If Recipient's employment by the Employer terminates because of Retirement, death or physical disability and a Change in Control subsequently occurs before the end of the Award Period, the number of Performance Shares determined under Section 3.3 shall immediately be paid to Recipient. If a Change in Control occurs and Recipient's employment by the Employer subsequently terminates before the end of the Award Period because of Retirement, death or physical disability, the number of Performance Shares determined under Section 3.3 shall immediately be paid to Recipient.

3.3 <u>CIC Acceleration</u>.

(a) If Recipient is a party to a Change in Control Severance Agreement with the Company or a parent or subsidiary of the Company, Recipient shall immediately be paid a pro-rated award if Recipient becomes entitled to a Change in Control Severance Benefit (as defined below). The number of Performance Shares to be issued or otherwise delivered as a pro-rated award under this Section 3.3 shall be determined by multiplying the Target Share Amount by a fraction, the numerator of which is the number of days Recipient was employed by the Employer during the Award Period and the denominator of

4

which is the number of days in the Award Period. A "Change in Control Severance Benefit" means the severance benefit provided for in Recipient's Change in Control Severance Agreement with the Company or a parent or subsidiary of the Company; provided, however, that such severance benefit is a "Change in Control Severance Benefit" for purposes of this Agreement only if, under the terms of Recipient's Change in Control Severance Agreement, Recipient becomes entitled to the severance benefit (i) after a Change in Control of the Company has occurred, (ii) because Recipient's employment with the Employer has been terminated by Recipient for good reason in accordance with the terms and conditions of the Change in Control Severance Agreement or by the Employer other than for cause, and (iii) because Recipient has satisfied any other conditions or requirements specified in the Change in Control Severance Agreement and necessary for Recipient to become entitled to receive the severance benefit. For purposes of this Section 3.3(a), the terms "change in control," "good reason," "cause" and "disability" shall have the meanings set forth in Recipient's Change in Control Severance Agreement.

- (b) If Recipient is <u>not</u> a party to a Change in Control Severance Agreement with the Company or a parent or subsidiary of the Company, Recipient shall immediately be paid a pro-rated award in the amount stated in Section 3.3(a) if a Change in Control (as defined in Section 3.7 below) occurs and at any time after the earlier of Shareholder Approval (as defined in Section 3.8 below), if any, or the Change in Control and on or before the second anniversary of the Change in Control, (i) Recipient's employment is terminated by the Employer (or its successor) without Cause (as defined in Section 3.6 below), or (b) Recipient's employment is terminated by Recipient for Good Reason (as defined in Section 3.9 below).
- 3.4 If Recipient's employment by the Employer is terminated at any time prior to the end of the Award Period and Section 3.2, 3.3 or 7.2 does not apply to such termination, Recipient shall not be entitled to receive any Performance Shares.
- 3.5 "Retirement" shall mean termination of employment (a) on or after the first anniversary of the date of this Agreement, and (b) after Recipient is (1) age 62 with at least five years of service as an employee of the Company or a parent or subsidiary of the Company, or (2) age 60 with age plus years of service (including fractions) as an employee of the Company or a parent or subsidiary of the Company totaling at least 70.
- 3.6 "Cause" shall mean (a) the willful and continued failure by Recipient to perform substantially Recipient's assigned duties with the Employer (other than any such failure resulting from incapacity due to physical or mental illness) after a demand for substantial performance is delivered to Recipient by the Employer which specifically identifies the manner in which Recipient has not substantially performed such duties, (b) willful commission by Recipient of an act of fraud or dishonesty resulting in economic or financial injury to the Company or Employer, (c) willful misconduct by Recipient that substantially impairs the business or reputation of the Company or Employer, or (d) willful gross negligence by Recipient in the performance of his or her duties
- 3.7 For purposes of this Agreement, a "Change in Control" of the Company shall mean the occurrence of any of the following events:
 - (a) The consummation of:

(1) any consolidation, merger or plan of share exchange involving the Company (a "Merger") as a
result of which the holders of outstanding securities of the Company ordinarily having the right to vote for the election of directors
("Voting Securities") immediately prior to the Merger do not continue to hold at least 50% of the combined voting power of the
outstanding Voting Securities of the surviving corporation or a

5

parent corporation of the surviving corporation immediately after the Merger, disregarding any Voting Securities issued to or retained by such holders in respect of securities of any other party to the Merger; or

- (2) any consolidation, merger, plan of share exchange or other transaction involving Northwest Natural Gas Company ("NW Natural") as a result of which the Company does not continue to hold, directly or indirectly, at least 50% of the outstanding securities of NW Natural ordinarily having the right to vote for the election of directors; or
- (3) any sale, lease, exchange or other transfer (in one transaction or a series of related transactions) of all, or substantially all, the assets of the Company or NW Natural;
- (b) At any time during a period of two consecutive years, individuals who at the beginning of such period constituted the Board ("Incumbent Directors") shall cease for any reason to constitute at least a majority thereof; provided, however, that the term "Incumbent Director" shall also include each new director elected during such two-year period whose nomination or election was approved by two-thirds of the Incumbent Directors then in office; or
- (c) Any person (as such term is used in Section 14(d) of the Securities Exchange Act of 1934, other than the Company or any employee benefit plan sponsored by the Company or NW Natural) shall, as a result of a tender or exchange offer, open market purchases or privately negotiated purchases from anyone other than the Company, have become the beneficial owner (within the meaning of Rule 13d-3 under the Securities Exchange Act of 1934), directly or indirectly, of Voting Securities representing twenty percent (20%) or more of the combined voting power of the then outstanding Voting Securities.
- 3.8 For purposes of this Agreement, "Shareholder Approval" shall be deemed to have occurred if the shareholders of the Company approve an agreement entered into by the Company, the consummation of which would result in the occurrence of a Change in Control.
- 3.9 For purposes of this Agreement, "Good Reason" shall mean the occurrence after Shareholder Approval, if applicable, or the Change in Control, of any of the following circumstances, but only if (x) Recipient gives notice to Employer of Recipient's intent to terminate employment for Good Reason within 30 days after the later of (1) notice to Recipient of such circumstances, or (2) the Change in Control, and (y) such circumstances are not fully corrected by the Employer within 90 days after Recipient's notice:
- (a) the assignment to Recipient of a different title, job or responsibilities that results in a decrease in the level of Recipient's responsibility; provided that Good Reason shall not exist if Recipient continues to have the same or a greater general level of responsibility for the former Employer operations after the Change in Control as Recipient had prior to the Change in Control even though such responsibilities have necessarily changed due to the former Employer operations becoming a subsidiary or division of the surviving company;
- (b) a reduction by the Employer in Recipient's base salary as in effect immediately prior to the earlier of Shareholder Approval, if applicable, or the Change in Control;
- (c) the failure by Employer to continue in effect any employee benefit or incentive plan in which Recipient is participating immediately prior to the earlier of Shareholder Approval, if applicable, or the Change in Control (or plans providing Recipient with at least substantially similar benefits) other than as a result of the normal expiration of any such plan in accordance with its terms as in effect immediately prior to the earlier of Shareholder

6

Approval, if applicable, or the Change in Control, or the taking of any action, or the failure to act, by Employer which would adversely affect Recipient's continued participation in any of such plans on at least as favorable a basis to Recipient as is the case immediately prior to the earlier of Shareholder Approval, if applicable, or the Change in Control or which would materially reduce Recipient's benefits in the future under any of such plans or deprive Recipient of any material benefit enjoyed by Recipient immediately prior to the earlier of Shareholder Approval, if applicable, or the Change in Control;

- (d) the failure by the Employer to provide and credit Recipient with the number of paid vacation days to which Recipient is then entitled in accordance with the Employer's normal vacation policy as in effect immediately prior to the earlier of Shareholder Approval, if applicable, or the Change in Control; or
- (e) the Employer's requiring Recipient to be based more than 30 miles from where Recipient's office is located immediately prior to the earlier of Shareholder Approval, if applicable, or the Change in Control except for required travel on the Employer's business to an extent substantially consistent with the business travel obligations which Recipient undertook on behalf of the Employer prior to the earlier of Shareholder Approval, if applicable, or the Change in Control.
- 4. <u>Dividend Equivalent Cash Award</u>. The amount of the Dividend Equivalent Cash Award shall be determined by multiplying the number of Performance Shares deliverable to Recipient as determined under Sections 2 and 3 by the total amount of dividends paid per share of the Company's Common Stock for which the dividend record date occurred after the beginning of the Award Period and before the date of delivery of the Performance Shares.
- 5. <u>Certification and Payment</u>. At the regularly scheduled meeting of the Committee held in February of the year immediately following the final year of the Award Period (the "Certification Meeting"), the Committee shall review the Company's results for the Award Period. Prior to the Certification Meeting, the Company shall calculate the number of Performance Shares deliverable and the amount of the Dividend Equivalent Cash Award payable to Recipient, and shall submit these calculations to the Committee. At or prior to the Certification Meeting, the Committee shall certify in writing (which may consist of approved minutes of the Certification Meeting) the number of Performance Shares deliverable to Recipient and the amount of the Dividend Equivalent Cash Award payable to Recipient. Subject to applicable tax withholding, the amounts so certified shall be delivered or paid (as applicable) on a date (the "Payment Date") that is the later of March 1, 2025 or five business days following the Certification Meeting, and no amounts shall be delivered or paid prior to certification. No fractional shares shall be delivered and the number of Performance Shares deliverable shall be rounded to the nearest whole share. Notwithstanding the foregoing, if Recipient shall have made a valid election to defer receipt of Performance Shares or the Dividend Equivalent Cash Award pursuant to the terms of Northwest Natural's Deferred Compensation Plan for Directors and Executives (the "DCP"), payment of the award shall be made in accordance with that election.
- 6. <u>Tax Withholding.</u> Recipient acknowledges that, on the Payment Date when the Performance Shares are issued or otherwise delivered to Recipient, the Value (as defined below) on that date of the Performance Shares (as well as the amount of the Dividend Equivalent Cash Award) will be treated as ordinary compensation income for federal and state income and FICA tax purposes, and that the Employer will be required to withhold taxes on these income amounts. To satisfy the required withholding amount, the Employer shall first withhold all or part of the Dividend Equivalent Cash Award, and if that is insufficient, the Employer shall withhold the number of Performance Shares having a Value equal to the remaining withholding amount. For purposes of this Section 6, the "Value" of a Performance Share shall be equal to the closing market price for Company Common Stock on the last trading day preceding the Payment Date.

7

Notwithstanding the foregoing, Recipient may elect not to have Performance Shares withheld to cover taxes by giving notice to the Company in writing prior to the Payment Date, in which case the Performance Shares shall be issued or acquired in the Recipient's name on the Payment Date thereby triggering the tax consequences, but the Company shall retain the certificate for the Performance Shares as security until Recipient shall have paid to the Company in cash any required tax withholding not covered by withholding of the Dividend Equivalent Cash Award.

- 7. <u>Sale of the Company</u>. If there shall occur before the Payment Date a merger, consolidation or plan of exchange involving the Company pursuant to which the outstanding shares of Common Stock of the Company are converted into cash or other stock, securities or property, or a sale, lease, exchange or other transfer (in one transaction or a series of related transactions) of all, or substantially all, the assets of the Company (either, a "Company Sale"), then either:
- 7.1 the unvested Performance Shares shall be converted into restricted stock units for stock of the surviving or acquiring corporation in the applicable transaction, with the amount and type of shares subject thereto to be conclusively determined by the Committee, taking into account the relative values of the companies involved in the applicable transaction and the exchange rate, if any, used in determining shares of the surviving corporation to be held by the former holders of the Company's Common Stock following the applicable transaction, and disregarding fractional shares; or
- 7.2 a pro-rated number of Performance Shares and the related dividend equivalent cash payment shall be delivered simultaneously with the closing of the applicable transaction such that Recipient will participate as a shareholder in receiving proceeds from such transaction with respect to those shares. The number of Performance Shares to be delivered as a pro-rated award under this Section 7.2 shall be determined by multiplying the Target Share Amount by a fraction, the numerator of which is the number of days of the Award Period elapsed prior to the closing of the transaction and the denominator of which is the number of days in the Award Period.
- 8. <u>Changes in Capital Structure</u>. If the outstanding Common Stock of the Company is hereafter increased or decreased or changed into or exchanged for a different number or kind of shares or other securities of the Company by reason of any stock split, combination of shares or dividend payable in shares, recapitalization or reclassification, appropriate adjustment shall be made by the Committee in the number and kind of shares subject to this Agreement so that the Recipient's proportionate interest before and after the occurrence of the event is maintained.

9. Recoupment On Misconduct.

9.1 If at any time before a Change in Control and within three years after the Payment Date, the Committee determines that Recipient engaged in any Misconduct (as defined below) during the Award Period that contributed to an obligation to restate the Company's financial statements for any quarter or year in the Award Period or that otherwise has had (or will have when publicly disclosed) an adverse impact on the Company's common stock price, Recipient shall repay to the Company the Excess LTIP Compensation (as defined below). The term "Excess LTIP Compensation" means the excess of (a) the number of Performance Shares and the amount of the Dividend Equivalent Cash Award as originally calculated and certified under Section 5 of this Agreement, over (b) the number of Performance Shares and the amount of the Dividend Equivalent Cash Award as recalculated (1) for the TSR Modifier, assuming that the average of the closing market prices of the Company's common stock for the period from October 1, 2024 to December 31, 2024 was an amount determined appropriate by the Committee in its discretion to reflect what the Company's common stock price would have been if the restatement had occurred or other Misconduct had been disclosed prior to October 1, 2024, and

8

- (2) for the EPS Payout Factor and the ROIC Performance Threshold, based on the Company's financial statements for all years of the Award Period as restated. The Committee may, in its sole discretion, reduce the amount of Excess LTIP Compensation to be repaid by Recipient to take into account the tax consequences of such repayment or any other factors. If any Performance Shares included in the Excess LTIP Compensation are sold by Recipient prior to the Company's demand for repayment (including any shares withheld for taxes under Section 6 of this Agreement), Recipient shall repay to the Company 100% of the proceeds of such sale or sales. The return of Excess LTIP Compensation is in addition to and separate from any other relief available to the Company due to Recipient's Misconduct.
- 9.2 "Misconduct" shall mean (a) willful commission by Recipient of an act of fraud or dishonesty resulting in economic or financial injury to the Company, (b) willful misconduct by Recipient that substantially impairs the Company's business or reputation, or (c) willful gross negligence by Recipient in the performance of his or her duties.
- 9.3 If any portion of the Performance Shares or the Dividend Equivalent Cash Award was deferred under the DCP, the Excess LTIP Compensation shall first be recovered by canceling all or a portion of the amounts so deferred under the DCP and any dividends or other earnings credited under the DCP with respect to such cancelled amounts. The Company may seek direct repayment from Recipient of any Excess LTIP Compensation not so recovered and may, to the extent permitted by applicable law, offset such Excess LTIP Compensation against any compensation or other amounts owed by the Company to Recipient. In particular, Excess LTIP Compensation may be recovered by offset against the after-tax proceeds of deferred compensation payouts under the DCP, Northwest Natural's Executive Supplemental Retirement Income Plan or Northwest Natural's Supplemental Executive Retirement Plan at the times such deferred compensation payouts occur under the terms of those plans. Excess LTIP Compensation that remains unpaid for more than 60 days after demand by the Company shall accrue interest at the rate used from time to time for crediting interest under the DCP.
- 10. <u>Approvals</u>. The obligations of the Company under this Agreement are subject to the approval of state and federal authorities or agencies with jurisdiction in the matter. The Company will use its best efforts to take steps required by state or federal law or applicable regulations, including rules and regulations of the Securities and Exchange Commission and any stock exchange on which the Company's shares may then be listed, in connection with the award under this Agreement. The foregoing notwithstanding, the Company shall not be obligated to issue or deliver Common Stock under this Agreement if such issuance or delivery would violate applicable state or federal law.
- 11. <u>No Right to Employment</u>. Nothing contained in this Agreement shall confer upon Recipient any right to be employed by the Employer or to continue to provide services to the Employer or to interfere in any way with the right of the Employer to terminate Recipient's services at any time for any reason, with or without cause.

12. Miscellaneous.

- 12.1 <u>Entire Agreement; Amendment</u>. This Agreement constitutes the entire agreement of the parties with regard to the subjects hereof and may be amended only by written agreement between the Company and Recipient.
- 12.2 <u>Notices</u>. Any notice required or permitted under this Agreement shall be in writing and shall be deemed sufficient when delivered personally to the party to whom it is addressed or when deposited into the United States Mail as registered or certified mail, return receipt requested, postage prepaid, addressed to the Company, Attention: Corporate Secretary, at its principal executive offices, or to Employer, Attention: Corporate Secretary, at its principal

9

executive offices, or to Recipient at the address of Recipient in the Company's records, or at such other address as such party may designate by ten (10) days' advance written notice to the other party.

- 12.3 <u>Assignment; Rights and Benefits</u>. Recipient shall not assign this Agreement or any rights hereunder to any other party or parties without the prior written consent of the Company. The rights and benefits of this Agreement shall inure to the benefit of and be enforceable by the Company's successors and assigns and, subject to the foregoing restriction on assignment, be binding upon Recipient's heirs, executors, administrators, successors and assigns.
- 12.4 <u>Further Action</u>. The parties agree to execute such further instruments and to take such further action as may reasonably be necessary to carry out the intent of this Agreement.
- 12.5 <u>Applicable Law; Attorneys' Fees</u>. The terms and conditions of this Agreement shall be governed by the laws of the State of Oregon. In the event either party institutes litigation hereunder, the prevailing party shall be entitled to reasonable attorneys' fees to be set by the trial court and, upon any appeal, the appellate court.
- 12.6 <u>Counterparts</u>. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

NORTHWEST NATURAL HOLDING COMPANY

By ______

Title _____

RECIPIENT

10

EXHIBIT A Peer Group Companies

Atmos Energy Corporation
ONE Gas, Inc.
South Jersey Industries, Inc.
Spire Inc.
Southwest Gas Holdings, Inc.
NiSource Inc.
New Jersey Resources Corporation
Avista Corporation
Black Hills Corporation
MGE Energy, Inc.
NorthWestern Corporation
Unitil Corporation

11

RESTRICTED STOCK UNIT AWARD AGREEMENT

corporation (the "Company"), and ("Recipient").
Board of Directors (the "Boa	2, the Organization and Executive Compensation Committee (the "Committee") of the Company's ard") awarded restricted stock units to Recipient pursuant to Section 6 of the Company's Long Term Recipient desires to accept the award subject to the terms and conditions of this Agreement.
NOW, THEREFORE	E, the parties agree as follows:
Company hereby grants to the upon vesting in accordance was for each RSU. Upon vesting each vested RSU in an amound dividend record dates occurred to the control of the co	ricted Stock Units; Dividend Equivalents. Subject to the terms and conditions of this Agreement, the ne Recipient restricted stock units (the "RSUs"). The grant of RSUs obligates the Company, with this Agreement, to deliver to the Recipient one share of Common Stock of the Company (a "Share") of each RSU, the Company also agrees to make a dividend equivalent cash payment with respect to ant equal to the total amount of dividends paid per share of Company Common Stock for which the red after the date of this Agreement and before the date of delivery of the underlying Shares. The RSUs set forth in Sections 2.1 and 2.10 below.
2. <u>Vesting; Forfe</u>	eiture Restriction.
2.1 <u>Vestin</u>	ng Schedule.
shall vest as follows:	All of the RSUs shall initially be unvested. Subject to Sections 2.3, 2.4, 2.5, 2.10 and 5.2, the RSUs
in Section 2.2 below) is satis	(1) one-fourth of the RSUs shall vest on March 1, 2023 if the Performance Threshold (as defined fied for 2022;
is satisfied for 2023;	(2) an additional one-fourth of the RSUs shall vest on March 1, 2024 if the Performance Threshold
is satisfied for 2024; and	(3) an additional one-fourth of the RSUs shall vest on March 1, 2025 if the Performance Threshold
satisfied for 2025.	(4) the final one-fourth of the RSUs shall vest on March 1, 2026 if the Performance Threshold is
forfeited to the Company effe	If the Performance Threshold is not satisfied for any year set forth in (1), (2), (3) or (4) above, the d if the Performance Threshold had been satisfied for that year (the "Performance Year") shall be ective as of the last day of the Performance Year. For example, if the Performance Threshold is not that were scheduled to vest on March 1, 2023 shall be forfeited effective as of December 31, 2022.
deemed to be satisfied for all RSUs outstanding at the time	If a Change in Control (as defined in Section 2.6 below) occurs, the Performance Threshold shall be I Performance Years that were not completed prior to the Change in Control, with the effect that the e of the Change of Control shall vest upon completion of the applicable time periods in Section 2.1(a).
114205053.2 0055570-00335	

2.2 Performance Threshold.

- (a) For purposes of this Agreement, the "Performance Threshold" for any year shall be satisfied if the ROE (as defined below) for that year is greater than the 5 Yr Avg Cost of LT Debt (as defined below) for that year.
- (b) The "ROE" for any year shall be calculated by dividing the Company's Adjusted Net Income (as defined below) for the year by the Average Equity (as defined below) for the year. Subject to adjustment in accordance with Section 2.2(c) below, the Company's "Adjusted Net Income" for any year shall be equal to the Company's net income attributable to common shareholders for the year, as set forth in the audited consolidated statement of income of the Company and its subsidiaries for the year. Subject to adjustment in accordance with Section 2.2(c) below, "Average Equity" for any year shall mean the average of the Company's total common stock equity as of the last day of the year and the Company's total common stock equity as of the last day of the prior year, in each case as set forth on the audited consolidated balance sheet of the Company and its subsidiaries as of the applicable date.
- (c) The Committee may, at any time, approve adjustments to the calculation of ROE to take into account such unanticipated circumstances or significant, non-recurring or unplanned events as the Committee may determine in its sole discretion, and such adjustments may increase or decrease ROE. Possible circumstances that may be the basis for adjustments shall include, but not be limited to, any change in applicable accounting rules or principles; any gain or loss on the disposition of a business; impairment of assets; dilution caused by Board approved business acquisition; tax changes and tax impacts of other changes; changes in applicable laws and regulations; changes in rate case timing; changes in the Company's structure; and any other circumstances outside of management's control.
- The "5 Yr Avg Cost of LT Debt" for any year shall mean the average of five numbers consisting of the Avg Cost of LT Debt (as defined below) for that year and for each of the four preceding years. The "Avg Cost of LT Debt" for any year shall be equal to the sum of the Weighted Costs (as defined below) calculated for each series or tranche of long-term debt of the Company outstanding on the last day of the year. The "Weighted Cost" for a series or tranche of long-term debt as of any date shall be calculated by multiplying the Effective Interest Rate (as defined below) on the debt as of that date by the outstanding principal balance of the debt on that date, and then dividing the resulting amount by the Company's total outstanding principal balance of long-term debt as of that date. The "Effective Interest Rate" for a series or tranche of long-term debt as of any date shall be the yield calculated based on the settlement date for the original issuance of the series or tranche, the maturity date of the series or tranche, the stated annual interest rate of the series or tranche in effect on that date, the number of interest payments per year under the terms of the series or tranche, the initial borrowing of an amount equal to the principal balance net of Debt Issuance Costs (as defined below) for the series or tranche, and the repayment of principal at maturity or otherwise according to the terms of the series or tranche. The "Debt Issuance Costs" for a series or tranche of long-term debt shall include the fees, commissions and expenses of issuance of such debt, any other purchase discount from the face amount of such debt, and any premiums, write-offs of unamortized debt issuance costs and other costs incurred in connection with retiring debt refinanced with the proceeds of such debt, all as reflected in the Company's accounting records. For purposes of this Section 2.2(d), the Company's long term debt and the interest rates and outstanding principal balances of the outstanding series or tranches of long-term debt as of any date shall be those amounts as set forth in the audited consolidated financial statements of the Company and its subsidiaries for the year ending on that date, and shall in all cases include the current portion of any long-term debt and exclude borrowings under a revolving credit facility. For the avoidance of doubt, the Effective Interest Rate for purposes of this Agreement of each series of fixed-rate long-term debt outstanding as of the date of this Agreement is set forth on Exhibit A hereto.

2

2.3 <u>Effect of Retirement, Death, or Disability</u>.

- (a) If Recipient's employment by the Company or any parent or subsidiary of the Company (the "Employer") terminates because of Retirement (as defined below), death or physical disability (within the meaning of Section 22(e) (3) of the Code and a Change in Control has not previously occurred, all outstanding RSUs shall remain outstanding and subject to potential future vesting upon satisfaction of the Performance Threshold for the applicable years.
- (b) If Recipient's employment by the Employer terminates because of Retirement, death or physical disability and a Change in Control subsequently occurs, all outstanding RSUs shall immediately vest. If a Change in Control occurs and Recipient's employment by the Employer subsequently terminates because of Retirement, death or physical disability, all outstanding RSUs shall immediately vest.
- (c) The term "Retirement" means termination of employment (1) on or after the first anniversary of the date of this Agreement, and (2) after the Recipient is (i) age 62 with at least five years of service as an employee of the Company or a parent or subsidiary of the Company, or (ii) age 55 with age plus years of service (including fractions) as an employee of the Company or a parent or subsidiary of the Company totaling at least 70; provided, however, that a termination of Recipient's employment by the Employer for Cause (as defined in Section 2.8 below) shall not constitute a Retirement.
- Agreement with the Company or a parent or subsidiary of the Company, all outstanding RSUs shall immediately vest if Recipient becomes entitled to a Change in Control Severance Benefit (as defined below). A "Change in Control Severance Benefit" means the severance benefit provided for in Recipient's Change in Control Severance Agreement with the Company or a parent or subsidiary of the Company; provided, however, that such severance benefit is a "Change in Control Severance Benefit" for purposes of this Agreement only if, under the terms of Recipient's Change in Control Severance Agreement, Recipient becomes entitled to the severance benefit (a) after a change in control of the Company has occurred, (b) because Recipient's employment with the Employer has been terminated by Recipient for good reason in accordance with the terms and conditions of the Change in Control Severance Agreement or by the Employer other than for cause, and (c) because Recipient has satisfied any other conditions or requirements specified in the Change in Control Severance Agreement and necessary for Recipient to become entitled to receive the severance benefit. For purposes of this Section 2.4, the terms "change in control," "good reason," "cause" and "disability" shall have the meanings set forth in Recipient's Change in Control Severance Agreement.
- 2.5 <u>CIC Acceleration if Not a Party to a Severance Agreement</u>. If Recipient is <u>not</u> a party to a Change in Control Severance Agreement with the Company or a parent or subsidiary of the Company, all outstanding RSUs shall immediately vest if a Change in Control (as defined in Section 2.6 below) occurs and at any time after the earlier of Shareholder Approval (as defined in Section 2.7 below), if any, or the Change in Control and on or before the second anniversary of the Change in Control, (a) Recipient's employment is terminated by the Employer (or its successor) without Cause (as defined in Section 2.8 below), or (b) Recipient's employment is terminated by Recipient for Good Reason (as defined in Section 2.9 below).
- 2.6 <u>Change in Control</u>. For purposes of this Agreement, a "Change in Control" of the Company shall mean the occurrence of any of the following events:

3

(a) The consummation of:

- (1) any consolidation, merger or plan of share exchange involving the Company (a "Merger") as a result of which the holders of outstanding securities of the Company ordinarily having the right to vote for the election of directors ("Voting Securities") immediately prior to the Merger do not continue to hold at least 50% of the combined voting power of the outstanding Voting Securities of the surviving corporation or a parent corporation of the surviving corporation immediately after the Merger, disregarding any Voting Securities issued to or retained by such holders in respect of securities of any other party to the Merger; or
- (2) any consolidation, merger, plan of share exchange or other transaction involving Northwest Natural Gas Company ("NW Natural") as a result of which the Company does not continue to hold, directly or indirectly, at least 50% of the outstanding securities of NW Natural ordinarily having the right to vote for the election of directors; or
- (3) any sale, lease, exchange or other transfer (in one transaction or a series of related transactions) of all, or substantially all, the assets of the Company or NW Natural;
- (b) At any time during a period of two consecutive years, individuals who at the beginning of such period constituted the Board ("Incumbent Directors") shall cease for any reason to constitute at least a majority thereof; provided, however, that the term "Incumbent Director" shall also include each new director elected during such two-year period whose nomination or election was approved by two-thirds of the Incumbent Directors then in office; or
- (c) Any person (as such term is used in Section 14(d) of the Securities Exchange Act of 1934, other than the Company or any employee benefit plan sponsored by the Company or NW Natural) shall, as a result of a tender or exchange offer, open market purchases or privately negotiated purchases from anyone other than the Company, have become the beneficial owner (within the meaning of Rule 13d-3 under the Securities Exchange Act of 1934), directly or indirectly, of Voting Securities representing twenty percent (20%) or more of the combined voting power of the then outstanding Voting Securities.
- 2.7 <u>Shareholder Approval</u>. For purposes of this Agreement, "Shareholder Approval" shall be deemed to have occurred if the shareholders of the Company approve an agreement entered into by the Company, the consummation of which would result in the occurrence of a Change in Control.
- 2.8 <u>Cause</u>. For purposes of this Agreement, "Cause" shall mean (a) the willful and continued failure by Recipient to perform substantially Recipient's assigned duties with the Employer (other than any such failure resulting from incapacity due to physical or mental illness) after a demand for substantial performance is delivered to Recipient by the Employer which specifically identifies the manner in which Recipient has not substantially performed such duties, (b) willful commission by Recipient of an act of fraud or dishonesty resulting in economic or financial injury to the Company or Employer, (c) willful misconduct by Recipient that substantially impairs the business or reputation of the Company or Employer, or (d) willful gross negligence by Recipient in the performance of his or her duties.
- 2.9 <u>Good Reason</u>. For purposes of this Agreement, "Good Reason" shall mean the occurrence after Shareholder Approval, if applicable, or the Change in Control, of any of the following circumstances, but only if (x) Recipient gives notice to Employer of Recipient's intent to terminate employment for Good Reason within 30 days after the later of (1) notice to

4

Recipient of such circumstances, or (2) the Change in Control, and (y) such circumstances are not fully corrected by the Employer within 90 days after Recipient's notice:

- (a) the assignment to Recipient of a different title, job or responsibilities that results in a decrease in the level of Recipient's responsibility; provided that Good Reason shall not exist if Recipient continues to have the same or a greater general level of responsibility for the former Employer operations after the Change in Control as Recipient had prior to the Change in Control even though such responsibilities have necessarily changed due to the former Employer operations becoming a subsidiary or division of the surviving company;
- (b) a reduction by the Employer in Recipient's base salary as in effect immediately prior to the earlier of Shareholder Approval, if applicable, or the Change in Control;
- (c) the failure by Employer to continue in effect any employee benefit or incentive plan in which Recipient is participating immediately prior to the earlier of Shareholder Approval, if applicable, or the Change in Control (or plans providing Recipient with at least substantially similar benefits) other than as a result of the normal expiration of any such plan in accordance with its terms as in effect immediately prior to the earlier of Shareholder Approval, if applicable, or the Change in Control, or the taking of any action, or the failure to act, by Employer which would adversely affect Recipient's continued participation in any of such plans on at least as favorable a basis to Recipient as is the case immediately prior to the earlier of Shareholder Approval, if applicable, or the Change in Control or which would materially reduce Recipient's benefits in the future under any of such plans or deprive Recipient of any material benefit enjoyed by Recipient immediately prior to the earlier of Shareholder Approval, if applicable, or the Change in Control;
- (d) the failure by the Employer to provide and credit Recipient with the number of paid vacation days to which Recipient is then entitled in accordance with the Employer's normal vacation policy as in effect immediately prior to the earlier of Shareholder Approval, if applicable, or the Change in Control; or
- (e) the Employer's requiring Recipient to be based more than 30 miles from where Recipient's office is located immediately prior to the earlier of Shareholder Approval, if applicable, or the Change in Control except for required travel on the Employer's business to an extent substantially consistent with the business travel obligations which Recipient undertook on behalf of the Employer prior to the earlier of Shareholder Approval, if applicable, or the Change in Control.
- 2.10 Forfeiture; Possible Restoration. If Recipient ceases to be employed by the Employer for any reason or for no reason, with or without cause, other than because of Retirement, death or physical disability (within the meaning of Section 22(e)(3) of the Code), any RSUs that did not vest pursuant to this Section 2 or Section 5.2 at or prior to the time of such termination of employment shall be forfeited to the Company; provided, however, that if Recipient's employment is terminated by the Employer without Cause or by the Recipient for Good Reason after Shareholder Approval but before a Change in Control, any RSUs that are forfeited under this sentence shall be restored to the Recipient and vested if a Change in Control subsequently occurs within two years.
- 3. <u>Certification and Delivery.</u> As soon as practicable following the completion of each Performance Year, the Company shall calculate the ROE and the 5 Yr Avg Cost of LT Debt for that Performance Year, and shall submit those calculations to the Committee. At or prior to the regularly scheduled meeting of the Committee held in February of the year immediately following each Performance Year (each, a "Certification Meeting"), the Committee shall certify in writing (which may consist of approved minutes of the meeting) whether or not the

5

Performance Threshold was satisfied for that Performance Year. Unless otherwise required under this Agreement as a result of the occurrence of a Change in Control, no amounts shall be delivered or paid unless the Committee certifies that the Performance Threshold has been satisfied for the applicable Performance Year. Subject to applicable tax withholding, on a date (a "Payment Date") that is on or as soon as practicable after the date any of the RSUs become vested or, if later, five business days following the Certification Meeting relating to those RSUs, the Company shall deliver to Recipient (a) the number of Shares underlying the RSUs that vested (rounded down to the nearest whole share), and (b) the dividend equivalent cash payment determined under Section 1 with respect to the number of Shares that are delivered; provided, however, that if accelerated vesting of the RSUs occurs pursuant to Section 2.3(b) as a result of Recipient's Retirement after a Change in Control has previously occurred, the Payment Date shall be delayed until a date that is on or as soon as practicable after the earlier of (x) the date the RSUs would have vested under Section 2.1, or (y) the date that is six months after Recipient's separation from service (within the meaning of Section 409A of the Internal Revenue Code). Notwithstanding the foregoing provisions of this Section 3, if Recipient shall have made a valid election to defer receipt of the Shares and dividend equivalent cash payment pursuant to the terms of Northwest Natural's Deferred Compensation Plan for Directors and Executives (the "DCP"), payment of RSUs that vest shall be made in accordance with that election.

4. <u>Tax Withholding</u>.

- 4.1 Recipient acknowledges that, on any Payment Date when Shares are delivered to Recipient, the Value (as defined below) on that date of the Shares so delivered (as well as the amount of the related dividend equivalent cash payment) will be treated as ordinary compensation income for federal and state income and FICA tax purposes, and that the Employer will be required to withhold taxes on these income amounts. To satisfy the required withholding amount, the Employer shall first withhold all or part of the dividend equivalent cash payment, and if that is insufficient, the Employer shall withhold the number of Shares having a Value equal to the remaining withholding amount. For purposes of this Section 4, the "Value" of a Share shall be equal to the closing market price for Company Common Stock on the last trading day preceding the Payment Date.
- 4.2 Recipient acknowledges that under current tax law, the Employer is required to withhold FICA taxes with respect to the RSUs at the earlier of (a) the issuance of shares underlying the RSUs or (b) the date after a Change in Control on which Recipient becomes eligible for Retirement (or the date of the Change in Control if Recipient is eligible for Retirement at the time of the Change in Control). To satisfy the required minimum FICA withholding in the event that subsection (b) applies, Recipient shall, immediately upon notification of the amount due, pay to the Company in cash or by check amounts necessary to satisfy applicable FICA withholding requirements. If Recipient fails to pay the amount demanded, the Company may withhold that amount from other amounts payable to Recipient, including salary, subject to applicable law.
- 4.3 Notwithstanding the foregoing, Recipient may elect not to have Shares withheld to cover taxes by giving notice to the Company in writing prior to the Payment Date, in which case the Shares shall be issued or acquired in Recipient's name on the Payment Date thereby triggering the tax consequences, but the Company shall retain the certificate for the Shares as security until Recipient shall have paid to the Company in cash any required tax withholding not covered by withholding of the dividend equivalent cash payment.
- 5. <u>Sale of the Company</u>. If there shall occur a merger, consolidation or plan of exchange involving the Company pursuant to which the outstanding shares of Common Stock of the Company are converted into cash or other stock, securities or property, or a sale, lease,

6

exchange or other transfer (in one transaction or a series of related transactions) of all, or substantially all, the assets of the Company, then either:

- 5.1 the unvested RSUs shall be converted into restricted stock units for stock of the surviving or acquiring corporation in the applicable transaction, with the amount and type of shares subject thereto to be conclusively determined by the Committee, taking into account the relative values of the companies involved in the applicable transaction and the exchange rate, if any, used in determining shares of the surviving corporation to be held by the former holders of the Company's Common Stock following the applicable transaction, and disregarding fractional shares; or
- 5.2 all of the unvested RSUs shall immediately vest and the underlying Shares and related dividend equivalent cash payment shall be delivered simultaneously with the closing of the applicable transaction such that Recipient will participate as a shareholder in receiving proceeds from such transaction with respect to those Shares.
- 6. <u>Changes in Capital Structure</u>. If, prior to the full vesting of all of the RSUs granted under this Agreement, the outstanding Common Stock of the Company is increased or decreased or changed into or exchanged for a different number or kind of shares or other securities of the Company by reason of any stock split, combination of shares or dividend payable in shares, recapitalization or reclassification, appropriate adjustment shall be made by the Committee in the number and kind of shares subject to the unvested RSUs so that Recipient's proportionate interest before and after the occurrence of the event is maintained. Notwithstanding the foregoing, the Committee shall have no obligation to effect any adjustment that would or might result in the issuance of fractional shares, and any fractional shares resulting from any adjustment may be disregarded or provided for in any manner determined by the Committee. Any such adjustments made by the Committee shall be conclusive.

7. <u>Recoupment On Misconduct.</u>

- 7.1 If at any time before a Change in Control and within three years after any date on which any RSUs vested, (a) the Company's financial statements for the corresponding Performance Year are the subject of a restatement due to the Misconduct (as defined below) of any person (whether or not Recipient was personally involved in such Misconduct), and (b) based on the Company's financial statements as restated, the Performance Threshold was not satisfied for that Performance Year, then Recipient shall repay to the Company the Shares (the "Excess Shares") and dividend equivalent cash payment (the "Excess Dividends") that vested under this Agreement on that vesting date. If any Excess Shares are sold by Recipient prior to the Company's demand for repayment (including any shares withheld for taxes under Section 4 of this Agreement), Recipient shall repay to the Company 100% of the proceeds of such sale or sales. The Committee may, in its sole discretion, reduce the amount to be repaid by Recipient to take into account the tax consequences of such repayment for Recipient.
- 7.2 If the Committee determines that Recipient engaged in any Misconduct after the date of this Agreement and prior to a sale of any of the Shares (the "Tainted Shares"), and this determination is made before a Change in Control and within three years after the vesting of the Tainted Shares, Recipient shall repay to the Company the Excess Proceeds (as defined below). The Committee may, in its sole discretion, reduce the amount of Excess Proceeds to be repaid by Recipient to take into account the tax consequences of such repayment or any other factors. The return of Excess Proceeds is in addition to and separate from any other relief available to the Company due to Recipient's Misconduct.
- 7.3 "Misconduct" shall mean (a) willful commission of an act of fraud or dishonesty resulting in economic or financial injury to the Company, (b) willful misconduct that

7

substantially impairs the Company's business or reputation, or (c) willful gross negligence in the performance of the person's duties; provided, however, that such acts shall only constitute Misconduct if the Committee determines that such acts contributed to an obligation to restate the Company's financial statements for any quarter or year or otherwise had (or will have when publicly disclosed) an adverse impact on the market price of the Company Common Stock.

- 7.4 "Excess Proceeds" shall mean the excess of (a) the actual aggregate sales proceeds from Recipient's sales of Tainted Shares, over (b) the aggregate sales proceeds Recipient would have received from sales of Tainted Shares at a price per share determined appropriate by the Committee in its discretion to reflect what the market price of the Company Common Stock would have been if the restatement had occurred or other Misconduct had been disclosed prior to such sales.
- 7.5 If any portion of the Excess Shares and Excess Dividends was deferred under the DCP, that portion shall be recovered by canceling the amounts so deferred under the DCP and any dividends or other earnings credited under the DCP with respect to such cancelled amounts. The Company may seek direct repayment from Recipient of any Excess Shares, Excess Dividends and Excess Proceeds not so recovered and may, to the extent permitted by applicable law, offset such amounts against any compensation or other amounts owed by the Company to Recipient. In particular, such amounts may be recovered by offset against the after-tax proceeds of deferred compensation payouts under the DCP, Northwest Natural's Executive Supplemental Retirement Income Plan or Northwest Natural's Supplemental Executive Retirement Plan at the times such deferred compensation payouts occur under the terms of those plans. Amounts that remain unpaid for more than 60 days after demand by the Company shall accrue interest at the rate used from time to time for crediting interest under the DCP.
- 8. <u>Approvals</u>. The obligations of the Company under this Agreement are subject to the approval of state and federal authorities or agencies with jurisdiction in the matter. The Company will use its best efforts to take steps required by state or federal law or applicable regulations, including rules and regulations of the Securities and Exchange Commission and any stock exchange on which the Company's shares may then be listed, in connection with the award under this Agreement. The foregoing notwithstanding, the Company shall not be obligated to issue or deliver Common Stock under this Agreement if such issuance or delivery would violate applicable state or federal law.
- 9. <u>No Right to Employment</u>. Nothing contained in this Agreement shall confer upon Recipient any right to be employed by the Employer or to continue to provide services to the Employer or to interfere in any way with the right of the Employer to terminate Recipient's services at any time for any reason, with or without cause.

10. Miscellaneous.

- 10.1 <u>Entire Agreement: Amendment.</u> This Agreement constitutes the entire agreement of the parties with regard to the subjects hereof and may be amended only by written agreement between the Company and Recipient.
- 10.2 <u>Notices</u>. Any notice required or permitted under this Agreement shall be in writing and shall be deemed sufficient when delivered personally to the party to whom it is addressed or when deposited into the United States Mail as registered or certified mail, return receipt requested, postage prepaid, addressed to the Company, Attention: Corporate Secretary, at its principal executive offices, or to Employer, Attention: Corporate Secretary, at its principal executive offices, or to Recipient at the address of Recipient in the Company's records, or at such other address as such party may designate by ten (10) days' advance written notice to the other party.

8

- 10.3 <u>Assignment; Rights and Benefits</u>. Recipient shall not assign this Agreement or any rights hereunder to any other party or parties without the prior written consent of the Company. The rights and benefits of this Agreement shall inure to the benefit of and be enforceable by the Company's successors and assigns and, subject to the foregoing restriction on assignment, be binding upon Recipient's heirs, executors, administrators, successors and assigns.
- 10.4 <u>Further Action</u>. The parties agree to execute such further instruments and to take such further action as may reasonably be necessary to carry out the intent of this Agreement.
- 10.5 Applicable Law; Attorneys' Fees. The terms and conditions of this Agreement shall be governed by the laws of the State of Oregon. In the event either party institutes litigation hereunder, the prevailing party shall be entitled to reasonable attorneys' fees to be set by the trial court and, upon any appeal, the appellate court.
- 10.6 <u>Counterparts</u>. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

Ву	
Title —	
RECIPIENT	

NORTHWEST NATURAL HOLDING COMPANY

9

EFFECTIVE INTEREST RATES OF OUTSTANDING LONG-TERM DEBT

The outstanding series or tranches of long-term debt of the Company outstanding as of the date of this Agreement and the Effective Interest Rate of each such series or tranche are as follows:

Series Effective Interest Rate

Northwest Natural Gas Company (Corp 5000):	
3.542 % Series due 2023	3.696%
5.620 % Series due 2023	6.360%
7.720 % Series due 2025	8.336%
6.520 % Series due 2025	6.589%
7.050 % Series due 2026	7.121%
3.211 % Series due 2026	3.383%
7.000 % Series due 2027	7.062%
6.650 % Series due 2027	6.714%
2.822 % Series due 2027	2.966%
6.650 % Series due 2028	6.727%
3.141 % Series due 2029	3.275%
7.740 % Series due 2030	8.433%
7.850 % Series due 2030	8.551%
5.820 % Series due 2032	5.913%
5.660 % Series due 2033	5.723%
5.250 % Series due 2035	5.316%
4.000 % Series due 2042	4.062%
4.136 % Series due 2046	4.226%
3.685 % Series due 2047	3.754%
4.110 % Series due 2048	4.145%
3.869 % Series due 2049	3.938%
3.600 % Series due 2050	3.689%
3.078 % Series due 2051	3.127%
NW Natural Water Company, LLC (Corp 6000):	
2.340 % weighted rate Notes	2.340%
5.000 % Note due 2028	5.000%
LIBOR Loan due 2026	0.938%

SUBSIDIARIES OF NORTHWEST NATURAL HOLDING COMPANY

an Oregon Corporation

Northwest Natural Gas Company (dba NW Natural) Northwest Energy Corporation** NWN Gas Reserves LLC** NWN Natural RNG Holding Company, LLC** Dakota City Renewable Energy LLC** Dakota City Renewable Energy LLC** NW Natural Rngery, LLC Dakota City Renewable Energy LLC** NW Natural Sas Storage, LLC NW Natural Gas Storage, LLC NW Natural Gas Storage, LLC NWTHING Financial Corporation Northwest Blogas, LLC NWN Natural Gas Storage, LLC NWN Natural Gas Storage, LLC NWN Natural Gas Storage, LLC NWN Natural Water Company NWN Natural Water Company NW Natural Water Company NW Natural Water Company NW Natural Water Company NW Natural Water of Oregon, LLC Sunstone Water, LLC Sunstone Water, LLC Sunstone Water, LLC Sunstone Water, LLC Sunstone Firstructure, LLC Sunstone Infrastructure, LLC Sunstone Infrastructure, LLC Sunstone Infrastructure, LLC Negon Suniver Environmental LLC Avion Water Company, Inc. NW Natural Renewables Holdings, LLC NW Natural Renewables Holdings, LLC NW Natural Renewables Holdings, LLC NW Natural Ohio Renewable Energy, LLC NW Natural Ohio Renewable Energy, LLC NW Natural Natural Vester of Washington, LLC	Name of Subsidiary	Jurisdiction Organized
NWN Gas Reserves LLC ⁽¹⁾ Oregon NW Natural RNG Holding Company, LLC ⁽¹⁾ Delaware Dakota City Renewable Energy LLC ⁽¹⁾ Delaware NW Natural Energy, LLC Oregon NW Natural Gas Storage, LLC Oregon NNG Financial Corporation Oregon Northwest Biogas, LLC Oregon NW Natural Water Company, LLC Oregon NW Natural Water Company LLC Oregon Salmon Valley Water Company Cregon Sunstone lifrastructure, LLC Oregon Sunstone Infrastructure, LLC Oregon Suniver Water LLC Oregon Suniver Environmental LLC Oregon NW Natural Renewables Holdings, LLC Oregon NW Natural Renewables Energy, LLC Oregon	Northwest Natural Gas Company (dba NW Natural)	Oregon
NW Natural RNG Holding Company, LLC ⁽¹⁾ Lexington Renewable Energy LLC ⁽¹⁾ Dakota City Renewable Energy LLC ⁽¹⁾ NW Natural Energy, LLC NW Natural Gas Storage, LLC NWG Financial Corporation Northwest Biogas, LLC KB Pipeline Company NW Natural Water Company, LLC Salmon Valley Water Company NW Natural Water of Oregon, LLC Sunstone Water, LLC Sunstone Infrastructure, LLC Sunstone Infrastructure, LLC Sunstone Infrastructure, LLC Sunsiver Environmental LLC Avion Water Company, Inc. NW Natural Rneewables Holdings, LLC NW Natural Renewables Holdings, LLC NW Natural Renewable Energy, LLC Oregon	Northwest Energy Corporation ⁽¹⁾	Oregon
Lexington Renewable Energy LLC ⁽¹⁾ Dakota City Renewable Energy LLC ⁽¹⁾ Dakota City Renewable Energy LLC ⁽¹⁾ NW Natural Energy, LLC Oregon NW Natural Gas Storage, LLC Oregon NNG Financial Corporation Oregon Northwest Biogas, LLC KB Pipeline Company Oregon NW Natural Water Company, LLC Oregon NW Natural Water Company, LLC Oregon Salmon Valley Water Company WW Natural Water of Oregon, LLC Oregon Sunstone Water, LLC Oregon Sunstone Infrastructure, LLC Oregon Sunriver Water LLC Oregon Avion Water Environmental LLC Avion Water Company, Inc. NW Natural Renewables Holdings, LLC NW Natural Renewable Energy, LLC Oregon NW Natural Renewable Energy, LLC Oregon	NWN Gas Reserves LLC ⁽¹⁾	Oregon
Dakota City Renewable Energy LLC(1) NW Natural Energy, LLC NW Natural Gas Storage, LLC NNG Financial Corporation Northwest Biogas, LLC KB Pipeline Company NW Natural Water Company, LLC Salmon Valley Water Company NW Natural Water of Oregon, LLC Sunstone Water, LLC Sunstone Water, LLC Sunriver Water LLC Sunriver Environmental LLC Avion Water Environmental LLC NW Natural Renewables Holdings, LLC NW Natural Renewable Energy, LLC Oregon NW Natural Renewable Energy, LLC Oregon	NW Natural RNG Holding Company, LLC ⁽¹⁾	Oregon
NW Natural Energy, LLC NW Natural Gas Storage, LLC NNG Financial Corporation Northwest Biogas, LLC KB Pipeline Company NW Natural Water Company, LLC Salmon Valley Water Company NW Natural Water of Oregon, LLC Sunstone Water, LLC Sunstone Water, LLC Sunstone Water LLC Sunriver Water LLC Sunriver Environmental LLC Avion Water Company, Inc. NW Natural Renewables Holdings, LLC NW Natural One Renewable Energy, LLC Oregon	Lexington Renewable Energy LLC ⁽¹⁾	Delaware
NW Natural Gas Storage, LLC NNG Financial Corporation Northwest Biogas, LLC KB Pipeline Company KB Pipeline Company NW Natural Water Company, LLC Salmon Valley Water Company NW Natural Water of Oregon, LLC Sunstone Water, LLC Oregon Sunstone Infrastructure, LLC Sunriver Water LLC Sunriver Environmental LLC Avion Water Company, Inc. NW Natural Renewable Energy, LLC NW Natural Ohio Renewable Energy, LLC Oregon Oregon Oregon Oregon Oregon Oregon Oregon Oregon Oregon	Dakota City Renewable Energy LLC ⁽¹⁾	Delaware
NNG Financial Corporation Oregon Northwest Biogas, LLC Oregon KB Pipeline Company Oregon NW Natural Water Company, LLC Oregon NW Natural Water Company Oregon NW Natural Water of Oregon, LLC Oregon Sunstone Water, LLC Oregon Sunstone Infrastructure, LLC Oregon Sunriver Water LLC Oregon Avion Water Company, Inc. Oregon NW Natural Renewable Holdings, LLC Oregon NW Natural Ohio Renewable Energy, LLC Oregon	NW Natural Energy, LLC	Oregon
Northwest Biogas, LLC KB Pipeline Company KB Pipeline Company NW Natural Water Company, LLC Salmon Valley Water Company NW Natural Water of Oregon, LLC Oregon NW Natural Water of Oregon, LLC Oregon Sunstone Water, LLC Oregon Sunstone Infrastructure, LLC Oregon Sunriver Water LLC Oregon Sunriver Environmental LLC Oregon Avion Water Company, Inc. Oregon NW Natural Renewables Holdings, LLC Oregon NW Natural Ohio Renewable Energy, LLC Oregon	NW Natural Gas Storage, LLC	Oregon
KB Pipeline Company NW Natural Water Company, LLC Salmon Valley Water Company NW Natural Water of Oregon, LLC Sunstone Water, LLC Oregon Sunstone Infrastructure, LLC Oregon Sunriver Water LLC Oregon Sunriver Environmental LLC Avion Water Company, Inc. NW Natural Renewables Holdings, LLC Ny Natural Ohio Renewable Energy, LLC Oregon Oregon Oregon Oregon Oregon Oregon Oregon	NNG Financial Corporation	Oregon
NW Natural Water Company, LLC Salmon Valley Water Company NW Natural Water of Oregon, LLC Oregon Sunstone Water, LLC Oregon Sunstone Infrastructure, LLC Oregon Sunriver Water LLC Oregon Sunriver Environmental LLC Avion Water Company, Inc. NW Natural Renewables Holdings, LLC NW Natural Ohio Renewable Energy, LLC Oregon Oregon Oregon Oregon Oregon	Northwest Biogas, LLC	Oregon
Salmon Valley Water Company NW Natural Water of Oregon, LLC Sunstone Water, LLC Sunstone Infrastructure, LLC Sunriver Water LLC Oregon Sunriver Water LLC Oregon Avion Water Company, Inc. NW Natural Renewables Holdings, LLC NW Natural Ohio Renewable Energy, LLC Oregon Oregon Oregon Oregon Oregon	KB Pipeline Company	Oregon
NW Natural Water of Oregon, LLC Sunstone Water, LLC Oregon Sunstone Infrastructure, LLC Sunriver Water LLC Oregon Sunriver Environmental LLC Avion Water Company, Inc. NW Natural Renewables Holdings, LLC NW Natural Ohio Renewable Energy, LLC Oregon Oregon Oregon Oregon Oregon	NW Natural Water Company, LLC	Oregon
Sunstone Water, LLC Sunstone Infrastructure, LLC Oregon Sunriver Water LLC Oregon Sunriver Environmental LLC Oregon Avion Water Company, Inc. NW Natural Renewables Holdings, LLC NW Natural Ohio Renewable Energy, LLC Oregon Oregon Oregon	Salmon Valley Water Company	Oregon
Sunstone Infrastructure, LLC Sunriver Water LLC Sunriver Environmental LLC Avion Water Company, Inc. NW Natural Renewables Holdings, LLC NW Natural Ohio Renewable Energy, LLC Oregon Oregon Oregon Oregon	NW Natural Water of Oregon, LLC	Oregon
Sunriver Water LLC Sunriver Environmental LLC Avion Water Company, Inc. NW Natural Renewables Holdings, LLC NW Natural Ohio Renewable Energy, LLC Oregon Oregon Oregon	Sunstone Water, LLC	Oregon
Sunriver Environmental LLC Avion Water Company, Inc. NW Natural Renewables Holdings, LLC NW Natural Ohio Renewable Energy, LLC Oregon Oregon Oregon	Sunstone Infrastructure, LLC	Oregon
Avion Water Company, Inc. NW Natural Renewables Holdings, LLC NW Natural Ohio Renewable Energy, LLC Oregon Oregon	Sunriver Water LLC	Oregon
NW Natural Renewables Holdings, LLC NW Natural Ohio Renewable Energy, LLC Oregon	Sunriver Environmental LLC	Oregon
NW Natural Ohio Renewable Energy, LLC Oregon	Avion Water Company, Inc.	Oregon
	NW Natural Renewables Holdings, LLC	Oregon
NW Natural Water of Washington, LLC Washington	NW Natural Ohio Renewable Energy, LLC	Oregon
	NW Natural Water of Washington, LLC	Washington

Cascadia Water, LLC	Washington
Cascadia Infrastructure, LLC	Washington
Suncadia Water Company, LLC	Washington
Suncadia Environmental Company, LLC	Washington
NW Natural Water of Idaho, LLC	Idaho
Falls Water Co., Inc.	Idaho
Gem State Water Company, LLC	Idaho
Gem State Infrastructure, LLC	ldaho
NW Natural Water of Texas, LLC	Texas
Blue Topaz Water, LLC	Texas
Blue Topaz Infrastructure, LLC	Texas
T & W Water Service Company	Texas
NW Natural Water of Arizona, LLC	Oregon
Foothills Water & Sewer, LLC	Arizona
Turquoise Infrastructure, LLC	Oregon
NW Natural Water of California, LLC	Oregon
Blue Diamond Water Company, LLC	California
Blue Diamond Infrastructure, LLC	Oregon

⁽¹⁾ Subsidiary of Northwest Natural Gas Company

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos. 333-187005-01, 333-180350-01, 333-134973-01, 333-139819-01, 333-221347-01, 333-227687, and 333-234539) and Form S-3 (No. 333-258792) of Northwest Natural Holding Company of our report dated February 25, 2022 relating to the financial statements, financial statement schedules and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP Portland, Oregon February 25, 2022

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (No. 333-214425) and Form S-3 (No. 333-258792-01) of Northwest Natural Gas Company of our report dated February 25, 2022 relating to the financial statements and financial statement schedule which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP Portland, Oregon February 25, 2022

CERTIFICATION

- I, David H. Anderson, certify that:
- 1. I have reviewed this annual report on Form 10-K for the year ended December 31, 2021 of Northwest Natural Gas Company;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(f)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
- (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
- (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
- (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
- (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
- (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
- (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 25, 2022

<u>/s/ David H. Anderson</u>
David H. Anderson
President and Chief Executive Officer

CERTIFICATION

- I, Frank H. Burkhartsmeyer, certify that:
- 1. I have reviewed this annual report on Form 10-K for the year ended December 31, 2021 of Northwest Natural Gas Company;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(f)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
- (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
- (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
- (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
- (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
- (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
- (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 25, 2022

Is/ Frank H. BurkhartsmeyerFrank H. BurkhartsmeyerSenior Vice President and Chief Financial Officer