

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form 10-Q

- ☒ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the quarterly period ended **June 30, 2022**
OR
☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from _____ to _____



NORTHWEST NATURAL HOLDING COMPANY

(Exact name of registrant as specified in its charter)

Commission file number **1-38681**

Oregon **82-4710680**

(State or other jurisdiction of incorporation or organization) (I.R.S. Employer Identification No.)

250 SW Taylor Street

Portland Oregon 97204

(Address of principal executive offices)

Registrant's telephone number, including area code: **(503) 226-4211**



NORTHWEST NATURAL GAS COMPANY

(Exact name of registrant as specified in its charter)

Commission file number **1-15973**

Oregon **93-0256722**

(State or other jurisdiction of incorporation or organization) (I.R.S. Employer Identification No.)

250 SW Taylor Street

Portland Oregon 97204

(Address of principal executive offices)

Registrant's telephone number, including area code: **(503) 226-4211**

Securities registered pursuant to Section 12(b) of the Act:

<u>Registrant</u>	<u>Title of each class</u>	<u>Trading Symbol</u>	<u>Name of each exchange on which registered</u>
NORTHWEST NATURAL HOLDING COMPANY	Common Stock	NWN	New York Stock Exchange
NORTHWEST NATURAL GAS COMPANY	None		

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

NORTHWEST NATURAL HOLDING COMPANY Yes ☒ No ☐ NORTHWEST NATURAL GAS COMPANY Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

NORTHWEST NATURAL HOLDING COMPANY Yes ☒ No ☐ NORTHWEST NATURAL GAS COMPANY Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

NORTHWEST NATURAL HOLDING COMPANY

Large Accelerated Filer ☒
Accelerated Filer ☐
Non-accelerated Filer ☐
Smaller Reporting Company ☐
Emerging Growth Company ☐

NORTHWEST NATURAL GAS COMPANY

Large Accelerated Filer ☐
Accelerated Filer ☐
Non-accelerated Filer ☒
Smaller Reporting Company ☐
Emerging Growth Company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

NORTHWEST NATURAL HOLDING COMPANY Yes ☐ No ☒ NORTHWEST NATURAL GAS COMPANY Yes ☐ No ☒

At July 28, 2022, 34,817,043 shares of Northwest Natural Holding Company's Common Stock (the only class of Common Stock) were outstanding. All shares of Northwest Natural Gas Company's Common Stock (the only class of Common Stock) outstanding were held by Northwest Natural Holding Company.

This combined Form 10-Q is separately filed by Northwest Natural Holding Company and Northwest Natural Gas Company. Information contained in this document relating to Northwest Natural Gas Company is filed by Northwest Natural Holding Company and separately by Northwest Natural Gas Company. Northwest Natural Gas Company makes no representation as to information relating to Northwest Natural Holding Company or its subsidiaries, except as it may relate to Northwest Natural Gas Company and its subsidiaries.

NORTHWEST NATURAL GAS COMPANY NORTHWEST NATURAL HOLDING COMPANY

For the Quarterly Period Ended June 30, 2022

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PART I. FINANCIAL INFORMATION

FORWARD-LOOKING STATEMENTS

This report contains forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995, which are subject to the safe harbors created by such Act. Forward-looking statements can be identified by words such as anticipates, assumes, may, intends, plans, projects, seeks, believes, estimates, expects, will, could, and similar references (including the negatives thereof) to future periods, although not all forward-looking statements contain these words. Examples of forward-looking statements include, but are not limited to, statements regarding the following:

- plans, projections and predictions;
- objectives, goals, visions or strategies;
- assumptions, generalizations and estimates;
- ongoing continuation of past practices or patterns;
- future events or performance;
- trends;
- risks;
- uncertainties;
- timing and cyclicalities;
- economic conditions, including impacts of inflation and interest rates, and general economic uncertainty;
- earnings and dividends;
- capital expenditures and allocation;
- capital markets or access to capital;
- capital or organizational structure;
- matters related to climate change and our role in decarbonization or a low-carbon future;
- renewable natural gas, environmental attributes related thereto, and hydrogen;
- our strategy to reduce greenhouse gas emissions and the efficacy of communicating that strategy to shareholders, investors, stakeholders and communities;
- the policies and priorities of the current presidential administration and U.S. Congress;
- growth;
- customer rates;
- pandemic and related illness or quarantine, including COVID-19 and related variants, economic conditions related thereto, the resumption of normal business operations, availability and acceptance of vaccinations, and potential future shutdowns;
- labor relations and workforce succession;
- commodity costs;
- desirability and cost competitiveness of natural gas;
- gas reserves;
- operational performance and costs;
- energy policy, infrastructure and preferences;
- public policy approach and involvement;
- efficacy of derivatives and hedges;
- liquidity, financial positions, and planned securities issuances;
- valuations;
- project and program development, expansion, or investment;
- business development efforts, including new business lines such as unregulated renewable natural gas, and acquisitions and integration thereof;
- implementation and execution of our water strategy;
- pipeline capacity, demand, location, and reliability;
- adequacy of property rights and operations center development;
- technology implementation and cybersecurity practices;
- competition;
- procurement and development of gas (including renewable natural gas) and water supplies;
- estimated expenditures, supply chain and third party availability and impairment;
- costs of compliance, and our ability to include those costs in rates;
- customers bypassing our infrastructure;
- credit exposures;
- uncollectible account amounts;
- rate or regulatory outcomes, recovery or refunds, and the availability of public utility commissions to take action;
- impacts or changes of executive orders, laws, rules and regulations, or legal challenges related thereto;
- tax liabilities or refunds, including effects of tax legislation;
- levels and pricing of gas storage contracts and gas storage markets;
- outcomes, timing and effects of potential claims, litigation, regulatory actions, and other administrative matters;
- projected obligations, expectations and treatment with respect to, and the impact of new legislation on, retirement plans;
- international, federal, state, and local efforts to regulate, in a variety of ways, greenhouse gas emissions, and the effects of those efforts;
- geopolitical factors, such as the Russia/Ukraine conflict;

- disruptions caused by social unrest, including related protests or disturbances;
- availability, adequacy, and shift in mix, of gas and water supplies;
- effects of new or anticipated changes in critical accounting policies or estimates;
- approval and adequacy of regulatory deferrals;
- effects and efficacy of regulatory mechanisms; and
- environmental, regulatory, litigation and insurance costs and recoveries, and timing thereof.

Forward-looking statements are based on our current expectations and assumptions regarding our business, the economy, and other future conditions. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks, and changes in circumstances that are difficult to predict. Our actual results may differ materially from those contemplated by the forward-looking statements. We therefore caution you against relying on any of these forward-looking statements. They are neither statements of historical fact nor guarantees or assurances of future performance. Important factors that could cause actual results to differ materially from those in the forward-looking statements are discussed in NW Holdings' and NW Natural's 2021 Annual Report on Form 10-K, Part I, Item 1A "Risk Factors" and Part II, Item 7 and Item 7A, "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Quantitative and Qualitative Disclosures about Market Risk", respectively, and Part I of this report, Items 2 and 3, "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Quantitative and Qualitative Disclosures About Market Risk", respectively.

Any forward-looking statement made in this report speaks only as of the date on which it is made. Factors or events that could cause actual results to differ may emerge from time to time, and it is not possible for us to predict all of them. We undertake no obligation to publicly update any forward-looking statement, whether as a result of new information, future developments or otherwise, except as may be required by law.

ITEM 1. CONSOLIDATED FINANCIAL STATEMENTS

NORTHWEST NATURAL HOLDING COMPANY CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (UNAUDITED)

<i>In thousands, except per share data</i>	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Operating revenues	\$ 194,960	\$ 148,917	\$ 545,261	\$ 464,863
Operating expenses:				
Cost of gas	79,720	41,193	225,308	153,403
Operations and maintenance	53,175	50,047	110,660	102,238
Environmental remediation	2,267	1,509	6,970	5,286
General taxes	8,989	8,914	21,093	20,283
Revenue taxes	8,240	5,671	21,600	18,335
Depreciation	28,110	28,144	56,539	56,241
Other operating expenses	920	815	1,914	1,747
Total operating expenses	181,421	136,293	444,084	357,533
Income from operations	13,539	12,624	101,177	107,330
Other income (expense), net	226	(2,597)	(728)	(6,139)
Interest expense, net	11,580	11,028	23,102	22,154
Income (loss) before income taxes	2,185	(1,001)	77,347	79,037
Income tax expense (benefit)	470	(277)	19,393	20,244
Net income (loss)	1,715	(724)	57,954	58,793
Other comprehensive income:				
Amortization of non-qualified employee benefit plan liability, net of taxes of \$71 and \$80 for the three months ended and \$142 and \$160 for the six months ended June 30, 2022 and 2021, respectively	197	221	394	442
Comprehensive income (loss)	\$ 1,912	\$ (503)	\$ 58,348	\$ 59,235
Average common shares outstanding:				
Basic	34,307	30,664	32,756	30,639
Diluted	34,352	30,664	32,805	30,671
Earnings (loss) per share of common stock:				
Basic	\$ 0.05	\$ (0.02)	\$ 1.77	\$ 1.92
Diluted	0.05	(0.02)	1.77	1.92

See Notes to Unaudited Consolidated Financial Statements

NORTHWEST NATURAL HOLDING COMPANY

CONSOLIDATED BALANCE SHEETS (UNAUDITED)

<i>In thousands</i>	June 30, 2022	June 30, 2021	December 31, 2021
Assets:			
Current assets:			
Cash and cash equivalents	\$ 17,209	\$ 20,084	\$ 18,559
Accounts receivable	68,583	60,713	101,495
Accrued unbilled revenue	18,060	13,592	82,169
Allowance for uncollectible accounts	(1,356)	(3,283)	(2,018)
Regulatory assets	92,803	60,672	72,391
Derivative instruments	60,652	46,168	48,130
Inventories	65,983	39,024	57,262
Income taxes receivable	—	6,000	—
Other current assets	36,060	30,871	59,288
Total current assets	357,994	273,841	437,276
Non-current assets:			
Property, plant, and equipment	4,129,236	3,849,792	3,997,243
Less: Accumulated depreciation	1,150,555	1,093,863	1,125,873
Total property, plant, and equipment, net	2,978,681	2,755,929	2,871,370
Regulatory assets	301,855	330,710	314,579
Derivative instruments	9,121	7,912	10,730
Other investments	96,027	77,577	89,278
Operating lease right of use asset, net	73,754	76,294	75,049
Assets under sales-type leases	136,673	141,408	138,995
Goodwill	70,714	69,313	70,570
Other non-current assets	75,699	50,516	56,757
Total non-current assets	3,742,524	3,509,659	3,627,328
Total assets	\$ 4,100,518	\$ 3,783,500	\$ 4,064,604

See Notes to Unaudited Consolidated Financial Statements

NORTHWEST NATURAL HOLDING COMPANY

CONSOLIDATED BALANCE SHEETS (UNAUDITED)

<i>In thousands, including share information</i>	June 30, 2022	June 30, 2021	December 31, 2021
Liabilities and equity:			
Current liabilities:			
Short-term debt	\$ 222,700	\$ 240,000	\$ 389,500
Current maturities of long-term debt	351	60,274	345
Accounts payable	135,364	97,854	133,486
Taxes accrued	11,324	15,143	15,520
Interest accrued	7,425	7,425	7,503
Regulatory liabilities	97,277	103,210	112,281
Derivative instruments	15,918	3,393	10,402
Operating lease liabilities	1,315	1,228	1,296
Other current liabilities	47,624	43,946	54,432
Total current liabilities	539,298	572,473	724,765
Long-term debt	1,045,530	915,501	1,044,587
Deferred credits and other non-current liabilities:			
Deferred tax liabilities	355,470	325,600	340,231
Regulatory liabilities	658,925	645,046	658,332
Pension and other postretirement benefit liabilities	162,511	203,854	166,684
Derivative instruments	9,475	453	412
Operating lease liabilities	78,826	80,088	79,468
Other non-current liabilities	111,704	117,659	114,979
Total deferred credits and other non-current liabilities	1,376,911	1,372,700	1,360,106
Commitments and contingencies (Note 16)			
Equity:			
Common stock - no par value; authorized 100,000 shares; issued and outstanding 34,754, 30,672, and 31,129 at June 30, 2022 and 2021, and December 31, 2021, respectively	767,826	569,785	590,771
Retained earnings	381,963	365,501	355,779
Accumulated other comprehensive loss	(11,010)	(12,460)	(11,404)
Total equity	1,138,779	922,826	935,146
Total liabilities and equity	\$ 4,100,518	\$ 3,783,500	\$ 4,064,604

See Notes to Unaudited Consolidated Financial Statements

NORTHWEST NATURAL HOLDING COMPANY

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY (UNAUDITED)

<i>In thousands, except per share amounts</i>	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Total shareholders' equity, beginning balances	\$ 987,944	\$ 936,324	\$ 935,146	\$ 888,733
Common stock:				
Beginning balances	602,382	568,066	590,771	565,112
Stock-based compensation	458	416	2,232	2,446
Shares issued pursuant to equity based plans, net of shares withheld for taxes	1,080	1,303	1,004	2,227
Issuance of common stock, net of issuance costs	163,906	—	173,819	—
Ending balances	767,826	569,785	767,826	569,785
Retained earnings:				
Beginning balances	396,769	380,939	355,779	336,523
Net income (loss)	1,715	(724)	57,954	58,793
Dividends on common stock	(16,521)	(14,714)	(31,770)	(29,815)
Ending balances	381,963	365,501	381,963	365,501
Accumulated other comprehensive income (loss):				
Beginning balances	(11,207)	(12,681)	(11,404)	(12,902)
Other comprehensive income	197	221	394	442
Ending balances	(11,010)	(12,460)	(11,010)	(12,460)
Total shareholders' equity, ending balances	\$ 1,138,779	\$ 922,826	\$ 1,138,779	\$ 922,826
Dividends per share of common stock	\$ 0.4825	\$ 0.4800	\$ 0.9650	\$ 0.9600

See Notes to Unaudited Consolidated Financial Statements

NORTHWEST NATURAL HOLDING COMPANY

CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)

<i>In thousands</i>	Six Months Ended June 30,	
	2022	2021
Operating activities:		
Net income	\$ 57,954	\$ 58,793
Adjustments to reconcile net income to cash provided by operations:		
Depreciation	56,539	56,241
Regulatory amortization of gas reserves	2,984	7,597
Deferred income taxes	10,659	1,048
Qualified defined benefit pension plan expense	2,882	7,874
Contributions to qualified defined benefit pension plans	—	(9,590)
Deferred environmental expenditures, net	(9,608)	(9,625)
Environmental remediation expense	6,970	5,286
Asset optimization revenue sharing bill credits	(41,102)	(9,053)
Other	9,961	10,663
Changes in assets and liabilities:		
Receivables, net	96,453	73,133
Inventories	(8,721)	3,666
Income and other taxes	17,241	21,467
Accounts payable	(13,728)	(17,239)
Deferred gas costs	2,607	(26,962)
Asset optimization revenue sharing	3,929	36,872
Decoupling mechanism	9,669	(6,860)
Other, net	(8,125)	(9,030)
Cash provided by operating activities	196,564	194,281
Investing activities:		
Capital expenditures	(167,696)	(130,108)
Acquisitions, net of cash acquired	—	(55)
Proceeds from the sale of assets	345	2,234
Other	(2,336)	46
Cash used in investing activities	(169,687)	(127,883)
Financing activities:		
Proceeds from common stock issued, net	174,053	—
Long-term debt issued	692	55,000
Long-term debt retired	—	(35,000)
Proceeds from term loan due within one year	—	100,000
Repayment of commercial paper, maturities greater than three months	—	(195,025)
Changes in other short-term debt, net	(166,800)	30,500
Cash dividend payments on common stock	(30,311)	(27,842)
Other	(1,596)	(1,175)
Cash used in financing activities	(23,962)	(73,542)
Increase (decrease) in cash, cash equivalents and restricted cash	2,915	(7,144)
Cash, cash equivalents and restricted cash, beginning of period	27,120	35,454
Cash, cash equivalents and restricted cash, end of period	\$ 30,035	\$ 28,310
Supplemental disclosure of cash flow information:		
Interest paid, net of capitalization	\$ 22,867	\$ 21,971
Income taxes paid, net of refunds	1,086	7,405

See Notes to Unaudited Consolidated Financial Statements

NORTHWEST NATURAL GAS COMPANY

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (UNAUDITED)

<i>In thousands</i>	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Operating revenues	\$ 190,251	\$ 144,579	\$ 536,875	\$ 456,929
Operating expenses:				
Cost of gas	79,776	41,249	225,420	153,515
Operations and maintenance	48,879	44,939	102,756	94,126
Environmental remediation	2,267	1,509	6,970	5,286
General taxes	8,872	8,783	20,861	20,042
Revenue taxes	8,208	5,650	21,532	18,305
Depreciation	27,328	27,530	54,965	54,699
Other operating expenses	796	780	1,695	1,699
Total operating expenses	176,126	130,440	434,199	347,672
Income from operations	14,125	14,139	102,676	109,257
Other income (expense), net	17	(2,566)	(964)	(6,231)
Interest expense, net	10,599	10,696	21,430	21,486
Income before income taxes	3,543	877	80,282	81,540
Income tax expense	810	288	20,133	20,840
Net income	2,733	589	60,149	60,700
Other comprehensive income:				
Amortization of non-qualified employee benefit plan liability, net of taxes of \$71 and \$80 for the three months ended and \$142 and \$160 for the six months ended June 30, 2022 and 2021, respectively	197	221	394	442
Comprehensive income	\$ 2,930	\$ 810	\$ 60,543	\$ 61,142

See Notes to Unaudited Consolidated Financial Statements

NORTHWEST NATURAL GAS COMPANY

CONSOLIDATED BALANCE SHEETS (UNAUDITED)

<i>In thousands</i>	June 30, 2022	June 30, 2021	December 31, 2021
Assets:			
Current assets:			
Cash and cash equivalents	\$ 10,267	\$ 11,488	\$ 12,271
Accounts receivable	66,186	51,849	99,780
Accrued unbilled revenue	17,840	13,474	82,028
Receivables from affiliates	300	301	261
Allowance for uncollectible accounts	(1,299)	(3,239)	(1,962)
Regulatory assets	92,803	60,672	72,391
Derivative instruments	60,652	46,168	48,130
Inventories	64,726	38,549	56,752
Other current assets	31,784	30,630	47,378
Total current assets	<u>343,259</u>	<u>249,892</u>	<u>417,029</u>
Non-current assets:			
Property, plant, and equipment	4,052,467	3,794,870	3,931,640
Less: Accumulated depreciation	<u>1,142,611</u>	<u>1,088,743</u>	<u>1,119,361</u>
Total property, plant, and equipment, net	2,909,856	2,706,127	2,812,279
Regulatory assets	301,790	330,670	314,539
Derivative instruments	9,121	7,912	10,730
Other investments	81,486	77,547	74,786
Operating lease right of use asset, net	73,706	76,211	74,987
Assets under sales-type leases	136,673	141,408	138,995
Other non-current assets	74,106	49,665	55,027
Total non-current assets	<u>3,586,738</u>	<u>3,389,540</u>	<u>3,481,343</u>
Total assets	<u>\$ 3,929,997</u>	<u>\$ 3,639,432</u>	<u>\$ 3,898,372</u>

See Notes to Unaudited Consolidated Financial Statements

NORTHWEST NATURAL GAS COMPANY

CONSOLIDATED BALANCE SHEETS (UNAUDITED)

<i>In thousands</i>	June 30, 2022	June 30, 2021	December 31, 2021
Liabilities and equity:			
Current liabilities:			
Short-term debt	\$ 78,700	\$ 198,000	\$ 245,500
Current maturities of long-term debt	—	59,987	—
Accounts payable	132,002	95,109	131,475
Payables to affiliates	7,259	22,869	1,248
Taxes accrued	11,289	10,072	15,476
Interest accrued	7,207	7,373	7,296
Regulatory liabilities	97,277	103,210	112,281
Derivative instruments	15,918	3,393	10,402
Operating lease liabilities	1,298	1,193	1,273
Other current liabilities	46,816	43,389	53,591
Total current liabilities	397,766	544,595	578,542
Long-term debt	986,762	857,422	986,495
Deferred credits and other non-current liabilities:			
Deferred tax liabilities	352,606	323,522	337,717
Regulatory liabilities	657,943	644,177	657,350
Pension and other postretirement benefit liabilities	162,511	203,854	166,684
Derivative instruments	9,475	453	412
Operating lease liabilities	78,789	80,043	79,431
Other non-current liabilities	110,469	116,975	113,934
Total deferred credits and other non-current liabilities	1,371,793	1,369,024	1,355,528
Commitments and contingencies (Note 16)			
Equity:			
Common stock	601,032	319,506	435,515
Retained earnings	583,654	561,345	553,696
Accumulated other comprehensive loss	(11,010)	(12,460)	(11,404)
Total equity	1,173,676	868,391	977,807
Total liabilities and equity	\$ 3,929,997	\$ 3,639,432	\$ 3,898,372

See Notes to Unaudited Consolidated Financial Statements

NORTHWEST NATURAL GAS COMPANY

CONSOLIDATED STATEMENTS OF SHAREHOLDER'S EQUITY (UNAUDITED)

<i>In thousands</i>	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Total shareholder's equity, beginning balances	\$ 1,021,609	\$ 881,565	\$ 977,807	\$ 835,184
Common stock:				
Beginning balances	436,042	319,506	435,515	319,506
Capital contributions from parent	164,990	—	165,517	—
Ending balances	601,032	319,506	601,032	319,506
Retained earnings:				
Beginning balances	596,774	574,740	553,696	528,580
Net income	2,733	589	60,149	60,700
Dividends on common stock	(15,853)	(13,984)	(30,191)	(27,935)
Ending balances	583,654	561,345	583,654	561,345
Accumulated other comprehensive income (loss):				
Beginning balances	(11,207)	(12,681)	(11,404)	(12,902)
Other comprehensive income	197	221	394	442
Ending balances	(11,010)	(12,460)	(11,010)	(12,460)
Total shareholder's equity, ending balances	\$ 1,173,676	\$ 868,391	\$ 1,173,676	\$ 868,391

See Notes to Unaudited Consolidated Financial Statements

NORTHWEST NATURAL GAS COMPANY

CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)

<i>In thousands</i>	Six Months Ended June 30,	
	2022	2021
Operating activities:		
Net income	\$ 60,149	\$ 60,700
Adjustments to reconcile net income to cash provided by operations:		
Depreciation	54,965	54,699
Regulatory amortization of gas reserves	2,984	7,597
Deferred income taxes	10,308	201
Qualified defined benefit pension plan expense	2,882	7,874
Contributions to qualified defined benefit pension plans	—	(9,590)
Deferred environmental expenditures, net	(9,608)	(9,625)
Environmental remediation expense	6,970	5,286
Asset optimization revenue sharing bill credits	(41,102)	(9,053)
Other	9,158	9,534
Changes in assets and liabilities:		
Receivables, net	97,175	74,354
Inventories	(7,974)	3,775
Income and other taxes	16,069	19,440
Accounts payable	(16,341)	(19,936)
Deferred gas costs	2,607	(26,962)
Asset optimization revenue sharing	3,929	36,872
Decoupling mechanism	9,669	(6,860)
Other, net	(8,404)	(8,361)
Cash provided by operating activities	193,436	189,945
Investing activities:		
Capital expenditures	(156,189)	(125,167)
Proceeds from the sale of assets	345	2,234
Other	(2,336)	46
Cash used in investing activities	(158,180)	(122,887)
Financing activities:		
Cash contributions received from parent	165,517	—
Proceeds from term loan due within one year	—	100,000
Repayment of commercial paper, maturities greater than three months	—	(195,025)
Changes in other short-term debt, net	(166,800)	61,500
Cash dividend payments on common stock	(30,191)	(27,935)
Other	(1,521)	(1,623)
Cash used in financing activities	(32,995)	(63,083)
Increase in cash, cash equivalents and restricted cash	2,261	3,975
Cash, cash equivalents and restricted cash, beginning of period	20,832	15,739
Cash, cash equivalents and restricted cash, end of period	\$ 23,093	\$ 19,714
Supplemental disclosure of cash flow information:		
Interest paid, net of capitalization	\$ 21,270	\$ 21,285
Income taxes paid, net of refunds	3,490	10,910

See Notes to Unaudited Consolidated Financial Statements

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

1. ORGANIZATION AND PRINCIPLES OF CONSOLIDATION

The accompanying consolidated financial statements represent the respective, consolidated financial results of Northwest Natural Holding Company (NW Holdings) and Northwest Natural Gas Company (NW Natural) and all respective companies that each registrant directly or indirectly controls, either through majority ownership or otherwise. This is a combined report of NW Holdings and NW Natural, which includes separate consolidated financial statements for each registrant.

NW Natural's regulated natural gas distribution activities are reported in the natural gas distribution (NGD) segment. The NGD segment is NW Natural's core operating business and serves residential, commercial, and industrial customers in Oregon and southwest Washington. The NGD segment is the only reportable segment for NW Holdings and NW Natural. All other activities, water businesses, and other investments are aggregated and reported as other at their respective registrant.

NW Holdings and NW Natural consolidate all entities in which they have a controlling financial interest. Investments in corporate joint ventures and partnerships that NW Holdings does not directly or indirectly control, and for which it is not the primary beneficiary, include NNG Financial's investment in Kelso-Beaver Pipeline and NWN Water's investment in Avion Water Company, Inc., which are accounted for under the equity method. NW Natural RNG Holding Company, LLC holds an investment in Lexington Renewable Energy, LLC, which is also accounted for under the equity method. See Note 13 for activity related to equity method investments. NW Holdings and its direct and indirect subsidiaries are collectively referred to herein as NW Holdings, and NW Natural and its direct and indirect subsidiaries are collectively referred to herein as NW Natural. The consolidated financial statements of NW Holdings and NW Natural are presented after elimination of all intercompany balances and transactions.

Information presented in these interim consolidated financial statements is unaudited, but includes all material adjustments management considers necessary for a fair statement of the results for each period reported including normal recurring accruals. These consolidated financial statements should be read in conjunction with the audited consolidated financial statements and related notes included in NW Holdings' and NW Natural's combined 2021 Annual Report on Form 10-K (2021 Form 10-K). A significant part of NW Holdings' and NW Natural's business is of a seasonal nature; therefore, NW Holdings and NW Natural results of operations for interim periods are not necessarily indicative of full year results. Seasonality affects the comparability of the results of other operations across quarters but not across years.

Notes to the consolidated financial statements reflect the activity for both NW Holdings and NW Natural for all periods presented, unless otherwise noted. Certain reclassifications have been made to conform prior period information to the current presentation. The reclassifications did not have a material effect on our consolidated financial statements.

2. SIGNIFICANT ACCOUNTING POLICIES

Significant accounting policies are described in Note 2 of the 2021 Form 10-K. There were no material changes to those accounting policies during the six months ended June 30, 2022 other than those set forth in this Note 2. The following are current updates to certain critical accounting policy estimates and new accounting standards.

Industry Regulation

In applying regulatory accounting principles, NW Holdings and NW Natural capitalize or defer certain costs and revenues as regulatory assets and liabilities pursuant to orders of the Oregon Public Utilities Commission (OPUC), Washington Utilities and Transportation Commission (WUTC), Idaho Public Utilities Commission (IPUC) or Public Utility Commission of Texas (PUCT), as applicable, which provide for the recovery of revenues or expenses from, or refunds to, utility customers in future periods, including a return or a carrying charge in certain cases.

Amounts deferred as regulatory assets and liabilities for NW Holdings and NW Natural were as follows:

In thousands	Regulatory Assets		
	2022	June 30, 2021	December 31, 2021
NW Natural:			
Current:			
Unrealized loss on derivatives ⁽¹⁾	\$ 15,918	\$ 3,393	\$ 10,402
Gas costs	48,218	29,486	35,641
Environmental costs ⁽²⁾	6,975	5,688	6,694
Decoupling ⁽³⁾	212	1,011	969
Pension balancing ⁽⁴⁾	7,131	7,131	7,131
Income taxes	2,276	2,345	2,568
Other ⁽⁵⁾	12,073	11,618	8,986
Total current	\$ 92,803	\$ 60,672	\$ 72,391
Non-current:			
Unrealized loss on derivatives ⁽¹⁾	\$ 9,475	\$ 453	\$ 412
Pension balancing ⁽⁴⁾	35,150	40,342	38,302
Income taxes	11,161	13,903	12,609
Pension and other postretirement benefit liabilities	110,548	160,385	116,440
Environmental costs ⁽²⁾	86,411	85,423	94,636
Gas costs	7,975	5,742	15,477
Decoupling ⁽³⁾	—	198	—
Other ⁽⁵⁾	41,070	24,224	36,663
Total non-current	\$ 301,790	\$ 330,670	\$ 314,539
Other (NW Holdings)	65	40	40
Total non-current - NW Holdings	\$ 301,855	\$ 330,710	\$ 314,579

In thousands	Regulatory Liabilities		
	2022	June 30, 2021	December 31, 2021
NW Natural:			
Current:			
Gas costs	\$ 1,898	\$ 1,519	\$ 70
Unrealized gain on derivatives ⁽¹⁾	60,652	46,168	48,130
Decoupling ⁽³⁾	14,242	5,821	4,475
Income taxes	7,318	8,217	8,192
Asset optimization revenue sharing	9,761	39,348	45,124
Other ⁽⁵⁾	3,406	2,137	6,290
Total current	\$ 97,277	\$ 103,210	\$ 112,281
Non-current:			
Gas costs	\$ 353	\$ 101	\$ 250
Unrealized gain on derivatives ⁽¹⁾	9,121	7,912	10,730
Decoupling ⁽³⁾	2,557	652	3,412
Income taxes ⁽⁶⁾	176,358	182,977	181,404
Accrued asset removal costs ⁽⁷⁾	455,794	439,685	445,952
Asset optimization revenue sharing	—	—	1,810
Other ⁽⁵⁾	13,760	12,850	13,792
Total non-current - NW Natural	\$ 657,943	\$ 644,177	\$ 657,350
Other (NW Holdings)	982	869	982
Total non-current - NW Holdings	\$ 658,925	\$ 645,046	\$ 658,332

(1) Unrealized gains or losses on derivatives are non-cash items and therefore do not earn a rate of return or a carrying charge. These amounts are recoverable through NGD rates as part of the annual Purchased Gas Adjustment (PGA) mechanism when realized at settlement.

(2) Refer to the Environmental Cost Deferral and Recovery table in Note 16 for a description of environmental costs.

(3) This deferral represents the margin adjustment resulting from differences between actual and expected volumes.

(4) Balance represents deferred net periodic benefit costs as approved by the OPUC.

- (5) Balances consist of deferrals and amortizations under approved regulatory mechanisms and typically earn a rate of return or carrying charge.
(6) Balance represents excess deferred income tax benefits subject to regulatory flow-through.
(7) Estimated costs of removal on certain regulated properties are collected through rates.

We believe all costs incurred and deferred at June 30, 2022 are prudent. All regulatory assets and liabilities are reviewed annually for recoverability, or more often if circumstances warrant. If we should determine that all or a portion of these regulatory assets or liabilities no longer meet the criteria for continued application of regulatory accounting, then NW Holdings and NW Natural would be required to write-off the net unrecoverable balances in the period such determination is made.

Supplemental Cash Flow Information

Restricted cash is primarily comprised of funds from public purpose charges for programs that assist low-income customers with bill payments or energy efficiency.

The following table provides a reconciliation of the cash, cash equivalents and restricted cash balances at NW Holdings as of June 30, 2022 and 2021 and December 31, 2021:

<i>In thousands</i>	2022	June 30, 2021	December 31, 2021
Cash and cash equivalents	\$ 17,209	\$ 20,084	\$ 18,559
Restricted cash included in other current assets	12,826	8,226	8,561
Cash, cash equivalents and restricted cash	<u>\$ 30,035</u>	<u>\$ 28,310</u>	<u>\$ 27,120</u>

The following table provides a reconciliation of the cash, cash equivalents and restricted cash balances at NW Natural as of June 30, 2022 and 2021 and December 31, 2021:

<i>In thousands</i>	2022	June 30, 2021	December 31, 2021
Cash and cash equivalents	\$ 10,267	\$ 11,488	\$ 12,271
Restricted cash included in other current assets	12,826	8,226	8,561
Cash, cash equivalents and restricted cash	<u>\$ 23,093</u>	<u>\$ 19,714</u>	<u>\$ 20,832</u>

Accounts Receivable and Allowance for Uncollectible Accounts

Accounts receivable consist primarily of amounts due for natural gas sales and transportation services to NGD customers, plus amounts due for gas storage services. NW Holdings and NW Natural establish allowances for uncollectible accounts (allowance) for trade receivables, including accrued unbilled revenue, based on the aging of receivables, collection experience of past due account balances including payment plans, and historical trends of write-offs as a percent of revenues. A specific allowance is established and recorded for large individual customer receivables when amounts are identified as unlikely to be partially or fully recovered. Inactive accounts are written-off against the allowance after they are 120 days past due or when deemed uncollectible. Differences between the estimated allowance and actual write-offs will occur based on a number of factors, including changes in economic conditions, customer creditworthiness, and natural gas prices. The allowance for uncollectible accounts is adjusted quarterly, as necessary, based on information currently available.

Allowance for Trade Receivables

The payment term of our NGD receivables is generally 15 days. For these short-term receivables, it is not expected that forecasted economic conditions would significantly affect the loss estimates under stable economic conditions. For extreme situations like a financial crisis, natural disaster, and the economic slowdown caused by the COVID-19 pandemic, we enhanced our review and analysis.

During 2020 and 2021, we considered the significant exposure to COVID-19 related job losses in Oregon and Washington state, and expanded our standard review procedures for our allowance for uncollectible accounts at NW Holdings and NW Natural, including analyzing the unemployment rate and comparing it to historic economic data during the 2007-2009 time period when the country experienced an economic recession. We also considered other qualitative information including recent customer interactions related to payment plans and credit issues, statistics from our website related to credit inquiries, and bill assistance programs including the arrearage management program. For the residential allowance calculation, we continue to consider the funds applied or granted to customers through a variety of assistance programs including the COVID-19 arrearage management programs in Oregon and Washington. During the third quarter of 2021, the collection process for residential accounts resumed. For residential and commercial accounts, we've resumed collection processes and our provision is based on historical write-off trends and current information on delinquent accounts. For industrial accounts, we continue to analyze those accounts on an account-by-account basis with specific reserves taken as necessary. We'll continue to closely monitor and evaluate our accounts receivable and provision for uncollectible accounts.

The following table presents the activity related to the NW Holdings provision for uncollectible accounts by pool, substantially all of which is related to NW Natural's accounts receivable:

<i>In thousands</i>	As of December 31, 2021	Six Months Ended June 30, 2022		As of June 30, 2022
	Beginning Balance	Provision recorded, net of adjustments	Write-offs recognized, net of recoveries	Ending Balance
Allowance for uncollectible accounts:				
Residential	\$ 1,460	\$ (142)	\$ (468)	\$ 850
Commercial	178	52	(110)	120
Industrial	67	110	(27)	150
Accrued unbilled and other	313	18	(95)	236
Total	\$ 2,018	\$ 38	\$ (700)	\$ 1,356

Allowance for Net Investments in Sales-Type Leases

NW Natural currently holds two net investments in sales-type leases, with substantially all of the net investment balance related to the North Mist natural gas storage agreement with Portland General Electric (PGE) which is billed under an OPUC-approved rate schedule. See Note 7 for more information on the North Mist lease. Due to the nature of this service, PGE may recover the costs of the lease through general rate cases. Therefore, we expect the risk of loss due to the credit of this lessee to be remote. As such, no allowance for uncollectibility was recorded for our sales-type lease receivables. NW Natural will continue monitoring the credit health of the lessees and the overall economic environment, including the economic factors closely tied to the financial health of our current and future lessees.

COVID-19 Impact

During 2020, our regulated utilities received approval in their respective jurisdictions to defer certain financial impacts associated with COVID-19 such as bad debt expense, financing costs to secure liquidity, lost revenues related to late fees and reconnection fees, and other COVID-19 related costs, net of offsetting direct expense reductions associated with COVID-19. As of June 30, 2022 and 2021, we had a regulatory asset of approximately \$13.4 million and \$5.8 million, respectively, for incurred costs associated with COVID-19 that we believe are recoverable.

Cloud Computing Arrangements (CCA)

Implementation costs associated with its CCA are capitalized consistent with costs capitalized for internal-use software. Capitalized CCA implementation costs are included in other assets in the consolidated balance sheets. The CCA implementation costs are amortized over the term of the related hosting agreement, including renewal periods that are reasonably certain to be exercised. Amortization expense of CCA implementation costs are recorded as operations and maintenance expenses in the consolidated statements of comprehensive income. The CCA implementation costs are included within operating activities in the consolidated statements of cash flows.

New Accounting Standards

NW Natural and NW Holdings consider the applicability and impact of all accounting standards updates (ASUs) issued by the Financial Accounting Standards Board (FASB). ASUs not listed below were assessed and determined to be either not applicable or are expected to have minimal impact on consolidated financial position or results of operations.

Recently Adopted Accounting Pronouncements

LEASES. In July 2021, the FASB issued ASU 2021-05, "Leases (Topic 842), Lessors - Certain Leases with Variable Lease Payments." The purpose of the amendment is to require lessors to account for certain lease transactions that contain variable lease payments as operating leases. The amendments in this ASU are intended to eliminate the recognition of any day-one loss associated with certain sales-type and direct-financing lease transactions. The changes do not impact lessee accounting. The new guidance was effective on January 1, 2022 and adopted using a prospective approach. The adoption did not materially affect the financial statements and disclosures of NW Holdings or NW Natural.

3. EARNINGS PER SHARE

Basic earnings or loss per share are computed using NW Holdings' net income or loss and the weighted average number of common shares outstanding for each period presented. Diluted earnings per share are computed in the same manner, except using the weighted average number of common shares outstanding plus the effects of the assumed exercise of stock options and the payment of estimated stock awards from other stock-based compensation plans that are outstanding at the end of each period presented. Anti-dilutive stock awards are excluded from the calculation of diluted earnings or loss per common share.

NW Holdings' diluted earnings or loss per share are calculated as follows:

<i>In thousands, except per share data</i>	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Net income (loss)	1,715	(724)	57,954	58,793
Average common shares outstanding - basic	34,307	30,664	32,756	30,639
Additional shares for stock-based compensation plans (See Note 8)	45	—	49	32
Average common shares outstanding - diluted	34,352	30,664	32,805	30,671
Earnings (loss) per share of common stock:				
Basic	\$ 0.05	\$ (0.02)	\$ 1.77	\$ 1.92
Diluted	\$ 0.05	\$ (0.02)	\$ 1.77	\$ 1.92
Additional information:				
Anti-dilutive shares	1	48	1	7

4. SEGMENT INFORMATION

We primarily operate in one reportable business segment, which is NW Natural's local gas distribution business and is referred to as the NGD segment. NW Natural and NW Holdings also have investments and business activities not specifically related to the NGD segment, which are aggregated and reported as other and described below for each entity.

Natural Gas Distribution

NW Natural's local gas distribution segment is a regulated utility principally engaged in the purchase, sale, and delivery of natural gas and related services to customers in Oregon and southwest Washington. In addition to NW Natural's local gas distribution business, the NGD segment also includes the portion of the Mist underground storage facility used to serve NGD customers, the North Mist gas storage expansion in Oregon, NWN Gas Reserves, which is a wholly-owned subsidiary of Energy Corp, and NW Natural RNG Holding Company, LLC, a holding company established to invest in the development and procurement of regulated renewable natural gas for NW Natural.

NW Natural

NW Natural's activities in Other include Interstate Storage Services and third-party asset management services for the Mist facility in Oregon, appliance retail center operations, and corporate operating and non-operating revenues and expenses that cannot be allocated to NGD operations.

Earnings from Interstate Storage Services assets are primarily related to firm storage capacity revenues. Earnings from the Mist facility also include revenue, net of amounts shared with NGD customers, from management of NGD assets at Mist and upstream pipeline capacity when not needed to serve NGD customers. Under the Oregon sharing mechanism, NW Natural retains 80% of the pre-tax income from these services when the costs of the capacity were not included in NGD rates, or 10% of the pre-tax income when the costs have been included in these rates. The remaining 20% and 90%, respectively, are recorded to a deferred regulatory account for crediting back to NGD customers.

NW Holdings

NW Holdings' activities in Other include all remaining activities not associated with NW Natural, specifically: NWN Water, which consolidates the water and wastewater utility operations and is pursuing other investments in the water sector through itself and wholly-owned subsidiaries; NWN Water's equity investment in Avion Water Company, Inc.; NWN Gas Storage, a wholly-owned subsidiary of NWN Energy; other pipeline assets in NNG Financial; and NW Natural Renewables Holdings, LLC and its non-regulated renewable natural gas activities. Other also includes corporate revenues and expenses that cannot be allocated to other operations, including certain business development activities.

Segment Information Summary

Inter-segment transactions were immaterial for the periods presented. The following table presents summary financial information concerning the reportable segment and other.

<i>In thousands</i>	Three Months Ended June 30,				
	NGD	Other (NW Natural)	NW Natural	Other (NW Holdings)	NW Holdings
2022					
Operating revenues	\$ 184,634	\$ 5,617	\$ 190,251	\$ 4,709	\$ 194,960
Depreciation	27,062	266	27,328	782	28,110
Income (loss) from operations	10,575	3,550	14,125	(586)	13,539
Net income (loss)	157	2,576	2,733	(1,018)	1,715
Capital expenditures	91,122	750	91,872	7,310	99,182
2021					
Operating revenues	\$ 139,614	\$ 4,965	\$ 144,579	\$ 4,338	\$ 148,917
Depreciation	27,273	257	27,530	614	28,144
Income (loss) from operations	11,331	2,808	14,139	(1,515)	12,624
Net income (loss)	(1,381)	1,970	589	(1,313)	(724)
Capital expenditures	60,376	693	61,069	3,337	64,406

<i>In thousands</i>	Six Months Ended June 30,				
	NGD	Other (NW Natural)	NW Natural	Other (NW Holdings)	NW Holdings
2022					
Operating revenues	\$ 526,032	\$ 10,843	\$ 536,875	\$ 8,386	\$ 545,261
Depreciation	54,435	530	54,965	1,574	56,539
Income (loss) from operations	96,238	6,438	102,676	(1,499)	101,177
Net income (loss)	55,547	4,602	60,149	(2,195)	57,954
Capital expenditures	155,402	787	156,189	11,507	167,696
Total assets at June 30, 2022	3,875,237	54,760	3,929,997	170,521	4,100,518
2021					
Operating revenues	\$ 440,952	\$ 15,977	\$ 456,929	\$ 7,934	\$ 464,863
Depreciation	54,186	513	54,699	1,542	56,241
Income (loss) from operations	97,818	11,439	109,257	(1,927)	107,330
Net income (loss)	52,544	8,156	60,700	(1,907)	58,793
Capital expenditures	124,368	799	125,167	4,941	130,108
Total assets at June 30, 2021	3,587,966	51,466	3,639,432	144,068	3,783,500
Total assets at December 31, 2021	3,846,112	52,260	3,898,372	166,232	4,064,604

Natural Gas Distribution Margin

NGD margin is the primary financial measure used by the Chief Operating Decision Maker (CODM), consisting of NGD operating revenues, reduced by the associated cost of gas, environmental remediation expense, and revenue taxes. The cost of gas purchased for NGD customers is generally a pass-through cost in the amount of revenues billed to regulated NGD customers. Environmental remediation expense represents collections received from customers through environmental recovery mechanisms in Oregon and Washington as well as adjustments for the Oregon environmental earnings test when applicable. This is offset by environmental remediation expense presented in operating expenses. Revenue taxes are collected from NGD customers and remitted to taxing authorities. The collections from customers are offset by the expense recognition of the obligation to the taxing authority. By subtracting cost of gas, environmental remediation expense, and revenue taxes from NGD operating revenues, NGD margin provides a key metric used by the CODM in assessing the performance of the NGD segment.

The following table presents additional segment information concerning NGD margin:

<i>In thousands</i>	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
NGD margin calculation:				
NGD distribution revenues	\$ 179,727	\$ 134,849	\$ 516,214	\$ 431,402
Other regulated services	4,907	4,765	9,818	9,550
Total NGD operating revenues	184,634	139,614	526,032	440,952
Less: NGD cost of gas	79,776	41,249	225,420	153,515
Environmental remediation	2,272	1,509	6,970	5,286
Revenue taxes	8,208	5,650	21,532	18,305
NGD margin	\$ 94,378	\$ 91,206	\$ 272,110	\$ 263,846

5. COMMON STOCK

In August 2021, NW Holdings initiated an at-the-market (ATM) equity program by entering into an equity distribution agreement under which NW Holdings may issue and sell from time to time shares of common stock, no par value, having an aggregate gross sales price of up to \$200 million. NW Holdings is under no obligation to offer and sell common stock under the ATM equity program, which expires in August 2024. Any shares of common stock offered under the ATM equity program are registered on NW Holdings' universal shelf registration statement filed with the SEC. During the three months ended June 30, 2022, NW Holdings issued and sold 482,200 shares of common stock pursuant to the ATM equity program resulting in cash proceeds of \$25.1 million, net of fees and commissions paid to agents of \$0.4 million. During the six months ended June 30, 2022, NW Holdings issued and sold 678,101 shares of common stock pursuant to the ATM equity program resulting in cash proceeds of \$35.2 million, net of fees and commissions paid to agents of \$0.7 million. As of June 30, 2022, NW Holdings had \$146.2 million of equity available for issuance under the program. The ATM equity program was initiated to raise funds for general corporate purposes, including equity contributions to NW Holdings' subsidiaries, NW Natural and NW Natural Water. Contributions to NW Natural and NW Natural Water will be used for general corporate purposes.

On April 1, 2022, NW Holdings issued and sold 2,875,000 shares of its common stock pursuant to a registration statement on Form S-3 and related prospectus settlement. NW Holdings received net offering proceeds, after deducting the underwriter's discounts and commissions and expenses payable by NW Holdings, of approximately \$138.6 million. The proceeds are to be used for general corporate purposes, including repayment of its short-term indebtedness and/or making equity contributions to NW Holdings' subsidiaries, NW Natural, NW Natural Water and NW Natural Renewables. Contributions to NW Natural, NW Natural Water and NW Natural Renewables are to be used for general corporate purposes. Of the contributions received by NW Natural, \$130.0 million was used to repay its short-term indebtedness.

6. REVENUE

The following tables present disaggregated revenue:

In thousands	Three Months Ended June 30,				
	NGD	Other (NW Natural)	NW Natural	Other (NW Holdings)	NW Holdings
2022					
Natural gas sales	\$ 190,041	\$ —	\$ 190,041	\$ —	\$ 190,041
Gas storage revenue, net	—	3,039	3,039	—	3,039
Asset management revenue, net	—	1,142	1,142	—	1,142
Appliance retail center revenue	—	1,436	1,436	—	1,436
Other revenue	628	—	628	4,709	5,337
Revenue from contracts with customers	190,669	5,617	196,286	4,709	200,995
Alternative revenue	(10,333)	—	(10,333)	—	(10,333)
Leasing revenue	4,298	—	4,298	—	4,298
Total operating revenues	\$ 184,634	\$ 5,617	\$ 190,251	\$ 4,709	\$ 194,960
2021					
Natural gas sales	\$ 123,739	\$ —	\$ 123,739	\$ —	\$ 123,739
Gas storage revenue, net	—	2,805	2,805	—	2,805
Asset management revenue, net	—	817	817	—	817
Appliance retail center revenue	—	1,343	1,343	—	1,343
Other revenue	399	—	399	4,338	4,737
Revenue from contracts with customers	124,138	4,965	129,103	4,338	133,441
Alternative revenue	11,083	—	11,083	—	11,083
Leasing revenue	4,393	—	4,393	—	4,393
Total operating revenues	\$ 139,614	\$ 4,965	\$ 144,579	\$ 4,338	\$ 148,917
In thousands	Six Months Ended June 30,				
	NGD	Other (NW Natural)	NW Natural	Other (NW Holdings)	NW Holdings
2022					
Natural gas sales	\$ 527,337	\$ —	\$ 527,337	\$ —	\$ 527,337
Gas storage revenue, net	—	5,796	5,796	—	5,796
Asset management revenue, net	—	1,894	1,894	—	1,894
Appliance retail center revenue	—	3,153	3,153	—	3,153
Other revenue	1,258	—	1,258	8,386	9,644
Revenue from contracts with customers	528,595	10,843	539,438	8,386	547,824
Alternative revenue	(11,160)	—	(11,160)	—	(11,160)
Leasing revenue	8,597	—	8,597	—	8,597
Total operating revenues	\$ 526,032	\$ 10,843	\$ 536,875	\$ 8,386	\$ 545,261
2021					
Natural gas sales	\$ 419,822	\$ —	\$ 419,822	\$ —	\$ 419,822
Gas storage revenue, net	—	5,300	5,300	—	5,300
Asset management revenue, net	—	7,745	7,745	—	7,745
Appliance retail center revenue	—	2,932	2,932	—	2,932
Other revenue	814	—	814	7,934	8,748
Revenue from contracts with customers	420,636	15,977	436,613	7,934	444,547
Alternative revenue	11,536	—	11,536	—	11,536
Leasing revenue	8,780	—	8,780	—	8,780
Total operating revenues	\$ 440,952	\$ 15,977	\$ 456,929	\$ 7,934	\$ 464,863

NW Natural's revenue represents substantially all of NW Holdings' revenue and is recognized for both registrants when the obligation to customers is satisfied and in the amount expected to be received in exchange for transferring goods or providing services. Revenue from contracts with customers contains one performance obligation that is generally satisfied over time, using the output method based on time elapsed, due to the continuous nature of the service provided. The transaction price is determined by a set price agreed upon in the contract or dependent on regulatory tariffs. Customer accounts are settled on a monthly basis or paid at time of sale and based on historical experience. It is probable that we will collect substantially all of the consideration to which we are entitled. We evaluated the probability of collection in accordance with the current expected credit losses standard.

NW Holdings and NW Natural do not have any material contract assets, as net accounts receivable and accrued unbilled revenue balances are unconditional and only involve the passage of time until such balances are billed and collected. NW Holdings and NW Natural do not have any material contract liabilities.

Revenue taxes are included in operating revenues with an equal and offsetting expense recognized in operating expenses in the consolidated statements of comprehensive income. Revenue-based taxes are primarily franchise taxes, which are collected from NGD customers and remitted to taxing authorities.

Natural Gas Distribution

Natural Gas Sales

NW Natural's primary source of revenue is providing natural gas to customers in the NGD service territory, which includes residential, commercial, industrial and transportation customers. NGD revenue is generally recognized over time upon delivery of the gas commodity or service to the customer, and the amount of consideration received and recognized as revenue is dependent on the Oregon and Washington tariffs. Customer accounts are to be paid in full each month, and there is no right of return or warranty for services provided. Revenues include firm and interruptible sales and transportation services, franchise taxes recovered from the customer, late payment fees, service fees, and accruals for gas delivered but not yet billed (accrued unbilled revenue). The accrued unbilled revenue balance is based on estimates of deliveries during the period from the last meter reading and management judgment is required for a number of factors used in this calculation, including customer use and weather factors.

We applied the significant financing practical expedient and have not adjusted the consideration NW Natural expects to receive from NGD customers for the effects of a significant financing component as all payment arrangements are settled annually. Due to the election of the right to invoice practical expedient, we do not disclose the value of unsatisfied performance obligations.

Alternative Revenue

Weather normalization (WARM) and decoupling mechanisms are considered to be alternative revenue programs. Alternative revenue programs are considered to be contracts between NW Natural and its regulator and are excluded from revenue from contracts with customers.

Leasing Revenue

Leasing revenue primarily consists of revenues from NW Natural's North Mist Storage contract with Portland General Electric (PGE) in support of PGE's gas-fired electric power generation facilities under an initial 30-year contract with options to extend, totaling up to an additional 50 years upon mutual agreement of the parties. The facility is accounted for as a sales-type lease with regulatory accounting deferral treatment. The investment is included in rate base under an established cost-of-service tariff schedule, with revenues recognized according to the tariff schedule and as such, profit upon commencement was deferred and will be amortized over the lease term. Leasing revenue also contains rental revenue from small leases of property owned by NW Natural to third parties. The majority of these transactions are accounted for as operating leases and the revenue is recognized over the term of the lease agreement. Lease revenue is excluded from revenue from contracts with customers. See Note 7 for additional information.

NW Natural Other

Gas Storage Revenue

NW Natural's other revenue includes gas storage activity, which includes Interstate Storage Services used to store natural gas for customers. Gas storage revenue is generally recognized over time as the gas storage service is provided to the customer and the amount of consideration received and recognized as revenue is dependent on set rates defined per the storage agreements. Noncash consideration in the form of dekatherms of natural gas is received as consideration for providing gas injection services to gas storage customers. This noncash consideration is measured at fair value using the average spot rate. Customer accounts are generally paid in full each month, and there is no right of return or warranty for services provided. Revenues include firm and interruptible storage services, net of the profit sharing amount refunded to NGD customers.

Asset Management Revenue

Revenues include the optimization of third-party storage assets and pipeline capacity and are provided net of the profit sharing amount refunded to NGD customers. Certain asset management revenues received are recognized over time using a straight-line approach over the term of each contract, and the amount of consideration received and recognized as revenue is dependent on a variable pricing model. Variable revenues earned above guaranteed amounts are estimated and recognized at the end of

each period using the most likely amount approach. Additionally, other asset management revenues may be based on a fixed rate. Generally, asset management accounts are settled on a monthly basis.

As of June 30, 2022, unrecognized revenue for the fixed component of the transaction price related to gas storage and asset management revenue was approximately \$89.6 million. Of this amount, approximately \$10.5 million will be recognized during the remainder of 2022, \$18.6 million in 2023, \$15.6 million in 2024, \$13.5 million in 2025, \$9.4 million in 2026 and \$22.0 million thereafter. The amounts presented here are calculated using current contracted rates.

Appliance Retail Center Revenue

NW Natural owns and operates an appliance store that is open to the public, where customers can purchase natural gas home appliances. Revenue from the sale of appliances is recognized at the point in time in which the appliance is transferred to the third party responsible for delivery and installation services and when the customer has legal title to the appliance. It is required that the sale be paid for in full prior to transfer of legal title. The amount of consideration received and recognized as revenue varies with changes in marketing incentives and discounts offered to customers.

NW Holdings Other

NW Holdings' primary source of other revenue is providing water and wastewater services to customers. Water and wastewater service revenue is generally recognized over time upon delivery of the water commodity or service to the customer, and the amount of consideration received and recognized as revenue is dependent on the tariffs established in the states we operate. Customer accounts are to be paid in full each month or bi-monthly, and there is no right of return or warranty for services provided.

We applied the significant financing practical expedient and have not adjusted the consideration we expect to receive from water distribution and wastewater collection customers for the effects of a significant financing component as all payment arrangements are settled annually. Due to the election of the right to invoice practical expedient, we do not disclose the value of unsatisfied performance obligations.

7. LEASES

Lease Revenue

Leasing revenue primarily consists of NW Natural's North Mist natural gas storage agreement with Portland General Electric (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 and NW Holdings 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:

<i>In thousands</i>	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Lease revenue				
Operating leases	\$ 19	\$ 25	\$ 37	\$ 43
Sales-type leases	4,279	4,368	8,560	8,737
Total lease revenue	<u>\$ 4,298</u>	<u>\$ 4,393</u>	<u>\$ 8,597</u>	<u>\$ 8,780</u>

Additionally, lease revenue of \$0.1 million was recognized for the three months ended June 30, 2022 and 2021 and lease revenue of \$0.3 million was recognized for the six months ended June 30, 2022 and 2021 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 June 30, 2022 are as follows:

<i>In thousands</i>	Operating	Sales-Type	Total
NW Natural:			
Remainder of 2022	\$ 289	\$ 8,460	\$ 8,749
2023	76	16,557	16,633
2024	76	15,867	15,943
2025	67	15,306	15,373
2026	36	14,901	14,937
Thereafter	22	236,820	236,842
Total minimum lease payments	<u>\$ 566</u>	<u>\$ 307,911</u>	<u>\$ 308,477</u>
Less: imputed interest		171,122	
Total leases receivable		<u>\$ 136,789</u>	
Other (NW Holdings):			
Remainder of 2022	\$ 25	\$ —	\$ 25
2023	51	—	51
2024	52	—	52
2025	53	—	53
2026	56	—	56
Thereafter	914	—	914
Total minimum lease payments	<u>\$ 1,151</u>	<u>\$ —</u>	<u>\$ 1,151</u>
NW Holdings:			
Remainder of 2022	\$ 314	\$ 8,460	\$ 8,774
2023	127	16,557	16,684
2024	128	15,867	15,995
2025	120	15,306	15,426
2026	92	14,901	14,993
Thereafter	936	236,820	237,756
Total minimum lease payments	<u>\$ 1,717</u>	<u>\$ 307,911</u>	<u>\$ 309,628</u>
Less: imputed interest		171,122	
Total leases receivable		<u>\$ 136,789</u>	

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 \$4.9 million, \$4.5 million and \$4.7 million at June 30, 2022 and 2021 and December 31, 2021, 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 three months 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:

<i>In thousands</i>	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
NW Natural:				
Operating lease expense	\$ 1,741	\$ 1,710	\$ 3,468	\$ 3,388
Short-term lease expense	\$ 416	\$ 349	\$ 579	\$ 569
Other (NW Holdings):				
Operating lease expense	\$ 8	\$ 18	\$ 15	\$ 36
NW Holdings:				
Operating lease expense	\$ 1,749	\$ 1,728	\$ 3,483	\$ 3,424
Short-term lease expense	\$ 416	\$ 349	\$ 579	\$ 569

Supplemental balance sheet information related to operating leases as of June 30, 2022 and 2021 and December 31, 2021 is as follows:

<i>In thousands</i>	June 30,		December 31,	
	2022	2021	2021	
NW Natural:				
Operating lease right of use asset	\$ 73,706	\$ 76,211	\$ 74,987	
Operating lease liabilities - current liabilities	\$ 1,298	\$ 1,193	\$ 1,273	
Operating lease liabilities - non-current liabilities	78,789	80,043	79,431	
Total operating lease liabilities	\$ 80,087	\$ 81,236	\$ 80,704	
Other (NW Holdings):				
Operating lease right of use asset	\$ 48	\$ 83	\$ 62	
Operating lease liabilities - non-current liabilities	37	45	37	
Operating lease liabilities - current liabilities	\$ 17	\$ 35	\$ 23	
Total operating lease liabilities	\$ 54	\$ 80	\$ 60	
NW Holdings:				
Operating lease right of use asset	\$ 73,754	\$ 76,294	\$ 75,049	
Operating lease liabilities - current liabilities	\$ 1,315	\$ 1,228	\$ 1,296	
Operating lease liabilities - non-current liabilities	78,826	80,088	79,468	
Total operating lease liabilities	\$ 80,141	\$ 81,316	\$ 80,764	

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

<i>In thousands</i>	June 30,		December 31,	
	2022	2021	2021	
Weighted-average remaining lease term (years)	17.7	18.7	18.2	
Weighted-average discount rate	7.2 %	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 deferred regulatory asset on our balance sheet. The balance of the regulatory asset was \$6.3 million, \$5.0 million and \$5.7 million as of June 30, 2022 and 2021 and December 31, 2021, respectively.

Maturities of operating lease liabilities at June 30, 2022 were as follows:

<i>In thousands</i>	NW Natural	Other (NW Holdings)	NW Holdings
Remainder of 2022	\$ 3,502	\$ 12	\$ 3,514
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	23	116,454
Total lease payments	148,634	59	148,693
Less: imputed interest	68,547	5	68,552
Total lease obligations	80,087	54	80,141
Less: current obligations	1,298	17	1,315
Long-term lease obligations	\$ 78,789	\$ 37	\$ 78,826

As of June 30, 2022, finance lease liabilities with maturities of less than one year were \$0.1 million at NW Natural.

Supplemental cash flow information related to leases was as follows:

<i>In thousands</i>	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
NW Natural:				
Cash paid for amounts included in the measurement of lease liabilities				
Operating cash flows from operating leases	\$ 1,733	\$ 1,717	\$ 3,466	\$ 3,386
Finance cash flows from finance leases	\$ 307	\$ 134	\$ 382	\$ 678
Right of use assets obtained in exchange for lease obligations				
Operating leases	\$ (14)	\$ —	\$ —	\$ 154
Finance leases	\$ 120	\$ 20	\$ 220	\$ 94
Other (NW Holdings):				
Cash paid for amounts included in the measurement of lease liabilities				
Operating cash flows from operating leases	\$ 6	\$ 17	\$ 12	\$ 33
NW Holdings:				
Cash paid for amounts included in the measurement of lease liabilities				
Operating cash flows from operating leases	\$ 1,739	\$ 1,734	\$ 3,478	\$ 3,419
Finance cash flows from finance leases	\$ 307	\$ 134	\$ 382	\$ 678
Right of use assets obtained in exchange for lease obligations				
Operating leases	\$ (14)	\$ —	\$ —	\$ 154
Finance leases	\$ 120	\$ 20	\$ 220	\$ 94

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 assets for finance leases were \$2.3 million, \$1.9 million and \$2.1 million at June 30, 2022 and 2021 and at December 31, 2021, respectively.

8. STOCK-BASED COMPENSATION

Stock-based compensation plans are designed to promote stock ownership in NW Holdings by employees and officers. These compensation plans include a Long Term Incentive Plan (LTIP) and an Employee Stock Purchase Plan (ESPP). For additional information on stock-based compensation plans, see Note 8 in the 2021 Form 10-K and the updates provided below.

Long Term Incentive Plan **Performance Shares**

LTIP performance shares incorporate a combination of market, performance, and service-based factors. During the six months ended June 30, 2022, the final performance factor under the 2020 LTIP was approved and 31,830 performance-based shares were granted under the 2020 LTIP for accounting purposes. As such, NW Natural and other subsidiaries began recognizing compensation expense. In February 2021 and 2022, LTIP shares were awarded to participants; however, the agreements allow 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 quarters of 2023 and 2024, respectively, there is not a mutual understanding of the awards' key terms and conditions between NW Holdings and the participants as of June 30, 2022, and therefore, no expense was recognized for the 2021 and 2022 awards. NW Holdings will calculate the grant date fair value and NW Natural will recognize expense over the remaining service period for each award once the final performance factor has been approved.

For the 2021 and 2022 LTIP awards, share payouts range from a threshold of 0% to a maximum of 200% based on achievement of pre-established goals. The performance criteria for the 2021 and 2022 performance shares consists of a three-year Return on Invested Capital (ROIC) threshold that must be satisfied and a cumulative EPS factor, which can be modified by a total shareholder return factor (TSR modifier) relative to the performance of peer group companies over the performance period of three years for each respective award. If the targets were achieved for the 2021 and 2022 awards, NW Holdings would grant for accounting purposes 56,335 and 56,885 shares in the first quarters of 2023 and 2024, respectively.

As of June 30, 2022, there was \$0.2 million of unrecognized compensation cost associated with the 2020 LTIP grants, which is expected to be recognized through 2022.

Restricted Stock Units

During the six months ended June 30, 2022, 46,812 RSUs were granted under the LTIP with a weighted-average grant date fair value of \$46.60 per share. 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. As of June 30, 2022, there was \$4.2 million of unrecognized compensation cost from grants of RSUs, which is expected to be recognized over a period extending through 2026.

9. DEBT

Short-Term Debt

At June 30, 2022, NW Holdings and NW Natural had short-term debt outstanding of \$222.7 million and \$78.7 million, respectively. NW Holdings' short-term debt consisted of \$144.0 million of balances outstanding under the credit agreement at NW Holdings and \$78.7 million of commercial paper outstanding at NW Natural. The weighted average interest rate on the credit agreement at June 30, 2022 was 2.7% at NW Holdings. The weighted average interest rate of commercial paper at June 30, 2022 was 2.0% at NW Natural. At June 30, 2022, NW Natural's commercial paper had a maximum remaining maturity of 22 days and an average remaining maturity of 13 days.

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.

Long-Term Debt

At June 30, 2022, NW Holdings and NW Natural had long-term debt outstanding of \$1,045.9 million and \$986.8 million, respectively, which included \$8.0 million and \$7.9 million of unamortized debt issuance costs at NW Holdings and NW Natural, respectively. NW Natural's long-term debt consists of first mortgage bonds (FMBs) with maturity dates ranging from 2023 through 2051, interest rates ranging from 2.8% to 7.9%, and a weighted average interest rate of 4.4%.

No long-term debt is scheduled to mature over the next twelve months following June 30, 2022 at NW Natural.

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.

In June 2021, NW Natural Water entered into a five-year term loan credit agreement for \$55.0 million and borrowed the full amount. The loan carried an interest rate of 2.3% at June 30, 2022, 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 June 30, 2022, with a consolidated indebtedness to total capitalization ratio of 52.7%.

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 in the 2021 Form 10-K for a description of the fair value hierarchy.

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:

<i>In thousands</i>	June 30,		December 31,
	2022	2021	2021
NW Natural:			
Gross long-term debt	\$ 994,700	\$ 924,700	\$ 994,700
Unamortized debt issuance costs	(7,938)	(7,291)	(8,205)
Carrying amount	\$ 986,762	\$ 917,409	\$ 986,495
Estimated fair value ⁽¹⁾	\$ 891,064	\$ 1,043,696	\$ 1,110,741
NW Holdings:			
Gross long-term debt	\$ 1,053,912	\$ 983,221	\$ 1,053,241
Unamortized debt issuance costs	(8,031)	(7,446)	(8,309)
Carrying amount	\$ 1,045,881	\$ 975,775	\$ 1,044,932
Estimated fair value ⁽¹⁾	\$ 950,597	\$ 1,104,230	\$ 1,174,500

⁽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), 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.

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 the pension and other postretirement benefit plans:

<i>In thousands</i>	Three Months Ended June 30,				Six Months Ended June 30,			
	Pension Benefits		Other Postretirement Benefits		Pension Benefits		Other Postretirement Benefits	
	2022	2021	2022	2021	2022	2021	2022	2021
Service cost	\$ 1,529	\$ 1,714	\$ 47	\$ 56	\$ 3,059	\$ 3,428	\$ 94	\$ 111
Interest cost	3,659	3,342	179	165	7,318	6,685	359	330
Expected return on plan assets	(6,427)	(6,099)	—	—	(12,854)	(12,198)	—	—
Amortization of prior service credit	—	—	(84)	(117)	—	—	(167)	(234)
Amortization of net actuarial loss	3,199	5,500	99	131	6,397	11,001	198	262
Net periodic benefit cost	1,960	4,457	241	235	3,920	8,916	484	469
Amount allocated to construction	(616)	(743)	(17)	(22)	(1,280)	(1,469)	(35)	(43)
Net periodic benefit cost charged to expense	1,344	3,714	224	213	2,640	7,447	449	426
Amortization of regulatory balancing account	1,281	1,281	—	—	4,082	4,082	—	—
Net amount charged to expense	\$ 2,625	\$ 4,995	\$ 224	\$ 213	\$ 6,722	\$ 11,529	\$ 449	\$ 426

Net periodic benefit costs are reduced by amounts capitalized to NGD plant. In addition, net periodic benefit costs were recorded to a regulatory balancing account as approved by the OPUC and amortized accordingly.

The following table presents amounts recognized in accumulated other comprehensive loss (AOCL) and the changes in AOCL related to non-qualified employee benefit plans:

<i>In thousands</i>	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Beginning balance	\$ (11,207)	\$ (12,681)	\$ (11,404)	\$ (12,902)
Amounts reclassified from AOCL:				
Amortization of actuarial losses	268	301	536	602
Total reclassifications before tax	268	301	536	602
Tax benefit	(71)	(80)	(142)	(160)
Total reclassifications for the period	197	221	394	442
Ending balance	\$ (11,010)	\$ (12,460)	\$ (11,010)	\$ (12,460)

Employer Contributions to Company-Sponsored Defined Benefit Pension Plans

NW Natural made no cash contributions to its qualified defined benefit pension plans during the six months ended June 30, 2022 compared to \$9.6 million for the same period in 2021. NW Natural does not expect to make any plan contributions during the remainder of 2022 as a result of adopting the American Rescue Plan Act.

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 \$5.2 million and \$4.7 million for the six months ended June 30, 2022 and 2021, respectively.

See Note 10 in the 2021 Form 10-K for more information concerning these retirement and other postretirement benefit plans.

11. INCOME TAX

An estimate of annual income tax expense is made each interim period using estimates for annual pre-tax income, regulatory flow-through adjustments, tax credits, and other items. The estimated annual effective tax rate is applied to year-to-date, pre-tax income to determine income tax expense for the interim period consistent with the annual estimate. Discrete events are recorded in the interim period in which they occur or become known.

The effective income tax rate varied from the federal statutory rate due to the following:

<i>In thousands</i>	Three Months Ended June 30,			
	NW Holdings		NW Natural	
	2022	2021	2022	2021
Income tax at statutory rate (federal)	\$ 460	\$ (210)	\$ 744	\$ 184
State income tax	161	(48)	219	41
Increase (decrease):				
Differences required to be flowed-through by regulatory commissions	(62)	21	(62)	21
Other, net	(89)	(40)	(91)	42
Total provision for income taxes	\$ 470	\$ (277)	\$ 810	\$ 288
Effective income tax rate	21.5 %	27.7 %	22.9 %	32.8 %

<i>In thousands</i>	Six Months Ended June 30,			
	NW Holdings		NW Natural	
	2022	2021	2022	2021
Income tax at statutory rate (federal)	\$ 16,243	\$ 16,598	\$ 16,859	\$ 17,123
State income tax	6,674	7,260	6,803	7,366
Increase (decrease):				
Differences required to be flowed-through by regulatory commissions	(3,235)	(3,584)	(3,235)	(3,584)
Other, net	(289)	(30)	(294)	(65)
Total provision for income taxes	\$ 19,393	\$ 20,244	\$ 20,133	\$ 20,840
Effective income tax rate	25.1 %	25.6 %	25.1 %	25.6 %

The NW Holdings and NW Natural effective income tax rates for the six months ended June 30, 2022 compared to the same period in 2021 changed primarily as a result of changes in pre-tax income. See Note 11 in the 2021 Form 10-K for more detail on income taxes and effective tax rates.

The IRS Compliance Assurance Process (CAP) examination of the 2020 tax year was completed during the first quarter of 2022. There were no material changes to the return as filed. The 2021 and 2022 tax years are subject to examination under CAP.

12. PROPERTY, PLANT, AND EQUIPMENT

The following table sets forth the major classifications of property, plant, and equipment and accumulated depreciation:

<i>In thousands</i>	June 30,		December 31,
	2022	2021	2021
NW Natural:			
NGD plant in service	\$ 3,782,197	\$ 3,623,092	\$ 3,721,939
NGD construction work in progress	195,118	99,646	135,398
Less: Accumulated depreciation	1,121,444	1,068,603	1,098,715
NGD plant, net	2,855,871	2,654,135	2,758,622
Other plant in service	69,623	66,315	69,332
Other construction work in progress	5,529	5,817	4,971
Less: Accumulated depreciation	21,167	20,140	20,646
Other plant, net	53,985	51,992	53,657
Total property, plant, and equipment, net	\$ 2,909,856	\$ 2,706,127	\$ 2,812,279
Other (NW Holdings):			
Other plant in service	\$ 59,718	\$ 50,148	\$ 57,184
Other construction work in progress	17,051	4,774	8,419
Less: Accumulated depreciation	7,944	5,120	6,512
Other plant, net	\$ 68,825	\$ 49,802	\$ 59,091
NW Holdings:			
Total property, plant, and equipment, net	\$ 2,978,681	\$ 2,755,929	\$ 2,871,370
NW Natural:			
Capital expenditures in accrued liabilities	\$ 44,052	\$ 37,968	\$ 37,537
NW Holdings:			
Capital expenditures in accrued liabilities	\$ 45,079	\$ 38,395	\$ 38,333

NW Natural

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

NW Holdings

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

13. INVESTMENTS

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

<i>In thousands</i>	NW Holdings			NW Natural		
	June 30,		December 31,	June 30,		December 31,
	2022	2021	2021	2022	2021	2021
Investments in life insurance policies	\$ 48,735	\$ 47,695	\$ 48,178	\$ 48,735	\$ 47,695	\$ 48,178
Investments in gas reserves, non-current	24,695	29,852	26,608	24,695	29,852	26,608
Investment in unconsolidated affiliates	22,597	30	14,492	8,056	—	—
Total other investments	\$ 96,027	\$ 77,577	\$ 89,278	\$ 81,486	\$ 77,547	\$ 74,786

Investment in Life Insurance Policies

Other investments include financial investments in life insurance policies, which are accounted for at cash surrender value, net of policy loans. See Note 13 in the 2021 Form 10-K.

NW Natural Gas Reserves

NW Natural has invested \$188 million through the gas reserves program in the Jonah Field located in Wyoming as of June 30, 2022. Gas reserves are stated at cost, net of regulatory amortization, with the associated deferred tax benefits of \$5.3 million, \$8.8 million, and \$6.9 million, which are recorded as liabilities in the June 30, 2022, June 30, 2021, and December 31, 2021 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 \$4.3 million, \$8.4 million, and \$5.4 million as of June 30, 2022, June 30, 2021, and December 31, 2021, respectively. See Note 13 in the 2021 Form 10-K.

Investments in Unconsolidated Affiliates

In December 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. In July 2022, NW Natural Water increased its ownership stake in Avion Water to 40.3% for an additional \$1.0 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 \$10.4 million higher than the underlying equity in the net assets of the investee at June 30, 2022 due to equity method goodwill. Equity in earnings (loss) of Avion Water is included in other income (expense), net.

In 2020, NW Natural began a partnership with BioCarbN to invest in up to four separate RNG development projects that will access biogas derived from water treatment at Tyson Foods' processing plants, subject to approval by all parties. During the construction phase of the projects, NW Natural determined it is the primary beneficiary and fully consolidates each entity.

In 2022, commissioning of the first project, Lexington Renewable Energy LLC (Lexington), was completed and NW Natural determined it was no longer the primary beneficiary and deconsolidated the variable interest entity and recorded the investment in Lexington as an equity method investment. NW Natural accounts for its interest in Lexington using the equity method of accounting because NW Natural does not control but has the ability to exercise significant influence over Lexington's operations after commissioning. There was no gain or loss recognized upon deconsolidation. NW Natural determined the fair value of the investment approximated the carrying value which was primarily comprised of cash and property, plant and equipment. As of June 30, 2022, NW Natural had an investment balance in Lexington of \$8.1 million. Equity in earnings (loss) of Lexington is included in cost of gas.

14. BUSINESS COMBINATIONS

2022 Business Combinations

During the six months ended June 30, 2022, NWN Water and its subsidiaries completed one acquisition qualifying as a business combination. The fair value of the preliminary consideration transferred was not material and is not significant to NW Holdings' results of operations.

2021 Business Combinations

During 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.

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 \$70.7 million, \$69.3 million, and \$70.6 million as of June 30, 2022, June 30, 2021, and December 31, 2021, respectively. 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:

<i>In thousands</i>	June 30,		December 31,	
	2022	2021	2021	
Natural gas (in therms):				
Financial	718,965	680,335		618,815
Physical	516,590	419,148		431,628
Foreign exchange	\$ 7,659	\$ 6,477	\$	6,268

Purchased Gas Adjustment (PGA)

Under the PGA mechanism in Oregon, 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. Hedge contracts entered into prior to the PGA filing were included in the PGA for the 2021-22 gas year. Hedge contracts entered into after the start of the PGA period are subject to the PGA incentive sharing mechanism in Oregon. Under the PGA mechanism in Washington, NW Natural incorporates risk-responsive hedging strategies and receives regulatory deferral accounting treatment for its Washington gas supplies.

NW Natural entered the 2021-22 gas year with its forecasted sales volumes hedged at approximately 79% in total. The total hedged for Oregon was approximately 82%, including 62% in financial hedges and 19% in physical gas supplies. The total hedged for Washington was approximately 57%, including 44% in financial hedges and 13% in physical gas supplies.

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:

<i>In thousands</i>	Three Months Ended June 30,			
	2022		2021	
	Natural gas commodity	Foreign exchange	Natural gas commodity	Foreign exchange
Benefit (expense) to cost of gas	\$ (29,332)	\$ (153)	\$ 16,323	\$ (45)
Operating revenues (expense)	—	—	—	—
Amounts deferred to regulatory accounts on balance sheet	29,332	153	(16,323)	45
Total gain (loss) in pre-tax earnings	\$ —	\$ —	\$ —	\$ —

<i>In thousands</i>	Six Months Ended June 30,			
	2022		2021	
	Natural gas commodity	Foreign exchange	Natural gas commodity	Foreign exchange
Benefit (expense) to cost of gas	\$ 44,453	\$ (73)	\$ 36,805	\$ 32
Operating revenues (expense)	—	—	(27)	—
Amounts deferred to regulatory accounts on balance sheet	(44,453)	73	(36,782)	(32)
Total gain (loss) in pre-tax earnings	\$ —	\$ —	\$ (4)	\$ —

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 \$21.2 million and \$57.2 million for the three and six months ended June 30, 2022, respectively, from the settlement of natural gas financial derivative contracts, whereas, net gains of \$4.2 million and \$9.3 million were realized for the three and six months ended June 30, 2021, respectively. 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 June 30, 2022 or 2021. 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 2022 or 2021. 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.

NW Natural's current commodity financial swap and option contracts outstanding reflect unrealized gains of \$46.6 million and \$54.3 million at June 30, 2022 and 2021. If netted by counterparty, NW Natural's physical and financial derivative position would result in an asset of \$47.8 million and a liability of \$3.4 million as of June 30, 2022, an asset of \$51.8 million and a liability of \$1.6 million as of June 30, 2021, and an asset of \$51.8 million and a liability of \$3.8 million as of December 31, 2021.

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 the posting of collateral, guarantees, or letters of credit from counterparties to maintain its minimum credit requirement standards. See Note 15 in the 2021 Form 10-K for additional information.

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 June 30, 2022. The net fair value was an asset of \$44.4 million, an asset of \$50.2 million, and an asset of \$48.0 million as of June 30, 2022 and 2021, and December 31, 2021, respectively. No Level 3 inputs were used in our derivative valuations during the six months ended June 30, 2022 and 2021. See Note 2 in the 2021 Form 10-K.

16. 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:

<i>In thousands</i>	Current Liabilities				Non-Current Liabilities			
	June 30,		December 31,		June 30,		December 31,	
	2022	2021	2021		2022	2021	2021	
Portland Harbor site:								
Gasco/Siltronic Sediments	\$ 6,144	\$ 6,658	\$ 7,582	\$	40,740	\$ 41,652	\$ 42,076	
Other Portland Harbor	2,313	2,195	2,592		8,613	6,588	9,570	
Gasco/Siltronic Upland site	11,050	12,442	15,711		34,352	38,401	36,215	
Front Street site	585	1,219	1,100		868	975	811	
Oregon Steel Mills	—	—	—		179	179	179	
Total	\$ 20,092	\$ 22,514	\$ 26,985	\$	84,752	\$ 87,795	\$ 88,851	

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. No design alternatives are more likely than the EE/CA alternatives 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 \$46.9 million to \$350 million. NW Natural has recorded a liability of \$46.9 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 \$1.5 million costs associated with the discovery during construction of World War II-era munitions, 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. See Note 17 in the 2021 Form 10-K for a description of SRRM and ECRM collection processes.

The following table presents information regarding the total regulatory asset deferred:

<i>In thousands</i>	June 30,		December 31,	
	2022	2021	2021	
Deferred costs and interest ⁽¹⁾	\$ 48,814	\$ 50,604	\$ 45,122	
Accrued site liabilities ⁽²⁾	104,798	110,237	115,773	
Insurance proceeds and interest	(60,226)	(69,730)	(59,564)	
Total regulatory asset deferral ⁽¹⁾	\$ 93,386	\$ 91,111	\$ 101,331	
Current regulatory assets ⁽³⁾	6,975	5,688	6,694	
Long-term regulatory assets ⁽³⁾	86,411	85,423	94,636	

⁽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 \$47 thousand at June 30, 2022, \$72 thousand at June 30, 2021, and \$62 thousand at December 31, 2021.

⁽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 for 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.

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.

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 relating to the Oregon Steel Mills site 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 their financial condition, results of operations or cash flows. See also Part II, Item 1, "*Legal Proceedings*".

Oregon Steel Mills Site

See Note 17 in the 2021 Form 10-K.

For additional information regarding other commitments and contingencies, see Note 16 in the 2021 Form 10-K.

17. SUBSEQUENT EVENT

On July 15, 2022, NW Natural entered into a Bond Purchase Agreement between NW Natural and the institutional investors named as purchasers therein (the Bond Purchase Agreement). The Bond Purchase Agreement provides for the issuance of \$140.0 million aggregate principal amount of NW Natural's First Mortgage Bonds, 4.78% Series due 2052 (the Bonds). The Bonds are expected to be issued on or about September 30, 2022. The Bonds will bear interest at the rate of 4.78% per annum, payable semi-annually on March 30 and September 30 of each year, commencing March 30, 2023, and will mature on September 30, 2052. The Bonds will be subject to redemption prior to maturity at the option of NW Natural, in whole or in part, (i) at any time prior to March 30, 2052, at a redemption price equal to 100% of the principal amount thereof plus a "make-whole" premium and accrued and unpaid interest thereon to the date of redemption, and (ii) at any time on and after March 30, 2052, at 100% of the principal amount thereof plus accrued and unpaid interest thereon to the date of redemption.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following is management's assessment of NW Holdings' and NW Natural's financial condition, including the principal factors that affect results of operations. The discussion refers to the consolidated results for the three and six months ended June 30, 2022 and 2021 of NW Holdings, the substantial majority of which consist of the operating results of NW Natural. When significant activity exists at NW Holdings that does not exist at NW Natural, additional disclosure has been provided. References in this discussion to "Notes" are to the Notes to Unaudited Consolidated Financial Statements in this report. A significant portion of the business results are seasonal in nature, and, as such, the results of operations for the three month period is not necessarily indicative of expected fiscal year results. Therefore, this discussion should be read in conjunction with NW Holdings' and NW Natural's 2021 Annual Report on Form 10-K, as applicable (2021 Form 10-K).

NW Natural's natural gas distribution activities are reported in the natural gas distribution (NGD) segment. The NGD segment also includes NWN Gas Reserves, which is a wholly-owned subsidiary of Energy Corp, the NGD-portion of NW Natural's Mist storage facility in Oregon, and NW Natural RNG Holding Company, LLC. NW Natural RNG Holding Company, LLC holds an investment in Lexington Renewable Energy, LLC, which is accounted for under the equity method. Other activities aggregated and reported as other at NW Natural include the non-NGD storage activity at Mist as well as asset management services and the appliance retail center operations. Other activities aggregated and reported as other at NW Holdings include NNG Financial's investment in Kelso-Beaver Pipeline (KB Pipeline) and NWN Water's investment in Avion Water Company, Inc., which are accounted for under the equity method, NW Natural Renewables Holdings, LLC and its non-regulated renewable natural gas activities; and NWN Water, which through itself or its subsidiaries, owns and continues to pursue investments in the water sector. See Note 4 for further discussion of our business segment and other, as well as our direct and indirect wholly-owned subsidiaries.

NON-GAAP FINANCIAL MEASURES. In addition to presenting the results of operations and earnings amounts in total, certain financial measures are expressed in cents per share, which are non-GAAP financial measures. All references in this section to earnings per share (EPS) are on the basis of diluted shares. We use such non-GAAP financial measures to analyze our financial performance because we believe they provide useful information to our investors, analysts and creditors in evaluating our financial condition and results of operations. Our non-GAAP financial measures should not be considered a substitute for, or superior to, measures calculated in accordance with U.S. GAAP. Moreover, these non-GAAP financial measures have limitations in that they do not reflect all the items associated with the operations of the business as determined in accordance with GAAP. Other companies may calculate similarly titled non-GAAP financial measures differently than how such measures are calculated in this report, limiting the usefulness of those measures for comparative purposes. A reconciliation of each non-GAAP financial measure to the most directly comparable GAAP financial measure is provided below.

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Earnings (loss) per share of common stock (diluted) - Total	\$ 0.05	\$ (0.02)	\$ 1.77	\$ 1.92
Diluted earnings (loss) per share - NGD segment ⁽¹⁾	—	(0.05)	1.70	1.71
Diluted earnings per share - NW Holdings - other ⁽¹⁾	0.05	0.03	0.07	0.21

⁽¹⁾ Non-GAAP financial measure

EXECUTIVE SUMMARY

Current financial results and highlights include:

- Reported net income of \$1.7 million or \$0.05 per share (diluted) for the second quarter of 2022, compared to net loss of \$0.7 million or \$0.02 per share (diluted) in the prior year;
- Reported net income of \$58.0 million or \$1.77 per share (diluted) for the first six months of 2022, compared to net income of \$58.8 million or \$1.92 per share (diluted) in the prior year;
- Issued and sold 2.9 million shares of common stock on April 1, 2022;
- Added nearly 10,200 meters during the past twelve months for a growth rate of 1.3% at June 30, 2022;
- Invested more than \$165 million in our utility systems in the first six months of 2022 in an effort to achieve greater reliability and resiliency;
- Filed multi-party settlements in the Oregon general rate case; and
- Announced two water and wastewater acquisitions near our existing service territory in Washington state and closed one water acquisition in Texas.

Key quarter-to-date financial highlights for NW Holdings include:

	Three Months Ended June 30,				
	2022		2021		
<i>In thousands, except per share data</i>	Amount	Per Share	Amount	Per Share	QTD Change
Consolidated net income (loss)	\$ 1,715	\$ 0.05	\$ (724)	\$ (0.02)	\$ 2,439

Key quarter-to-date financial highlights for NW Natural include:

	Three Months Ended June 30,				
	2022		2021		
<i>In thousands</i>	Amount		Amount		QTD Change
Consolidated net income	\$	2,733	\$	589	\$ 2,144
Natural gas distribution margin	\$	94,378	\$	91,206	\$ 3,172

THREE MONTHS ENDED JUNE 30, 2022 COMPARED TO JUNE 30, 2021.

Consolidated net income increased \$2.1 million at NW Natural primarily due to the following factors:

- \$3.2 million increase in NGD segment margin driven by customer growth and higher usage by non-decoupled customers; and
- \$2.6 million increase in other income (expense), net primarily due to lower pension costs; partially offset by
- \$3.9 million increase in operations and maintenance expenses primarily due to higher contract labor, amortization expense related to cloud computing arrangements, and professional service fees; and
- \$0.5 million increase in income tax expense primarily due to higher pre-tax income in the current period compared to the prior year.

Consolidated net income increased \$2.4 million at NW Holdings primarily due to the following factors:

- \$2.1 million increase in consolidated net income at NW Natural as discussed above; and
- \$0.3 million increase in other net income primarily reflecting lower business development costs, partially offset by higher interest expense at the holding company.

Key year-to-date financial highlights for NW Holdings include:

	Six Months Ended June 30,				
	2022		2021		
<i>In thousands, except per share data</i>	Amount	Per Share	Amount	Per Share	YTD Change
Consolidated net income	\$ 57,954	\$ 1.77	\$ 58,793	\$ 1.92	\$ (839)

Key year-to-date financial highlights for NW Natural include:

In thousands	Six Months Ended June 30,				YTD Change
	2022		2021		
	Amount		Amount		
Consolidated net income	\$	60,149	\$	60,700	\$ (551)
Natural gas distribution margin	\$	272,110	\$	263,846	\$ 8,264

SIX MONTHS ENDED JUNE 30, 2022 COMPARED TO JUNE 30, 2021.

Consolidated net income decreased \$0.6 million at NW Natural primarily due to the following factors:

- \$8.6 million increase in operations and maintenance expenses due to higher contract labor, information technology costs, amortization expense related to cloud computing arrangements, and professional service fees; and
- \$5.4 million decrease in asset management revenue primarily due to the February 2021 cold weather event discussed below that did not recur in the current year; partially offset by
- \$8.3 million increase in NGD segment margin driven by customer growth, new rates in Washington, and higher usage by non-decoupled customers; and
- \$5.3 million increase in other income (expense), net primarily due to lower pension costs.

Consolidated net income decreased \$0.8 million at NW Holdings primarily due to the following factors:

- \$0.6 million decrease in consolidated net income at NW Natural as discussed above; and
- \$0.3 million decrease in other net income primarily reflecting higher interest expense at the holding company.

2021 COLD WEATHER EVENT. In February 2021, Portland, Oregon and the surrounding region, like much of the country, experienced a severe winter storm with several days of colder temperatures resulting in elevated natural gas demand and significantly higher spot prices. Additional market gas purchases and other expenses resulted in approximately \$29 million of higher commodity costs, of which approximately \$27 million was deferred to a regulatory asset for recovery in future rates. The result was approximately \$2 million of lower natural gas utility margin in the first six months of 2021. The higher commodity costs were offset by approximately \$39 million of asset management revenue, of which approximately \$33 million was deferred to a regulatory liability for the benefit of customers.

CURRENT ECONOMIC CONDITIONS. We are evaluating and monitoring current economic conditions, which include but are not limited to: inflation, rising interest rates and commodity costs, heightened cybersecurity awareness, and supply chain disruptions. We have enhanced cybersecurity monitoring in response to reports that cybersecurity attacks have and will continue to increase. We have not experienced material disruptions in our supply chain for goods and services to date. Our suppliers may be subject to lack of personnel or disruption in their own supply chain for materials, which could disrupt supplier performance or deliveries, and negatively impact our business. We are continuing to actively monitor, and have formulated and continue to evaluate contingency plans as necessary.

See the discussion in "Results of Operations", "Regulatory Matters" and "Financial Condition" below for additional detail regarding all significant activity that occurred during the second quarter of 2022.

DIVIDENDS

Dividend highlights include:

<i>Per common share</i>	Three Months Ended June 30,		Six Months Ended June 30,		QTD Change	YTD Change
	2022	2021	2022	2021		
Dividends paid	\$ 0.4825	\$ 0.4800	\$ 0.9650	\$ 0.9600	\$ 0.0025	\$ 0.0050

In July 2022, the Board of Directors of NW Holdings declared a quarterly dividend on NW Holdings common stock of \$0.4825 per share. The dividend is payable on August 15, 2022 to shareholders of record on July 29, 2022, reflecting an annual indicated dividend rate of \$1.93 per share.

RESULTS OF OPERATIONS

Business Segment - Natural Gas Distribution (NGD)

NGD margin results are primarily affected by customer growth, revenues from rate-base additions, and, to a certain extent, by changes in delivered volumes due to weather and customers' gas usage patterns. In Oregon, NW Natural has a conservation tariff (also called the decoupling mechanism), which adjusts margin up or down each month through a deferred regulatory accounting adjustment designed to offset changes resulting from increases or decreases in average use by residential and commercial customers. NW Natural also has a weather normalization tariff in Oregon, WARM, which adjusts customer bills up or down to offset changes in margin resulting from above- or below-average temperatures during the winter heating season. Both mechanisms are designed to reduce, but not eliminate, the volatility of customer bills and natural gas distribution earnings. For additional information, see Part II, Item 7 "Results of Operations—Regulatory Matters—*Rate Mechanisms*" in NW Natural's 2021 Form 10-K. In addition to NW Natural's local gas distribution business, the NGD segment also includes the portion of the Mist underground storage facility used to serve NGD customers, the North Mist gas storage expansion, NWN Gas Reserves, which is a wholly owned subsidiary of Energy Corp., and NW Natural RNG Holding Company, LLC.

The NGD business is primarily seasonal in nature due to higher gas usage by residential and commercial customers during the cold winter heating months. Other categories of customers experience seasonality in their usage but to a lesser extent. Seasonality affects the comparability of the results of operations of the NGD business across quarters but not across years.

NGD segment highlights include:

<i>In thousands, except EPS data</i>	Three Months Ended June 30,		Six Months Ended June 30,		QTD Change	YTD Change
	2022	2021	2022	2021		
NGD net income (loss)	\$ 157	\$ (1,381)	\$ 55,547	\$ 52,544	\$ 1,538	\$ 3,003
Diluted EPS - NGD segment	\$ —	\$ (0.05)	\$ 1.70	\$ 1.71	\$ 0.05	\$ (0.01)
Gas sold and delivered (in therms)	268,553	213,714	696,939	644,834	54,839	52,105
NGD margin ⁽¹⁾	\$ 94,378	\$ 91,206	\$ 272,110	\$ 263,846	\$ 3,172	\$ 8,264

⁽¹⁾ See Natural Gas Distribution Margin Table below for additional detail.

THREE MONTHS ENDED JUNE 30, 2022 COMPARED TO JUNE 30, 2021. The primary factors contributing to the \$1.5 million, or \$0.05 per share, increase in NGD net income were as follows:

- \$3.2 million increase in NGD margin due to:
 - \$1.5 million increase driven by customer growth; and
 - \$0.8 million increase due to higher usage from colder weather, net of the loss from the Oregon gas cost incentive sharing mechanism; and
 - \$0.7 million increase due to new customer rates from the 2021 Washington rate case that went into effect on November 1, 2021.
- \$2.7 million increase in other income (expense), net driven by lower pension non-service costs; partially offset by
- \$4.1 million increase in NGD operating and maintenance expenses due primarily to higher contract labor, amortization expense related to cloud computing arrangements, and professional service fees; and
- \$0.4 million increase in income tax expense primarily due to higher pre-tax income in the current period compared to the prior year.

For the three months ended June 30, 2022, total NGD volumes sold and delivered increased 26% over the same period in 2021 primarily due to 23% colder than average weather in the second quarter of 2022 compared to 40% warmer than average weather in the prior period.

SIX MONTHS ENDED JUNE 30, 2022 COMPARED TO JUNE 30, 2021. The primary factors contributing to the \$3.0 million increase in NGD net income were as follows:

- \$8.3 million increase in NGD margin due to:
 - \$3.6 million increase driven by customer growth;
 - \$3.0 million increase due to higher usage from colder comparative weather, net of the loss from the Oregon gas cost incentive sharing mechanism; and
 - \$2.4 million increase due to new customer rates from the 2021 Washington rate case that went into effect on November 1, 2021.
- \$5.2 million increase in other income (expense), net driven by lower pension non-service costs; partially offset by
- \$8.8 million increase in NGD operations and maintenance expenses due to higher contract labor, amortization expense related to cloud computing arrangements, information technology costs, and professional service fees.

Diluted EPS for the NGD segment decreased \$0.01 per share primarily due to a common share issuance on April 1, 2022, partially offset by an increase in NGD net income.

For the six months ended June 30, 2022, total NGD volumes sold and delivered increased 8% over the same period in 2021 primarily due to 2% warmer than average weather in the first six months of 2022 compared to 12% warmer than average weather in the prior period.

NATURAL GAS DISTRIBUTION MARGIN TABLE. The following table summarizes the composition of NGD gas volumes, revenues, and cost of sales:

<i>In thousands, except degree day and customer data</i>	Three Months Ended June 30,		Six Months Ended June 30,		Favorable/ (Unfavorable)	
	2022	2021	2022	2021	QTD Change	YTD Change
NGD volumes (therms)						
Residential and commercial sales	147,447	102,469	441,374	400,291	44,978	41,083
Industrial sales and transportation	121,106	111,245	255,565	244,543	9,861	11,022
Total NGD volumes sold and delivered	268,553	213,714	696,939	644,834	54,839	52,105
Operating Revenues						
Residential and commercial sales	\$ 159,792	\$ 120,360	\$ 474,399	\$ 398,944	\$ 39,432	\$ 75,455
Industrial sales and transportation	19,526	14,093	40,799	31,472	5,433	9,327
Other distribution revenues	409	396	1,016	986	13	30
Other regulated services	4,907	4,765	9,818	9,550	142	268
Total operating revenues	184,634	139,614	526,032	440,952	45,020	85,080
Less: Cost of gas	79,776	41,249	225,420	153,515	(38,527)	(71,905)
Less: Environmental remediation expense	2,272	1,509	6,970	5,286	(763)	(1,684)
Less: Revenue taxes	8,208	5,650	21,532	18,305	(2,558)	(3,227)
NGD margin	\$ 94,378	\$ 91,206	\$ 272,110	\$ 263,846	\$ 3,172	\$ 8,264
Margin⁽¹⁾						
Residential and commercial sales	\$ 83,535	\$ 78,900	\$ 246,663	\$ 239,672	\$ 4,635	\$ 6,991
Industrial sales and transportation	8,065	7,407	16,991	16,161	658	830
Gain (loss) from gas cost incentive sharing	(2,518)	(223)	(2,448)	(2,486)	(2,295)	38
Other margin	390	357	1,088	952	33	136
Other regulated services	4,906	4,765	9,816	9,547	141	269
NGD Margin	\$ 94,378	\$ 91,206	\$ 272,110	\$ 263,846	\$ 3,172	\$ 8,264
Degree days⁽²⁾						
Average ⁽³⁾	305	305	1,631	1,631	—	—
Actual	374	182	1,591	1,443	105 %	10 %
Percent colder (warmer) than average weather	23 %	(40)%	(2)%	(12)%		

	As of June 30,			
	2022	2021	Change	Growth
<u>NGD Meters - end of period:</u>				
Residential meters	720,537	710,543	9,994	1.4%
Commercial meters	68,827	68,756	71	0.1%
Industrial meters	1,074	980	94	9.6%
Total number of meters	790,438	780,279	10,159	1.3%

⁽¹⁾ Amounts reported as NGD margin for each category of meters are operating revenues less cost of gas, environmental remediation expense and revenue taxes, subject to earnings test considerations, as applicable.

⁽²⁾ Heating degree days are units of measure reflecting temperature-sensitive consumption of natural gas, calculated by subtracting the average of a day's high and low temperatures from 59 degrees Fahrenheit.

⁽³⁾ Average weather represents the 25-year average of heating degree days. Beginning November 1, 2020, average weather is calculated over the period June 1, 1994 through May 31, 2019, as determined in NW Natural's 2020 Oregon general rate case.

Residential and Commercial Sales

Residential and commercial sales highlights include:

In thousands	Three Months Ended June 30,		Six Months Ended June 30,		QTD Change	YTD Change
	2022	2021	2022	2021		
<u>Volumes (therms)</u>						
Residential sales	90,016	61,346	276,345	255,837	28,670	20,508
Commercial sales	57,431	41,123	165,029	144,454	16,308	20,575
Total volumes	147,447	102,469	441,374	400,291	44,978	41,083
<u>Operating revenues</u>						
Residential sales	\$ 107,292	\$ 82,310	\$ 324,475	\$ 278,112	\$ 24,982	\$ 46,363
Commercial sales	52,500	38,050	149,924	120,832	14,450	29,092
Total operating revenues	\$ 159,792	\$ 120,360	\$ 474,399	\$ 398,944	\$ 39,432	\$ 75,455
<u>NGD margin</u>						
Residential NGD margin	\$ 60,046	\$ 56,926	\$ 179,878	\$ 174,809	\$ 3,120	\$ 5,069
Commercial NGD margin	23,489	21,974	66,785	64,863	1,515	1,922
Total NGD margin	\$ 83,535	\$ 78,900	\$ 246,663	\$ 239,672	\$ 4,635	\$ 6,991

THREE MONTHS ENDED JUNE 30, 2022 COMPARED TO JUNE 30, 2021. Residential and commercial margin increased \$4.6 million compared to the prior period. The increase was primarily driven by higher usage from non-decoupled customers, 1.4% growth in residential meters, and new customer rates in Washington that took effect on November 1, 2021. Volumes increased 45.0 million therms due to higher usage driven by comparatively colder weather.

SIX MONTHS ENDED JUNE 30, 2022 COMPARED TO JUNE 30, 2021. Residential and commercial margin increased \$7.0 million compared to the prior period. The increase was primarily driven by 1.4% growth in residential meters, new customer rates in Washington that took effect on November 1, 2021, and higher usage from non-decoupled customers. Volumes increased 41.1 million therms due to higher usage driven by comparatively colder weather and higher usage from commercial customers as COVID-19 restrictions and closures were lifted.

Industrial Sales and Transportation

Industrial sales and transportation highlights include:

<i>In thousands</i>	Three Months Ended June 30,		Six Months Ended June 30,		QTD Change	YTD Change
	2022	2021	2022	2021		
<u>Volumes (therms)</u>						
Firm and interruptible sales	24,329	20,002	53,189	46,245	4,327	6,944
Firm and interruptible transportation	96,777	91,243	202,376	198,298	5,534	4,078
Total volumes - sales and transportation	121,106	111,245	255,565	244,543	9,861	11,022
<u>NGD margin</u>						
Firm and interruptible sales	\$ 3,191	\$ 2,741	\$ 6,890	\$ 6,298	\$ 450	\$ 592
Firm and interruptible transportation	4,874	4,666	10,101	9,863	208	238
Total margin - sales and transportation	\$ 8,065	\$ 7,407	\$ 16,991	\$ 16,161	\$ 658	\$ 830

THREE MONTHS ENDED JUNE 30, 2022 COMPARED TO JUNE 30, 2021. Industrial sales and transportation margin increased \$0.7 million compared to the prior period. Volumes increased 9.9 million therms primarily due to higher usage from multiple customers, most notably in the light manufacturing and electric manufacturing industries, partially offset by lower usage from customers in the pulp and paper industry.

SIX MONTHS ENDED JUNE 30, 2022 COMPARED TO JUNE 30, 2021. Industrial sales and transportation margin increased \$0.8 million compared to the prior period. Volumes increased 11.0 million therms primarily due to higher usage from multiple customers, most notably in the primary metals and light manufacturing industries, partially offset by lower usage from customers in the plastic manufacturing industry.

Cost of Gas

Cost of gas highlights include:

<i>In thousands</i>	Three Months Ended June 30,		Six Months Ended June 30,		QTD Change	YTD Change
	2022	2021	2022	2021		
Cost of gas	\$ 79,776	\$ 41,249	\$ 225,420	\$ 153,515	\$ 38,527	\$ 71,905
Volumes sold (therms) ⁽¹⁾	171,776	122,471	494,563	446,536	49,305	48,027
Average cost of gas (cents per therm)	\$ 0.46	\$ 0.34	\$ 0.46	\$ 0.34	\$ 0.12	\$ 0.12
Loss from gas cost incentive sharing ⁽²⁾	\$ (2,518)	\$ (223)	\$ (2,448)	\$ (2,486)	\$ (2,295)	\$ 38

⁽¹⁾ This calculation excludes volumes delivered to industrial transportation customers.

⁽²⁾ For additional information regarding NW Natural's gas cost incentive sharing mechanism, see Part II, Item 7 "Results of Operations—Regulatory Matters—Rate Mechanisms—Gas Reserves" in NW Natural's 2021 Form 10-K.

THREE MONTHS ENDED JUNE 30, 2022 COMPARED TO JUNE 30, 2021. Cost of gas increased \$38.5 million primarily due to a 35% increase in average cost of gas with the majority of these higher gas costs embedded in the PGA and customer growth. Volumes sold increased 49.3 million therms driven by 23% colder than average weather in the second quarter of 2022 compared to 40% warmer than average weather in the prior period.

SIX MONTHS ENDED JUNE 30, 2022 COMPARED TO JUNE 30, 2021. Cost of gas increased \$71.9 million primarily due to a 35% increase in average cost of gas with the majority of these higher gas costs embedded in the PGA and customer growth. Volumes sold increased 48.0 million therms driven by 2% warmer than average weather in the first six months of 2022 compared to 12% warmer than average weather in the prior period.

Other Regulated Services Margin

Other regulated services margin highlights include:

<i>In thousands</i>	Three Months Ended June 30,		Six Months Ended June 30,		QTD Change	YTD Change
	2022	2021	2022	2021		
North Mist storage services	\$ 4,857	\$ 4,715	\$ 9,715	\$ 9,431	\$ 142	\$ 284
Other services	49	50	101	116	(1)	(15)
Total other regulated services	\$ 4,906	\$ 4,765	\$ 9,816	\$ 9,547	\$ 141	\$ 269

THREE MONTHS ENDED JUNE 30, 2022 COMPARED TO JUNE 30, 2021. Other regulated services margin was relatively flat when compared to the prior period. The North Mist expansion facility did not experience any significant fluctuations in storage service revenue. See Note 7 for information regarding North Mist expansion lease accounting.

SIX MONTHS ENDED JUNE 30, 2022 COMPARED TO JUNE 30, 2021. Other regulated services margin increased \$0.3 million compared to the prior period due to scheduled rate increases in storage service revenue.

Other

Other activities aggregated and reported as other at NW Holdings include NNG Financial's investment in Kelso-Beaver Pipeline (KB Pipeline); NW Natural Renewables Holdings, LLC and its non-regulated renewable natural gas activities; NWN Water, which owns and continues to pursue investments in the water sector; and NWN Water's investment in Avion Water Company, Inc. (Avion Water). Other activities aggregated and reported as other at NW Natural include the non-NGD storage activity at Mist as well as asset management services and the appliance retail center operations. See Note 4 for further discussion of our business segment and other, as well as our direct and indirect wholly-owned subsidiaries. See Note 13 for information on our Avion Water investment.

The following table presents the results of activities aggregated and reported as other for both NW Holdings and NW Natural:

<i>In thousands, except EPS data</i>	Three Months Ended June 30,		Six Months Ended June 30,		QTD Change	YTD Change
	2022	2021	2022	2021		
NW Natural other - net income	\$ 2,576	\$ 1,970	\$ 4,602	\$ 8,156	\$ 606	\$ (3,554)
Other NW Holdings activity	(1,018)	(1,313)	(2,195)	(1,907)	295	(288)
NW Holdings other - net income	\$ 1,558	\$ 657	\$ 2,407	\$ 6,249	\$ 901	\$ (3,842)
Diluted EPS - NW Holdings - other	\$ 0.05	\$ 0.03	\$ 0.07	\$ 0.21	\$ 0.02	\$ (0.14)

THREE MONTHS ENDED JUNE 30, 2022 COMPARED TO JUNE 30, 2021. Other net income increased \$0.9 million at NW Holdings and \$0.6 million at NW Natural. The increase at NW Natural was primarily due to an increase in asset management revenues. The increase at NW Holdings was driven by the increase at NW Natural and lower business development costs, partially offset by higher interest expense at the holding company.

SIX MONTHS ENDED JUNE 30, 2022 COMPARED TO JUNE 30, 2021. Other net income decreased \$3.6 million at NW Natural and \$3.8 million at NW Holdings. The decrease at NW Natural was primarily due to \$5.4 million of lower asset management revenue mainly related to the 2021 cold weather event, partially offset by \$1.4 million lower income tax expense associated with the lower revenue that did not recur in the current year. The decrease at NW Holdings was driven by the decrease at NW Natural and higher interest expense at the holding company, partially offset by higher net income from our water and wastewater subsidiaries.

Consolidated Operations

Operations and Maintenance

Operations and maintenance highlights include:

<i>In thousands</i>	Three Months Ended June 30,		Six Months Ended June 30,		QTD Change	YTD Change
	2022	2021	2022	2021		
NW Natural	\$ 48,879	\$ 44,939	\$ 102,756	\$ 94,126	\$ 3,940	\$ 8,630
Other NW Holdings operations and maintenance	4,296	5,108	7,904	8,112	(812)	(208)
NW Holdings	<u>\$ 53,175</u>	<u>\$ 50,047</u>	<u>\$ 110,660</u>	<u>\$ 102,238</u>	<u>\$ 3,128</u>	<u>\$ 8,422</u>

THREE MONTHS ENDED JUNE 30, 2022 COMPARED TO JUNE 30, 2021. Operations and maintenance expense increased \$3.1 million at NW Holdings and \$3.9 million at NW Natural. The increase at NW Natural was driven by the following:

- \$1.5 million increase in contract labor for safety and reliability and contracted support for information technology and corporate projects;
- \$0.7 million increase in amortization expense related to cloud computing arrangements; and
- \$0.6 million increase in professional service fees.

The \$0.8 million decrease in other NW Holdings operations and maintenance expense primarily reflects lower business development costs at the holding company.

SIX MONTHS ENDED JUNE 30, 2022 COMPARED TO JUNE 30, 2021. Operations and maintenance expense increased \$8.4 million at NW Holdings and \$8.6 million at NW Natural. The increase at NW Natural was driven by the following:

- \$3.7 million increase in contract labor for safety and reliability and contracted support for information technology and corporate projects;
- \$1.4 million increase in amortization expense related to cloud computing arrangements;
- \$0.9 million increase in professional service fees; and
- \$0.9 million increase in information technology maintenance and support.

The \$0.2 million decrease in other NW Holdings operations and maintenance expense primarily reflects lower business development costs at the holding company.

Depreciation

Depreciation highlights include:

<i>In thousands</i>	Three Months Ended June 30,		Six Months Ended June 30,		QTD Change	YTD Change
	2022	2021	2022	2021		
NW Natural	\$ 27,328	\$ 27,530	\$ 54,965	\$ 54,699	\$ (202)	\$ 266
Other NW Holdings depreciation	782	614	1,574	1,542	168	32
NW Holdings	<u>\$ 28,110</u>	<u>\$ 28,144</u>	<u>\$ 56,539</u>	<u>\$ 56,241</u>	<u>\$ (34)</u>	<u>\$ 298</u>

THREE MONTHS ENDED JUNE 30, 2022 COMPARED TO JUNE 30, 2021. Depreciation expense decreased \$34 thousand and \$0.2 million at NW Holdings and NW Natural, respectively, primarily due to the amortization of cloud computing arrangements, which are recorded within operations and maintenance expenses beginning in 2022.

SIX MONTHS ENDED JUNE 30, 2022 COMPARED TO JUNE 30, 2021. Depreciation expense increased \$0.3 million at both NW Holdings and NW Natural, respectively, primarily due to additional capital investments in the distribution system, Mist storage, and information technology systems, as well as renovation and construction of resource and operations service centers. The increase was partially offset by the amortization of cloud computing arrangements, which are recorded within operations and maintenance expenses beginning in 2022.

Other Income (Expense), Net

Other income (expense), net highlights include:

<i>In thousands</i>	Three Months Ended June 30,		Six Months Ended June 30,		QTD Change	YTD Change
	2022	2021	2022	2021		
NW Natural other income (expense), net	\$ 17	\$ (2,566)	\$ (964)	\$ (6,231)	\$ 2,583	\$ 5,267
Other NW Holdings activity	209	(31)	236	92	240	144
NW Holdings other income (expense), net	\$ 226	\$ (2,597)	\$ (728)	\$ (6,139)	\$ 2,823	\$ 5,411

THREE MONTHS ENDED JUNE 30, 2022 COMPARED TO JUNE 30, 2021. Other income (expense), net changed \$2.8 million and \$2.6 million at NW Holdings and NW Natural, respectively, primarily due to lower pension non-service costs. Costs related to our defined benefit pension plan for 2022 are expected to decrease compared to the prior year due to changes in assumptions and gains on plan assets. The change at other NW Holdings was driven by the change at NW Natural. Other income (expense), net primarily consists of regulatory interest, pension and other postretirement non-service costs, gains from company-owned life insurance, and donations.

SIX MONTHS ENDED JUNE 30, 2022 COMPARED TO JUNE 30, 2021. Other income (expense), net changed \$5.4 million and \$5.3 million at NW Holdings and NW Natural, respectively, primarily due to lower pension non-service costs. Costs related to our defined benefit pension plan for 2022 are expected to decrease compared to the prior year due to changes in assumptions and gains on plan assets. The change at other NW Holdings was driven by the change at NW Natural.

Interest Expense, Net

Interest expense, net highlights include:

<i>In thousands</i>	Three Months Ended June 30,		Six Months Ended June 30,		QTD Change	YTD Change
	2022	2021	2022	2021		
NW Natural	\$ 10,599	\$ 10,696	\$ 21,430	\$ 21,486	\$ (97)	\$ (56)
Other NW Holdings interest expense, net	981	332	1,672	668	649	1,004
NW Holdings	\$ 11,580	\$ 11,028	\$ 23,102	\$ 22,154	\$ 552	\$ 948

THREE MONTHS ENDED JUNE 30, 2022 COMPARED TO JUNE 30, 2021. Interest expense, net increased \$0.6 million at NW Holdings and decreased \$0.1 million at NW Natural. Interest expense, net at NW Natural decreased \$0.6 million due to higher Allowance for Funds Used During Construction (AFUDC) debt interest income, partially offset by \$0.5 million of higher interest expense on short and long-term debt. The increase at NW Holdings is primarily due to higher interest expense on the Holdings' credit facility as a result of higher balances outstanding.

SIX MONTHS ENDED JUNE 30, 2022 COMPARED TO JUNE 30, 2021. Interest expense, net increased \$0.9 million at NW Holdings and decreased \$0.1 million at NW Natural. Interest expense, net at NW Natural decreased \$1.0 million due to higher AFUDC debt interest income, partially offset by \$0.9 million of higher interest expense on short and long-term debt. The increase at NW Holdings is primarily due to higher interest expense on Holdings' credit facility as a result of higher balances outstanding.

Income Tax Expense (Benefit)

Income tax expense (benefit) highlights include:

<i>In thousands</i>	Three Months Ended June 30,		Six Months Ended June 30,		QTD Change	YTD Change
	2022	2021	2022	2021		
NW Natural income tax expense	\$ 810	\$ 288	\$ 20,133	\$ 20,840	\$ 522	\$ (707)
NW Holdings income tax expense (benefit)	\$ 470	\$ (277)	\$ 19,393	\$ 20,244	\$ 747	\$ (851)

THREE MONTHS ENDED JUNE 30, 2022 COMPARED TO JUNE 30, 2021. Income tax expense increased \$0.5 million at NW Natural and \$0.7 million at NW Holdings. The increase in income tax expense is primarily due to a higher pre-tax income in the current period compared to the prior year.

SIX MONTHS ENDED JUNE 30, 2022 COMPARED TO JUNE 30, 2021. Income tax expense decreased \$0.7 million at NW Natural and \$0.9 million at NW Holdings. The decrease in income tax expense is primarily due to a decrease in pre-tax income.

Regulatory Matters

For additional information, see Part II, Item 7 "Results of Operations—*Regulatory Matters*" in the 2021 Form 10-K.

Regulation and Rates

NATURAL GAS DISTRIBUTION. NW Natural's natural gas distribution business is subject to regulation by the OPUC and WUTC with respect to, among other matters, rates and terms of service, systems of accounts, and issuances of securities by NW Natural. At June 30, 2022, approximately 88% of NGD customers were located in Oregon, with the remaining 12% in Washington. Earnings and cash flows from natural gas distribution operations are largely determined by rates set in general rate cases and other proceedings in Oregon and Washington. They are also affected by weather, the local economies in Oregon and Washington, the pace of customer growth in the residential, commercial, and industrial markets, customer preferences and NW Natural's ability to remain price competitive, control expenses, and obtain reasonable and timely regulatory recovery of its natural gas distribution-related costs, including operating expenses and investment costs in plant and other regulatory assets. See "*Most Recent Completed Rate Cases*" below.

MIST INTERSTATE GAS STORAGE. NW Natural's interstate storage activity at Mist is subject to regulation by the OPUC, WUTC, and the Federal Energy Regulatory Commission (FERC) with respect to, among other matters, rates and terms of service. The OPUC also regulates the intrastate storage services at Mist, while FERC regulates the interstate storage services at Mist. The FERC uses a maximum cost of service model which allows for gas storage prices to be set at or below the cost of service as approved by each agency in their last regulatory filing. The OPUC Schedule 80 rates are tied to the FERC rates, and are updated whenever NW Natural modifies FERC maximum rates.

OTHER. The wholly owned regulated water businesses of NWN Water, a wholly owned subsidiary of NW Holdings, are subject to regulation by the utility commissions in the states in which they are located, which currently includes Oregon, Washington, Idaho, and Texas.

Most Recent Completed Rate Cases

OREGON. On October 16, 2020, the OPUC issued an order concluding NW Natural's general rate case filed in December 2019 (OPUC Order). The OPUC Order provides for a total revenue requirement increase of approximately \$45 million over revenues from existing rates. The revenue requirement is based on the following assumptions:

- Capital structure of 50% common equity and 50% long-term debt;
- Return on equity of 9.4%;
- Cost of capital of 6.965%; and
- Average rate base of \$1.44 billion or an increase of \$242.1 million since the last rate case.

Under the terms of the OPUC Order, NW Natural was authorized to begin to recover the expense associated with the Oregon Corporate Activity Tax (CAT) as a component of base rates. See "*Corporate Activity Tax*" below.

In NW Natural's previous Oregon rate case in March 2019, the OPUC ordered specific terms by which excess deferred income taxes (EDIT) associated with the Tax Cuts and Jobs Act (TCJA) would be provided to customers directly or applied for the benefit of customers. The Order in the most recent Oregon rate case directs NW Natural to include a true-up credit to customers of approximately \$1.0 million as a temporary rate adjustment to be amortized over the 2020-21 PGA year.

In addition, the OPUC Order approved the application of NW Natural's decoupling calculation for the months of November and May to the month of April. The decoupling mechanism is intended to encourage customers to conserve energy without adversely affecting earnings due to reductions in sales volumes.

New rates authorized by the OPUC Order were effective November 1, 2020.

WASHINGTON. On October 21, 2021, the WUTC issued an order concluding NW Natural's general rate case filed in December 2020 (WUTC Order). The WUTC Order provides for an annual revenue requirement increase over two years, consisting of a 6.4% or \$5.0 million increase in the first year beginning November 1, 2021 (Year One), and up to a 3.5% or \$3.0 million increase in the second year beginning November 1, 2022 (Year Two). The increase is based on the following assumptions:

- Cost of capital of 6.814%; and
- Average rate base of \$194.7 million, an increase of \$20.9 million since the last rate case for capital expenditures already expended at the time of filing, with an additional expected \$31.2 million increase in Year One, and an additional expected \$21.4 million increase in Year Two, with the increases in Year One and Year Two relating to expected capital expenditures in those years.

The WUTC Order does not specify the underlying inputs to the cost of capital, including capital structure and return on equity. New rates authorized by the WUTC Order were effective November 1, 2021.

From November 1, 2019 through October 31, 2021, the WUTC authorized rates to customers based on an ROE of 9.4% and an overall rate of return of 7.161% with a capital structure of 50.0% long-term debt, 1.0% short-term debt, and 49.0% common equity. The WUTC also authorized the recovery of environmental remediation expenses allocable to Washington customers

through an Environmental Cost Recovery Mechanism (ECRM) and directed NW Natural to provide federal tax reform benefits to customers. See "Rate Mechanisms - Environmental Cost Deferral and Recovery - *Washington ECRM*" below.

FERC. NW Natural is required under its Mist interstate storage certificate authority and rate approval orders to file every five years either a petition for rate approval or a cost and revenue study to change or justify maintaining the existing rates for its interstate storage services. On October 12, 2018, NW Natural filed a rate petition with FERC for revised cost-based maximum rates, which incorporated the new federal corporate income tax rate. The revised rates were effective beginning November 1, 2018.

NW Natural continuously evaluates the need for rate cases in its jurisdictions.

Regulatory Proceeding Updates

2022 OREGON GENERAL RATE CASE. On December 17, 2021, NW Natural filed a request for a general rate case (Rate Case) with the OPUC. On May 31, 2022, NW Natural, the OPUC staff, the Oregon Citizens' Utility Board (CUB), the Alliance of Western Energy Consumers (AWEC), and the Small Business Utility Advocates (SBUA), which comprise some of the parties to the Rate Case, filed a stipulation with the OPUC addressing a number of issues in the Rate Case as well as a second docket, which was consolidated with the Rate Case (Stipulation).

The Stipulation provides for a total revenue requirement increase of \$62.65 million over revenues from existing rates, subject to adjustment for capital additions and revenues related to new customers added in the test year and completion of capital projects identified as being placed into service prior to the rate effective date. The revenue requirement is based on the following assumptions:

- Capital structure of 50% common equity and 50% long-term debt;
- Return on equity of 9.4%;
- Cost of capital of 6.836%; and
- Average rate base of \$1.77 billion or an increase of \$337 million compared to the last rate case.

On June 29, 2022, NW Natural, the OPUC staff, the Oregon CUB, AWEC, and the Coalition of Communities of Color, Climate Solutions, Verde, Columbia Riverkeeper, Oregon Environmental Council, Community Energy Project, and Sierra Club ("Coalition"), which comprise some of the parties to the Rate Case, filed a second stipulation with the OPUC addressing a number of issues in the Rate Case that were not addressed in the first Stipulation ("Second Stipulation" and with the Stipulation, the Stipulations). The Second Stipulation addresses the following:

- Eliminates deposits for new customers;
- Updates to the Oregon low-income energy efficiency program; and
- Addresses recovery of the COVID-19 deferral over two years starting November 1, 2022.

The Stipulations do not address all aspects of the Rate Case. We expect remaining items to be subject to the ongoing regulatory litigation process. The Stipulations are subject to review and approval by the OPUC. For the new rates to be effective, the OPUC must issue an order, which may approve or deny the terms of the Stipulations or be issued under the OPUC's own terms. NW Natural currently expects new rates to take effect November 1, 2022.

Rate Mechanisms

During 2022 and 2021, NW Natural's key approved rates and recovery mechanisms for each service area included:

	Oregon	Washington	
	2020 Rate Case (effective 11/1/2020)	2019 Rate Case (effective 11/1/2019)	2021 Rate Case (effective 11/1/2021)
Authorized Rate Structure:			
Return on Equity	9.4%	9.4%	**
Rate of Return	7.0%	7.2%	6.8%
Debt/Equity Ratio	50%/50%	51%/49%	**
Key Regulatory Mechanisms:			
Purchased Gas Adjustment (PGA)	X	X	X
Gas Cost Incentive Sharing	X		
Decoupling	X		
Weather Normalization (WARM)	X		
Environmental Cost Recovery	X	X	X
Interstate Storage and Asset Management Sharing	X	X	X

** The WUTC Order does not specify the underlying inputs to the cost of capital, including capital structure and return on equity.

PURCHASED GAS ADJUSTMENT. Rate changes are established for NW Natural each year under PGA mechanisms in Oregon and Washington to reflect changes in the expected cost of natural gas commodity purchases. The PGA filings include gas costs under spot purchases as well as contract supplies, gas cost hedges, gas costs from the withdrawal of storage inventories, the production of gas reserves, interstate pipeline demand costs, temporary rate adjustments, which amortize balances of deferred regulatory accounts, and the removal of temporary rate adjustments effective for the previous year.

Each year, NW Natural hedges gas prices on a portion of NW Natural's annual sales requirement based on normal weather, including both physical and financial hedges. NW Natural entered the 2021-22 gas year with its forecasted sales volumes hedged at approximately 79% in total. The total hedged for Oregon was approximately 82%, including 62% in financial hedges and 19% in physical gas supplies. The total hedged for Washington was approximately 57%, including 44% in financial hedges and 13% in physical gas supplies. During 2021, there was increased volatility and pricing in the current and forward gas markets. In response to higher than normal volatility in forward gas markets in 2021, NW Natural increased its hedging level for the 2021-22 PGA year in Oregon to 82% compared to 74% in the 2020-2021 PGA year.

NW Natural is also hedged between 12% and 50% for annual requirements over the subsequent three gas years, which consists of between 13% and 48% in Oregon and between 0% and 67% in Washington. Hedge levels are subject to change based on actual load volumes, which depend to a certain extent on weather, economic conditions, and estimated gas reserve production. Also, gas storage inventory levels may increase or decrease with storage expansion, changes in storage contracts with third parties, variations in the heat content of the gas, and/or storage recall by NW Natural. As the Company plans for the 2022-23 gas year, gas price volatility has remained high with current and forward gas prices increasing substantially in 2022. We will continue to monitor gas prices as we begin to fill storage and look at hedging plans for future gas years. Gas purchases and hedges entered into for the coming winter are included in the Company's PGA filings in OR and WA which we anticipate filing later this year in September 2022.

In September 2021, NW Natural filed its annual PGA and received OPUC and WUTC approval in October 2021. PGA rate changes were effective November 1, 2021. Rates may vary between states due to different rate structures, rate mechanisms and hedging policies.

Under the current PGA mechanism in Oregon, there is an incentive sharing provision whereby NW Natural is required to select each year an 80% deferral or a 90% deferral of higher or lower actual gas costs compared to estimated PGA prices, such that the impact on NW Natural's current earnings from the incentive sharing is either 20% or 10% of the difference between actual and estimated gas costs, respectively. For the 2021-22 and 2020-21 gas years, NW Natural selected the 90% deferral option. Under the Washington PGA mechanism, NW Natural defers 100% of the higher or lower actual gas costs, and those gas cost differences are passed on to customers through the annual PGA rate adjustment.

EARNINGS TEST REVIEW. NW Natural is subject to an annual earnings review in Oregon to determine if the NGD business is earning above its authorized ROE threshold. If NGD business earnings exceed a specific ROE level, then 33% of the amount above that level is required to be deferred or refunded to customers. Under this provision, if NW Natural selects the 80% deferral gas cost option, then NW Natural retains all earnings up to 150 basis points above the currently authorized ROE. If NW Natural selects the 90% deferral option, then it retains all earnings up to 100 basis points above the currently authorized ROE. For the 2020-21 and 2021-22 gas years, NW Natural selected the 90% deferral option. The ROE threshold is subject to adjustment annually based on movements in long-term interest rates. For calendar year 2021, the ROE threshold was 10.40%. NW Natural filed the 2021 earnings test in April 2022, indicating no customer refund adjustment. NW Natural does not expect a customer refund adjustment for 2022 based on results.

GAS RESERVES. In 2011, the OPUC approved the Encana gas reserves transaction to provide long-term gas price protection for NGD business customers and determined costs under the agreement would be recovered on an ongoing basis through the annual PGA mechanism. Gas produced from NW Natural's interests is sold at then prevailing market prices, and revenues from such sales, net of associated operating and production costs and amortization, are included in cost of gas. The cost of gas, including a carrying cost for the rate base investment made under the original agreement, is included in NW Natural's annual Oregon PGA filing, which allows NW Natural to recover these costs through customer rates. The net investment under the original agreement earns a rate of return.

In 2014, NW Natural amended the original gas reserves agreement in response to Encana's sale of its interest in the Jonah field located in Wyoming to Jonah Energy. Under the amended agreement with Jonah Energy, NW Natural has the option to invest in additional wells on a well-by-well basis with drilling costs and resulting gas volumes shared at the amended proportionate working interest for each well in which NW Natural invests. Volumes produced from the additional wells drilled after the amended agreement are included in NW Natural's Oregon PGA at a fixed rate of \$0.4725 per therm. NW Natural has not participated in additional wells since 2014.

DECOUPLING. In Oregon, NW Natural has a decoupling mechanism. Decoupling is intended to break the link between earnings and the quantity of gas consumed by customers, removing any financial incentive to discourage customers' efforts to conserve energy. The Oregon decoupling baseline usage per customer was reset in the 2020 Oregon general rate case. The Order in the 2020 Oregon general rate case also approved extending NW Natural's decoupling calculation for the months of November and May to the month of April. This mechanism employs a use-per-customer decoupling calculation, which adjusts margin revenues

to account for the difference between actual and expected customer volumes. The margin adjustment resulting from differences between actual and expected volumes under the decoupling component is recorded to a deferral account, which is included in the annual PGA filing.

WARM. In Oregon, NW Natural has an approved weather normalization mechanism (WARM), which is applied to residential and small commercial customer bills. This mechanism is designed to help stabilize the collection of fixed costs by adjusting residential and small commercial customer billings based on temperature variances from average weather, with rate decreases when the weather is colder than average and rate increases when the weather is warmer than average. The mechanism is applied to bills from December through mid-May of each heating season. The mechanism adjusts the margin component of customers' rates to reflect average weather, which uses the 25-year average temperature for each day of the billing period. Daily average temperatures and 25-year average temperatures are based on a set point temperature of 59 degrees Fahrenheit for residential customers and 58 degrees Fahrenheit for commercial customers. The collections of any unbilled WARM amounts due to tariff caps and floors are deferred and earn a carrying charge until collected, or returned, in the PGA the following year. Residential and small commercial customers in Oregon are allowed to opt out of the weather normalization mechanism, and as of June 30, 2022, 7% of total eligible customers had opted out. NW Natural does not have a weather normalization mechanism approved for Washington customers, which account for about 12% of total customers. See "Business Segment—*Natural Gas Distribution*" below.

INDUSTRIAL TARIFFS. The OPUC and WUTC have approved tariffs covering NGD service to major industrial customers, which are intended to give NW Natural certainty in the level of gas supplies needed to serve this customer group. The approved terms include, among other things, an annual election period, special pricing provisions for out-of-cycle changes, and a requirement that industrial customers complete the term of their service election under NW Natural's annual PGA tariff.

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. Effective beginning November 1, 2019, the WUTC authorized an Environmental Cost Recovery Mechanism (ECRM) for recovery of prudently incurred costs allocable to Washington customers.

Oregon SRRM

Under the Oregon 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 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. NW Natural included \$6.3 million and \$4.2 million of deferred remediation expense approved by the OPUC for collection during the 2021-22 and 2020-21 PGA years, respectively.

In addition, the SRRM also provides for the annual collection of \$5.0 million from Oregon customers through a tariff rider. As it collects amounts from customers, NW Natural recognizes these collections as revenue net of any earnings test adjustments and separately amortizes an equal and offsetting amount of the deferred regulatory asset balance through the environmental remediation operating expense line shown separately in the operating expenses section of the Consolidated Statements of Comprehensive Income (Loss). For additional information, see Note 17 in the 2021 Form 10-K.

The SRRM earnings test is an annual review of adjusted NGD ROE compared to authorized NGD ROE. To apply the earnings test NW Natural must first determine what if any costs are subject to the test through the following calculation:

Annual spend
Less: \$5.0 million base rate rider
Prior year carry-over ⁽¹⁾
\$5.0 million insurance + interest on insurance
Total deferred annual spend subject to earnings test
Less: over-earnings adjustment, if any
Add: deferred interest on annual spend ⁽²⁾
Total amount transferred to post-review

⁽¹⁾ Prior year carry-over results when the prior year amount transferred to post-review is negative. The negative amount is carried over to offset annual spend in the following year.
⁽²⁾ Deferred interest is added to annual spend to the extent the spend is recoverable.

To the extent the NGD business earns at or below its authorized ROE as defined in the SRRM, the total amount transferred to post-review is recoverable through the SRRM. To the extent more than authorized ROE is earned in a year, the amount transferred to post-review would be reduced by those earnings that exceed its authorized ROE.

NW Natural concluded there was no earnings test adjustment for 2021 based on the environmental earnings test that was submitted in April 2022.

Washington ECRM

The ECRM established by the WUTC order effective November 1, 2019 permits NW Natural's recovery of environmental remediation expenses allocable to Washington customers. These expenses represent 3.32% of costs associated with remediation of sites that historically served both Oregon and Washington customers. The order allows for recovery of past deferred and future prudently incurred remediation costs allocable to Washington through application of insurance proceeds and collections from customers. Prudently incurred costs that were deferred from the initial deferral authorization in February 2011 through June 2019 were fully offset with insurance proceeds, with any remaining insurance proceeds to be amortized over a 10.5 year period. On an annual basis NW Natural will file for a prudence determination and a request to recover remediation expenditures in excess of insurance amortizations in the following year's customer rates. 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.

INTERSTATE STORAGE AND ASSET MANAGEMENT SHARING. On an annual basis, NW Natural credits amounts to Oregon and Washington customers as part of a regulatory incentive sharing mechanism related to net revenues earned from Mist gas storage and asset management activities. Previously, amounts were credited to Oregon customers in June. Starting in 2021, Oregon customers received this credit in February per the 2020 Oregon rate case order. Credits are given to customers in Washington as reductions in rates through the annual PGA filing in November.

During the first quarter of 2022, NW Natural refunded an interstate storage and asset management sharing credit of approximately \$41.1 million to Oregon customers over three equal installments in January, February and March. This includes revenue generated for the November 2020 through October 2021 PGA year. A majority of this revenue is from the cold weather event in February 2021 disclosed above. Credits are given to customers in Washington as reductions in rates through the annual PGA filing in November. Credits to Oregon and Washington customers in 2021 were approximately \$9.1 million and \$3.1 million, respectively.

Regulatory Proceeding Updates

During 2022, NW Natural was involved in the regulatory activities discussed below. For additional information, see Part II, Item 7 "Results of Operations—Regulatory Matters" in the 2021 Form 10-K.

COVID-19 DEFERRAL DOCKETS. During 2020, Oregon and Washington approved our applications to defer certain COVID-19 related costs. Costs that may be recoverable include, but are not limited to, the following: personal protective equipment, cleaning supplies and services, bad debt expense, financing costs to secure liquidity, and certain lost revenue, net of offsetting direct expense reductions associated with COVID-19. As of June 30, 2022, we believe that approximately \$17.0 million of the financial effects related to COVID-19 are recoverable and deferred to a regulatory asset approximately \$13.4 million for incurred costs. In addition, we expect to recognize revenue in a future period for an additional \$3.6 million related to forgone late fee revenue.

The following table outlines some of the key items approved by the respective Commissions:

	Oregon	Washington
Reinstituting Disconnections for Nonpayment:		
Residential	August 1, 2021	September 30, 2021
Small Commercial	December 1, 2020	September 30, 2021
Large Commercial/Industrial	November 3, 2020	October 20, 2020
Resuming Residential Reconnection Fee Charges	October 1, 2022 *	**
Reinstituting Late Fees for Nonpayment:		
Residential	October 1, 2022 *	**
Small Commercial	December 1, 2020	**
Large Commercial/Industrial	November 3, 2020	October 20, 2020
Extended Time Payment Arrangements:		
Residential	Up to 24 months	Up to 18 months
Small Commercial	Up to 6 months	Up to 12 months
Arrearage Management Program	1.5% of Retail Revenues	1% of Retail Revenues

* Jurisdiction retains discretion to re-evaluate date based on ongoing pandemic and economic conditions.

** Date is pending a Commission review of its existing credit and collection practices that is expected to be completed over the next year.

ARREARAGE MANAGEMENT PROGRAMS. As part of the approved term sheets, NW Natural established programs in Oregon and Washington to identify and mitigate residential customer arrearages associated with COVID-19. Under the Washington program, income-eligible customers may receive up to \$2,500 per year. In March 2022, the Oregon program was expanded to include additional funding and a low-income focus. Under the Oregon program, NW Natural can provide a one-time grant of up to \$1,600 per eligible residential customer. AMP is funded by NW Natural with recovery facilitated through the COVID-19 deferral dockets. As of June 30, 2022, the amount granted and deferred to a regulatory asset related to AMP was \$9.0 million of the total funds available of \$9.9 million.

LOW INCOME DISCOUNT TARIFF. In July 2022, NW Natural received approval from the OPUC for an income-qualifying residential bill discount program. The income threshold for program participation is at or below 60 percent of Oregon state median income (SMI). The program provides a bill discount for income-qualifying residential customers at four discount tier levels based on household income compared to SMI, with higher discounts given for lower income levels. Participating customers can self-certify their income and household size to qualify for the program directly with NW Natural or their local Community Action Agency. We expect the program will be available for qualifying customers by November 1, 2022. Costs for the bill discount program include simultaneous recovery from all customers. Start-up and administrative costs of the program are authorized to be deferred for later inclusion in rates.

	Total Household Income	Bill Discount Percentage
Tier 0	At or below 15% SMI	40%
Tier 1	16% - 30% of SMI	25%
Tier 2	31% - 45% of SMI	20%
Tier 3	46% - 60% of SMI	15%

RENEWABLE NATURAL GAS. On June 19, 2019, the Oregon legislature passed Senate Bill 98 (SB 98), which enables natural gas utilities to procure or develop RNG on behalf of their Oregon customers. The bill was signed into law by the governor in July 2019, and subsequently, the OPUC opened a docket in August 2019 regarding the rules for the bill. After working with parties, the OPUC adopted final rules in July 2020.

SB 98 and the rules outline the following parameters for the RNG program including: setting voluntary goals for adding as much as 30% renewable natural gas into the state's pipeline system by 2050; enabling gas utilities to invest in and own the cleaning and conditioning equipment required to bring raw biogas and landfill gas up to pipeline quality, as well as the facilities to connect to the local gas distribution system; and allowing up to 5% of a utility's revenue requirement to be used to cover the incremental cost or investment in renewable natural gas infrastructure.

Further, the new law supports all forms of renewable natural gas including renewable hydrogen, which is made from excess wind, solar and hydro power. Renewable hydrogen can be used for the transportation system, industrial use or blended into the natural gas pipeline system.

WATER UTILITIES. In the second quarter of 2022, NWN Water signed two purchase agreements for water utilities, representing approximately 1,400 connections in Washington near its existing Cascadia Water utilities. The acquisitions received approval by the WUTC in July 2022 and are expected to close in August 2022. Also in the second quarter of 2022, NWN Water closed the purchase of a water and wastewater utility, representing approximately 150 combined connections in Texas near its Blue Topaz Utilities. In the first quarter of 2022, NWN Water signed two additional purchase agreements for water utilities, representing approximately 900 connections in Texas also near its existing Blue Topaz Utilities. These applications were filed in the second quarter of 2022 with the PUCT and decisions are expected in late 2022 or 2023. In December 2021, NWN Water agreed to purchase the water and wastewater utilities of Far West Water & Sewer, Inc. located in Arizona. In March 2022, we filed our acquisition application with the Arizona Corporation Commission. In June 2022, Arizona staff recommended approval of the Far West acquisition with the docket awaiting Commission review, which is expected in the third quarter of 2022. The Far West acquisition is expected to close in the fourth quarter of 2022.

For our acquired water utilities, we have been executing general rate cases. In February 2022, the OPUC adopted a comprehensive stipulation in Sunriver Water's rate case with new rates effective May 2022. In January 2022, we filed a general rate case for Suncadia Water and the WUTC allowed rates to go into effect in May 2022 by operation of law.

INTEGRATED RESOURCE PLAN (IRP). NW Natural generally files a full IRP biennially for Oregon and Washington with the OPUC and WUTC, respectively. NW Natural jointly filed its 2018 IRP for both Oregon and Washington in August 2018, and received both a letter of compliance from the WUTC and acknowledgment by the OPUC in February 2019. The 2018 IRP included analysis of different scenarios, examining several potential future states and the corresponding least cost, least risk resource acquisition strategies. In addition to these strategies, the 2018 IRP published an emissions forecast for each of these potential futures. NW Natural filed an update to the 2018 IRP in March 2021 and received acknowledgement of the requested capital projects by the OPUC in September 2021.

The development of an IRP filing is an extensive and complex process that engages multiple stakeholders in an effort to build a robust and commonly understood analysis. The final product is intended to provide a long-term outlook of the supply-side and demand-side resource and compliance requirements for reliable and low cost natural gas service. The IRP examines and analyses uncertainties in the planning process, including potential changes in governmental and regulatory policies. As a result of the executive order (EO) issued by the governor of Oregon, new regulations and requirements have been developed resulting in a new program known as the Climate Protection Plan. The Washington Department of Ecology is currently undergoing rule-making for the Climate Commitment Act. Both of these policies have the potential to impact long-term resource decisions. NW Natural received approval from both the OPUC and the WUTC to extend the filing of our full IRP until September 23, 2022 due to the implementation of new resource planning optimization software.

PIPELINE SECURITY. In May and July 2021, the Department of Homeland Security's (DHS) Transportation Security Administration (TSA) released two security directives applicable to certain notified owners and operators of natural gas pipeline facilities (including local distribution companies) that TSA has determined to be critical. The first security directive required notified owners/operators to implement cybersecurity incident reporting to the DHS, designate a cybersecurity coordinator, and perform a gap assessment of current entity cybersecurity practices against certain voluntary TSA security guidelines and report relevant results and proposed mitigation to applicable DHS agencies. The second security directive requires notified entities to implement a significant number of specified cybersecurity controls and processes. The TSA recently released a third security directive, which replaces the second directive. The third security directive provides a framework based on risk and outcome objectives and is effective until July 2023. NW Natural is currently in the process of evaluating and implementing the security directives while ensuring safe and reliable operations. NW Natural is providing frequent updates to the TSA on NW Natural's progress on achieving the security directives. NW Natural filed requests with the OPUC and WUTC to defer the costs associated with complying with the second security directive and plans to seek recovery of these costs in future ratemaking proceedings. As of June 30, 2022, NW Natural has deferred to a regulatory asset \$3.1 million of costs incurred and \$27.6 million was invested in information technology to date. NW Natural continues to evaluate the potential effect of these directives on our operations and facilities, as well as the potential total cost of implementation, and will continue to monitor for any clarifications or amendments to these directives.

ERP UPGRADE DEFERRALS. In the fourth quarter of 2020, NW Natural filed requests to defer expenses pertaining to a project to upgrade the existing enterprise resource planning (ERP) system with the OPUC and WUTC. A stipulation supported by all parties in the Oregon docket was filed and approved by the OPUC in the third quarter of 2021. Under the settlement agreement, NW Natural can recover 100% of costs incurred up to the \$8.55 million estimate of Oregon-allocated costs provided in the docket. For costs that exceed \$8.55 million up to \$12 million, 80% may be recovered from customers. For costs that exceed \$12 million, 50% may be recovered. As of June 30, 2022, NW Natural deferred to a regulatory asset \$7.9 million of expenses incurred to date. Approval of the Washington deferral was resolved as part of the most recent general rate case.

Environmental, Legislation and Regulation Matters

There is a growing international and domestic focus on climate change and the contribution of greenhouse gas (GHG) emissions, most notably methane and carbon dioxide, to climate change. In response, there are increasing efforts at the international, federal, state, and local level to regulate GHG emissions. Legislation or other forms of regulation could take a variety of forms including, but not limited to, GHG emissions limits, reporting requirements, carbon taxes, requirements to purchase carbon credits, building codes, increased efficiency standards, additional charges to fund energy efficiency activities or other regulatory actions, incentives or mandates to conserve energy, or use renewable energy sources, tax advantages and other subsidies to support alternative energy sources, a reduction in rate recovery for construction costs related to the installation of new customer services or other new infrastructure investments, mandates for the use of specific fuels or technologies, or promotion of research into new technologies to reduce the cost and increase the scalability of alternative energy sources. These efforts could include legislation, legislative proposals, or new regulations at the federal, state, and local level, as well as private party litigation related to GHG emissions. We recognize certain of our businesses, including our natural gas business, are likely to be affected by current or future regulation seeking to limit GHG emissions.

International

In early 2021, the U.S. rejoined the Paris Agreement on Climate, which establishes non-binding targets to reduce GHG emissions from both developed and developing nations. Under the Paris Agreement, signatory countries are expected to submit their nationally determined contributions to curb GHG emissions and meet the agreed temperature objectives every five years. On April 22, 2021, the United States federal administration announced the U.S. nationally determined contribution to achieve a fifty to fifty-two percent reduction from 2005 levels in economy-wide net GHG emissions by 2030.

Federal

President Biden's administration has issued executive orders directing agencies to conduct a general review of regulations and executive actions related to the environment and reestablished a framework for considering the social cost of carbon as part of certain agency cost-benefit analyses for new regulations. President Biden's administration continues to consider a wide range of additional policies, executive orders, rules, legislation, and other initiatives to address climate change. Some of these initiatives may include repeal of policies, executive orders or rules implemented by the prior administration.

The U.S. Congress has not yet passed any federal climate change legislation, and we cannot predict when or if Congress will pass such legislation and in what form. In the absence of such legislation, the Environmental Protection Agency (EPA) regulates

GHG emissions pursuant to the Clean Air Act. In September 2009, the EPA issued a final rule requiring the annual reporting of greenhouse gas emissions from certain industries, specified large GHG emission sources, and facilities that emit 25,000 metric tons or more of CO₂ equivalents per year. NW Natural began reporting emission information in 2011. Under this reporting rule, local natural gas distribution companies like NW Natural are required to report system throughput to the EPA on an annual basis. The EPA also has required additional GHG reporting regulations to which NW Natural is subject, requiring the annual reporting of fugitive emissions from operations. Other federal regulatory agencies, including the Federal Energy Regulatory Commission, are beginning to address greenhouse gas emissions through changes in their regulatory oversight approach and policies.

Additionally, the Securities and Exchange Commission (SEC) recently proposed new rules relating to the disclosure of a range of climate-related matters. These include corporate governance and risk management, disaggregated financial disclosure in the notes to audited financial statements, and detailed disclosure concerning GHG emissions. We are currently assessing these proposed rules. We cannot predict what any final rules adopted by the SEC may require, nor can we predict the time periods for compliance, the costs of implementation, or any potential impacts resulting from any final climate-related rules that may be adopted. To the extent these rules are finalized as proposed or in modified form, we or our customers could incur increased costs related to the assessment and disclosure of climate-related risks. These could include internal costs as well as external costs such as the cost of independent experts to provide attestation reports on our GHG emissions data and increased audit costs.

Washington State

In 2021, Washington comprised approximately 11% of NW Natural's revenues, as well as 1.5% and 25.5% of new meters from commercial and residential customers, respectively. Effective February 1, 2021, building codes in Washington state require new residential homes to achieve higher levels of energy efficiency based on specified carbon emissions assumptions, which calculate electric appliances to have lower on-site GHG emissions than comparable gas appliances. This increases the cost of new home construction incorporating natural gas depending on a number of factors including home size, equipment configurations, and building envelope measures. Additionally, the Washington State Building Code Council (SBCC) voted in April 2022 to include updates in the state commercial building energy code that, if final action is taken in November 2022 are expected to restrict or eliminate the use of gas space and water heating in new commercial construction beginning in July 2023. In May 2022, the SBCC is expected to begin reviewing building energy code updates for new residential construction that may include similar requirements. Utilities and other organizations, including NW Natural, are reviewing the proposed building energy code updates, the process by which the updates have been considered, and the legality of the building code updates. We currently expect that the building code changes will be subject to legal challenge if they become final.

NW Natural continues to work with policymakers and a coalition of utilities, labor groups and business coalitions in Washington to communicate the role of direct use natural gas, and in the coming years renewable natural gas and hydrogen, can play in pursuing more effective policies to reduce GHGs while preserving reliability, resiliency, energy choice, equity, and energy affordability.

Washington has also enacted the Climate Commitment Act (CCA), which establishes a comprehensive program that includes an overall limit for GHG emissions from major sources in the state that declines yearly beginning on January 1, 2023, resulting in an overall reduction of GHG emissions to 95% below 1990 levels by 2050. The Washington Department of Ecology has been directed to develop rules to create a cap-and-invest program, under which entities, including natural gas and electric utilities, large manufacturing facilities, and transportation and other fuel providers, which are subject to the CCA must either reduce their emissions or obtain allowances and approved offset credits to cover any remaining emissions. These rules are expected by the end of 2022. NW Natural is subject to the CCA and intends to pursue inclusion of CCA compliance costs in rates.

Oregon

On March 10, 2020, the governor of Oregon issued an executive order (EO) establishing GHG emissions reduction goals of at least 45% below 1990 emission levels by 2035 and at least 80% below 1990 emission levels by 2050 and directed state agencies and commissions to facilitate such GHG emission goals targeting a variety of sources and industries. Although the EO does not specifically direct actions of natural gas distribution businesses, the OPUC is directed to prioritize proceedings and activities that advance decarbonization in the utility sector, mitigate the energy burden experienced by utility customers and ensure system reliability and resource adequacy. The EO also directs other state agencies, including the Oregon Department of Environmental Quality (ODEQ), to cap and reduce GHG emissions from transportation fuels and all other liquid and gaseous fuels, including natural gas, adopt building energy efficiency goals for new building construction, reduce methane gas emissions from landfills and food waste, and submit a proposal for adoption of state goals for carbon sequestration and storage by Oregon's forest, wetlands and agricultural lands. The OPUC is charged with carrying out the EO to the extent it is consistent with its statutory authority and duties, and in doing so to focus on equitable impacts to low-income customers.

In December 2021, the ODEQ concluded its rulemaking process and issued final cap and reduce rules for its Climate Protection Program (CPP), which became effective in January of 2022. The CPP outlines GHG emissions reduction goals of 50% by 2035 and 90% by 2050 from a 1990 baseline. The first three-year compliance period is 2022 through 2024. NW Natural is subject to the CPP, and pursuant to this rule, is required to make its first compliance filing in 2025. We intend to pursue inclusion of compliance costs for the CPP in rates. The CPP has been subject to legal challenge by a number of utilities, companies and organizations, including NW Natural.

NW Natural is also engaged in an OPUC Fact-Finding (“Fact-Finding Docket”), opened in response to the EO for the purpose of analyzing the potential natural gas utility bill impacts that may result from the ODEQ’s CPP and to identify appropriate regulatory tools to mitigate potential customer impacts. The OPUC Staff has indicated that the ultimate goal of the Fact-Finding Docket is to inform future policy decisions and other key analyses to be considered in 2022, or thereafter, after the CPP is in place. We expect the Oregon Commission to issue a final report in the last half of 2022.

NW Natural is working with policymakers and a coalition of utilities in Oregon to help stakeholders understand the role direct use natural gas, and in the coming years renewable natural gas and hydrogen, can play in pursuing more effective policies to reduce greenhouse gases while preserving reliability, resiliency, energy choice, equity, and energy affordability.

Local Jurisdictions and Other Advocacy

In addition to legislative activities at the state level, ballot measures may be proposed by advocacy groups. Some local and county governments in the United States also have been proposing or passing renewable energy resolutions, restrictions, taxes, or fees with advocates seeking to accelerate climate action goals. A number of cities across the country, and several in our service territory are currently considering actions such as limitations or bans on the use of natural gas in new construction or otherwise. For example, in July 2022, the Eugene City Council passed several motions, including one directing the city manager to draft an ordinance that could prohibit the use of natural gas in low rise residential buildings beginning with permits submitted after June of 2023, to allow the Eugene City Council an opportunity to consider one or more draft ordinances or actions, and to hear further from the citizens of Eugene regarding such actions. NW Natural is actively engaged with such cities, local governments, and other advocates, including, among others the cities of Eugene and Milwaukie, Oregon, in our service territory and is working with these communities to help them understand the ways in which the natural gas system, and renewable fuels, can help them meet their decarbonization goals.

NW Natural Decarbonization Initiatives & Actions

Our customers are currently paying less for their natural gas today than they did 15 years ago. We expect that compliance with any form of regulation of GHG emissions, including the CPP in Oregon and CCA in Washington as well as voluntary actions under SB 98, will require additional resources and compliance tools. The developing and changing carbon credit markets and other compliance tool options, decades-long timeframes for compliance, likely changing and evolving laws and energy policy, and evolving technological advancements, all make it difficult to accurately predict long-term tools for and costs of compliance. Given that CCA rules are in development and the recency of the adoption of the final CPP rules, we have not completed our full integrated resources planning process to identify our compliance obligations and expected costs. Even as we develop these compliance and cost projections, they will be uncertain and subject to significant change over the nearly 30-year time horizon. It is our current expectation that costs associated with compliance generally would be recovered in rates and would result in an increase in the prices charged to customers. The CPP in Oregon is largely tied to the volume of natural gas consumed and as such, we currently expect that CPP cost impacts will be the lowest among residential customers because they generally consume less and highest among industrial customers that use significantly higher volumes of natural gas, with cost increases for commercial customers falling between residential and industrial customers. The projected customer bill impact of the CPP varies significantly based on forecasting assumptions related to permitted levels of rate recovery, available technologies and equipment, weather patterns and gas usage, customer growth or attrition, allocation of fixed costs among classes of customers, energy efficiency levels, availability, use and cost of renewables, feasibility of broad-scale hydrogen in the natural gas system, and a number of other assumptions used in the complex analysis of integrated resource planning.

It is difficult to assess whether building code changes that could make the use of natural gas more expensive for home builders, lower levels of recovery in rates for construction costs related to new customer services, or higher customer bills as compliance costs are included in rates will affect the competitiveness of our business or result in a decline in demand for natural gas. All of these developments could negatively affect our gas utility customer growth. At the same time natural gas utilities will be subject to GHG emissions regulation, we expect that other energy source providers will be subject to similar, or in some cases stricter or more rapid, compliance requirements that are likely to affect their cost and competitiveness relative to natural gas as well. For example, President Biden has announced his intention to have a carbon-free electricity sector by 2035, 15 years before the target date of the CCA or CCP. In June 2021, the State of Oregon enacted HB 2021, a clean electricity bill that requires the state’s two largest investor-owned electric utilities and retail electricity service suppliers to reduce GHG emissions associated with electricity sold to Oregon customers to 100 percent below baseline levels by 2040 with interim steps, including an 80 percent reduction by 2030 and 90 percent reduction by 2035. This bill does not replace the separate renewable portfolio standards previously established in Oregon, which sets requirements for how much of the electricity used in Oregon must come from renewable resources. In Washington, SB 5116, the Clean Energy Transformation Act, requires all electric utilities in Washington to transition to carbon-neutral electricity by 2030 and to 100 percent carbon-free electricity by 2045. We expect that compliance with these and other laws will substantially increase the cost of energy for electric customers in our service territory. We are not able to determine at this time whether increased electricity costs will make natural gas use more or less competitive on a relative basis.

We expect these and other trends to drive innovation of, and demand for, technological developments and innovative new products that reduce GHG emissions. Research and development are occurring across the energy sector, including in the gas sector with work being conducted on gas-fired heat pumps, higher efficiency water and space heating appliances including hybrid systems, carbon capture utilization and storage developments, continued development of technologies related to RNG, and various forms of hydrogen for different applications, among others.

NW Natural continues to take proactive steps in seeking to reduce GHG emissions in our region and is proactively communicating with local, state, and federal governments and communities about those steps. NW Natural has been a leader among gas utilities in innovative programs. Notable programs have included a decoupling rate structure designed to weaken the link between earnings and gas consumption by customer adopted in 2007, and establishment of a voluntary Smart Energy carbon offset program for customers established in 2007, and removal of all known cast iron and bare steel to create one of the tightest and most modern distribution systems in the country. We continue to believe that NW Natural has an important role in providing affordable and equitable energy to the communities we serve. NW Natural is an important provider of energy to families and businesses in Oregon and southwest Washington. Yet, the sales of natural gas to our residential and commercial customers account for approximately 6% of Oregon's GHG emissions according to data for recent years from the State of Oregon Department of Environmental Quality In-Boundary GHG Inventory. We intend to continue to provide this necessary energy to our communities with the goal of using our modern pipeline system to help the Pacific Northwest transition to a clean energy future.

In 2016, NW Natural initiated a multi-pronged, multi-year strategy to accelerate and deliver greater GHG emission reductions in the communities we serve. Key components of this strategy include customer energy efficiency, continued adoption of NW Natural's voluntary Smart Energy carbon offset program, and seeking to incorporate RNG and hydrogen into our gas supply. RNG is produced from organic materials including food, agricultural and forestry waste, wastewater, or landfills. We believe RNG has powerful potential to reduce net GHG emissions. Methane that would otherwise be released to the atmosphere is captured from these organic materials as they decompose and is conditioned to pipeline quality, so it can be added into the existing natural gas system. In 2019, Oregon Senate Bill 98 (SB 98) was signed into law enabling NW Natural to procure RNG on behalf of customers and provided voluntary targets that would allow us to make qualified investments and purchase RNG from third parties.

Under SB 98, NW Natural is actively working to procure RNG supply for customers and is engaging in longer-term efforts to increase the amount of RNG on our system and explore the development of renewable hydrogen through power to gas. To that end, in 2020 and 2021, NW Natural announced several agreements and investments to procure RNG for its customers. In addition, NW Natural began a partnership with BioCarbN to invest up to an estimated \$38 million in four separate RNG development projects that will access biogas derived from water treatment at Tyson Foods' processing plants, subject to approval by all parties. The first project was commissioned in early 2022 with a second underway and planned to be commissioned in early 2023. To date, NW Natural has signed agreements with options to purchase or develop RNG for utility customers totaling about 3% of NW Natural's annual sales volume in Oregon.

FINANCIAL CONDITION

Capital Structure

NW Holdings' long-term goal is to maintain a strong and balanced consolidated capital structure. NW Natural targets a regulatory capital structure of 50% common equity and 50% long-term debt, which is consistent with approved regulatory allocations in Oregon, which has an allocation of 50% common equity and 50% long-term debt without recognition of short-term debt, and Washington, which has an allocation of 50% long-term debt, 1% short-term debt, and 49% common equity.

When additional capital is required, debt or equity securities are issued depending on both the target capital structure and market conditions. These sources of capital are also used to fund long-term debt retirements and short-term commercial paper maturities. See "Liquidity and Capital Resources" below and Note 9. Achieving our target capital structure and maintaining sufficient liquidity to meet operating requirements is necessary to maintain attractive credit ratings and provide access to the capital markets at reasonable costs.

NW Holdings' consolidated capital structure, excluding short-term debt, was as follows:

	June 30,		December 31,
	2022	2021	2021
Common equity	52.1 %	48.6 %	47.2 %
Long-term debt (including current maturities)	47.9	51.4	52.8
Total	100.0 %	100.0 %	100.0 %

NW Natural's consolidated capital structure, excluding short-term debt, was as follows:

	June 30,		December 31,
	2022	2021	2021
Common equity	54.3 %	48.6 %	49.8 %
Long-term debt (including current maturities)	45.7	51.4	50.2
Total	100.0 %	100.0 %	100.0 %

Including short-term debt balances, as of June 30, 2022 and 2021, and December 31, 2021, NW Holdings' consolidated capital structure included common equity of 47.3%, 43.2% and 39.5%; long-term debt of 43.4%, 42.8% and 44.0%; and short-term debt including current maturities of long-term debt of 9.3%, 14.0% and 16.5%, respectively. As of June 30, 2022 and 2021, and

December 31, 2021, NW Natural's consolidated capital structure included common equity of 52.4%, 43.8%, and 44.2%; long-term debt of 44.1%, 43.2% and 44.7%; and short-term debt including current maturities of long-term debt of 3.5%, 13.0%, and 11.1%, respectively.

Liquidity and Capital Resources

At June 30, 2022 and 2021, NW Holdings had approximately \$17.2 million and \$20.1 million, and NW Natural had approximately \$10.3 million and \$11.5 million of cash and cash equivalents, respectively. In order to maintain sufficient liquidity during periods when capital markets are volatile, NW Holdings and NW Natural may elect to maintain higher cash balances and add short-term borrowing capacity. NW Holdings and NW Natural may also pre-fund their respective capital expenditures when long-term fixed rate environments are attractive. NW Holdings and NW Natural expect to have ample liquidity in the form of cash on hand and from operations and available credit capacity under credit facilities to support funding needs.

NW Natural Holdings and NW Natural continue to monitor interest rates and financing options for all of its businesses. Interest rates have increased in 2022 resulting from actions taken by the U.S. Federal Reserve to increase short-term rates as inflation rates rise. NW Natural recovers interest expense on its long-term debt through its authorized cost of capital and capital.

Equity Issuance

On April 1, 2022, NW Holdings issued and sold 2,875,000 shares of its common stock pursuant to a registration statement on Form S-3 and related prospectus supplement. NW Holdings received net offering proceeds, after deducting the underwriter's discounts and commissions and expenses payable by NW Holdings of approximately \$138.6 million. The proceeds are to be used for general corporate purposes, including repayment of its short-term indebtedness and/or making equity contributions to NW Holdings' subsidiaries, NW Natural, NW Natural Water and NW Natural Renewables. Contributions to NW Natural, NW Natural Water and NW Natural Renewables are to be used for general corporate purposes. Of the contributions received by NW Natural, \$130.0 million was used to repay its short-term indebtedness.

ATM Equity Program

In August 2021, NW Holdings initiated an at-the-market (ATM) equity program by entering into an equity distribution agreement under which NW Holdings may issue and sell from time to time shares of common stock, no par value, having an aggregate gross sales price of up to \$200 million. NW Holdings is under no obligation to offer and sell common stock under the ATM equity program, which expires in August 2024. Any shares of common stock offered under the ATM equity program are registered on NW Holdings' universal shelf registration statement filed with the SEC. During the three months ended June 30, 2022, NW Holdings issued and sold 482,200 shares of common stock pursuant to the ATM equity program resulting in cash proceeds of \$25.1 million, net of fees and commissions paid to agents of \$0.4 million. During the six months ended June 30, 2022, NW Holdings issued and sold 678,101 shares of common stock pursuant to the ATM equity program resulting in cash proceeds of \$35.2 million, net of fees and commissions paid to agents of \$0.7 million. As of June 30, 2022, NW Holdings had \$146.2 million of equity available for issuance under the program. The ATM equity program was initiated to raise funds for general corporate purposes, including equity contributions to NW Holdings' subsidiaries, NW Natural and NW Natural Water. Contributions to NW Natural and NW Natural Water will be used for general corporate purposes.

NW Holdings

For NW Holdings, short-term liquidity is primarily provided by cash balances, dividends from its operating subsidiaries, in particular NW Natural, available cash from a multi-year credit facility, and short-term credit facilities. NW Holdings also has a universal shelf registration statement filed with the SEC for the issuance of debt and equity securities. NW Holdings long-term debt, if any, and equity issuances are primarily used to provide equity contributions to NW Holdings' operating subsidiaries for operating and capital expenditures and other corporate purposes. From 2022 through 2024, we estimate NW Holdings' and NW Natural's combined incremental capital needs to be in the range of \$600 million to \$700 million. NW Holdings has issued more than \$170 million of equity through July 2022 and NW Natural entered into a \$140 million private placement FMB that we expect to receive the proceeds on September 30, 2022. NW Holdings intends to use raised capital to support NW Natural, NW Natural Water, and NW Natural Renewables operating and capital expenditure programs. NW Holdings' issuance of securities is not subject to regulation by state public utility commissions, but the dividends from NW Natural to NW Holdings are subject to regulatory ring-fencing provisions. NW Holdings guarantees the debt of its wholly-owned subsidiary, NWN Water. See "*Long-Term Debt*" below for more information regarding NWN Water debt.

As part of the ring-fencing conditions agreed upon with the OPUC and WUTC in connection with the holding company reorganization, NW Natural may not pay dividends or make distributions to NW Holdings if NW Natural's credit ratings and common equity ratio, defined as the ratio of equity to long-term debt, fall below specified levels. If NW Natural's long-term secured credit ratings are below A- for S&P and A3 for Moody's, dividends may be issued so long as NW Natural's common equity ratio is 45% or more. If NW Natural's long term secured credit ratings are below BBB for S&P and Baa2 for Moody's, dividends may be issued so long as NW Natural's common equity ratio is 46% or more. Dividends may not be issued if NW Natural's long-term secured credit ratings are BB+ or below for S&P or Ba1 or below for Moody's, or if NW Natural's common equity ratio is below 44%, where the ratio is measured using common equity and long-term debt excluding imputed debt or debt-like lease obligations. In each case, common equity ratios are determined based on a preceding or projected 13-month average. In addition, there are certain OPUC notice requirements for dividends in excess of 5% of NW Natural's retained earnings.

Additionally, if NW Natural's common equity (excluding goodwill and equity associated with non-regulated assets), on a preceding or projected 13-month average basis, is less than 46% of NW Natural's capital structure, NW Natural is required to notify the OPUC, and if the common equity ratio falls below 44%, file a plan with the OPUC to restore its equity ratio to 44%. This condition is designed to ensure NW Natural continues to be adequately capitalized under the holding company structure. Under the WUTC order, the average common equity ratio must not exceed 56%.

At June 30, 2022, NW Natural satisfied the ring-fencing provisions described above.

Based on several factors, including current cash reserves, committed credit facilities, its ability to receive dividends from its operating subsidiaries, in particular NW Natural, and an expected ability to issue long-term debt and equity securities in the capital markets, NW Holdings believes its liquidity is sufficient to meet anticipated near-term cash requirements, including all contractual obligations, investing, and financing activities as discussed in "*Cash Flows*" below.

NW HOLDINGS DIVIDENDS. Quarterly dividends have been paid on common stock each year since NW Holdings' predecessor's stock was first issued to the public in 1951. Annual common stock dividend payments per share, adjusted for stock splits, have increased each year since 1956. The declarations and amount of future dividends to shareholders will depend upon earnings, cash flows, financial condition, NW Natural's ability to pay dividends to NW Holdings and other factors. The amount and timing of dividends payable on common stock is at the sole discretion of the NW Holdings Board of Directors.

NW Natural

For the NGD business segment, short-term borrowing requirements typically peak during colder winter months when the NGD business borrows money to cover the lag between natural gas purchases and bill collections from customers. Short-term liquidity for the NGD business is primarily provided by cash balances, internal cash flow from operations, proceeds from the sale of commercial paper notes, as well as available cash from multi-year credit facilities, short-term credit facilities, company-owned life insurance policies, the sale of long-term debt, and equity contributions from NW Holdings. NW Natural's long-term debt and contributions from NW Holdings are primarily used to finance NGD capital expenditures, refinance maturing debt, and provide temporary funding for other general corporate purposes of the NGD business.

Based on its current debt ratings (see "Credit Ratings" below), NW Natural has been able to issue commercial paper and long-term debt at attractive rates. In the event NW Natural is not able to issue new long-term debt due to adverse market conditions or other reasons, NW Natural expects that near-term liquidity needs can be met using internal cash flows, issuing commercial paper, receiving equity contributions from NW Holdings, or drawing upon a committed credit facility. NW Natural also has a universal shelf registration statement filed with the SEC for the issuance of secured and unsecured debt securities.

In the event NW Natural senior unsecured long-term debt ratings are downgraded, or outstanding derivative positions exceed a certain credit threshold, counterparties under derivative contracts could require NW Natural to post cash, a letter of credit, or other forms of collateral, which could expose NW Natural to additional cash requirements and may trigger increases in short-term borrowings while in a net loss position. NW Natural was not required to post collateral at June 30, 2022. See "*Credit Ratings*" below and Note 15.

Other items that may have a significant impact on NW Natural's liquidity and capital resources include NW Natural's pension contribution requirements and environmental expenditures. For additional information, see Part II, Item 7 "*Financial Condition*" in the 2021 Form 10-K.

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 June 30, 2022 and 2021, NW Holdings had short-term debt outstanding of \$222.7 million and \$240.0 million, respectively. At June 30, 2022 and 2021, NW Natural had short-term debt outstanding of \$78.7 million and \$198.0 million, respectively. NW Holdings' short-term debt at June 30, 2022 consisted of \$144.0 million in revolving credit agreement loans at NW Holdings and \$78.7 million of commercial paper outstanding at NW Natural. The weighted average interest rate on the revolving credit

agreement at June 30, 2022 was 2.7% at NW Holdings. The weighted average interest rate of commercial paper at June 30, 2022 was 2.0% at NW Natural.

Credit Agreements

NW Holdings

At June 30, 2022, NW Holdings had a \$200 million sustainability-linked credit agreement, with a feature that allows it to request increases in the total commitment amount, up to a maximum of \$300 million. The maturity date of the agreement is November 3, 2026, with available extensions of commitments for two additional one-year periods, subject to lender approval.

All lenders under the NW Holdings credit agreement are major financial institutions with committed balances and investment grade credit ratings as of June 30, 2022 as follows:

In millions

Lender rating, by category	Loan Commitment	
AA/Aa	\$	200
Total	\$	200

Based on credit market conditions, it is possible one or more lending commitments could be unavailable to NW Holdings if the lender defaulted due to lack of funds or insolvency; however, NW Holdings does not believe this risk to be imminent due to the lenders' strong investment-grade credit ratings. At June 30, 2022, June 30, 2021 and December 31, 2021, \$144.0 million, \$42.0 million and \$144.0 million were drawn under the NW Holdings Credit Agreement, respectively.

The NW Holdings credit agreement permits the issuance of letters of credit in an aggregate amount of up to \$40 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 June 30, 2022 and 2021, with consolidated indebtedness to total capitalization ratios of 52.7% and 56.8%, respectively.

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.

The NW Holdings credit agreement also includes a mechanism that can increase or decrease the undrawn interest rate by up to 1 basis point and undrawn interest rate by up to 5 basis points in accordance with NW Holdings' independently verified achievement of quantifiable metrics related to two goals—one related to carbon savings and one related to in-line inspections of NW Natural's transmission pipeline. Performance against these metrics is designed to be assessed annually with pricing adjustments, if any, resetting off of primary pricing annually and not cumulatively.

Interest charges on the NW Holdings credit agreement are indexed to the London Interbank Offered Rate (LIBOR). The agreement contains provisions addressing the end of the use of LIBOR as a benchmark rate of interest and a mechanism for determining an alternative benchmark rate of interest without an amendment to the credit agreement. If the provisions are triggered, LIBOR would be replaced by a secured overnight financing rate (SOFR)-based rate, if one can be determined, or, if not, LIBOR may be replaced by a rate selected by NW Holdings and the administrative agent under the agreement. The replacement rate is also subject to a spread adjustment which may be positive, negative or zero.

NW Holdings had no letters of credit issued and outstanding at June 30, 2022 and 2021.

NW Natural

At June 30, 2022, NW Natural had a sustainability-linked multi-year credit agreement for unsecured revolving loans totaling \$400 million, with a feature that allows NW Natural to request increases in the total commitment amount, up to a maximum of \$600 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.

All lenders under the NW Natural credit agreement are major financial institutions with committed balances and investment grade credit ratings as of June 30, 2022 as follows:

In millions

Lender rating, by category	Loan Commitment	
AA/Aa	\$	400
Total	\$	400

Based on credit market conditions, it is possible one or more lending commitments could be unavailable to NW Natural if the lender defaulted due to lack of funds or insolvency; however, NW Natural does not believe this risk to be imminent due to the lenders' strong investment-grade credit ratings. NW Natural did not have any outstanding balances drawn under this credit facility at June 30, 2022, June 30, 2021 and December 31, 2021.

The NW Natural credit agreement permits the issuance of letters of credit in an aggregate amount of up to \$60 million. The principal amount of borrowings under the credit agreement is due and payable on the maturity date. There were no outstanding balances under this credit agreement at June 30, 2022 or 2021. The credit agreement requires 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 June 30, 2022 and 2021, with consolidated indebtedness to total capitalization ratios of 47.6% and 56.2%, respectively.

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. See "*Credit Ratings*" below.

The NW Natural credit agreement also includes a mechanism that can increase or decrease the undrawn interest rate by up to 1 basis point and undrawn interest rate by up to 5 basis points in accordance with NW Natural's independently verified achievement of quantifiable metrics related to two goals—one related to carbon savings and one related to in-line inspections of NW Natural's transmission pipeline. Performance against these metrics is designed to be assessed annually with pricing adjustments, if any, resetting off of primary pricing annually and not cumulatively.

Interest charges on the NW Natural credit agreement are indexed to LIBOR. The agreement contains provisions addressing the end of the use of LIBOR as a benchmark rate of interest and a mechanism for determining an alternative benchmark rate of interest without an amendment to the credit agreement. If the provisions are triggered, LIBOR would be replaced by a secured overnight financing rate (SOFR)-based rate, if one can be determined, or, if not, LIBOR may be replaced by a rate selected by NW Natural and the administrative agent under the agreement. The replacement rate is also subject to a spread adjustment which may be positive, negative or zero.

Credit Ratings

NW Holdings does not currently maintain ratings with S&P or Moody's. NW Natural's credit ratings are a factor of liquidity, potentially affecting access to the capital markets including the commercial paper market. NW Natural's credit ratings also have an impact on the cost of funds and the need to post collateral under derivative contracts. The following table summarizes NW Natural's current credit ratings:

	S&P	Moody's
Commercial paper (short-term debt)	A-1	P-2
Senior secured (long-term debt)	AA-	A2
Senior unsecured (long-term debt)	n/a	Baa1
Corporate credit rating	A+	n/a
Ratings outlook	Stable	Stable

The above credit ratings and ratings outlook are dependent upon a number of factors, both qualitative and quantitative, and are subject to change at any time. The disclosure of or reference to these credit ratings is not a recommendation to buy, sell or hold NW Holdings or NW Natural securities. Each rating should be evaluated independently of any other rating.

As part of the ring-fencing conditions agreed upon with the OPUC and WUTC in connection with the holding company reorganization, NW Holdings and NW Natural are required to maintain separate credit ratings, long-term debt ratings, and preferred stock ratings, if any.

Long-Term Debt

On July 15, 2022, NW Natural entered into a Bond Purchase Agreement between NW Natural and the institutional investors named as purchasers therein (the Bond Purchase Agreement). The Bond Purchase Agreement provides for the issuance of \$140.0 million aggregate principal amount of NW Natural's First Mortgage Bonds, 4.78% Series due 2052 (the Bonds). The

Bonds are expected to be issued on or about September 30, 2022. The Bonds will bear interest at the rate of 4.78% per annum, payable semi-annually on March 30 and September 30 of each year, commencing March 30, 2023, and will mature on September 30, 2052. The Bonds will be subject to redemption prior to maturity at the option of NW Natural, in whole or in part, (i) at any time prior to March 30, 2052, at a redemption price equal to 100% of the principal amount thereof plus a "make-whole" premium and accrued and unpaid interest thereon to the date of redemption, and (ii) at any time on and after March 30, 2052, at 100% of the principal amount thereof plus accrued and unpaid interest thereon to the date of redemption.

In November 2021, NW Natural issued \$130.0 million of First Mortgage Bonds (FMBs) with an interest rate of 3.08% due in 2051. Issued as a sustainability bond, net proceeds from the sale of the FMBs were added to the general funds of NW Natural and used for general corporate purposes, while an amount equivalent to the net proceeds from the sale of the bonds was or will be allocated to finance and/or refinance, in whole or in part, investments in one or more new or existing projects of NW Natural deemed to be an eligible project in the bond offering. Projects deemed eligible for the FMB offering included expenditures related to RNG and hydrogen generation and infrastructure, programs related to energy efficiency, expenditures related to operations or service centers that have or are expected to receive LEED Gold or Platinum certification, and expenditures and program investments related to enabling opportunities for diverse business enterprises.

In June 2021, NW Natural Water entered into a five-year term loan agreement for \$55.0 million. The loan carried an interest rate of 2.3% at June 30, 2022, 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 June 30, 2022, with a consolidated indebtedness to total capitalization ratio of 52.7%.

At June 30, 2022, NW Holdings and NW Natural had long-term debt outstanding of \$1,045.9 million and \$986.8 million, respectively, which included \$8.0 million and \$7.9 million of unamortized debt issuance costs at NW Holdings and NW Natural, respectively. NW Natural's long-term debt consists of first mortgage bonds (FMBs) with maturity dates ranging from 2023 through 2051, interest rates ranging from 2.8% to 7.9%, and a weighted average interest rate of 4.4%.

No long-term debt is scheduled to mature over the next twelve months as of June 30, 2022 at NW Natural. See Part II, Item 7, "Financial Condition—*Long-Term Debt*" in the 2021 Form 10-K for long-term debt maturing over the next five years.

Bankruptcy Ring-fencing Restrictions

As part of the ring-fencing conditions agreed upon with the OPUC and WUTC, NW Natural is required to have one director who is independent from NW Natural management and from NW Holdings and to issue one share of NW Natural preferred stock to an independent third party. NW Natural was in compliance with both of these ring-fencing provisions as of June 30, 2022. NW Natural may file a voluntary petition for bankruptcy only if approved unanimously by the Board of Directors of NW Natural, including the independent director, and by the holder of the preferred share.

Cash Flows

Operating Activities

Changes in operating cash flows are primarily affected by net income or loss, changes in working capital requirements, and other cash and non-cash adjustments to operating results.

<i>In thousands</i>	Six Months Ended June 30,				YTD Change
	2022		2021		
NW Natural cash provided by operating activities	\$	193,436	\$	189,945	\$ 3,491
NW Holdings cash provided by operating activities	\$	196,564	\$	194,281	\$ 2,283

SIX MONTHS ENDED JUNE 30, 2022 COMPARED TO JUNE 30, 2021. Cash provided by operating activities increased \$2.3 million at NW Holdings and increased \$3.5 million at NW Natural. The significant factors contributing to the increase at NW Holdings were as follows:

- \$29.6 million decrease in net deferred gas costs as gas costs for the six months ended June 30, 2021 were 27% above the PGA estimates primarily due to the 2021 cold weather event;
- \$23.3 million increase in accounts receivable and accrued unbilled revenue resulting from higher balances due to colder weather; and
- \$16.5 million increase in NW Natural's decoupling mechanism; partially offset by
- \$32.9 million decrease in the regulatory incentive sharing mechanism related to revenues earned from Mist gas storage and asset management activities primarily related to the 2021 cold weather event; and
- \$32.0 million increase in asset optimization revenue sharing bill credits to customers.

NW Natural did not make any cash contributions to its qualified defined benefit pension plans during the six months ended June 30, 2022 compared to \$9.6 million for the same period in 2021. NW Natural does not expect to make any plan contributions during the remainder of 2022. The amount and timing of future contributions will depend on market interest rates and investment returns on the plans' assets. For additional information, see Note 10.

The increase in cash provided by operating activities at NW Natural was primarily driven by the increase discussed above.

NW Holdings and NW Natural have lease and purchase commitments relating to their operating activities that are financed with cash flows from operations. For information on cash flow requirements related to leases and other purchase commitments, see Note 7 and Note 16 in the 2021 Form 10-K.

Investing Activities

<i>In thousands</i>	Six Months Ended June 30,		YTD Change
	2022	2021	
NW Natural cash used in investing activities	\$ (158,180)	\$ (122,887)	\$ (35,293)
NW Holdings cash used in investing activities	\$ (169,687)	\$ (127,883)	\$ (41,804)

SIX MONTHS ENDED JUNE 30, 2022 COMPARED TO JUNE 30, 2021. Cash used in investing activities increased \$41.8 million at NW Holdings and increased \$35.3 million at NW Natural. The increase in cash used in investing activities was primarily due to an increase of \$37.6 million and \$31.0 million of capital expenditures at NW Holdings and NW Natural, respectively.

NW Natural capital expenditures in 2022 (including cloud-based software classified as other assets) are anticipated to be in the range of \$310 million to \$350 million and for the five-year period from 2022 to 2026 are expected to range from \$1.3 billion to \$1.5 billion. NW Natural Water is expected to invest approximately \$15 million in 2022 related to maintenance capital expenditures for water and wastewater utilities currently owned as of December 31, 2021, and for the five-year period from 2022 to 2026, capital expenditures are expected to be approximately \$60 million to \$70 million. Investments in our infrastructure during and after 2022 will depend largely on additional regulations, growth, and expansion opportunities. Required funds for the investments are expected to be internally generated or financed with long-term debt or equity, as appropriate.

Financing Activities

<i>In thousands</i>	Six Months Ended June 30,		YTD Change
	2022	2021	
NW Natural cash used in financing activities	\$ (32,995)	\$ (63,083)	\$ 30,088
NW Holdings cash used in financing activities	\$ (23,962)	\$ (73,542)	\$ 49,580

SIX MONTHS ENDED JUNE 30, 2022 COMPARED TO JUNE 30, 2021. Cash used in financing activities decreased \$49.6 million and \$30.1 million at NW Holdings and NW Natural, respectively. The decrease at NW Holdings was attributable to net proceeds from the issuance of common stock and the ATM equity program of \$174.1 million, partially offset by changes in debt. The decrease at NW Natural was attributable to cash contributions from NW Holdings of \$165.5 million, partially offset by changes in debt.

Contingent Liabilities

Loss contingencies are recorded as liabilities when it is probable a liability has been incurred and the amount of the loss is reasonably estimable in accordance with accounting standards for contingencies. See "Application of Critical Accounting Policies and Estimates" in the 2021 Form 10-K. At June 30, 2022, NW Natural's total estimated liability related to environmental sites is \$104.8 million. See "Results of Operations—Regulatory Matters—Rate Mechanisms—Environmental Costs" in the 2021 Form 10-K and Note 16.

APPLICATION OF CRITICAL ACCOUNTING POLICIES AND ESTIMATES

In preparing financial statements in accordance with U.S. GAAP, management exercises judgment to assess the potential outcomes and related accounting impacts in the selection and application of accounting principles, including making estimates and assumptions that affect reported amounts of assets, liabilities, revenues, expenses, and related disclosures in the financial statements. Management considers critical accounting policies to be those which are most important to the representation of financial condition and results of operations and which require management's most difficult and subjective or complex judgments, including accounting estimates that could result in materially different amounts if reported under different conditions or if they used different assumptions. Our most critical estimates and judgments for both NW Holdings and NW Natural include accounting for:

- regulatory accounting;
- revenue recognition;
- derivative instruments and hedging activities;
- pensions and postretirement benefits;
- income taxes;
- environmental contingencies; and
- impairment of long-lived assets and goodwill.

There have been no material changes to the information provided in the 2021 Form 10-K with respect to the application of critical accounting policies and estimates. See Part II, Item 7, "*Application of Critical Accounting Policies and Estimates*," in the 2021 Form 10-K.

Management has discussed its current estimates and judgments used in the application of critical accounting policies with the Audit Committees of the Boards of NW Holdings and NW Natural. Within the context of critical accounting policies and estimates, management is not aware of any reasonably likely events or circumstances that would result in materially different amounts being reported. For a description of recent accounting pronouncements that could have an impact on financial condition, results of operations or cash flows, see Note 2.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

NW Holdings and NW Natural are exposed to various forms of market risk including commodity supply risk, commodity price risk, interest rate risk, foreign currency risk, credit risk and weather risk. This section describes NW Holdings' and NW Natural's exposure to these risks, as applicable. Management monitors and manages these financial exposures as an integral part of NW Holdings' and NW Natural's overall risk management program. No material changes have occurred related to disclosures about market risk for the six months ended June 30, 2022. For additional information, see Part II, Item 1A, "*Risk Factors*" in this report and Part II, Item 7A, "*Quantitative and Qualitative Disclosures about Market Risk*" in the 2021 Form 10-K.

ITEM 4. 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 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 Exchange Act Rule 13a-15(f).

There have been no changes in NW Natural's or NW Holdings' internal control over financial reporting that occurred during the quarter ended June 30, 2022 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 4(b).

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

Other than the proceedings disclosed in Note 16 and those proceedings disclosed and incorporated by reference in Part I, Item 3, "*Legal Proceedings*" in the 2021 Form 10-K, we have only nonmaterial litigation, or litigation that occurs in the ordinary course of our business.

ITEM 1A. RISK FACTORS

There were no material changes from the risk factors discussed in Part I, Item 1A, "Risk Factors" in the 2021 Form 10-K. In addition to the other information set forth in this report, you should carefully consider those risk factors, which could materially affect our business, financial condition, or results of operations.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

The following table provides information about purchases of NW Holdings' equity securities that are registered pursuant to Section 12 of the Securities Exchange Act of 1934, as amended, during the quarter ended June 30, 2022:

Period	<u>Issuer Purchases of Equity Securities</u>			
	Total Number of Shares Purchased ⁽¹⁾	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs ⁽²⁾	Maximum Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs ⁽²⁾
Balance forward			2,124,528	\$ 16,732,648
04/01/22-04/30/22	—	—	—	—
05/01/22-05/31/22	3,100	50.03	—	—
06/01/22-06/30/22	—	\$ —	—	—
Total	3,100	\$ 50.03	2,124,528	\$ 16,732,648

⁽¹⁾ During the quarter ended June 30, 2022, no shares of common stock were purchased on the open market to meet the requirements of NW Holdings' Dividend Reinvestment and Direct Stock Purchase Plan. However, 3,100 shares of NW Holdings common stock were purchased on the open market to meet the requirements of share-based compensation programs. During the quarter ended June 30, 2022, no shares of NW Holdings common stock were accepted as payment for stock option exercises pursuant to the NW Natural Restated Stock Option Plan.

⁽²⁾ During the quarter ended June 30, 2022, no shares of NW Holdings common stock were repurchased pursuant to the Board-approved share repurchase program. In May 2019, we received NW Holdings Board approval to extend the repurchase program through May 2022. Effective August 3, 2022, we received NW Holdings Board approval to extend the repurchase program. Such authorization will continue until the program is used, terminated or replaced. For more information on this program, refer to Note 5 in the 2021 Form 10-K.

ITEM 5. OTHER INFORMATION

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

Bylaws Amendment

Effective August 3, 2022, the Board of Directors approved the amendment and restatement of NW Holdings' Amended and Restated Bylaws (Bylaws). In addition to certain ministerial changes, the amendments to the Bylaws generally included the following changes:

- Article II, Sections 1 and 2 of the Bylaws were amended to allow NW Holdings flexibility to hold its annual meeting or any special meeting in the City of Portland, or such other place as determined by the Board of Directors.
- Article II, Section 9 of the Bylaws was amended to clarify that a shareholder must be a shareholder of record to properly bring notice of business to be conducted at the meeting.
- Article II, Section 10 of the Bylaws was amended to include additional procedural and informational requirements for shareholders to nominate director candidates and incorporate provisions related to the Securities and Exchange Commission's (SEC)'s new universal proxy rules.
- Article VII, Section 1 of the Bylaws was amended to eliminate the requirement that the Board annually elect the President and Secretary, consistent with other officer appointments.

The foregoing description of the amendments to the Bylaws does not purport to be complete and is qualified in its entirety by reference to the full text of the Bylaws, which are attached to this Quarterly Report on Form 10-Q as Exhibit 3.1 and are incorporated by reference herein.

The following disclosure is intended to satisfy any obligation to provide disclosures pursuant to Item 8.01 of Form 8-K.

Share Repurchase Program

Effective August 3, 2022, NW Holdings' Board of Directors approved an extension to the Company's previously authorized share repurchase program for our common stock, under which the Company purchases shares on the open market or through privately negotiated transactions. The Company has Board authorization to repurchase up to an aggregate of 2.8 million shares or up to an aggregate of \$100 million. Such authorization will continue until the program is used, terminated or replaced. Since the program's inception in 2000, the Company has repurchased 2.1 million shares of common stock at a total cost of \$83.3 million.

ITEM 6. EXHIBITS

See the Exhibit Index below, which is incorporated by reference herein.

NORTHWEST NATURAL GAS COMPANY NORTHWEST NATURAL HOLDING COMPANY

Exhibit Index to Quarterly Report on Form 10-Q
For the Quarter Ended June 30, 2022

Exhibit Index

<u>Exhibit Number</u>	<u>Document</u>
<u>3.1</u>	<u>Amended and Restated Bylaws of Northwest Natural Holding Company.</u>
<u>3.2</u>	<u>Amended and Restated Bylaws of Northwest Natural Gas Company.</u>
<u>31.1</u>	<u>Certification of Principal Executive Officer of Northwest Natural Gas Company Pursuant to Rule 13a-14(a)/15-d-14(a), Section 302 of the Sarbanes-Oxley Act of 2002.</u>
<u>31.2</u>	<u>Certification of Principal Financial Officer of Northwest Natural Gas Company Pursuant to Rule 13a-14(a)/15-d-14(a), Section 302 of the Sarbanes-Oxley Act of 2002.</u>
<u>31.3</u>	<u>Certification of Principal Executive Officer of Northwest Natural Holding Company Pursuant to Rule 13a-14(a)/15-d-14(a), Section 302 of the Sarbanes-Oxley Act of 2002.</u>
<u>31.4</u>	<u>Certification of Principal Financial Officer of Northwest Natural Holding Company Pursuant to Rule 13a-14(a)/15-d-14(a), Section 302 of the Sarbanes-Oxley Act of 2002.</u>
<u>*32.1</u>	<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>
<u>*32.2</u>	<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.</u>
101	The following materials formatted in Inline Extensible Business Reporting Language (Inline XBRL): (i) Consolidated Statements of Income; (ii) Consolidated Balance Sheets; (iii) Consolidated Statements of Cash Flows; and (iv) Related notes. The instance document does not appear in the interactive data file because XBRL tags are embedded within the Inline XBRL document.
104	The cover page from the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2022, formatted in Inline XBRL.

* Pursuant to Item 601(b)(32)(ii) of Regulation S-K, this certification is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended.

SIGNATURES

Pursuant to the requirements 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 GAS COMPANY

(Registrant)

Dated: August 4, 2022

/s/ Brody J. Wilson

Brody J. Wilson

Principal Accounting Officer

Vice President, Treasurer, Chief Accounting Officer and Controller

NORTHWEST NATURAL HOLDING COMPANY

(Registrant)

Dated: August 4, 2022

/s/ Brody J. Wilson

Brody J. Wilson

Principal Accounting Officer

Vice President, Treasurer, Chief Accounting Officer and Controller

**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, 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 their 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 such other place as may be determined by the board of directors, 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 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 their absence, by the vice-chair of the Board if that position be filled, in their 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 meeting, 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 of record entitled to vote at such meeting. 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 their 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, (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 (the “Exchange Act”), (iv) a questionnaire with respect to the background and qualifications of the nominee completed by the nominee in the form required by the company (which questionnaire shall be provided by the secretary of the company upon written request), and (v) a statement (1) that the shareholder is a holder of record of capital stock of the company entitled to vote at such meeting and intends to appear in person or by proxy at the meeting to propose such nomination, (2) whether or not the shareholder giving the notice and/or the other Proposing Person(s) (as defined below), if any, will deliver a proxy statement and form of proxy to holders of at least 67 percent of the voting power of all of the shares of capital stock of the company entitled to vote on the election of directors, (3) providing a representation as to whether or not such shareholder and/or the other Proposing Person(s) intends to solicit proxies in support of director nominees other than the company’s director nominees in accordance with Rule 14a-19 promulgated under the Exchange Act, and (4) that the shareholder will provide any other information relating to such nomination that would be required to be disclosed in a proxy statement or other filing required to be made in connection with solicitations of proxies in support of the nomination proposed to be brought before the meeting pursuant to Section 14(a) of the Exchange Act; (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.

Notwithstanding the foregoing provisions of this Section 10 and Article I, Section 9, a shareholder shall also comply with all applicable requirements of the Exchange Act and the rules and regulations thereunder, including, but not

limited to, Rule 14a-19 of the Exchange Act, with respect to the matters set forth in this Section 10 and Article I, Section 9. If a shareholder fails to comply with any applicable requirements of the Exchange Act, including, but not limited to, Rule 14a-19 promulgated thereunder, such shareholder's proposed nomination or proposed business shall be deemed to have not been made in compliance with these bylaws and shall be disregarded. Nothing in this bylaw shall be deemed to affect any rights of (i) a shareholder to have proposals included in the company's proxy statement pursuant to Rule 14a-8 (or any successor rule), as applicable, under the Exchange Act and, to the extent required by such rule, have such proposals considered and voted on at an annual meeting or (ii) the holders of any series of undesignated Preferred Stock (as defined in the Restated Articles of Incorporation) to elect directors under specified circumstances.

Further notwithstanding the foregoing provisions of this Section 10, unless otherwise required by law, if any shareholder and/or other Proposing Person (i) provides notice pursuant to Rule 14a-19(b) promulgated under the Exchange Act and (ii) subsequently fails to comply with the requirements of Rule 14a-19(a)(2) or Rule 14a-19(a)(3) promulgated under the Exchange Act, then the company shall disregard any proxies or votes solicited for any proposed nominee of such shareholder and/or other Proposing Person. Upon request by the company, if any shareholder and/or other Proposing Person provides notice pursuant to Rule 14a-19(b) promulgated under the Exchange Act, such shareholder and/or other Proposing Person shall deliver to the company, no later than five (5) business days prior to the applicable meeting, reasonable evidence that it has met the requirements of Rule 14a-19(a)(3) promulgated under the Exchange Act.

The number of nominees a shareholder may nominate for election at the annual meeting (or in the case of a shareholder giving the notice on behalf of a beneficial owner, the number of nominees a shareholder may nominate for election at the annual meeting on behalf of such beneficial owner) shall not exceed the number of directors to be elected at such annual meeting.

For purposes of these bylaws, the term "Proposing Person" shall mean the following persons: (i) the shareholder of record providing the notice of nominations or business proposed to be brought before a shareholders' meeting and (ii) the beneficial owner(s), if different, on whose behalf the nominations or business proposed to be brought before a shareholders' meeting is made.

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 their 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 governance committee and specific resolution 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 their 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 their sole discretion designate in their 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 their 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 their 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, may 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. The President 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 their 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, their 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, their 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 their legal representative who shall furnish proper evidence of authority to transfer, or by their 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 they are or were 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 them 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 their 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 them and incurred by them in any such capacity or arising out of their status as such, whether or not the company would have the power to indemnify them 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 them and incurred by them in their 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, 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 their 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 such other place as may be determined by the board of directors, 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 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 their absence, by the vice-chair of the Board if that position be filled, in their 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 meeting, 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 of record entitled to vote at such meeting. 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 their 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, (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 (the “Exchange Act”), (iv) a questionnaire with respect to the background and qualifications of the nominee completed by the nominee in the form required by the company (which questionnaire shall be provided by the secretary of the company upon written request), and (v) a statement (1) that the shareholder is a holder of record of capital stock of the company entitled to vote at such meeting and intends to appear in person or by proxy at the meeting to propose such nomination, (2) whether or not the shareholder giving the notice and/or the other Proposing Person(s) (as defined below), if any, will deliver a proxy statement and form of proxy to holders of at least 67 percent of the voting power of all of the shares of capital stock of the company entitled to vote on the election of directors, (3) providing a representation as to whether or not such shareholder and/or the other Proposing Person(s) intends to solicit proxies in support of director nominees other than the company’s director nominees in accordance with Rule 14a-19 promulgated under the Exchange Act, and (4) that the shareholder will provide any other information relating to such nomination that would be required to be disclosed in a proxy statement or other filing required to be made in connection with solicitations of proxies in support of the nomination proposed to be brought before the meeting pursuant to Section 14(a) of the Exchange Act; (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.

Notwithstanding the foregoing provisions of this Section 10 and Article I, Section 9, a shareholder shall also comply with all applicable requirements of the Exchange Act and the rules and regulations thereunder, including, but not limited to, Rule 14a-19 of the Exchange Act, with respect to the matters set forth in this Section 10 and Article I, Section 9. If a shareholder fails to comply with any applicable requirements of the Exchange Act, including, but not limited to, Rule

14a-19 promulgated thereunder, such shareholder's proposed nomination or proposed business shall be deemed to have not been made in compliance with these bylaws and shall be disregarded. Nothing in this bylaw shall be deemed to affect any rights of (i) a shareholder to have proposals included in the company's proxy statement pursuant to Rule 14a-8 (or any successor rule), as applicable, under the Exchange Act and, to the extent required by such rule, have such proposals considered and voted on at an annual meeting or (ii) the holders of any series of undesignated Preferred Stock (as defined in the Restated Articles of Incorporation) to elect directors under specified circumstances.

Further notwithstanding the foregoing provisions of this Section 10, unless otherwise required by law, if any shareholder and/or other Proposing Person (i) provides notice pursuant to Rule 14a-19(b) promulgated under the Exchange Act and (ii) subsequently fails to comply with the requirements of Rule 14a-19(a)(2) or Rule 14a-19(a)(3) promulgated under the Exchange Act, then the company shall disregard any proxies or votes solicited for any proposed nominee of such shareholder and/or other Proposing Person. Upon request by the company, if any shareholder and/or other Proposing Person provides notice pursuant to Rule 14a-19(b) promulgated under the Exchange Act, such shareholder and/or other Proposing Person shall deliver to the company, no later than five (5) business days prior to the applicable meeting, reasonable evidence that it has met the requirements of Rule 14a-19(a)(3) promulgated under the Exchange Act.

The number of nominees a shareholder may nominate for election at the annual meeting (or in the case of a shareholder giving the notice on behalf of a beneficial owner, the number of nominees a shareholder may nominate for election at the annual meeting on behalf of such beneficial owner) shall not exceed the number of directors to be elected at such annual meeting.

For purposes of these bylaws, the term "Proposing Person" shall mean the following persons: (i) the shareholder of record providing the notice of nominations or business proposed to be brought before a shareholders' meeting and (ii) the beneficial owner(s), if different, on whose behalf the nominations or business proposed to be brought before a shareholders' meeting is made.

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 their 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 governance committee and specific resolution 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 their 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 their sole discretion designate in their 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 their 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 their 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, may 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. The President 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 their 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, their 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, their 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 their legal representative who shall furnish proper evidence of authority to transfer, or by their 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 they are or were 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 them 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 their 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 them and incurred by them in any such capacity or arising out of their status as such, whether or not the company would have the power to indemnify them 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 them and incurred by them in their 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.

CERTIFICATION

I, David H. Anderson, certify that:

1. I have reviewed this quarterly report on Form 10-Q for the quarterly period ended June 30, 2022 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(e)) 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: August 4, 2022

/s/ David H. Anderson

David H. Anderson

President and Chief Executive Officer

CERTIFICATION

I, Frank H. Burkhartsmeyer, certify that:

1. I have reviewed this quarterly report on Form 10-Q for the quarterly period ended June 30, 2022 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(e)) 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: August 4, 2022

/s/ Frank H. Burkhartsmeyer

Frank H. Burkhartsmeyer

Senior Vice President and Chief Financial Officer

CERTIFICATION

I, David H. Anderson, certify that:

1. I have reviewed this quarterly report on Form 10-Q for the quarterly period ended June 30, 2022 of Northwest Natural Holding 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(e)) 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: August 4, 2022

/s/ David H. Anderson

David H. Anderson

President and Chief Executive Officer

CERTIFICATION

I, Frank H. Burkhartsmeyer, certify that:

1. I have reviewed this quarterly report on Form 10-Q for the quarterly period ended June 30, 2022 of Northwest Natural Holding 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(e)) 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: August 4, 2022

/s/ Frank H. Burkhartsmeyer

Frank H. Burkhartsmeyer

Senior Vice President and Chief Financial Officer

NORTHWEST NATURAL GAS COMPANY
Certificate Pursuant to Section 906
of Sarbanes – Oxley Act of 2002

Each of the undersigned, DAVID H. ANDERSON, Chief Executive Officer, and FRANK H. BURKHARTSMEYER, the Chief Financial Officer, of NORTHWEST NATURAL GAS COMPANY (the Company), DOES HEREBY CERTIFY that:

1. The Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2022 (the Report) fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
2. Information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

IN WITNESS WHEREOF, each of the undersigned has caused this instrument to be executed this 4th day of August 2022.

/s/ David H. Anderson
David H. Anderson
President and Chief Executive Officer

/s/ Frank H. Burkhartsmeier
Frank H. Burkhartsmeier
Senior Vice President and Chief Financial Officer

A signed original of this written statement required by Section 906 of the Sarbanes-Oxley Act of 2002 has been provided to Northwest Natural Gas Company and will be retained by Northwest Natural Gas Company and furnished to the Securities and Exchange Commission or its staff upon request.

NORTHWEST NATURAL HOLDING COMPANY

Certificate Pursuant to Section 906 of Sarbanes – Oxley Act of 2002

Each of the undersigned, DAVID H. ANDERSON, Chief Executive Officer, and FRANK H. BURKHARTSMEYER, the Chief Financial Officer, of NORTHWEST NATURAL HOLDING COMPANY (the Company), DOES HEREBY CERTIFY that:

1. The Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2022 (the Report) fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
2. Information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

IN WITNESS WHEREOF, each of the undersigned has caused this instrument to be executed this 4th day of August 2022.

/s/ David H. Anderson
David H. Anderson
President and Chief Executive Officer

/s/ Frank H. Burkartsmeier
Frank H. Burkartsmeier
Senior Vice President and Chief Financial Officer

A signed original of this written statement required by Section 906 of the Sarbanes-Oxley Act of 2002 has been provided to Northwest Natural Holding Company and will be retained by Northwest Natural Holding Company and furnished to the Securities and Exchange Commission or its staff upon request.