e-FILING REPORT COVER SHEET



Send completed Cover Sheet and the Report in an email addressed to: <u>PUC.FilingCenter@state.or.us</u>

REPORT NAME: 2015 New Construction Budget Report

COMPANY NAME: NW Natural

DOES REPORT CONTAIN CONFIDENTIAL INFORMATION?

If yes, please submit only the cover letter electronically. Submit confidential information as directed in OAR 860-001-0070 or the terms of an applicable protective order.

If known, please select designation:	RE (Electric)	RG (Gas)	RW (Water)	RO (Other)
Report is required by: 🖾 OAR	OAR 860-027-00	015		
⊠Statute	ORS 757.105			
Order				
Other				
Is this report associated with a speci	fic docket/case?	No	∐Yes	

If yes, e	enter	docket	number:	RG	19
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List applicable Key Words for this report to facilitate electronic search: 2015 New Construction Budget Report

DO NOT electronically file with the PUC Filing Center:

- Annual Fee Statement form and payment remittance or
- OUS or RSPF Surcharge form or surcharge remittance or
- Any other Telecommunications Reporting or
- Any daily safety or safety incident reports or
- Accident reports required by ORS 654.715

Please file the above reports according to their individual instructions.

MARK R. THOMPSON Manager, Rates & Regulatory Affairs Tel: 503.721.2476 Fax: 503.721.2516 email: mark.thompson@nwnatural.com



220 NW 2ND AVENUE PORTLAND, OR 97209

<u>^{TEL}</u> 503.226.4211

www.nwnatural.com

March 13, 2015

VIA ELECTRONIC FILING

Public Utility Commission of Oregon 3930 Fairview Industrial Drive SE Post Office Box 1088 Salem, Oregon 97308-1088

Attention: Filing Center

Re: RG 19: 2015 NEW CONSTRUCTION BUDGET REPORT

Northwest Natural Gas Company, dba NW Natural, submits herewith its 2015 New Construction Budget Report, pursuant to ORS 757.105 and OAR 860-27-0015.

Please address any correspondence on this matter to me, with copies to Jorge Moncayo, Financial Planning and Budget Manager, 503.226.4211, extension 5752, at the address stated above.

Sincerely,

/s/ Mark R. Thompson

Mark R. Thompson

enclosure

cc: Brody Wilson Stephen Feltz Alex Miller Jorge Moncayo



PUBLIC UTILITY COMMISSION OF OREGON PO BOX 1088, SALEM, OR 97308-1088 PUC.FilingCenter@state.or.us

GAS UTILITY NEW CONSTRUCTION BUDGET FOR _______

GENERAL INSTRUCTIONS

- Each energy utility operating within the State of Oregon and having gross operating revenues of \$50,000 or more per year is required to file a New Construction Budget annually on or before December 31st and report information on new construction, extensions, and new additions to property of the utility in accordance with Oregon Administrative Rule 860-027-0015.
- The New Construction Budget report should be completed and filed with the Public Utility Commission of Oregon Filing Center. Complete the e-Filing Report Cover Sheet found at http://egov.oregon.gov/PUC/eFiling/eReports/efiling_report_cover_sheet.docx. Email both the report and cover sheet to PUC.FilingCenter@state.or.us no later than December 31st of the year preceding that for which the budget is made.

For major projects (total project cost greater than \$300,000 \$1 Million) a narrative supplying the following information is required:

PROJECT NARRATIVE

- 1. Project Description: Include a brief technical specification of the project, ownership, if jointly owned, operating date, stage of construction, and other relevant information.
- Need for the Project: Attach all prepared information documenting the need for the project, including the specific need the project is intended to fill. Economic comparisons with alternatives are to be provided. All the underlying assumptions of the economic analyses are to be specified.
- 3. Contingencies: Provide a listing of existing or potential future problems which might impact the final cost or successful completion and operation of the project, such as licensing problems, labor difficulties, litigation, etc.
- Reconciliation with Prior Budget: Each successive year's budget can be expected to reflect differing estimates of project costs as the project progresses. For each major project, prepare a reconciliation with the prior budget's estimates and provide specific reasons for the changes.

In addition, please attach copies of prepared documentation or plans describing transmission, distribution, and general plant projects located in Oregon exceeding \$100,000 in total cost and for which construction will commence in the budget year. Information submitted should contain a brief project description, location, and total budgeted cost.

FULL NAME OF GAS UTILITY			
Northwest Natural Gas Company			
ADDRESS: PO BOX OR STREET NUMBER	CITY	STATE	ZIP CODE
220 NW 2 nd Avanue	Portland	OR	97209
CERTIFICATION: I CERTIFY THAT THE INFORMATION REPOR	TED IS TRUE AND COMPLETE TO TH	E BEST OF MY K	NOWLEDGE.
SIGNATURE	TITLE		DATE,
Tech X	Controller		3/10/2015
d t		100 s	

			Northwest Natural Gas Company	rai Gae Comoan					2015	
 INSTRUCTIONS Report percent ownership, scheduled operating dates, and expenditures required to complete project for major production, transmission, and general plant projects. Major projects are defined as those projects having a total estimated cost to completion exceeding \$300,000. Under "Distribution," report specific line item expenditures for the budget year only. All expenditures for distribution following the budget year should be aggregated for the year and only total distribution expenditures reported for the period. Non-major project expenditures within each category should be aggregated and only the totals reported. 	i dates, and e ving a total es cpenditures fo corted for the egory should	xpenditures re timated cost t or the budget period. be aggregate	equired to con o completion year only. All d and only the	nplete projec exceeding S expenditures totals repor	t for major p 300,000. s for distribu ted.	roduction, tion followi	transmission ng the budg	n, and gen et year sh	leral plant pr ould be aggr	ojects. egated for the
		SCHEDULED	EXPENDITU	<u>EXPENDITURES (B.Y. = BUDGET YEAR; B.Y.+1 = THE FIRST YEAR AFTER THE BUDGET YEAR_ETC</u>)	UDGET YEAR	: B.Y.+1 = T	HE FIRST YEA	R AFTER T	HE BUDGET Y	(EAR, ETC.)
DESCRIPTION	PERCENT OWNERSHIP %	OPERATING DATE (MO / YR)	PRIOR TO B.Y.	B.Y.	B.Y. + 1	B.Y. + 2	B.Y.+3	B.Y. + 4	REQUIRED TO COMPLETE	TOTAL
Major Production and Storage Projects:										
Non-Major Production and Storage Projects Total Production and Storage Projects										
Major Transmission Projects:										
Non-Major Transmission Projects Total Transmission Projects										
Distribution (See Instruction 3): Mains										
Measuring & Reg. Sta. Equipment Compressor Station Equipment										
Services Meters and Regulators Meter Installations										
Other (Landington) Other (Landington) Total Distribution				1						
Major General Plant Projects:										
Non-Major General Plant Projects Total General Plant Projects										
Total New Construction Budget										

PUC FORM 356 (10-2013)

Schedule C: Gas Utility New Construction Budget (Oregon)	(uot		COMPANY: Northwest Natural Gas Comment	tere Communication					BUDGET YEAR: 2015	\R:
INSTRUCTIONS				al cas compan						
 Report percent ownership, scheduled operating dates, and expenditures required to complete project for major production, transmission, and general plant projects. Major projects are defined as those projects having a total estimated cost to completion exceeding \$300,000. Under "Distribution," report specific line item expenditures for the budget year only. All expenditures for distribution following the budget year only. All expenditures for distribution following the budget year should be aggregated for the year and only total distribution expenditures reported for the period. Non-maior project expenditures within each catactor should be appreciated and only the total distribution expenditures within each catactor should be appreciated and only the total distribution expenditures within each catactor should be appreciated and only total distribution expenditures within each catactor should be appreciated and only the total distribution expenditures within each catactor should be appreciated and only the total distribution expenditures within each catactor should be appreciated and only the total distribution expenditures within each catactor should be appreciated and only the total distribution within each catactor should be appreciated and only total distribution expenditures within each catactor should be appreciated and only the total distribution expenditures within each catactor should be appreciated and only the total distribution and catactor should be appreciated and only the total distribution expended to the period. 	j dates, and e ving a total es xpenditures fo ported for the	(penditures re timated cost to the budget) period.	is required to complete project for major production, transmission, and general plant projects. ost to completion exceeding S300,000. get year only. All expenditures for distribution following the budget year should be aggregated	Iplete projec exceeding S expenditures	t for major p 300,000. s for distribu	roduction, f tion followi	transmission ng the budg	n, and gen et year sho	eral plant pro suld be aggre	ojects. egated for the
5. Report all expenditures in thousands of dollars		SCHEDULED		IVIAIS ICHUI RES (B.Y. = BI	veu. UDGET YEAR	B.Y.+1=T	IE FIRST YEA	R AFTER TI	in unity the totals reported. Expenditures (B.Y. = BUDGET YEAR: B.Y.+ 1 = THE FIRST YEAR AFTER THE RUDGET YEAR FTC)	FAR FTC V
DESCRIPTION	PERCENT OWNERSHIP %	OPERATING DATE (MO / YR)	PRIOR TO B.Y.	B.Y.	B.Y. + 1	B.Y. + 2	B.Y.+3	B.Y. + 4	REQUIRED TO COMPLETE	TOTAL
Major Production and Storage Projects:										
Non-Major Production and Storage Projects Total Production and Storage Projects										
Major Transmission Projects:								g		
Non-Major Transmission Projects Total Transmission Projects Distribution (See Instruction 3): Mains										
Measuring & Reg. Sta. Equipment Compressor Station Equipment Services Meters and Regulators Meter Installations Other (Land, Equipment, Structures) Total Distribution		-								
Major General Plant Projects: Non-Major General Plant Projects Total General Plant Projects										
Total New Construction Budget										
			7							

PUC FORM 356 (10-2013)

			COMPANY						BUDGET YEAR	~	Γ
SCHEDULE B: GAS UTILITY NEW CONSTRUCTION BUDGET (SYSTEM)			Northwest	Northwest Natural Gas Company	s Company				2015		
DESCRIPTION	PERCENT OWNERSHIP	SCHEDULED		EXPENDIMURES	(B.Y. BUDGE	T YEAR: 8.Y.	(THOUSANDS) + 1 = THE FIRS	T YEAR AFTE	A THE BUDGET YE	SAR, ETC.)	
	¥	DATE (MO//R)	PRIOR TO B.Y.	B.Y.	B.Y.+1	B.Y.+2	8.4.3	B.Y.+4	B.Y. A. B.Y.+1 B.Y.+2 B.Y.+3 B.Y.+4 COMPLETE T	TOTAL	
MAJOR PRODUCTION & STORAGE PROJECTS:	1										
Mist Storage Project (Includes Utility) - 352				10,090	9,946	89,463	6,054	365			
LNG Plant Modifications - 363				7,586	7,649	3,489	3,246	498			
NON-MAJOR PRODUCTION & STORAGE PROJECTS									To man and		
TOTAL PRODUCTION & STORAGE PROJECTS MAJOR TRANSMISSION PROJECTS:		-		17,676	17,595	92,952	6'300	863		\$	138,386
NON-MAJOR TRANSMISSION PROJECTS											
TUTAL THANSMISSION PHOJECTS								•		\$	•
DISTRIBUTION: MAINS: NEW BUSINESS - 376 REFLACEMENTS - 376, 380 BARE STEEL - 376, 380				7,911 52,863 4,658							
REPLACEMENTS - 380 REPLACEMENTS - 374, 376, 380				22,966							
MEASUHING & REG. STA, EQUIPMENT - 378 PIPELNE WTEGRITY - 376 GEO HAZARD - 376 (turn to londeridae)				112'1			E				
				5.583							
					P	201		X			
PERMITS, CONTRIBUTIONS, REINFORCEMENTS, CATHODIC PROTECTION - 376, 380 OTHER BETTERMENTS - 352, 378, 397				460 1,958		" 1					
TOTAL DISTRIBUTION				102,004	108,520	119,246	140,284	125,145	and the second second	s	595,199
MAJOR GENERAL PLANT PROJECTS: INFORMATION SYSTEMS - 303, 397				8,095	10,073	8,804	8,703	10,716			
SIMUCIUMES - 390 LAND - 389				1,029	3,954	1.766	2,676	2,719			
								1			
TOTAL GENERAL FLANT PROJECTS - 399, 391, 392, 394, 396 TOTAL GENERAL PLANT PROJECTS				20,310	19,242	27,517	5,765	5,719	-		103.367
TOTAL NEW CONSTRUCTION BUDGET				139.990	145.357	239.715	166.728	145,162			876 952
RiFinancial Planning and Analysis/OPUC Submissions/OR - New Construction Budgef2015/2015 Construction Budget.xtsx/P2 System Budget	onstruction Br	udget.xlsx]P2	System Budg	et							Southand

SCHEDULE B: GAS UTILITY NEW CONSTRUCTION BUDGET (OREGON)			COMPANY	t Natural C	OMPANY Northwest Natural Gas Company				BUDGET YEAR 2015	~
DESCRIPTION	PERCENT	SCHEDULED		EXPENDITURE	S (8.Y.= BUDG	(ET YEAR: B.Y.	(THOUSANDS) + 1 = THE FIRS	T YEAR AFT	er the Budget y	EAR, ETC.)
	×	DATE (MOVR)	PRIOR TO B.Y.	B.Y.	B.Y.+1	B.Y.+2	B.Y.+3	B.Y.+4	BY BY +1 BY+2 BY+3 BY+4 COMPLETE TC	TOTAL
MAJOR PRODUCTION & STORAGE PROJECTS:										
Mist Storage Project (Includes Utility) - 352				10,090	9,946	89,463	6,054	365	- 517	
LNG Plant Modifications - 363				7,586	7,649	3,489	3,246	498		
	1.1.53									
NON-MAJOR PRODUCTION & STORAGE PROJECTS TOTAL PRODUCTION & STORAGE PROJECTS				17,676	17,595	92,952	9,300	863		5 138,386
MAJOR TRANSMISSION PROJECTS:										
NON-MAJOR TRANSMISSION PROJECTS TOTAL TRANSMISSION PROJECTS										
DISTRIBUTION:										
MUNUS: NEW BUSINESS - 376 REPI ACHKENTS - 376 340				6,566						
BARE STEEL - 376, 380 SERVICES				4,146					12.00	
NEW BUSINESS - 380 REPLACEMENTS - 374, 360				19,062						
MEASURING & REG. STA. EQUIPMENT - 378 PIDELIME INTECENTY - 326			Ī	1,167						
GED HAZARD - 376 (due landsides) COMPRESSOR STATION EQUIPMENT										
METERS - 381				4,969						
AUTOWALED MELERI READING METER SETS - 382				3,822						
PERMILS, CONTINUO ICMS, REMPONCEMENTS, BELITERMENTS - 376, 380 OTHER BETTERMENTS - 352, 378, 397 TOTAL DISTRIBUTION				382 1,958 80 120	04 744	103 565	700 CG1	107 000		- 107 E 10
MAJOR GENERAL PLANT PROJECTS: INFORMATION SYSTEMS - 303, 397	1			7,205	8965	7 876	7 746	0 597		Sec.10
STRUCTURES - 390 LAND - 389				1,029	3,954	1,766	2,676	2,719		
WAN HA NG CENEBAI DI ANT NGA 16776 ANA ANA ANA ANA ANA										
TOTAL GENERAL PLANT PROJECTS - 330, 331, 332, 339, 350				19,419	2,836	27,517	5,765	5,719	and the second se	\$ 98,989
TOTAL NEW CONSTRUCTION BUDGET	1000 - 10			126,215	128,094	224,034	148,481	128,005		\$ 754,829

Narrative for Major Projects

Ellendale Ave Bare

Replace approximately 2 miles of 4" bare main on Ellendale Avenue in Dallas Oregon, beginning east of Orchard View Lane, extending east for approximately 2-miles ending at the intersection of Rickreall Road with Highway 99W. The project is expected to be completed during the summer 2015.

2015 Project Budget – \$1,960,000 – Bare Steel

Lincoln

Replace approximately 5600 feet of 6 inch (B) leaking gas main on NW Lincoln Ave. between NW 44th Ave. and NW Bernie Drive. The project is expected to be completed during the summer 2015.

2015 Project Budget – \$1,839,000 – Leakage Reconstruction

P20b 6" Dwyer Lumber ILI

Begins at SE Flavel St & 67th Avenue and terminates at SE 100th Avenue in Portland, Oregon. Complete pipeline modifications and build a permanent pig receiver station to accommodate in-line inspection (smart pigging) of the 2 mile transmission pipeline. The project is expected to be completed during the summer 2015.

2015 Project Budget – \$1,300,000 – Transmission Integrity Management Program

EMX West

Eugene, Oregon. This project is a public works project and requires relocation of gas facilities to avoid conflicts with the EMX bus lane expansion, bus terminal stations and traffic lane reconstruction. The project is expected to be completed in 2015.

2015 Project Budget – \$4,454,000 – Public Works

Narrative for Major Projects

Willamette Crossing near Corvallis

The project consists of installing approximately 3 miles of 12 3/4" (W) .312wt Grade x52 Class F pipe from a valve station near NW Independence Hwy and Pettibone Rd. to an existing valve station near Riverside Dr. (Waggle Bridle). This project is the final phase to reinforce the supply system in the Mid-Willamette Valley. The project is expected to be completed in 2015.

2015 Project Budget – \$10,059,000– System Reinforcement

North Vancouver Gate

NW Natural will take over pressure control and line heating from Williams Pipeline, install actuated valve for summer shutoff, replace Orifice and Annubar meters with a new ultrasonic meter and replace aging, undersized odorizer with a new YZ odorizer. Construct new odorizer building and reconfigure station for new piping. The project is expected to be completed in 2015.

2015 Project Budget – \$1,458,000 – Gas Control

Newport LNG CO2 Remediation

Mitigate the CO_2 buildup at the Newport LNG plant and provide for liquefaction process improvements. The project is expected to be completed in 2015.

2015 Project Budget - \$4,537,000- Newport LNG

Newport LNG Turbine Modernization

This project will update the existing Solar Turbine at the Newport LNG Plant which is used to compress refrigerant as a part of the Mixed Refrigerant Loop process. There are 4 main systems which will be updated: the wet seal system will be upgraded to a dry seal system, the control system will be updated with a modern version, the starter/fuel gas systems will be upgraded, and the combustion air inlet will be replaced. The compressor will be overhauled to original factory specifications during the dry seal conversion. The project is expected to be completed in 2015.

2015 Project Budget – \$2,213,000 – Newport LNG

Narrative for Major Projects

GMACS Upgrade

This project will upgrade the iFIX SCADA software to the current commercial version. In addition, the project will integrate the iHistorian database software, which NW Natural already owns, to remove custom code previously developed to integrate with SQL during the initial iFIX implementation in 2004. This will streamline the GMACS architecture.

The current production version of iFIX SCADA software is three versions behind. The upgrade will allow I/T to move existing WindowsXP machines that are no longer supported. The proposed software version of iFIX will allow I/T to use virtualized environments increasing reliability, availability, and supportability. Additionally, NW Natural needs to increase the sampling (resolution) of data in the field and at our storage plants for improved operations and safety.

2015 Project Budget - \$1,056,000 - Computer Software / Hardware

Technology Replacements

Fund the replacement of capital technology assets according to a planned schedule based upon the estimated useful life of the asset. Additional project objectives include funding new computer hardware and software to comply with regulatory requirements, continue a current level of service (e.g. additional disk storage), and as requested by the business units to support strategic objectives or process improvements.

• Large Servers - \$630,000

Our strategy is to replace hardware that is at end of life from a vendor support perspective. Our DMZ SAN infrastructure is no longer supported by the vendor, and is at the end of its 5 year depreciation cycle. In addition, are purchasing faster disk for our I-Series supporting CIS, and are expanding SAN storage to accommodate growth.

• Network - \$44,000

Purchase of Ethernet adapters and ports for routers, as well as power supplies for Ethernet switches.

• Desktop/Peripherals - \$726,000

Complete Desktop/Laptop replacements per lease schedules. Desktops are leased for 4 years and laptops for 3 years (industry standard estimated useful life). The 2015 budget request includes the cost of the hardware and labor to refresh approximately 365 leased systems.

- Exchange Upgrade \$120,000 Our current version of 2010 is due for an upgrade to provide additional security and functionality, and allows us an opportunity to redesign the architecture for better performance and affordability.
- I-Series Disk Based Backup \$216,000

The I-Series is our only remaining system still being backed up with tape. This project affords the opportunity to run disk-based backups.

Narrative for Major Projects

North Mist Storage Expansion Project

NWN proposes to develop the North Mist Extension Project to provide 2.5 Bcf of storage capacity, and deliveries up to 120 MMscfd, by late 2018. The anchor tenant and customer for this capacity is PGE. NWN proposes to develop, construct, and commission the Adams Pool near Mist, Oregon as a natural gas storage facility. The development of the Adams Pool will require the construction of new facilities, including a remotely-operated compressor station consisting of compressors, dehydration equipment, metering and odorizing facilities, remote well pad sites, injection/withdrawal (IW) wells, observation/monitoring (OM) wells, injection/withdrawal pipelines, a transmission pipeline, and customer metering facilities.

NWN is currently in the permitting phase of the project. The permitting schedule reflects a submittal date of the EFSC permit amendment application in the middle of April, 2015; with the expectation of obtaining state approval by June, 2016. The risks associated with the submission of the application include outside agencies and/or special interest groups opposing the project, which could cause delays in obtaining the final project order. Potential delays could result in unbudgeted expenses to mitigate issues and concerns of the previously mentioned agencies or groups.

2014 Budget of \$3,700,000 vs Actual spend of \$1,614,154 Reconciliation: NWN & PGE worked closely to ensure costs associated with this project are prudent and necessary, but were unable to reach a point where PGE issued a "Notice to Proceed" to NWN. That delay resulted in NWN coming in under budget in 2014.

2015 Project Budget - \$9,990,239 - Storage