



e-FILING REPORT COVER SHEET

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

REPORT NAME: Gas Utility New Construction Budget 2017

COMPANY NAME: Cascade Natural Gas Corporation

DOES REPORT CONTAIN CONFIDENTIAL INFORMATION? No Yes

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)

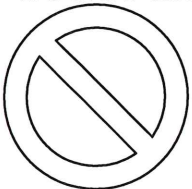
Report is required by: OAR 860-027-0015
Statute Enter statute number
Order Enter PUC Order No
Other Enter reason

Is this report associated with a specific docket/case? No Yes

If yes, enter docket number: RG-12(5)

List applicable Key Words for this report to facilitate electronic search:
Enter Key Words

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.



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

GAS UTILITY NEW CONSTRUCTION BUDGET FOR 2017

GENERAL INSTRUCTIONS

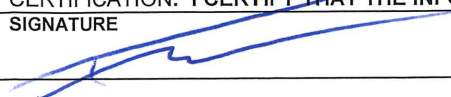
1. Each energy utility operating within the State of Oregon and having gross operating revenues of \$50,000 or more per year is required to file a New Construction Budget annually on or before March 31st and report information on new construction, extensions, and new additions to property of the utility in accordance with Oregon Administrative Rule 860-027-0015.
2. 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://www.puc.state.or.us/eFiling/eReports/efiling_report_cover_sheet_FM050.pdf. Email both the report and cover sheet to PUC.FilingCenter@state.or.us no later than March 31st.

For major projects (total project cost greater than \$300,000) 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.
2. 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.
4. 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 Cascade Natural Gas Corporation			
ADDRESS: PO BOX OR STREET NUMBER 8113 W. Grandridge Blvd.	CITY Kennewick	STATE WA	ZIP CODE 99336
CERTIFICATION: I CERTIFY THAT THE INFORMATION REPORTED IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.			
SIGNATURE 	TITLE Vice President , Operations	DATE 3-23-17	

INSTRUCTIONS

1. Report percent ownership, scheduled operating dates, and expenditures required to complete project for major production, transmission, and general plant projects.
2. Major projects are defined as those projects having a total estimated cost to completion exceeding \$300,000.
3. 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.
4. Non-major project expenditures within each category should be aggregated and only the totals reported.
5. Report all expenditures in thousands of dollars.

DESCRIPTION	PERCENT OWNERSHIP %	SCHEDULED OPERATING DATE (MO / YR)	EXPENDITURES (B.Y. = BUDGET YEAR; B.Y. + 1 = THE FIRST YEAR AFTER THE BUDGET YEAR, ETC.)							TOTAL
			PRIOR TO B.Y.	B.Y.	B.Y. + 1	B.Y. + 2	B.Y. + 3	B.Y. + 4	REQUIRED TO COMPLETE	
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				27,483						
Measuring & Reg. Sta. Equipment				1,018						
Compressor Station Equipment				0						
Services				6,788						
Meters and Regulators				5,014						
Meter Installations				2,134						
Other (Land, Equipment, Structures)				975						
Total Distribution				43,412		53,555	57,752	61,023	38,621	254,363
Major General Plant Projects:										
Longview – New Operations Building (FP-307020)	100%	9/30/2018	756	2						
Aberdeen – New Operations Building (FP-307044)	100%	12/30/2019	0	0						
PIM [formerly GL Essentials] (FP-101472)	100%	12/31/2018	1,225	267						
PS&I Enterprise Management (FP-101480/315723)	100%	12/31/2021	0	10						
GPS Based Leak Survey (FP-101481)	100%	12/31/2017	215	312						
Customer Self-Service Web/IRV (FP-200064)	100%	4/30/2018	1,081	318						
GIS Enhancements (FP-200663)	100%	12/31/2021	428	396						
CC&B Upgrade to v2.4 (FP-302571)	100%	07/01/2017	73	424						
CC&B Process Enhancement (FP-302574)	100%	12/31/2019	0	0						
BI Software for CC&B (FP-302609)	100%	12/31/2019	0	0						

INSTRUCTIONS

1. Report percent ownership, scheduled operating dates, and expenditures required to complete project for major production, transmission, and general plant projects.
2. Major projects are defined as those projects having a total estimated cost to completion exceeding \$300,000.
3. 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.
4. Non-major project expenditures within each category should be aggregated and only the totals reported.
5. Report all expenditures in thousands of dollars

DESCRIPTION	PERCENT OWNERSHIP %	SCHEDULED OPERATING DATE (MO / YR)	EXPENDITURES (B.Y. = BUDGET YEAR; B.Y. + 1 = THE FIRST YEAR AFTER THE BUDGET YEAR, ETC.)						REQUIRED TO COMPLETE	TOTAL
			PRIOR TO B.Y.	B.Y.	B.Y. + 1	B.Y. + 2	B.Y. + 3	B.Y. + 4		
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				9,935						
Measuring & Reg. Sta. Equipment				432						
Compressor Station Equipment				0						
Services				1,630						
Meters and Regulators				1,260						
Meter Installations				599						
Other (Land, Equipment, Structures)				377						
Total Distribution				14,233		16,000	17,216	15,728	14,535	
Major General Plant Projects:										
PIM [formerly GL Essentials](FP-101472)	100%	12/31/2018	303	66						
PS&I Enterprise Management (FP-101480/315723)	100%	12/31/2021	0	0						
GPS Based Leak Survey (FP-101481)	100%	12/31/2017	53	77						
Customer Self-Service IVR/WEB (FP-200064)	100%	04/30/2018	267	79						
GIS Enhancements (FP-200663)	100%	12/31/2021	106	98						
CC&B Upgrade to v2.4 (FP-302571)	100%	07/01/2017	18	105						
CC&B Process Enhancement (FP-302574)	100%	12/31/2019	0	0						
BI Software for CC&B (FP-302609)	100%	12/31/2019	0	0						

NARRATIVES

Longview District Office/Shop/Warehouse (FP-307020) - \$1,902 CY 2017 Budget

1. Project Description: Purchase property and construct a new District office/shop/warehouse in Cowlitz County, WA. This purchase increases safety and efficiency of district operations and allows for all equipment and materials to be stored in one location. Property Purchased in 2015. Property rocked and fenced, being used as a pipe laydown, equipment storage and contractor staging location.
2. Need for the Project: Cascade currently owns District office/shop/warehouse space at 1332 Vandercook Way in Longview, WA and 209 Douglas Street in Kelso, WA. Cascade intends to obtain commission approval for the sale of these properties, to purchase a single property, and to construct a new District office/shop/warehouse. With the dilapidation of the building at Cascade's current location, increasing safety concerns require Cascade to seek a new location for the safety of its employees and to improve the efficiency of its overall operations resulting in improved system safety, integrity, and reliability.
3. Contingencies: Cascade will continue to own the existing properties until the purchase of said property is finalized and new facilities are constructed and operational.
4. Reconciliation with Prior Budget: This is a multi-phase project estimated to complete in 2018.

Aberdeen District Office/Shop/Warehouse (FP-307044) - \$0 CY 2017 Budget

1. Project Description: Purchase property and construct a new District office/shop/warehouse in Grays Harbor County, WA. This purchase increases safety and efficiency of district operations and allows for all equipment and materials to be stored in one location.
2. Need for the Project: Cascade currently owns District office/shop/warehouse space at 713 West Wishkaw Street, WA. Cascade intends to obtain commission approval for the sale of this property, to purchase a single property, and to construct a new District office/shop/warehouse. With the dilapidation of the building at Cascade's current location, increasing safety concerns require Cascade to seek a new location for the safety of its employees and to improve the efficiency of its overall operations resulting in improved system safety, integrity, and reliability.
3. Contingencies: Cascade will continue to own the existing property until the purchase of said property is finalized and new facilities are constructed and operational.
4. Reconciliation with Prior Budget: This is a multi-phase project estimated to complete in 2019.

Pipeline Inspection Manager (Formerly Utility Group Work Management-GL Essentials) (FP-101472) - \$266,723 CY 2017 Budget

1. Project Description: Pipeline Inspection Manager (formerly GL Essentials) is designed to schedule, track, execute and archive field data inspections for a variety of assets and business processes. It is designed to manage compliance activities for assets that are defined and maintained in an ESRI Geo-database, or for assets defined and maintained in the Essentials Asset Register. The Essentials Scheduling and Tracking module is used to manage the compliance activities, while the Essentials Field Manager application provides a set of electronic forms to support the automated (non-paper based) field data capture. Configuration, hardware, and software implementation began in 2011.
2. Need for the project: Implementation of the GL Essentials software transitions O&M record keeping from multiple databases and paper formats to a single operational repository of data and activity at Cascade Natural Gas Company. Project also includes the consolidation of existing systems at Montana Dakota Utilities, Great Plains Natural Gas, and Intermountain Gas Company onto a common database for O&M activities and reporting. Essentials interfaces with the ESRI

Construction Budget Forms Page 2

GIS, allowing field personnel the opportunity to view O&M record data from the GIS system while in the field. Also, automates scheduling of O&M activities, and provides reporting and notification of activities before they are out of compliance.

3. Contingencies: Cascade Natural Gas will continue to use the existing electronic document management systems until the new GL Essentials is ready for production.
 4. Reconciliation with prior year budget: This is a continued phase in the project. The project is has been extended in order to complete additional interfaces and modules. The first module, Atmospheric Corrosion Survey, was placed into production 2016 and early 2017. We anticipated this project to be multi-year completing in 2018. The extended time frame is due to more complicated dependencies within the systems and business processes at Cascade Natural Gas.
- Utility Group PS&I Enterprise Management (Formerly Work Asset Management) (FP-101480 & FP-315723) – \$0 CY 2017 Budget (FP-101480) \$9,500 CY 2017 Unbudgeted (FP-315723)**
1. Project Description: Provide research on the feasibility of implementing an Enterprise/Utility wide "Asset Management" software solution. The tool could be used to track the operation, maintenance, and disposal of assets (Plant and production, vehicles, gas distribution networks, infrastructure, real estate, and facilities).
 2. Need for the Project: Currently the utility company implements several different applications to support field operations and maintenance activity. For these systems to interact it requires the development and maintenance of several interfaces. Preventive and Emergency maintenance of assets have manual based processes. We are researching the potential to implement an integrated tool for Asset Management. The tool has the capabilities to support: crew management, labor skills and certifications (OQ) tracking, provide mobile workforce management, meter sampling, Meter Data Management, work order management. It can be configured to support State Commission Agency, NERC/FERC and CIP compliance requirements. It has integration with GIS, JDE and PowerPlan for fixed asset accounting and purchase ordering. Utility specific functionality includes: Compatible unit estimating, Crew management, Labor skills and certifications tracking, Fixed asset accounting integration, Mobile workforce management integration, Graphical design tool integration, Geographic information system support, Work order task analysis using Gantt view.
 3. Contingencies: For this specific research project there are no contingencies required. If Cascade elects to purchase an Asset Management system in the future it will continue to use the existing systems and manual process until the new Asset Management system is ready for production.
 4. Reconciliation with prior year budget: This is a one year "Preliminary Survey and Investigation" project. If Cascade decides to purchase an Asset Management system new capital Funding Projects will be developed and authorized.

Utility Group GPS Based Leak Survey Software project (FP-101481) – \$311,900 CY 2017 Budget

1. Project Description: GPS Based Leak Survey Software project is intended to design, create and implement a computer based Leak Survey system to replace the existing paper process. It is designed to manage compliance activities for Leak Survey that are defined and maintained via a paper process utilizing maps and assets in an ESRI mapping system. The Leak Survey system would utilize GPS enabled devices giving feedback regarding the inspection process. The hardware and software tools would be used to manage the inspection process while utilizing back office hardware and software to monitor and report on the inspection activities.
2. Need for the project: Implementation of the GPS Based Leak Survey Software will help streamline the O&M record keeping paper formats to a single operational repository of data and activity at Cascade Natural Gas Company. GPS Based Leak Survey Software interfaces with the ESRI GIS, allowing field personnel the

Construction Budget Forms Page 2

opportunity to view O&M record data from the GIS system while in the office. Also, automates scheduling of Leak Survey activities, and provides reporting and notification of activities before they are out of compliance.

3. Contingencies: Cascade Natural Gas will continue to use the existing paper document management systems, until the new GPS Based Leak Survey Software is ready for production.
4. Reconciliation with prior year budget: This is a continued phase in the project. As this is a Utility Group project, Intermountain Gas is the first to deploy and go to production early 2017. The project is anticipated to be multi-year. With an expected implementation in early 2018 at Cascade Natural Gas. The extended time frame is due to enhancements to the software by the vendor, more complicated dependencies within the systems, and business processes challenges at CNGC.

Utility Group CNG IVR-WEB Implementation (FP-200064) – 317,600 CY 2017 Budget + 89,920 2017 Unbudgeted

1. Project Description: The current IVR/WEB solution provides utility customers with self-service functionality for all utility brands: MDU, GPNG, CNG and IGC. This project involves the replacement of the existing IVR system with a new upgraded, compliant and enhanced system.
2. Need for the Project: A solution to replace the inbound self-service IVR is needed because support for the aging Speech Server 2007 platform will officially end in January of 2018. Support for Speech Server 2007 development tools ended in April of 2016. A replacement is needed to meet corporate compliance and CyberSecurity standards that require 3rd party Customer Care software and operating systems to be fully patched and supported. The Self-service IVR is a critical part of our customer support services because it significantly reduces the call loads that would normally be handed by customer care representatives.
3. Contingencies: Cascade Natural Gas will continue to use the existing IVR solution until the new IVR infrastructure is ready for production.
4. Reconciliation with Prior Budget: The budget for 2017 has been increased for this project due to an unexpected and unplanned replacement of the Call Center main telecommunication switch required to support the new IVR infrastructure.

Utility Group GIS Enhancements (FP-200663) - \$396,017 CY 2017 Budget

1. Project Description: The GIS Enhancements project is designed to augment and enhance the current GIS deployment. A base configuration of GIS was deployed at CNG in the past few years but additional functionality has been required to meet the increasing needs of the business. We are implementing a repository to store as-built and project related paperwork (allowing us to view this data from GIS). We are purchasing additional GIS licenses and tools to meet the growing demand for GIS data.
2. Need for the Project: Numerous business systems now interface or require information from CNG's GIS system. Additionally, many regulatory reports are completed using information from GIS. We need to continue to enhance this system to meet the needs of the various departments at CNG. We are also enhancing the Land base components within the environment to increase spatial accuracy.
3. Contingencies: Cascade Natural Gas will continue to use the existing system until the enhancements can be completed.
4. Reconciliation with Prior Budget: This is the continuation of the multi-year project; prior phases have been implemented. We will continue to update our CNGC land base, enhance the existing GIS web tools, and add necessary tools to create a highly effective GIS system. Additionally a number of GIS related PHMSA regulations are on the horizon which will require new components.

Utility Group CC&B Upgrade to v2.4 (FP-302571) – \$424,308 CY 2017 Budget

Construction Budget Forms Page 2

1. **Project Description:** Customer Care and Billing (CC&B) is the customer information system supporting the Utility Group. This project is to implement an upgrade to it from our current production system v2.2 to a newer version v2.4.
2. **Need for the project:** Implementation for CC&B began in 2007 and completed in 2015 with all utilities sharing costs across the entire project. CNG went live in 2010, MDU in 2013, GPNG in 2015 and IGC in 2015. CC&B v2.2 was the version implemented for all four brands. A commercial Billing System has a rolling vendor life cycle that turns over every 2 to 4 years. CC&B v2.2 went out of vendor support during the 1st Qtr 2016. The vendor no longer provides bug patches or functional enhancements to this version. To stay current with the industry we are upgrading to a supported release. A new release will also provide updated technical tools, functional enhancements and sets the stage for future releases.
3. **Contingencies:** The Upgrade is on-track to be completed as scheduled 4th qtr 2017. If we run into some unexpected contingencies that require us to push out the date, we can continue to run off v2.2 without any interruption in service.
4. **Reconciliation with prior year budget:** Project is on-track to be completed as scheduled and is within approved budget parameters.

Utility Group CC&B Process Enhancement (FP-302574) – \$0 CY 2017 Budget

1. **Project Description:** Implement requested system enhancements and functionality to the Customer Care and Billing System (CC&B).
2. **Need for the project:** During the initial implementation phase of CC&B several requested custom enhancements supporting different field and business processes were not included. At that time these requests were deemed low-priority/non-critical and were put on-hold. This current project involves the re-evaluation of those requests and the technical incorporation of them into CC&B.
3. **Contingencies:** Cascade Natural Gas will continue to use the existing system as-is until the requested enhancements are installed.
4. **Reconciliation with prior year budget:** This project has not been budgeted for 2017.

Utility Group BI Software-CC&B (FP-302609) – \$0 CY 2017 Budget

1. **Project Description:** The selection and implementation of a Business Intelligence (BI) tool that will be provided to the end-user community to support self-service queries and reporting needs.
2. **Need for the project:** Currently we produce and maintain over 540+ custom reports for the various business functions from the Customer Care and Billing (CC&B) system. This requires a considerable amount of technical attention and labor to maintain these reports. By providing a self-service reporting tool to the end-user community we will be able to reduce technical maintenance costs and improve reporting efficiencies.
3. **Contingencies:** Cascade Natural Gas will continue to use the existing reporting structure until the new BI tool is ready for production and delivery.
4. **Reconciliation with prior year budget:** This project has not been budgeted.