

Staff Audit Report of

Northwest Natural

Audit Number: 11-001



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Executive Summary

Audit staff conducted an Operational Audit of Northwest Natural (NW Natural, NWN or Company) during the July 2011 through October 2011 timeframe. As part of the audit, Staff submitted 204 data requests to NW Natural.

Staff focused on operations from fiscal years 2008 through 2010; however, Staff examined additional data for consistency in context of historical information that could be referenced in future regulatory proceedings. Other than NW Natural's responses to Staff's data requests, Staff relied on the following resources:

1. NW Natural's Fiscal Year 2010 Result of Operations Report;
2. NW Natural's Fiscal Year 2010 Affiliated Interest Annual Report;
3. NW Natural's 2010 Annual Report;
4. NW Natural's 2010 FERC Form 1 Report;
5. NW Natural's 2010 SEC Forms (e.g., 8-K and 10-K); and
6. An analysis of NW Natural's historic and outstanding debt securities.

Audit Objectives and Scope

1. To review and provide information that will assist Staff in the NW Natural rate case.
2. Provide an information base for future regulatory proceedings and other inquiries into the operations of NW Natural.

Audit Areas

Staff audited the following areas and topics:

1. Company Background
2. Affiliated Interest
3. Capital Projects
4. Information Technology Capital Projects
5. Allowance for Funds Used During Construction (AFUDC)
6. Actual Financial Performance
7. Administrative and General Costs
8. Labor Costs
9. Operations and Maintenance
10. Taxes
11. Financial Records
12. Securities Issuances
13. Customer Service

Audit Results

As a result of the audit being performed prior to NW Natural's rate case, Staff identified recommendations to be used in the next general rate case.

Staff's recommendations are listed in the Summary of Recommendations, starting on page 6.

Staff recommendations for further investigation during the rate case resulted from observations of activities that may have a potential effect on the upcoming rate case and may require a more in-depth review by Oregon Public Utility Commission (Commission) Staff assigned to the rate case. Staff identified 35 recommendations for further investigation during the rate case.

It is important to note that the audit was performed on a sample basis. Staff involved in the rate case may discover issues and concerns that were not encountered during the audit process or may not agree with the Audit Staff's findings.

Additionally, these recommendations should not be considered final rate case adjustments, as each subject area will undergo further review by Staff during NW Natural's rate case.

Other Comments

Staff submitted a large number of structured multi-part data requests regarding NWN's financial strategy, status, and experience in the past five calendar years. Staff appreciates NW Natural's responsiveness and cooperation during the audit process as well as the Company's recognition of the individual parts to multi-part questions.

Summary of Recommendations

NW Natural

No.	Area	Topic	Comments	Page
1	Affiliated Interest and Cost Allocations	Affiliate Transactions	NW Natural should file with the Commission an addendum to update the list of current affiliates in its MSA within 120 days of this report.	15
2	Capital Projects	Oregon Situs Utility Plant	During any future rate case, rate case staff should ensure existing SIP and AMR rate amounts in Schedules 177 & 179 are removed from rate schedules and are included at net value to rate base.	19
3	Capital Projects	Oregon Situs Utility Plant	During any future rate case, rate case staff should examine all capital IT projects included in rate base after UG 152 and 2010/2011 SIP projects to ensure all meals (excluding meal tickets), refreshments, and awards were removed from rate base.	19
4	Capital Projects	Oregon Situs Utility Plant	Rate case staff should thoroughly examine plant in service and net plant to ensure all plant currently in PGA tracker is properly reflected in rate base at the depreciated amount and no longer included in PGA trackers.	25

No.	Area	Topic	Comments	Page
5	Capital Projects	Storage	Rate case staff should review the capital cost of all new storage additions by the Company since the last general rate case as well as the level of storage capacity for core demand included in its regulated rate base.	25
6	Capital Projects	Storage	Rate case staff should review the appropriateness of the level and types of operational and maintenance costs for Company owned storage included in rates.	25
7	Capital Projects	Storage	Rate case staff should review the operational processes NW Natural applies in operating its Company owned storage.	25
8	Capital Projects	WARM & Decoupling	<p>Rate case staff should evaluate the current decoupling mechanism, including addressing the following:</p> <ul style="list-style-type: none"> • How well the Company’s incentives aligned with respect to energy efficiency goals. • How these mechanisms assisted the Company towards earning its authorized rate of return. 	25
9	Capital Projects	WARM & Decoupling	NW Natural should modify the elasticity equation to connect more closely to current underlying factors.	25

No.	Area	Topic	Comments	Page
10	Capital Projects	WARM & Decoupling	NW Natural should modify the calculation of the baseline margin used for comparison to arrive at the decoupling adjustment.	25
11	Capital Projects	WARM & Decoupling	Rate case staff should review the normal weather assumptions used for the test year normalization.	25
12	Capital Projects	WARM & Decoupling	Rate case staff should evaluate all trackers adopted since UG 152 as well as the shifting of risk associated with volatility in sales volumes from NW Natural to its customers.	26
13	Capital Projects	Pipeline Capital Costs	Rate case staff should review all construction and capital costs for current and past proposed pipeline distribution projects.	26
14	Capital Projects	Pipeline Capital Costs	Rate case staff should review all construction and capital costs for current and past proposed low and high pressure pipeline transportation projects.	26

No.	Area	Topic	Comments	Page
15	Capital Projects	Pipeline Capital Costs	Capital costs for major pipeline (mains and transportation) and meter projects should be entered into rate base at net book of cost. Staff is referring to “net” as depreciation since the project was put into service and the date of the current general rate case filing.	26
16	Capital Projects	Accounting	Rate case staff should audit and review entries made to FERC account 380.	26
17	Capital Projects	Accounting	Rate case staff should verify the mapping of SAP accounting entries to ensure they are correct and appropriate.	26
18	Capital Projects	Competitive Bidding	Rate case staff should verify that all pipeline and mains projects are bid competitively and that the results of bidding are appropriate.	26
19	Capital Projects	Competitive Bidding	Rate case staff should verify all documentation of the conduct and results of each bidding process for pipeline and mains projects.	26
20	Information Technology Capital Projects	Information Technology Capital Projects	Rate case staff should ensure that Technology Refresh-Large Servers assets are properly allocated to non-utility operations in accordance with NW Natural’s allocation methodology.	29

No.	Area	Topic	Comments	Page
21	Information Technology Capital Projects	Information Technology Capital Projects	Rate case staff should ensure that the Disaster Recovery Phase II project; the SCADA Network Security; the GMS SunGard Aligner; and the GMS PCM-Gasco projects are used and useful prior to placing into plant.	29
22	Actual Financial Performance	Budget Versus Actual	Rate case staff should examine test year operating expenses to ensure increases track with historical performance.	34
23	Administrative and General Expenses	Advertising	Rate case staff should review all advertising and promotional concessions.	37
24	Administrative and General Expenses	Uncollectible Expenses	Rate case staff should review uncollectible expenses during any upcoming general rate case to determine a reasonable ongoing level.	39
25	Administrative and General Expenses	Insurance Services, Injuries, and Damages	Rate case staff should review individual insurance policies to determine an appropriate level of insurance expense that should be borne by customers.	40
26	Labor Costs	Staffing	Rate case staff should review wages and salaries to determine the driving force behind the increase in the 2009 and 2010 period.	42

No.	Area	Topic	Comments	Page
27	Labor Costs	Incentive Costs	Rate case staff should review and determine whether NWN's salaries used in the salary studies included bonuses, key goal incentives, overtime or any other wage components, and if so whether the components are comparable with the surveys provided in the salary studies.	43
28	Labor Costs	Labor Loadings	Rate case staff to examine labor loading percentages and compare them to industry standards.	44
29	Labor Costs	Benefits	Rate case staff to review the benefit costs in detail and determine the sharing plan in place, if any, between NW Natural and its staff.	45
30	Labor Costs	Medical/Dental/ Vision Benefits	Rate case staff should review in detail, the individual bargaining unit agreements and terms of various medical, dental, and vision benefit plans to determine the overall costs as compared to industry standards and the Kaiser Family Foundation recommendations.	46
31	Taxes	Tax Credits	Rate case staff should verify that the entire cost of purchasing BETC's is booked to below-the-line accounts.	53

No.	Area	Topic	Comments	Page
32	Securities Issuance	Competitive Issuance Cost	In any upcoming rate proceedings, Staff recommends a detailed examination of the Company's control of legal expenses surrounding securities' issuance. This examination should look at the assignment of legal costs across multiple related issuances, and confirm whether costs for like legal work reflect downward price pressures over time.	54
33	Securities Issuance	Competitive Issuance Cost	Staff recommends that Staff Reports in subsequent securities' issuance dockets require the Company capture and document legal expenses to reflect the purposes of the legal services or rendered the types of attorney or paralegal performing the work, and the billed cost to accomplish specific component tasks.	54
34	Securities Issuance	Early Redemptions	During any period of rising interest rates, Staff recommends examining early redemptions to confirm evidence of cost reduction against the Company's need to control the number of securities outstanding for the same purpose.	55
35	Securities Issuance	Advice by Investment Banks to NW Natural	Staff should review actions taken pursuant to advice presentations to the Company in future general rate cases, where the same investment bank or its affiliates or marketing partners plays a significant role in affecting such a recommended action.	56

Company Background and Organization

Founded in 1859, Northwest Natural Gas Company, dba NW Natural, is a local gas distribution company based in Oregon and Washington. NW Natural is headquartered in Portland, Oregon.

At year-end 2010, NW Natural had approximately 674,000 utility customers in Oregon and southwest Washington, including the Portland-Vancouver metropolitan area, the Willamette Valley, the Oregon coast, and the Columbia River Gorge. NW Natural serves a wide array of industries, some of which are: pulp, paper, and other forest products; the processing of farm and food products; government and educational institutions; and electric generation.

NW Natural meets the expected needs of its core utility customers through natural gas purchases from a variety of suppliers in the western United States and Canada. The Company also operates an underground storage facility and contracts for additional gas storage outside its service territory. NW Natural operates two liquefied natural gas plants in its service area. The Company also provides gas storage services to other energy companies in the Northwest interstate market. In addition, NW Natural has contracts with an electric generator and two industrial customers that provide recallable capacity transportation.

Affiliated Interest and Cost Allocations

Affiliated Interests

The following is a brief description of NW Natural's affiliated entities, based on the Company's 2010 Annual Affiliated Interests Report filed with the Commission. These entities are affiliated interests of the Company, as defined by ORS 757.015, because each has two or more officers or directors in common with the Company, or they meet the ownership requirements of 5 percent direct or indirect ownership.

NNG Financial Corporation (NNGFC), a wholly-owned subsidiary of the Company, was created in 1984. NNGFC owns 100 percent of the stock of KB Pipeline Company. NNGFC is also a limited partner in a low-income housing project located in Portland, Oregon. NNGFC's ownership interest in this project is 49.5 percent.

KB Pipeline Company (KBPC), a wholly-owned subsidiary of NNGFC, was created in 1991. KBPC owns a 10 percent interest in, and is the former operator of, an interstate natural gas pipeline known as the Kelso-Beaver Pipeline. KBPC

has no separate employees of its own; it uses employees shared with Northwest Natural Gas Company, as approved by FERC in July 2004.

Northwest Energy Corporation (NVEC), a wholly-owned subsidiary of the Company, was created in 2001. It was formed to serve as the holding company for Northwest Natural and PGE in the event that a proposed acquisition of PGE had been completed. The acquisition effort was eventually terminated in May 2002, and the corporation has remained dormant. There were no affiliated transactions between the Company and NVEC in 2010.

Northwest Energy Sub Corporation (NWESC), a wholly-owned subsidiary of NVEC, was created in 2001. It was formed to effect the corporate reorganization of the proposed acquisition mentioned in the preceding paragraph. The corporation has remained dormant. There were no affiliated transactions between the Company and NWESC in 2010.

Palomar Gas Holdings, LLC (PGH), a 50 percent membership interest of which is owned by NW Natural Energy, LLC, was created in 2006. Until July 2010, both the Company and Gas Transmission Northwest Corporation (GTN) owned a 50 percent membership interest in PGH. PGH wholly owns Palomar Gas Transmission, LLC, which is developing the Palomar Pipeline. As of July 1, 2010, the Company assigned its 50 percent membership interest in PGH to its wholly-owned subsidiary NW Natural Energy, LLC.

Palomar Gas Transmission, LLC (PGT), a wholly-owned subsidiary of PGH, was created in 2006. PGT had been pursuing the development of the Palomar Pipeline until March 2011, at which time it withdrew its FERC application to construct and operate the pipeline. There were no affiliated transactions between the Company and PGT in 2010.

BL Credit Holdings, LLC (BLCH), a wholly-owned subsidiary of PGT, was created in 2009. There were no affiliated transactions between the Company and BLCH in 2010.

Gill Ranch Storage, LLC (GRS), a wholly-owned subsidiary of the Company, was created in 2007. Note that effective March 7, 2007, the Company assigned all of its membership interest in GRS to NW Natural Energy, LLC. NW Natural Energy, LLC, subsequently assigned all of its membership interest in GRS to NW Natural Gas Storage, LLC. GRS entered into a Joint Project Agreement with Pacific Gas & Electric Company (PG&E) in 2007 for the co-development of an underground natural gas storage facility near Fresno, California. GRS owns 75 percent undivided ownership interest in the project and is the project operator.

Northwest Biogas, LLC (NWB), a 50 percent membership interest of which is owned by the Company, was created in 2008. NWB is developing and will operate a demonstration biodigester located at Three Mile Canyon Farms in Boardman, Oregon.

NW Natural Energy, LLC (NWNE), a wholly-owned subsidiary of Northwest Natural Gas Company, was created in 2009. It was formed to own NW Natural Gas Storage, LLC, and other non-utility businesses.

NW Natural Gas Storage, LLC (NWNGS), a wholly-owned subsidiary of NWNE, was created in 2009. It owns and manages non-utility gas storage interests.

Affiliate Transactions

Staff reviewed the Company's 2010 Annual Affiliated Interest Report and comments on the following.

Money Pooling

The Company does not maintain a cash management (money pooling) arrangement with subsidiaries and affiliates.

Master Services Agreement

NW Natural's most recent Affiliated Master Services Agreement (MSA) was approved on February 6, 2009, in OPUC Order No. 09-051. At this time, however, the MSA does not accurately reflect all of NW Natural's current affiliates.

Staff Recommendation

1. NW Natural should file with the Commission an addendum to update the list of current affiliates in its MSA within 120 days of this report. (*Planning Issue*)

Transactions

No payments were made by the utility to an affiliate for services in 2008, 2009, or 2010 (Oregon). In April 2008, the Company sold an airplane it owned for \$6.2 million. No approval from the Commission was necessary as the property was not considered related to the operation of the utility.

NW Natural made payments to KB Pipeline Company in 2010 for pipeline demand charges totaling \$12,359, Total Oregon (\$224,258 Total System). These payments are pursuant to certain FERC regulations and do not require an affiliated interest filing pursuant to OAR 860-027-0040(3)(b)(A).

Affiliate services payments to the utility in 2010 for insurance, overhead, property taxes, and other administrative expenses totaled \$1,606,370. Services provided

by NW Natural employees to affiliates are direct charged and based on individual time cards with an administrative overhead allocation of 27.5 percent of the direct labor in addition to any other appropriate overhead allocations. Affiliates or non-public utility activities are charged directly for materials, supplies, and services purchased by NW Natural on behalf of the affiliate. Intercompany balances between NW Natural and its affiliates are generally paid on a monthly basis. NW Natural files both federal and state income taxes on a consolidated basis and allocated income tax expense or benefit monthly to each affiliate.

Staff did not note any issues concerning the services payments.

Other Payments

Tax benefits (Oregon) paid by NW Natural to NNG Financial Corporation in 2010 equaled \$12,289. Tax benefits (Oregon) paid by NW Natural to GRS in 2010 equaled \$6,144,701. Tax benefits (Oregon) paid by NW Natural to NWN Gas Storage in 2010 equaled \$4,891. Tax benefits (Oregon) paid by NW Natural to NWN Energy in 2010 equaled \$505,655.

NW Natural files and pays taxes on a consolidated basis with its subsidiaries. For any taxable year, these subsidiaries have income and expenses, which cause NW Natural's consolidated tax liability to increase or decrease. Monthly payments are made to or from NW Natural to the extent the operations have income or losses.

Staff did not note any issues concerning the other payments.

Cost Allocation Manual

The Cost Allocation Manual attached to the 2010 Affiliated Interest Report notes that 11.7 percent of total assets and 2.6 percent of gross operating revenues were attributable to non-regulated/non-utility activities. A section by section comparison to the Cost Allocation Manual template indicates compliance with the Commission's requirements concerning the Cost Allocation Manual. Staff also performed a cursory review of the Cost Allocation Manuals included with the 2008 and 2009 Affiliated Interest Reports and noted no extraordinary or unexpected items.

Staff did not note any issues concerning the Cost Allocation Manual.

Capital Projects

Oregon Situs Utility Plant

The following table presents the changes in asset accounts 301 through 399 from 2008 through 2010.

Table 1 – Northwest Natural Utility Plant

Account	2008	2009	2010	Percent Change 2008-2010
301	\$852	\$852	\$852	0%
302	\$83,496	\$83,496	\$83,496	0%
303	\$75,030,544	\$84,227,777	\$82,573,707	10%
304	\$24,998	\$24,998	\$24,998	0%
305	\$68,063	\$68,063	\$68,063	0%
311	\$8,242	\$8,242	\$8,242	0%
318	\$388,447	\$388,447	\$388,447	0%
319	\$185,448	\$185,448	\$185,448	0%
350	\$216,174	\$216,174	\$216,174	0%
351	\$6,538,592	\$6,542,426	\$6,555,425	.2%
352	\$34,198,982	\$34,675,131	\$34,680,704	1%
353	\$6,552,220	\$6,552,220	\$6,552,220	0%
354	\$27,090,280	\$27,422,924	\$27,431,454	1%
355	\$6,165,959	\$6,318,797	\$6,318,797	2%
356	\$297,363	\$297,363	\$297,363	0%
357	\$1,218,731	\$1,331,924	\$1,331,924	9%
360	\$749,133	\$749,133	\$749,133	0%
361	\$6,554,415	\$7,969,698	\$8,785,838	34%
362	\$7,995,489	\$8,484,136	\$8,484,136	6%
363	\$18,458,054	\$18,789,498	\$18,810,849	2%
365	\$6,360,740	\$6,544,949	\$6,544,949	3%
366	\$1,041,984	\$1,041,984	\$1,041,984	0%
367	\$166,969,894	\$166,969,894	\$166,969,894	0%
369	\$3,661,168	\$3,661,168	\$3,661,168	0%
374	\$1,853,723	\$1,855,923	\$1,888,356	2%
375	\$49,372	\$49,372	\$49,372	0%
376	\$766,642,448	\$789,545,562	\$806,810,420	5%
377	\$818,380	\$818,380	\$818,380	0%
378	\$17,715,144	\$18,945,689	\$20,709,022	17%
379	\$905,392	\$1,033,434	\$1,146,579	27%
380	\$515,188,333	\$531,994,158	\$547,084,439	6%
381	\$79,985,569	\$90,230,970	\$91,769,977	15%
382	\$69,382,057	\$65,004,691	\$63,294,289	-10%
383	\$420,403	\$455,393	\$538,750	28%
387	\$281,415	\$281,415	\$281,415	0%
389	\$2,229,014	\$2,850,468	\$2,850,886	28%

Account	2008	2009	2010	Percent Change 2008-2010
390	\$22,033,292	\$22,647,707	\$23,556,183	7%
391	\$24,221,206	\$26,356,724	\$26,191,103	8%
392	\$21,489,228	\$21,728,578	\$21,006,775	2%
393	\$119,406	\$119,406	\$119,406	0%
394	\$13,044,646	\$13,282,790	\$13,358,576	2%
395	\$68,293	\$68,293	\$68,293	0%
396	\$6,298,034	\$6,227,245	\$6,769,265	7%
397	\$10,193,436	\$10,361,422	\$10,632,798	4%
398	\$219,109	\$223,468	\$183,067	-20%
Total	\$1,923,017,168	\$1,986,635,832	\$2,041,990,941	6%

As noted from the table above, plant in service has increased at a rate of three percent a year over the past two years. Staff reviewed the Company's Capital Asset Policy and did not have any concerns on how the Company capitalizes assets.

It should be noted that all System Integrity Program (SIP) and Automated Meter Reading (AMR) investments currently in Schedules 177 and 179 are reflected in the above table. The Company's practice is to include in base rates the effects of the SIP and AMR programs. Schedules 177 and Schedule 179 simply show the amounts that were placed into base rates with the most recent filing for documentation purposes. A zeroing out of Schedules 177 and Schedule 179 has no effect on rates.

During any future rate case, Staff should ensure that the existing rate amounts in Schedules 177 and 179 are removed to ensure double counting of the investments does not occur if the Company proposes to include the SIP and AMR investments in rate base and re-set the rate amounts in Schedules 177 and 179 to zero.

This action by the Company would have the effect of "restarting" the program for ratemaking purposes. As a result, in the PGA following the resolution of the rate case, only the activity of the SIP program for the twelve months ended October 31, 2012, would be considered, whereas, without restarting the program, the PGA would reflect that activity, as well as the vintages for every year of activity going back to 2002. Zeroing out the rates in Schedules 177 and 179 and placing those investments in rate base in the next rate case would simplify the ratemaking and review process for SIP during the PGA.

If, for some reason, resetting the tracking of the safety programs is not agreeable to the Parties in the rate case, then the Company would retain the rate amounts

in Schedule 177 and SIP investments would be excluded from the rate base used in the rate case. If so, the PGA following the resolution of the rate case would include SIP activity back to 2002.

Staff Recommendation:

2. During any future rate case, rate case staff should ensure that the existing SIP and AMR rate amounts in Schedules 177 and 179 are removed from the rate schedules and are included at net value to rate base.

Line item transactions were examined for the following accounts/projects:

- 303.1 - Addition of SAP Software (2009);
- 352.2 - CORE recall from Non Utility to Utility of \$476,149 (2009);
- 361.11 - LNG Fire Safety Equipment, LNG Splash Shield, LNG Generator (2009);
- 361.12 - LNG Splash Shield, Security, LNG Fire Suppression, Ventilation System (2010);
- 367 - Transmission Integrity work (2010);
- 381.2 - AMR Project - Additions of ERTs to Meters (2009); and
- 382.2 - AMR project - Installation of ERTs (2009).

Staff discovered numerous items such as meals (excluding meal tickets), refreshments, and awards that are not listed as components of construction costs under the *Code of Federal Regulations (CFR), Conservation of Power and Water Resources*, Part 201. The amounts discovered by Staff equaled \$22,579; \$17,735 being in the SAP Software Addition and \$4,619 included in the Transmission Integrity projects. Staff recommends that these expenses be removed from capital costs during any upcoming rate case. This recommendation is consistent with Staff's previous recommendations in the Bare Steel/SIP audits and the PGE UE 115 Information Technology (IT) and SB 1149 IT project cost audits.

Staff Recommendation:

3. During any future rate case, rate case Staff should examine all capital IT projects that were included in rate base after UG 152 and 2010/2011 SIP projects to ensure all meals (excluding meal tickets), refreshments, and awards are removed from rate base.

System Integrity Programs

Staff performed annual audits on NW Natural's System Integrity Programs during 2004 through 2009. Staff performed these audits pursuant to Commission Order No. 01-843 (UM 1030 – Safety Program Stipulation). That order requires Staff to

complete an audit of NW Natural’s combined investment of Leakage and accelerated Bare Steel Replacement and Geo-Hazard Mitigation program, by June 30 of the following year, costs that were included in the Purchased Gas Adjustment (PGA). Beginning in 2005, Staff also included System Integrity Programs (SIP) in the audits. The last completed audit was issued on June 30, 2009.

Bare Steel and GeoHazard Programs

Bare Steel and GeoHazard activity is tracked into the PGA on a cumulative basis. Each year in the PGA, program to date investments are tracked in to rates. In each PGA, the vintaged cost of service for the program to date investments is placed in rates and the cost of service for program to date investment from the previous PGA is removed from rates. The following table highlights the annual PGA activity:

Table 2 – Cumulative Bare Steel/GeoHazard Activity (\$000’s)

Year	Investment Amount placed in Rate Base	Investment Amount Placed in PGA	Tracker Year Cost of Service
2002 (2002-03 PGA filing) investments made Oct 01 - Sep 02	2,647	4,379	736
2003 (2003-04 PGA filing) investments made Oct 02 - Sep 03	6,014	8,444	1,266
2004 (2004-05 PGA filing) investments made Oct 03 - Sep 04	8,650	11,677	1,679
2005 (2005-06 PGA filing) investments made Oct 04 - Sep 05	12,801	17,883	2,546
2006 (2006-07 PGA filing) investments made Oct 05 - Sep 06	15,505	20,051	2,730
2007 (2007-08 PGA filing) investments made Oct 06 - Sep 07	18,553	20,735	2,725
2008 (2008-09 PGA filing) investments made Oct 07 - Sep 08	21,828	26,026	3,447
2009 (2009-10 PGA filing) investments made Oct 08 - Oct 09	26,148	30,300	3,932
2010 (2010-11 PGA filing) investments made Nov 09 - Oct 10	28,555	32,924	4,160

Note: Column 1 shows the amount of investment placed in Rate base, which is not included in the PGA under Commission Order No. 01-843 (UM 1030 – Safety Program Stipulation). Column 2 of the above graph represents the actual investment placed in the PGA. Column 3 shows the cost of service of the investment included in rate base.

The following major Bare Steel projects, as defined above, were worked on during the period of October 2008 through September 2010:

1. Hwy 22, Pacific Hwy 99W and Rickreall Rd, Rickreall: Replacement of 14,000 feet of 4-inch bare steel main operating at 125 MAOP with 8-inch coated, cathodically protected steel main installed along the north side of Highway 22 between Rickreall and Salem, Oregon.
2. Sullivan’s Gulch, Portland: Abandon approximately 5,000 feet of 8” bare steel main and approximately 400’ of 1921 6” bare steel main. Install

approximately 5000 feet of 8” coated, cathodically protected steel main from NE 57th to NE 76th along NE Broadway in NE Portland, Oregon.

3. High St/Broadway, Salem: Replacement of approximately 1,000’ of 4” Steel and 6 services with new cathodically protected steel main and services on High St from Knapp Place to Belmont St in Salem, Oregon.
4. Trevitt St, The Dalles: Replacement of approximately 1600 feet of bare steel main with approximately 800 feet of 4-inch coated, cathodically protected steel main and 800 feet of 2-inch poly installed on Trevitt St from 8th to 13th Street in The Dalles, Oregon.
5. 8th and Gibbs, Eugene: Replacement of approximately 650 feet of bare steel 4 inch main with approximately 650 feet of 4-inch coated, cathodically protected steel main and replace approximately 2,000 feet of bare 2” main with approximately 2,000 feet of 2-inch poly installed in a two block area centered around 8th and Gibbs in Eugene, Oregon.

According to NW Natural, the Company did not receive any government funding (transportation, economic development, etc.), private business funding, or any insurance settlements for any Bare Steel replacement or Leakage project. The Company has not performed an internal audit on the Bare Steel program.

According to NW Natural, in the upcoming general rate case, the Company will likely remove from rates the cost of service for tracked safety program expenditures from the last PGA and roll all safety program capital into rate base, thereby re-setting the tracking of the safety programs, should a new SIP agreement be made.

Transmission and Distribution Integrity Management Programs (TIMP/DIMP)

TIMP and DIMP activity is tracked into the PGA on a cumulative basis. Each year in the PGA, program-to-date investments are tracked in to rates. The following two tables (Tables 3 & 4) reflect cumulative amounts recorded for the two programs:

Table 3 – TIMP (\$000’s)

Year	Investment Amount Placed in PGA	Tracker Year Cost of Service
2005 (2005-06 PGA filing) investments made Oct 04 - Sep 05	\$3,476	\$535
2006 (2006-07 PGA filing) investments made Oct 05 - Sep 06	\$12,454	\$1,861
2007 (2007-08 PGA filing) investments made Oct 06 - Sep 07	\$15,058	\$2,101

Year	Investment Amount Placed in PGA	Tracker Year Cost of Service
2008 (2008-09 PGA filing) investments made Oct 07 - Sep 08	\$24,738	\$3,491
2009 (2009-10 PGA filing) investments made Oct 08 - Oct 09	\$28,184	\$3,796
2010 (2010-11 PGA filing) investments made Nov 09 - Oct 10	\$33,890	\$4,509

Table 4 – DIMP (\$000's)

Year	Investment Amount Placed in PGA	Tracker Year Cost of Service
2005 (2005-06 PGA filing) investments made Oct 04 - Sep 05	\$0	\$0
2006 (2006-07 PGA filing) investments made Oct 05 - Sep 06	\$0	\$0
2007 (2007-08 PGA filing) investments made Oct 06 - Sep 07	\$0	\$0
2008 (2008-09 PGA filing) investments made Oct 07 - Sep 08	\$0	\$0
2009 (2009-10 PGA filing) investments made Oct 08 - Oct 09	\$0	\$0
2010 (2010-11 PGA filing) investments made Nov 09 - Oct 10	\$136	\$21

Each year the current SIP program year estimate of costs is included, along with a true-up for the previous year's estimate of costs. Other adjustments include reductions made for agreed-to audit adjustments. In the 2010 PGA, an additional adjustment was made to ensure that the true-up of the prior program year's costs would not place the program over the cost cap that was agreed to in UM 1406.

For the period October 2008 through September 2010, 25 projects and 2,796 individual work orders associated with the SIP (TIMP/DIMP) program were completed. The following major SIP (TIMP and DIMP) projects were worked on during the period of October 2008 through September 2010:

1. Southeast Transmission 12", from SE Gate to Bell Rd Station, Clackamas (TIMP):
 - Modified pipeline to allow for inline inspection
 - Cleaned and assessed pipeline with inline inspection tool
 - Evaluate inline inspection data
 - Excavate and remediated required anomalies on pipeline

2. Clackamas to West Linn Transmission 12", from Hwy 212 to West Linn (TIMP):
 - Modified pipeline to allow for inline inspection

- Cleaned and assessed pipeline with inline inspection tool
 - Evaluate inline inspection data
 - Excavate and remediated required anomalies on pipeline
3. Browns Landing Pipeline Replacement, Sauvie Island (TIMP):
- Installation of approximately 3,000 feet of 8” steel class D main
 - Replacement of exposed pipeline in the waterway due to channel scouring
4. External Corrosion Direct Assessment of 16”/12” SP Newsprint pipeline, Newberg (TIMP):
- Pre-assessment and feasibility study
 - Conduct field data gathering and evaluation
 - Excavate and remediate anomalies on all pipeline segments
 - Recoat the pipeline and restore the sites
5. South Mist Pipeline Expansion 24”, from Bacona to Mollala, 2 segments (TIMP):
- Modified pipeline to allow for inline inspection
 - Cleaned and assessed pipeline with inline inspection tool
 - Evaluate inline inspection data
 - Excavate and remediated required anomalies on pipeline
6. West Union 8”, from BPA ROW to Neakahnie, Beaverton (TIMP):
- Modified pipeline to allow for inline inspection
 - Cleaned and assessed pipeline with inline inspection tool
 - Evaluate inline inspection data
 - Excavate and remediated required anomalies on pipeline
7. Rock Creek 12”, Central Coast Transmission Pipeline (TIMP):
- Installation of approximately 3500 feet of 12” steel class E main
 - Replacement of exposed pipeline in the waterway due to channel scouring
8. Willis Creek 12”, Central Coast Transmission Pipeline (TIMP):
- Installation of approximately 200 feet of 12” steel class E main

- Replacement of exposed pipeline in the waterway due to channel scouring

9. Young's Bay 8", North Coast Transmission Pipeline (DIMP):

- Installation of approximately 4500 feet of 8" steel class D main
- Replacement of exposed pipeline in the waterway due to channel scouring

10. Astoria – Natural Forces, Astoria Distribution System (DIMP):

- Mapping of active landslide areas in central Astoria
- Monitoring of active landslide areas
- Elimination of unnecessary system ties to lower risk
- Development of emergency shut off procedures

11. GIS Conflation, System-wide (DIMP):

- Correct and adjust NW Natural's land base data and allow GIS to be used as the foundation for Integrity Risk modeling and allow risk modeling software.
- Move NW Natural to the official North American horizontal datum; simplifying coordination and information exchange with other agencies and allowing the incorporation of valuable data such as assessor's maps, parcel information, routing, address, zoning, and LIDAR.

According to NW Natural, the Company did not receive any government funding (transportation, economic development, etc.), private business funding, or any insurance settlements for any TIMP/DIMP projects. According to the Company, an internal audit of the SIP is currently in progress. The audit is expected to be completed in Q3-2011.

As with the Bare Steel Program, the Company will likely remove from rates the cost of service for tracked safety program expenditures from the last PGA and roll all safety program capital into rate base, thereby re-setting the tracking of the safety programs, should a new SIP agreement be approved.

Staff did not note any discrepancies with NW Natural's accounting of SIP programs; however, rate case Staff should thoroughly examine plant in service and net plant during the Company's upcoming rate case to ensure that all plant currently in PGA trackers is properly reflected in rate base at the depreciated amount and no longer included in PGA trackers.

Staff Recommendation:

4. Rate case staff should thoroughly examine plant in service and net plant during the Company's upcoming rate case to ensure that all plant currently in the PGA tracker is properly reflected in rate base at the depreciated amount and no longer included in PGA trackers.

Staff also reviewed NW Natural's storage, WARM & decoupling, pipeline capital costs, accounting, and competitive bidding. The following are Staff's recommendations regarding each.

Storage

Staff Recommendations:

5. Staff recommends that during any rate case, Staff should review the capital cost of all new storage additions by the Company since the last general rate case as well as the level of storage capacity for core demand included in its regulated rate base.
6. Review the appropriateness of the level and types of operational and maintenance costs for Company owned storage included in rates.
7. Review the operational processes NW Natural applies in operating its Company owned storage.

WARM & Decoupling

Staff Recommendations:

8. Evaluate the current decoupling mechanism, including addressing the following:
 - How well the Company's incentives aligned with respect to energy efficiency goals.
 - How these mechanisms assisted the Company towards earning its authorized rate of return.
9. Modify the elasticity equation to connect it more closely to current underlying factors.
10. Modify the calculation of the baseline margin used for comparison to arrive at the decoupling adjustment.
11. In any general rate case, Staff should review the normal weather assumptions used for the test year normalization.

12. Evaluate all trackers adopted since UG 152 as well as the shifting of risk associated with volatility in sales volumes from NW Natural to its customers.

Pipeline Capital Costs

Staff Recommendations:

13. Review all construction and capital costs for current and past proposed pipeline distribution projects.
14. Review all construction and capital costs for current and past proposed low and high pressure transmission pipeline projects.
15. Capital costs for major pipeline (mains and transmission) and meter projects should be entered into rate base at net book of cost. Staff is referring to “net” as depreciation since the project was put into service and the date of the current general rate case filing.

Accounting

Staff Recommendations:

16. Audit and review entries made in FERC account 380.
17. Verify the mapping of SAP accounting entries to ensure they are correct and appropriate.

Competitive Bidding

Staff Recommendations:

18. Verify all major pipeline and mains projects are bid competitively and that results of bidding are appropriate.
19. Verify all documentation of the conduct and results of each bidding process for pipeline and mains projects.

Information Technology Capital Projects

The following Information Technology capital projects (expected total project cost greater than \$500,000) are currently being implemented by the Company. The information was provided in response to Staff Data Request No. 22.

1. Disaster Recovery Phase II
 - a. Purpose: Complete Phase 2 of the Network Disaster Recovery and expand capabilities at the Company’s DR co-location facility. Both projects support IT’s Strategic Objective and responsibility for

ensuring essential business and communications systems are recoverable and accessible within committed recovery windows.

- b. Anticipated Operational Savings: None
- c. Summary of ROI Studies: None
- d. Project Budget: \$540,000
- e. Primary Customers: All Company employees responding in the event of a disaster; external customers able to continue business with Company in the event of a disaster.

2. Technology Refresh-Desktops/Laptops and Peripherals

- a. Purpose: Complete Desktop/Laptop replacements per lease schedules. Desktops are leased for 4 years and laptops for 3 years (industry standard estimated useful life).
- b. Anticipated Operational Savings: If technology is kept past its useful life, 1.5 additional full-time equivalent (FTE) and \$20,000 to \$50,000 in parts required to maintain failing equipment.
- c. Summary of ROI Studies: None
- d. Project Budget: \$650,000
- e. Primary Customers: All Company business systems users

3. Technology Refresh-Large Servers

- a. Purpose: Acquire and implement hardware/software to expand Company's virtual server farm and storage environment to a) accommodate the virtualization of SAP in lieu of refreshing the physical servers; and b) accommodate the continued growth in data storage requirements of existing systems. Estimated useful life of servers is 5 years (industry standard). Typical use is 3 years as production servers and then they are repurposed as development/test servers. IT strategy continues to be virtualizing all servers when possible. In addition, the existing storage system for SAP (an HP EVA 8000) is at end of life.
- b. Anticipated Operational Savings: 2 additional FTE's and \$50,000 to \$70,000 in parts required to maintain failing equipment if kept passed standard useful life.
- c. Summary of ROI Studies: None
- d. Project Budget: \$775,000
- e. Primary Customers: All Company business systems users

4. SCADA Network Security

- a. Purpose: Procure, configure and install routers, switches and firewall hardware and software to implement improved SCADA network security at OPS, EasyStreet, Gasco, and 22 SCADA Master Sites.
- b. Anticipated Operational Savings: None
- c. Summary of ROI Studies: None
- d. Project Budget: \$550,000
- e. Primary Customers: Company Deliver Gas process/system users

5. GMS SunGard Aligne

- a. Purpose: Implement SunGard Aligne Gas Operations software product replacing one module of the existing Caminus application, which has reached end of life and support by the vendor, with an integrated gas acquisition and accounting tool from SunGard.
- b. Anticipated Operational Savings: None
- c. Summary of ROI Studies Performed: None performed or anticipated
- d. Project Budget: \$980,000
- e. Primary Customers (internal or external): NW Natural Gas Supply, Gas Accounting, and Treasury.

6. GMS PCM-Gasco

- a. Purpose: Implement a controlled shutdown program at the Portland LNG plant including:
 - Control program to perform managed turbo-expander shutdown
 - Additional telemetry for remote monitoring of critical equipment
 - Enhanced functionality to continuously monitor and validate data communication
 - Modifications to user interfaces at Plant and Gas Control
 - Training
 - Documentation
- b. Anticipated Operation Savings: None
- c. Summary of ROI Studies: None
- d. Project Budget: \$700,000
- e. Primary Customers: NW Natural Gas Supply

As of August 2011, the Disaster Recovery Phase II project; the SCADA Network Security; the GMS SunGard Aligne; and the GMS PCM-Gasco are still under construction. During any rate case review, Staff would ensure that the above listed projects are completed, used, and useful for inclusion in rate base.

According to the Company, NW Natural Gas Storage and Gill Ranch Storage purchased or leased directly their desktops, laptops, and peripherals. As a result, the Technology Refresh-Desktops/Laptops and Peripherals project does not include hardware or software costs for these non-utility operations.

Non-utility use of assets acquired by the Technology Refresh-Large Servers project is reviewed annually in September and will be directly charged. During any rate case review, Staff should ensure that these assets are properly allocated to non-utility operations in accordance with NW Natural's allocation methodology.

Additionally, Staff noted that the 2010 reported depreciation lives (0.1662) for the two technology refresh projects did not reconcile with the expected lives of the equipment (3 - 5 years). The difference is a result of a Depreciation Study performed by Gannet Fleming in 2006 and 2007 for all assets contained in FERC Plant Account 391.2 as of December 31, 2005. These rates were approved under Docket No. UM 1335, and are used for all assets charged to FERC Plant Account 391.2. Separate depreciation rates are not used for individual assets included in FERC Plant Account 391.2.

Staff Recommendations:

20. During any rate case review, Staff should ensure that Technology Refresh-Large Servers assets are properly allocated to non-utility operations in accordance with NW Natural's allocation methodology.
21. Rate case Staff should ensure that the Disaster Recovery Phase II project; the SCADA Network Security; the GMS SunGard Align; and the GMS PCM-Gasco projects are used and useful prior to placing into plant.

Allowance for Funds Used During Construction (AFUDC)

NW Natural's combined weighted average annual AFUDC rates were 0.60 percent, 1.02 percent, and 3.62 percent in years 2010, 2009, and 2008 respectively.¹ At the beginning of each calendar year, the AFUDC rates are calculated using budgeted short term borrowing rates and prior year-end actual results. Monthly actual rates replace the budgeted rates as they become known at the end of each month. NW Natural used the average short-term debt interest rate because the average Construction Work in Progress (CWIP) balance was less than the average short-term debt balance. Staff reviewed the Company's monthly short term borrowing rates from 2008 through 2010 and did not note any issues with the rates used.

¹ As a comparison from the previous NW Natural Operation Audit, the combined weighted average annual AFUDC rate was 5.37 percent, 4.67 percent, and 3.08 percent in years 2007, 2006, and 2005 respectively.

AFUDC is applied to the previous month's ending balance and half of its current month expenditures on all projects in CWIP in Accounts 107000-Utility and 121107-Non-Utility. AFUDC is applied to capital projects through the Company's accounting software. SAP software is in use today, and was used in 2009 and 2010. Powerplant software was in use in 2008 and earlier.

According to the Company, NW Natural completes a series of steps each month to ensure the CWIP balance is valid and that the AFUDC calculation is applied to the appropriate base cost. A summary of the process follows:

1. A CWIP aging summary is reviewed monthly by assigned business owners to ensure Projects are placed into service in a timely manner.
2. During the monthly accounting closing process, the SAP program excludes capital projects that have been placed into service from the AFUDC calculation.

In 2010, the total monthly CWIP balance was \$286,692,439 and the total monthly AFUDC balance was \$144,123, resulting in a weighted average interest monthly AFUDC rate of 0.05 percent. Staff examined the rate applied and amounts calculated concerning AFUDC for projects over \$1,000,000 completed in 2008 through 2010 and did not note any issues concerning the rates applied and the amounts calculated.

NW Natural did not perform any audits on AFUDC during the 2008 through 2010 time period and could not locate any audits performed prior to 2008.

Actual Financial Performance

Actual Returns

Staff reviewed NW Natural's actual Oregon returns for fiscal years 2008 through 2010. The following table compares total rate base, income, and returns for that time period. Information was provided by the Company in response to Staff Data Request No. A19.

Table 5 – Actual Oregon Returns (\$000s)

	2008	2009	2010
Utility Plant in Service	\$1,836,863	\$1,912,948	\$1,971,533 ²
Accumulated Depreciation	-\$778,039	-\$824,563	-\$854,691
Net Utility Plant	\$1,058,824	\$1,088,385	\$1,116,842 ³
Customer Advances	-\$2,297	-\$2,163	-\$1,959
Gas Inventory	\$65,869	\$81,045	\$72,977
Materials & Supplies	\$8,899	\$8,667	\$7,856
Leasehold Improvements	\$2,118	\$1,921	\$1,716
Accumulated Deferred Income Taxes	-\$154,506	-\$191,675	-\$230,124
Total Rate Base	\$978,907	\$986,180	\$967,308
Operating Revenue	\$83,918	\$89,513	\$84,845
Overall Return on Rate Base	8.6%	9.1%	8.8%
Return on Equity	10.0%	11.2%	11.1%

As can be seen from the above table, NW Natural’s actual rate of return and return on equity for 2009 and 2010 exceeded its authorized rate of return of 8.62 percent and return on equity of 10.20 percent. The above table indicates that NW Natural is not currently experiencing any strain on its earnings.

In its Financial Information page,⁴ the Company presents profitability ratios as shown in the following table:

² The utility plant in Table 1 relied on NW Natural’s FERC Form 2, which displays assets on a “situs” basis, so all assets located in Oregon are presented as Oregon assets. The amount in Table 5 above, provides amounts that are “state allocated,” which is done for ratemaking purposes, and reflects the assignment of a portion of costs that are in Oregon to Washington operations. The most significant category of assets that is allocated is for the storage facility at Mist. The difference is not related to SIP or AMR, both of which are directly assigned for state allocation purposes to the states in which they are located.

³ As a comparison from the previous NW Natural Operation Audit, 2007 net utility plant was \$1,076,276,553. As a result, net utility plant (not including plant in trackers) only increased 3.77 percent from the time period of 2007 to 2010.

⁴ <http://www.snl.com/irweblinkx/reports.aspx?keyreport=532&iid=4057132>

Table 6 – Profitability Ratios

	2010	2009	2008
Return on Average Equity ⁵	10.62%	11.53%	11.26%
Return on Average Capital Employed ⁶	10.62%	11.53%	11.26%

Additionally, NW Natural discusses its earnings in several Company press releases including:

- August 3, 2011 - Volumes sold to residential and commercial customers in the first six months of 2011 were 405 million therms, up 22 percent from 333 million therms in the first six months of 2010 due mainly to colder weather. Utility margin from residential and commercial customers in the first six months totaled \$178 million, including weather normalization and decoupling adjustments, up 5 percent over margin in the first six months of 2010 of \$170 million. NW Natural's weather and decoupling mechanisms adjusted margin up by \$0.3 million in 2011, compared to a margin adjustment increase of \$20.6 million in the six months ended 2010. The results for 2010 were largely driven by weather that was significantly warmer than average in the period.

In this earnings report, the Company addressed the repeal of SB 408 and its effect on earnings, which includes an after-tax charge of \$4.4 million (17 cents per share).

- July 1, 2011 - The Board of Directors of NW Natural Gas Company (NYSE: NWN), dba NW Natural, has declared a quarterly dividend of 43.5 cents a share on the company's common stock. The dividends will be paid Aug. 15, 2011, to shareholders of record on July 29, 2011. The company's indicated annual dividend rate is \$1.74 per share.
- October 4, 2010 - NW Natural will have paid \$1.68 per share in dividends on its common stock in 2010, the 55th consecutive year in which the company's dividend payments have increased. The indicated annual dividend rate is now \$1.74 per share.

⁵ An adjusted version of the return on equity (ROE) measure of company profitability, in which the denominator, shareholders' equity, is changed to average shareholders' equity. Typically, return on average equity refers to a company's performance over a fiscal year, so the average-equity denominator is usually computed as the sum of the equity value at the beginning and end of the year, divided by two. www.investopedia.com

⁶ A financial ratio that shows profitability compared to investments made in new capital. www.investopedia.com

Budget Versus Actual

The following information was provided by NW Natural concerning budgeted versus actual performance. The tables below reflect total system actual compared to total system budgeted and does not reflect Oregon-Situs.

Table 7 – Budgeted Versus Actual Performance – 2008

	2008 Budget Total System	2008 Actual Total System	2008 Actual OR Only	% Difference
Revenue	\$964,658,501	\$1,019,171,934	\$923,913,620	5.65%
Natural Gas Commodity Costs	\$601,691,330	\$656,504,258	\$598,493,889	9.11%
Operating Expenses	\$112,400,000	\$111,900,123	\$100,610,185	-0.44%
Utility Operating Income	\$250,567,171	\$250,767,553	\$224,809,546	0.08%
Interest and Other	\$190,966,477	\$191,954,327	\$171,608,954	0.52%
Net Income	\$59,600,694	\$58,813,226	\$53,200,592	-1.32%

Table 8 – Budgeted Versus Actual Performance – 2009

	2009 Budget Total System	2009 Actual Total System	2009 Actual OR Only	% Difference
Revenue	\$1,077,800,132	\$992,748,834	\$893,472,452	-7.89%
Natural Gas Commodity Costs	\$716,222,389	\$611,088,123	\$550,900,664	-14.68%
Operating Expenses	\$117,000,000	\$125,690,380	\$112,627,802	7.43%
Utility Operating Income	\$244,577,743	\$255,970,331	\$229,943,986	4.66%
Interest and Other	\$184,271,612	\$191,562,684	\$171,397,665	3.96%
Net Income	\$60,306,131	\$64,407,647	\$58,546,321	6.80%

Table 9 – Budgeted Versus Actual Performance – 2010

	2010 Budget Total System	2010 Actual Total System	2010 Actual OR Only	% Difference
Revenue	\$832,841,769	\$790,633,127	\$715,078,180	-5.07%
Natural Gas Commodity Costs	\$473,651,276	\$424,493,929	\$384,591,337	-10.38%

	2010 Budget	2010 Actual Total System	2010 Actual	% Difference
Operating Expenses	\$115,000,000	\$114,693,441	\$103,606,692	-0.27%
Utility Operating Income	\$244,190,493	\$251,445,757	\$226,880,151	2.97%
Interest and Other	\$184,588,335	\$185,603,839	\$168,597,215	0.55%
Net Income	\$59,602,158	\$65,841,918	\$58,282,936	10.47%

As the above tables indicate, NW Natural’s budgets are in most cases fairly close to its actual performance. Also notable is that NW Natural’s unadjusted expenses only increased 2.98 percent from 2008 to 2010. Although this amount is greater than the Consumers Price Index – All Urban Consumers (CPI-U) of 1.26 percent for the same period, it indicates a strong degree of cost controls by the Company. During any upcoming rate case, rate case staff should closely examine test year operating expenses to ensure test year increases track with historical performance.

Staff Recommendation:

22. During any upcoming rate case, rate case staff should closely examine test year operating expenses to ensure increase track with historical performance.

Comparison to Other Natural Gas Utilities in Oregon

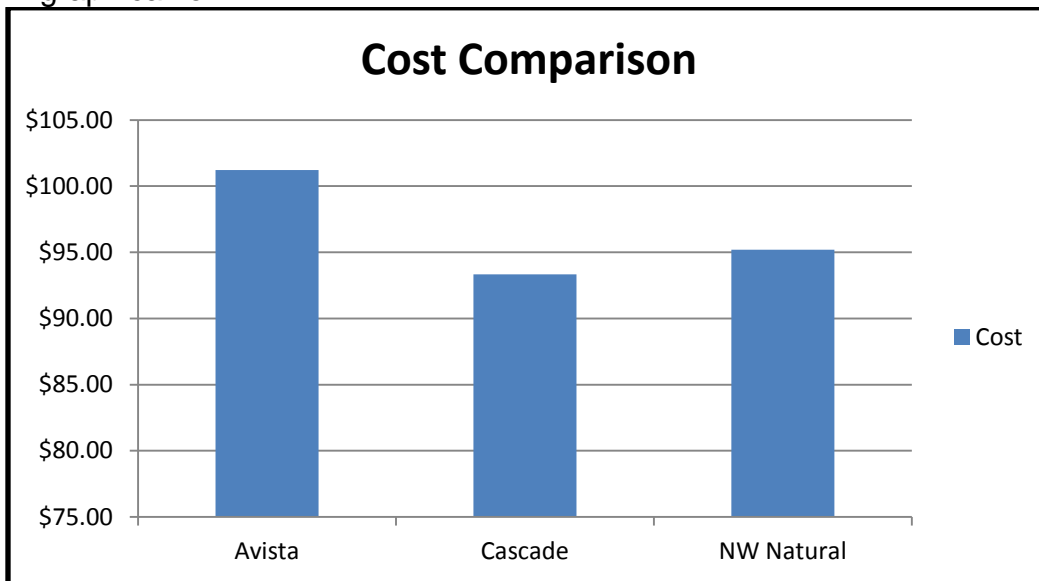
For comparison purposes, Staff examined NW Natural’s basic residential service rates to Avista and Cascade, the other two natural gas utilities operating in Oregon. These rates include a myriad of variables including cost of gas and other operating expenses incurred by each natural gas company. The following table highlights the comparison.

Table 10 – Comparison of Residential Service Rates of Oregon Natural Gas Utilities⁷

Company	Base	Per Therm	Commodity	Cost
Avista	\$7.00	\$1.14912	\$94.23	\$101.23
Cascade	\$3.00	\$1.10167	\$90.34	\$93.34
NW Natural	\$6.00	\$1.08786	\$89.20	\$95.20

⁷ To perform the comparison, Staff used Cascade *General Residential Service Rate, Schedule No. 101*; Avista Corporation *General Natural Gas Service – Oregon, Schedule 410*; and NW Natural Gas Company *Rate Schedule 2, Residential Sales Service*.

In graphical form:



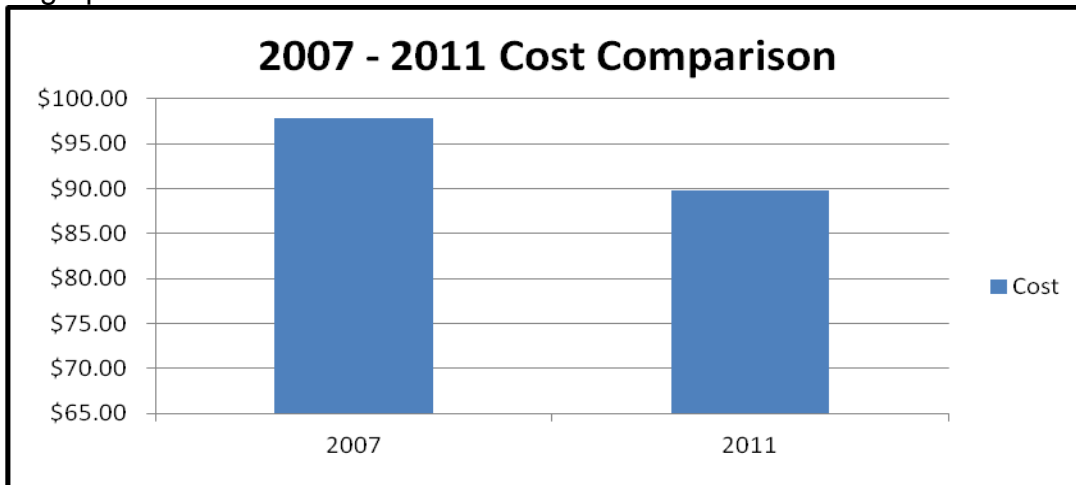
At the August 3, 2011, Annual Natural Gas Price Outlook Hearing, NW Natural informed the Commission that prices paid by their customers could decrease by approximately 2 percent. As a result of the price reduction, the average customer using 85 therms experienced an approximately \$2.44 decrease from the 2010 monthly costs.

Because of the decrease in natural gas prices, the actual NW Natural customer bill is less than what was calculated in Staff Audit Report of NW Natural, Audit Number: 2008-001, dated September 12, 2008. Because Staff used 75 therms per month as the average usage in 2007, both 2007 and 2011 monthly bills reflect 75 therms. The following table demonstrates the comparison:

Table 11 – 2007 and 2011 Average Monthly Bill Comparison

Year	Cost
2007	\$97.84
2011	\$87.59

In graphical form:



Administrative and General (A&G) Expenses

Cost Comparisons

Rather than budgeting by FERC account, NW Natural budgets by cost center and GL Account. NW Natural has reduced their administrative and general expenses by \$10.7 million in 2010 over 2009 totals.

The following table highlights changes in NWN A&G costs from fiscal year 2009 to fiscal year 2010:

Table 12 – Northwest Natural Administrative and General Costs

	2009	2010	2011	Percent Change 2009-2010
Payroll	\$52,702,265	\$46,459,705	N/A	-11.8%
Non-Payroll	\$31,823,918	\$27,370,748	N/A	-14.0%
Total A&G	\$84,526,183	\$73,830,453	N/A	-12.7%

As the above table indicates, NW Natural experienced a significant decrease in overall A&G costs from 2009 to 2010. Overall, A&G expenses have been reduced by approximately 12.7 percent. Based on unaudited estimates, Oregon allocated A&G costs for 2011 are expected to be higher than what was incurred in 2010.

Staff examined the following accounts due to significant changes in expenses from 2009 to 2010:

902 – Meter Reading decreased by \$2,811,932 from 2009 to 2010 due primarily to a decrease in labor expense, but also included a decrease in transportation costs related to vehicles driven by former Meter Readers. 2010 was the first full year of expense reductions from the completion of the Company's Automated Meter Reading (AMR) project in late 2009.

908 – Customer Assistance Expense decreased by \$941,180 from 2009 to 2010. Reviewing transaction summaries by year it appears that the Company has experienced a decrease of at least \$100,000 or more in new construction, conversions, and major energy savings. This combined with smaller reductions in other sub accounts has lead to an overall decrease.

913 – Advertising Expense increased by \$334,129 from 2009 to 2010. In 2010, the Company provided additional support for product preference, customer acquisition, customer retention, and new construction messages. The bulk of the advertising dollars were used by the Company to conduct research and produce the "Blue" advertising campaign and develop promotional messages and graphics for the Company website. Additionally, the Company supported sponsorships for new home shows and community events delivering the same messages as the Company's advertising campaigns.

Advertising

Staff requested comprehensive information regarding NW Natural's advertising through Staff data requests, including copies of all pieces of the Company's advertising for 2010 along with work papers detailing the associated expenses. Staff has reviewed the responses provided by the Company and has no specific comments with regards to advertising at this time.

Staff Recommendation

23. During any upcoming rate proceeding, Staff should review all advertising and promotional concessions.

Uncollectible Expenses

Staff reviewed NW Natural's level of uncollectible expense for fiscal years 2008 through 2010.

When uncollectible accounts are turned over to a collection agency, NW Natural credits the accounts receivable (general ledger Account 142) and debits provisions for bad debts (general ledger Account 144). Any recovery is then credited to the provisions for bad debts (offset in cash-general ledger) and collection agency fees are charged to the O&M expense.

The table below summarizes the system wide uncollectible accounts assigned to collection agencies as of August 2011:

Table 13 – Assignment and Collections

Year	2008	2009	2010	Thru August 2011
Assigned to Collection Agencies	\$4,620,806	\$5,191,706	\$3,401,614	\$2,203,902
Cancelled from Collection Agencies	\$1,084,292	\$2,125,720	\$788,781	\$446,416
Collected by Agencies	\$1,005,544	\$902,093	\$948,931	\$505,408
Collection Fees Paid to Agencies	\$273,607	\$238,208	\$252,699	\$136,944

According to the Company, from 2009 to 2010 the amounts “assigned to collection agencies” and the amounts “cancelled from collection agencies” went down significantly due to a price decrease in November 2009. The price reduction (residential drop of 18 percent and commercial drop of 21 percent) would have had the effect of reducing bad debt in 2010. In addition to the price drop, NWN believes that the economy and unemployment somewhat stabilized and that the economy was past the catastrophic events and influence of 2008 and 2009. Lastly, the 2009 – 2010 heating season was 4 percent warmer than the prior season. The weather difference causes a reduction in usage and therefore lowering bad debt.

During the period from 2008 to 2010, NW Natural has received an average of 22 percent recovery of amounts turned over to a collection agency, prior to any collection fees. Fees paid to collection agencies from 2008 to 2010 averaged approximately 27 percent of gross collections, which is a reduction compared to the average of 39 percent in 2005 – 2007.

Debt cancelled by the collection agencies are gross write-offs. The amounts collected by the collection agencies also include recalled listings, which is when the customer requests return of utility service.

NW Natural uses a split fee for collections, which means the collection agencies receive a percentage of the collected amounts in return for their services.

NW Natural currently uses two collection agencies; each has a similar fee structure. For accounts pursued without legal intervention the agency retains 20 percent. If legal action is required the rate increases to 35 percent in recognition of the increased cost that the agency incurs with this type of collection.

Staff recommendation

24. Staff should review uncollectible expenses during the rate case to determine a reasonable ongoing level of expense. (*Further investigation during the rate case*)

Insurance Services, Injuries, and Damages

Total premium costs have increased by approximately 17 percent (\$511,281) from 2008 to 2010. The table below highlights NWN’s insurance costs:

Table 14 – Northwest Natural Insurance Premium Costs

Cost	2007 - 2008	2008 - 2009	2009 - 2010
Property Insurance Premiums	\$229,391	\$265,683	\$255,746
Liability Insurance Premium	\$1,219,469	\$1,290,900	\$1,589,778
Terrorism Premium	\$75,757	\$79,800	\$88,472
D&O Liability Premium (including excess D&O)*	\$714,161	\$747,072	\$840,352
Workers' Compensation Premiums	\$233,391	\$212,869	\$209,102
Total Premium Costs	\$2,472,169	\$2,596,324	\$2,983,450

* NW Natural only carries Excess D&O.

Through Staff data requests, Staff asked NW Natural to explain the requirements surrounding excess D&O Liability Insurance.

According to the Company, NW Natural carries D&O limits in accordance with the associated risk to directors and officers for service to the Company. NW Natural believes that in order to attract and retain qualified directors and officers, NW Natural needs to provide adequate insurance coverage. Company insurance limits are based on input from industry peers, the Company’s broker and claim review.

NW Natural spreads its D&O coverage across two industry mutuals and two regular market carriers.

Staff Recommendation

25. Staff should review, in detail individual insurance policies during an upcoming rate case to determine an appropriate level of insurance expense that should be borne by customers. (*Further investigation during the rate case*)

Administrative & General Expense Adjustments

Staff did not review individual line item detail for various meals and entertainment expenses as part of this audit. However, such a review should be conducted as part of any upcoming rate proceeding in order to identify any non-utility office expenses, travel/entertainment expenses, spousal expenses, political contributions, gifts, catering, etc., which should be removed as rate case adjustments.

Commission Order No. 04-439

In Commission Order No. 04-439, NW Natural agreed to eliminate parking costs incurred in downtown Portland from Oregon retail rates, at least through September 1, 2013. After August 31, 2013, NW Natural may seek recovery in a future rate case for prospective parking costs only, and parking costs beginning September 1, 2003, through August 31, 2013, are not eligible for any tracking or deferred accounting recovery from NW Natural customers.

Through a Staff data request, Staff verified that parking costs for Fish Block, Port Block, and Chinese Garden Block Assets had been removed from rates.

Legal Fees

Staff requested that NW Natural provide a breakdown of legal costs for accounts 921 (Office Supplies and Expenses), 923 (Outside Services Employed), and 928 (Regulatory Commission Expense). Staff also requested that NW Natural explain if services were provided for both utility and non-utility activities, and to provide details on how expenses were allocated.

NW Natural does not readily have the specific descriptions requested by Staff, and instead provided a listing of the legal costs booked to accounts 921, 923, and 928. According to the Company, NW Natural did not record any legal costs in accounts 923 and 928 in 2008 and 2009. The table below provides the actual legal fees assigned to account 921 for 2008 and 2009.

Table 15 – Legal Expenses 2008 and 2009 FERC Account 921

FERC Account	2008	2009	Percent Change from 2008 to 2009
921	\$1,350,527	\$1,125,712	-16.7%

According to the breakout provided by NW Natural, the majority of their legal costs are associated with state and federal regulation, reporting, and human resources/labor matters.

Labor Costs

Staffing

The following table shows a breakdown of Northwest Natural full-time and part-time employees.

Table 16 – Northwest Natural Staffing

Division	Employee Count as of July 2011
Acquire Customers	53
Business Development & Energy	14
Corporate Communications	8
Deliver Gas	385
Executives	11
Finance	167
General Counsel	38
Human Resources & Admin.	44
Resource Management	88
Serve the Customer	279
Total	1,087

Staff reviewed the time period between 2007 and 2010 for A & G salaries. NWN's FTE count decreases by approximately 12 percent between 2008-2009 and by nearly 9 percent between 2009-2010. Staff would expect to see a decline in FTE during this period as this is the same period that NWN implements a new Automated Meter Reading system which displaces the need for physical meter readers. From 2007 through 2010, NW Natural's overall FTE count declines by approximately 120 FTE.

Staff reviewed salary studies submitted by NW Natural in response to Staff data requests. Overall, it appears that NW Natural does perform salary studies to establish that its employees are at or below market levels. Due to timing of the

salary studies, Staff was unable to view salary studies performed that would affect the 2010 wage and salary levels.

Staff Recommendation

26. Staff recommends that during the rate case wages and salaries are reviewed to determine what is driving the increase in the 2009 – 2010 period.

Severance Costs

The following table highlights NW Natural’s severance costs within the Company’s regulated operations.

Table 17 – NW Natural’s Severance Costs

	2008	2009	2010
Executives	\$20,000	\$20,000	\$0
Senior Management	\$0	\$0	\$0
Other Management (Supervisor)	\$0	\$0	\$0
NBU-Exempt	\$96,085	\$167,304	\$248,709
NBU Non-Exempt	\$50,252	\$33,180	\$0
Bargaining	\$159,542	\$795,232	\$427,995
Total	\$325,879	\$1,015,716	\$676,704

Incentive Costs

The table below reflects incentive payments⁸ applicable to employees within the Company’s regulated operations.

Table 18 – NW Natural’s Incentive Payments

	2008	2009	2010
Executives	\$1,563,068	\$1,293,368	\$1,533,348
NBU-Exempt	\$5,692,507	\$3,739,497	\$5,196,740
Bargaining	\$1,707,769	\$1,406,428	\$1,735,063
Total	\$8,963,344	\$6,439,293	\$8,465,151

⁸ According to NW Natural, annual incentive payments include Key Goal Bonuses, NBU Goals Incentive Plan Bonuses, Executive Bonuses, and the Long Term Incentive Plan payments. The payments are reported in the year paid and are not split into Operating & Maintenance and Capital expense categories; for these two reasons, they will not match the incentive expense included in the income statement.

For this Operational Audit, Staff did not separately analyze the changes in Key Goals, Bonuses, Severance Payments, and Incentives as these amounts were incorporated into the overall wage and salary amounts provided to Staff.

As part of the wages and salaries review, Staff analyzed the changes in labor loadings including incentives and bonuses and found that during 2008 – 2009 there was a 72 percent decline. During 2009 – 2010 there was a 31 percent increase. This time period (2009 – 2010) is the same period in which NW Natural loses more than 75 FTE or more than 62 percent of the overall FTE reduction during the time period.

Staff Recommendation:

27. Staff recommends that during the rate case, Staff should determine whether NWN’s salaries used in the salary studies include bonuses, key goal incentives, overtime or any other wage components and if so, whether these components are comparable with the surveys provided in the salary studies.

Labor Loadings

In February 2009, NW Natural implemented the SAP Human Capital Management (HCM) Module to replace PeopleSoft for payroll accounting. The HCM Module charges an employee’s vacation time to a liability account and not to the employee’s home cost center as the PeopleSoft method did. The labor cost in an employee’s cost center is less in the HCM Module than it was under PeopleSoft payroll accounting. This resulted in a decrease to which the payroll overhead loading percentages were applied. In order to allocate all of the payroll overhead costs to this smaller base, the Company had to increase the payroll overhead loading percentages.

The 2009 data provided by NW Natural reflects the accounting change with the software transition. The transition also resulted in the elimination of NBU and BU clerical and BU field employees. They are now combined and identified as “Others”.

Table 19 – NW Natural Labor Loadings 2008 – 2010

Year	From (month)	To (month)	Employee Group	Benefits Overhead	Vacation, Sick, Holiday Overhead
2008	January	December	Execs	51.0%	0%
			NBU	58.5%	0%
			BU Clerical	58.7%	0%
			BU Field	57.5%	15%
Year	From	To	Employee	Benefits	Vacation,

	(month)	(month)	Group	Overhead	Sick, Holiday Overhead
2009	January	January	Execs	51.0%	0%
			NBU	58.5%	0%
			BU Clerical	58.7%	0%
			BU Field	57.5%	15%
2009	February	March	Execs	55.0%	15%
			Others	60.4%	15%
2009	April	July	Execs	69.4%	15%
			Others	74.2%	15%
2009	August	December	Execs	69.4%	15%
			Others	84.9%	15%
2010	January	February	Execs	99.7%	15%
			Others	71.5%	15%
2010	March	December	Execs	94.3%	15%
			Others	77.8%	15%

Staff Recommendation:

28. Staff recommends that during the rate case, Staff examine the labor loading percentages and compare them to industry standards.

Benefits

Staff did not review NW Natural's benefit costs in detail, but did question the increase in costs. From 2008 to 2009, NW Natural's benefit costs increased \$5.3 million. NW Natural explains that the increase is due to higher health care premiums and higher bonuses related to above-target operating results, which affect incentive payments and compensation.

Staff would like to point out that according to the Kaiser Family Foundation's Employer Health Benefits Findings for 2010, health care premiums for single coverage averaged \$5,049 and \$13,770 for family coverage annually. The findings also show that, on average, employees pay approximately 19 percent of premiums for single coverage and 30 percent for family coverage.

In response to Staff's comparison based on the Kaiser Family Foundation, the Company points out that it does not use the Kaiser Family Foundation for comparative market median purposes as NWN believes it does not represent the Company's industry.

Staff Recommendation:

29. Staff recommends that during any rate case, Staff review the benefit costs in detail and determine the sharing plan in place, if any, between NW Natural and its staff.

Medical/Dental/Vision Benefits

NW Natural’s non-represented employees have an overall 80/20 sharing for medical coverage, 80/20 sharing for dental coverage, and 80/20 sharing for vision coverage. These sharing percentages for non-represented employees appear to be in line with industry standards. For union employees or bargaining employees there is no sharing of benefit costs between employer and employee. NW Natural, however, believes that bargaining employees contribute to the cost of their benefits outside of premium sharing through co-pays and deductibles.

The following table highlights benefit costs incurred by NW Natural from fiscal year 2008 through fiscal year 2010. Based on a Staff data request, NW Natural explained that in 2009 it recorded a charge of \$1.1 million to O&M that was related to a voluntary severance program involving workforce reductions that occurred in 2009 based on guidance provided in SFAS No. 112 “Employer’s Accounting for Postemployment Benefits” under SFAS 112. There was no activity in either 2008 or 2010 regarding SFAS 112.

Table 20 – Northwest Natural Benefit Costs

	2008	2009	2010	% Change 2008 to 2010
Medical/Dental	\$13,053,476	\$13,029,997	\$12,003,082	-8.0%
Defined Contribution Pension	\$135,670	\$201,349	\$277,802	105.0%
Life	\$145,056	\$150,232	\$89,122	-38.5%
401(K) Match	\$1,921,604	\$1,800,513	\$1,810,470	-5.8%
Short-Term Disability	\$890,841	\$1,010,541	\$871,334	-2.2%
Long-Term Disability	\$230,567	\$229,922	\$219,039	-5.0%
Employee Assistance Program	\$38,185	\$29,453	\$28,743	-24.7%
Tuition Assistance Plan	\$78,128	\$73,618	\$61,664	-21.1%
Wellness – Health Miles	\$98,015	\$73,726	\$115,524	17.9%

	2008	2009	2010	% Change 2008 to 2010
Wellness – Flu Shots/Health Risk Assessment	\$44,650	\$27,025	\$34,189	-23.4%
Total Benefits	\$16,636,192	\$16,626,376	\$15,510,969	-6.8%

While the individual amounts have varied, the overall dollar amounts of benefits have decreased 6.8 percent from 2008 to 2010.

Staff Recommendation

30. During any upcoming rate proceeding, Staff should review, in detail, the individual bargaining unit agreements and terms of the various medical, dental, and vision benefit plans to determine the overall costs as compared to industry standards and the Kaiser Family Foundation recommendations. (Further investigation during the rate case)

Pension and Postretirement Costs

As a result of Staff data requests, NW Natural provided the following information regarding pension benefits:

Table – 21 NWN Pension Costs

	2008	2009	2010
Obligation at prior year-end measurement date	\$261,541,000	\$285,210,000	\$314,460,000
Fair Value of Plan Assets	\$163,115,000	\$201,311,000	\$219,015,000
Actual Return on Assets	-\$63,267,000	\$28,641,000	\$24,651,000
Funded Status	-\$98,426,000	-\$83,898,000	-\$95,446,000
Accumulated Benefit Obligation	\$261,541,000	\$282,210,000	\$314,460,000
Service Cost	\$5,868,000	\$5,954,000	\$5,990,000
Interest Cost	\$16,221,000	\$16,688,000	\$16,652,000
Expected Return on Assets	-\$19,087,000	-\$15,696,000	-\$18,208,000
Amortization of Transition Asset/Obligation	\$0	\$0	\$0
Amortization of Prior Service Cost	\$1,291,000	\$1,259,000	\$230,000
Recognized (Gain) Loss	\$0	\$6,374,000	\$6,740,000
Net Periodic Pension Cost (Income)	\$4,293,000	\$14,579,000	\$11,404,000

	2008	2009	2010
NW Natural Contribution to Plan	\$0	\$25,000,000	\$10,000,000
Discount Rate	6.44% / 6.72%	5.97% / 6.0%	5.46% / 5.49%
Long-Term Rate of Return on Assets	8.25%	8.25%	8.25%
Actual Rate of Return on Assets	-27.18%	15.79%	13.20%
Return on Consolidated Common Equity	11.37%	11.66%	10.74%

The actual rate of return on assets is a one-year rate. The long-term rate of return on assets is the anticipated return on plan assets measured at market value based on long-term expected rate of return (i.e., over multiple years). Over an extended period of time, the actual and estimated rates of return are expected to be comparable. According to the Company, the variance between expected to actual is based on market volatility.

Through a Staff data request, NW Natural was asked to provide the effect on the 2010 net periodic pension rate if the discount rate is changed 25 basis points in both directions, and the expected rate of return is changed 50 basis points in both directions.⁹ The 2010 net periodic pension cost was \$11.4 million. The estimated effect is as follows:

- 25 basis points increase in the discount rate and 50 basis points increase in the expected rate of return on assets would decrease the net periodic pension cost by approximately \$1.9 million to \$9.5 million.
- 25 basis points decrease in the discount rate and 50 basis points decrease in the expected rate of return on assets would increase the net periodic pension cost by approximately \$1.9 million to \$13.3 million.

The following table highlights net pension benefit costs and net postretirement costs for the years 2008 through 2010:

⁹ The discount rate is the interest rate used to adjust for the time value of money. A company will calculate its pension obligations by estimating what it will ultimately pay current and future retirees. A lower rate increases the plan's current liability; a higher rate decreases current obligations.

Table 22 – Northwest Natural Net Pension/Postretirement Costs

	2008	2009	2010
FAS 87 Pension	\$4,293,000	\$14,579,000	\$11,404,000
FAS 106 Postretirement	\$2,532,000	\$2,698,000	\$2,763,000
Total	\$6,825,000	\$17,277,000	\$14,167,000

Future pension and postretirement net benefit costs have the potential to decrease based on possible positive changes to the discount rate and rate of return on plant assets due to projected market trends.

In Commission Order No. 11-051 (Docket UM 1475), Commission Staff, NW Natural, Citizens Utility Board, and Northwest Industrial Gas Users signed a stipulation that would implement a balancing account rather than a deferral for certain pension expenses.

NW Natural records their Executive Deferral plan costs/payments in account 926. The table below shows a summary of the expense for the Executive Supplemental Retirement Income Plan (ESRIP) and the Supplemental Executive Retirement Plan (SERP). Based on Commission policy, these expenses would be removed from the revenue requirement during a rate case review.

Table 23 – Executive Deferral Plan

Year	SERP	ESRIP	Total
2008	\$242,922	\$1,547,931	\$1,790,853
2009	\$258,344	\$1,849,107	\$2,107,451
2010	\$364,764	\$2,375,415	\$2,740,179

On March 23, 2010, the Patient Protection and Affordable Care Act (PPACA) was signed into law and on March 30, 2010, the Health Care and Education Reconciliation Act of 2010 was signed into law, which makes various amendments to certain aspects of the PPACA. The PPACA changes the tax treatment of federal subsidies paid to sponsors of retiree health benefit plans that provide a benefit that is at least actuarially equivalent to the benefits under Medicare Part D. These subsidy payments become taxable in years beginning after December 31, 2012.

Through Staff data requests, Staff learned that the tax provision of the PPACA did not have, and is not expected to have, an impact on the financial situation of NW Natural, their results of operations or cash flows as they do not receive federal subsidy payments under Medicare Part D.

Operations and Maintenance Expenses

Staff examined NW Natural’s O&M accounts for the years 2008 through 2010. The following table highlights NWN’s O&M costs.

Table 24 – NW Natural’s O&M costs

Year	2008	2009	2010
Costs	\$28,179,710	\$31,361,125	\$30,227,353
Percent Change 2008-2010	7.27%	CPI Change 2008-2010	1.28%

As the table indicates, NW Natural’s increase in O&M costs has been significantly higher than the CPI-U increase for the same period.

Although the cost increases are higher than the CPI-U, the following accounting changes, adjustments, one-time charges, and out-of-period changes are reasonably viewed as distorting a comparison of annual O&M expenses for each fiscal year through 2009 and 2010 in the FERC accounts referenced below.

FERC account 818 Compressor Stations: 2010 increase of \$209,000 due to maintenance amortization for a rebuilt compressor at MIST.

FERC account 820 Measurement: 2009 decrease of \$291,000 due to more capital jobs in 2009 than 2008 and less O&M labor charges \$166,000.

FERC account 874 Distribution Mains/Regulators: 2009 increased \$1,475,000 and then declined \$716,000 in 2010. In 2009, there was a significant change in “on-call duty” for emergency responders which significantly increased costs.

FERC account 878 Distribution Meters: 2010 decrease of \$510,000 due to decreased installs and meter sets caused by the downturn in the economy.

FERC account 879 Customer Installs: 2010 increase of \$519,000 due to additional Technical FTE’s hired in 2010 and higher payroll overhead.

FERC account 880 Other Distribution Expense: 2009 increase of \$213,000 related to costs incurred for labor negotiations.

FERC account 885 Distribution Maintenance Expense: 2009 increase of \$1.1 million was due primarily to higher O&M expense due to less construction activity in 2009 and more work on O&M projects, a result of the downturn in the economy in 2008.

FERC account 892 Maintenance Services: 2009 increase of \$444,000 and then declined \$333,000 in 2010. In 2009, there were new requirements for more documentation on leaks, which results in more time spent on paperwork and time tracking.

As can be seen from the analysis of selected accounts, 2009 and 2010 had numerous one-time charges that partially contributed to the overall increases.

Taxes

Income Taxes

NW Natural provided the following tax information for 2008 through 2010. Total Operating Revenues for Oregon decreased approximately 22.4 percent in 2010 from 2008.

The following table highlights the income taxes for 2008 through 2010.

Table 25 – NW Natural Income Tax 2008 – 2010

	2008	2009	2010
Operating Revenue	\$1,019,171,935	\$992,748,834	\$790,633,128
Other Deductions	\$890,214,628	\$850,520,639	\$644,945,266
Interest (AFUDC)	\$748,127	\$251,710	\$144,123
Interest Income	\$801,815	\$2,262,228	\$6,715,883
Interest Expense	\$36,584,579	\$39,226,796	\$40,953,906
Schedule M Additions	\$1,062,785	\$28,250,596	\$8,012,790
Schedule M Deductions	\$128,688,674	\$233,191,574	\$80,705,828
Income Before Taxes	-\$33,703,219	-\$99,425,641	\$38,900,924
State Income Tax	\$5,512,863	\$7,596,208	\$8,350,961
Taxable Income	-\$28,238,025	78,323,507	\$10,182,902
Federal Income Tax	\$30,264,137	\$34,137,255	\$37,777,082

According to the Company, the 17.31 percent increase in income tax expense in 2009 over 2008 is due primarily to an increase in Oregon statutory fees. From 2009 to 2010, the increase in total income taxes was 8.37 percent.

Senate Bill (SB) 408 was passed in 2005 by the Oregon Legislature. The law required NW Natural, as well as Portland General Electric, PacifiCorp, and Avista to file tax reports with the Commission annually on October 15th. Taxes

recovered in customers' rates beginning January 1, 2006, were to be subject to an adjustment each year.

Later, Senate Bill 967 was passed in 2011 by the Oregon Legislature. This law repeals the statute above. As a result of SB 967 being enacted into law, NW Natural will be denied recovery of the surcharge for the 2010 tax year. NW Natural is required to record a one-time pre-tax charge to earnings in the second quarter of 2011 of approximately \$7.4 million (\$4.4 million or 17 cents per share after tax) related to amounts earned in 2010.

Staff also took a further look at the decrease in "other deductions" as shown in the table above. According to the Company, "other deductions" are a sum of the operating expenses, maintenance expenses, depreciation, and taxes other than income. Below is an explanation of the contributing factors which reduced the expenses.

- Operating Expenses declined during this period due to decreases in City Gate Purchases of Gas which are attributable to a decrease in demand as a result of progressively milder weather each year along with a variety of other factors.
- Depreciation decreased as a result of the adoption of new depreciation rates approved by this Commission and the Washington Utilities and Transportation Commission and the Federal Energy Regulatory Commission.
- Taxes Other Than Income decreased as a result of lower Oregon Franchise Taxes.

According to NW Natural, the 22.6 percent decrease in Operating Revenue from 2008 to 2010 is due to significant decreases in therms sold and the weighted average cost of gas ("WACOG") that was in effect during that time period. For NW Natural, their gas sales decreased by 23.8 percent from 2008 to 2010. Below is a table highlighting the Oregon sales volume in therms which decreased by over 14 percent.

Table 26 – Oregon Sales Volumes in Therms

Sales Volumes	2008	2010	Change	% Change from 2008 to 2010
Residential	375,239,606	334,203,050	(41,036,556)	-10.94%
Commercial	239,676,448	212,318,575	(27,357,873)	-11.41%
Industrial Firm	43,813,232	34,420,234	(9,392,998)	-21.44%

Sales Volumes	2008	2010	Change	% Change from 2008 to 2010
Interruptible	81,194,377	53,847,399	(27,346,978)	-33.66%
Total	739,923,663	634,789,258	(105,134,405)	-14.21%

Other Taxes

Northwest Natural provided the following information regarding taxes other than income:

Table 27 – Taxes Other than Income

	2008	2009	2010	Change from 2008 to 2010
Property Tax	\$18,767,482	\$19,751,345	\$15,287,619	-18.5%
Payroll	\$4,634,687	\$5,181,757	\$5,053,714	9.0%
Other	\$158,978	\$185,394	\$321,543	102.2%
Regulatory Fee	\$2,492,966	\$2,500,251	\$2,432,537	-2.4%
Multnomah	(\$5,959)	(\$4,964)	(\$9,985)	-67.6%
Total	\$26,050,162	\$27,615,792	\$23,087,438	-11.4%

Upon request from Staff, NW Natural explained the increase in “other” taxes as shown in the table above was primarily due to a tax assessment from the State of Washington Department of Revenue and an increase in revenue based taxes paid to the Oregon Department of Energy.

Deferred Taxes

The table below shows NWN’s accumulated deferred income taxes for years 2008 through 2010.

Table 28 – Accumulated Deferred Income Taxes

	2008	2009	2010
Accumulated DIT	\$164,298,763	\$203,622,932	\$246,110,516

According to the Company, the increases in years 2008 through 2010 is primarily attributed to the federal bonus depreciation provisions. Oregon withdrew from the bonus depreciation provisions for tax years 2009 and 2010. In 2008, \$25 million was deducted as a cash pension contribution and in 2010 \$16 million was deducted.

Tax Credits

NW Natural received various Federal and State Income tax credits including a credit for Federal Tax paid on Fuel. Since 2008, NW Natural has used Business

Energy Tax Credits (BETC) totaling an estimated \$18,429. The BETC credits received during 2008 – 2010 are significantly less than the amount received in 2005 – 2007 where NWN received an estimated \$730,249.

Staff Recommendation

31. In any upcoming rate proceedings, Staff should verify that the entire cost of purchasing BETC's is booked to below-the-line accounts. Ratepayers do not receive any benefit from BETC's and therefore should not share in any of their cost.

Financial Records

Internal Audits

Staff reviewed the Company's internal audit program. The Company's Board of Directors has an Audit Committee consisting of six members. Each of these directors is an independent director as defined under current NYSE listing standards and the Company's Director Independence Standards. The chair of the committee has been deemed a financial expert as defined under applicable Securities and Exchange Commission rules.

The Company's Internal Audit Department completed five internal audits in 2008, six internal audits in 2009, and seven audits in 2010. Four internal audits have been completed as of September 2011. Staff reviewed six Audit Reports and was favorably impressed with the quality of the reports.

FAS 133 Mark-to-Market Accounting

According to the Company, in the ordinary course of business, NW Natural enters into a number of contracts to mitigate or control financial risks. Many of these contracts are considered to be financial derivative contracts (also referred to as ISDA contracts) and are accounted for under FAS 133.

The most common use of FAS 133 contracts by the Company is related to natural gas purchase contracts in which it actively manages the gas price risk. However, NW Natural also uses foreign currency forward purchase contracts and interest rate hedge contracts. The Company has used foreign currency hedge contracts for a number of years to manage the financial risk associated with paying pipeline demand charges and buying commodity supplies from Canada.

Property Sales

There has been one sale of real property by the Company between 2008 and 2010. A sale of the former Albany customer service center property was finalized on August 15, 2008. NW Natural does not have a specified mechanism for returning the gains from property sales to customers, but relies on agreement

from the Commission and Company on a case by case basis. In this case, the gain was deferred and refunded to customers in the 2008-09 PGA. See Order No. 08-395 entered July 31, 2008, Docket UP 245.

Securities Issuance

Information related to the below topics are available but this information is highly sensitive. This information provides a useful benchmark for future Staff analysis and a means of rapidly matching a security with relevant cost information. Due to the confidential nature of this information, it is not reproduced herein.

Competitive Issuance Cost

The Company demonstrated to Staff's satisfaction that it has worked to control and where possible to reduce the cost of securities' issuance through competitive processes for debt issuances in the last five years. Responses to Staff data requests depict action-by-action bidding and strategy and reflect NW Natural's initiative in providing benefits to ratepayers.

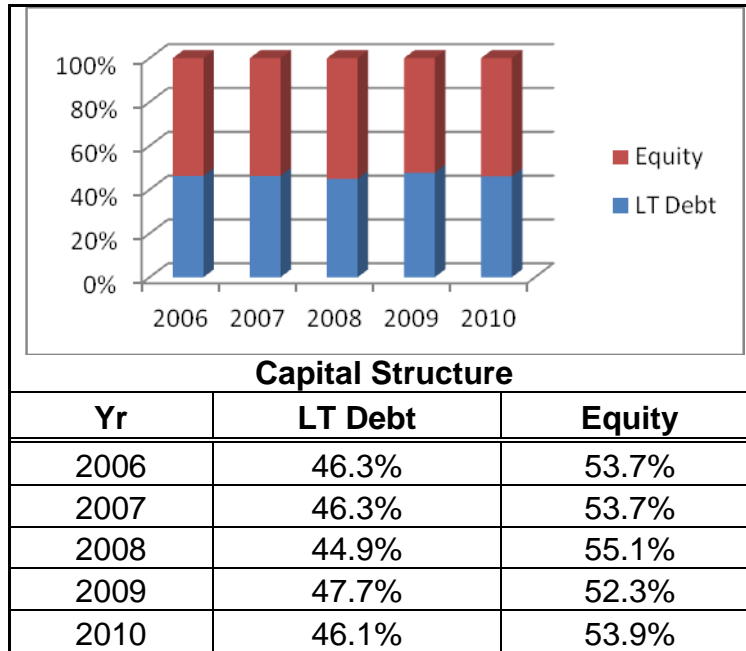
Staff Recommendations:

32. In any upcoming rate proceedings, Staff recommends a detailed examination of the Company's control of legal expenses surrounding securities' issuance. This examination should look at the assignment of legal costs across multiple related issuances, and confirm whether costs for like legal work reflect downward price pressures over time.

33. Staff recommends that Staff Reports in subsequent securities' issuance dockets require the Company capture and document legal expenses to reflect the purposes of the legal services or rendered the types of attorney or paralegal performing the work, and the billed cost to accomplish specific component tasks.

Access to Capital

Credit markets were dysfunctional in parts of 2008 and 2009. According to the Company, its 2008 financing plan was to issue up to \$85 million of long-term debt between August 1 and November 30, 2008. Problems in the banking sector caused NW Natural to use lower-cost short-term debt as bridge financing until financial markets unfroze. The Company was able to issue long-term debt on March 20, 2009, at the coupon rate of 5.37 percent. Conditions since have again allowed NW Natural to strategically manage issuance of securities to achieve its target long-term capital structure. NOTE: The Company currently has no preferred stock.



Early Redemptions

According to NW Natural, early redemptions in the last five years in a period of declining interest rates were necessary in reducing cost. Company provided documentation depicts bidding detail for early redemptions of outstanding issues.

Staff Recommendation

- 34. During any period of rising interest rate, Staff recommends examining early redemptions to confirm evidence of cost reduction against the Company’s need to control the number of securities outstanding for the same purpose.

Private Placements

Northwest Natural has not privately placed any long-term debt in the period from January 1, 2005 – December 31, 2010.

Investor Presentations

Staff reviewed the correlation of presentation and other materials with quarterly and annual filings with the Securities and Exchange Commission (SEC) provided by the Company.

Staff detects no material differences in NWN’s presentation materials delivered to investors, analysts or credit ratings and those delivered to either the SEC or the Commission.

Advice by Investment Banks to Northwest Natural

Staff notes that investment banks both advised and offered to sell financial services to the Company over the past five years. Below is a highlight.

Table 29 – NW Natural Advisory, Research, Credit and Other Reports

NW Natural		
An Illustrative List of Advisory, Research, Credit and Other Similar Financial Reports		
Date	Provider Name	Report Title or Description
7/20/2011	UBS	Indicative Fixed Income Pricing Update
7/19/2011	CIBC	Complete Financial Market Update
6/1/2011	Bank of America Merrill Lynch	Fixed Income Pricing Update
5/31/2011	Wells Fargo Securities	Debt Private Replacement Market Update
4/7/2011	UBS	Capital Market Update
4/1/2011	Bank of America Merrill Lynch	NWN Overview and Market Updates
3/15/2011	Wells Fargo Securities	DCM Update and Liability Management Discussion
3/7/2011	J.P. Morgan	General Market Overview and NWN
2/11/2011	J.P. Morgan	Debt Private Placement Market Discussion
12/10/2010	J.P. Morgan	Market Update
11/16/2010	US Bancorp	Capital Markets Overview & Financing Discussion
10/20/2010	J.P. Morgan	Market Update
10/14/2010	Wells Fargo Securities	Debt Capital Markets Update
10/13/2010	CIBC	General Market Update
8/1/2010	J.P. Morgan	Protecting Rates Ahead of Note Issuance
8/27/2010	UBS	Debt Capital Markets Update
8/26/2010	UBS	Risk Management Discussion
6/9/2010	MUFG	Bank and Capital Markets Overview
1/1/2010	Morgan Stanley	Financial Environment Update
1/27/2010	UBS	Interest Rate Risk Management
8/10/2009	Bank of America Merrill Lynch	Strategic and Capital Markets Environment
7/1/2009	J.P. Morgan	Financial Market Updates
12/1/2008	Bank of America	2008 US Commercial Paper Placement Analysis
9/26/2007	AG Edwards	Gas Utility Equity Research
9/27/2006	AG Edwards	Gas Utility Industry Overview
9/21/2005	Daniel M. Fidell, Analyst	Industry Analyst Perspective on NW Natural

Staff Recommendation

35. Staff should review actions taken pursuant to advice presentations to the Company in future general rate cases, where the same investment bank or its affiliates or marketing partners plays a significant role in affecting such a recommended action.

Public Stock Offerings, Reinvestment Plans and Incentive Plans

Remarkably, Northwest Natural’s last public stock offering was in 2004. All common stock costs since then have been associated with the following three programs:

1. Dividend Reinvestment Plan (DRIP),
2. Employee Stock Purchase Plan (ESPP), and
3. Restated Stock Option Plan (SOP)

Issuance costs associated with these programs have ranged from none to approximately \$30 thousand annually over the last five years.

Rating Agency Reports, Ratings, and Calculations

Staff reviewed Standard and Poor’s (S&P) and Moody’s rating agency reports to better understand agency concerns regarding the Company and the calculation of inputs into agency decisions. “NWN” is used in the following table as an abbreviation for Northwest Natural Gas Company.

NW Natural’s analysis of ratios and other information used by credit rating agencies is considered highly sensitive and is not reproduced or summarized herein. The Company has demonstrated to Staff that it actively pursues high credit ratings as part of its foundational corporate strategy. Ratios important to rating agencies were maintained within target parameters from 2005 to 2010.

The table below demonstrates NWN’s stable, positive trend in credit ratings.

Table 30 – NWN Credit Trend

Credit Ratings	Sep. 2011		Dec. 2007		Dec. 2003	
	S&P	Moody's	S&P	Moody's	S&P	Moody's
Outlook	Stable	Stable	Stable	Stable	Stable	Stable
Senior Secured Long-Term Debt	A+	A1	AA-	A2	A	A2
* Commercial Paper	A-1	P-1				

Commercial paper is included as a current snapshot. Here the ratings indicated that these credit rating agencies apparently have no issue with NWN’s (Commission-jurisdictional) credit facilities used to support the issuance of commercial paper.

Customer Service

Staff reviewed customer service data provided by Northwest Natural.

Three customer service initiatives identified in responses to Staff data requests and shown in the table below are aimed at improving the following:

- Odor/emergency call intake process – (1) Emergency Call Intake;
- Inside odor classification and response – (2) Inside Odor Classification; and
- Appointment establishment process – (3) Service Appointment Window.

All three of these initiatives are focused on improving Company identification of and response to odor/emergency calls, which will enhance both the customer experience and company response efforts. While the Service Appointment Window initiative is still under review, it is strongly recommended that the Company proceed with this initiative.

The following table provided to Staff by the Company, contains the comment and outcomes, current status and proposed completion dates for the initiatives.

Table 31 – NW Natural’s Customer Service Initiatives

	Initiative Description	Comments / Outcomes	Status	Proposed Completion Date
1	Emergency Response (ER) Improvement – Office – Dedicated CSRs to ER Call Intake [1]	Company initiated to enhance call intake time for odor and other emergency calls.	Approved. In implementation phase	03/01/12
2	Emergency Response Improvement – Field – Business process changes around Inside Odor Response [2]	Company initiated. Change will dictate that service technicians meet immediate response, or if on an existing service call, meet next call response for all odor calls.	In progress	To be determined
3	Service Appointment Windows	Company initiated based on customer feedback from surveys and other customer interactions.	Under review	Unknown

The detailed customer counts and projections provided to staff are summarized below.

Table 32 – NW Natural’s Actual and Forecasted Customer Percentage Growth Year-to Year

Year	A	B	C	D	Total
2005	545,163	58,914	699	247	605,023
2006	564,759	59,890	695	251	625,595
2007	580,346	60,748	694	525	642,313
2008	595,573	61,927	627	179	658,306
2009	602,903	62,345	614	175	666,037
2010	608,367	62,498	590	153	671,608
2011*	615,857	62,134	586	145	678,722

* 2011 amounts are forecasted amounts provided by NWN in response to Staff Data Request No. 66.

As shown in the following table, NW Natural’s actual growth is consistent with the reported growth in its financial statement and Annual Reports.

Table 33 – NW Natural’s Actual and Forecasted Customer Percentage Growth Year-to Year

Year	A	B	C	D	Total
2006	3.59	1.66	-0.57	1.62	3.40
2007	2.76	1.43	-0.14	109.16	2.67
2008	2.62	1.94	-9.65	-65.90	2.49
2009	1.23	0.67	-2.07	-2.23	1.17
2010	0.91	0.25	-3.91	-12.57	0.84
2011*	1.23	-0.58	-0.68	-5.23	1.06

* 2011 amounts are forecasted amounts provided by NWN in response to Staff Data Request No. 66.

Key: A – Residential
 B – Commercial
 C – Industrial Firm
 D – Industrial Interruptible

Customer Call Data and Analysis

The following tables highlight NW Natural’s customer call data and analysis.

Table 34 – NW Natural’s Actual Customer Percentage Growth Year-to Year

Year	Number (000)	Percentage (Increase/- Decrease)
2005	973	-
2006	942	-3.2
2007	999	6.1
2008	934	-6.5
2009	955	2.2
2010	911	-4.6

The Commission periodically receives consumer complaints regarding access/hold times when trying to reach the Company for non-emergency service. NW Natural has proven to be very responsive to customer access/hold times and takes immediate action to alleviate congestion. The Company’s use of their call statistics to adjust staffing to meet peak call periods appears to be working effectively based on the experiences of the Commission call center staff.

According to the Company, with respect to customer complaints and inquires, NW Natural tracks and reports on only those received through the Consumer Services Division of the Commission. The categories are billing, customer acquisition, field service, office service, WARM rates, and miscellaneous. For a historical look, a six year Company history is shown as follows:

Table 35 – NW Natural’s Customer Complaints

Year	Inquires	At Fault	Total
2005	219	15	234
2006	171	42	213
2007	103	9	112
2008	109	6	115
2009	118	7	125
2010	87	10	97

NW Natural effectively uses a variety of billing related communication pieces to effectively communicate with customers about emerging issues. These targeted communications have contributed to an over fifty percent reduction in total complaints since 2005.

The Company’s advance metering integration project (AMI), which allows the Company to read meters remotely, resulted in a reduction of 51 meter reading positions. The new AMI system does require that an AMI Driver (Utility Support 2 or 3) drive routes using a company vehicle equipped with automate remote meter reading equipment. As a result of the new process, eight Utility Support-3

personnel and 4 AMR Utility Support-2 drivers have been added since the AMI project started in 2006.

Table 36 – NW Natural’s “Field” Customer Service Personnel

Positions	2010	2009	2008	2007	2006
AMR Drivers (Utility Support 2)	7	5	7	3	3
Meter Readers	0	24	35	27	51
Utility Support 3	10	11	10	4	2
Service Techs (Non-Industrial)	94	87	90	97	100
Service Techs (Industrial)	5	4	5	5	5

Table 37 – NW Natural’s “Field” Customer Service Personnel per Thousand Customers

Position	Positions Per 1,000 Customers				
	2010	2009	2008	2007	2006
AMR Drivers (Utility Support 2)	0.01	0.01	0.01	0.00	0.00
Meter Reader Per Customer		0.04	0.05	0.04	0.08
Utility Support 3	0.02	0.02	0.02	0.01	0.00
Techs Per Customer (non-industrial)	0.14	0.13	0.14	0.15	0.16
Techs Per Customer (industrial) [1]	5.42	4.29	5.31	5.32	5.29

Although the number of customer technicians has increased slightly since 2008, Oregon Commission Consumer Services regularly receives complaints from customers that NW Natural makes them wait more than one day to have service connected or restored after an involuntary disconnection. Other utilities routinely connect or restore service the same day, or the next, in accordance with OAR 860-021-0328(3)(a) which specifies that, “An energy utility must reconnect service as soon as reasonably possible within the normal course of business...” Failure to reconnect service the same or next day is often attributed to tight scheduling of the customer technicians.

Conclusion

Staff appreciates the cooperation received from NW Natural during the audit process. NW Natural's timeliness and exactness in responses allowed Staff to complete this report in a timely and quality manner.

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