ITEM NO. CA8

PUBLIC UTILITY COMMISSION OF OREGON
STAFF REPORT
PUBLIC MEETING DATE: September 2, 2014

REGULAR ____ **CONSENT** X **EFFECTIVE DATE** N/A

DATE: August 21, 2014

TO: Public Utility Commission

RF

FROM: Matthew Muldoon and Robert Fonner

MH for MG MH

THROUGH: Jason Eisdorfer, Maury Galbraith, and Marc Hellman

SUBJECT: NORTHWEST NATURAL: (Docket No. UF 4289) Requests authority to issue up to $325,000,000 of debt securities.

STAFF RECOMMENDATION:

Staff recommends the Commission approve Northwest Natural Gas Company's (NW Natural, NWN, or Company) application subject to eight conditions and reporting requirements.

DISCUSSION:

Northwest Natural filed an application entered July 31, 2014, pursuant to ORS Chapter 757 in general and more specifically ORS 757.405, ORS 757.410(1), ORS 757.415, and 860-027-0030 for authority to issue and sell or exchange up to an aggregate amount of $325 million Secured and Unsecured Notes issued under the Company's Medium-Term Note Program, junior subordinated debentures under an indenture between the Company and the trustee specified therein, and other debt instruments having maturities of at least one year (Debt Securities).[1] The Company has stated that it expects this authority to accommodate its long-term debt financing requirements for the next several years.$^{\Delta}$ [2]

Staff concludes that subject to the recommended conditions as provided herein, the proposed issuance satisfies the Commission's and statutory criteria. Staff recommends that the Commission approve Northwest Natural's application. The order approving the Company's application will terminate all remaining long-term debt issuance authority

---

1 Long-term debt as used in this Staff Report and the Company's application denotes debt having a maturity of over one year. Information regarding debt maturities over the 9 month or 270 day maximum maturity of Commercial Paper, but less than one year is received by Staff for informational purposes only, consistent with ORS 757.415(3).

2 The **Symbol** $^{\Delta}$ is used to designate representations made by the Company in a phone discussion between Staff and Northwest Natural held on August 13, 2014.

granted by prior Commission Orders.[3] Thereafter, Debt Securities may be issued in any proportion and in any combination of differently sized public offerings or private placements provided that the combined total of these offerings does not exceed $325M, inclusive of any original issue discount (OID). Other conditions and restrictions recommended by Staff are discussed below.

Note: This report contains fewer conditions than similar recent Staff memos because Northwest Natural currently intends to issue debt in U.S. markets.

The Company has reviewed this memo and does not oppose any of the recommended conditions.

Financial Instruments:

Northwest Natural states that the Company may issue a mix of secured or unsecured Debt Securities including First Mortgage Bonds, which are generally in the form of Medium Term Notes (MTN). The Company has no outstanding unsecured long-term debt of the type described in this docket.$^{\Delta}$

In addition to fixed-rate debt, the Company may issue floating-rate debt with interest rates that reset periodically (e.g., daily, monthly, quarterly, or semi-annually). As a general matter, interest rates for floating rate debt may be periodically reset and are often based on a spread over 1-, 2-, 3-, or 6-month London Interbank Offering Rates (LIBOR) as reported on Bloomberg or other customary LIBOR sources.

Staff Recommendation: Staff recommends that in no case (other than customary provisions providing for interest rates upon defaults) will the spread over pertinent LIBOR exceed 1.5 percent at the time Debt Securities are priced. This 1.5 percent spread allows sufficient headroom to attract investors at competitive rates under current market conditions. In the unlikely event that LIBOR is not reported or is unavailable, the Company may use an alternative floating rate from another recognized source that is commonly used as an alternative in the financial markets (e.g. Federal Funds) or a rate otherwise intended to approximate LIBOR.

Convertible Debt:

Currently the Company has no outstanding preferred stock. Northwest Natural clarifies that its application does not request and the Company does not intend to issue Debt Securities that are convertible to either common or preferred stock.$^{\Delta}$

---

3 The termination of prior authority to issue bonds or notes under prior orders is consistent with page two of the Company's application. Staff notes that authority for the Company's credit facilities is addressed in separate dockets and is unaffected by this docket.

Competitive vs. Negotiated Issues:

The Company represents that it may seek attractive pricing through either of two methods. Debt Securities issued on a competitive basis involves Northwest Natural requesting competitive quotes as of a specific date and time. In contrast, Debt Securities issued on a negotiated basis has the Company utilizing one or more investment banks to shop its Debt Securities offering. Depending on the Debt Securities offering, its target placement, and market conditions Debt Securities issued on a negotiated basis can achieve lower all-in costs for ratepayers.

For example in the fall of 2012, Northwest Natural arranged on a negotiated basis Debt Securities in private placement at attractive all-in rates with a delayed start / draw at essentially no incremental risk or cost.

International Financing:

The Company states that it will issue domestic, U.S. dollar denominated Debt Securities, and will require no currency exchange hedging or carry trade.$^{\Delta}$ As Northwest Natural's offerings are well recognized in the United States, the Company will not require supporting letters of credit (LC).$^{\Delta}$

Financial Hedging, Puts and Calls:

Commission Order No. 07-032 authorized the Company to utilize financial hedging tools. However, Northwest Natural represents that in the specific instance of this requested authorization to issue Debt Securities, the Company does not currently intend to enter into financial hedges such as fixed vs. floating interest rate swaps in connection with the debt issuances under this docket, however the Company has requested authority to do so in the event market conditions are appropriate.$^{\Delta}$ Northwest Natural also does not contemplate any puts and calls at this time as described on the top of page 14 of the Company's application, but requests the ability to use puts and calls when prevailing market conditions warrant it.$^{\Delta}$

In the event that the Company directly or constructively, engages in interest rate hedging arrangements related to bond issuances, including treasury interest rate locks, treasury interest rate caps, treasury interest rate collars, treasury options, forward starting interest rate swaps, and swap option combinations (swaptions), the Company will meet Staff expectations. The Company does not claim, and Staff has seen no evidence, that any of the above options are necessary or cost effective in comparison to a delayed issuance in private placement at this time. However, the Company wishes to maintain flexibility for possible future hedging activity relating to Debt Securities. The Company does not request, and this order does not grant, currency hedging, speculation or investment.

<u>*Staff Recommendation Regarding Hedging*</u>: The Company's hedging must comply with the Company's internal financing and operating policies. Moreover, the Company recognizes that it should either conduct its own analysis of proposed hedging transactions, or use independent third party analysis, in addition to evaluating an investment bank's indicative analysis. The Company agrees with Staff, as memorialized here, that before entering into a hedging arrangement for the Debt Securities, it will perform "its own" in-depth analysis of incremental risks and costs represented by hedging, or rely on independent third party analysis. Proposed hedges should be benchmarked against alternatives inclusive of no hedge and delayed start in private placement addressing outcomes under potential outlier events as well as most likely outcomes. Hedging analyses may be informed by, but should not solely rely on investment bank provided materials. The analyses should place minimal weight on unverified indicative data, and select range of years "snapshot" trend analysis.

The hedging analyses should clearly identify material assumptions and answer the question: "Who wins and who loses, how much money, if assumptions and correlations do not hold true?" The analyses may rely on third party quantitative cost and risk analysis provided by a directly retained independent third party expert firm not associated with investment banks and not in the business of finding or acting as hedging counterparties.

The hedging analyses should capture contemporaneous cost quotes for hedging products, customized to allow the Company to avoid taking on incremental cost and risk in excess of the underlying volatility the Company strives to manage, inclusive of swaps with asymmetric distribution of outcome tails that trade some likelihood of surplus upside potential gain for elimination of downside risk should hedging assumptions and expected correlations not hold true. The analyses should also disaggregate any vanilla swaps and standardized hedging product from bond and debt securities issuances, and compare the cost of those products sourced via investment banks against the cost of exchange traded derivatives.

The Company asserts here that it will draw upon experience gained from previous hedging transactions to control the cost of similar future hedging activity, in part to reduce the costs of customized hedging arrangements, including investment bank fees and legal costs of delayed starts in private placements.

The Company also represents that its hedging policy is a general outline and not an analytic evaluation tool that can be relied upon in lieu of the Company's own case-by-case analysis of whether to enter into a hedge. In addition, the hedging policy allows for multiple accounting methods, and the Company represents that the hedging policy is not an after-the-fact evaluative tool that measures the cost vs. benefit of the hedge and determines the extent to which it managed underlying volatility. Thus the Company represents here that it will: 1) perform its own analysis prior to entering into any hedging; 2) monitor active hedges for unfavorable developments; and 3) carry out after the-fact hedging evaluations from a rigorous and practical financial operations perspective, understanding that this perspective will not be the same as accounting tests of effectiveness.

For all hedging activity, other than delayed start in private placement with de minimis incremental cost and risk, the Company will maintain its analysis in a MS Excel spreadsheet form that can be provided to Staff on request. The Company will maintain this analysis at least through the conclusion of its next general rate case in Oregon after each financial hedge is completed or unwound.

Example:

Based on the Company's own internal analysis, identifying these action(s) as lower cost and risk against other reasonable alternatives at the time(s), the Company may: 1) Issue floating rate debt and subsequently, 2) Fix that debt, and 3) Retire an interest rate swap, assigning a gain or loss to a subsequent Debt Securities issuance. Note that in this example, executing decisions are predicated on the Company's own analysis and not solely on recommendations or offerings from a counterparty investment bank.

No currency exchange hedging is permitted in conjunction with Debt Securities issuance authority requested herein. This specific exception to Order No. 07-032 does not limit other or future application of Order No. 07-032. The Company will revisit this topic afresh in its next Debt Securities financing application when Northwest Natural's needs or market conditions may have changed.

Credit Ratings as of August 14, 2014:

Northwest Natural's FMBs are currently rated as:

Moody's: A1 **S&P**: AA–

The Company's Unsecured Long-Term Debt is currently rated as:

Moody's: A3 **S&P**: A+

Note: S&P does not technically rate Northwest Natural's unsecured debt. Rather S&P adopts the Company's general corporate rating for unsecured debt.

In general, the interest rate or coupon is higher for unsecured debt because the unsecured ratings are typically one or two notches less than secured ratings. Smaller sized debt issuances may be more advantageous in the private placement market since it provides flexibility of timing and size, and may provide lower all-in issuance costs.

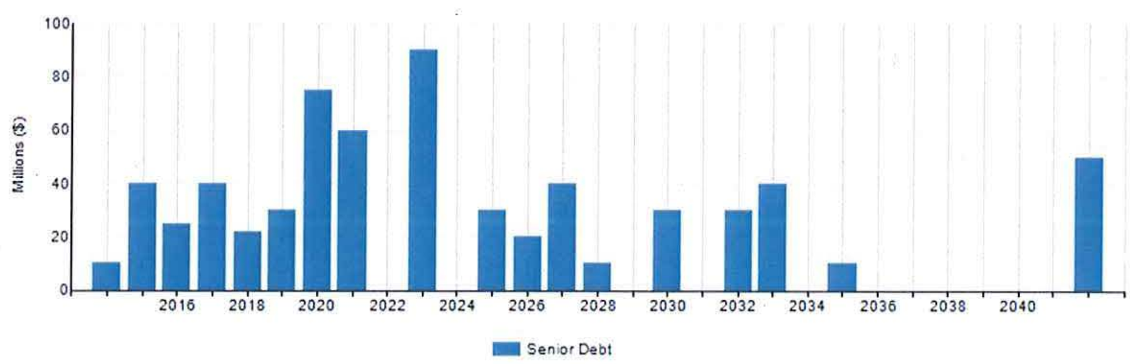
Private placements generally do not require rating by rating agencies.[4] But, private placements do have an implied rating based on the Company's current ratings.

The Company asks that an order authorizing Debt Securities issuances remain in effect so long as the NWN's senior secured debt has investment grade ratings from both Standard and Poor's (S&P) and Moody's Investors' Service (Moody's). Staff's review of like jurisdictional financing applications finds the Company's request usual and reasonable. However, Staff finds there are numerous situations when just one of the two largest rating agencies covered jurisdictional Debt Securities without adverse effect on ratepayers or utilities. Condition 6 is therefore less stringent than requested by the Company.

<u>Staff Recommended Condition Regarding Credit Rating Agencies</u>: Reviewing Commission jurisdictional energy utility historic bond issues and ratings, Staff finds that an investment grade rating by either Moody's[5] or S&P[6] is sufficient. This proposed flexibility does no harm, but may offer small efficiency and cost benefits.

<u>Staff Recommendation Regarding Authorization of Longer than 30-Year Maturities:</u> Confidential benchmarking by Staff indicates that issuances of up to 45-year maturity debt at reasonable costs may be available to Northwest Natural. Such longer maturities (i.e. more than 30-years) may lock in historically low coupon rates while reducing pressure on the Company's debt maturity profile shown below. Therefore, Staff's recommended conditions are silent regarding maximum maturity, permitting longer than 30-year maturities when prudent and cost effective.

Debt Maturity Profile (Data displayed in USD)
(Includes outstanding notes, bonds, and trust preferreds with original maturity greater than 1 year)



Source: SNL Financial LC. Data is restricted to exclude Gil Ranch Storage, LLC.

---

4 Debt in private placement may not be rated and registered.

5 Staff confirmed credit ratings from Moody's on August 14, 2014, from: https://www.moodys.com/page/search.aspx

6 Staff confirmed credit ratings from S&P on August 14, 2014, from: http://www.standardandpoors.com/en_US/web/guest/ratings/entity/-/org-details/sectorCode/UTIL/entityId/101789

Staff Recommendation Regarding Spreads Over U.S. Treasuries' (UST) Yields: The Company's requested "Maximum Spreads over Benchmark Treasury Yields" on page 12 of its Application are replaced by values shown in Attachment A to this memorandum. Staff's lower recommended values in Attachment A are based in part on Bloomberg data summarized by the graphs in Attachment C. Limits shown in Attachment A allow adequate headroom for the Company to issue Debt Securities under financial market conditions anticipated by the Board of Governors of the Federal Reserve System over the next several years.[7]

Further, Staff sees few if any recent U.S. utility bond issuances with 15-, 20-, or 25-year maturities. When those unutilized maturities are removed from Attachment C, Staff's recommended spread over UST provides adequate headroom for the Company's likely 10-year or less, and 30-year Debt Securities issuances. Staff's recommended spreads are higher than like dockets in part because this authorization is intended to permit Northwest Natural to borrow to meet its utility obligations for three or more years. However, this relatively long view does not relieve the Company of demonstrating in a rate case, that executed spreads were indicative of market conditions prevailing at time of arrangement and commitment for like-rated regulated utility issuances. See further discussion under Hard Cap Alternative on the next page.

Staff Recommendation Regarding Underwriter and Agent Fees: Appendix A also shows Staff's recommendation regarding the maximum range of allowed agent and underwriting commissions for issuances. Underwriters' commissions represent the maximum commission to be paid by the Company and vary depending on the maturity of the Debt Securities issued (e.g., 0.875 percent of principal amount of Debt Securities is estimated to be the customary and prevailing market fees for issuances with maturity dates of approximately 30 years). Shorter maturities typically require lower commissions than do longer maturities.

Staff's recommended limits on underwriting commissions are stated in basis points (bps) or percentages of aggregate principal amounts. Under Staff's recommendations, underwriting commissions will not exceed 0.875 percent of principal amount of Debt Securities (approximately $3 million in aggregate across the requested authorization), except in the Hard Cap Alternative.

7 Staff accessed the minutes and materials of the Board of Governors of the Federal Reserve System, minutes of the Open Market Committee released for the meeting of June 17-18, 2014, at http://www.federalreserve.gov/monetarypolicy/fomccalendars.htm .

Other Technical Expenses:

After netting-out issuance fees as illustrated in Attachment B,[8] the Company expects to achieve approximately 99 percent of issuances in aggregate net proceeds, not including any OID determined at the time of issuance.

The representative aggregate fees and charges in Attachment B are higher than for recent benchmark issuances.[9] The Company may issue multiple separate sets of Debt Securities spread out over several years rather than a single set of coordinated issuances within the same year. Northwest Natural must still show that issuance costs were consistent with component costs for like stand-alone issuances in future audits or general rate cases.

Staff Recommendation Regarding Hard Cap Alternative: Should spreads exceed the relevant maximum spread over UST for fixed-rate Debt Securities set forth in Attachment A, the Company may still issue fixed-rate Debt Securities without further Commission approval if the All-in Rate does not exceed a "hard cap" of 6.0 percent, subject to additional reporting requirements outlined in Condition 6.[10] A 6.0 percent All-in Rate "hard cap" allows additional headroom to assure Company access to debt markets under stressed market conditions, while providing reasonable cost controls to protect ratepayers. Northwest Natural asked for a 6.5 percent hard cap, however, Staff finds that a 6.0 percent hard cap is adequate at this time when benchmarked against recent Commission Order Nos. 14-145 and 14-268. Therein, Portland General Electric Company with lower Credit Ratings and PacifiCorp with comparable Credit Ratings in the orders referenced above were authorized a 6.0 percent hard cap.[11]

Additionally, the Company may incur a new prevailing fee(s), not to exceed an aggregate 10 basis points of affected principal. Northwest Natural's next reporting to the Commission should include materials to demonstrate that this cost was new and market-pervasive at time of issuance. This flexibility addresses the potential for an additional fee(s) or charge(s) by investment banks, agents, organizers or other parties

---

8 Attachment B sets out Northwest Natural's Estimated Representative Issuance Expenses for the FMB and Unsecured Notes issuances.

9 Staff captured 2013-2014 debt issuance detail reported by the Wall Street Journal, Bloomberg, and SNL Financial LC, for electric and natural gas utilities that Value Line covers, including NWN.

10 See the definition for "All-in Rate" or "All-in Cost" includes all expenses associated with issuance, the coupon rate, and any discount or premium from par value at issuance. Technically, it is the percentage internal rate of return when all costs, such as any original issue discount, floatation, and insurance costs, as well as the actual cash flows of the security, are included.

11 Since PacifiCorp's application for authority to issue debt, Bloomberg shows 10-year spreads over U.S. Treasuries (UST) have narrowed slightly and 30-year spreads over UST has widened slightly. Meanwhile UST yields have fallen. For example, the 10-year UST yield has fallen to 2.345 percent as of August 15, 2014, down about 20 basis points.

that is not part of itemized bond issuance costs routinely encountered in July 2014 bond markets.

Use of Proceeds:

The Company states that it may use proceeds for any or all of the following purposes:

1. Construction, facility improvement, and maintenance programs;
2. Retire or exchange outstanding stock, bond, note, or other debt issuances;
3. Reimburse Company treasury for funds previously expended; and
4. Other purposes, as may be permitted by law.

There is no single specific large project planned, that this issuance authority would support. Rather the Debt Securities would support usual utility purposes, consistent with statutory requirements.[12] In general, ratepayers benefit to the extent that the Company can optimize timing and cost of financing cash flows to meet utility needs described above.

Early Redemption Features Authorized:

Northwest Natural may utilize early redemption features to provide financial flexibility. In addition, the Company will stand ready to demonstrate how any early redemption and refinancing executed was cost effective based on prevailing market conditions at the time of execution.

A make-whole redemption feature allows an issuer to call Debt Securities at any time at a cost equal to the future debt service discounted back to the redemption date. Such provisions are usual and generally neutral or to ratepayers' benefit. The discount rate for a make-whole provision within a call feature is likely be a rate based on the prevailing treasury yield to remaining maturity plus additional basis points. This type of redemption does not typically require the issuer to pay a higher coupon or fee since the bond holder is effectively made whole.

Capital Structure:

Northwest Natural roughly targets a long-term 50/50 Debt/Equity capital structure. $60M of the Company's FMBs retire in 2014. Approval of the Company's request subject to Staff's conditions is consistent with Northwest Natural's targeted capital structure. NWN last related filing with the SEC is shown below:

---

[12] The Company's intended uses mirror those authorized in ORS 757.415(1).

Filed w SEC	2014 Q2 8-K	
5-Aug-14	2013	2014
Common Stock	47.5%	49.2%
LT Debt	43.9%	39.7%
ST Debt	8.6%	11.1%
Total	100.0%	100.0%

	2014 Q2 8-K	
Implied	2013	2014
Common Stock	52.0%	55.3%
LT Debt	48.0%	44.7%
Total	100.0%	100.0%

Selection of Agents:

Selection of agents, underwriters and external counsel may include entities familiar with the Company's outstanding Debt Securities based in part on knowledge of the Company's business, and proven ability to place debt, and to provide cost effective services. The Company may select additional service providers for the issuance of Debt Securities as it deems appropriate.

Adequate Collateral Pool and Interest Coverage:

Staff's review of the Company's mortgage and deed documentation confirms there are no technical limitations therein not met by the Company's continued operations. First, Northwest Natural's pool of appropriate regulated utility assets is sufficient to permit the issuance of $325M in FMB over the next three years. In addition, the Company's earnings are projected by Value Line to be more than twice the interest coverage – were requested authority used to issue FMBs over the next three years. Finally exhibit I-1 (page numbered variously 7 or 15 of 53 in the Company's application) indicates that Northwest Natural also has some additional flexibility. The Company could deploy a 70 percent multiplier in lieu of the current 60 percent threshold of applicable property additions were that additional headroom needed.

No Harm:

Staff review of this application indicates that the Debt Securities issuance requested will do no harm and can be expected to benefit ratepayers. Staff recommends approval of Northwest Natural's application as modified herein. The Company has reviewed this memo and does not oppose any of its terms.

PROPOSED COMMISSION MOTION:

The Company's application for authority to issue up to $325,000,000 of Debt Securities be approved subject to the following eight conditions and reporting requirements:[13]

1. Authorization Limit

Total aggregate Debt Securities issued, sold, or exchanged under this authority must not exceed $325 million, inclusive of any OID discount.

2. Withdrawal of and Exceptions to Prior Authorizations:

All prior Commission's long-term debt issuance authorization under Order 08-539 in Docket No. UF 4254 will automatically terminate upon the issuance of a Commission Order in UF 4289 approving the Company's Application to issue Debt Securities up to the limits shown in Condition 1. For avoidance of doubt, the Company's credit facilities are handled in separate dockets and are unaffected by this docket.

Exception to Order No. 07-032: The Company must not engage in the following in conjunction with Debt Securities issued hereunder:
A. Currency exchange hedging, with or without carry trade borrowing;
B. Convertible debt (into either common or preferred stock)

3. Cost Requirements

Subsequent to an authorizing Commission order pursuant to this application, the Company may issue Debt Securities without further Commission approval provided either:

A. Spread(s) over yield(s) on like maturity UST for fixed-rate Debt Securities do not exceed limits set forth in Attachment A. Interest rates on floating rate Debt Securities may be periodically reset based on a spread over 1-, 2-, 3-, or 6-month London Interbank Offering Rates (LIBOR) or other customary floating rate sources. In no case (other than for customary default interest rate provisions) for floating rate Debt Securities will the spread over pertinent floating rate index exceed 1.5 percent. In the unlikely event that LIBOR is not reported or is unavailable, the Company may use a rate from another recognized customary source intended for floating rate debt.

B. The Company may issue fixed-rate Debt Securities even if the spread would exceed the amounts permitted by clause (A) above so long as the All-in Rate does not exceed a 6.0 percent "Hard Cap," plus an Unanticipated Fee Allowance as defined next.

---

13 The Company has told Staff that it agrees to Staff's proposed conditions and reporting requirements.

C. The Company may incur a new prevailing fee(s) (Unanticipated Fee Allowance), not to exceed an aggregate 10 basis points of affected principal. Northwest Natural should including materials in its next reporting to the Commission demonstrating that this cost was new and market pervasive at issuance.

4. Hedging

The Company's hedging must comply with the Company's internal financing and operating policies. Authorization to enter into Interest Rate Hedging Arrangements as requested is predicated upon the Company's completion of the Company's own affirmative comprehensive analysis or use of independent third-party analysis. Regardless of any prevailing hedging and accounting policies, and regardless of the presence of associated materials generated by investment banks or hedge counterparties, prior to executing any hedging or financial derivative agreement, other than a delayed issuance arrangement of up to one year under a private placement at de minimis incremental cost and at no incremental risk, the Company will perform its own comprehensive analysis regarding hedging costs, benefits and risks, or will obtain expert advice from an entity not associated with investment banks and not offering hedging contracts. The Company will stand ready to present its hedging analysis to the Commission upon request and will maintain its analysis as described in the body of this report. No currency hedging or speculation is authorized.

5. Cost Competitive

A. Agent and underwriting commissions/discounts for the issuance of Debt Securities will not exceed the fees as shown in Attachment A.

B. The Company may issue Debt Securities even if the agent and underwriting commissions/discounts for the issuance of Debt Securities exceed the fees as shown in Attachment A so long as the All-in Rate does not exceed a 6.0 "Hard Cap," plus an Unanticipated Fee Allowance.

C. The Company shall demonstrate for all Debt Securities issuances and associated activities that the Company achieved cost effective All-in Rates.

6. Timely Reporting

A. The Company will promptly provide a written summary notice through the PUC filing center and through email directly to PUC Staff named on the service list for this docket of any Debt Securities issuance or execution of a bond purchase and sale agreement. A summary notice need only show series name, maturity, coupon rate, principal, and agreement date.

B. The Company will also provide the Commission with the customary Report of Securities Issued and Disposition of Net Proceeds statements (Reports) no later than 30 calendar days after any Debt Securities transaction has been closed and funded. Reporting denominated in U.S. dollars will include, but not be limited to: total value of the issuance; total and per unit fees and expenses (including external legal costs); interest costs; credit ratings; and an explanation of the Company's choice and cost of placement. Fees, expenses and invoices not then available will be provided as available.

C. For each Debt Securities issuance under condition 3-B, the Company shall also report to the Commission within 30 calendar days why 3-B was invoked.

7. Maintenance of Credit Ratings

The Company's authorization to issue additional Debt Securities granted by an Order issued pursuant to this application will be terminated as of such time that both S&P's and Moody's credit rating for the Company's senior secured debt fall below Investment Grade.[14]

8. Reservation of Judgment Regarding Reasonableness

The Commission will reserve judgment on the reasonableness for ratemaking purposes of the Company's capital costs, capital structure, and the commissions and expenses incurred for Debt Securities issuance and related activities.

UF 4289

[14] Investment grade long-term debt is rated BBB– or better by S&P, or Baa3 or better by Moody's. Staff does not foresee a loss of ratepayer perceived protection or value absent ratings by Fitch.

Attachment A

Maximum Allowable Agent and Underwriter Commissions,
& Spread over UST Yields at Time of Commitment
for Fixed-Rate Debt Securities in Normal Market Conditions

Maturity		**Maximum Underwriters Commission/Discount**	**Long-Term Debt Annual Spread**	
At Least	**But Less Than**		**FMB**	**Unsecured Notes and other Debt Securities**
Years		**Percentage of Aggregate Principal Amount of Debt Securities Sold**	**Basis Points (bps)**	
1	1.5	0.150%	105	125
1.5	2	0.200%		
2	3	0.250%		
3	4	0.350%		
4	5	0.450%		
5	7	0.600%	125	150
7	10	0.625%		
10	12	0.650%	175	200
12	15	0.675%	200	225
15	20	0.750%		
20	30	0.875%	250	275
30	46			

Note: Comparing Bloomberg data[15] for like rated utility bonds, Staff finds that the schedule above provides access to capital under current market conditions with reasonable headroom for fixed rate combinations of issuances in public, and private placement with delayed start at no or minimal incremental cost that may benefit ratepayers over at least the next several years.

---

15 Staff referenced Bloomberg FMB and Unsecured USD indexed data on August 14, 2014.

Attachment B

Northwest Natural's[16]

Estimated Representative Issuance Expenses

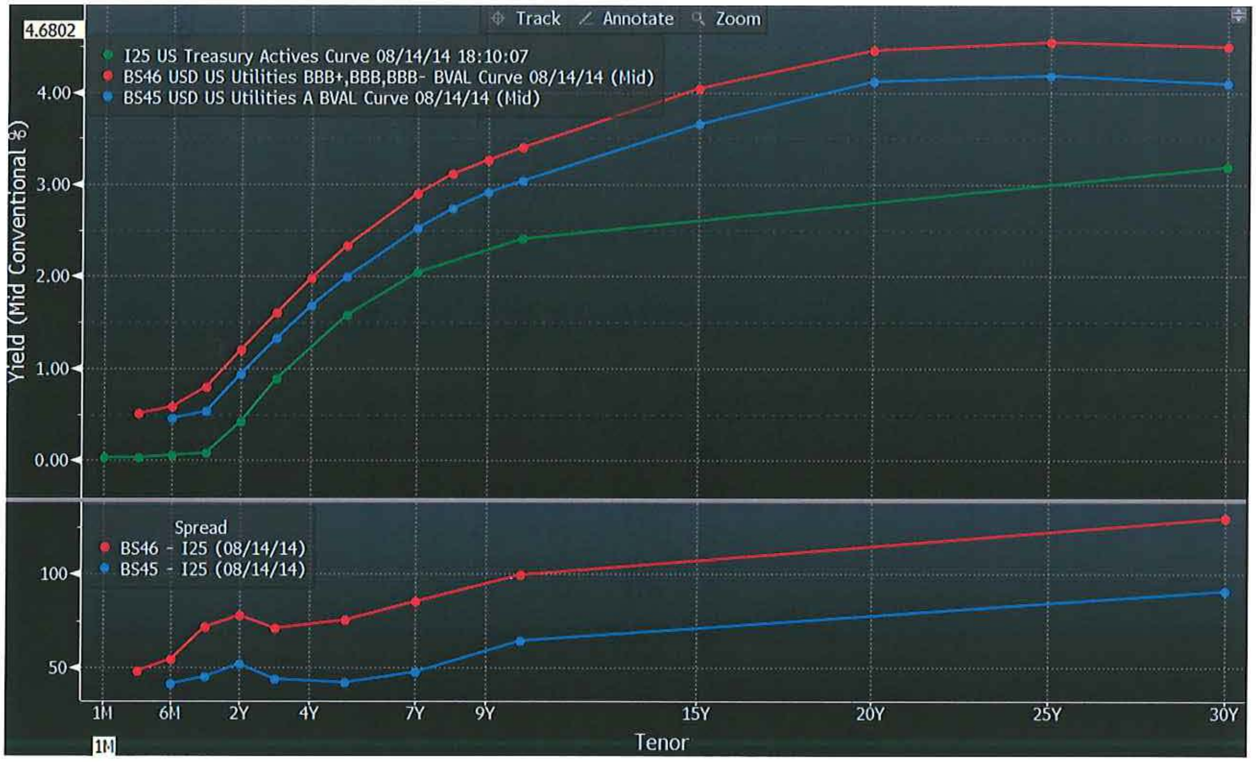
Item	Debt Securities $	Per $100	
Principal Amount (Face Value)	$325,000,000	$100	
Plus Premium or Less Discount	(Not Applicable)		
Gross Proceeds	**$325,000,000**	$100	
Underwriter Spread & Commissions	2,437,500	$ 0.75	
SEC Registration	42,250	$ 0.01	*
Fees for Recording Indenture	32,500	$ 0.01	*
Printing & Engraving Expense	16,250	$ 0.01	*
Trustee's or Registrar's Fee	71,500	$ 0.02	*
Counsel's Fees	325,000	$ 0.10	*
Accountant's Fees	162,500	$ 0.05	*
Bond Rating Agency Fees	437,125	$ 0.13	
Miscellaneous Expenses	32,500	$ 0.01	*
Allocation of Other Shelf Registration	552,500	$ 0.17	*
Total Estimated Commissions and Expenses	4,109,625	$ 1.26	*
Net Estimated Amount to be Realized	**$320,890,375**	**$ 98.74**	

***Note: Includes costs that are incurred to maintain the Company's existing FMB and MTN program. These cost estimates assume a three-year timeline for issuance of the full approved principal amount of Debt Securities. A portion of these costs will be incurred regardless of whether new Debt Securities are issued.**

[16] These representative values are derived from Page 20 of Northwest Natural's application.

Attachment C

Bloomberg Current
Investment Grade Utility Spreads Over UST
Bloomberg CRVF Function Plot
Accessed by Staff on August 14, 2014



Referent Points of Interest:

10 Year Maturity Range from **A rated 64 bps** to B rated 99 bps,
30 Year Maturity Range from **A rated 91 bps** to B rated 130 bps.