ITEM NO. CA4

PUBLIC UTILITY COMMISSION OF OREGON
STAFF REPORT
PUBLIC MEETING DATE: April 21, 2016

REGULAR ____ **CONSENT** X **EFFECTIVE DATE** __________

DATE: April 5, 2016

TO: Public Utility Commission

FROM: Matt Muldoon

THROUGH: Jason Eisdorfer and Marc Hellman

SUBJECT: PORTLAND GENERAL ELECTRIC: (Docket No. UF 4296) Requests authority to issue and sell up to $500 million of first mortgage bonds and debt securities.

STAFF RECOMMENDATION:

Staff recommends the Commission approve Portland General Electric Company's (PGE or Company) application to issue and sell up to $500 million of debt securities (hereinafter the "Application"), subject to nine conditions and reporting requirements.

DISCUSSION:

Issue

Whether the Commission should approve PGE's request to potentially sell up to $500 million of debt securities with maturities up to 40 years, and cancel PGE's previously approved outstanding bond issuance authority in Order 14 399 in Docket No. UF 4291.[1]

Applicable Law

Under ORS 757.405, a utility must obtain Commission approval prior to issuing stocks and bonds, notes and other evidences of indebtedness. The Commission may authorize an issuance if it is for one of the permissible purposes listed in ORS 757.415(1), and satisfies the criteria of ORS 757.415(2)(b), and the purpose of the issuance is not reasonably chargeable to operating expenses or income, ORS 757.415(2)(c). Permissible purposes for an issuance under ORS 757.415(1) include the acquisition of property, the construction, completion, extension or improvement of its

1 UF 4296 Application of Portland General Electric (March 15, 2016).

facilities, the improvement or maintenance of its service, and the discharge or lawful refunding of its obligations.

Finally, OAR 860-027-0030 requires utilities to provide certain information when seeking authority to make an issuance under ORS 757.405-.415.

Analysis

PGE's Application:

PGE seeks authority to issue securities between one and 40 years in length, in one or more series, in amounts not to exceed $500 million in the aggregate.[2] PGE proposes to use the proceeds of the issuance(s) to construct, extend, or improve utility facilities, improve or maintain service, or for the discharge or lawful refunding of obligations that were incurred for utility purposes permitted under ORS 757.415.[3]

PGE agrees that if the Commission approves PGE's Application, authorization to issue new bonds or notes under previous Commission orders will no longer be valid.

PGE states that it may issue fixed-rate secured long-term debt in the form of First Mortgage Bonds (FMB) or fixed or floating rate Unsecured Notes, with a term of up to 40 years. PGE states that any Unsecured Notes that it may issue would most likely be without coupons, may or may not be registered, and could be in any amount in excess of $25 per note. The Notes will be subordinated to the Company's FMBs with respect to the Company's First Mortgage lien.

PGE states that if its Application is approved, the coupon or interest rate for FMB or fixed-rate Notes issued under the Commission's order will be established at the time of issuance, unless the FMBs or Notes have the delayed settlement feature, in which case the fixed interest rate will be determined on the date PGE and purchaser enter into a binding purchase and sale agreement.

PGE sets forth a matrix proposing the maximum interest and coupon rates for issuances under any order approving PGE's Application, but asks for authority to issue FMBs or Notes so long as the interest rate or coupon does not exceed 6.0 percent per annum.[4]

PGE states that floating rate Notes issued under the Commission's order would have interest rates that would be reset monthly, quarterly or every six months (established at time of sale), based on a fixed spread over the 1-month, 3-month or 6-month London

[2] UF 4296 Application of Portland General Electric at 6-9.

[3] UF 4296 Application of Portland General Electric at 12.

[4] UF 4296 Application of Portland General Electric at 7.

Interbank Offering Rates (LIBOR) rate source, with a maximum fixed spread no greater than 1.5 percent.[5]

PGE states the securities may have a sinking fund provision and may have a feature that allows for early redemption and may require PGE to indemnify the holders of the securities from any loss or costs incurred as a result of the redemption.[6] The agreement with purchasers of securities may contain a provision requiring PGE to pay a breakage fee in the event the securities are redeemed prior to maturity.[7] The agreement with purchasers of securities may contain other market-required conditions including yield protection, capital adequacy requirements and tax and funding indemnification.[8]

Staff Analysis and Recommendations

In the following analysis, Staff addresses whether the proposed issuance complies with ORS 757.415(1) and satisfies the Commission's no harm standard, specifically addressing PGE's proposal with respect to the $500M amount, up to 40-year maturities, use of FMB and Unsecured Notes, fixed and floating rates for Unsecured Notes, interest rate hedges, the maximum spread over U.S. Treasuries Yields and alternate 7 percent hard cap within which PGE is authorized to do issuance, PGE's credit rating, and recovery of fees and commissions associated with the issuance. In making this recommendation, Staff incorporates Federal Reserve Chairwoman Janet Yellen's current projections for raising rates. Staff's proposed upward 1% shift from prior like authorization accommodates the gradual increases over the next two years.[9]

Use of Proceeds:

PGE had $2.083 billion of FMB and $121.4 million of Pollution Control Revenue Bonds outstanding as of March 15, 2016. Authorization as requested will allow PGE to address capital spending needs and/or repay or replace maturing debt shown on page 5 of its application.

This $500 million debt would support usual utility purposes as described above, consistent with statutory requirements.[10] 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. In addition, the requested authority provides certainty that

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5 UF 4296 Application of Portland General Electric at 8.

6 UF 4296 Application of Portland General Electric at 6.

7 UF 4296 Application of Portland General Electric at 6.

8 UF 4296 Application of Portland General Electric at 6.

9 See "Treasury's Extend Gains on Yellen Speech" by Min Zeng in the March 29, 2016, WSJ.

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

PGE can meet its trading and contractual obligations and that the Company has adequate resources to require counterparties to meet theirs.

$500 Million Debt:

Staff supplemented the information provided by the Company with PGE's filings with the U.S. Securities and Exchange Commission (SEC), Wall Street Journal (WSJ) articles and compiled data, Moody's Analytics and Market Risk Projections, Value Line market snapshots, and Bloomberg analysis, forward data, and trend curves. Staff also reviewed recent bond issuance spreads and costs by credit rating of issuing energy utilities for each bank that also participated in a Commission authorized securities issuance in the last five years. Staff does not publish that aggregated confidential reporting herein.

FMB and Fixed and Floating Rate Unsecured Debt:

The Company's FMB place a lien on Company property under its Mortgage and Deed of Trust as amended and supplemented by various supplemental indentures since inception. The lien acts as collateral for bondholders, which in current market conditions results in a higher credit rating than the Company's unsecured rating, and decrease of the coupon rate at issuance, as compared with otherwise similar unsecured debt.

Authority to issue unsecured debt provides PGE with additional flexibility, but imposes a burden on the Company to establish at subsequent general rate case that the cost of issuing unsecured debt was prudent and cost effective compared to cost of issuing FMBs, given market conditions and any restrictions PGE operated under at time of issuance. As shown in Attachment A, unsecured debt can bear higher cost than secured, so utilizing this flexibility bears greater scrutiny. Conversely, FMB require both adequate interest coverage cash flows, and an adequate pool of qualified assets.

Authority to issue floating or variable rate debt also provides PGE with additional flexibility. Interest rates for floating rate Notes may be periodically reset based on a fixed spread over 1-, 2-, 3-, or 6-month LIBOR. In no case will the fixed spread over pertinent LIBOR exceed 1.5 percent. In the unlikely event that LIBOR is not reported or is unavailable, the parties may use a rate from another recognized source or a rate agreed to by the parties intended to approximate LIBOR.[11]

Recent financial news projects persistent low 10- and 30-year U.S. Treasury (UST) yields underlying associated highly-rated fixed-rate secured bonds.[12] Under Staff's

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[11] UF 4297 Portland General Electric Company at 8.

[12] See "Credit Spreads — Investment Grade" by John Lonski, Moody's Chief Economist in Moody's Capital Research, Inc. of March 10, 2016. See Federal Reserve Chair Janet Yellen's expectations and explanations of stable interest rates in the March 16, 2016 WSJ article, "Fed Leaves Interest

proposed Condition 6, the Company's choice to issue floating rate Unsecured Notes would have to be explained within 30 days after the close of the transaction and at the next general rate case, the Company will have to establish the variable rate debt was prudent and cost effective compared to alternatives the Company examined.

Credit Ratings:

PGE's FMBs are currently rated as:

Moody's: A1 **S&P**: A–

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

Moody's: A3 **S&P**: BBB

In general, the interest rate or coupon is higher for unsecured debt because the debt is not backed by any PGE assets and therefore bond-rating agencies set the unsecured ratings below secured ratings.

Debt issued in the private placement market may be advantageous versus a public offering since it may provide flexibility of timing and size, and lower issuance costs. Private placements generally do not require rating by rating agencies.[13] But, they can have implied ratings based on the Company's current ratings.

Under Staff's proposed Condition 8, the Company's authorization to issue FMB and Unsecured Notes granted by an order issued pursuant to the Application is terminated if either S&P's or Moody's credit rating for PGE secured debt falls below Investment Grade.[14]

Maturities up to 40 years:

The Company requests authority to issue FMB and Unsecured Notes with maturities of up to 40 years.[15] Confidential benchmarking by Staff indicates that up to 40-year issuances at reasonable costs may be available to PGE. Such longer maturities may lock in historically low coupon rates while reducing pressure on the Company's debt maturity profile. Staff finds such arrangements can help reduce debt maturity concentration while lowering aggregate cost of long-term debt to ratepayer benefit.

Rates Unchanged, Lowers Outlook for Further Increases" by Jon Hilsenrath and Harriet Torry. And see John Scholnick of Western Asset Management Co.'s UST yield projections in "U.S. Government Bonds Rally on Fed Outlook" by Min Zeng in the March 18, 2016, WSJ.

13 PGE indicates that debt in private placement may not be rated and registered on page 10 of its application.

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.

15 See Application page 9.

Hedging Authority:

To the extent PGE wishes to engage in interest rate hedging arrangements other than delayed start in private placement with *de minimis* incremental cost and risk with respect to issuances authorized under this order, Staff recommends that the Commission adopt Staff's Condition 4 requiring the Company to either conduct its own analysis or obtain an independent third-party analysis of any hedging transactions prior to execution of the transactions.[16]

PGE agrees with Staff Condition 4, as memorialized here, that before entering into a financial hedging arrangement for the FMB or Unsecured Notes, the Company will perform "its own" in-depth analysis of incremental risks and costs represented by hedging, or rely on independent third party analysis.

Recommended Hedging Analysis:

Staff believes that a robust hedging analysis should,

- Be informed by, but should not solely rely on, investment bank provided materials;
- Place minimal weight on unverified indicative data and select range of years "snapshot" trend analysis;
- Clearly identify material assumptions and answer the question, "Who wins and who loses and how much, if assumptions and correlations do not hold true?";
- 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;
- 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; and
- 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.

To the extent PGE obtains the third-party quantitative cost and risk analysis, such analysis should be 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.

[16] Such hedging transactions could include 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 has told Staff that it will draw upon experience gained from previous hedging transactions to control the cost of like 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.

PGE 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 Company 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, PGE will maintain its analysis in a MS Excel spreadsheet form that can be provided to Staff on request. PGE 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.

Spreads over UST Yields:

Staff recommends replacing PGE's requested "Maximum Spreads over Benchmark Treasury Yields" on page 8 of its Application with the values shown in Attachment A to this memorandum. Staff's 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 FMB and debt securities under financial market conditions anticipated by the Board of Governors of the Federal Reserve System over the next several years.[17]

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- to 40-year FMB or Unsecured Note issuances.

Hard Cap Alternative:

Staff recommends that the Commission impose Staff's recommended condition that in the event all-in spreads exceed the relevant maximum spread over UST set forth in Attachment A, the Company may still issue FMB or Unsecured Notes without further

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17 Staff accessed the materials of the Board of Governors of the Federal Reserve System, minutes of the Open Market Committee released for the meeting of March 15-16, 2016, at http://www.federalreserve.gov/monetarypolicy/fomccalendars.htm.

Commission approval if the all-in rate does not exceed a "hard cap" of 7.0 percent, subject to additional reporting requirements outlined in Condition 6.[18] A 7.0 percent all-in rate "hard cap" allows adequate headroom to assure Company access to debt markets, while providing reasonable cost controls to protect ratepayers.[19] Staff notes that this level differs from that asked by the Company. The level is based on Staff's news feeds and both Staff and U.S. Federal Reserve analysis. This level is neither overly permissive nor excessively constricting. It represents analysis that is current, comprehensive, and reflective of best available information at this time.

Provision for New Bank Fees:

Additionally, the Company may incur a new prevailing fee(s), not to exceed an aggregate 10 basis points of affected principal. If relying on this provision, PGE'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 that is not part of itemized bond issuance costs routinely encountered in March 2016 bond markets.

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 is estimated to be the 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 issuance amounts. Under Staff's recommendations, underwriting commissions will not in any case exceed 0.875 percent of gross proceeds (approximately $4.4M in aggregate across the requested authorization).[20]

Other Technical Expenses:

After netting-out issuance fees as illustrated in Attachment B,[21] the Company expects to achieve approximately $495 million in aggregate net proceeds, not including any

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[18] See the definition for "All-in Cost" by browsing to the lower right corner of the Commission's home webpage at: http://www.puc.state.or.us/Pages/index.aspx. Then, click the Quick Link: "Standard Data Requests for Energy Rate Cases" and scroll to page 32, "Terms."

[19] See page 7 of the Company's application.

[20] See page 11 of the Company's application.

[21] Attachment B sets out PGE's Estimated Representative Issuance Expenses for the FMB and Unsecured Notes issuances.

Original Issue Discount (OID) determined at the time of issuance. Representative aggregate fees and charges in Attachment B are higher than for recent benchmark issuances.[22] The Company may issue multiple separate sets of FMB or Unsecured Notes spread out over time rather than a single set of coordinated issuances within the same quarter. However, PGE stands ready to show that issuance costs were consistent with component costs for like stand-alone issuances in future audits or general rate cases.

Early Redemption Features:

PGE's request for authority includes the option to utilize an early redemption feature to provide financial flexibility. Staff agrees that the requested flexibility is reasonable. And, the Company will stand ready to demonstrate how any early redemption executed was cost effective based on prevailing market conditions at the time of execution.

Allowing the early redemption feature is reasonable because shorter maturity debt may be more cost effective in the near term until PGE financial metrics allow for the issuance of additional FMB.[23]

A make-whole redemption feature allows an issuer to call bonds at any time at a cost equal to the future debt service discounted back to the redemption date. Such provisions are usual and generally 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 current maturity plus 50 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.

The Company may also choose to implement other redemption features that would allow PGE an option to call FMB or Unsecured Notes in the future at a rate determined at the time of issue. The redemption rate can be set at par or at some premium and is dictated by market conditions at the time of sale. These types of call provisions usually require that the issuer pay a higher coupon or interest rate to compensate the bondholder for the risk that their bonds may be called prior to maturity. Such provisions may also require a breakage fee or indemnification for any loss or costs.

Capital Structure:

PGE targets a 50/50 Debt/Equity capital structure over time. An order authorizing the Company to issue FMB and Unsecured Debt in the form and quantity requested would

[22] Staff captured 2016 debt issuance detail reported by the Wall Street Journal, Bloomberg and SNL Financial LC, for electric utilities that Value Line covers, including PGE.

[23] Multiple 2013 forced outages temporarily impaired PGE's interest coverage in the first half of 2014. Granting PGE the ability to issue Unsecured Notes is supportive of future upgrades to the Company's credit ratings.

refresh PGE's authorization to issue long-term debt consistent with the Company's current utility obligations.

Selection of Agents:

Selection of agents, underwriters, and external counsel may include entities associated with the Company's outstanding debt 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 the FMB and/or Unsecured Notes as it deems appropriate.

Conclusion

Staff concludes that, subject to Staff's recommended conditions, the proposed issuance satisfies the Commission's and the statutory criteria and recommends that the Commission approve the Application. Thereafter, FMB and Unsecured Notes may be issued under this new authority (subject to Staff recommended conditions listed below) in any proportion and in any combination of differently sized public offerings, which may be issued pursuant to a shelf registration filed with the SEC, or private placements, provided that the combined aggregate total of these offerings does not exceed $500 million, inclusive of any OID.

Staff review of this application indicates that the FMB issuance with maturities equal to or less than 40 years as requested will do no harm and can be expected to benefit ratepayers. The Company wants the flexibility to engage in other activities that may not be demonstrated to be necessary or cost effective at this time, but that may be cost effective in the future. PGE agrees that the Company will perform its own case-by-case in-house analysis or retain its own independent third-party experts to ensure that ratepayers bear no unnecessary incremental cost or risk from activities beyond vanilla FMB or Unsecured Note issuance with delayed start in private placement. Based on that representation, not on Company hedging or accounting policies, Staff recommends approval of PGE's application as modified by this report.

The Company has reviewed and agrees with this memo including the Staff proposed conditions and reporting requirements.

PROPOSED COMMISSION MOTION:

Approve the Company's application for authority to issue and sell up to $500 million of first mortgage bonds and debt securities with the conditions and reporting requirements 1-9 listed below:

1. Authorization Limit

   Total aggregate bonds and notes issued, sold, or exchanged under this authority shall not exceed $500 million and shall have maturities not exceeding 40-years.

   Note: If the bonds and notes are issued at an OID not to exceed one percent, such greater amount shall result in an aggregate offering price of not more than $500 million.

2. Withdrawal of Prior Authorization

   All prior Commission's FMB and debt securities issuance authorizations will expire 60 calendar days after the Commission's order is entered in Docket No. UF 4296 approving PGE's Application to issue FMB and Unsecured Notes up to the limits shown in Condition 1.

3. Cost Requirements

   Subsequent to an authorizing Commission order pursuant to this application, the Company may issue FMB and Unsecured Notes without further Commission approval provided that proceeds are used for lawful utility purposes, and provided either:

   A. All-in rate spread(s) over yield(s) on like maturity UST do not exceed limits set forth in Attachment A. Interest rates on the Unsecured Notes may be periodically reset based on a fixed spread over 1-, 2-, 3-, or 6-month LIBOR as reported on Bloomberg, Reuters, or other customary LIBOR sources. In no case for Unsecured Notes will the fixed spread over pertinent LIBOR exceed 1.5 percent. In the unlikely event that LIBOR is not reported or is unavailable, the parties may use a rate from another recognized source or a rate agreed to by the parties intended to approximate LIBOR; or

   B. The all-in rate does not exceed a 7.0 percent "hard cap." However, the agreements related to FMBs and Unsecured Notes may contain customary or market terms and conditions required by lenders or holders, including without limitation, yield protection, capital adequacy requirements and tax indemnification, which will not be included in the hard cap.

   Both "A" and "B" above incorporate the restriction that all costs of any hedging associated with any issuance under the authority requested must be accomplished within the all-in spreads or rate specified above.

The Company may also incur a new prevailing fee(s) (Unanticipated Fee Allowance), not to exceed an aggregate 10 basis points of affected principal. Such Unanticipated Fee Allowance is in addition to the hard caps described above. The Company should include materials in its next reporting to the Commission demonstrating that this cost was new and market pervasive at issuance.

4. Hedging Limitations

Authorization to enter into Interest Rate Hedging Arrangements 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[24] 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.

5. Cost Competitive

Agent and underwriting commissions for the issuance of FMB will not exceed the fees as shown in Attachment A, and will not in any case exceed 0.875 percent of gross proceeds. The Company shall demonstrate for all debt issuances and associated activities that the Company achieved all-in rates that contemporaneously were both competitive and cost effective.

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 issuance or execution of a bond purchase and sale agreement with a delayed issuance feature occurring under an Order pursuant to this application. 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 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

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24 See "Recommended Hedging Analysis" on page 6 of this report.

legal costs); interest costs; credit ratings; and an explanation of the Company's choice and cost of placement. To the extent that fees, expenses, and invoices are not available within the 30-day period, they will be provided to the Commission in final Reports within 120 days after the transaction has been closed and funded.

C. For each securities issuance under condition 3-B, the Company shall report to the Commission within 30 calendar days after any transaction is closed and funded regarding the prevailing market conditions and if applicable, the causes for all-in spreads exceeding the relevant spreads specified in Attachment A over the UST benchmark yields.

7. Termination of Authority

The Company's authorization to issue FMB and Unsecured Notes granted by an order issued pursuant to this application is terminated if either S&P's or Moody's credit rating for PGE secured debt falls below Investment Grade.[25]

8. Authorization End Date(s)

Provided all conditions and reporting requirements are fulfilled, authorization under an order issued pursuant to this application will remain in effect until superseded or exhausted. Hedging authority ends when securities issuance authority ends.

9. 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 security issuance and related activities.

[25] 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 &
All-in Spread over UST Yields
for FMB and Unsecured Notes
in Normal Market Conditions

Maturity		Maximum Underwriters Commission	Long-Term Debt Annual Spread	
At Least	But Less Than		FMB	Unsecured Notes
Years		Basis Points (bps)		
1	1.5	15	150	200
1.5	2	20		
2	3	25		
3	4	35		
4	5	45		
5	6	50		
6	7	55		
7	10	60	170	250
10	15	62.5		
15	20	67.5	200	275
20	30	75		
30	40	87.5		

Note: Comparing Bloomberg data[26] for like rated utility bonds, Staff finds that the above limitations provide access to capital with reasonable headroom for likely combinations of issuances in public, and private placement with delayed start at no or minimal incremental cost that could be beneficial to ratepayers, over at least the next two years.

26 Staff referenced Bloomberg FMB and Unsecured USD indexed data on March 25, 2016. Basis Point (bp) is defined as one-one hundredth of a percentage point. i.e. 100 bps equal one percent.

Attachment B

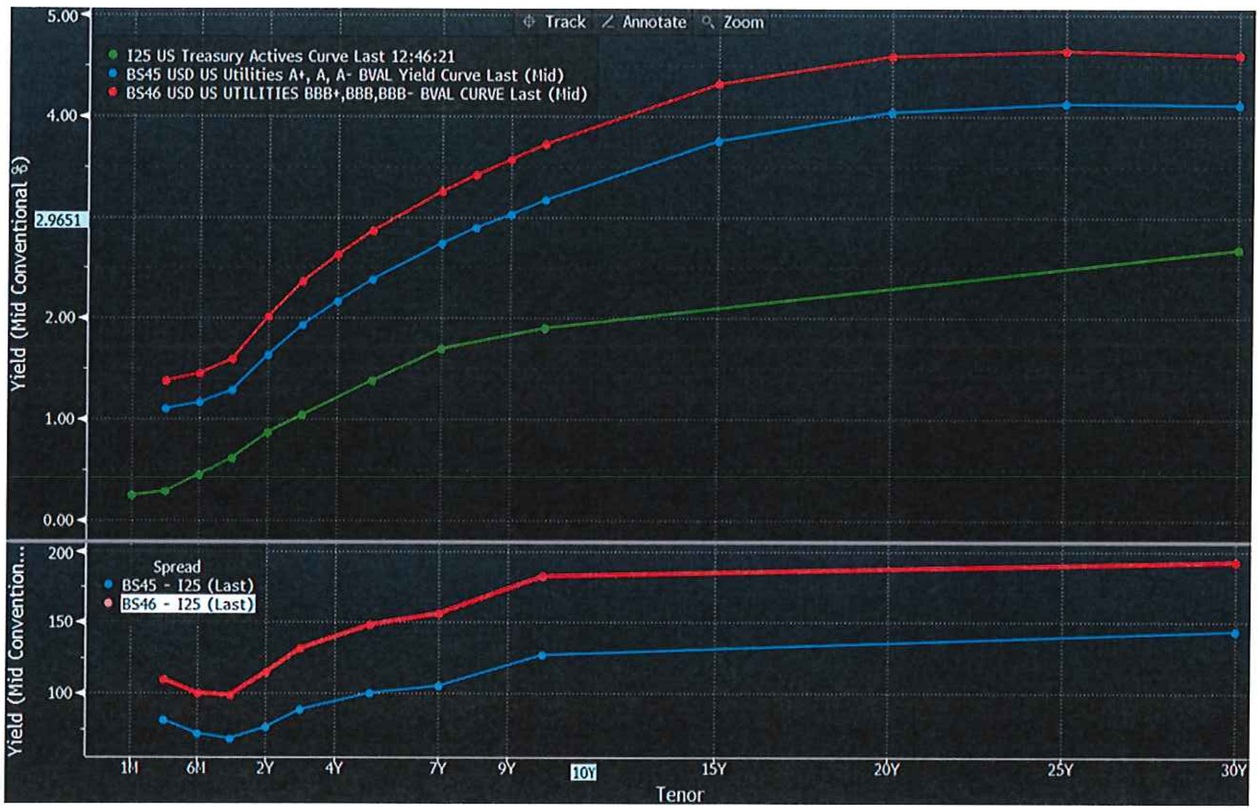
PGE Estimated Representative Issuance Expenses

Item	Debt Securities $	Per $100
Principal Amount (Face Value)	$500,000,000	$100
Plus Premium or Less Discount	(Not Applicable)	
Gross Proceeds	**$500,000,000**	$100
Underwriter Spread & Commissions	4,375,000	$ 0.875
SEC Registration	15,000	
Printing & Engraving	30,000	
Trustee Charges	25,000	
(Independent Public) Accounting	40,000	
Rating Agency	100,000	
Legal	150,000	
Total Deductions	4,735,000	$ 0.947
Estimated Realized Net Amount	**$495,265,000**	**$ 99.053**

Attachment C

Bloomberg Current Utility Values and Spreads

Accessed by Staff on March 25, 2016



Current Referent Spreads of Interest:

10 Year Maturity Range from **A rated 126 bps** to B rated 182 bps
30 Year Maturity Range from **A rated 144 bps** to B rated 193 bps

Prevailing Referent Spreads as of October 2014:

10 Year Maturity Range from **A rated 73 bps** to B rated 112 bps
30 Year Maturity Range from **A rated 101 bps** to B rated 142 bps