PUBLIC UTILITY COMMISSION OF OREGON STAFF REPORT PUBLIC MEETING DATE: January 30, 2018

REGULAR	CONSENT X EFFECTIVE DATE
DATE:	January 16, 2018
TO:	Public Utility Commission

FROM: Matt Muldoon

THROUGH: Jason Eisdorfer and John Crider

SUBJECT: AVISTA CORPORATION: (Docket No. UF 4302) Requests authority to

issue and sell up to an incremental \$500 million of debt securities

STAFF RECOMMENDATION:

Staff recommends that the Commission approve Avista Corporation's (Avista or Company) application to issue and sell up to an additional \$500 million of debt securities (hereinafter the "Application"), subject to the following eight conditions and reporting requirements. The Company has reviewed this memo and has no objection.

1. Authorization Limits

Total debt securities issued, sold or exchanged under this authority shall not exceed \$570 million, inclusive of any Original Issue Discount (OID). Maturities for debt securities may not exceed 50 years.

2. Withdrawal of Prior Authorizations

All prior Commission authorizations for the issuance of debt securities terminate upon the Commission's approval of Avista's Application, specifically:

Type	Order No.	Docket No.	Unused Authorization	
LT Debt	15-305	UF 4294	\$70 million	

3. Cost Requirements

The Company shall demonstrate for all issuances and associated activities that the Company achieved cost effective All-in Rates. On approval of Avista's Application, the Company may issue Debt Securities without the need for further Commission approval <u>provided either:</u>

- A. Agent and underwriting commissions, and spread(s) over yield(s) on like maturity United States Treasury (UST) bonds 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. The fixed spread over pertinent LIBOR may not exceed 1.5 percent. If LIBOR ceases to be reported or is unavailable, the Company may use a rate from another recognized customary source intended for floating rate debt, restricted to like spread there over. The Company will maintain records to show that spreads over a common benchmark were competitive; or
- 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 **7.0 percent** "Hard Cap," plus an Unanticipated Fee Allowance, defined as follows:¹

The Company may incur a new prevailing fee(s) (**Unanticipated Fee Allowance**), not to exceed an aggregate 100 basis points of affected principal. Avista must then demonstrate in its reporting to the Commission that this cost was new and market pervasive at time of issuance.

4. Hedging

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. The Company must comply with its internal hedging policies and stand ready to provide its policy, its own analysis, and documentation to Staff for review upon request. The Company must also annually review its hedging performance and internally check to ensure hedging costs incurred do not exceed benefits achieved, and do not impair the Company's ability to deliver utility services.

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; or

All-in Cost –The 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 of the security. 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. See pages 746 through 747 of "Futures, Options, and Swaps," Fifth Edition; by Robert W. Kolb and James A. Overdahl; Blackwell Publishing, Ltd; 2007.

B. Convertible debt (into either common or preferred stock).

5. Cost Competitive

Agent and underwriting commissions for the issuance of First Mortgage Bonds (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.

Timely Reporting

- A. Should the Company be engaged in a general rate case proceeding with the Commission, the Company must provide written notice through the PUC filing center to the attention of the PUC Staff member named on the distribution list for this docket, or to the attention of any PUC Staff subsequently identified by Staff, of any issuance within seven days calendar days of arrangement or term sheet availability. Further, should an issuance occur while general rate case settlement discussions are taking place, the Company is additionally obligated to inform such PUC Staff directly of such an issuance as soon as is reasonably possible and prior to the conclusion of settlement discussions regarding cost of capital.
- B. The Company will provide the Commission with the customary Report of Securities Issued and Disposition of Net Proceeds statements no later than 60 calendar days after any transaction has been closed and funded. Reporting will be denominated in U.S. dollars and will include, but not be limited to: total value of the issuance; total and per unit fees and expenses; interest costs; credit ratings; copies of issuance documentation including itemized invoices for all external legal costs; an explanation of the Company's choices of placement, secured versus unsecured debt, and fixed- versus floating-rate debt; and how any hedging activities utilized best fit prevailing conditions, objectives, and expectations.
- 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 the appropriate Attachment (A or B) over the UST benchmark yields; and
 - ii. The steps taken by the Company to control issuance costs.

7. Maintenance of Credit Ratings

If the Company's credit ratings fall below Investment Grade² as determined by either Standard & Poor's (S&P)³ or Moody's,⁴ the Commission's approval of Avista's Application will be withdrawn.

8. Reservation of Judgment Regarding Reasonableness
The Commission reserves judgment on the reasonableness for ratemaking
purposes of the Company's capital costs, capital structure, and the commissions,
fees, and expenses incurred for security issuance. The Company will be required
in future rate proceedings to show that capital costs, hedging expenses, capital
structure; maturities' concentration; issuance commissions, expenses and fees;
and other factors are just and reasonable on both component and aggregate
bases.

DISCUSSION:

Issue

Whether the Commission should authorize Avista to issue and sell or exchange secured or unsecured, fixed or floating rate debt securities in one or more public offerings or private placements in the aggregate principal amount not to exceed \$570 million (Debt Securities). This maximum amount is the sum of \$500 million new authority requested, plus \$70 million unused prior authority. With a new authorization, Avista's previously approved outstanding bond issuance authority in Order 15-305 in Docket No. UF 4294 is revoked.

Applicable Law

Oregon Revised Statutes (ORS):

Under ORS 757.405, the Commission has the authority to regulate issuance of utility securities. Further, under ORS 757.410 a public utility must obtain Commission approval before issuing securities, stocks, bonds, notes or any evidence of indebtedness (collectively referred to as "issuances.") ORS 757.415 sets forth the purposes for which issuances can be made and authorizes the Commission to establish terms and conditions that are reasonable and in the public interest for any issuances authorized by the Commission.

Investment grade long-term debt is rated BBB- or better by S&P, or Baa3 or better by Moody's.

³ S&P refers to Standard & Poor's, which is a subsidiary of The McGraw-Hill Companies.

⁴ Moody's refers to Moody's Investors Service, which is a division of Moody's Corporation.

Oregon Administrative Rules (OAR):

OAR 860-027-0025⁵ and 860-027-0030 set forth several specific requirements for applications submitted for Commission approval of an issuance.

Analysis

Application:

Avista seeks authority to issue Debt Securities between one and 50 years in maturity, in one or more series, in amounts not to exceed \$500 million in the aggregate.⁶ The Company 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 757.415.⁷

The Company states that it may issue fixed-rate secured long-term debt in the form of FMB or fixed or floating rate Unsecured Notes, with a term of up to 50 years. Any Notes may be subordinated to the Company's FMBs with respect to the Company's First Mortgage lien.

Avista sets forth a matrix proposing the maximum interest and coupon rates for issuances under any order approving the Company's Application, but asks for authority to issue Debt Securities so long as the interest rate or coupon does not exceed <u>8.0</u> percent per annum.⁸

Any floating rate Notes issued under the Commission's order may 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 Interbank Offering Rates (LIBOR) rate source.

Securities may have a sinking fund and/or early redemption provisions. The Company does not expect fees to underwriters, banks, or agents in connection with issuance of debt securities to exceed 0.875 percent.⁹

Staff Recommendations

⁵ Staff assumes OAR 860-027-0025 is applicable to issuance of First Mortgage Bonds.

⁶ UF 4302 Application of Avista, part (i).

⁷ UF 4302 Application of Avista, part (l).

⁸ UF 4302 Application of Avista, part (i).

⁹ UF 4302 Application of Avista, part (j).

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 Avista's proposal with respect to the \$500M amount, up to 50-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 7.0 percent hard cap within which Avista is authorized to do issuance, Avista's credit ratings, and recovery of fees and commissions associated with the issuance. In making this recommendation, Staff addresses Federal Reserve (Fed) trends in raising rates. Staff's proposed upward 1.0 percent shift from prior like authorization accommodates the gradual increases projected by the Fed over the next two years.

Use of Proceeds:

The Company states that it may use proceeds from Debt Securities to:

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

This \$500 million debt would support usual utility purposes as described above, consistent with statutory requirements. 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 Avista can meet its utility obligations and that the Company has adequate resources to continue normal operations.

Staff supplemented the information provided by the Company with Avista'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.

First Mortgage Bonds (FMB)

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

The Company's application represents that Avista would most likely issue fixed-rate, secured long-term debt¹¹ in the form of FMBs, which have been the traditional debt financing vehicle utilized by utilities in the United States. The Company's FMBs place a lien on its Mortgage and Deed of Trust. As amended and supplemented by various indentures since inception, the lien acts as collateral for bondholders, which should result in a higher credit rating than the Company's unsecured rating, and typically decreases the coupon rate at issuance as compared with otherwise similar unsecured debt.

Unsecured Debt Securities:

Avista further represents in its application that, when market conditions and the Company's financial position warrant, authorization pursuant to this application will allow the Company to issue new unsecured debt with fixed- or floating-rates and having maturities generally between one and 50 years. The flexibility afforded by issuing debt securities with fixed- or floating-rates and having maturities over 30 years is consistent with previous Commission authorization pursuant to similar applications by other investor owned utilities¹² under the jurisdiction of the Commission.

Authority to issue unsecured debt provides Avista with additional flexibility, but imposes a burden on the Company to establish in a 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 Avista operated under at time of issuance. As shown in Attachment A, unsecured debt can bear higher cost than secured debt, 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 Avista 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.

Recent financial news projects persistent low 10- and 30-year UST yields underlying associated highly-rated fixed-rate secured bond. Under Staff's 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

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 less than one year is received by Staff for informational purposes only, consistent with ORS 757.415(3).

For example, in Docket No. UF 4263, Order No. 10-171 provided Idaho Power similar flexibility.

case, the Company will need to explain why the variable rate debt was cost effective compared to alternatives that the Company examined.

Credit Ratings:

Avista's FMBs are currently rated as:

Moody's: A2

S&P: A-

In general, the interest rate or coupon is higher for unsecured debt because the debt is not backed by any 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 because it may provide flexibility of timing and size, and lower issuance costs. Private placements generally do not require rating by rating agencies. But, they can have implied ratings based on the Company's current ratings.

Under Staff's proposed Condition 7, the Company's authorization to issue FMB and Unsecured Notes will be withdrawn if either S&P's or Moody's credit rating for Avista secured debt falls below Investment Grade.¹³

Maturities up to 50 years:

The Company requests authority to issue FMB and Unsecured Notes with maturities of up to 50 years. Confidential benchmarking by Staff indicates that up to 50-year issuances at reasonable costs may be available to Avista. 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.

Hedging Authority:

To the extent Avista wishes to engage in or continue 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.

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.

This authorization does not relieve the Company from the need to annually evaluate its hedging activities not just for definitional accounting effectiveness, but also to measure the costs incurred against benefits achieved, and to confirm that like or superior results could not have been obtained absent hedging costs incurred. Internal vigilance is necessary to avoid durable patterns of loss or outsized costs not incurred by benchmarked utilities with like patterns of issuance.

Spreads over UST Yields:

Staff recommends replacing Avista's requested Maximum Spreads over Benchmark Treasury Yields provided in Exhibits L and M 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.

Hard Cap

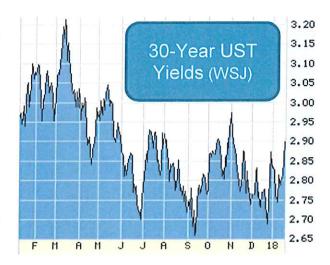
Staff recommends that the Commission impose the condition that in the event all-in spreads exceed the relevant maximum spread over UST set forth in Attachment A, the Company may still issue FMB or Unsecured Notes without further Commission approval if the all-in rate does not exceed a "hard cap" of 7.0 percent, subject to additional reporting requirements outlined in Condition 6. 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. 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. Despite substantial discussion in the financial press that we are in a rising interest environment, the Federal Reserve has actually only raised interest rates five times for a total of 1.25 percent in recent years.

2015 Q4 Federal Funds Rate Target lifted by **25 bps** to (0.25 to 0.50 2016 Q4 Federal Funds Rate Target lifted by **25 bps** to (0.50 to 0.75 2017 Q1 Federal Funds Rate Target lifted by **25 bps** to (0.75 to 1.00 2017 Q2 Federal Funds Rate Target lifted by **25 bps** to (1.00 to 1.25 2017 Q4 Federal Funds Rate Target lifted by **25 bps** to (1.25 to 1.50

Similarly, according to Wall Street Journal market data as of January 9, 2018, the US 30-year Bond has a yield of just 2.90 percent. As shown to the right, Staff's proposed hard cap is not pressured at this time.

Provision for New Bank Fees:

Avista may incur a new prevailing fee(s), not to exceed an aggregate 100 basis points of affected principal. If relying on this provision, Avista'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 current 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).

Other Technical Expenses:

After netting-out issuance fees as illustrated in Attachment B, the Company expects to achieve approximately \$492.5 million in aggregate net proceeds, not including any Original Issue Discount (OID) determined at the time of issuance. Representative aggregate fees and charges in Attachment B are illustrative rather than closely predictive. 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, Avista must stand 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:

Avista'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.

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 Avista 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:

Avista 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 refresh the Company'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 or Unsecured Notes or both as it deems appropriate.

Withdrawal of Prior Authority:

The Company requests new issuance authority in addition to its outstanding issuance authority. Avista supplemented its filing with updated numbers reflected herein.

Outstanding authorization quantities are added to the quantity requested for each purpose respectively in the Company's application. This approach minimizes the number of active Commission authorizations for each given purpose. Limits shown in Condition 1 are informed by remaining outstanding authorizations set for termination in Condition 2. Consolidation of like authorizations minimizes reporting requirements. On approval of Avista's Application in this docket, prior like authorizations are withdrawn and Conditions herein supersede conditions contained in prior orders.

Due Diligence:

Staff reviewed all of the Avista's outstanding securities relying on resources at the St. Louis Federal Reserve (FRED), the U.S. Security and Exchange Commission (SEC) — Electronic Data Gathering, Analysis and Retrieval (EDGAR), Bloomberg, SNL Financial (SNL), and Value Line (VL) assessments. The requested incremental \$500 million of debt securities issuance authority is consistent with Company operations and necessary to support planned issuances for utility purposes.

No Harm:

Staff review of this application indicates that the Debt Securities will do no harm and can be expected to benefit ratepayers. Staff recommends approval of Avista's application as modified herein.

This report clarifies that it is the responsibility of the Company to annually review its hedging activity critically and to make sure that all costs incurred are necessary, and more than offset by associated benefits. Should the Company find that its financial hedging is more costly than projected or that there is a pattern of losses, it is Staff's expectation that Avista will remedy or terminate its hedging program.

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, Debt Securities may be issued under this new authority (subject to Staff recommended conditions) 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 \$570 million, inclusive of any OID, and all prior unused like authority is terminated.

Staff review of this application indicates that the FMB issuance with maturities equal to or less than 50 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.

The Company has reviewed this memo including the Staff proposed conditions and reporting requirements and has no objection.

PROPOSED COMMISSION MOTION:

Approve Avista's Application authorizing the issuance and sale up to an additional incremental \$500 million of Debt Securities, subject to Staff's eight recommended conditions.

Attachments:

Attachment A: Maximum Allowable Commissions and Spreads
Attachment B: Estimated Net Proceeds for Debt Securities
Attachment C: Utility Debt Security Spreads over UST Yields

UF 4302

Attachment A

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

Maturity		Maximum	Maximum Spread over UST	
		Underwriter's		
Over	But No More Than	Commission as Percentage of Aggregate Principal Amount of Debt	FMB	Unsecured Notes and other Debt Securities
Years		Securities Sold	Basis Points (bps)	
1	5	0.875%	175	200
5	10		200	225
10	20		230	260
20	30		255	285
30	50		275	300

Note: Comparing Bloomberg data for like rated utility forwards, 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.

Attachment B

Avista Corporation's

Representative Issuance Expenses

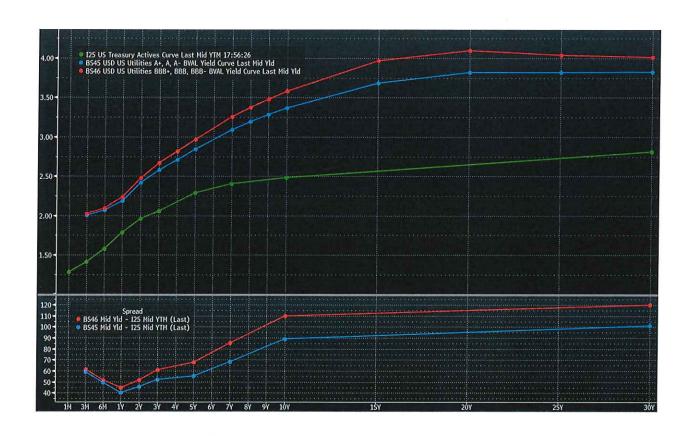
Debt Securities

	Dept Securities	
ltem	\$	% of Total
Principal Amount (Face Value)	500,000,000	100.000%
Plus Premium or Less Discount	(Not Applicable)	
Underwriter Spread & Commissions	4,375,000	0.875%
Proceeds Payable to Applicant	495,625,000	99.125%
General Issuance Fees		
Rating Agency	300,000	
Legal	300,000	
(SEC) Regulatory	50,000	
Accounting	50,000	
Printing & Engraving	50,000	
Miscellaneous Expenses	80,000	
Subtotal	830,000	0.166%
First Mortgage Bond (FMB) Fees		
Legal	75,000	
Title Insurance	80,000	
County Filing	30,000	
Subtotal	185,000	0.037%
Estimated Net Proceeds	98.922%	

The above is an indicative illustration of applicable costs. Actuals costs will vary. The Company will provide terms sheets with actual costs or like issuance cost detail to Staff as that information is available following each issuance of Debt Securities.

Attachment C

Bloomberg Investment Grade Utility Spreads Over UST Bloomberg CRVF Function Plot Accessed by Staff on January 8, 2018



Referent Points of Interest:

10 Year Maturity Range from A rated 89 bps to B rated 110 bps, 30 Year Maturity Range from A rated 101 bps to B rated 120 bps.