



**Public Service
Commission**

Public Service Commission

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Three Empire State Plaza, Albany, NY 12223-1350
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February 24, 2016

SENT VIA ELECTRONIC FILING

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Room 1-A209
Washington, D.C. 20426

Re: Docket No. ER16-835-000 - New York Independent
System Operator, Inc.

Dear Secretary Bose:

For filing, please find the Notice of Intervention and Protest of the New York State Public Service Commission in the above-entitled proceeding. The parties have also been provided with a copy of this filing, as indicated in the attached Certificate of Service. Should you have any questions, please feel free to contact me at (518) 473-8178.

Very truly yours,

David G. Drexler

Acting Managing Attorney

Attachment
cc: Service List

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

New York Independent System) Docket No. ER16-835-000
Operator, Inc.)

NOTICE OF INTERVENTION AND PROTEST
OF THE NEW YORK STATE PUBLIC SERVICE COMMISSION

INTRODUCTION

On February 19, 2016, the New York Power Authority (NYPA) filed a Petition seeking to: (i) implement a formula rate for updating, on an annual basis, its revenue requirement associated with providing transmission services under the New York Independent System Operator, Inc.'s (NYISO) Open Access Transmission Tariff (OATT); and, (ii) include a new rate schedule in the NYISO OATT for allocating and recovering the revenue requirement associated with NYPA's development of the Marcy-South Series Compensation (MSSC) project.¹ Further, NYPA requests inputs to the formula rate that include its actual capital structure, capped at 60% equity, and a base Return on Equity (ROE) of 8.65% plus a 50 basis point adder for participation in the NYISO (i.e., a total ROE of 9.15%).

Pursuant to Rule 211 (18 C.F.R. §385.211) of the Federal Energy Regulatory Commission's (FERC or Commission) Rules of Practice and Procedure, and the Commission's Notice of

¹ The cost allocation for NYPA's MSSC project would utilize the participant-funded settlement agreement pending approval in Docket No. ER15-572-000.

Extension of Time issued on February 18, 2016, the New York State Public Service Commission (NYPSC) hereby submits its Protest to certain aspects of NYPA's Petition.² In particular, the NYPSC opposes the requested capital structure, which is excessive and unnecessary since the NYPSC's analysis demonstrates that a 50% equity ratio would adequately balance collections from customers and ensure that NYPA has access to capital markets at reasonable terms. In addition, the proposed 9.15% total ROE is excessive and unwarranted. The NYPSC's proxy group indicates that a base ROE of no more than 8.5% would be just and reasonable. The requested ROE adder for participation in NYISO is also unnecessary and unwarranted because NYPA has already agreed to turn operational control of its transmission facilities over to the NYISO. Finally, NYPA has failed to include any measures for cost containment with respect to the MSSC project. The Commission should establish an evidentiary hearing to resolve these issues, or direct NYPA to address the matters raised herein in a compliance filing.

² The views expressed herein are not intended to represent those of any individual member of the NYPSC. Pursuant to Section 12 of the New York Public Service Law, the Chair of the NYPSC is authorized to direct this filing on behalf of the NYPSC.

NOTICE OF INTERVENTION

The NYPSC submits its Notice of Intervention pursuant to the Commission's Combined Notice of Filings #1, issued on February 1, 2016, and Rule 214(a)(2) (18 C.F.R. §385.214) of the Commission's Rules of Practice and Procedure. Copies of all correspondence and pleadings should be addressed to:

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PROTEST

I. The Commission Should Reject NYPA's Proposed Capital Structure, Which Is Unreasonably Excessive

NYPA's petition proposes a 60% common equity ratio for ratemaking purposes, even though its actual capital structure typically contains a greater common equity ratio. NYPA notes that using 2014 data would produce a 76.4% equity ratio. It is clear that NYPA has purposefully chosen to maintain exceedingly strong financial metrics. While NYPA's current equity ratio is above 65%, it has chosen a long-term target of 65% equity.

NYPA maintains that its proposal to cap its actual equity at 60% equity would help to maintain its strong credit profile and "Aa1"/"AA" Moody's/Standard & Poor's (S&P) credit

ratings. However, NYPA incorrectly suggests that the costs associated with maintaining these high-end financial metrics do not come at an increased cost to ratepayers, relative to investor-owned utilities.³ While it is true that NYPA has certain tax advantages over investor-owned utilities, having these strong financial ratios come at a cost to ratepayers due to an overall increase in equity costs or cost of surplus capital. NYPA's "Aa" rating could be maintained even if one metric, the utility's equity ratio, were lowered to no higher than 50%. Such adjustment would lower capital cost while providing NYPA with a continued higher than average financial metrics.

The NYPSC seeks to ensure a proper balance is achieved between collections from customers and ensuring that NYPA has access to capital markets at reasonable terms. NYPA need not maintain financial metrics that are the best of all public power utilities in the nation in order to present a strong credit profile. Slightly lower credit metrics, due to a lower equity ratio, will in no way hinder NYPA's ability to raise capital on reasonable terms.

Utilities with much lower ratings, including every company in NYPA's and the NYPSC's proxy groups, contained in

³ NYPA Petition, Ex. PA-301, p. 17.

Appendix A, have both an average issuer credit ratings of "Baa1"/"A-" by Moody's/S&P's and regularly access the capital markets on terms that are reasonable. Municipal utility companies, even those that are rated "A"/"A" or "Baa"/"BBB" by Moody's/S&P, have issued billions of dollars of debt on reasonable terms over the past year.⁴ While NYPA may argue that slightly lower financial metrics will result in slightly higher future debt expense, any such increase that materializes would be more than offset by the amount customers would save from paying debt cost rates, as opposed to equity cost rates, on a higher portion of NYPA's capital.

On June 19, 2015, the Commission approved a 50% equity ratio in its decision regarding WPPI Energy, a not-for-profit regional municipal joint action agency.⁵ WPPI Energy was accorded this capital structure because it "is within the range that the Commission has allowed for other entities reliant on non-equity financing."⁶ Similarly, the median and average common equity ratios of the consolidated companies in the NYPSC's proxy group of 13 companies, as noted in Appendix A, are approximately

⁴ See, Appendix A, which contains a summary of municipal utility debt issuances by rating categories for the past year.

⁵ Docket No. ER15-1544-000, Midcontinent Independent System Operator, Inc. and WPPI Energy, Order on Transmission Rate Incentives, 151 FERC ¶ 61,246 (issued June 19, 2015).

⁶ Id. at ¶22.

48% and 50%, respectively.⁷ These common equity ratios are comparable to that of NYPA's proxy group's respective median and average common equity ratios of 49.96% and 51.19%, respectively. The companies in both the NYPA and NYPSC proxy groups have investments in not only utility operations, but also non-utility operations which are typically financed with a higher equity ratio.

The NYPSC supports a capital structure with an equity ratio of up to 50% as a reasonable level for the application of NYPA's formula rate. This level is in line with those of entities engaging in projects of similar risk to NYPA, including WPPI Energy, NYPA's, and NYPSC's proxy group. This level will support a strong credit profile for NYPA while maintaining its ability to access capital on reasonable terms.

An evidentiary hearing is necessary to allow interested parties an opportunity to examine NYPA's claim that a 60% equity ratio is necessary. Such an examination is needed to ensure New York ratepayers benefit from the most cost-effective method for financing NYPA's activities, while also maintaining NYPA's strong credit profile.

⁷ NYPA Petition, Ex. PA-307.

II. The Commission Should Reject NYPA's Proposed 9.15% Total ROE, Which Is Excessive and Unjust and Unreasonable

NYPA requested that its base ROE be set at the median of 8.65%, based upon a range of 6.37% to 10.29% of its 19-company proxy group. Additionally, NYPA is requesting an upward adjustment to the 8.65% base ROE to reflect the Company's participation in the NYISO, resulting in a total ROE of 9.15%. In estimating NYPA's base cost of equity, NYPA's witness, Mr. Richard Ansaldo, followed similar Discounted Cash Flow (DCF) cost of equity methodology and selection criteria that the Commission adopted in Opinion No. 531. While the NYPSC agrees with NYPA's DCF cost of equity methodology, the composition of Mr. Ansaldo's proxy group raises significant concerns. For instance, MGE Energy Inc. was included in NYPA's proxy group, which is unrated by both S&P and Moody's. Moreover, contrary to his criteria for selecting utility holding companies -- each rated at least "A3" from Moody's or at least an "A-" from S&P -- he included Otter Tails Corporation that carries Moody's rating of "Baa2" and S&P rating of "BBB".

The NYPSC's initial analysis, subject to update, suggests a median ROE of 8.53%, rounded to 8.5%, based on a lower range of 6.9% to 9.7%, is reasonable and supported by FERC's DCF methodology. This zone of reasonableness, as detailed in Appendix A, was determined using a proxy group of 13

companies that met FERC-established selection criteria,⁸ while excluding one low-end outlier. The NYPSC's analysis raises important facts that needed to be addressed in an evidentiary hearing to allow interested parties an opportunity to cross-examine NYPA's witness on his factual claims with respect to the proposed 8.65% base ROE.

Moreover, the NYPSC opposes the requested adder to NYPA's base ROE for participation in the NYISO because it is unnecessary and unwarranted where NYPA has already agreed to turn operational control of its transmission facilities over to the NYISO. Furthermore, NYPA is expected to make a similar transfer of control for any new facilities and maintain its membership.⁹ An additional incentive for NYISO participation is not justified where the Commission's goals of incentivizing the creation of the NYISO and transferring operational control of

⁸ Each company in the proxy group met the following criteria: (1) the company must be a domestic publicly-traded electric utility followed by the Value Line Investment Survey; (2) the company must first be rated by both Moody's and Standard & Poor's and such credit ratings must be either at least A3 or A-, respectively; (4) the company must not have been known to be a party to significant merger and acquisition activity recently; and (5) the company must have consistently paid dividends and without any cuts to their dividends for the past 6 months; (6) the company must have IBES-determined growth rate estimates (obtainable from Yahoo.Finance.com).

⁹ See, NYISO/Transmission Owner Agreement, http://www.nyiso.com/public/markets_operations/documents/legal_regulatory/index.jsp (requiring the NYISO to exercise operational control of the transmission facilities owned by the Transmission Owners).

their transmission facilities to the NYISO have already been achieved. Awarding NYPA an ROE incentive for what it must do in any event is not warranted since the incentive will have no effect on its behavior. NYPA has failed to demonstrate that the 50 basis point adder is necessary or warranted on top of its requested base ROE, and should therefore be rejected.

III. The Commission Should Direct NYPA To Incorporate Cost-Containment Mechanisms In Its Formula Rate

Absent from NYPA's petition is any mention of how it would seek to limit the application of its requested ROE incentive adder in order to contain its project costs. Such cost containment mechanism was an integral part of the Offer of Partial Settlement (Settlement) filed for the Commission's review and approval in Docket No. ER15-572-000 on November 5, 2015. In particular, the pending Settlement requires the utilities to forgo any incentive adders on costs incurred above certain cost estimates that were negotiated.

While NYPA's filing here seeks to extend the Settlement to its MSSC project, by applying the participant-funded cost allocation approach agreed to in the other docket, NYPA has inappropriately omitted the rest of the principles from the Settlement. NYPA's failure to include such cost-containment measures is inexplicable given that its July 2, 2015 petition in

Docket No. ER15-2102-000 expressly indicated that "NYPA will include the same risk-sharing or performance-based incentive components that are ultimately agreed to by the NY Transco in Docket No. ER15-572-000 with respect to future competitive projects."¹⁰ NYPA's Petition ignores this prior statement and selectively includes the provisions in the settlement favorable to NYPA. Although the settlement is pending FERC's review, the cost containment aspect of the settlement was not an issue of contention for FERC Staff or the settling parties, including NYPA.

CONCLUSION

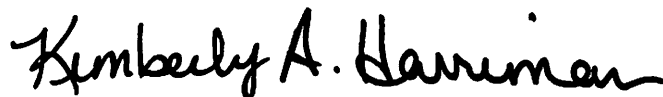
In accordance with the foregoing discussion, the NYPSC respectfully requests that the Commission conduct an evidentiary hearing to allow interested parties an opportunity to cross-examine NYPA on its factual claims with respect to the requested 60.0% equity capital structure and 9.15% ROE. Alternatively, the Commission should: 1) set the capital structure at no more than 50% equity; 2) reject the proposed ROE incentive adder; 3) set the total ROE at no more than 8.5%; and, 4) direct NYPA to

¹⁰ Docket No. ER15-2102-000, NYPA Petition (filed July 2, 2015), p. 11.

Docket No. ER16-835-000

include a cost containment mechanism consistent with the
settlement proposed in Docket No. ER15-572-000.

Respectfully submitted,



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of the State of New York
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Dated: February 24, 2016
Albany, New York

APPENDIX A

	Company	Moody's Rating	S&P Rating	At Least A3 or A-	Dividend Paying?	Not in M&A Activity?	Proxy Group
1	ALLETE, Inc.	A3	BBB+	Yes	Yes	Yes	selected
2	Alliant Energy Corp.	A3	A-	Yes	Yes	Yes	selected
3	Ameren Corp.	Baa1	BBB+	No	Yes	Yes	
4	American Electric Power Co. Inc.	Baa1	BBB	No	Yes	Yes	
5	Avista Corp.	Baa1	BBB	No	Yes	Yes	
6	Black Hills Corp.	Baa1	BBB	No	Yes	No	
7	CenterPoint Energy Inc.	Baa1	A-	Yes	Yes	Yes	selected
8	Cleco Corp.	Baa1	BBB+	No	Yes	No	
9	CMS Energy Corp.	Baa2	BBB+	No	Yes	Yes	
10	Consolidated Edison Inc.	A3	A-	Yes	Yes	Yes	selected
11	Dominion Resources, Inc.	Baa2	BBB+	No	Yes	No	
12	DTE Energy Co.	A3	BBB+	Yes	Yes	Yes	selected
13	Duke Energy Corp.	Baa1	A-	Yes	Yes	No	
14	Edison International	A3	BBB+	Yes	Yes	Yes	selected
15	El Paso Electric Co.	Baa1	BBB	No	Yes	Yes	
16	Empire District Electric Co.	Baa1	BBB	No	Yes	No	
17	Entergy Corp.	Baa3	BBB	No	Yes	Yes	
18	Exelon Corp.	Baa2	BBB	No	Yes	No	
19	FirstEnergy Corp.	Baa3	BBB-	No	Yes	Yes	
20	Great Plains Energy Inc.	Baa2	BBB+	No	Yes	Yes	
21	Hawaiian Electric Industries Inc.	NR	BBB-	No	Yes	No	
22	IDACORP Inc.	Baa1	BBB	No	Yes	Yes	
23	Integrus Energy Group Inc.	A3	A-	Yes	Yes	No	
24	ITC Holdings Corp.	Baa2	A-	Yes	Yes	No	
25	MGE Energy Inc	NR	NR	No	Yes	Yes	
26	NextEra Energy, Inc.	Baa1	A-	Yes	Yes	No	
27	Northeast Utilities / Eversource Energy	Baa1	A	Yes	Yes	Yes	selected
28	Northwestern Corporation	A3	BBB	Yes	Yes	Yes	selected
29	OGE Energy Corp.	A3	A-	Yes	Yes	Yes	selected
30	Otter Tail Corp.	Baa2	BBB	No	Yes	Yes	
31	Pepco Holdings Inc.	Baa3	BBB+	No	Yes	No	
32	PG&E Corp.	Baa1	BBB	No	Yes	Yes	
33	Pinnacle West Capital Corp.	A3	A-	Yes	Yes	Yes	selected
34	PNM Resources Inc.	Baa3	BBB+	No	Yes	Yes	
35	Portland General Electric Co.	A3	BBB	Yes	Yes	Yes	selected
36	PPL Corp.	Baa2	A-	Yes	Yes	Yes	selected
37	Public Service Enterprise Group Inc.	(P)Baa2	BBB+	No	Yes	Yes	
38	SCANA Corp.	Baa3	BBB+	No	Yes	Yes	
39	Sempra Energy	Baa1	BBB+	No	Yes	No	
40	Southern Co. (The)	Baa1	A-	Yes	Yes	No	
41	TECO Energy Inc.	(P)Baa1	BBB+	No	Yes	No	
42	UIL Holdings Corp.	Baa2	BBB	No	Yes	No	
43	Unitil Corp. (UTL)	NR	BBB+	No	Yes	Yes	
44	Vectren Corp.	NR	A-	Yes	Yes	Yes	
45	Westar Energy Inc.	Baa1	BBB+	No	Yes	Yes	
46	WEC Energy Group	A3	A-	Yes	Yes	No	
47	Xcel Energy Inc.	A3	A-	Yes	Yes	Yes	selected
	Total Selected						13

NYPSC Staff Proxy Group Stock Prices & Dividend
6 Month Average Price Data

Company	Annual Dividend (Value Line)	Annual Dividend Yield	Six-month Average Price	Aug-15		Sep-15		Oct-15		Nov-15		Dec-15		Jan-16	
				High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
ALLETE, Inc.	2.03	4.05%	\$50.13	52.49	48.31	51.13	45.86	52.90	49.29	52.78	49.06	51.85	47.93	53.74	48.26
Alliant Energy Corp.	2.23	3.73%	\$59.67	62.94	55.52	58.64	54.27	61.67	57.18	61.16	56.14	64.25	58.13	65.35	60.75
CenterPoint Energy Inc.	1.00	5.54%	\$17.99	20.10	17.72	18.57	17.48	19.26	17.60	18.90	16.85	18.48	16.05	18.49	16.38
Consolidated Edison Inc.	2.61	4.04%	\$64.74	67.37	62.15	66.97	60.49	67.94	64.83	66.31	61.19	65.66	60.30	70.20	63.47
DTE Energy Co.	2.87	3.57%	\$80.35	85.12	76.09	80.47	74.56	85.36	78.39	83.48	78.26	81.93	77.35	85.18	78.01
Edison International	1.75	2.90%	\$60.38	63.18	57.28	63.15	56.68	66.29	59.84	61.16	57.51	61.35	57.85	62.34	57.97
Northeast Utilities / Eversource Energy	1.69	3.36%	\$50.18	52.15	46.89	50.66	45.14	52.85	49.26	51.98	48.66	52.24	48.18	54.15	50.01
Northwestern Corporation	1.93	3.61%	\$53.56	56.68	51.00	53.99	48.47	57.07	53.18	55.50	51.27	55.65	51.95	55.85	52.16
OGE Energy Corp.	1.07	3.95%	\$27.04	31.52	27.14	28.05	26.44	29.40	26.72	28.66	25.45	27.04	24.15	26.52	23.37
Pinnacle West Capital Corp.	2.46	3.90%	\$63.07	65.23	58.95	64.21	57.33	67.02	62.43	65.45	61.02	65.51	60.70	66.49	62.51
Portland General Electric Co.	1.19	3.28%	\$36.40	38.00	33.74	37.03	33.33	39.08	36.12	37.43	34.97	37.80	35.04	39.02	35.27
PPL Corp.	1.50	4.56%	\$32.95	33.83	30.51	32.91	29.18	34.92	32.22	35.00	32.62	34.48	32.36	35.15	32.18
Xcel Energy Inc.	1.29	3.66%	\$35.35	36.48	32.83	35.45	32.43	37.25	34.64	36.32	34.33	36.72	34.33	38.26	35.19

Data Source

Prices from S&P CapitalIQ, a business unit of Standard and Poor's
Dividend from Latest Value Line Investment Survey

NYPSC Staff Proxy Group: Common Equity Ratio and Credit Rating as of Third Quarter of 2015

Company	Long-term Debt (LTD, \$M)	Current portion of LTD (\$M)	Total Long-term Debt (\$M)	Preferred Stock (\$M)	Minority Interest (\$M)	Customer Deposits (\$M)	Common Equity (\$M)	Total Capital	Common Equity Ratio	Moody's Rating	S&P Rating
1 ALLETE, Inc.	\$1,549	\$49	\$1,598	\$0	\$2	\$0	\$1,822	\$3,422	53.24%	A3	BBB+
2 Alliant Energy Corp.	\$3,856	\$3	\$3,859	\$0	\$201	\$0	\$3,745	\$7,805	47.99%	A3	A-
3 CenterPoint Energy Inc.	\$7,662	\$938	\$8,600	\$0	\$0	\$0	\$4,058	\$12,658	32.06%	Baa1	A-
4 Consolidated Edison Inc.	\$11,521	\$761	\$12,282	\$0	\$9	\$0	\$13,040	\$25,331	51.48%	A3	A-
5 DTE Energy Co.	\$8,368	\$462	\$8,830	\$0	\$21	\$0	\$8,812	\$17,663	49.89%	A3	BBB+
6 Edison International	\$10,957	\$295	\$11,252	\$0	\$2,031	\$0	\$11,600	\$24,883	46.62%	A3	BBB+
7 Northeast Utilities / Eversource Energy	\$8,757	\$229	\$8,986	\$0	\$156	\$0	\$10,294	\$19,436	52.96%	Baa1	A
8 Northwestern Corporation	\$1,782	\$0	\$1,782	\$0	\$0	\$0	\$1,519	\$3,301	46.01%	A3	BBB
9 OGE Energy Corp.	\$2,646	\$110	\$2,756	\$0	\$0	\$0	\$3,353	\$6,109	54.89%	A3	A-
10 Pinnacle West Capital Corp.	\$3,257	\$411	\$3,669	\$0	\$138	\$0	\$4,654	\$8,460	55.01%	A3	A-
11 Portland General Electric Co.	\$2,204	\$0	\$2,204	\$0	\$0	\$0	\$2,232	\$4,436	50.32%	A3	BBB
12 PPL Corp.	\$17,873	\$1,496	\$19,369	\$0	\$0	\$312	\$10,222	\$29,903	34.18%	Baa2	A-
13 Xcel Energy Inc.	\$12,691	\$457	\$13,148	\$0	\$0	\$228	\$10,545	\$23,922	44.08%	A3	A-
Total	\$93,123	\$5,212	\$98,335	\$0	\$2,557	\$540	\$85,896	\$187,328			
Average	\$7,163	\$401	\$7,564	\$0	\$197	\$42	\$6,607	\$14,410	47.59%	Baa1	BBB+
Median	\$7,662	\$295	\$8,600	\$0	\$2	\$0	\$4,654	\$12,658	49.89%	Baa1	BBB+

Total Capital= Common Equity+Total LTD+Customer Deposits+Pref Stock+Minority Interest

Source:

2015 Third Quarter Reports(10Q) using S&P CapitalIQ

NYPSC STAFF DCF ANALYSIS USING FERC COST OF EQUITY MODEL

	Moody's	S&P	Dividend	I/B/E/S	GDP	Composite	Adj. Div.	Adj. Div.	DCF Results with	DCF Results without
Company	Rating	Rating	Yield	Growth Rate	Growth Rate	Growth Rate	Factor	Yield	low-end Outliers	low-end Outliers
1 ALLETE, Inc.	A3	BBB+	4.05%	5.00%	4.32%	4.77%	1.024	4.15%	8.92%	8.92%
2 Alliant Energy Corp.	A3	A-	3.73%	5.55%	4.32%	5.14%	1.026	3.83%	8.97%	8.97%
3 CenterPoint Energy Inc.	Baa1	A-	5.54%	0.40%	4.32%	1.71%	1.009	5.59%	7.30%	7.30%
4 Consolidated Edison Inc.	A3	A-	4.04%	2.95%	4.32%	3.41%	1.017	4.11%	7.51%	7.51%
5 DTE Energy Co.	A3	BBB+	3.57%	5.05%	4.32%	4.81%	1.024	3.65%	8.46%	8.46%
6 Edison International	A3	BBB+	2.90%	-0.61%	4.32%	1.03%	1.005	2.91%	3.95%	
7 Northeast Utilities / Eversource Energy	Baa1	A	3.36%	6.57%	4.32%	5.82%	1.029	3.46%	9.28%	9.28%
8 Northwestern Corporation	A3	BBB	3.61%	6.81%	4.32%	5.98%	1.030	3.72%	9.70%	9.70%
9 OGE Energy Corp.	A3	A-	3.95%	2.17%	4.32%	2.89%	1.014	4.01%	6.90%	6.90%
10 Pinnacle West Capital Corp.	A3	A-	3.90%	4.95%	4.32%	4.74%	1.024	3.99%	8.73%	8.73%
11 Portland General Electric Co.	A3	BBB	3.28%	4.13%	4.32%	4.19%	1.021	3.35%	7.54%	7.54%
12 PPL Corp.	Baa2	A-	4.56%	3.75%	4.32%	3.94%	1.020	4.65%	8.59%	8.59%
13 Xcel Energy Inc.	A3	A-	3.66%	4.84%	4.32%	4.67%	1.023	3.74%	8.41%	8.41%
Min									3.95%	6.90%
Max									9.70%	9.70%
Median									8.46%	8.53%
Low-end Outlier Threshold									6.45%	6.45%

Norminal GDP(\$billions)

			Compound Annual
Source	2020	2040	Growth Rate
U.S. Energy Information Administration Projections ¹			
Real Gross Domestic Product (\$ billions)	18,801	29,898	2.35%
GDP Chain-Type Price index	1.211	1.730	1.80%
² Nominal GDP (\$ billions)	22,760	51,732	4.19%

Blue Chip Economic Indicators(October 2015 Edition)			
Real GDP consensus long range forecast(2022-26)			2.20%
GDP Deflator (2022-26)			2.10%
Nominal GDP Growth Rate			4.30%

Norminal GDP(\$billions)

			Compound Annual
	2020	2070	Growth Rate
³ Based on Social Security Administration 2015			
Nominal Gross Domestic Product (\$ billions)	\$23,687	\$211,683	4.48%
Nominal GDP			4.48%

Average GDP Growth Rate

4.32%

¹Annual Energy Outlook -- Reference case tables released in April 2015

²Dollar amount for Nominal GDP=(Real GDP)*(GDP Chain-Type Price index)

³OASDI Trustees Report: see link below

https://www.socialsecurity.gov/oact/tr/2015/VI_G2_OASDHI_GDP.html

<https://www.socialsecurity.gov/oact/tr/2015/trTOC.html>

Summary: Municipal Utilities Debt Issuances By Rating Categories (From February 1, 2015 to January 31, 2016)


Rating Category	Amount Issued (\$M)	Average Coupon	Min. Term (yrs)	Max. Term(yrs)	Average Term(yrs)	# of Issuances
(S&P/Moody's)						
BBB+/Baa1	\$233.80	4.161%	3	29	11	31
A-/A3	\$1,671.70	3.981%	0.1	45	11	185
A/A2	\$1,847.46	4.230%	1.0	30	10	201
A+/A1	\$1,745.26	3.949%	0.6	45	11	455
AA-/Aa3	\$4,816.49	3.595%	0.5	31	11	858
AA/Aa2	\$5,052.76	3.457%	0.2	33	10	2,042
AA+/Aa1	\$2,230.00	3.920%	0.5	30	10	474
Total or Average	Total is \$17,597.46	Avg is 3.899%	Avg is 0.84	Avg is 34.71	Avg is 10.57	Total is 4,246

Source of Data:
S&P CapitalIQ

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated: Albany, New York
February 24, 2016


David G. Drexler
Acting Managing Attorney
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