

C. Additional Detail on Financing Parameters

This appendix provides additional detail on the data presented in Section III.

The first table provides detail on each debt issuance shown in Figure 5. The second figure includes additional detail on the data used to estimate the risk free rate within the CAPM model and Table 36.

Appendix C Table 1: Additional Detail on Cost of Debt for Independent Power Producers by Issuance, 2017 – 2019

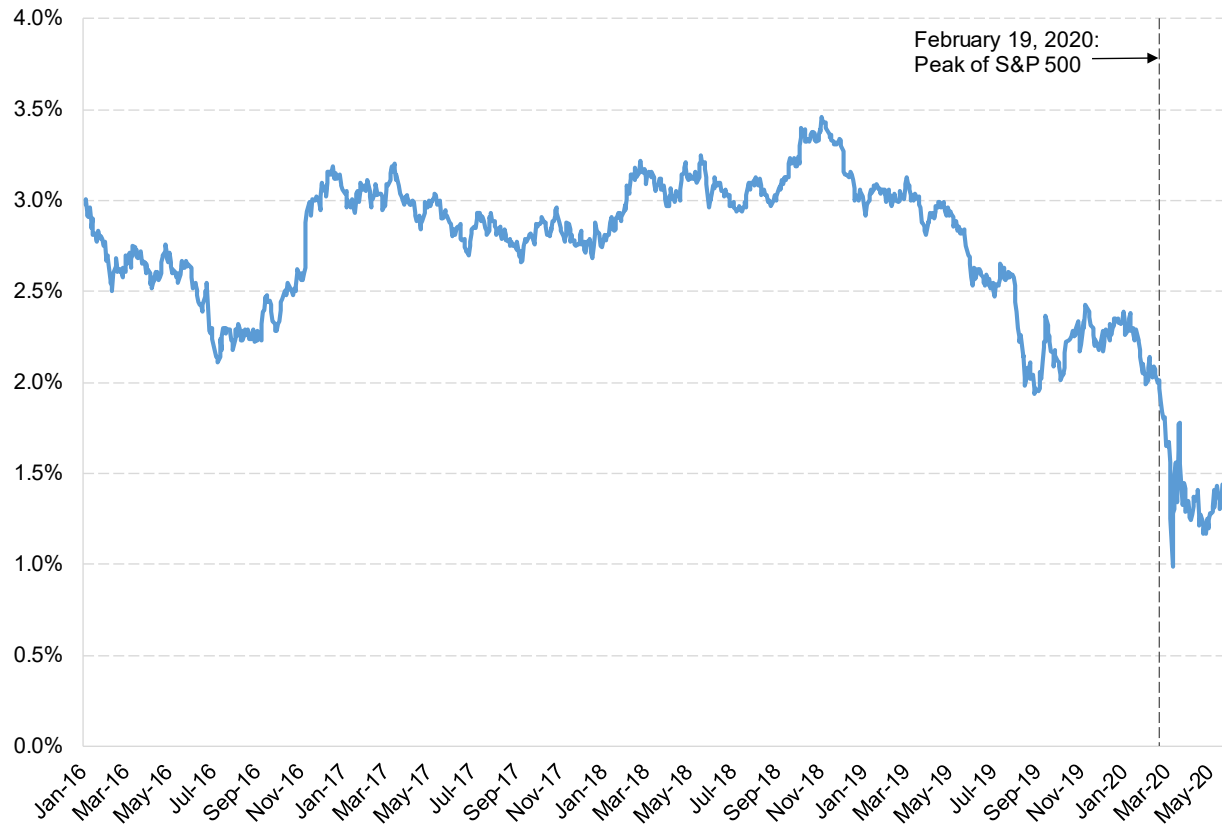
Company	Ticker	Maturity Type	Currency	Bloomberg Composite Rating	Coupon	Issue Date	Maturity	Years to Maturity
Calpine Corp	CPN	CALLABLE	USD	BB	5.3%	12/15/2017	6/1/2026	8.5
Calpine Corp	CPN	CALLABLE	USD	BB	4.5%	12/20/2019	2/15/2028	8.2
Calpine Corp	CPN	CALLABLE	USD	BB	4.5%	12/20/2019	2/15/2028	8.2
Calpine Corp	CPN	CALLABLE	USD	B	5.1%	12/27/2019	3/15/2028	8.2
Calpine Corp	CPN	CALLABLE	USD	B	5.1%	12/27/2019	3/15/2028	8.2
NRG Energy	NRG	CALLABLE	USD	BB	7.3%	2/14/2017	5/15/2026	9.3
NRG Energy	NRG	CALLABLE	USD	BB	6.6%	4/18/2017	1/15/2027	9.8
NRG Energy	NRG	CALLABLE	USD	BB	5.8%	12/7/2017	1/15/2028	10.1
NRG Energy	NRG	CALLABLE	USD	BB	5.8%	12/7/2017	1/15/2028	10.1
NRG Energy	NRG	CALLABLE	USD	BB	5.8%	10/30/2018	1/15/2028	9.2
NRG Energy	NRG	CALLABLE	USD	BB	5.3%	5/14/2019	6/15/2029	10.1
NRG Energy	NRG	CALLABLE	USD	BB	5.3%	5/14/2019	6/15/2029	10.1
NRG Energy	NRG	CALLABLE	USD	BB	5.3%	5/14/2019	6/15/2029	10.1
Talen Energy	TLN	CALLABLE	USD	B-	9.5%	4/13/2017	7/15/2022	5.3
Talen Energy	TLN	CALLABLE	USD	B-	9.5%	4/13/2017	7/15/2022	5.3
Talen Energy	TLN	CALLABLE	USD	B-	6.5%	8/4/2017	9/15/2024	7.1
Talen Energy	TLN	CALLABLE	USD	B-	6.5%	8/4/2017	9/15/2024	7.1
Talen Energy	TLN	CALLABLE	USD	B-	7.0%	10/11/2017	10/15/2027	10.0
Talen Energy	TLN	CALLABLE	USD	B-	10.5%	11/29/2017	1/15/2026	8.1
Talen Energy	TLN	CALLABLE	USD	B-	10.5%	11/29/2017	1/15/2026	8.1
Talen Energy	TLN	CALLABLE	USD	B+	7.3%	5/21/2019	5/15/2027	8.0
Talen Energy	TLN	CALLABLE	USD	B+	7.3%	5/21/2019	5/15/2027	8.0
Talen Energy	TLN	CALLABLE	USD	B+	6.6%	7/8/2019	1/15/2028	8.5
Talen Energy	TLN	CALLABLE	USD	B+	6.6%	7/8/2019	1/15/2028	8.5
Vistra Energy Corp	VST	CALLABLE	USD	BB	8.1%	8/21/2017	1/30/2026	8.4
Vistra Energy Corp	VST	CALLABLE	USD	BB	8.1%	8/21/2017	1/30/2026	8.4
Vistra Energy Corp	VST	CALLABLE	USD	BB	5.5%	8/22/2018	9/1/2026	8.0
Vistra Energy Corp	VST	CALLABLE	USD	BB	5.5%	8/22/2018	9/1/2026	8.0
Vistra Energy Corp	VST	CALLABLE	USD	BB	5.6%	2/6/2019	2/15/2027	8.0
Vistra Energy Corp	VST	CALLABLE	USD	BB	5.6%	2/6/2019	2/15/2027	8.0
Vistra Energy Corp	VST	CALLABLE	USD	BB	5.0%	6/21/2019	7/31/2027	8.1
Vistra Energy Corp	VST	CALLABLE	USD	BB	5.0%	6/21/2019	7/31/2027	8.1

Source:

[1] Bloomberg, L.P.

Appendix C Figure 1 provides additional detail on the risk free rate used in the CAPM model. AGI used a 1.88% risk free rate based on the 30-year Treasury Constant Maturity Rate. This rate reflects the average 30-year treasury yields over the period from January 2016-January 2020, the impact on the COVID-19 pandemic on risk-free rates, and the expectation of some recovery in financial markets after 2020. Over the three-year period from January 2016 to January 2020, the average 30-year treasury constant maturity rate was 2.78%. Over the four-month period from February 2020 to May 2020, the average 30-year treasury constant maturity rate was 1.51%.

Appendix C Figure 1: Historical 30 Year Treasury Constant Maturity Rate 2016-Present



Source:

[1] St. Louis Federal Reserve Bank of St. Louis, FRED.