

**Pittsfield Aqueduct Company
Overall Rate of Return Proforma
For the Twelve Months Ended December 31, 2019**

Staff 3-7
Schedule 1

<u>Capital Component</u>	<u>Amount</u> <u>12/31/19</u>	<u>Proforma</u>	<u>Proforma Amount</u> <u>12/31/19</u>	<u>Proforma</u> <u>Component Ratio</u>	<u>Component</u> <u>Cost Rate</u> <u>12/31/2019</u>	<u>Proforma</u> <u>Component Cost</u> <u>Rate</u>	<u>Proforma</u> <u>Average</u> <u>Cost Rate</u>
Long-term Debt (3)	1,312,186 (3)	-	1,312,186	64.58%	3.10%	3.10%	2.00%
Intercompany Debt (3)	14,674	-	14,674	0.72%	3.31%	3.31% (1)	0.02%
Preferred Stock	-			0.00%	0.00%	0.00%	0.00%
Common Equity	1,768,307	(1,063,241) (4)	705,066	34.70%	4.85%	4.85% (2)	1.68%
Overall Rate of Return	<u>\$ 3,095,167</u>		<u>\$ 2,031,926</u>	<u>100.00%</u>			<u>3.71%</u>

Notes:

(1) The interest reflected is the effective interest rates for 2019 per Schedule F-35 of the Annual Report. -

(2) The return on equity based on methodolog used in Order 25,292 in DW 11-026 is as follows:

Average prior 12 mos (Aug 2019-Jul	
2020) 30 year Treasury bonds	1.85%
Plus 3.0%	<u>3.00%</u>
Total	<u>4.85%</u>

(3) Inclusive of 2018 pcp/PAC LONG term intercompany approved in DW18-033

(4) Per Order 25,292 in DW 11-026, eliminate the MARA and related equity per Schedule 2 as required by DW11-026

**Pittsfield Aqueduct Company
Capital Structure for Ratemaking Purposes
For the Twelve Months Ended December 31, 2019**

**Staff 3-7
Schedule 2**

	<u>Test Year</u>	<u>Pro Forma Adjustment s</u>	<u>Pro Forma Test Year</u>	<u>Component Ratio</u>
Long-term Debt	1,312,186	-	1,312,186	64.58%
Intercompany Debt	\$ 14,674	-	14,674	0.72%
<u>Common Equity:</u>				
Common Stock	100	(100)	-	
Paid In Capital	1,899,596	(1,063,241) (1)	836,355	
Comprehensive Income	-	-	-	
Retained Earnings	<u>(131,389)</u>		<u>(131,389)</u>	
Total Common Equity	1,768,307		704,966	34.70%
Total Capital	<u>\$ 3,095,167</u>		<u>\$ 2,031,826</u>	100.00%

Notes:

(1) Per Order 25,292 in DW 11-026, eliminate the MARA and related equity:

Equity as of 1/25/	826,112
Paid in Capital as of 1/25/12	237,129
	<u>1,063,241</u>

Pittsfield Aqueduct Company
Historical Capital Structure
For the Twelve Months Ended December 31, 2015 - 2019

Staff 3-7
Schedule 3

	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
Bonds	-	-	-	-	-
Intercompany Note	1,147,728	1,172,125	776,850	776,850	776,850
Other LTD	164,458	168,331	171,163	58,117	-
Long-term Debt	<u>\$ 1,312,186</u>	<u>\$ 1,340,456</u>	<u>\$ 948,013</u>	<u>\$ 834,967</u>	<u>\$ 776,850</u>
Intercompany Debt	14,674	85,570	423,622	443,407	465,569
Common Equity:					
Common Stock	100	100	100	100	100
Paid In Capital	1,899,596	1,935,318	2,064,824	2,185,204	2,224,208
Comprehensive Income	-	-	-	-	-
Retained Earnings	(131,389)	(137,454)	(23,553)	3,028	52,358
Total Common Equity	<u>\$ 1,768,307</u>	<u>\$ 1,797,964</u>	<u>\$ 2,041,371</u>	<u>\$ 2,188,332</u>	<u>\$ 2,276,666</u>
Total Capital	<u>\$ 3,095,167</u>	<u>\$ 3,223,990</u>	<u>\$ 3,413,005</u>	<u>\$ 3,466,706</u>	<u>\$ 3,519,085</u>
Long-term Debt	42.39%	41.58%	27.78%	24.09%	22.08%
Total Common Equity	57.13%	55.77%	59.81%	63.12%	64.69%
Intercompany Debt	<u>0.47%</u>	<u>2.65%</u>	<u>12.41%</u>	<u>12.79%</u>	<u>13.23%</u>
Total Capital	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>

Pittsfield Aqueduct Company
Historical Capitalization Ratios
For the Twelve Months Ended December 31, 2015 - 2019

Staff 3-7
Schedule 4

	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
Long-term Debt	42.39%	41.58%	27.78%	24.09%	22.08%
Total Common Equity	57.13%	55.77%	59.81%	63.12%	64.69%
Intercompany Debt	<u>0.47%</u>	<u>2.65%</u>	<u>12.41%</u>	<u>12.79%</u>	<u>13.23%</u>
Total Capital	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>

Pittsfield Aqueduct Company
Weighted Average Cost of Long-Term Debt
For the Twelve Months Ended December 31, 2019
Revised per Staff DR 3-7
5/15/21

Staff 3-7
Schedule 5

Holder	Term	Maturity	Coupon Rate	Outstanding Balance as of 12/31/19	New Debt Added in 2020	Annual Interest (1)	Annual Amortization Issue Costs	All In Annual Cost	Effective Rate	2019 TY Principal Payments(9)	2019 TY Interest Payments	2019 TY Principal and Interest Payments	2019 Pro Form Adj to 2019 TY Principal	2019 Pro Form Adj to 2019 TY Interest	2019 TY Pro Form Principal and Interest Payments	2020 Principal Payments	2020 Interest Payments	2020 Principal and Interest Payments
SRF Catamount Road	30	04/30/48	1.960%	164,458		3,223	673	3,897	2.37%	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
Intercompany Loan from PCP (1)	30	05/31/48	3.200%	1,147,728	-	36,727	75	36,802	3.21%	\$ 23,576	\$ 37,973	\$ 61,549	\$ 535	\$ (535)	\$ 61,549	\$ 24,111	\$ 37,438	\$ 61,549
TOTAL				1,312,186	-	39,951	748	40,699	3.10%	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!

Notes:
 (1) Intercompany debt approved in DW18-033 - \$ 1,186,000
 Loan Term - 30 Year
 Loan Interest Rate - 3.20%
 Annual P&I - \$61,549

Pittsfield Aqueduct Company
Short-Term and Long-Term Intercompany Debt
For the Thirteen Months Ended December 31, 2019

Staff 3-7
Schedule 6

	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	13 Month Average
NOTE PAYABLE - PCP 2018 1.1M LOAN	1,147,728	1,145,660	1,143,586	1,141,506	1,139,421	1,137,331	1,135,234	1,133,133	1,131,025	1,128,912	1,126,794	1,124,669	1,122,540	1,135,195
NOTE PAYABLE - PCP 2018 1.1M LOAN-CURRENT PORTION	24,396	24,462	24,527	24,592	24,658	24,723	24,789	24,856	24,922	24,988	25,055	25,122	25,189	24,791
TOTAL LONG TERM INTERCOMPANY DEBT	1,172,125	1,170,121	1,168,113	1,166,098	1,164,079	1,162,054	1,160,024	1,157,988	1,155,947	1,153,901	1,151,849	1,149,791	1,147,728	1,159,986
INTERCO PAY/REC: PAC/PCP	72,615	(2,878)	5,839	(50,214)	(100,125)	(160,809)	(105,101)	(173,857)	(203,044)	(260,915)	(339,032)	(368,432)	1,719	(129,556)
INTERCO PAY/REC: PAC/TSC	-	-	-	-	-	-	-	-	-	-	-	-	-	-
INTERCO PAY/REC: PAC/PWS	-	-	-	-	-	(63)	(63)	(63)	(64)	(64)	(64)	(64)	-	(34)
AP INTERCO PAY/REC:PEU/PAC	-	335	335	335	335	335	335	3,099	4,699	4,460	6,674	12,977	-	2,609
INTERCO PAY/REC: PAC/PWW	-	25,931	48,422	92,458	114,971	141,261	168,609	199,694	226,148	249,157	275,416	311,404	-	142,575
INTERCO LOAN PWW/PAC: RSF	12,955	12,955	12,955	12,955	12,955	12,955	12,955	12,955	12,955	12,955	12,955	12,955	12,955	12,955
INTERCO PAY/REC: PAC/PEU	-	0	1	2	3	4	1,006	1,003	1,014	1,027	1,070	1,091	-	478
INTERCO ADV-PCP PROM NOTE 5/18	-	-	-	-	-	-	-	-	-	-	-	-	-	-
INTERCO LOAN PAC - INTERGRATED	-	-	-	-	-	-	-	-	-	-	-	-	-	-
INTERCOMPANY SHORT TERM DEBT	85,570	36,343	67,551	55,535	28,138	(6,318)	77,740	42,830	41,708	6,621	(42,981)	(30,069)	14,674	29,026
TOTAL INTERCOMPANY DEBT	1,257,695	1,206,464	1,235,664	1,221,634	1,192,217	1,155,736	1,237,764	1,200,818	1,197,655	1,160,521	1,108,868	1,119,722	1,162,402	1,189,012

Pittsfield Aqueduct Company
Weighted Average Cost of Preferred Stock
For the Twelve Months Ended December 31, 2012

Staff 3-7
Schedule 7

Security	Term	Maturity	Rate	Outstanding Balance	Annual Dividends	Annual Amortization	All In Annual Cost	Effective Rate
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NOT APPLICABLE

Pittsfield Aqueduct Company
Return on Common Equity
For the Twelve Months Ended December 31, 2019

Staff 3-7
Schedule 8

Source: 30 yr treasury rates used by S&P

Date	Open	High	Low	Close
Aug 2019				2.1200%
Sept 2019				2.1600%
Oct 2019				2.1900%
Nov 2019				2.2800%
Dec 2019				2.3000%
Jan 2020				2.2200%
Feb 2020				1.9700%
Mar 2020				1.4600%
Apr 2020				1.2700%
May 2020				1.3800%
Jun 2020				1.4900%
Jul 2020				1.3100%
	30 year Treasury bonds			Average
			Average	1.8458%
			Plus	3.0000%
			Cost of Equity	4.8458%

**Pittsfield Aqueduct Company
Report of Proposed Rate Changes
For the Twelve Months Ended December 31, 2019**

Staff 3-7

**Pro Forma
Schedule 9
Permanent**

DOCKET NO: _____ DATE FILED: _____
TARIFF NO.: 1 or PAGE NOS. 38, 40, 42-43,45,48 EFF. DATE: _____

Rate or Class of Service	Effect of Proposed Change	Average Number of Customers	Pro Forma Rates to five Year Ave.	Proposed Perm Rates	Proposed Change	
					Amount	% Increase
G-M ²	Increase	630	571,063	602,158	\$31,095	5.45%
Private FP ³	Increase	12	29,067	30,650	\$1,583	5.45%
FP - Hydrants	Increase	1	175,804	185,377	\$9,573	5.45%
TOTALS		643	775,934	818,185	\$42,251	

Signed by: _____

Donald L. Ware

Title: **Chief Operating Officer**

³ Includes Private Fire Services and Private Hydrants - count is number of accounts

**Pittsfield Aqueduct Company
Bingo Sheet Perm
For the Twelve Months Ended December 31, 2019**

Staff 3-7

UTILITY: Pittsfield Aqueduct Company DATE FILED: _____
 TARIFF NO.: 5 or PAGE NOS. 39-40 EFF. DATE: _____

Rate or Class of Service	Effect of Proposed Change	Average Number of Customers	Estimated Annual Revenue	Proposed Change		
			Pro Forma Rate to TY Five Year Ave (1)	Proposed Rates	\$\$ Amunt Increase over TY Current Rates 5 Yr. Ave. Pro Forma	% Increase
G-M ²	Increase	630	571,063	602,158	31,095	5.45%
Private FP ³	Increase	12	29,067	30,650	1,583	5.45%
FP - Hydrants	Increase	1	175,804	185,377	9,573	5.45%
TOTALS		643	775,934	818,185	42,251	