Amador Water Agency

Capacity Fees

March 4, 2021

RAFTELIS

Agenda

1. Capacity Fees 101
2. Methodology
3. Proposed Results

Capacity Fees 101

Capacity Fees 101

- What are Capacity Fees?
  - One-time capital charges assessed against new development as a way to provide or cover a proportional share of the costs of capital facilities constructed or to be constructed for its use
    - Address equity concerns between current and future customers
  - Commonly known as connection fees, capacity fees, system development charges, impact fees, etc.

Legal Environment

- **CAPACITY FEES MUST:**
  - Reflect the link between fees and benefits received by new customers
  - Not exceed the proportional share of costs associated with providing service
- Per Assembly Bill ("AB") 1600 (codified as California Government Code §66000 – 66008) as well as §66013, 66016, 66022, and 66023

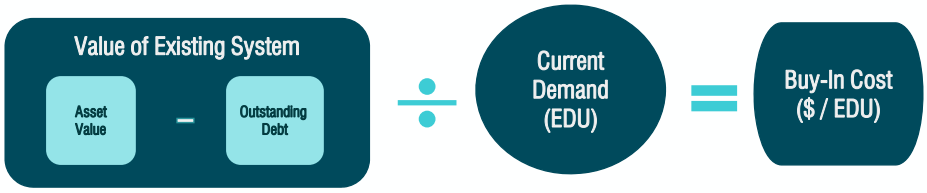
Capacity Fees

- Raftelis used the Equity Buy-In + Incremental Cost method
  - Need to value the existing system and charge new customers for appropriate share of existing infrastructure
  - Master Plan forecast CIP that is growth related in the treated retail and treated wholesale

Equity Buy-In Method

Focuses on Total Value and Current Demand of Existing System

- Recognizes that existing customers have developed and maintained a utility system that can accommodate growth
- Typical Approaches for System Value: OC, OCLD, RC, RCLD



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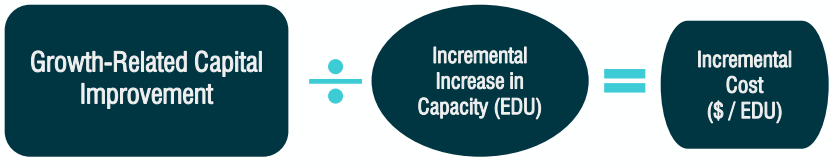
Incremental-Cost Method

Focuses on new development paying for additional capacity necessary to serve growth

- Typically used when there are specific capital improvements that are needed to accommodate growth for development to occur
  - Growth-related capital improvements are allocated to new development based on their estimated usage or capacity requirements



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Buy In

Valuation Methodology

- Asset Registry List is missing key data to calculate Replacement Cost Less Depreciation
- Raftelis utilized the Water Master Plan study that estimated Replacement Cost
  - Assets were grouped into 3 service types
    - Treated Retail
    - Untreated Retail
    - Treated Wholesale
- RC accounts for inflation, but not depreciation
  - To account for depreciation, we are subtracting 20 years of related CIP from the asset value

Net Asset Value

Line	Description	Treated Retail	Untreated Retail	Treated Wholesale
1	Asset Value in 2020 Dollars	$444,819,528	$6,712,228	$102,964,247
2	Less Outstanding Principal	($29,607,303)	($446,768)	($6,853,327)
3	Less 20 Years of CIP	($309,751,449)	($4,674,080)	($71,699,471)
4	**Net Asset Value**	**$105,460,776**	**$1,591,380**	**$24,411,449**

- Numbers shown in all the tables of this presentation are rounded

Assessment Methodology

- Raftelis recommends that the Fee is assessed based on American Water Works Association's (AWWA) capacity ratio
  - Current methodology is similar to Raftelis recommendation except for higher meters where the ratio slightly lower
  - Raftelis recommends the meter ratio be normalized to a 3/4" meter rather than 5/8"
- Capacity ratios are used to determine the number of equivalent meters (EMUs) for each service type

EMUs – Treated Retail

Treated Retail	AWWA Capacity	AWWA Ratio	# of Meters	EMU
5/8 & 3/4	30	1.00	6,683	6,683
1	50	1.67	244	407
1.5	100	3.33	34	113
2	160	5.33	34	181
3	350	11.67	3	35
4	630	21.00	4	84
6	1600	53.33	6	320
Total			**7,008**	**7,823**

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EMUs – Untreated Retail

Untreated	AWWA Capacity	AWWA Ratio	# of Meters	EMU
5/8 & 3/4	30	1.00	125	125
1	50	1.67	30	50
1.5	100	3.33	7	23
2	160	5.33	6	32
3	350	11.67	3	35
4	630	21.00	3	63
6	1600	53.33	1	53
Total			**175**	**382**

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EMUs – Treated Wholesale

Treated Wholesale	AWWA Capacity	AWWA Ratio	# of Meters	EMU
5/8 & 3/4	30	1.00	3,242	3,242
1	50	1.67	197	328
1.5	100	3.33	36	120
2	160	5.33	106	565
3	350	11.67	-	-
4	630	21.00	8	168
6	1600	53.33	1	53
Total			**3,590**	**4,477**

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EMUs – Summary

	Treated Retail	Untreated Retail	Treated Wholesale
Calculated EMU	7,823	382	4,477
Prior EMU (2016 Study)	8,359	825	2,806

- Calculated EMUs for Untreated Retail reflects a more accurate number
  - › Prior study used estimated values
- Calculated EMUs for Treated Wholesale are based on number of end user service connections reported by each wholesale customer, results in a large increase from prior study

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Buy-In: Fee per EMU

- Net Asset Value is divided by total equivalent meters to determine the Fee per EMU

Line	Description	Treated Retail	Untreated Retail	Treated Wholesale
1	Net Asset Value	$105,460,776	$1,591,380	$24,411,449
2	EMUs	7,823	382	4,477
3	**BUY-IN CAPACITY FEE**	**$13,480**	**$4,170**	**$5,453**

- Numbers shown in all the tables of this presentation are rounded

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Incremental

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Incremental Calculation

- Raftelis worked with Amador staff to determine the next 5 years of growth-related CIP
  - Only Treated Retail and Treated Wholesale benefit from growth related CIP
- Raftelis also calculated the incremental growth Amador would expect based on the Water Master Plan
  - Estimated growth rates by service area (7% overall)
- These amounts are divided to give the incremental cost

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Incremental Calculation

Line	Calculation	Description	Values
1	***Water Master Plan***	Incremental CIP Total (5 Years)	$7,687,000
2	***Slide 16***	Current EMUs (Treated Retail and Treated Wholesale)	12,300
3	***(Line 2 x 7%)***	Incremental EMUs	922
4	***(Line 1 / Line 3)***	**INCREMENTAL FEE**	**$8,338**

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Proposed Capacity Fee

- Adding the Buy-In and Incremental Portions yields the proposed Capacity Fee

Line	Description	Treated Retail	Untreated Retail	Treated Wholesale
1	BUY-IN CAPACITY FEE	$13,480	$4,170	$5,453
2	INCREMENTAL FEE	$8,338	$0	$8,338
3	**Total Capacity Fee**	**$21,818**	**$4,170**	**$13,790**

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Proposed Fees

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Proposed Capacity Fees Treated Retail

Meter Size	Current	Proposed	$ Difference
5/8 & 3/4	$15,992	$21,818	$5,826
1	$26,655	$36,363	$9,708
1.5	$53,307	$72,727	$19,420
2	$85,293	$116,363	$31,070
3	$170,586	$254,544	$83,958
4	$266,540	$458,179	$191,639
6	$533,078	$1,163,629	$630,551

Proposed Capacity Fees Untreated Retail

Meter Size	Current	Proposed	$ Difference
5/8 & 3/4	$6,507	$4,170	($2,337)
1	$10,845	$6,949	($3,896)
1.5	$21,690	$13,899	($7,791)
2	$34,704	$22,238	($12,466)
3	$69,409	$48,645	($20,764)
4	$108,449	$87,561	($20,888)
6	$216,900	$222,376	$5,476

Proposed Capacity Fees Treated Wholesale

Meter Size	Current	Proposed	$ Difference
5/8 & 3/4	$9,210	$13,790	$4,580
1	$15,351	$22,984	$7,633
1.5	$30,702	$45,968	$15,266
2	$49,124	$73,549	$24,425
3	$98,248	$160,888	$62,640
4	$153,512	$289,598	$136,086
6	$307,021	$735,487	$428,466

Policy Discussion on Residential Fireflow Requirement

- Given Residential fire sprinkler requirements, most new development will require a 1” meter
  - Who benefits from Fire Sprinkler requirements?
- Thought A:
  - Fire Sprinkler system is a benefit only for property owner
  - Policy A: Developer should pay for 1” capacity and associated meter rate
- Thought B:
  - Fire Sprinkler benefits property owner and the neighboring community
  - Policy B: Developer should pay for 3/4” capacity and associated meter rate

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Thank you!

Contact:
Sanjay Gaur
213-262-9304 / sgaur@raftelis.com

Nancy Phan
206-707-9150 / nphan@raftelis.com

Michael Hicks
213-262-9301 / mhicks@raftelis.com

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Non-growth related CIP

Line	CIP (Today's Dollars)		Treated Retail	Untreated Retail	Treated Wholesale
1	Water Master Plan	$184,285,000	$147,834,369	$2,230,788	$34,219,843
2	Water R&R CIP	$201,840,000	$161,917,080	$2,443,293	$37,479,627
3	**Total CIP**	**$386,125,000**	**$309,751,449**	**$4,674,080**	**$71,699,471**