Docket		A.23-01-001
Exhibit Number	:	Cal Adv - #
Commissioner	:	Genevieve Shiroma
Administrative Law Judge	:	Gerald F. Kelly
Public Advocates Office	:	Anthony Andrade
Witness(es)	:	



PUBLIC ADVOCATES OFFICE CALIFORNIA PUBLIC UTILITIES COMMISSION

San Jose Hills Planned Projects and Water Quality [Public]

SUBURBAN WATER SYSTEMS TEST YEAR 2024 GENERAL RATE CASE

San Francisco, California August 14, 2023

TABLE OF CONTENTS

1	MEN	IORA	NDUM	III
2	CHA	PTER	1 SAN JOSE HILLS PLANNED PROJECTS	1-1
3	I.	INTF	RODUCTION	1-1
4	II.	SUM	IMARY OF RECOMMENDATIONS	1-1
5	III.	ANA	LYSIS	
6		А.	Contingency	
7		B.	Previously Funded Projects Not Built	1-4
8		C.	Three Service Replacement Projects	1-17
9	IV.	CON	ICLUSION	1-19
10	ATT		IENT 1-1: CAL ADVOCATES SJH CAPITAL BUDGET BY	
11			NT	1-20
12 13	ATT		IENT 1-2: SUBURBAN'S RESPONSE TO DATA REQUEST -02	1 22
13	АТТ		-02 IENT 1-3: A.20-03-001 REBUTTAL TESTIMONY OF JORGE	
14	AII		EXTERT 1-5: A.20-05-001 REBUTTAL TESTIMONT OF JORGE	
16	ATT	ACHM	IENT 1-4: LPVCWD MASTER PLAN EXCERPT	1-38
17	ATT		IENT 1-5: LIBERTY UTILITIES (APPLE VALLEY RANCHO	
18		WA]	FER COMPANY) TECHNICAL REPORT EXCERPT	1-48
19	ATT	ACHM	IENT 1-6: SUBURBAN'S RESPONSE TO DR AA9-03	1-52
20	CHA	PTER	2 WATER QUALITY AND SPECIAL REQUEST NO. 3	2-1
21	I.	INTF	RODUCTION	
22	II.	SUM	IMARY OF RECOMMENDATIONS	
23	III.	ANA	LYSIS	
24		А.	Service Area Operations	2-1
25		В.	DDW Drinking Water Enforcement Actions	
26		C.	Water Quality Reports	
27		D.	Future Water Quality Regulations	
28		E.	Special Request No. 3 Recommendation	2-12
29	IV.	CON	ICLUSION	2-13

1	ATTACHMENT 2-1: EXCERPTS FROM DDW'S FOUR CITATIONS OF
2	SUBURBAN WATER SYSTEMS FROM JULY 2023 2-14
3	ATTACHMENT 2-2: STATEMENT OF QUALIFICATIONS2-31

MEMORANDUM

2	The Public Advocates Office at the California Public Utilities Commission ("Cal
3	Advocates") examined application material, data request responses, and other
4	information presented by Suburban Water Systems ("Suburban") in Application ("A.")
5	23-01-001 to provide the California Public Utilities Commission ("Commission" or
6	"CPUC") with recommendations in the interests of ratepayers for safe and reliable
7	service at the lowest cost. Mr. Ibrahim is Cal Advocates project lead for this proceeding.
8	Mr. Moussa is the oversight supervisor, and Ms. Foley is the legal counsel.
9	Although every effort was made to comprehensively review, analyze, and provide
10	the Commission with recommendations on each ratemaking and policy aspect presented
11	in the Application, the absence from Cal Advocates' testimony of any particular issue
12	connotes neither agreement nor disagreement of the underlying request, methodology, or
13	policy position related to that issue.

Chapter #	Description	Witness
1	San Jose Hills Planned Projects	Anthony Andrade
2	Water Quality	Anthony Andrade

CHAPTER 1 San Jose Hills Planned Projects

2 I. INTRODUCTION

The Commission should reduce Suburban Water System's ("SWS" or "Suburban") forecasted budget for planned projects in the San Jose Hills service area during the years 2023 to 2025. This chapter also recommends that the Commission remove forecasted amounts for generators and a slope stability project in the Whittier/La Mirada service area and contingency for projects from any service area. The Public Advocates Office ("Cal Advocates") uses the recommended budget in this chapter as a component to calculate the rate base forecast for Suburban in the Test Years: 2024-2025

- 10 and 2025-2026.
- 11

II. SUMMARY OF RECOMMENDATIONS

12	The Commission should adjust Suburban's proposed capital budget, as follows:
13 14 15 16 17	• Remove all amounts for contingency from the capital budget, because including contingency in utility plant-in-service forecasts would raise rates for unknown and unpredictable costs. The Commission should instead account for differences between actual costs and forecasted costs after the project is complete and costs are recorded and reviewed for reasonableness.
18 19 20 21	• Adjust the amounts for Engineering and Inspection, Mobilization, and Demobilization, for all projects in the capital budget according to the methodology in Cal Advocates' Report on Plant Projects for Whittier/La Mirada System.
22 23 24 25 26 27 28	• Remove \$1,336,721 in 2023, \$9,266,488 in 2024, and \$5,182,381 in 2025 for previously funded projects at Plant 128, Plant 140, Plant 158, Plant 217, and at eight other proposed generator sites that Suburban did not build and is now re-requesting in the current GRC. The Commission should instead conduct its prudency review after the utility completes the projects, demonstrates the plant is in service, and requests to move recorded costs to rate base.
29 30 31	• Remove a total of \$533,786 in 2025 for service replacements that Suburban forecasts as planned projects. Suburban should instead use its annual budget for services to replace these service laterals.

1 III. ANALYSIS

For the San Jose Hills Service Area, Suburban proposes to replace a reservoir and upgrade a pump station at Plant 128, replace the electrical equipment for Plants 118, 140, and 158, add new power generators to seven sites, and replace service laterals in three areas, among other projects. Suburban's cost estimates reserve an amount for contingency for nearly all proposed projects.

7

A. Contingency

8 The Commission should remove all amounts for contingency from the forecasted9 capital budget.

10 Suburban includes a 10% add-on for contingency in nearly all cost estimates for 11 its planned projects. Unlike base construction cost estimates, Suburban uses contingency 12 as a placeholder for costs that may result from construction conflicts and complications 13 unforeseen at the time of budgeting.¹ To illustrate the difference between a base 14 construction cost estimate and contingency, consider Suburban's cost estimate for the 15 proposed project at Plant 118:

¹ Direct Testimony of Jorge Lopez ("Lopez Direct"), p. 250.

Line Item	Quantity	Units	Unit Cost	Cost
Furnish and install new Main Switchboard	1	L.S.	\$141,380	\$141,380
Furnish and install 125 HP VFD	2	L.S.	\$79,127	\$158,254
Furnish and install 40 HP VFD	2	L.S.	\$53,000	\$106,000
Furnish and install Electrical Conduits and Wire	1	L.S.	\$115,000	\$115,000
Furnish and install Electrical Grounding System	1	L.S.	\$16,323	\$16,323
Furnish and install Low Voltage Distribution Panel	1	L.S.	\$68,800	\$68,800
Construct concrete housekeeping pad	1	L.S.	\$39,198	\$39,198
Furnish and install Sola Panel	1	L.S.	\$4,300	\$4,300
Furnish and install PLC, SCADA, and required software modifications	1	L.S.	\$88,900	\$88,900
Furnish and install new Instrumentation Panel	1	L.S.	\$15,646	\$15,646
Furnish and install ventilation system	1	L.S.	\$45,000	\$45,000
Funish and Install Edison Meter and perform service relocation	1	L.S.	\$12,102	\$12,102
Acceptance testing, checkout and startup of power controls, NETA testing	1	L.S.	\$17,621	\$17,621
Perform Arc Flash Study	1	L.S.	\$7,900	\$7,900
Furnish and install new protective bollards	5	L.S.	\$788	\$3,940
Demolition, including salvage and disposal of equipment	1	L.S.	\$12,075	\$12,075
Subtotal				\$852,439
Engineering and Inspection			12%	\$102,292.68
Subtotal				\$954,732
Contingency			10%	\$95,473
				\$1,050,205
General Administration			9.0%	\$94,518
Subtotal				\$1,144,723

Table 1-1: Suburban Plant 118 Cost Estimate²

2 3 In the example above, Suburban details its cost estimates for the proposed electrical equipment upgrade project at Plant 118. The base construction cost estimate is 4 5 the sum of the individual project items, ranging from the \$141,380 estimate for a main 6 switchboard to the \$3,940 estimate for five protective bollards. On top of the base 7 construction cost estimate of \$852,439, Suburban adds 12% more for Engineering and 8 Inspection, 10% for Contingency, and 9% for General Administration. While the base 9 construction cost is estimated with a basis of predictable physical work and purchased items, Suburban adds 10% for contingency in case of unpredictable complications during 10 construction. In effect, contingency accounts for project cost overruns that may or may 11 12 not occur.

² Lopez Direct, p. 240.

1 The Commission should not include estimates for unpredictable costs in the calculation of customer rates. The Commission has recently considered and removed 2 contingency from capital budgets. In a 2021 decision, the Commission held that 3 4 budgeting for contingencies is not necessarily appropriate in a General Rate Case ("GRC"), where the utility must demonstrate the reasonableness of every dollar in its 5 forecast revenue requirement.^{$\frac{3}{2}$} The Commission recognized that since contingency 6 allowances are intended to cover "unforeseen conditions," contingency amounts are 7 8 unpredictable, and therefore, a utility cannot establish the costs for contingency to be 9 reasonable at the forecasting stage. In addition, the Commission reasoned that removing 10 the budgeted contingencies should motivate the utility to remain within its forecasted budget for these projects. 11

12 The Commission should instead account for differences between actual costs and 13 forecasted costs after the project is complete and costs are recorded. Whether 14 contingency is included in the forecast or not, the actual costs of completed projects may 15 be less than or greater than forecasted costs. Suburban may even cancel some projects. 16 In the next GRC, Suburban will update its utility plant-in-service balance with recorded 17 costs that it has incurred for completed projects. Therefore, there is no need in the 18 current GRC to forecast a contingency allowance for unpredictable costs in rate base.

19

B. Previously Funded Projects Not Built

The Commission should remove \$1,336,721 in 2023, \$9,266,488 in 2024, and \$5,182,381 in 2025 for previously funded projects at Plant 128, Plant 140, Plant 158 and at eight other proposed generator sites that Suburban did not build and is now rerequesting in the current GRC. The Commission should instead conduct its prudency review after the utility completes the previously funded projects, demonstrates the plants are in service, and requests to move recorded costs to rate base in a future GRC.

³ Decision 21-08-036, p. 331.

Ratepayers should not be asked to fund projects twice before receiving any 1 benefits from the projects the utilities use to justify rate increases. The Commission 2 authorized increased rates based on Suburban's testimony and forecast for capital 3 projects in the 2020 GRC. Since rates for the test years are based on what projects are 4 included in forecasts, ratepayers pay for projects even where a utility fails to complete a 5 6 project within the forecasted period. Even if the utility completes the project in the 7 following GRC cycle, ratepayers still experience a gap between paying for costs and 8 receiving benefits. Instead of raising rates again in anticipation of the same projects 9 actually being completed, the Commission should account for the completed plant 10 additions in the next GRC after reviewing the reasonableness of the actual costs. 11 The following table breaks down the specific cost estimates that should be 12 removed from Suburban's capital budget as part of this recommendation. Suburban has 13 identified each of the projects summarized in the table below as plant improvements for

14 which it previously received rate payer funding but were not built. $\frac{4}{2}$

⁴ Lopez Direct, pp. 29-32.

	(A)	(B)	(C)	(D)
	Description	2023	2024	2025
1	Plant 128 Cost of Removal	\$398,908		
2	Plant 128 Electrical Upgrades ⁵		\$2,292,188	
3	Plant 128 Reservoir	\$027.812	\$5.055.290	
	Replacement	\$937,813	\$5,055,289	
4	Plant 506 Generator		\$546,535	
5	Plant 235 Generator ⁶		\$496,704	
6	Plant 165 Generator		\$496,704	
7	Plant 118 Generator		\$379,068	
8	Plant 119 Generator			\$529,202
9	Plant 504 Generator			\$496,704
10	Plant 121 W-1 & B-4 Generator			\$852,702
11	Plant 201 W-7 & W-8			0000 007
	Generator ⁷			\$832,827
12	Plant 140 Electrical Upgrades			\$817,662
13	Plant 158 Electrical Upgrades			\$796,284
14	Plant 217 Slope Stability ⁸			\$857,000
15	Suburban	\$1,336,721	\$9,266,488	\$5,182,381
16	Cal Advocates	\$0	\$0	\$0

Table 1-2: Suburban's Cost Estimates for Previously Funded Projects

1

At this time, the Commission should also determine that the reservoir size that Suburban proposes for Plant 128 and the number of fixed generators throughout its San Jose Hills water system are not cost-effective and are unreasonable. Cal Advocates discusses these two points in the following sections.

7 8

1. Plant 128 Reservoir Replacement and Pump Station Projects

9

Suburban has not justified replacing the existing reservoir at Plant 128 with a

10 reservoir as large as 0.5 million gallons (MG). Suburban proposes to spend about \$2.7

 $[\]frac{5}{2}$ Includes a proposed new generator.

⁶ Proposed generator for a site in Whittier/La Mirada.

² Proposed generator for a site in Whittier/La Mirada.

⁸ Proposed project for a site in Whittier/La Mirada.

million to demolish the existing reservoir, upgrade the pump station, and install a new
generator at Plant 128. Suburban proposes to spend a further \$6 million to completely
rebuild the reservoir at Plant 128, including replacing related piping.⁹

The Commission should remove previously authorized but not built projects that 4 5 are forecasted again in subsequent GRCs especially when a utility prematurely forecasted 6 the capital projects. The previously authorized but not built project at Plant 128 is an example of a project that Suburban prematurely forecasted. Suburban could not have 7 8 realistically completed the Plant 128 project in the prior GRC. The Plant 128 project 9 includes removing a reservoir from service while Suburban builds its replacement. 10 Suburban states that it did not build the project in the prior GRC because it required additional time to design a system to continue operations while it removed the existing 11 reservoir from service.¹⁰ Suburban's current solution involves using temporary water 12 storage tanks to substitute while the existing reservoir is demolished and replaced.¹¹ 13 Suburban further states that it discovered this need in the detailed design phase following 14 the prior rate case.¹² Knowing whether the Plant 128 site would need constant storage is 15 a critical design constraint that Suburban should have known before forecasting the Plant 16 128 project with a completion date of 2022.¹³ 17

A utility seeking upfront ratepayer funding should design a project at least enough to know whether the forecast it provides to the Commission is reasonable. Although Suburban notes a nearly 90% increase in costs since the last GRC due to inflation,¹⁴ Suburban's major design additions, including the temporary tank system, have also expanded Suburban's new cost estimate for the Plant 128 project. Since the last GRC,

² Suburban's Workpapers, Volume III-D Planned Projects, pdf p. 280.

¹⁰ Suburban's Workpapers, Volume III-D Planned Projects, p. 20.

¹¹ Attachment 1-2: Suburban's Response to Data Request AA9-02, Q. 7.a.

¹² Attachment 1-2: Suburban's Response to Data Request AA9-02, Q. 7.b.

¹³ Lopez Direct, pp. 30 and 32.

<u>14</u> Lopez Direct, p. 106.

1	the cost of the proposed Plant 128 projects has ballooned from \$2.2 million for the
2	reservoir replacement and \$1.5 million for the pump station upgrade to a total of nearly
3	9 million. ¹⁵ At this time, the Commission should find that Suburban has not justified
4	the proposed new reservoir size and permanent power generator at Plant 128.
5	The Commission should reject the need for a 0.5 MG reservoir because Suburban
6	has, over time, built-up enough water storage infrastructure to replace the need for water
7	storage at Plant 128. < <begin confidential="">></begin>
8	
9	<u>16</u>
10	
11	<u>17</u> << END
12	CONFIDENTIAL >>> Second, over the last decades, Suburban's customers average
13	water demands have decreased. ¹⁸ Therefore, the Commission should not conclude that
14	because the existing reservoir at Plant 128 is 0.5 MG, the replacement should be the same
15	size.
16	In the prior GRC, Suburban argued that its own Water Storage Analysis is no
17	longer applicable because it does not consider the need to provide water during Public
18	Safety Power Shutoffs (PSPS). ¹⁹ PSPS are events when electric utilities, such as
19	Southern California Edison, turn off an area's supply of electricity. <<begin< b=""></begin<>
20	CONFIDENTIAL>>
21	

¹⁵ Lopez Direct, pp. 30 and 32.

¹⁶ Suburban's Workpapers, Volume III-E Asset Management Plans and Master Plans, pdf p. 324 (row for zone 520).

¹⁷ Suburban's Workpapers, Volume III-E Asset Management Plans and Master Plans, pdf p. 464.

 $[\]frac{18}{18}$ For example, Suburban states that the average residential water demand has declined by 31.6% in the San Jose Hills Service Area since 2008 in Suburban's Results of Operations, p. 12-2.

¹⁹ Attachment 1-3: A.20-03-001, Rebuttal Testimony of Jorge Lopez Excerpt.

²⁰ <<END CONFIDENTIAL>> More importantly, building large reservoirs in 1 response to PSPS events is not cost-effective compared to acquiring mobile or fixed 2 3 back-up power generators. For example, Suburban's proposed reservoir at Plant 128 would add just 0.5 MG of water for a cost of nearly \$6 million, which is more than the 4 cost of nine other fixed generators that Suburban proposes throughout its systems. 5 6 Suburban argues that a reservoir at Plant 128 is necessary to provide net positive 7 suction head (NPSH) to the pump station at Plant 128 and thus avoid pump cavitation. 8 However, Suburban also states that it would need to provide NPSH to the pump station at 9 Plant 128 while the existing reservoir is removed and replaced.²¹ Suburban plans to provide the necessary NPSH using portable water tanks with a total of only 0.04 MG, or 10 less than 10% of the proposed permanent reservoir's size.²² Suburban provides no reason 11 that a permanent 0.04 MG reservoir could not provide sufficient NPSH. 12 13 Instead of overbuilding a reservoir to maintain pressure, Suburban could cooperate 14 with its water purveyor to maintain adequate pressure for its water connection. Plant 128 15 receives water from La Puente Valley County Water District (LPVCWD) as part of the Baldwin Park Operating Unit (BPOU) agreement.²³ The supply from LPVCWD is 16 17 intended to replace the production from the San Jose Hills Service Area wells that are out of service due to pollution.²⁴ According to LPVCWD's master plan, LPVCWD has 18 surplus water storage for the zone that supplies Plant 128.25 For the Plant 128 project, 19 Suburban already proposes installing variable frequency drives on the site's booster 20

²⁰ Suburban's Workpapers, Volume III-E Asset Management Plans and Master Plans, pdf p. 324 (row for zone 520).

²¹ Attachment 1-2: Suburban's Response to Data Request AA9-02, Q. 7.a.

²² Suburban's Workpapers, Volume III-D Planned Projects, pdf p. 277, Item No. 3.

²³ Lopez Direct, p. 94.

²⁴ Lopez Direct, p. 94, lines 8-16.

²⁵ Attachment 1-4: LPVCWD Master Plan Excerpt.

pumps to coordinate operations with LPVCWD's well production.²⁶ To avoid damage
due to cavitation, Suburban could similarly coordinate its booster pump operations to the
water level in LPVCWD's reservoirs. This would allow Suburban to shut off booster
pumps if the water supply from LPVCWD is ever depleted.

Besides the size of the reservoir, Suburban has not justified the need to install a
fixed generator at Plant 128. Removing the generator and underlying concrete pad from
the project would reduce costs by about \$423,740.²⁷ The following section explains why
mobile generators are a more reasonable solution for power sites such as Plant 128.

9 The Commission should forecast \$0 for the project at Plant 128. The project was 10 previously proposed and funded by ratepayers in the prior GRC but not built. Ratepayers 11 should not be asked to pay twice for items that have not produced a benefit once. If 12 Suburban does build the Plant 128 project, the Commission can review recorded costs in 13 the next GRC and include all just and reasonable costs in rate base. The Commission 14 should also now determine that Suburban has not justified a replacement reservoir as 15 large as 0.5 MG or a fixed generator at Plant 128.

16

2. Generator Purchases and Installation

The Commission should forecast \$0 for all generator projects companywide because these projects were used to justify rate increases in the prior GRC but not built. At this time, the Commission should also determine that Suburban has not justified installing fixed generators at seven of its nine proposed sites. Suburban could instead save ratepayer funds by acquiring more mobile generators. Mobile generators have been recognized as a method to provide power during outages by the electric utility serving Suburban. Suburban's approach, which instead relies on more fixed generators for many

<u>**26</u>** Lopez Direct, p. 103.</u>

 $[\]frac{27}{27}$ Suburban's Workpapers, Volume III-D Planned Projects, pdf p. 279. The base construction cost estimates are \$347,100 plus successive 12% Engineering Services and Inspection and 9% General Administration cost adders are: \$347,100 × 1.12 × 1.09 = \$423,740.

sites, is contrary to the use of mobile generators by other Class-A water utilities regulated
 by the Commission.

3 In the SJH Service Area, Suburban proposes to spend about \$1.4 million in 2024 and \$1.9 million in 2025 to purchase and install seven generators at various sites. In the 4 5 WLM Service Area, Suburban proposes to spend a further \$0.5 million in 2024 and \$0.85 million in 2025 on a total of two generators.²⁸ Suburban states that these generators are 6 reasonable to restore lost power to pumps or wells during outages.²⁹ Suburban 7 8 specifically refers to Public Safety Power Shutoffs, events where electric utilities suspend the supply of power to prevent electric infrastructure from starting fires. $\frac{30}{2}$ 9 The majority of Suburban's SJH Service Area has a low probability of 10 experiencing a PSPS. Public Safety Power Shutoffs (PSPS) are intended to reduce the 11 12 occurrence of fires ignited by power lines. As a result, areas that have a higher risk of wildfires are more likely to experience PSPS events.³¹ The Commission itself has 13 adopted a High Fire Threat District (HFTD) that designates areas with a higher risk of 14 power line fires.³² The following figures show that only small parts of Suburban's SJH 15 and WLM service areas overlap with the HFTD: 16

²⁸ Lopez Direct Testimony p. 213.

²⁹ Lopez Direct Testimony p. 203-227.

<u>**30</u>** "Public Safety Power Shutoff." Southern California Edison website. <u>https://www.sce.com/outage-center/outage-information/psps</u>.</u>

<u>31</u> "Who is most vulnerable to a PSPS Outage." Southern California Edison website. <u>https://www.sce.com/outage-center/outage-information/psps</u>.

<u>32</u> "Fire-Threat Maps and Fire-Safety Rulemaking." CPUC website. <u>https://www.cpuc.ca.gov/industries-and-topics/wildfires/fire-threat-maps-and-fire-safety-rulemaking</u>.





 $[\]frac{33}{33}$ Based on CPUC Fire Maps and Suburban's Response to DR AA9-01, Q.2.b. Note that the SJH Service Area is enclosed by a black line and Tiers 2 and 3 of the HFTD is represented by a yellow and red shapes over the map.



2

 $[\]frac{34}{2}$ Based on CPUC Fire Maps and Suburban's Response to DR AA9-01, Q.2.b. Note that the SJH Service Area is enclosed by a black line and Tiers 2 and 3 of the HFTD is represented by a yellow and red shapes over the map.



7

<< END CONFIDENTIAL>>

It is more reasonable and cost-effective for Suburban to use a combination of fixed 8 9 and mobile generators as other Class-A water utilities currently do. Suburban could install fixed generators at two of the nine proposed sites and use mobile generators for the 10 11 remaining seven. While Suburban states that certain proposed generator sites, such as 12 Plant 128, are important to the supply chain of the water system, Suburban's existing 13 surplus water storage can be used to maintain water supply during power outages and 14 while Suburban connects mobile generators.

15



1-14



20 Edison alerts water utilities of upcoming PSPS events up to three days before they

³⁷ Suburban's Workpapers, Volume III-E Asset Management Plans and Master Plans, pdf p. 302 (upper left corner of system schematic).

³⁸ Suburban's Workpapers, Volume III-E Asset Management Plans and Master Plans, pdf p. 324.

³⁹ Suburban's Workpapers, Volume III-E Asset Management Plans and Master Plans, pdf p. 324.

⁴⁰ "Critical Facilities and Critical Infrastructure." "Water and Wastewater Systems." Southern California Edison website. <u>https://www.sce.com/wildfire/critical-facilities-infrastructure</u>.

⁴¹ "Critical Facilities and Critical Infrastructure." "Availability of Mobile Backup Power." Southern California Edison website. <u>https://www.sce.com/wildfire/critical-facilities-infrastructure</u>.

occur.⁴² Other class A water utilities served by Southern California Edison such as
 Liberty Utilities (Apple Valley Ranchos Water Company) have plant sites that can be
 powered through mobile generators.⁴³ Suburban last purchased two mobile generators in
 2019 for \$117,880 each.⁴⁴

Finally, Suburban's schedule for its proposed generators is unlikely. Suburban 5 states that fixed generators have a delivery lead time from 70 to over 100 weeks. $\frac{45}{2}$ 6 Nevertheless, Suburban has only recently begun its orders for several of the fixed 7 generators. $\frac{46}{10}$ This is despite Suburban originally scheduling these projects for years 2021 8 and 2022.⁴⁷ For example, because Suburban only issued its notices to proceed in April 9 2023 for two of the generators proposed for 2024, Suburban would need to have the 10 generators delivered in under 60 weeks to meet its proposed schedule. Even after 11 receiving the generator, Suburban may require time to complete the project as is the case 12 with the historical generator project at Plant 109. 13

The state of Plant 109's generator demonstrates that Suburban's forecasts for these projects are unreliable. Suburban's master plan states that the Plant 109 generator would be in service by November 2022. Accordingly, Suburban identifies the Plant 109 generator as a completed project in its testimony.⁴⁸ However, the generator was not delivered until the end of March 2023.⁴⁹ Moreover, since Suburban was still missing components to complete the installation in March, Suburban now does not expect the

^{42 &}quot;SCE's 2020 Planning for Public Safety Power Shutoffs." Southern California Edison presentation. https://www.sce.com/sites/default/files/2020-06/2020 PSPS Preparations.pptx.

⁴³ Attachment 1-5: Liberty Utilities (Apple Valley Ranchos Water Company) Technical Report Excerpt.

⁴⁴ Suburban's Workpapers Volume I, tab "MODEL," cells J4299 and J4300.

<u>45</u> Lopez Direct, p. 203.

⁴⁶ Most orders were made in March 2023 as shown in Suburban's Response to DR AA9-03, Q.1.a.

 $[\]frac{47}{1}$ Lopez Direct, p. 31.

⁴⁸ Lopez Direct, p. 31.

⁴⁹ Attachment 1-6: Suburban's Response to DR AA9-03, Q.1.a.

generator to be operational until June 2023.⁵⁰ Out of eight proposed generators,
 Suburban only ordered two ahead of its GRC application.⁵¹ These are the same two
 generators that are within the HFTD. Therefore, the remaining six proposed generators
 are both unlikely to be completed according to Suburban's forecast in this GRC and
 unlikely to serve areas experiencing a PSPS event.

6 The Commission should forecast \$0 for all generator projects companywide 7 because these projects were used to justify rate increases in the prior GRC but not built. 8 At this time, the Commission should also determine that Suburban has not justified 9 installing more than two fixed generators out of its proposed nine. If Suburban does 10 acquire generators of any type during 2023 to 2025, the Commission can review recorded 11 costs in the next GRC for reasonableness before adding to rate base.

12

C. Three Service Replacement Projects

13 The Commission should remove \$533,786 in 2025 from Suburban's forecasted 14 utility plant-in-service for three service replacement projects. Suburban states that the three service replacement projects are reasonable because the service laterals in these 15 neighborhoods have a history of leaks.52 The Commission should remove these estimates 16 17 because it is unnecessary to have separate service replacement projects in addition to the 18 annual budget for service line replacements. Suburban should instead reprioritize the 19 annual budget to replace services that Suburban has identified as being most likely to 20 leak.

⁵⁰ Attachment 1-6: Suburban Response to DR AA9-03, Q.1.c.

⁵¹ Cal Advocates' DR AA9-03 did not address the proposed generator at Plant 128.

⁵² Lopez Direct Testimony, p. 501.

	(A)	(B)
	Description	2025
1	Larimore & Cadwell	\$83,062
2	Beckner & Orange	\$99,992
3	Jacqueline & Kimberly	\$350,732
4	Suburban	\$533,786
5	Cal Advocates	\$0

1 Table 1-4: Suburban's Cost Estimates for Service Replacement Planned Projects

3 Suburban proposes a separate, multimillion-dollar annual budget to replace service laterals that reach the end of useful life. $\frac{53}{5}$ Suburban states that it forecasts the annual 4 budget as a linear regression because the amount of service failures in future years is 5 unpredictable. $\frac{54}{2}$ Nevertheless, Suburban states that the services in the three 6 neighborhoods in the table above will fail if not replaced in 2025.55 In other words, 7 Suburban predicts that services in these three neighborhoods will fail but the total number 8 9 of services that will fail is unknown. Moreover, Suburban's annual services budget does not include any reduction to account for replacements that are predicted. 10 11 Suburban could use a part of the adopted annual budget for service replacement in 2025 for the three services projects. Suburban already proactively replaces services that 12 are adjacent to leaking services as part of its annual budget.⁵⁶ If Suburban's actual 13 amount of service replacement exceeds the adopted budget, and if Suburban can justify 14 15 the expenditure, then the recorded costs will be captured in the next GRC's historical plant-in-service and added to rate base. 16

⁵³ Lopez Direct Testimony, p. 255.

⁵⁴ Lopez Direct Testimony, p. 257.

⁵⁵ Lopez Direct Testimony, p. 506.

⁵⁶ Cal Advocates' Report and Recommendations on Customer Service, Environmental and Justice Action Plan, Special Requests, and Annual Projects, Attachment 4-4: Suburban's Response to DR KN3-11, Q.1.

1 IV. CONCLUSION

The Commission should remove contingency amounts in Suburban's proposed projects, remove previously funded but not built projects at Plants 128, 140, 158, and at nine generator sites, and remove three service replacement projects from the Utility Plant-in-Service forecast. The Commission should also find that Suburban has not justified the full cost estimate for the Plant 128 project or the number of fixed generators it plans to install.

Attachment 1-1: Cal Advocates SJH Capital Budget by Plant

	(A) Description	(B) 2023	(C) 2024	(D) 2025
1	Plant 128 Cost of Removal	\$0		
2	Plant 128 Electrical Upgrades		\$0	
3	Plant 128 Reservoir Replacement	\$0	\$0	
4	Plant 506 Generator		\$0	
5	Plant 235 Generator		\$0	
6	Plant 165 Generator		\$0	
7	Plant 118 Electrical Upgrades		\$929,159	
8	Plant 118 Generator		\$0	
9	Plant 140 Electrical Upgrades			\$0
10	Plant 119 Generator			\$0
11	Plant 504 Generator			\$0
12	Plant 121 W-1 & B-4 Generator			\$0
13	Plant 201 W-7 and 8 Generator			\$0
14	Tank 162-R1 Center Column and Rafter Recoating			\$158,509
15	Plant 158 Electrical Upgrades			\$0
16	Larimore & Cadwell - Services Replacement			\$0
17	Beckner & Orange - Services Replacement			\$0
18	Jacqueline and Kimberly Service Replacement			\$0
19	Plant 217 Slope Stability			\$0

Attachment 1-2: Suburban's Response to Data Request AA9-02



1325 N. Grand Avenue Sulte 100 Covina, CA 91724-4044 Phone: 626.543.2500 Fax: 626.331.4848 www.swwc.com/suburban

March 17, 2023

To: Suliman Ibrahim Project Coordinator

> Anthony Andrade Utilities Engineer

Shanna Foley Attorney for Public Advocates Office

Re.: Response to A.23-01-001, Public Advocates Office DR AA9-02 (SJH Plant 128 Projects)

Dear Mr. Suliman et al.,

Attached is the information you requested in writing for Suburban's Total Company General Rate Case.

Sincerely,

/s/ Carmelitha Bordelon

Carmelitha Bordelon Director of Regulatory Affairs

Response to A.23-01-001, Public Advocates Office

DR AA9-02 (SJH Plant 128 Projects)

- In SWS 2023 GRC Workpapers ("Workpapers"), Volume III-D Planned Projects, pdf pages 277 to 280, Suburban shows a comparison of two bids for its proposed projects at Plant 128. In the final table on pdf page 280, Suburban summarizes the cost estimates for the "Electrical," "Reservoir," and "COR" projects at Plant 128.
 - a. In the Workpapers, Volume I Microsoft Excel file, tab "MODEL," row 5258, Suburban forecasts the "Cost of Removal Plant 128" as \$398,908 in 2023. Confirm whether this "Cost of Removal Plant 128" refers to the same cost estimate as the amount labeled as "COR" that appears in two tables in Workpapers, Volume III-D Planned Projects, pdf page 280.

Response:

The amounts are the same.

b. Is Suburban treating the cost of removal at Plant 128 differently than at other sites? If yes, explain why. For example, Suburban shows a demolition cost for the proposed project at Plant 118 in Volume III-D Planned Projects, pdf page 874, but Suburban does not appear to include this cost estimate under the "Cost of Removal" workpaper in Volume I Microsoft Excel file, tab "MODEL," starting on row 5247.

Response:

No. The cost of removal for projects is treated the same. The cost of removal for the projects on the excel file "Response DR AA09-02 #1.b.xlsx" should have been included in workpaper Volume 1 Microsoft Excel file, tab "Model."

c. Suburban includes four cost estimate subtotals in the final table of the Workpapers, Volume III-D Planned Projects, pdf page 280. They are "\$991,358.11," \$398,907.76," "\$2,518,123.32," and "\$5,371,112.35." For each of these four cost estimate subtotals, provide a table showing which bid items on pdf pages 277 to 280 comprise the subtotal. See the table below for an example.

Item No.	Bid Item	Total Bid Price
15	Demolish and remove facilities per details noted on sheet D-1, including but not limited to tree, light post, fence, pipe, per plans and specifications.	\$37,900.00

	Complete in place. (SHEET 7, D-1)	
[Table rows for as many bid items as necessary]		
Subtotal: COR		\$398,907.76

Response:

Workpaper Volume II-D, page 280 is incorrect. The correct cost estimate is shown on page 106 of Jorge Lopez's direct testimony. See the enclosed file "Response DR AA9-02 #1.c.xlsx."

- In the Workpapers, Volume III-D Planned Projects, pdf pages 281 to 282, Suburban provides a memorandum that identifies Pacific Hydrotech Corporation ("PacHydro") and R.C. Foster Corporation ("RC Foster") as two bidders for the proposed projects at Plant 128.
 - a. Apart from PacHydro and RC Foster, identify all other bidders for Suburban's proposed projects at Plant 128.

Response:

Suburban also solicited a bid from a third General Engineering Contractor Schuler Constructors. Schuler did not submit a bid.

 Provide the documents that PacHydro, RC Foster, and any other bidder provided to Suburban to support the bidders' cost estimates for the projects at Plant 128.

Response:

Please see the enclosed proposal from the bidders:

- "Response DR AA9-02 #2.b Pachydro.pdf"
- "Response DR AA9-02 #2.b RC Foster.pdf"
- In the Workpapers, Volume III-D Planned Projects, pdf page 278, Suburban shows that bid item number 30 is "Abandon and remove 20-inch AC pipe (Phase 5) including proper disposal of pipe fittings per plans and specifications. Complete in Place (SHEET 8 D-2)."
 - a. Confirm that this 20-inch AC pipe refers to an asbestos-cement pipe.

Response:

This 20-inch AC pipe refers to an asbestos-cement pipe.

 Provide the age and condition of the AC pipe. Response:

2

The bid schedule incorrectly calls out AC pipe. The pipe is PVC installed in 1987. The age of the pipe is 34 years, and the condition is poor and has a Project Risk Score (PRS) as shown on page 254, line 9 of Jorge Lopez's direct testimony.

c. Explain Suburban's reason to remove the AC pipe.

Response:

The pipe is being removed to connect to the system. A size on size tap is not recommended because too much of the pipe is removed and compromises the structural integrity of the pipe.

d. If Suburban is replacing this AC pipe, identify the bid items on pdf pages 277 to 280 that are related to the AC pipe replacement.

Response:

Bid item number 46 includes the replacement pipe.

- 4. In the Workpapers, Volume III-D Planned Projects, pdf page 279, Suburban shows that bid item number 58 is "Furnish and install new Standalone Packaged 125 HP VFD, including panels manufactured by Benjamin Electric and training per plans and specifications. Complete in place. (39 E-2, 42 E-5)." Suburban apparently includes the item no. 58's bid price, \$160,500.00, in its bid total of \$6,644,840.00. On pdf page 280, Suburban shows "Costs per Year" totaling to \$6,644,840.00. Nevertheless, Suburban adds another amount for "VFD Purchase" as a separate cost estimate item equal to \$129,127.00 in its calculation showing the final total of \$8,784,902.54 for the projects at Plant 128.
 - a. Explain why item number 58, which includes furnishing new Variable Frequency Drives ("VFDs"), and the "VFD Purchase" item equal to \$129,127.00 should both be included in the cost estimate for the projects at Plant 128.

Response:

The \$129,127.00 is the cost for Suburban to directly purchase and install two VFDs for operation during construction of the new reservoir. The VFDs were purchased to avoid project delays due to supply chain issues due to COVID-19. The cost for bid item #58 is the contractor's cost to purchase and install the remaining three VFDs required to operate the Plant for final operation.

b. Explain how Suburban determined the "VFD Purchase" estimate of \$129,127.00. Provide supporting documentation including any calculations in Microsoft Excel file format.

Response:

Enclosed is the quote and estimate for the work:

"Response DR AA9-02 #4.b Benjamin Quote.pdf"

- "Response DR AA9-02 #4.b VFD Installation.xlsx"
- 5. In the Workpapers, Volume III-D Planned Projects, pdf page 280, Suburban shows that bid item number 93 is "Construct 7-foot-tall steel gate..." with a 46-foot length and item number 94 is "Construct 7-foot CMU split face on the exterior and precision on the inside block wall..." with a 535-foot length.
 - a. Explain whether Suburban is proposing to build a new block wall at Plant 128. If not, explain what work item numbers 93 and 94 are for.

Response:

Suburban is proposing to build a new perimeter block wall at Plant 128.

a. If Suburban is building a new block wall, what equipment at Plant 128 would the proposed block wall enclose?

Response:

The new perimeter block wall will protect the proposed improvements including but not limited to the new reservoir, new electrical equipment, new generator, and the existing pump station.

b. If Suburban is proposing to enclose equipment at Plant 128 with a block wall, is Suburban also proposing to enclose the equipment with a roof? If yes, which bid items on pdf pages 277 to 290 correspond to the roof structure?

Response:

No, Suburban is not proposing to enclose the equipment at Plant 128 with a roof.

c. Provide written documentation of any noise complaints for the booster pumps or any other equipment, including electrical equipment, that Suburban has received for Plant 128.

Response:

There are no noise complaints from the booster station or from any other equipment from Plant 128.

d. Is Suburban currently operating in violation of any state or local noise ordinance or regulation?

Response:

No, Suburban is not operating the site in a manner that violates State or local noise ordinance or regulation.

e. If Suburban is proposing to replace an existing gate and/or block wall at Plant 128, please explain why the existing gate and/or block wall should be replaced. Please provide documentation supporting Suburban's answer including but not limited to site assessments, reports, pictures, etc.

Response:

Suburban has had several break-ins at Plant 128. Several locations along the wall can be climbed because it is 5-feet short. Suburban is proposing a new, taller block wall to protect the proposed improvements. Additional weight on the existing wall is not recommended like adding steel fencing because the weight will compromise the existing wall footing. Modifying the wall requires building permits with structural calculations that cannot be prepared without modifying the wall.

- 6. In the Workpapers, Volume III-D Planned Projects, pdf page 27, Suburban states that Plant 128's "pumping equipment is also in poor condition." Following this statement, Suburban describes the pumps' electric motors. On pdf page 52, Suburban provides a site drawing showing a proposed configuration of the projects at Plant 128. In this site drawing, the existing booster pumps are demolished and replaced with a new pump station. In the final table of pdf page 280, Suburban's bid items are categorized in subtotals labelled as "COR," "Electrical," and "Reservoir."
 - a. Is it Suburban's opinion that only the electrical equipment, and not the mechanical equipment, such as the pump impellers or casings, of the booster pumps at Plant 128 should be replaced?

Response:

The scope of work does not include replacing mechanical equipment, only electrical equipment, as agreed upon in the previous rate case.

b. If Suburban is proposing to replace mechanical equipment, excluding any pipeline, valves, and fittings, which bid items on pdf pages 277 to 290 correspond to booster pump mechanical equipment?

Response:

The pump and motors at Plant 128 are not being replaced.

- c. Did Suburban analyze the costs and benefits of replacing the existing booster pumps at Plant 128 with:
 - i. New Centrifugal pumps, or

Response:

No, the pumps and motors are not being replaced.

ii. New Vertical Turbine pumps

Response:

No, because the pumps are not being replaced.

If yes to either i., ii., or both, provide all cost-benefit analyses that Suburban performed for the booster pump station project at Plant 128.

Response:

No, the pumps and motors are not being replaced.

d. Does the site drawing on pdf page 52 represent Suburban's most current proposed site plan for the projects at Plant 128. If no, provide the drawing of Suburban's most current proposed site plan.

Response:

The most current proposed site plan is attached, and the document is titled as noted below:

- "Response DR AA9-02 #6.d Plant 128 Site Plan1.pdf"
- e. On pdf page 279, Suburban shows that bid item number 59 is "Remove and relocate Standalone Packaged 125 HP VFD per plans and specifications. Complete in place. (39 E-2)." Does Suburban also propose to relocate the existing mechanical pumping equipment?

Response:

Suburban does not propose relocating the existing mechanical equipment.

- In the Workpapers, Volume III-D Planned Projects, pdf page 20, Suburban states: "Additional time was required to design a system to operate the facility when the reservoir is out of service..." regarding the projects at Plant 128.
 - Please fully describe how Suburban would operate Plant 128 when the reservoir is out of service.

Response:

While constructing the new reservoir, Suburban will use two tanks to receive and hold water from La Puente Valley Water District. The tanks will allow the pumps to receive a constant flow and avoid taking water from a pipeline that may choke the pumps due to insufficient NPSH.

b. Please explain why Suburban did not take this issue into consideration when it proposed this project in the previous rate case.

Response:

Suburban discovered this need during the detailed design phase of the project not completed in the previous rate case.

Attachment 1-3: A.20-03-001 Rebuttal Testimony of Jorge Lopez Excerpt


,		
1		TABLE OF CONTENTS
2	Ι.	INTRODUCTION1
3	II.	PURPOSE OF TESTIMONY1
4	III.	OPERATIONS & MAINTENANCE; ADMINISTRATIVE &
5		GENERAL EXPENSES
6	IV.	PAYROLL AND NEW POSITIONS
7	v.	UTILITY PLANT IN SERVICE (I)9
8		PLANT 128 RESERVOIR REPLACEMENT9
9		PLANT 128 PUMP STATION REPLACEMENT18
10		PLANT 110 RESIDUAL CONTROL SYSTEM27
11		PLANT 505 RESIDUAL CONTROL SYSTEM
12		COVINA HILLS RELIABILITY PIPELINE
.3		WILLOW CHANNEL CROSSING INSTALLATION41
.4		PLANT 162 SLOPE STABILITY45
.5		PUMP REPLACEMENTS PROGRAM
16		BLOW-OFF REPLACEMENT PROGRAM
17 18		CONTROL VALVE REFURBISHMENT PROGRAM
19		SCADA MASTERPLAN UPGRADES65
20		GIS AND MODEL SYSTEM PROGRAM
21		WATER RIGHTS PURCHASES
22		ADVANCE METERING INFRASTRUCTURE ("AMI") PILOT
23		STUDY
24		PLANT IMPROVEMENT (VARIOUS LOCATIONS)73
25		RESULTS OF OPERATION MODEL CORRECTIONS
26	VI.	UTILITY PLANT IN SERVICE (II)76
27		PLANT 410 TREATMENT PLANT76
28		PLANT 238 PUMP STATION IMPROVEMENTS88
		PLANT 217 SLOPE STABILITY95

1	SOLEJAR AND JANISON VALVE STATION
2	NEW MAIN ON SYRACUSE DRIVE101
3	PLANT 408 PUMP STATION105
4	PLANT 408 RESERVOIR R-5117
5	PLANT 201 TREATMENT PLANT122
6	GENERATOR PURCHASES
7	METER REPLACEMENTS AND INSTALLATIONS
8	VALVE REPLACEMENTS
9	FIELD EQUIPMENT
10	MISCELLANEOUS PIPELINE REPLACEMENTS
11	FIRE HYDRANT REPLACEMENTS
12	CONTINGENCY
13	CENTRAL BASIN WATER RIGHTS
14	VII. PIPELINE REPLACEMENT
15	VII. FIFELINE REFLACEMENT
16 17	
18	
19	
20	
20	
22	
23	
24	
25	
26	
27	
28	
	iii
I	F7000500 4

1	(v) The service area has excess storage
2	Starting on page 6-9, page 1, Cal Advocates indicates that
3	
	the Hacienda Heights service area has excess capacity and
4	the project should be disallowed. The Hacienda Heights area
5	has a dramatic range in elevation requiring water to be
6	lifted by booster pumps several times to reach customers in
7	the highest zone. If there is a failure along the boosting
8	chain, supply to upper zones can be interrupted, this is
9	problematic due to the increased safety risks posed by
10	wildfires. The reservoir and boosters are the first step in
11	the booster chain that supplies Hacienda Heights. The upper
12	zones are exposed to a greater risk when water cannot be
13	supplied from Plant 128.
14	
15	The Hacienda Heights area has sufficient storage under
16	normal conditions, but it is insufficient during PSPS
17	events. Suburban's water systems were designed to provide
18	water supply during limited power outage situations such as
19	routing maintenance, repairs, or unscheduled outages
20	lasting up to 8 hours caused by damage to electrical
21	utility infrastructure caused by toppled trees or vehicle
22	accidents. Suburban's reservoirs are not sized to provide
23	emergency supply for extended periods exceeding one day.
24	Cal Advocates has prepared a table that includes Maximum
25	Day Demand in the Hacienda Area to demonstrate that
26	consumption is going down and a result less storage will be
27	required. Cal Advocates does not include emergency storage
28	in their calculation which affects storage requirement more
	16

1-35

dramatically than the Maximum Day Demand. On page 6-10, Cal 1 Advocates includes a table showing a downward trend of MDD. 2 3 As previously mentioned, MDD has a smaller effect than storage required during emergencies which has become more 4 5 important due to PSPS. Cal Advocates has conveniently 6 selected data to support their argument by going back to 7 2010 to create a linear regression showing a downward trend. The linear regression provided by Cal Advocates is 8 very weak at about 0.5. Additionally, there is an upward 9 trend on demand starting in 2015 to 2019. Cal Advocates' 10 information about lower MDD should be ignored due to its 11 12 poor correlation and overlooking the more current trend of an upward trend. 13 14 15 This shortage of storage capacity makes water sources like Plant 128 critical to protecting customers in Hacienda 16 Heights. It is necessary to maintain a reliable storage and 17 pumping system at Plant 128. 18 19 20 Cal Advocates' misunderstanding of the criticality of the reservoir exposes customers in Hacienda Heights to 21 22 increased consequences by their recommendation to disallow this project. The Hacienda Heights area has a high 23 probability for wildfires and there are limited sources of 24 25 supplies due to the hilly terrain. Cal Advocates on several instances incorrectly explains the operation of this 26 27 facility and recommends construction of a bypass line as an 28 alternative to constructing a reservoir. For the reasons 17 -----

noted above, Cal Advocates' recommendation to replace the 1 Plant 128 reservoir with a bypass line is not a viable 2 3 option and should be dismissed. 4 5 Plant 128 Pump Station Replacement 6 Q7. What does Cal Advocates recommend regarding the Plant 128 7 Pump Station Replacement project and what is your response? A7. Cal Advocates recommends that the request for \$3,400,000 to 8 replace the existing pump station be disallowed and instead 9 recommends approval a budget of \$174,000 to replace the 10 Motor Control Center (MCC). The following section will 11 12 demonstrate that replacing only the MCC does not provide the reliability needed for the customers in Hacienda 13 Heights, and the pump station must be replaced along with 14 15 the Plant 128 reservoir requested on Page 410 of my direct testimony. Further, Cal Advocates provides the following 5 16 reasons to support their recommendation to deny Suburban's 17 request to replacement the Plant 128 pump station. Suburban 18 will provide evidence demonstrating that Cal Advocates' 19 20 claims are unsupported. 21 22 (i) All pumps are in good condition Starting on page 6-12, line 1, Cal Advocates includes an 23 extremely brief explanation for disallowing the 24 25 replacements of the existing pumps. Cal Advocates states that pump efficiency tests result for the pumps are between 26 27 . Cal Advocates does not mention that there is one 28 pump with and efficiency of that was replaced 12 years 18 -----

Attachment 1-4: LPVCWD Master Plan Excerpt



2017 WATER MASTER PLAN UPDATE

FOR

LA PUENTE VALLEY COUNTY WATER DISTRICT

LOCATED AT

112 N 1st STREET LA PUENTE, CA 91744

Prepared By:

Civlitec Engineering, Inc. & La Puente Valley County Water District

Submitted: May 2017



TABLE OF CONTENTS

LA PUENTE VALLEY COUNTY WATER DISTRICT

CHAPTER ONE - INTRODUCTION

1.1 GENERAL DESCRIPTION	
1.2 Study Area	1-1
1.3 Study Period	1-2
1.4 Scope Of Report	
1.5 Abbreviations	1-9
1.6 CONVERSIONS	1-10
1.7 ACKNOWLEDGEMENTS CHAPTER TWO – LAND USE AND WATER REQUIREMENTS	1-12
2.1 GENERAL DESCRIPTION	
2.2 LAND USE ANALYSIS	
2.3 PENDING DEVELOPMENT	
2.4 WATER DEMAND CHAPTER THREE – SOURCES OF SUPPLY	
3.1 GENERAL DESCRIPTION	
3.2 WATER RIGHTS AND AGREEMENTS	
3.3 WATER RELIABILITY, SUSTAINABILITY, AVAILABILITY	
3.4 SUPPLY TO PRESSURE ZONES	3-5
4.1 GENERAL DESCRIPTION	4-1
4.2 CONSUMER CONFIDENCE REPORT	
4.3 SAFE DRINKING WATER ACT	
4.4 CURRENT AND PENDING WATER QUALITY RELATED LEGISLATION	
4.5 LOCAL CONTAMINATION	
4.6 CURRENT WATER TREATMENT	
4.7 PUENTE VALLEY OPERABLE UNIT INTERMEDIATE ZONE PROJECT (P CHAPTER FIVE – EXISTING WATER SYSTEM	VOU IZ) . 4-7
5.1 GENERAL DESCRIPTION	5-1
5.2 SUPPLY SYSTEM FACILITIES	5-1
5.3 BOOSTER STATIONS	5-3
5.4 CONTROL VALVES	5-4
5.5 RESERVOIRS	5-4



2017 WATER MASTER PLAN

i



TABLE OF CONTENTS LA PUENTE VALLEY COUNTY WATER DISTRICT

5.6 DISTRIBUTION SYSTEM
5.7 TREATMENT FACILITIES
6.1 GENERAL DESCRIPTION
6.2 WATER MODEL DEVELOPMENT METHODOLOGY
6.3 WATER MODEL CONSTRUCTION
6.4 Model Calibration
7.1 GENERAL DESCRIPTION
7.2 EXISTING WATER CONSERVATION PROJECTS
7.3 APPROACH TO WATER CONSERVATION
7.4 Cost and Accounting Conventions
7.5 WATER CONSERVATION PROGRAM SCOPE AND GOALS
7.6 CANDIDATE WATER CONSERVATION PROGRAMS
8.1 GENERAL DESCRIPTION
8.2 Study Period
8.3 Design Criteria
8.4 Planning Criteria
9.1 GENERAL DESCRIPTION
9.2 SUPPLY ANALYSIS
9.3 Analysis of Storage Facilities
9.4 Analysis of Booster Facilities
9.5 Analysis of Existing Distribution System
9.6 Proposed Improvements for Deficiencies
9.7 EVALUATION BASED ON CONDITION AND AGE
9.8 CAPITAL IMPROVEMENT PROGRAM 9-32



ii



2017 WATER MASTER PLAN



TABLE OF CONTENTS

LA PUENTE VALLEY COUNTY WATER DISTRICT

FIGURES

FIGURE 1-1 – BOUNDARY MAP OF LPVCWD 1-1
FIGURE 2-1 – BOUNDARY MAP OF LPVCWD
FIGURE 3-1 – The Boundary Map of MSGB
FIGURE 3-2 – RAINFALL PRECIPITATION (IN)
FIGURE 3-3 – BOUNDARY OF PRESSURE ZONES IN LPVCWD
FIGURE 4-1- LAYOUT OF LPVCWD WATER TREATMENT FACILITY
FIGURE 4-2 – FLOW DIAGRAM OF LPVCWD WATER TREATMENT FACILITY
FIGURE 5-1 – Pressure Zone Map
FIGURE 5-2 – Hydraulic Flow Diagram
FIGURE 6-1 – DESIGN POINT CURVE FOR MAIN STREET BOOSTER PUMP NO. 1 6-4
FIGURE 9-1 – Hudson Pump vs. MDD Requirements
FIGURE 9-2 – PUMP 1 VS. MDD + FF REQUIREMENTS FOR ZONE 2
FIGURE 9-3 – PUMP 3 VS. MDD + FF REQUIREMENTS FOR ZONE 2
FIGURE 9-4 – PUMP 1 VS. PHD REQUIREMENTS FOR ZONE 2
FIGURE 9-5 – PUMP 3 VS. PHD REQUIREMENTS FOR ZONE 2
FIGURE 9-6 – PUMP 1 VS. MDD REQUIREMENT FOR ZONE 3
FIGURE 9-7 – PUMP 2 VS. MDD + FF REQUIREMENT FOR ZONE 4
FIGURE 9-8 – ZONE 4 BOOSTER PUMP VS. PHD REQUIREMENT
FIGURE 9-9 – Improvements on 5^{th} Street between Workman Street
AND MAIN STREET (CIP #1)
FIGURE 9-10 – Improvements on Ferrero Lane and Rorimer Street
(CIP #2)
FIGURE 9-11 – BAMBOO STREET AND DALESFORD DRIVE IMPROVEMENTS
(CIP #3)
FIGURE 9-12 – INYO STREET AND COMMON AVENUE IMPROVEMENTS
(CIP #4)
FIGURE 9-13 – North Hacienda Boulevard, North of Temple Avenue
IMPROVEMENTS (CIP#5)9-22
FIGURE 9-14 – BAMBOO STREET IMPROVEMENTS (CIP #6)
FIGURE 9-15 – WATERMAIN LEAK REPAIRS (2012-2016)



2017 WATER MASTER PLAN

iii



 TABLE OF CONTENTS

 LA PUENTE VALLEY COUNTY WATER DISTRICT

FIGURE 9-16 – PROPOSED 2" COPPER SERVICE LINE ON TEMPLE AVENUE	
AND GLENDORA AVENUE (CIP # 7)	
FIGURE 9-17 – PIPELINES OF THE AGE OF 1959 (CIP #8)	
FIGURE 9-18 – Phase 1 Recycled Water Project (CIP #9)	



TABLES

TABLE 1-1 – VOLUMETRIC FLOW RATE CONVERSIONS 1-1	1
TABLE 1-2 – VOLUME CONVERSIONS 1-12	2
TABLE 2-1 – CURRENT WATER DEMAND 2-3	3
TABLE 2-2 – PEAKING FACTORS 2-4	4
TABLE 2-3 – Existing and Future Water Demand 2-4	4
TABLE 2-4 – FUTURE LPVCWD WATER USE BY ZONES (AFY) 2-	5
TABLE 2-5 – FUTURE ADD AND MDD BY ZONES (GPM)	5
TABLE 2-6 – WATER USAGE PERCENTAGE OF EACH ZONE	5
TABLE 3-1 – LOCATION OF ALTERNATIVE SOURCES	3
TABLE 3-2 – GROUND ELEVATION RANGE OF PRESSURE ZONES 3-2	5
TABLE 3-3 – ZONES CAPACITY 3-	6
TABLE 4-1 – TREND OF WATER QUALITY	5
TABLE 4-2 – AVERAGE WATER QUALITY AND MCL/NL	6
TABLE 5-1 – LPVCWD ACTIVE WELLS 5-	1
TABLE 5-2 – LPVCWD INACTIVE WELLS	2
TABLE 5-3 – EMERGENCY INTERCONNECTION SUMMARY 5-2	2
TABLE 5-4 – BOOSTER STATION PUMP DATA 5-2	3
TABLE 5-5 – Reservoir Summary 5-5	5
TABLE 5-6 – Pipeline Summary 5-5-5-5-5-5-5-5-5-5-5-5-5-5-5-5-5-5-5-	5
TABLE 6-1 – INPUT DATA FOR MAIN STREET BOOSTER PUMP NO. 1 6-4	4
TABLE 6-2 – Existing Demands within Water System	6
TABLE 6-3 – FUTURE (YR 2020) DEMANDS WITHIN WATER SYSTEM	6



2017 WATER MASTER PLAN

iv



TABLE OF CONTENTS

LA PUENTE VALLEY COUNTY WATER DISTRICT

TABLE 8-1 – INFRASTRUCTURE REPLACEMENT CRITERIA 8-8
TABLE 9-1 – SUPPLY ANALYSIS
TABLE 9-2 – Supply Emergency and Fire Refill Requirement
TABLE 9-3 – Supply Emergency and Fire Refill Analysis
TABLE 9-4 – Existing Storage Capacity 9-4
TABLE 9-5 – STORAGE ANALYSIS
TABLE 9-6 – INDUSTRIAL FIRE FLOW DEFICIENCIES 9-13
TABLE 9-7 – Commercial Fire Flow Deficiencies 9-14
TABLE 9-8 – Single Family Residential Fire Flow Deficiencies 9-15
TABLE 9-9 – Industrial Fire Flow Deficiencies with improvements
TABLE 9-10 – SINGLE FAMILY RESIDENTIAL FIRE FLOW DEFICIENCIES WITH
IMPROVEMENTS ON FERRERO LANE AND RORIMER STREET
TABLE 9-11 – SINGLE FAMILY RESIDENTIAL FIRE FLOW DEFICIENCIES
North of Inyo street9-18
TABLE 9-12 – SINGLE FAMILY RESIDENTIAL FIRE FLOW DEFICIENCIES
IMPROVEMENTS ON INYO STREET AND COMMON AVENUE
TABLE 9-13 – SINGLE FAMILY RESIDENTIAL FIRE FLOW DEFICIENCIES
IMPROVEMENTS ON NORTH HACIENDA BOULEVARD,
North of Temple Avenue
TABLE 9-14 – SINGLE FAMILY RESIDENTIAL FIRE FLOW DEFICIENCIES
IMPROVEMENTS ON BAMBOO STREET
TABLE 9-15 – INFRASTRUCTURE REPLACEMENT CRITERIA 9-24
TABLE 9-16 – Service Line Leak Repairs and Replacements (2012-2016) 9-26
TABLE 9-17 – Near Term Pipeline Replacement Schedule 9-28
TABLE 9-18 – PUMPS ACCORDING TO EFFICIENCY RATING 9-30
TABLE 9-19 – ACTIVE CONTROL VALVES. 9-30
TABLE 9-20 – UNIT COST ASSUMPTIONS 9-32
TABLE 9-21 – Capital Projects (\$1,000s) 9-34
TABLE 9-22 - 10 YEAR MAINTENANCE PROJECTS (1.000s) 9-37



2017 WATER MASTER PLAN

v



CHAPTER FIVE – EXISTING WATER SYSTEM

LA PUENTE VALLEY COUNTY WATER DISTRICT







CHAPTER FIVE – EXISTING WATER SYSTEM

LA PUENTE VALLEY COUNTY WATER DISTRICT

Figure 5-2 – Hydraulic Flow Diagram





LA PUENTE VALLEY COUNTY WATER DISTRICT

 $V_{Future \ Operational} = (0.3) * (3.59 \ MG) = 1.08 \ MG$

Fire Storage is the requirement for one maximum event:

$$\left(\frac{4,000 gallons}{minute}\right) * \left(\frac{60 minutes}{1 hour}\right) * (4 hours) = 0.96 MG$$

Both the LPVCWD and CIWS systems are considered to be widely interconnected and as a result may share storage. Storage in the Industry Hills Reservoirs is available to all Zones in both systems and water can automatically move to lower Zones as needed to supplement storage reserves in lower zones if the emergency and fire flow reserves were to be depleted from those zones. As a result, Industry Hills reservoirs are considered in this analysis. **Table 9-4** provides the storage capacity in the Zone served and volume.

Reservoir Name	Zone Served	Nominal Volume (MG)	
Hudson	Zone 1	0.1	
Main Street No. 1	Zone 2	3.0	
Main Street No. 2	Zone 2	1.8	
Industry Hills No. 1	Industry Hills	1.4*	
Industry Hills No. 2	Industry Hills	1.4*	
Total		7.7	

Table 9-4 – Existing Storage Capacity

*Capacity is shared with CIWS. Only surplus storage can be allocated to LPVCWD.

Table 9-5 summarizes and compares the calculations for available and required storage.

Table 9-5 - Storage Analysis

n : 1	Storage Requirement Type (MG)			Total	Total	Surplus
Period	Emergency	Operational	Fire	Requirement (MG)	Available (MG)	(MG)
Existing	3.42	1.03	0.96	5.41	7.7	2.29
Future	3.59	1.08	0.96	5.63	7.7	2.07

9.3.1 Storage Recommendation

Based on the water supply agreement in place between LPVCWD and CIWS, the systems are considered to be widely interconnected, and as a result, have adequate storage supply.

9.4 Analysis of Booster Facilities

Per supply design criteria, there should be sufficient booster pumping capacity in each pressurized zone without gravity storage to meet (1) combined production capacity of maximum day demand



9-4

2017 WATER MASTER PLAN

Attachment 1-5: Liberty Utilities (Apple Valley Ranchos Water Company) Technical Report Excerpt

Apple Valley Ranchos Water Company Technical Report Analysis of Source and Storage Capacity

2013 Update

June 2013

Prepared by: Rick Dalton Corporate Chief Engineer And Pat Kearns Consulting Engineer Emeritus Park Water Company

)

14-1

the high potential for a permanent loss of some well source capacity, such as a casing failure, makes the necessity for a buffer more pressing.

Storage Analysis

Table 6 analyzes storage capacity. Storage volume consists of three components: operational storage, fire-fighting storage, and emergency storage. The storage requirements are well within the existing system storage capacity for two primary reasons. The first is that the system has enough source capacity to meet MDD, even with the largest well out of service. The second is the emergency generators located at various wells and the natural gas powered engines at Wells 4 and 19. These emergency/alternate power sources provide access to ground water even in an emergency that includes a power outage. This reduces the amount of storage needed for emergencies.

The operational storage is the larger of that amount of storage needed to supplement pumping during peak demands or that amount of storage used to maintain water quality. Typically, the amount of storage used to maintain water quality (which can vary seasonally) is the larger volume. Care and planning based on land use and customer water use profiles must be considered when projecting the operational storage. The total projected operational storage will vary in the range of 20% to 50% of total storage. In **Table 6**, operational storage was based on 30% of total zone storage.

Firefighting storage has been determined by using the fire flow data provided by the Apple Valley Fire District. One complete maximum fire flow should be stored in each zone. If the fire flow is 3500gpm for 4 hours, the total volume stored is 3500 x 4 x 60 or 840,000 gals as shown. A 4000 GPM fire flow or 4 hours equates to 960,000 gallons of storage.

The emergency storage requirement would normally be at least one average day demand (ADD) or 15.1 MG for the entire system. However, AVRWC can reduce its storage demand because of its emergency source capacity. This capability is provided by the permanent diesel engine driven electric generators that automatically provide power to some of the more critical wells during a power outage. In addition, AVRWC has a fleet of mobile generators capable of powering wells or booster pump stations as needed. AVRWC also has two natural gas powered wells. This emergency source capacity exceeds the ADD (see **Table 4**) and allows for a reduction in calculating the emergency storage requirement. Because it will take some time to distribute all the mobile generators and get the entire emergency source online, a twelve-hour time period is provided for that purpose. In **Table 6**, emergency storage capacity was calculated by taking 12 hours of the ADD less the pumping capacity of the wells equipped with automatic starting generators. The emergency storage calculations for

8

the Main Zone are based on the demands of the complete system (including Jess Ranch) in all cases because the storage in the Main Zone and the storage at higher elevations are capable of supplying all zones in the system.

Adding storage as a means of reducing the need for source capacity to meet the MDD is not practical. Three maximum day demands in a row is the typical design criterion for this situation. For example: it would take 4.32 million gallons of elevated storage to make up for a 1000 GPM source capacity shortfall below the MDD. Having adequate source capacity to reliably meet the MDD at all times is essential. In addition, the strategic use of emergency generators on key sources of supply is a cost effective and sustainable means to ensure source availability at all times.

Demand Projections and Source of Supply Analysis

Table 7 summarizes growth projections and compares the resulting demands to various scenarios of source capacities. In the table, the total number of customers is 19,098 for end of year 2012. The projected number of customers for future years is calculated by assuming a growth percentage. For 2013 a 0.5% assumed growth is used and for future years a 1% assumed growth rate is used. The average day demands (ADD) and maximum day demands (MDD) are then calculated based on the demand per customer, which were derived previously in the report.

Because the sole source of water for the AVRWC system is well water, the primary requirement for determining the source of supply pumping capacity is that the source of supply pumping capacity must be able to reliably meet the MDD at all times. In order to reliably meet the MDD at all times, it is essential to have enough source capacity to meet the MDD with a certain amount of well capacity unavailable. This additional well capacity above and beyond the MDD is needed for many reasons, which include:

- Wells can often un-expectantly be out of service for extended periods.
- Permanent failure can occur at any time on aging wells.
- Well capacities typically decrease over the long term.
- Demands can vary considerably from year to year.
- Adding a well to make up for a shortfall takes a considerable amount of time.

While it is not possible to predict exactly how pumping capacity and demands will vary, it is prudent to account for the fact that pumping capacity will decrease and demands have potential to increase.

Table 7 compares pumping capacity to the MDD under various conditions starting with the column labeled "Normal", which signifies that all wells are available. The table then compares various reduced pumping capacities to the MDD. In each case the pumping capacity less the MDD is tabulated. While there are a wide range of combinations of

9

Attachment 1-6: Suburban's Response to DR AA9-03



1325 N. Grand Avenue Sulte 100 Covina, CA 91724-4044 Phone: 626.543.2500 Fax: 626.331.4848 www.swwc.com/suburban

April 13, 2023

To: Suliman Ibrahim Project Coordinator

> Anthony Andrade Utilities Engineer

Shanna Foley Attorney for Public Advocates Office

Re.: Response to A.23-01-001, Public Advocates Office DR AA9-03 (Plant Generators)

Dear Mr. Ibrahim et al.,

Attached is the information you requested in writing for Suburban's Total Company General Rate Case.

Sincerely,

/s/ Carmelitha Bordelon

Carmelitha Bordelon Director of Regulatory Affairs

Response to A.23-01-001, Public Advocates Office

DR AA9-03 (Plant Generators)

- In the Direct Testimony of Jorge Lopez, page 203, Suburban states "Generator lead times currently range from 70 to over 100 weeks." In the 2023 GRC Workpapers, Volume III-D Planned Projects, pdf page 839, Suburban provides an email from January 10, 2022 from Aestocia Ramirez of Lyden Electric to Nathan Au of Suburban. The email states that submittals are estimated to take 2-6 weeks "on receipt and approval of purchase order" for Quinn Power and 6-8 weeks "on receipt and approval of purchase order" for Cummins.
 - a. Please provide Suburban's submitted purchase orders for the existing or proposed generators at Plants 109, 235, 118, 506, 165, 119, 504, 121, and 201. If not shown on the documentation, provide the date when Suburban submitted the purchase orders.

Response:

Suburban entered into construction agreements for Plants 109, 165, and 506 with electrical contractors that included the contractors purchase of generator from the manufacturer. Suburban does not have a purchase order directly with the generator manufacturer. A Notice to Proceed letter was issued to the electrical contractor purchasing the generator from the generator manufacturer.

To expedite the project schedule Suburban purchased the Plant 235 and 119 generators directly from the generator manufacturer and issued a Notice to Proceed to them. Orders to procure the remaining generators directly from the generator manufacturer will be finalized by May 2023.

The enclosed document "DR AA9-03 Response #1.a.pdf" includes the purchase orders.

		Delivery	Delivery	
Site	PO Date	Status	Lead Time	Delivery Date
Plant 109	9/2/2021	Delivered	81 Weeks	March 25, 2023
Plant 235	3/31/2023	Pending	125 Weeks	August 2025
Plant 118	4/11/2023	Pending	57 Weeks	August 2024
Plant 506	2/2/2022	Pending	85 Weeks	September 2023
Plant 165	12/22/2021	Pending	85 Weeks	July 2023
Plant 119	4/4/2023	Pending	138 Weeks	November 2025
Plant 504	4/11/2023	Pending	55 Weeks	October 2024
Plant 121	Expected 5/16/2023	Pending	120 Weeks	August 2025
Plant 201	Expected 5/23/2023	Pending	133 Weeks	November 2025

The table below summarizes the status of the generators:

b. Provide documentation to show that Suburban's submitted purchase orders for the existing or proposed generators at Plants 109, 235, 118, 506, 165, 119, 504, 121, and 201 have been approved. If not shown on the documentation, provide the date when Suburban received approval for the purchase orders.

Response:

The information requested is included in response 1.a of this data request.

c. On what date was the generator at Plant 109 placed into service?

Response:

Plant 109 generator was delivered on 03/25/2023, installation has not been completed because some components have not been delivered. This equipment is expected to be operational in June 2023.

d. Provide a photograph showing Plant 109 generator installation is complete.

Response:

See attached image of the generator "DR AA9-03 Response #1.d.pdf"

2. What does Suburban estimate the lead times are for orders of mobile generators? If there is a difference in lead times due to power rating, provide Suburban's estimated lead times for mobile generators of 125 kW, 150 kW, 175 kW, 200 kW, 400 kW, and 500 kW power ratings. Provide documentation to support Suburban's estimate for mobile generator lead times.

Response:

The generator manufacturer estimates that mobile generator lead time is the same as fixed generators but could not indicate if there is a difference due to power rating. See attached email response from the sales representative indicating that mobile generators will be available late 2024. "DR AA9-03 Response #2.pdf"

1

CHAPTER 2 Water Quality and Special Request No. 3

2 I. INTRODUCTION

This chapter presents Cal Advocates' analyses and recommendations on Suburban's water quality for the San Jose Hills, Whittier/La Mirada, and Sativa service areas. In Special Request No. 3, Suburban requests that the Commission find that Suburban complies with all water quality requirements. The Commission should approve Suburban's Special Request No. 3 only if Suburban shows that it is following the directives stated in the water quality citations Suburban received in July 2023.

9 II.

II. SUMMARY OF RECOMMENDATIONS

The Commission should find Suburban's water systems in compliance with all
water quality standards only if Suburban shows that it is following the State Water
Resources Control Board's Division of Drinking Water (DDW)'s directives following the
citations from July 2023. Suburban should provide its plan to ensure that all backflow
preventers are tested at least annually that DDW requires by September 1, 2023.⁵⁷

15 III. ANALYSIS

16 Cal Advocates reviewed Suburban's Service Area Operations, Reports and
17 Enforcement Actions by the State Water Resources Control Board Division of Drinking
18 Water (DDW), and Future Water Quality Regulations.

19

A. Service Area Operations

20 Suburban's three main service areas include San Jose Hills, Whittier/La Mirada,

21 and the recently acquired Sativa water system. $\frac{58}{58}$ Suburban operates its water systems

⁵⁷ Attachment 2-1: DDW's Four Citations of Suburban Water Systems from July 2023, p. 3.

⁵⁸ Suburban Results of Operations, p. 2-1.

under permits from DDW. DDW regulates California's public drinking water systems
 and oversees a variety of drinking water-related activities.

Suburban's facilities include six public water systems within three services areas
 as listed in the table below. The total population served is approximately 300,000.⁵⁹
 Most of Suburban's service area is located within Los Angeles County, with the
 exception of small areas located in unincorporated portions of Orange County.⁶⁰

7

Table 2-1: Suburban's Water Systems and Water Supply

Service Area	Water System	No. of Connections 2021 ⁶¹	Groundwater Production 2021 (AF) ⁶²	Purchased Water 2021 (AF) ⁶³
San Jose Hills	San Jose Hills	42,038	5,469.27	18,909.81
	Glendora			
	Covina Knolls			
Whittier/La Mirada	Whittier	33,225	12,662.63	7,714.98
	La Mirada			
Sativa		1,643 64	0	514.00 <u>65</u>
Total		76,906 <u>66</u>	18,131.9	27,138.79

8

9 Suburban's water supply comes from groundwater production and purchased

10 water. The 2021 water supply data for each service area is summarized in the table

11 above. Wells in the San Jose Hills service area extract groundwater from the Main San

12 Gabriel Basin. Wells in the Whittier/La Mirada service area extract groundwater from

⁶⁰ Suburban's 2020 Urban Water Management Plan, pp. 2-5 to 2-6.

⁵⁹ Suburban's 2020 Urban Water Management Plan, p. 2-4.

⁶¹ Suburban Results of Operations, pp. 4-5 and 4-8.

^{62 2021} Annual Report of Suburban Water Systems, D-1 Attachment; Acre Feet (AF).

^{63 2021} Annual Report of Suburban Water Systems, D-1 Attachment; Acre Feet (AF).

⁶⁴ Suburban's Workpapers Volume I, tab "MODEL," cell B753.

⁶⁵ Suburban's Workpapers Volume I, tab "MODEL," cell M2814.

⁶⁶ Suburban records a total of 76,556 customers by December 31, 2021 in its MDR, p. 2.

both the Main San Gabriel Basin and the Central Basin.⁶⁷ Suburban's San Jose Hills and 1 Whittier/La Mirada service areas have a total of eleven active wells and three standby 2 wells.⁶⁸ Suburban's Sativa water system has two active wells and one inactive well.⁶⁹ 3 In addition, Suburban purchases water imported by the Metropolitan Water 4 5 District of Southern California (MWD), a regional water wholesaler, through three of 6 MWD's member agencies. MWD imports water from the Colorado River and from the 7 State Water Project. Suburban also purchases water from other agencies that supply imported water, groundwater, and surface water. $\frac{70}{2}$ 8 9 Water produced at the well sites in both service areas is disinfected with sodium hypochlorite or monochloramine. $\frac{71}{1}$ The storage tanks are also chlorinated with calcium 10 hypochlorite as required by system conditions. In the San Jose Hills service area, water 11 12 from sources of varying quality is blended at Plant 121 to achieve the desired water 13 quality.⁷² Plant 409 in the Whittier/La Mirada service area has an oxidation/coagulation and pressure filtration treatment facility to remove substances that cause the water to 14 have color from well water to comply with water quality regulations. $\frac{73}{10}$ 15

⁶⁷ Suburban's Results of Operations, pp. 3-6 and 3-9 and Exhibits 3-2 and 3-3.

<u>68</u> Suburban's Workpapers, Volume III-E - Asset Management Plans and Master Plans, San Jose Hills Master Plan, p. 51 and Whittier/La Mirada Master Plan, p. 51. Most recent DDW Sanitary Survey Reports for Suburban's water systems as of February 2023.

⁶⁹ Suburban's Workpapers, Volume III-D Sativa Water System Projects, Appendix 2 Engineering Report (SWRCB), p. 4.

⁷⁰ Suburban's 2020 Urban Water Management Plan, pp. 3-1, 3-7 and 3-19.

⁷¹ Suburban's Results of Operations, pp. 3-8 to 3-10.

 $[\]frac{72}{2}$ Suburban's Results of Operations, p. 3-8.

⁷³ Suburban's Results of Operations, pp. 3-9 to 3-10.

1

B. DDW Drinking Water Enforcement Actions

Suburban's response to Minimum Data Requirements (MDR) Item G.5 indicates
that it received one water quality citation from DDW since 2020.⁷⁴ However, Suburban
received a further four citations in July 2023 which followed Suburban's filing of its
Application for the current GRC.

6

1.

2022 Total Coliform Rule Citation

DDW issued a Revised Total Coliform Rule Monitoring Violation for the San Jose Hills water system on July 5, 2022. This citation was given for "sampling at an incorrect location per the California Revised Total Coliform Rule treatment technique monitoring requirements" in the San Jose Hills water system. DDW determined that Suburban failed to comply with primary drinking water standards pursuant to California Health and Safety Code, Section 116555(a)(1) and California Code of Regulations, Title 22, Section 64422(b).⁷⁵

14To comply with the Revised Total Coliform Rule, a water system must collect and15analyze water samples for total coliform bacteria. If collected samples are positive for16total coliform bacteria, then water systems must collect a repeat sample set within 2417hours of being notified of the positive results. Specifically, Title 22 requires that a water18system collect bacteriological samples for total coliform analysis according to a19bacteriological sample siting plan (BSSP) that has been approved by the State Water20Resources Control Board.⁷⁶

Suburban did not comply with the Revised Total Coliform Rule because it did not collect its repeat sample set from sites identified by its approved BSSP. DDW states that a laboratory notified Suburban that two of its routine samples were positive for total coliform bacteria on April 19 and April 26, 2022. On each of those same days, Suburban

⁷⁴ Suburban's Response to MDR, p. 23, Item G.5.

⁷⁵ Suburban Response to MDR, Attachment No. 11 (G.6). Citation No. 04_07_22C_004.

⁷⁶ Suburban Response to MDR, Attachment No. 11 (G.6). Citation No. 04 07 22C 004.

collected three repeat samples. The six total repeat samples were all negative for total
 coliform bacteria. However, out of the six sites that Suburban chose for the repeat
 samples, two were not identified by the approved BSSP. Consequently, DDW
 determined that Suburban failed to comply with the appropriate drinking water
 standards.⁷⁷

Suburban has completed the directives set by DDW's 2022 citation. DDW
directed Suburban to notify all persons served by the water system of the violation and to
provide on-going training to staff responsible for overseeing compliance with monitoring
and reporting and collecting samples. Suburban included a copy of the citation in the
Minimum Data Requirements as required by the Rate Case Plan.

11

2. 2023 Backflow Preventer Testing Citations

On July 26, 2023, DDW issued citations to four of Suburban's water systems.
DDW issued these citations because Suburban tested some but not all its backflow
prevention assemblies for the year 2022. The four affected water systems were San Jose
Hills, Glendora, Whittier, and La Mirada.

Public water systems may be physically connected to other sources or systems containing liquids, gases, or other substances that are not from an approved drinking water supply. The undesired or unintended flow of these liquids, gases, or substances into a public water system is known as "backflow."⁷⁸ The State of California prohibits backflow under normal operating conditions.⁷⁹ Drinking water regulations require that water systems protect their supply from backflow by installing and maintaining prevention assemblies or "backflow preventers."⁸⁰ Water systems are required to test all

⁷⁷ Suburban Response to MDR, Attachment No. 11 (G.6). Citation No. 04_07_22C_004.

⁷⁸ Draft Cross-Connection Control Policy Handbook. State Water Resources Control Board. https://www.waterboards.ca.gov/drinking_water/.../cccph_draft_feb2021.pdf.

 $[\]frac{79}{2}$ California Health and Safety Code § 116555(a)(2).

⁸⁰ California Code of Regulations, Title 17 § 7584.

backflow preventers at least annually.⁸¹ Out of all backflow preventers, DDW found that
Suburban had only tested 46% in San Jose Hills, 25% in Glendora, 52% in Whittier, and
50% in La Mirada during the year 2022.⁸² Therefore, DDW determined that these four
water systems failed to comply with water quality standards.

5 DDW directed Suburban to take several actions in response to these violations. 6 Among other actions, Suburban must assure DDW that it has tested all the affected systems' backflow preventers by December 31, 2023.⁸³ By February 13, 2024, Suburban 7 must submit a testing status report and an inventory of all backflow preventers to DDW.84 8 Suburban must also disclose these violations in the 2023 Consumer Confidence 9 Reports.⁸⁵ More immediately, DDW has directed Suburban to submit a plan to DDW on 10 September 1, 2023 that ensures that all backflow preventers are tested at least annually. $\frac{86}{2}$ 11 The Commission should only find that Suburban complies with water quality 12 standards if Suburban provides its plan to ensure annual backflow preventer testing as 13 14 required by DDW.

15

C. Water Quality Reports

Cal Advocates reviewed the most recent DDW Sanitary Survey Reports for
 Suburban's water systems.⁸⁷ Cal Advocates reviewed the most recent DDW Sanitary
 Survey Reports for Suburban's water systems. Table 2-2 below shows the dates of the
 most recent reports. The reports evaluate eight elements of each water system, including:
 1) source;

87 Suburban Response to MDR, Attachment No. 11 (G.6).

<u>81</u> California Code of Regulations, Title 17 § 7605(c).

⁸² Attachment 2-1: DDW's Four Citations of Suburban Water Systems from July 2023, p. 3.

⁸³ Attachment 2-1: DDW's Four Citations of Suburban Water Systems from July 2023, p. 3.

<u>84</u> Attachment 2-1: DDW's Four Citations of Suburban Water Systems from July 2023, p. 3.

⁸⁵ Attachment 2-1: DDW's Four Citations of Suburban Water Systems from July 2023, p. 4.

⁸⁶ Attachment 2-1: DDW's Four Citations of Suburban Water Systems from July 2023, p. 3.

1	2) treatment;	
2	3) distribution system;	
3	4) finished water storage;	
4	5) pumps, pump facilities, and controls;	
5	6) monitoring, reporting, and data verification;	
6	7) system management and operation; and	
7	8) operator compliance with state requirements.	

- 8
- 9

Table 2-2: Most Recent DDW Sanitary Survey Reports⁸⁸

Water System	System No.	Report Date
San Jose Hills	1910205	September 2, 2021
Glendora	1910046	February 3, 2023
Covina Knolls	1910200	December 23, 2022
Whittier	1910174	February 15, 2022
La Mirada	1910059	October 21, 2021
Sativa	1910147	September 30, 2022

10

11 The reports conclude that all systems can provide a continuous supply of safe, 12 wholesome, and potable water to customers. In the reports, DDW includes lists of 13 deficiencies and recommendations that the systems should address. Items that are 14 common among Suburban's water systems include recommendations to annually test 15 each backflow device and flush each dead-end blow-off.

As required by California Health and Safety Code §116470, every public water system should annually prepare a Consumer Confidence Report (CCR) and mail/deliver a copy of the report to each customer. The CCR is based on data collected during, or prior to, the previous calendar year. The report includes information on source water, levels of any detected contaminants, compliance with drinking water regulations, and educational information. The CCR is also known as the "annual drinking water quality report." In

⁸⁸ Suburban Response to MDR, Attachment No. 11 (G.6).

the 2021-2022 water quality reports for each of Suburban's water systems, Suburban
 stated that the drinking water was in full compliance with all applicable county, state, and
 federal drinking water regulations in the previous year.⁸⁹

4

D. Future Water Quality Regulations

In its response to MDR Item G.8, Suburban discussed several Maximum
 Contaminant Levels Limits (MCLs) that may be set or revised within the next five years
 and the potential impact on Suburban's operations.⁹⁰

8 **1.** Arsenic

9 The State Water Resources Control Board (SWRCB)'s current MCL for arsenic is 10 parts per million (ppm). SWRCB has identified arsenic on its list of contaminants to 11 be considered for a revised MCL. SWRCB has not released a schedule for its revision of 12 the arsenic MCL.⁹¹

Suburban may be impacted by a revised arsenic MCL. Suburban has detected
arsenic levels between 6.1 ppm and 14 ppm at its Plant 409 Well 3 in the Whittier/La
Mirada service area. Suburban added modifications to the existing treatment system at
Plant 409 to target arsenic.⁹²

17 Cal Advocates discusses its recommendations regarding Suburban's treatment
18 system modifications at Plant 409 in the Cal Advocates Report on Plant Projects for
19 Whittier-La Mirada System, Chapter 2.

⁸⁹ Suburban Response to MDR, Attachment No. 10 (G.4).

⁹⁰ Galindo Direct Testimony, p. 4.

<u>91</u> Galindo Direct Testimony, pp. 4-5.

⁹² Galindo Direct Testimony, pp. 4-5.

1 2

2. Perfluorooctanioic acid (PFOA) and Perfluorooctaniesulfonic acid (PFOS)

3 On August 23, 2019, SWRCB released revised guidance revising Notification Levels (NLs) for PFOA to 5.1 parts per trillion (ppt) and PFOS to 6.5 ppt. On February 4 6, 2020, SWRCB revised the Response Level (RL) to 10 ppt for PFOA and 40 ppt for 5 6 PFOS. SWRCB then began issuing monitoring requirements to potentially vulnerable water systems. On March 14, 2023, the United States Environmental Protection Agency 7 announced a proposed MCL of 4 ppt for PFOA and PFOS.⁹³ Water systems would have 8 three years to comply with the MCLs once the MCL is finalized.⁹⁴ SWRCB presented a 9 proposed NL of 2 ppt and RL of 20 ppt for another substance, Perfluorohexane Sulfonic 10 Acid (PFHxS), on August 16, 2022.95 11 12 Since 2019 Suburban has been testing four of its wells at Plant 201 in the 13 Whittier/La Mirada service area. Suburban found that the four wells exceeded the PFOA, 14 PFOS, and PFHxS NL and PFOA RL. Subsequently, DDW issued a blending plan and 15 permit amendment for Suburban's Whittier water system. Suburban states that the 16 blended water from Plant 201 has PFOA, PFOS, and PFHxS levels between the NL and RL.<u>96</u> 17 Cal Advocates discusses its recommendations regarding Suburban's proposed 18 PFAS treatment system at Plant 201 in the Cal Advocates Report on Plant Projects for 19 20 Whittier-La Mirada System, Chapter 2.

SWRCB issued a monitoring order for Suburban's Sativa water system on October
28, 2022. SWRCB is requiring monitoring for PFOA and PFOS at Well No. 3 and 5

⁹³ "Proposed PFAS National Primary Drinking Water Regulation." US EPA website. <u>https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas</u>.

^{94 &}quot;Proposed PFAS National Primary Drinking Water Regulation FAQs for Drinking Water Primacy Agencies" US EPA website. <u>https://www.epa.gov/system/files/documents/2023-03/FAQs PFAS States NPDWR Final 3.14.23 0.pdf</u>.

<u>95</u> Galindo Direct Testimony, p. 7.

⁹⁶ Galindo Direct Testimony, pp. 6-7.

quarterly beginning for the first quarter of 2023. PFOA and PFOS levels have not been
 previously sampled at Sativa before.⁹⁷

3

3. Manganese

4 There are both primary water quality standards for manganese that are health-5 based and secondary water quality standards that are based on the appearance and odor of 6 drinking water. SWRCB currently has a health-based NL of 500 parts per billion (ppb) and RL of 5,000 ppb.98 SWRCB proposed revising the NL to 20 ppb and the RL to 200 7 ppb on February 16, 2023.⁹⁹ SWRCB has a secondary MCL for manganese of 50 ppb. 8 9 Cal Advocates discusses its recommendations regarding Suburban's proposed manganese treatment system at the Sativa Water System's Well 5 in the Cal Advocates 10 Report on Plant Projects for Whittier-La Mirada System, Chapter 3. 11

12

4. Chromium VI

13 No specific MCL for hexavalent chromium (chromium VI) is currently active

since the Superior Court of Sacramento County invalidated the prior MCL in 2017.

15 However, water systems must still comply with the MCL for total chromium of 50 ppb,

16 which is a standard for the combined total of Chromium VI and trivalent chromium. $\frac{100}{100}$

17 SWRCB proposed an MCL of 10 ppb for Chromium VI alone on June 16, 2023.¹⁰¹ None

18 of Suburban's wells exceed the proposed MCL for Chromium VI. Suburban notes that if

19 the final MCL requires public notification for water sources with Chromium VI levels

99 "Drinking Water Notification Levels." SWRCB website. <u>https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/NotificationLevels.html</u>.

100 "State Water Board Approves Removal of Drinking Water Standard for Hexavalent Chromium." SWRCB website.

https://www.waterboards.ca.gov/press room/press releases/2017/pr080117 mcl removal.pdf.

⁹⁷ Galindo Direct Testimony, p. 10.

<u>98</u> Galindo Direct Testimony, pp. 10-11.

^{101 &}quot;Hexavalent Chromium MCL (SWRCB-DDW-21-003)." SWRCB website. https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/SWRCBDDW-21-003 hexavalent_chromium.html.

above one-half the MCL, then Suburban would need to notify customers served by wells
 in its San Jose Hills service area.¹⁰²

3

5. Lead and Copper Rule

4 The United States Environmental Protection Agency (EPA) is planning changes to the Lead and Copper Rule, which addresses the risk of lead from historical pipes 5 6 contaminating drinking water. Suburban will need to develop a lead service line 7 inventory or demonstrate that it does not have lead service lines by October 2024 as part 8 of the Lead and Copper Rule Revisions. Suburban states that EPA's Lead and Copper 9 Rule improvements will propose to replace all lead service lines regardless of ownership, 10 strengthen required tap sampling, simplify action and trigger levels, and prioritize historically underserved communities.¹⁰³ 11

Suburban states that it has completed its triennial Lead and Copper Rule sampling
 in September 2022. Suburban found that its water systems did not exceed the lead action
 level.¹⁰⁴

15

6. Perchlorate

16 Currently, perchlorate has a MCL of 6 ppb in California. SWRCB lowered the 17 Detection Limit of Reporting (DLR) for perchlorate in July 2021.¹⁰⁵ The new DLR will 18 support data collection that SWRCB can use to determine whether a revised MCL is 19 feasible. Suburban currently blends the production of three wells in the San Jose Hills 20 service area with other water sources to meet the current MCL for perchlorate. Suburban 21 explains that if the perchlorate MCL is lowered, Suburban may not be able to continue

¹⁰² Galindo Direct Testimony, p. 14.

<u>103</u> Galindo Direct Testimony, pp. 14-17.

<u>104</u> Galindo Direct Testimony, p. 17.

<u>105</u> The DLR is the minimum level at which SWRCB is confident about the measurement being reported.

blending.¹⁰⁶ SWRCB has not released a schedule for the potential perchlorate MCL
 revision.

3

7. Microplastics

California is currently developing regulations for microplastics. SWRCB adopted
testing methods and a four-year monitoring plan for microplastics in August 2022. The
monitoring plan is split in two phases, with the first phase beginning in Fall 2023.
Suburban will collect samples to test for microplastics during the four-year monitoring
plan.¹⁰⁷

9

E. Special Request No. 3 Recommendation

10 The Commission should approve Suburban's Special Request No. 3 only if 11 Suburban shows that it is following the directives stated in the water quality citations 12 Suburban received in July 2023. In Special Request No. 3, Suburban requests that the 13 Commission find that Suburban complies with all water quality requirements.¹⁰⁸

DDW directs Suburban to complete several actions in response to its backflow preventer testing violations and establishes due dates for these actions over 2023 and 2024.¹⁰⁹ Importantly, DDW requires that Suburban submit its plan to ensure that all backflow preventers are tested at least annually to DDW by September 1, 2023.¹¹⁰ The Commission has set a due date for Suburban's rebuttal testimony of September 5,

<u>106</u> Galindo Direct Testimony, p. 18.

¹⁰⁷ Galindo Direct Testimony, pp. 18-19.

¹⁰⁸ Suburban's Application, p. 8.

<u>109</u> Attachment 2-1: Excerpts from DDW's Four Citations of Suburban Water Systems from July 2023, p.
3.

<u>110</u> Attachment 2-1: Excerpts from DDW's Four Citations of Suburban Water Systems from July 2023, p.3.

2023.¹¹¹ Therefore, Suburban has an opportunity to show that it is following DDW's
 directives by including the plan required by DDW with its rebuttal testimony.

As a result, the Commission should only approve Suburban's Special Request No.
3 if Suburban provides its plan to ensure that all backflow preventers are tested at least
annually.

6

7 IV. CONCLUSION

8 Cal Advocates reviewed Suburban's MDR responses and Direct Testimony, DDW 9 Citations and Sanitary Survey Reports, Consumer Confidence Reports, and SWRCB's 10 databases, and concludes that Suburban's six water systems will meet the applicable state 11 and federal water quality standards once Suburban remedies the violations that DDW 12 identified in July 2023.

¹¹¹ Assigned Commissioner's Scoping Memo and Ruling, p. 4.
Attachment 2-1: Excerpts from DDW's Four Citations of Suburban Water Systems from July 2023

Citation No. 04_07_23C_011

STATE OF CALIFORNIA STATE WATER RESOURCES CONTROL BOARD DIVISION OF DRINKING WATER

Name of Public Water System: Suburban Water Systems-San Jose Hills Water System No: 1910205

Attention:Sandy Nimat, Water Quality Manager1325 N. Grand Avenue #100, Covina, CA 91724

Issued: July 26, 2023

CITATION FOR NONCOMPLIANCE

CALIFORNIA HEALTH AND SAFETY CODE, SECTION 116555 AND CALIFORNIA CODE OF REGULATIONS, TITLE 17, SECTIONS 7584 AND 7605

FAILURE TO TEST EACH BACKFLOW PREVENTION DEVICE ANNUALLY 2022

The California Health and Safety Code (hereinafter "CHSC"), Section 116650, authorizes the State Water Resources Control Board (hereinafter "State Water Board") to issue a citation to a public water system when the State Water Board determines that the public water system has violated or is violating the California Safe Drinking Water Act (hereinafter "California SDWA") (CHSC, Division 104, Part 12, Chapter 4,

The State Water Board, acting by and through its Division of Drinking Water (hereinafter "Division"), and the Deputy Director for the Division, hereby issues Citation No. 04_07_23C_011 (hereinafter "Citation"), pursuant to Section 116650 of the CHSC to Suburban Water Systems – San Jose Hills (hereinafter "SWS-San Jose Hills"), for violation of CHSC, Section 116555 and California Code of Regulations (hereinafter "CCR"), Title 17, Sections 7584 and 7605.

STATEMENT OF FACTS

SWS-San Jose Hills is classified as a community public water system with a population of 168,843, serving 40,883 connections. SWS-San Jose Hills operates under Domestic Water Supply Permit issued by the State Water Board on May 23, 2001, and ten subsequently issued permit amendments. SWS-San Jose Hills's water supply is obtained from four groundwater sources, two standby wells, and purchased water connections with nine different water systems. SWS-San Jose Hills has water rights from those four wells. SWS-San Jose Hills has 17 reservoirs and is divided into 18 pressure zones.

California Health and Safety Code, Section 116555 requires all public water systems to not be subject to backflow under normal operating conditions. CCR, Title 17, Section 7584 requires the water supplier to protect the public water supply from contamination by implementation of a cross-connection control program. CCR, Title 17, Section 7584, subdivision (f) requires the maintenance of records of locations, tests, and repairs of backflow preventers. CCR, Title 17, Section 7605, subdivision (c) requires all backflow preventers to be tested at least annually or more frequently if determined to be

necessary by the health agency or water supplier. When devices are found to be defective, they must be repaired or replaced in accordance with the provisions of CCR, Title 17, Division 1, Chapter 5.

During the State Water Board's 2022 Electronic Annual Report (EAR) review, it was noted that out of total number of 920 installed backflow assemblies, only 421 devices were tested. Thus, the percenage of tested backflow devices was 46%, which failed to meet 100% annual testing requirement.

DETERMINATION

The State Water Board has determined that SWS-San Jose Hills has failed to comply with the CHSC, Section 116555 and CCR, Title 17, Sections 7584, and 7605.

DIRECTIVES

SWS-San Jose Hills is hereby directed to take the following actions:

- By December 31, 2023, assure that all of the System's backflow prevention devices are tested. SWS-San Jose Hills must submit a backflow prevention device testing status report, copies of the individual device test reports, and an inventory of all identified backflow prevention devices in the distribution system to the State Water Board by February 13, 2024.
- By September 1, 2023, submit a plan to the State Water Board for review and approval that outlines a process to ensure that all backflow prevention devices are tested at least annually.

- SWS-San Jose Hills must include this violation in the 2023 Consumer Confidence Report in accordance with CCR, Title 22, Section 64481, subdivision (g)(1).
- 4. By August 11, 2023, complete and return to the State Water Board the "Notification of Receipt" form attached to this Citation as Appendix 1. Completion of this form confirms that SWS-San Jose Hills has received this Citation and understands that it contains legally enforceable directives with due dates.
- Complete Appendix 2: Compliance Certification Form. Submit it to the State Water Board by February 13, 2024.

Dmitriy Ginzburg, P.E. District Engineer, Hollywood District Dwpdist07@waterboards.ca.gov

The State Water Board reserves the right to make modifications to this Citation as it may deem necessary to protect public health and safety. Such modifications may be issued as amendments to this Citation and shall be effective upon issuance.

CITATION NO. 04_07_23C_014

STATE OF CALIFORNIA STATE WATER RESOURCES CONTROL BOARD DIVISION OF DRINKING WATER

Name of Public Water System: Suburban Water Systems-Glendora Water System No: 1910046

Attention:Sandy Nimat, Water Quality Manager1325 N. Grand Avenue #100, Covina, CA 91724

Issued: July 26, 2023

CITATION FOR NONCOMPLIANCE

CALIFORNIA HEALTH AND SAFETY CODE, SECTION 116555 AND CALIFORNIA CODE OF REGULATIONS, TITLE 17, SECTIONS 7584 AND 7605

FAILURE TO TEST EACH BACKFLOW PREVENTION DEVICE ANNUALLY 2022

The California Health and Safety Code (hereinafter "CHSC"), Section 116650, authorizes the State Water Resources Control Board (hereinafter "State Water Board") to issue a citation to a public water system when the State Water Board determines that the public water system has violated or is violating the California Safe Drinking Water Act (hereinafter "California SDWA") (CHSC, Division 104, Part 12, Chapter 4,

The State Water Board, acting by and through its Division of Drinking Water (hereinafter "Division"), and the Deputy Director for the Division, hereby issues CITATION NO. 04_07_23C_014 (hereinafter "Citation"), pursuant to Section 116650 of the CHSC to Suburban Water Systems – Glendora (hereinafter "SWS-Glendora"), for violation of CHSC, Section 116555 and California Code of Regulations (hereinafter "CCR"), Title 17, Sections 7584 and 7605.

STATEMENT OF FACTS

SWS-Glendora is classified as a community public water system with a population of 5,009, serving 1,554 connections. SWS-Glendora operates under Domestic Water Supply Permit issued by the State Water Board on May 31, 2016 (04-07-16P-003), and no subsequently issued permit amendments since its issuance. SWS-Glendora currently receives its water supply from the CIC and Glendora. SWS-Glendora does not currently have any active groundwater wells. Also, SWS-Glendora does not have any exclusive emergency connections.

California Health and Safety Code, Section 116555 requires all public water systems to not be subject to backflow under normal operating conditions. CCR, Title 17, Section 7584 requires the water supplier to protect the public water supply from contamination by implementation of a cross-connection control program. CCR, Title 17, Section 7584, subdivision (f) requires the maintenance of records of locations, tests, and repairs of backflow preventers. CCR, Title 17, Section 7605, subdivision (c) requires all backflow preventers to be tested at least annually or more frequently if determined to be necessary by the health agency or water supplier. When devices are found to be

defective, they must be repaired or replaced in accordance with the provisions of CCR, Title 17, Division 1, Chapter 5.

During the State Water Board's 2022 Electronic Annual Report (EAR) review, it was noted that out of total number of 8 installed backflow assemblies, only 2 were tested. Thus, the percenage of tested backflow devices was 25%, which failed to meet 100% annual testing requirement.

DETERMINATION

The State Water Board has determined that SWS-Glendora has failed to comply with the CHSC, Section 116555 and CCR, Title 17, Sections 7584, and 7605.

DIRECTIVES

SWS-Glendora is hereby directed to take the following actions:

- By December 31, 2023, assure that all of the System's backflow prevention devices are tested. SWS-Glendora must submit a backflow prevention device testing status report, copies of the individual device test reports, and an inventory of all identified backflow prevention devices in the distribution system to the State Water Board by February 13, 2024.
- By September 1, 2023, submit a plan to the State Water Board for review and approval that outlines a process to ensure that all backflow prevention devices are tested at least annually.
- SWS-Glendora must include this violation in the 2023 Consumer Confidence Report in accordance with CCR, Title 22, Section 64481, subdivision (g)(1).

- 4. By August 11, 2023, complete and return to the State Water Board the "Notification of Receipt" form attached to this Citation as Appendix 1. Completion of this form confirms that SWS-Glendora has received this Citation and understands that it contains legally enforceable directives with due dates.
- Complete Appendix 2: Compliance Certification Form. Submit it to the State Water Board by February 13, 2024.

Dmitriy Ginzburg, P.E. District Engineer, Hollywood District Dwpdist07@waterboards.ca.gov

The State Water Board reserves the right to make modifications to this Citation as it may deem necessary to protect public health and safety. Such modifications may be issued as amendments to this Citation and shall be effective upon issuance.

CITATION NO. 04_07_23C_012

STATE OF CALIFORNIA STATE WATER RESOURCES CONTROL BOARD DIVISION OF DRINKING WATER

Name of Public Water System: Suburban Water Systems-Whittier Water System No: 1910174

Attention:Sandy Nimat, Water Quality Manager1325 N. Grand Avenue #100, Covina, CA 91724

Issued: July 26, 2023

CITATION FOR NONCOMPLIANCE

CALIFORNIA HEALTH AND SAFETY CODE, SECTION 116555 AND CALIFORNIA CODE OF REGULATIONS, TITLE 17, SECTIONS 7584 AND 7605

FAILURE TO TEST EACH BACKFLOW PREVENTION DEVICE ANNUALLY 2022

The California Health and Safety Code (hereinafter "CHSC"), Section 116650, authorizes the State Water Resources Control Board (hereinafter "State Water Board") to issue a citation to a public water system when the State Water Board determines that the public water system has violated or is violating the California Safe Drinking Water Act (hereinafter "California SDWA") (CHSC, Division 104, Part 12, Chapter 4,

The State Water Board, acting by and through its Division of Drinking Water (hereinafter "Division"), and the Deputy Director for the Division, hereby issues CITATION NO. 04_07_23C_012 (hereinafter "Citation"), pursuant to Section 116650 of the CHSC to Suburban Water Systems – Whittier (hereinafter "SWS-Whittier"), for violation of CHSC, Section 116555 and California Code of Regulations (hereinafter "CCR"), Title 17, Sections 7584 and 7605.

STATEMENT OF FACTS

SWS-Whittier is classified as a community public water system with a population of 66,045, serving 18,267 connections. SWS-Whittier operates under Domestic Water Supply Permit issued by the State Water Board on October 25, 1962, and seven subsequently issued permit amendments since its issuance. There are four active groundwater wells, one standby well, and seven reservoirs; SWS-Whittier also purchases treated groundwater from six nearby water systems and imported water from the Central Basin Municipal Water District. The water system is divided into 11 pressure zones. Chlorination and blending are the only forms of water treatment.

California Health and Safety Code, Section 116555 requires all public water systems to not be subject to backflow under normal operating conditions. CCR, Title 17, Section 7584 requires the water supplier to protect the public water supply from contamination by implementation of a cross-connection control program. CCR, Title 17, Section 7584, subdivision (f) requires the maintenance of records of locations, tests, and repairs of backflow preventers. CCR, Title 17, Section 7605, subdivision (c) requires all backflow

preventers to be tested at least annually or more frequently if determined to be necessary by the health agency or water supplier. When devices are found to be defective, they must be repaired or replaced in accordance with the provisions of CCR, Title 17, Division 1, Chapter 5.

During the State Water Board's 2022 Electronic Annual Report (EAR) review, it was noted that out of total number of 466 installed backflow assemblies, only 240 were tested. Thus, the percenage of tested backflow devices was 52%, which failed to meet 100% annual testing requirement.

DETERMINATION

The State Water Board has determined that SWS-Whittier has failed to comply with the CHSC, Section 116555 and CCR, Title 17, Sections 7584, and 7605.

DIRECTIVES

SWS-Whittier is hereby directed to take the following actions:

- By December 31, 2023, assure that all of the System's backflow prevention devices are tested. SWS-Whittier must submit a backflow prevention device testing status report, copies of the individual device test reports, and an inventory of all identified backflow prevention devices in the distribution system to the State Water Board by February 13, 2024.
- By September 1, 2023, submit a plan to the State Water Board for review and approval that outlines a process to ensure that all backflow prevention devices are tested at least annually.

- SWS-Whittier must include this violation in the 2023 Consumer Confidence Report in accordance with CCR, Title 22, Section 64481, subdivision (g)(1).
- 4. By August 11, 2023, complete and return to the State Water Board the "Notification of Receipt" form attached to this Citation as Appendix 1. Completion of this form confirms that SWS-Whittier has received this Citation and understands that it contains legally enforceable directives with due dates.
- Complete Appendix 2: Compliance Certification Form. Submit it to the State Water Board by February 13, 2024.

Dmitriy Ginzburg, P.E. District Engineer, Hollywood District Dwpdist07@waterboards.ca.gov

CITATION NO. 04_07_23C_013

STATE OF CALIFORNIA STATE WATER RESOURCES CONTROL BOARD DIVISION OF DRINKING WATER

Name of Public Water System: Suburban Water Systems- La Mirada Water System No: 1910059

Attention:Sandy Nimat, Water Quality Manager1325 N. Grand Avenue #100, Covina, CA 91724

Issued: July 26, 2023

CITATION FOR NONCOMPLIANCE

CALIFORNIA HEALTH AND SAFETY CODE, SECTION 116555 AND CALIFORNIA CODE OF REGULATIONS, TITLE 17, SECTIONS 7584 AND 7605

FAILURE TO TEST EACH BACKFLOW PREVENTION DEVICE ANNUALLY 2022

The California Health and Safety Code (hereinafter "CHSC"), Section 116650, authorizes the State Water Resources Control Board (hereinafter "State Water Board") to issue a citation to a public water system when the State Water Board determines that the public water system has violated or is violating the California Safe Drinking Water Act (hereinafter "California SDWA") (CHSC, Division 104, Part 12, Chapter 4,

The State Water Board, acting by and through its Division of Drinking Water (hereinafter "Division"), and the Deputy Director for the Division, hereby issues CITATION NO. 04_07_23C_013 (hereinafter "Citation"), pursuant to Section 116650 of the CHSC to Suburban Water Systems – La Mirada (hereinafter "SWS-La Mirada"), for violation of CHSC, Section 116555 and California Code of Regulations (hereinafter "CCR"), Title 17, Sections 7584 and 7605.

STATEMENT OF FACTS

SWS-La Mirada is classified as a community public water system with a population of 56,739, serving 15,541 connections. SWS-La Mirada operates under Domestic Water Supply Permit issued by the State Water Board on November 18, 1994 (04-07-85P-021), and seven subsequently issued permit amendments since its issuance. There are two active groundwater wells, and seven reservoirs; SWS-La Mirada also purchases treated groundwater from nearby water systems and imported water from the Central Basin Municipal Water District. The water system is divided into four pressure zones.

California Health and Safety Code, Section 116555 requires all public water systems to not be subject to backflow under normal operating conditions. CCR, Title 17, Section 7584 requires the water supplier to protect the public water supply from contamination by implementation of a cross-connection control program. CCR, Title 17, Section 7584, subdivision (f) requires the maintenance of records of locations, tests, and repairs of backflow preventers. CCR, Title 17, Section 7605, subdivision (c) requires all backflow preventers to be tested at least annually or more frequently if determined to be

necessary by the health agency or water supplier. When devices are found to be defective, they must be repaired or replaced in accordance with the provisions of CCR, Title 17, Division 1, Chapter 5.

During the State Water Board's 2022 Electronic Annual Report (EAR) review, it was noted that out of total number of 528 installed backflow assemblies, only 262 were tested. Thus, the percenage of tested backflow devices was 50%, which failed to meet 100% annual testing requirement.

DETERMINATION

The State Water Board has determined that SWS-La Mirada has failed to comply with the CHSC, Section 116555 and CCR, Title 17, Sections 7584, and 7605.

DIRECTIVES

SWS-La Mirada is hereby directed to take the following actions:

- By December 31, 2023, assure that all of the System's backflow prevention devices are tested. SWS-La Mirada must submit a backflow prevention device testing status report, copies of the individual device test reports, and an inventory of all identified backflow prevention devices in the distribution system to the State Water Board by February 13, 2024.
- By September 1, 2023, submit a plan to the State Water Board for review and approval that outlines a process to ensure that all backflow prevention devices are tested at least annually.

- SWS-La Mirada must include this violation in the 2023 Consumer Confidence Report in accordance with CCR, Title 22, Section 64481, subdivision (g)(1).
- 4. By August 11, 2023, complete and return to the State Water Board the "Notification of Receipt" form attached to this Citation as Appendix 1. Completion of this form confirms that SWS-La Mirada has received this Citation and understands that it contains legally enforceable directives with due dates.
- Complete Appendix 2: Compliance Certification Form. Submit it to the State Water Board by February 13, 2024.

Dmitriy Ginzburg, P.E. District Engineer, Hollywood District Dwpdist07@waterboards.ca.gov

The State Water Board reserves the right to make modifications to this Citation as it may deem necessary to protect public health and safety. Such modifications may be issued as amendments to this Citation and shall be effective upon issuance.

Attachment 2-2: Statement of Qualifications

1

QUALIFICATIONS AND PREPARED TESTIMONY

2 OF

3 ANTHONY ANDRADE

4	Q.1	Please state your name, business address, and position with the California Public
5		Utilities Commission ("Commission").

- A1. My name is Anthony Andrade, and my business address is 320 West 4th Street,
 Suite 500, Los Angeles, California 90013. I am a Utilities Engineer in the Water
 Branch of the Public Advocates Office.
- 9 Q2. Please summarize your education background and professional experience.
- A2. I received a Bachelor of Science Degree in Mechanical Engineering from the
 University of California--Riverside in 2018.
- 12 I have been with the Public Advocates Office Water Branch since 2018. As a
- 13 witness for Cal Advocates, I have previously provided testimony regarding Utility
- 14 Plant-in-Service, Depreciation, and Rate Base in San Gabriel Valley Water
- 15 Company (SGVWC)'s 2022 GRC (A.22-01-001) and 2019 GRC (A.19-01-001)
- 16 and Liberty Utilities (Apple Valley Ranchos Water Company) and (Park Water
- 17 Company)'s consolidated 2021 GRC (A.21-07-003 et al). I have also provided
- 18 testimony regarding Utility Plant-in-Service in Golden State Water Company's
- 19 2020 GRC (A.20-07-012), Water Quality in SGVWC's 2019 GRC, and the topic
- 20 of Storage Capacity in SGVWC's proposed acquisition of the City of Montebello
- 21 Water System (A.20-10-004).
- 22 Q3. What is your responsibility in this proceeding?
- A3. I am responsible for the preparation of Chapter 1 (San Jose Hills Planned Projects)
 and Chapter 2 (Water Quality) of this testimony.

- 1 Q4. Does this conclude your prepared direct testimony?
- 2 A4. Yes, it does.