Exhibit G

Cost of Capital

Direct Testimony of Paul G. Townsley

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I. INTRODUCTION

Q. What is the purpose of this testimony?

A. The purpose of this testimony is to outline operational and regulatory risks that Cal Water faces and to request that the Commission increase its rate of return to compensate for those risks.

II. QUALIFICATIONS

Q. What is your current position?

A. I am Vice President of Regulatory Matters and Corporate Development for California Water Service Company.

Q. What is your educational background?

A. I received a Bachelor of Science degree in Marine Engineering from the United States Merchant Marine Academy at Kings Point, New York in 1980. During the time I have been in industry I have participated in numerous advanced programs for business executives.

Q. Do you hold any professional certifications?

A. Yes. I am a Professional Engineer in the States of Arizona and Hawaii. I also hold a United States Marine Engineering license from the U.S. Coast Guard.

Q. Please summarize your business experience.

A. I have been working in the utility business for over 35 years, including assignments in the electric sector, natural gas sector, telecommunications sector, and the water/wastewater sector. I have over 20 years of experience leading water utilities located in California, Arizona, New Mexico, Texas, Indiana, Illinois, Ohio, and Pennsylvania; first for Citizens Utilities, then for American Water, and then for EPCOR USA. I have been with California Water Service Company for four years and have been responsible at various times for its regulatory affairs, government and communications, purchasing and facilities, and corporate development teams.

III. RISKS ASSOCIATED WITH OPERATING SMALL SYSTEMS

Q. Please provide a background on Cal Water's operations of small water systems.

A. Cal Water operates a series of differently sized water systems, ranging from large urban operations in Bakersfield and East Los Angeles County serving 50,000 or more service connections to districts, to very small communities such as Dillon Beach (249 connections) and Fremont in Kern County (76 connections). In addition, the Company's operations are distributed across the state, making it

difficult to obtain the economies of scale across small districts that can be obtained entirely within a larger district with the same total number of connections.

Q. What ratemaking mechanisms has the Commission employed for small water utilities?

A. The Commission has employed simplified, expedited, and supportive ratemaking practices for small utilities.[1] In addition to a number of administratively expedited processes, the Commission generally provides a higher rate of return for small systems. For instance, the Commission's compliance division developed a "short-form" filing method for Class D utilities in the 1990's that is used today. Commission staff performs "outreach" to Class C and D water systems to ensure that owners take advantage of opportunities for rate adjustments. Rate cases are processed by a Tier 3 advice letter, not an application, and annual CPI increases are granted to utilities who have submitted annual reports. Finally, small utilities can submit rate base offsets without prior

[1] Standard Practice U-5-SM, Standard Practice for Determining Fixed Capital and Rate Base of Class B, C and D Water Utilities.

approval in a GRC. The Commission has also recognized the need for higher returns for these smaller water systems.[2]

Q. Is Cal Water allowed to make use of the same regulatory mechanisms?

A. Generally, no. Cal Water operations are treated as part of a single Class A water company, even though there are many systems that could be classified as Class B, Class C, or Class D.

Q. What are some reasons the Commission has allowed higher returns to small water companies?

A. First, there are operational risks in running a small system in that expenses can be more volatile than those of a large system. When something does go wrong, such as a pump failure or main leak, the cost of the repair could be quite large as a percentage of total revenue requirement than in a large system. The second reason for higher returns for small companies is their challenge in financing system improvements. In fact, due to the difficult time small systems have qualifying for bank loans, the Commission generally assumes these are 100% equity financed operations. While a small system as part of Cal Water does not face the same financing difficulties, it will have similar operating risks as an

[2] The annual rates of return for the Class C and Class D companies are from the annual letter to the Commission from Rami Kahlon, Director of Division of Water and Audits, dated February 24, 2017, and titled Rates of Return and Rates of Margin for Class C and Class D Water Utilities.

independent utility of the same size. The Commission's ratemaking process for multi-district utilities sets rates on a local cost of service basis, so the burden of extraordinary expenses still falls with customers of the (often small) system.

Q. How would each of Cal Water's water systems be classified if they were "stand-alone" companies?

A. The following chart shows how the Commission currently classifies regulated water and sewer utilities:[3]

Company Designation	Number of Services
Class A	Over 10,000
Class B	2001 - 10,000
Class C	501 - 2,000
Class D	Less than 500

Cal Water's districts are composed of differently-sized, non-contiguous operating systems. Each of these non-contiguous water systems is recognized as a separate Department of Drinking Water ("DDW") water system, with a unique system identification number, specific source and storage requirements, and independent water quality reporting requirements. Each system is essentially independent from a water quality perspective. In addition, from a ratemaking perspective, many of these systems are regulated by the Commission with their

[3] From GO-96-A Water industry Rule 1.2 and from Decision D. 85-04-076

own rate base, expenses, and revenue requirement. If Cal Water were to be broken down into individual companies based on these systems using the Commission's classifications for water companies, the result would be a group of 39 companies comprised of 14 Class A companies, 8 Class B companies, 9 Class C companies, and 8 Class D companies. The following chart shows the breakdown of Cal Water by individual water operating system:

District	Customers
AV – Leona Val/Lake Hughes	624
AV - Lancaster	672
AV - Fremont	76
Bakersfield	70,780
Bayshore - Mid Peninsula	36,617
Bayshore - So. San Francisco	16,959
Bear Gulch	18,914
Chico	29,025
Dixon	2,889
Dominguez	34,007
East Los Angeles	26,771
Hermosa Redondo	26,783
KRV - Kern River Valley	938
KRV - Arden	1,192
KRV - Bodfish	713
KRV - Kernville	585
KRV - Lakeland	198
KRV - Squirrel Mountain	416
KRV - Grand Oks	43
King City	2,611
Livermore	18,615
Los Altos Suburban	18,905
Marysville	3,760
Oroville	3,573

District	Customers
Palos Verdes	24,134
RDV - Lucerne	1,190
RDV - Armstrong Valley	377
RDV - Coast Springs	249
RDV - Hawkins	51
SLN - Salinas	24,645
SLN - Las Lomas	615
SLN - Oak Hills	814
SLN - Bolsa Knolls	2,231
SLN - Buena Vista	182
Selma	6,338
Stockton	43,570
Visalia	43,117
Westlake	7,076
Willows	2,403
TOTAL	472,658

The following chart shows the corresponding summary of systems by the Commission's classifications if Cal Water were broken down by water operating system:

System Type	Number of Systems	Number	Percent
A Systems	14	432,842	91.6%
B Systems	8	30,881	6.5%
C Systems	9	7,343	1.6%
D Systems	8	1,592	0.3%
Total	39	472,658	

Q. How does Cal Water's currently authorized rate of return compare to what the Commission believes is appropriate for water utilities of different sizes?

A. According to the Commission's Water Division in its annual memorandum, Cal Water's rate of return is below the average of Class A, and Class B water utilities, and below the Commission's recommended rate of return for Class C and Class D water utilities.

System Type	ROR[4] [5]
Cal Water Authorized	7.94%
Class A Average	8.51%
Class B Average	10.07%
Class C Recommended	10.0% - 11.0%
Class D Recommended	10.5% - 11.5%

As an earlier table indicates show, classifying the Company by operating system size would result in 6.5% of its operating systems classified as Class B water utilities, 1.6% of its operating systems classified as Class C water utilities, and 0.3% of its operating systems classified as Class D water utilities. All of these smaller operating systems would be able to earn a higher rate of return than Cal Water is now earning, if operated separately. The following chart shows the effect of including the rates of return for Class B, Class C and Class D companies on Cal Water's similarly sized systems. Taking into account Cal Water's currently authorized rate of return, this would have nearly a 20 basis point increase in the

[4] Cal Water's current authorized Rate of Return is 7.94% which is a weighted factor based on 9.43% return on equity, and 6.24% cost of long-term debt as determined in D.12-07-009, and modified by the WCCM in Advice Letter 2088.

[5] The annual rates of return for the Class C and Class D companies are from the annual letter to the Commission from Rami Kahlon, Director of Division of Water and Audits, dated February 24, 2017, and titled Rates of Return and Rates of Margin for Class C and Class D Water Utilities.

authorized rate of return on a company-wide basis. This translates to a correspondingly higher return on equity.

Cal Water System Type	Percent	ROR	Weighting by System
A Systems	91.6%	7.94%	7.27%
B Systems	6.5%	10.07%	0.66%
C Systems	1.6%	10.50%	0.16%
D Systems	0.3%	11.00%	0.04%
Total	100.0%		8.13%

Q. Are smaller water systems really any more difficult to operate than larger water systems?

A. Yes. Smaller systems have complications associated with them that are not frequently encountered in larger districts. Smaller systems often do not have the redundancy in storage and supply that larger systems have, making them more susceptible to system failures, water outages, and other upsets. The smaller systems are also often located in remote areas, leading to reduced economies of scale, where fewer specialized vendors are available. Further, operations are often complicated by large distances between systems, leading to extended travel times for the certified water system operators. Alternative supplies such as imported surface water are also usually not economically feasible in small water systems.

Q. Does having smaller districts complicate Cal Water's General Rate Case filings?

A. Yes definitely**.** Different cost-of-service calculations for each district result in a significantly more complex set of supporting workpapers. For each district, and sometimes for each operating system, there will be separate capital projects and justifications, unique workforce needs, more granular cost allocations, different customer growth, and different consumption patterns. In addition, the need for multiple district workshops, tours, public participation hearings, and customer notices add complexities.

Cal Water has also experienced a higher ratio of rate case intervenors in Cal Water's smaller districts versus its larger districts. While having input from the community is generally a good thing, often there is a lack of understanding of the process by representatives from smaller system, having intervenors involved in a rate case generally increases the workload on the Company because the utility must respond to additional data requests, and substantially increases the settlement time because settlement discussions and negotiations include not only the ORA, but generally also include intervening parties.

The following charts show Cal Water recent experience with intervenors in its 2005, 2007, 2009, 2012, and 2015 GRCs. As the chart shows, approximately

70% of the intervenors for Cal Water's last five GRCs were attributable to small water systems.

Intervenor System 2015 GRC	System 2016 Services	System CPUC Class
Coast Springs	249	D
Leona Valley Town Council	624	C
City of Selma	6,338	A
City of Visalia	43,117	A
Kern County (represent Kern River Valley, Arden, Bodfish, Kernville, Lakeland, Squirrel Mountain)	4,042	C & D
Lake County (representing Lucerne)	1,190	C
City of Bakersfield	70,780	A
Kern River Valley (represent Kern River Valley, Arden, Bodfish, Kernville, Lakeland, Squirrel Mountain)	4,042	C & D
County of Butte (representing Chico & Oroville)	32,598	A
City of Marysville	3,760	B
City of Thousand Oaks	7,076	B
City of Chico	29,025	A

Intervenor System 2012 GRC	System 2016 Services	System CPUC Class
Coast Springs	249	D
Leona Valley	624	D
Selma	6,338	A
Visalia	43,117	A
Kern County (represent Kern River Valley, Arden, Bodfish, Kernville, Lakeland, Squirrel Mountain)	4,042	C & D
Lake County (representing Lucerne)	1,190	C
Lancaster	672	D
R.A.W (represent Kern River Valley Arden, Bodfish, Kernville, Lakeland, Squirrel Mountain)	4,042	C & D

Intervenor System 2009 GRC	System 2015 Services	System CPUC Class
Coast Springs	249	D
Leona Valley	624	C
Fremont Valley	76	D
Visalia	43,117	A

Intervenor System 2007 GRC	System 2015 Services	System CPUC Class
Coast Springs	249	D
Leona Valley	624	C
San Mateo (portion of Mid-Peninsula)	36,617	A
Los Altos	18,905	A

Intervenor System 2005 GRC	System 2016 Services	System CPUC Class
Coast Springs	249	D
Fremont Valley	76	D
Leona Valley	624	C
Lucerne	1,190	C
Armstrong & Hawkins (portion of Unified)	428	D

Q. What is your experience with the LIRA program in small systems?

A. Low Income Rate Assistance ("LIRA") participation in the smaller Cal Water systems tends to be much higher than in larger systems, and demands more resources to manage. Under the Commission's LIRA program, Cal Water tracks and reports on a variety of performance objectives. A LIRA account requires more

initial set-up time, and time to process LIRA documentation. The table below shows the LIRA participation by Cal Water's system sizes.

System Type	Percent of Customers enrolled in LIRA
A Systems	17.7%
B Systems	25.3%
C Systems	30.0%
D Systems	18.2%
Overall	18.4%

Q. Are small water systems more difficult to manage from a water quality perspective?

A. Yes, small systems require more water quality management time and effort than large systems. While DDW reporting requirements for small water systems are similar to those for large water systems, there are added complexities. As mentioned earlier in my testimony, many small systems lack the redundancy and reliability to seamlessly handle operational challenges, such as a power outage, pump repair or main repair. This leads to more frequent water outages, and potentially boil water notices for customers. Many of the small systems are in remote and hilly terrain; systems can have multiple zones across which to supply customers according to recommended pressure levels. Having many small pressure zones often means that a system requires more small tanks and boosters than a more level system would, and since the systems are small, there is not sufficient redundancy at many sites.

Because of geologic conditions found underneath many of the small water system areas, such as fractured rock that results in low well yields, it is often very difficult to construct wells that produce high quantities of good quality water. Even in small water systems, where there are fewer customers, multiple wells can often be required to simply meet the average day demand of the small system. In contrast to large water systems, where a single well may serve hundreds of customer connections, the small water systems often present supply problems.

No matter the size of the system, DDW requires annual reports, inspections, and consumer confidence reports for every system. This requires almost the same level of effort for a large system as a small system. Permitting a small well or small treatment system requires a similar amount of time as a larger facility. For a small system, this cost is not spread across as many customers. All of these issues lead to a much higher workload per customer connection for smaller systems compared to larger systems.

Q. What additional comments to you have about the costs of operating small water systems?

A. Smaller systems tend to be located in areas with struggling economies. Local governments in these smaller systems often become more involved and

interested in the water system with regard to conservation, review of capital projects, rate impacts, and community involvement on the part of the company, all leading to more intensive management needs in the small system. Accordingly, the potential for condemnation attempts or threats also tends to be higher in smaller systems.

Q. What is your recommendation in this proceeding with regard to operating small water systems?

A. Because Cal Water operates a series of differently-sized water districts across the state, and since it is often difficult and costly to obtain the same economies of scale for small water systems as compared to larger water systems, the Commission should recognize the additional burdens imposed by Cal Water's small systems, as the Commission already does for Class B, C, and D companies. It should therefore consider adding 20 basis points to Cal Water's overall return on equity to compensate for the additional risks and challenges involved in operating a series of smaller districts that are not present for larger districts.

IV. RISKS ASSOCIATED WITH IMBALANCE IN REGULATORY MECHANISMS

Q. Does setting a reasonable rate of return ensure a reasonable ability for a company to achieve that rate of return?

A. No. Generally, setting a cost of capital that is “fair” assumes that the utility has an equal opportunity to earn above or below its authorized rate of return. The development of regulation at the Commission, however, has made it almost impossible for a utility like Cal Water to earn above its authorized rate of return, and instead increasingly likely that a utility will earn below its rate of return. Specifically, "advice letter” rate base offsets, the earnings tests, one-way balancing accounts, the 3-year General Rate Case plan, and the increasing use of memorandum and balancing accounts in lieu of test year forecasts all contribute to the likelihood that a utility will earn below its rate of return.

Q. What are the positive attributes of the Commission’s regulatory scheme?

A. Yes. The Commission utilizes the use of a future test year for expense forecasting, multiple future test years for plant additions, use of memorandum and balancing accounts particularly for production expenses, and providing interim rates if a rate case cannot be processed in a timely fashion.

Q. Is expense estimating a concern under the Rate Case Plan?

A. Yes, Cal Water must estimate expenses before filing, approximately 24-30 months in advance of the test year, and use a historical average for forecasting. The Rate Case Plan allows an update of recorded figures, but not a deviation in

estimating methods, so if for instance the utility estimated costs using a five-year average in its GRC application, and its subsequent data shows a divergence from this trend, there is no opportunity in the procedural schedule for the utility to modify its estimates to achieve a reasonable recovery of its expenses. In addition, legitimate historic expenses are often disputed by ORA as non-recurring expenses and eliminated from the average, notwithstanding that other non-recurring expenses are likely to occur in the future. ORA and other participants in the proceeding face no such restriction, so when updated data comes in, they are free to lower estimates where data so indicates, but they are under no obligation to increase estimates when the data would support a higher expense than the utility originally forecast.

In addition to this, the utility is not allowed to forecast expenses beyond the first test year. Expenses for the second and third year of the rate case cycle are escalated by CPI and other indices that often do not account for the utility's actual expenses.

Q. How is the mechanism of "Advice Letter" Rate Base Offsets biased?

A. Rate Base Offsets that only allow capital projects to be reflected in rates via an "Advice Letter" after project completion are often used in rate cases as a means of pre-approving projects whose scope or timing is uncertain at the time

of the GRC filing. The main reason for uncertainty in these instances, however, is that Cal Water is required to prepare its general rate case 3-4 years in advance of the expected completion date of a large project.[6] ORA, the primary reviewer of Class A utility filings, has an incentive to reduce the immediate impact on rates by proposing that many projects be handled by advice letter rather than reflecting them in adopted rates. ORA reports annually to the legislature and measures its success in terms of dollar and percentage reductions of utility requests.[7] Further complicating this trend is the Commission's General Order 96-B, which allows for "capped" advice letters to be processed as Tier 2 (30-day administrative approval), while uncapped advice letters are Tier 3 (indefinite approval by Commission resolution). Since these advice letters can only be filed after project completion, the utility has an incentive to accept a "capped" amount because it can begin to recover its costs sooner. This leads to a situation where either the costs come below the cap and ratepayers pay only the final cost of the project (minus the regulatory lag), or the costs come in above the cap, wherein the utility receives no consideration of additional revenue requirement until the next GRC test year. Furthermore, actual use of this "advice letter" track is not insignificant,

[6] For example, if Cal Water forecasts the need for a well in 2021, the second rate base "test year," Cal Water has to estimate the costs and completion date for the project in 2017 in order to request the project in the May 2018 "Proposed Application" of its 2018 General Rate Case.

[7] See ORA 2015 Annual Report to the Legislature, "ORA's $27.7 million budget represents a small fraction of total benefit to ratepayers compared with the more than $5.3 billion in savings ORA helped to achieve on behalf of ratepayers in 2015. This savings was realized in the form of lower utility revenues and avoided rate increases."

as demonstrated by Cal Water's agreement to give advice letter treatment to $197 million in projects, potentially generating $30 million annual revenue requirement, in its 2015 GRC.

Q. Why does the escalation earnings test inhibit a water utility's ability to earn its authorized return?

A. The escalation earnings test is filed before the second escalation year and the third escalation year of a triennial rate case filing cycle. If the Company does not pass the earnings test, prior authorized rate increases may not be implemented. Only the water industry is required to "pass" an earnings test in order to obtain an inflation or rate base adjustment in an escalation year. Energy utilities in California are allowed to implement post-test-year changes to revenues without filing or passing an earnings test. To make matters worse, each of Cal Water's regulated districts must pass their own individual earnings test, rather than having one warnings test for the whole utility.

While the test for escalation years is called an "earnings test" it is actually not a test of earnings at all. The mechanics of the test only incorporate changes in weighted average rate base, as compared to rate base authorized in the rate case, and changes in customer count. Other changes that could affect earnings, such as changes in expenses beyond CPI indexes are excluded from the

calculation. The net result is that it is extraordinarily difficult for Cal Water to actually earn its authorized rate of return because (1) Cal Water must pass individual "earnings tests" in each of its 25 ratemaking areas in order to achieve the full authorized escalation year increase for the utility, and (2) any changes in expenses beyond CPI and other Commission approved indexes is excluded in calculating rates for the escalation year.

Q. Is the earnings test biased against utilities?

A. Of course. As I have just described, in the case of a large multi-district water utility such as Cal Water, the earnings test represents a one-way adjustment that biases the Commission's ratemaking process. No extra revenue is given for ratemaking areas which under-earn in a given year. Operating expenses and capital improvements can be outside the utility's control, for instance if materials prices change, if permitting costs are beyond those forecasted, or if governmental agencies interfere with timing of projects. While these changes are obviously risks the utility has undertaken, the earnings test makes those risks asymmetric by penalizing one deviation from normal while not commensurately rewarding the other deviations.

While the earnings test measures historical variables such as capital project completion and customer count in order to apply a reduction to future

revenue escalation, “excess earnings” as calculated by the earnings test ignores any cost increases above CPI that the utility has incurred and therefore most likely are not “excess earnings” at all. Moreover the earnings test assumes that any “excess earnings” as compared to authorized for a past period will uniformly continue to occur in future periods. The adjustment to revenue recovery is permanent until the next general rate case. There is no make-up provision if a later period reflects earnings at or below authorized. Customer numbers can, at a later point, return to normal levels if a development occurred more quickly or slowly than anticipated. Rate base can “catch up” if projects were delayed but completed at a later point. In fact, since the earnings test uses weighted average rate base, it is possible that all authorized plant improvements were actually placed into service, but later in the year than anticipated in the rate case.

Q. Please describe memorandum and balancing accounts and how they work.

A. A memorandum account is a mechanism that allows the utility to track charges and credits related to a specific activity or event. Details governing the memorandum account, such as the purpose of the account, applicable parties involved, accounting procedures, and the rate component are stipulated in the Preliminary Statement of the utility’s tariff. The balance of the account will be

recovered or refunded upon approval by the Commission after the utility provides a showing of reasonableness for the entries into the account. The ratemaking treatment of a balancing account is similar to a memorandum account, except that recovery of a balancing account does not require Commission disposition through a resolution.

Q. Why are memorandum and balancing accounts considered to be beneficial?

A. Rate case revenue is largely based on a utility's projection of future costs using historical data, as determined during a general rate case proceeding. Many costs, such as local taxes and fees, are fairly stable and predictable. Other costs are more difficult to predict, and an incorrect estimation of those costs will result in the under- or over-collection of revenue from a utility's ratepayers in the absence of a memo or balancing account. The best example is if wholesale water prices rise or fall dramatically, the Commission's balancing accounts can ensure that ratepayers only pay the actual amount, not an estimate made three years earlier. Memorandum and balancing accounts benefit ratepayers by collecting only exact costs from them.

Q. How many memorandum and balancing accounts does Cal Water have?

A. In its most recent GRC, the Commission authorized 36 memorandum and balancing accounts for Cal Water. These are listed in Table 1 and 2 below.

Cal Water's Balancing and Memorandum Accounts (Table 1 of 2)			
Prel. St. & Abbrev.	**REGULATORY ACCOUNT**	**Issues Raised in Proceeding**	**Summary of Settlement**
AJCA	Amer. Job Creation Act	No issues to resolve.	No CPUC action needed.
F MTBE MA	MTBE Memo Account	CWS' request to allocate net proceeds 75/25 (shareholders/ratepayers)	See discussion. Apply additional MTBE litigation proceeds to offset the additional estimated costs of capital additions in Bayshore District and allocate remainder 75/25 (shareholders/ratepayers).
H LIRA MA	LIRA Memo Account	CWS' request to recover admin costs of $267K via Tier 1, and later costs via Tier 2.	Recover $198K via a Tier 1 AL, and any other costs via Tier 3.
J2 CCPP MA	Credit Card Pilot MA (Modified)	CWS' request to amortize balance, close account, and adopt permanent program (see SR #17).	See discussion. Refund balance to ratepayers and close account; make Credit Card Payment Program permanent.
K WMA	Wausau Memo Account	No issues to resolve.	No CPUC action needed.
M WRAM/MCBA	WRAM/MCBA	CWS' request to eliminate 10% cap on WRAM amortization (SR #18).	See SR #18 discussion. As part of settlement, CWS withdraws request to eliminate cap.
P DTSC MA	Dept of Tox. Subs. Cont. MA	No issues to resolve.	No CPUC action needed.
Q HomeSer MA	A.08-05-019 MA (HomeSer)	No issues to resolve.	No CPUC action needed.
S WCCM	Water CoC Adjust. Mech.	No issues to resolve.	No CPUC action needed.
T LCBA	Lucerne BA	No issues to resolve.	No CPUC action needed.
U TLMA	Tort Litigation Memo Account	No issues to resolve. (CWS to close account without amortization.)	No CPUC action needed.
V PCE MA	PCE Litigation Memo Account	No issues to resolve.	No CPUC action needed.
W TCP MA	TCP Litigation Memo Account	CWS' request to expand to apply to any districts with TCP contamination, and to recover capital projects costs quickly.	Expand Preliminary Statement to apply to all districts. CWS may seek recovery for completed projects once every 12 months.
X OEEP MA	Oper. Energy Efficiency Program MA	CWS' request to put plant in rates and recover carrying costs.	Put depreciated plant into rates, but include carrying costs through end of 2014.
Z1 CEBA1	Conservation Expense One-Way BA 1	No issues to resolve.	No CPUC action needed.
Z2 CEBA2	Conservation Expense One-Way BA 2	(1) CWS' request to modify prelim to offset costs with grant money; (2) CWS' request to open new CEBA with same terms.	(1) Modify prelim to offset costs with grant money; (2) Authorize new CEBA under same terms.
AA1 PCBA1	Pension Cost Balancing Account 1	No issues to resolve.	No CPUC action needed.

Cal Water's Balancing and Memorandum Accounts (Table 2 of 2)			
Prel. St., Abbrev.	**REGULATORY ACCOUNT**	**Issues Raised in Proceeding**	**Settlement**
AA2 PCBA2	Pension Cost Balancing Account 2	(1) ORA's request to adjust recovery calculations; (2) CWS' request to open new PCBA with same terms.	(1) Adjust calculations; (2) Open new PCBA excluding SERP.
AB2 HCBA	Health Cost Balancing Account 2	(1) ORA's request to adjust recovery calculations; (2) CWS' request to open new HCBA with same terms.	(1) Adjust calculations; (2) Open new HCBA.
AC PRV MA	Pressure Reducing Valve MA	No issues to resolve.	No CPUC action needed.
AD SLMA	Stockton East Litigation MA	No issues to resolve.	No CPUC action needed.
AE Bonus Tax MA	Bonus Tax Depreciation MA	CWS' request to refund corrected amounts.	Refund corrected amounts to customers.
AG CEMA	Catastrophic Event MA	No issues to resolve.	No CPUC action needed.
AI CR6 MA	Chromium-6 Memo Account	No request in Application, but see Rebuttal.	Modify to allow account to continue.
AJ LIRA BA	LIRA Balancing Account	CWS' request to eliminate cap on LIRA credit (see SR #3).	No CPUC action needed.
AK 2012 IRMA	2012 GRC Interim Rate MA	No issues to resolve.	No CPUC action needed.
AL DRMA	Drought Memo Account	CWS' request to recover amounts via Tier 1 and Tier 2.	CWS sought partial recovery through Tier 3 on 7/15/16, so requests are moot.
AM RSF BA	Rate Support Fund BA	(1) CWS' request to annually recalculate surcharge; (2) Parties' proposals to phase out or modify program (see SR #2).	(1) Agree to annual re-calculation; (2) See discussion of Special Request #2.
AN Infra MA	Infrastructure Act MA	No issues to resolve.	No CPUC action needed.
AO Contam MA	Water Contamination Lit. MA	No issues to resolve.	No CPUC action needed.
AP Gen BA	General District BAs	No issues to resolve.	No CPUC action needed.
AQ ELAMA	East Los Angeles Memo Account	CWS' request to put capital projects into rates and recover carrying costs.	Put depreciated value of capital projects into rate base; recovery carrying costs; defer Phase 2 building improvements.
AR SRM	Sales Recon. Mech. BA	CWS' request to eliminate account.	Eliminate account.
AS ALMA	Asbestos Memo Account	No issues to resolve.	No CPUC action needed.
IFRS MA	Int'l Financial Rep Stds MA	(Has not been triggered.)	Agree to let account lapse.
[none]	Old Interim Rate Surch. Residuals	CWS' request to move residual balances into District-specific Balancing Accounts.	Agree to amortize high balances and credits again, and to transfer low balances to District BAs.

Q. Who are the beneficiaries of these accounts?

A. In some accounts, the beneficiary is the ratepayer. In other accounts, the beneficiary is both Cal Water and the ratepayer.

Q. How did you determine whether or not Cal Water benefits from a particular memorandum account?

A. Cal Water benefits from a memorandum or balancing account if there is the potential for Cal Water to recover costs it otherwise would not be able to collect. As an example, Cal Water maintains a Catastrophic Event Memo Account ("CEMA") in which to capture extraordinary costs associated with an earthquake, dam failure, or other catastrophic event beyond its control. At the time of Cal Water's next rate case, or through a separate filing with the Commission, Cal Water can seek approval to recover those costs even though they may be classified as non-recurring under normal ratemaking practices.

One type of memorandum or balancing account in which Cal Water does not benefit is the one-way memorandum account. This is a memorandum account in which Cal Water must refund an over-collection, but is not authorized to recover from an under-collection. An example of this is the Conservation Expense One-Way Balancing Account ("CEBA") that has been adopted in every general rate case since Cal Water's 2009 GRC. This account tracks the differences

between the actual costs associated with specified conservation efforts and the projected, or authorized costs. If Cal Water spends less than the authorized amount, it will refund the difference to the ratepayers. However, if Cal Water spends more than what was authorized the company will absorb the difference.

Another type of memorandum or balancing account Cal Water does not benefit from would be an account that tracks a public purpose program such as the Low Income Ratepayer Assistance ("LIRA") account or Rate Support Fund ("RSF") account. Public purpose programs are set up to assist a group or classification of Cal Water's ratepayers usually in the form of a discount or credit. The costs of these programs are spread out among Cal Water's ratepayers through a nominal surcharge. If the revenues supporting the programs are less than the costs of the programs, Cal Water will request to raise the surcharge. If the revenues collected exceed the cost of the programs, Cal Water will refund the over-collected portion. While Cal Water appreciates the benefits of these programs, Cal Water does not directly benefit from these programs.

Q. Are there memorandum accounts that only serve to benefit the utility?

A. No. According to Standard Practice U-27-W, upon filing to establish a memorandum account, the utility must address the following four factors:[8]

[8] Standard Practice U-27-W, Section 44.

- The expense is caused by an event of an exceptional nature that is not under the utility's control,
- The expense cannot have been reasonably foreseen in the utility's last GRC and will occur before the utility's next schedule rate case,
- The expense is of a substantial nature in the amount of money involved, and
- The ratepayers will benefit by the memorandum account treatment.

In the instances where Cal Water receives Commission approval to recover an under-collection in a memorandum acount, the ratepayer is not harmed for three main reasons. First, they are paying for the true cost of the service associated with the account. Second, the utility is required to adhere to specific guidelines in determining what costs should be included in a memorandum account. Finally, in order for a utility to recover or refund the balances of the memorandum accounts, the Commission must scrutinize and deem the costs reasonable.

Q. Do you have any additional concerns regarding the use of memorandum and balancing accounts?

A. Yes. While memorandum and balancing accounts have the potential to mitigate some risk to the utility and ensure the ratepayer pays the true cost associated with a particular event or circumstance, Cal Water has concerns regarding the number of memorandum and balancing accounts, and the lag time between when the costs occur and when the utility is able to recover those costs.

As mentioned above, Cal Water has 39 active memorandum or balancing accounts. When Cal Water filed its last Cost of Capital application in 2011, it had 21 active memorandum or balancing accounts. Along with the increase in the number of memorandum accounts comes an increase in the use of Cal Water's resources to establish, track, maintain, periodically report on and ultimately attempt to recover the balance in each memorandum account. Also memo accounts do not adequately compensate Cal Water for the time-value of the funds it has recorded in the accounts until authorized to recover these costs, often years into the future. As mentioned before, recovery of the balance of memorandum accounts is not guaranteed, as the Commission must review and determine whether the costs associated with each memorandum account are prudent before Cal Water is able to recover its costs.

Q. What are you requesting in the Cost of Capital proceeding regarding the imbalance in regulatory mechanisms?

A. The Commission should conclude that the implementation of the earnings test, the use of capped rate base offset advice letters, and the use of numerous memorandum and balancing accounts, along with the Commission's other ratemaking practices, do not provide a uniformly supportive regulatory structure for water utilities. In fact, many of these mechanisms are designed specifically by

the Commission to restrict the earnings of water utilities, not to benefit them. Therefore the Commission should consider adding basis points to Cal Water's overall return on equity to compensate for the additional risks and challenges associated with the asymmetrical regulatory mechanisms.

Q. Does this conclude your prepared direct testimony?

A. Yes, it does.