

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



October 9, 2023

Tiffany Thong
Manager, Rates and Regulatory Affairs
Liberty Utilities (Apple Valley Ranchos Water) Corp.
21760 Ottawa Road
Apple Valley, CA 92308-6533

Dear Ms. Thong,

The Water Division of the California Public Utilities Commission has approved Liberty Utilities' (Apple Valley Ranchos Water) Advice Letter No. 277, filed on August 15, 2023, regarding request to update Rule No. 16.

Enclosed are copies of the following revised tariff sheets, effective September 14, 2023, for the utility's files:

P.U.C. Sheet No.	Title of Sheet
1227-W	Rule No. 16 Service Connections, Meters, And Customer's Facilities, Sheet 1
1228-W	Rule No. 16 Service Connections, Meters, And Customer's Facilities, Sheet 2
1229-W	Rule No. 16 Service Connections, Meters, And Customer's Facilities, Sheet 3
1230-W	Rule No. 16 Service Connections, Meters, And Customer's Facilities, Sheet 4
1231-W	Rule No. 16 Service Connections, Meters, And Customer's Facilities, Sheet 5
1232-W	Rule No. 16 Service Connections, Meters, And Customer's Facilities, Sheet 6
1233-W	Rule No. 16 Service Connections, Meters, And Customer's Facilities, Sheet 7
1234-W	Rule No. 16 Service Connections, Meters, And Customer's Facilities, Sheet 8
1235-W	Rule No. 16 Service Connections, Meters, And Customer's Facilities, Sheet 9
1236-W	Rule No. 16 Service Connections, Meters, And Customer's Facilities, Sheet 10

P.U.C.

Sheet No.	Title of Sheet
1237-W	Rule No. 16 Service Connections, Meters, And Customer's Facilities, Sheet 11
1238-W	Table of Contents, Sheet 1

Please contact Jim Boothe at JB5@cpuc.ca.gov or 415-703-1748, if you have any questions.

Thank you.

Enclosures



Liberty Utilities (Apple Valley Ranchos Water) Corp.
21760 Ottawa Road
Apple Valley, CA 92308-6533
Tel: 760-247-6484
Fax: 760-247-1654

Advice Letter No. 277-W

August 15, 2023

TO THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Liberty Utilities (Apple Valley Ranchos Water) Corp. (U 346-W) (“Liberty Apple Valley”) hereby submits the attached revised tariff sheets applicable to water service in its service territory.

Summary

The purpose for this advice letter is to request authorization to update Liberty Apple Valley’s Rule 16 to reflect the current standards to implement its cross-connection control program (“CCCP”) being driven by the California State Water Resources Control Board (“SWRCB”).

Pursuant to Industry Rule 8.2 (Request for Similar Treatment) of General Order 96-B, Liberty Apple Valley is requesting similar treatment afforded to California Water Service Company (“Cal Water”) in its general rate case Application (A.12-07-007), Decision (D.14-08-011), dated August 14, 2014, which granted Cal Water the authority to update its Rule 16 to reflect the current industry standards to implement its CCCP.

Background and Discussion

On May 24, 1991, the Commission approved Liberty Apple Valley (then Apple Valley Ranchos Water Company) Advice Letter 83-W to revise its Rule 16 to conform with revisions of Sections 7583-7605, Title 17 of the California Code of Regulations, which required utilities to adopt operating rules implementing a cross-connection program. Resolution W-3477 required each regulated water utility to incorporate the revisions in its tariffs.

On October 2, 2017, the Governor of California approved Assembly Bill No. 1671 (“AB 1671”) amended Section 116810 of, and added Sections 11640 and 116555.5 to, the Health and Safety Code, relating to drinking water. AB 1671 is requiring the SWRCB to adopt standards for backflow protection and cross-connection control and authorizing the SWRCB to do so through the adoption of a policy handbook. Currently, the SWRCB is working on finalizing the policy handbook and is anticipated to be released in December 2023.

On August 14, 2014, in D.14-08-011, the Commission authorized Cal Water to revise its Rule 16, mainly to update terminology and references to reflect current industry standards and provide greater specificity and clarity to Cal Water’s mandates, and customers’ responsibilities.

Liberty Apple Valley Rule 16 is outdated and does not reflect current industry standards. Liberty Apple Valley therefore requests similar treatment afforded to Cal Water in accordance with Industry Rule 8.2 of General Order 96-B.

An excerpt of Cal Water D.14-08-11 is included as Attachment A and a copy of AB 1671 is included as Attachment B to this advice letter for reference.

The redlined version of Rule 16 is included as Attachment C to this advice letter.

Tier Designation

In accordance with General Order 96-B, Industry Rule 5.2 and Water Industry Rule 7.3.2(7), this advice letter is submitted with a Tier 2 designation.

Effective Date

In accordance with General Order 96-B, Industry Rule 5.2 and Water Industry Rule 7.3.2(7), Liberty Apple Valley requests this filing become effective on September 14, 2023.

Notice and Service

In accordance with General Order 96-B, General Rules 4.3 and 7.2, and Water Industry Rule 4.1, a copy of this advice letter will be electronically transmitted on August 15, 2023 to competing and adjacent utilities and other utilities or interested parties having requested such notification. Pursuant to Water Industry Rule 3.2 of General Order 96-B, public notice is not required.

Response or Protest

Anyone may respond to or protest this advice letter. A response supports the filing and may contain information that proves useful to the Commission in evaluating the advice letter. A protest objects to the advice letter in whole or in part and must set forth the specific grounds on which it is based. These grounds are:

- (1) The utility did not properly serve or give notice of the advice letter;
- (2) The relief requested in the advice letter would violate statute or Commission order or is not authorized by statute or Commission order upon which the utility relies;
- (3) The analysis, calculations, or data in the advice letter contain material error or omissions;
- (4) The relief requested in the advice letter is pending before the Commission in a formal proceeding;
- (5) The relief requested in the advice letter requires consideration in a formal hearing or is otherwise inappropriate for the advice letter process; or
- (6) The relief requested in the advice letter is unjust, unreasonable, or discriminatory, provided that such a protest may not be made where it would require re-litigating a prior order of the Commission.

A protest shall provide citations or proofs where available to allow staff to properly consider the protest. A response or protest must be made in writing or by electronic mail and must be received by the Division of Water within 20 days of the date this advice letter is filed. The address for mailing or delivering a protest is:

Tariff Unit, Water Division, 3rd floor
California Public Utilities Commission
505 Van Ness Avenue, San Francisco, CA 94102
Water.division@cpuc.ca.gov

On the same date the response or protest is submitted to the Water Division, the respondent or protestant shall send a copy by mail (or e-mail) to Liberty Apple Valley, addressed to:

Tiffany Thong
Manager, Rates and Regulatory Affairs
Liberty Utilities
9750 Washburn Road
P. O. Box 7002
Downey, CA 90241
Fax: (562) 861-5902
E-Mail: Tiffany.Thong@libertyutilities.com

Cities and counties that need Board of Supervisors or Board of Commissioners approval to protest should inform the Division of Water and Audits within the 20-day protest period so that a late filed protest can be entertained. The informing document should include an estimate of the date the proposed protest might be voted on.

If you have not received a reply to your protest within 10 business days, contact Tiffany Thong at Tiffany.Thong@libertyutilities.com.

Sincerely,

LIBERTY UTILITIES (APPLE VALLEY RANCHOS WATER) CORP.

/s/ Tiffany Thong

Tiffany Thong
Manager, Rates and Regulatory Affairs

TT/as

Attachments

Cal P.U.C. Sheet No.	Title of Sheet	Cancelling Cal P.U.C. Sheet No.
1227-W	RULE NO. 16 SERVICE CONNECTIONS, METERS, AND CUSTOMER'S FACILITIES Sheet 1	399-W
1228-W	RULE NO. 16 SERVICE CONNECTIONS, METERS, AND CUSTOMER'S FACILITIES Sheet 2	400-W
1229-W	RULE NO. 16 SERVICE CONNECTIONS, METERS, AND CUSTOMER'S FACILITIES Sheet 3	401-W
1230-W	RULE NO. 16 SERVICE CONNECTIONS, METERS, AND CUSTOMER'S FACILITIES Sheet 4	402-W
1231-W	RULE NO. 16 SERVICE CONNECTIONS, METERS, AND CUSTOMER'S FACILITIES Sheet 5	403-W
1232-W	RULE NO. 16 SERVICE CONNECTIONS, METERS, AND CUSTOMER'S FACILITIES Sheet 6	404-W
1233-W	RULE NO. 16 SERVICE CONNECTIONS, METERS, AND CUSTOMER'S FACILITIES Sheet 7	405-W
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1237-W	RULE NO. 16 SERVICE CONNECTIONS, METERS, AND CUSTOMER'S FACILITIES Sheet 11	

Cal P.U.C. Sheet No.	Title of Sheet	Cancelling Cal P.U.C. Sheet No.
1238-W	TABLE OF CONTENTS Sheet 1	1226-W

SERVICE CONNECTIONS, METERS, AND CUSTOMER'S FACILITIES

A. General

1. Utility's Responsibility

- a. (1) In urban areas with dedicated front streets, rear service roads, or public utility easements the utility will furnish and install the service pipe, curb stop, meter and meter box at its own expense for the purpose of connecting its distribution system to the customer's piping, except for temporary services and as otherwise provided in Rule No. 15, Main Extensions. The service connection, curb stop, meter and meter box will be installed at a convenient place between the property line and the curb, or inside the customer's property line where necessary.
- (2) In areas which do not have dedicated front streets, rear service roads, or public utility easements, the utility will furnish and install the service pipe, curb stop, meter and meter box as above provided but at a convenient point on or near the customer's property except for service beyond the service area.
- b. The service connection will determine the point of delivery of water service to the customer.

2. Customer's Responsibility

a. Condition Precedent to Receiving Service

The customer as a condition precedent to receiving service shall:

- (1) Furnish and lay the necessary piping to make the connection from the service connection to the place of consumption and shall keep such piping in good repair in accordance with such reasonable requirements of the utility as may be incorporated in its rules herein.
- (2) Provide a main valve on the piping between the service connection and the point of customer use.
- (3) Where service is rendered at or near the service area boundary for use beyond the service area, install, operate, and maintain the facilities necessary to provide service.

- b. The customer's piping shall extend to that point on the curb line or property line of easiest access to the utility from its existing distribution system or requiring the least extension of the existing distribution main. The utility shall be consulted before installation thereof and its approval of location secured.

3. Ownership and Absence of Rental Obligation Where Facilities Are on Premises of Customer

- a. The service pipe, curb stop, meter, and meter box furnished by or on behalf of the utility and located wholly or partially upon a customer's premises are the property of the utility.
- b. No rent or other charge will be paid by the utility where the utility-owned service facilities are located on a customer's premises.

(L)
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(L)

(Continued)

RULE NO. 16

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SERVICE CONNECTIONS, METERS, AND CUSTOMER'S FACILITIES

A. 4. Access to Premises of Customer

- a. The utility shall at all reasonable hours have access to meters, service connections and other property owned by it which may be located on customer's premises for purposes of installation, maintenance, operation or removal of the property at the time service is to be terminated. The customer's system should be open for inspection at all reasonable times to authorized representatives of the utility.
- b. Any inspection work or recommendations made by the utility or its agents in connection with plumbing or appliances or any use of water on the customer's premises, either as a result of a complaint or otherwise, will be made without charge.

5. Responsibility for Loss or Damage

- a. The utility will not be responsible for any loss or damage caused by any negligence or wrongful act of a customer or of a customer's authorized representatives in installing, maintaining, operating or using any or all appliances, facilities or equipment for which service is supplied.
- b. The customer will be held responsible for damage to utility's meters and other property resulting from the use or operation of appliances and facilities on customer's premises, including, but not limited to damage caused by steam, hot water, or chemicals.

B. Services

1. Charge for Service Connections

Except as provided in subparagraphs a., b., or c. below, the utility shall make no charge to a customer for making a service connection except in case of connections for private fire protection service, connections for temporary service, changes made at the request and for the convenience of the customer, where additional connections are requested because of divisions of land ownership when the land before division was receiving service, and as otherwise provided in the utility's main extension rules.

a. Individual Customer Connection Fee

A Class C or Class D utility, or a Class A or Class B utility district or subsidiary serving 2,000 or fewer connections, may accept from individual customers amounts in contribution as a connection fee calculated pursuant to the Commission's Connection Fee Data Form contained in the utility's tariffs.

- b. In lieu of paying the connection fee, an applicant for a service connection may retain a licensed contractor, qualified in the judgment of the utility, to install the service connection. Cost to the utility of inspection and supervision of the installation, including gross-up for tax required by a contribution, shall be paid by the applicant. The applicant shall provide the utility with a statement of actual construction costs in reasonable detail. The amount shall be treated as contribution by the utility. The installation shall be in accordance with plans and specifications of the utility.

(L)

(L)

(Continued)

SERVICE CONNECTIONS, METERS, AND CUSTOMER'S FACILITIES

B. 1. c. Individual Customer Facilities Fee

A Class C or Class D utility, or a Class A or Class B utility district or subsidiary serving 2,000 or fewer connections, may accept from individual customers amounts in contribution as a facilities fee calculated pursuant to tariff approved by the Commission.

2. Size of Service Pipe

a. The minimum size of service pipe installed by the utility will not be less than 1-inch nominal size. (L)

b. The utility may require the customer to provide such data as may be necessary for the utility to properly size a service larger than 1-inch nominal size consistent with pressure requirements. (T)

3. Installation

Only duly authorized employees or agents of the utility (or licensed contractors, upon approval of the utility) will be permitted to install a service pipe from the utility's main to the location of the service connection. The connection from the meter to the customer's piping will be made by the utility; provided, however, that if the customer's piping requires repair or replacement, the connection may, at the option of the utility, be made by the customer or his agent. (T)

C. Cross-Connections

1. Protective Regulation

No physical connection between the potable water supply system of the public utility and that of any other water supply or source of actual or potential contamination will be permitted except in compliance with the regulations of the State Department of Public Health contained in Title 17, Sections 7583-7605 of the California Code of Regulations under "Regulations Relating to Cross-Connections."

It is unlawful for any person, firm, or corporation at any time to make or maintain or cause to be made, temporarily or permanently, for any period of time whatsoever, any cross-connection between plumbing pipes or water fixtures being served with water by the Utility and any other source of water supply or to maintain any sanitary fixture or other appurtenances or fixtures which, by reason of their construction, may cause or allow backflow of water or other substances into the water supply system of the Utility and/or the service of water pipes or fixtures of any consumer of the Utility. (N)

2. Backflow Prevention Assemblies Required

Pursuant to general rate case decisions, and in accordance with the Commission's general supervisory policies, the utility will evaluate the degree of potential health hazard to the public water supply which may be created as a result of conditions existing on a user's premises. As a minimum, the evaluation will consider: the existence of cross-connections, auxiliary intakes, bypasses or interconnections, the nature of materials handled on the property, the probability of a backflow occurring, the degree of piping system complexity, and the potential for piping system modification. It is not the responsibility of Liberty Utilities to identify all hazards within a facility rather than the hazards sufficient for identifying appropriate service protection. (T) (T) (L)

(Continued)

SERVICE CONNECTIONS, METERS, AND CUSTOMER'S FACILITIES

C. 2. Backflow Prevention Assemblies Required (continued)

Notwithstanding the above, because certain activities present inherent risks to the water supply, the utility may forego a complete evaluation and may require backflow protection based on the type of facility or nature of water use, if certain conditions are present. The installation of a backflow prevention assembly at the potable water meter protects the public water system from potential cross-connections, but it does not prevent backflow within the customer's internal piping system. Liberty Utilities is not responsible for cross-connections within the customer's internal piping system. The conditions under which Liberty Utilities will require the installation of approved backflow prevention assembly(ies) of required type include, but are not limited to, those listed below.

- a. Where a fresh water supply which has not been approved by the utility is already available from a well, spring, reservoir or other source. (If the customer agrees to destroy this other supply and agrees to remove all pumps and piping necessary for the utilization of an auxiliary supply, the installation of backflow prevention assembly(ies) will not be required.)
- b. Where salt water, or water otherwise contaminated, is available for industrial or fire protection purposes at the same premises.
- c. Where the premises are or may be engaged in industrial processes using or producing process waters or liquid industrial wastes, or where the premises are or may be engaged in handling sewage or any other dangerous substances.
- d. Where fresh water hydrants or other outlets are or may be installed on piers or docks.
- e. Where the circumstances are such that there is special danger of backflow of sewage or other contaminated liquids through plumbing fixtures or water-using or treating equipment, or storage tanks and reservoirs.
- f. Where premises have internal cross-connections that are not abated to the satisfaction of the utility or the health agency.
- g. Intricate plumbing and piping arrangements or premises where cross-connections are likely to occur and entry is restricted so that cross-connection inspections cannot be made with sufficient frequency or at sufficiently short notice to assure that cross-connections do not exist.
- h. Premises having a repeated history of cross-connections being established or re-established.
- i. Premises that have more than one service connection present a loop-through hazard such that backflow protection on all service connections must be installed. Each backflow prevention assembly must be commensurate with the highest degree of hazard present, but must provide no less protection than a Double Check Valve Assembly.
- j. Premises that have multiple users or units sharing one meter must install an RP due to the risk of occupancy change without notification to the utility.

(T)
(N)
(N)
(T)
(T)(L)
(T)
(T)
(T)
(T)
(L)
(N)
(N)

(Continued)

SERVICE CONNECTIONS, METERS, AND CUSTOMER'S FACILITIES

C. 2. Backflow Prevention Assemblies Required (continued)

(T)

k. Premises that store or handle materials or substances that, if introduced into the water supply, have the potential to pose a health-related or aesthetic risk to drinking water quality.

(N)

l. New or modified fire sprinkler systems: A backflow prevention assembly must be installed when new or modified non-residential fire sprinkler systems are installed. If potable water pipes are used to construct the sprinkler system, no chemicals are added, and there is no auxiliary supply, a Double Check Detector Assembly may be installed. If non-potable water pipes are used, or chemicals are added, or there is an auxiliary water supply, then a Reduced Pressure Principle Detector Assembly must be installed.

Residential fire sprinkler systems do not need a backflow prevention assembly if they are designed and installed using potable water piping and materials, and have connections to points of regular water use to prevent degradation of water quality. Systems that do not meet these requirements must be equipped, at a minimum, with a Double Check Valve Assembly (DC) located at the service connection. If chemical additives, on-site storage, or booster pumps are used, backflow protection must be a Reduced Pressure Principle Assembly (RP).

Where a premises is required to have an RP backflow prevention assembly installed on a metered service, a Reduced Pressure Principle Detector Assembly must also be installed on all new or modified fire service connections.

All new or modified fire systems that are being fitted with a backflow prevention assembly shall be designed by a licensed engineer at the customer's expense.

m. Temporary hydrants must be equipped with a RP device.

The water service may be discontinued in the case of non-compliance with Liberty Utilities Regulations. Non-compliance includes, but is not limited to, the following:

- a. Refusal to allow the Cross-connections Control Specialist access to the property to survey for cross-connection(s).
- b. Removal of a backflow prevention assembly or method that is required by the Utility.
- c. Bypassing of a backflow prevention assembly or method that is required by the Utility.
- d. Providing inadequate backflow prevention when potential or actual cross-connections exist.
- e. Failure to install a backflow prevention assembly or method that is required by the Utility.
- f. Failure to test and/or properly repair a backflow prevention assembly or method as required by the Utility.

(N)

(Continued)

SERVICE CONNECTIONS, METERS, AND CUSTOMER'S FACILITIES

- C. 3. Type and Expense of Backflow Prevention Assemblies (T)
- a. Any backflow prevention assembly utilized shall be of the type and design specified and approved for the circumstances in Section 7604, Title 17 of the California Code of Regulations (or its successor, and the California Plumbing Code), except that a customer may utilize an approved backflow prevention assembly providing greater protection than required by Section 7604. Such backflow prevention assembly shall be installed by and at the expense of the customer, in a manner approved by the utility and the public health agency having jurisdiction. (T)
 - b. Backflow prevention assemblies shall be tested, repaired or replaced at the expense of the customer. (T)
 - c. Backflow prevention assemblies shall be installed no more than 5 feet (unless approved by the utility) to the customer's connection to the utility, prior to any tee or branch line, and in a location which that is readily available for periodic inspection. (N)
 - d. Existing backflow prevention assemblies that are determined to provide an inadequate level of protection must be replaced by the appropriate level of protection instead of repaired. Inadequate backflow prevention assemblies must be replaced immediately, even if the existing assembly still passes the annual test, if there is an imminent health risk as determined by the utility. (N)
 - e. A non-residential connection that has a backflow prevention assembly installed to abate an internal backflow hazard, whether at the recommendation of utility or as directed by a regulatory agency, must also install a backflow prevention assembly at the meter commensurate with the degree of hazard. The utility does not have any responsibility or authority to abate internal hazards or monitor testing of backflow prevention assemblies that are installed internal to a customer's premise. (N)
 - f. Residential Irrigation Systems: At the discretion of the utility, properly installed Reduced Pressure Principle Assemblies (RPs), pressure vacuum breakers (PVBs), or spill resistant pressure vacuum breakers (SVBs) may be accepted as protection on residential irrigation systems in lieu of protection at the meter, when no other hazards are present, provided they are tested and maintained in accordance with Section 4. (N)
 - g. For dedicated road median irrigation systems, PVBs and SVBs are acceptable as service protection only if they are properly installed. (N)
 - h. No backflow prevention assemblies or methods shall be installed in a place where they would create a safety hazard such as, but not limited to, over an electrical panel or above ceiling level. (N)
 - i. The removal, bypassing, or altering of a protective assembly or the installation, thereof so as to render an assembly ineffective, shall constitute grounds for discontinuance of water service. Water service to such premises shall not be restored until the Customer has corrected or eliminated such conditions or defects. (N)

(Continued)

Advice Letter No. 277-W
Decision No.

Issued by
Edward N. Jackson
PRESIDENT

Date Filed 08/15/2023
Effective 09/14/2023
Resolution No.

SERVICE CONNECTIONS, METERS, AND CUSTOMER'S FACILITIES

C. 4. Periodic Testing of Backflow Prevention Assemblies

Whenever a backflow prevention assembly is installed, relocated, or repaired, the customer shall have it tested by persons who are certified to test backflow prevention assemblies by either the California Nevada Section of the American Water Works Association, County of Los Angeles Public Health or the American Backflow Prevention Association.

Backflow prevention assemblies shall be tested at least annually or more frequently if determined to be necessary by the health agency or utility.

The utility shall notify the customer on record when testing of backflow prevention assemblies is needed. The notice shall give the date by which the test must be completed. The notice shall also inform the customer that, following the compliance date, the costs of all testing, repair, or replacement will be borne by the customer. In tenant-landlord situations, the utility shall not be responsible for determining the responsible party beyond notification of the customer of record.

Reports of testing and maintenance shall be maintained by the utility for a minimum of three years.

The Utility shall have the right to inspect and require testing of the assemblies whenever deemed necessary.

Should a protective assembly be found defective or have a status of Failed, the Utility will require the assembly to be repaired promptly with manufacturer's specified parts, in accordance to manufacturer's suggested procedure, and placed in proper operating condition within 15-days of the finding or the specified time limit established by the Utility. Following repairs, the assembly is to be tested again to verify that it is meeting performance standards and have a status of Passed. The owner will be held responsible for maintaining protective measures in a good state of repairs.

If the assembly cannot or will not be repaired within 3 days (72 hours) of discovery of the failure, the backflow prevention assembly tester must notify the utility of the failure in cases where the failed assembly presents an immediate risk to public health, the service will be discontinued until the repairs or replacement is completed.

5. Refusal to Serve or Discontinuance of Service

The utility may refuse or discontinue service:

- a. Until there has been installed on the customer's piping an approved backflow prevention assembly of the required type, if one is required.
- b. Where the utility has been denied access to the customer's premises to make an evaluation.
- c. Where the customer refuses or fails to install, test a backflow prevention assembly, or to repair or replace a faulty backflow prevention assembly.

(L)(T)

(T)

(L)(T)

(N)

(N)

(L)

(T)

(T)

(T)

(Continued)

SERVICE CONNECTIONS, METERS, AND CUSTOMER'S FACILITIES

- C. 5. d. Providing inadequate backflow prevention when potential or actual cross-connections exist. (N)
- e. Where there is a direct or indirect connection between the public water system and a sewer line. (N)
- f. Where there is an unprotected direct or indirect connection between the public water system and a system or equipment containing contaminants. (T)(L)
- g. Where there is an unprotected direct or indirect connection between the public water system and auxiliary water system. (T)(L)
- h. When there is a situation which presents an immediate health hazard to the public water system. (N)
- i. Bypassing of a backflow prevention assembly or method that is required by the Utility.
- j. Removal of a backflow prevention assembly or method that is required by the Utility.
- 6. Thermal Expansion (N)
Prior to the installation of a backflow prevention assembly, it is the customer's responsibility to have a qualified plumber mitigate the effects of thermal expansion. Failure to do so may create a dangerous condition resulting in damage and/or injury.
- 7. Pumps and Boosters (T)(L)
When a customer receiving service at the utility's main or service connection must, by means of a pump of any kind, increase the pressure of the water received, the pump shall not be attached to any pipe directly connected to the utility's main or service pipe. Such pumping or boosting of pressure shall be done at the option of the utility, either:
 - a. From a sump, cistern or storage tank which must be served through an air gap connection, or
 - b. From a combination of an approved backflow prevention assembly plus a device approved by the water utility to prevent the booster pump from drawing the utility's system pressure below 20 psig. (T)This requirement of a pressure limiting device shall not apply to fire protection systems equipped with booster pumps. (T)
(T)
(D)

(Continued)

Advice Letter No. 277-W
Decision No.

Issued by
Edward N. Jackson
PRESIDENT

Date Filed 08/15/2023
Effective 09/14/2023
Resolution No.

SERVICE CONNECTIONS, METERS, AND CUSTOMER'S FACILITIES

C. 8. Automatic Valves

Quick closing or opening valves shall not be installed on customer's pipes which are directly attached to the utility's mains or service pipes. A customer whose operation requires the use of a quick opening or closing valve must operate such device from a tank, cistern, sump or other facility which may be served by but not directly connected with the utility's distribution mains or service pipes. This restriction does not apply to quick closing or opening valves used in connection with normal household appliances such as automatic dishwashers or washing machines.

D. Reclaimed Water Service

1. Construction

a. Material

- (1) All on-site reclaimed water facilities must be readily distinguishable from all on-site potable water facilities.
- (2) Reclaimed water pipes may be of PVC dyed purple (Pantone 512) with continuous lettering "**CAUTION RECLAIMED WATER**" applied at the factory. No other identification is required.
- (3) All reclaimed water pipes except as specified in item 2 above, must be identified along their entire length with warning tape. The warning tape must be yellow in color, a minimum of 2 inches wide with the words "**RECLAIMED WATER**" printed in 1" high black letters. The lettering should be repeated continuously the full length of the tape.
- (4) All piping from the reclaimed water system shall be installed to maintain ten (10') feet minimum horizontal separation from all potable water piping. Where reclaimed and potable water piping cross, the reclaimed water piping shall be installed below the potable water piping in a PVC class 200 pipe sleeve which extends a minimum of five (5') feet on either side of the potable water piping. Additionally, a minimum vertical clearance of six (6") inches shall be provided.
- (5) All above ground reclaimed water facilities (risers, valves, controllers, etc.) must have identifying labels for reclaimed water.

b. Valve Marking

Hose bibs are not permitted on the reclaimed water system.

c. Drawings Required

Applicants for reclaimed water service shall submit system plans for review and approval by the utility.

d. Location

- (1) Reclaimed water facilities shall not be installed inside any structures, indoor atriums or planters.
- (2) Drinking fountains and picnic tables shall be located to minimize exposure to direct and windblown reclaimed water spray.

(N)

(N)

(Continued)

SERVICE CONNECTIONS, METERS, AND CUSTOMER'S FACILITIES

D.1.d. Location (continued)

- (3) Reclaimed water shall not be sprayed outside the design area shown in the plans submitted in Section D.1.c. above.
- (4) Reclaimed water shall not be used to irrigate any enclosed private rear yard or patio.

2. Cross Connection Control Requirements

- a. Cross connection between the potable water system and the reclaimed water system is prohibited.
- b. Where reclaimed water and potable water service exist on the same site the potable water system shall be protected with an approved backflow prevention assembly (reduced pressure principle assembly RP). Applicant shall pay all costs for the purchase, installation, and maintenance of backflow preventative devices. Final determination of the type of protection will be the responsibility of the water utility.
- c. Backflow prevention devices shall not be installed on reclaimed water systems and must be removed from potable irrigation systems which are converted to reclaimed water.
- d. Backflow prevention devices shall be tested annually or more frequently if determined to be necessary by the utility and repaired or replaced as necessary at the expense of the customer.

3. Operational Requirements

- a. The customer must appoint a Site Supervisor and provide name, title and 24-hour phone number(s) of designated Site Supervisor to the water utility. Alternate site supervisors may be appointed.
- b. The Site Supervisor shall:
 - (1) Ensure proper installation, operation, and maintenance of the recycled water system and all backflow prevention devices on the potable water system.
 - (2) Practice diligent surveillance of the system to ensure compliance with water utility rules, the State Board's Division of Drinking Water regulations, and any local governmental requirements. Disregard for requirements could result in termination of service until the specified corrections are made.
 - (3) Educate occupants, residents, and on-site personnel on a continuous basis to ensure that reclaimed water is used in compliance with the State Board's Division of Drinking Water and any local governmental requirements.
 - (4) Post warnings that reclaimed water shall not be used for human consumption or in the preparation of food.
 - (5) Maintain the reclaimed water system to ensure its integrity and minimize failures. Broken valves, pipes, and sprinklers shall be repaired in a timely manner.
 - (6) Receive appropriate training to assure proper operation of recycling facilities, operations personnel protection, and that the reuse site meets all applicable requirements.

(N)

(N)

(Continued)

SERVICE CONNECTIONS, METERS, AND CUSTOMER'S FACILITIES

4. Usage Guidelines

- a. Avoid direct spray and minimize overspray on drinking fountains in areas irrigated with reclaimed water.
- b. Adjust sprinklers to minimize reclaimed water spray on picnic tables, benches, decks, patios, sidewalks and roads.
- c. Irrigate in a manner which will minimize ponding, and runoff. If necessary, use the "repeat" function of the irrigation controller to apply the required amount of water in several short duration cycles.

5. Irrigation Time Restrictions

- a. Irrigation in areas of human contact, parks, playgrounds, and school yards shall be during the late night/early morning hours (10:00 p.m. – 6:00 a.m.). Slopes adjacent to pedestrian walkways are considered areas where there is human contact.
- b. No time restrictions apply to irrigation areas where there is minimal human contact.

6. Reporting and Inspections

- a. The water utility shall be notified 48 hours prior to the start of construction or pipeline installation in order to schedule inspection.
- b. The water utility shall be notified immediately of a change in Site Supervisor.
- c. All significant changes for the reclaimed water system shall be submitted to the water utility for pre-approval.
- d. As-built plans for the reclaimed water system including subsequent modifications shall be submitted to the water utility for approval.

(N)

(N)

TABLE OF CONTENTS

The following listed tariff sheets contain all effective rates and rules affecting the charges and service of the utility, together with other pertinent information:

<u>Subject Matter of Sheet:</u>		<u>CPUC Sheet No.</u>
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Schedule No. 5	Fire Flow Testing Charge	850-W
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No. 2	Description of Service	159-W
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No. 16	Service Connections, Meters, and Customer Facilities	1227-W through 1237-W (T)

(Continued)

Attachment A
D.14-08-011

Decision 14-08-011 August 14, 2014

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of California Water Service Company (U60W), a California corporation, for an order 1) authorizing it to increase rates for water service by \$92,765,000 or 19.4% in test year 2014, 2) authorizing it to increase rates on January 1, 2015 by \$17,240,000 or 3.0%, and on January 1, 2016 by \$16,950,000 or 2.9% in accordance with the Rate Case Plan, and 3) adopting other related rulings and relief necessary to implement the Commission's ratemaking policies.

Application 12-07-007
(Filed July 5, 2012)

**DECISION GRANTING JOINT MOTION TO ADOPT THE
PROPOSED SETTLEMENT AGREEMENT AUTHORIZING
CALIFORNIA WATER SERVICE COMPANY'S GENERAL RATE
INCREASES FOR 2014, 2015, AND 2016**

2.9. Joint Motion to Adopt Proposed Settlement Agreement

On October 30, 2013, Cal Water, ORA, City of Carson, City of Lancaster, City of Selma, City of Visalia, County of Kern, County of Lake, Leona Valley Town Council, Residents Against Water Rates, TURN, and Jeffrey Young (Settling Parties or Parties) filed a Joint Motion to Adopt the Proposed Settlement Agreement (Joint Motion). The Proposed Settlement Agreement (Settlement or Agreement) resolved the following issues in this GRC:

- Affordability issues (Chapter 2);
- Rate design issues (Chapter 3);
- Conservation program (Chapter 4);
- Affiliate transactions and non-tariffed services (Chapter 5);
- Special requests (Chapter 6);
- Balancing and memorandum accounts (Chapter 7);
- Sales and services (Chapter 8);
- General offices expenses (Chapter 9);
- District expenses (Chapter 10);
- Taxes (Chapter 11);
- Global plant issues (Chapter 12);
- General office plant issues (Chapter 13); and
- Specific water district issues involving advance capital budget projects, carryover projects, Advise Letter (AL) projects, projects excluded from plant additions, and adjustment to recorded plant balances (Chapters 14-37).

Most settling parties were focused on negotiations in one or more of the following general areas: revenue requirement determination for a specific area; modification of LIRA and the Rate Support Fund (RSF) (collectively, “affordability” issues); and rate design (the shift in revenues recovered through

the service charge versus the quantity charges). TURN also addressed certain special requests. To the extent that an issue was specifically negotiated between a subset of the parties, the Settlement identifies those parties at the beginning of the relevant section or chapter.

Because of its length, portions of the Settlement are incorporated into this decision as necessary. The entirety of the Settlement is attached as Exhibit A to this decision.

Along with the Settlement, the Parties appended the following attachments:

- Attachment 1: Summary of Earnings Comparison Tables, by district;
- Attachment 2: Rate Base Comparison Tables, by District;
- Attachment 3: Draft Modifications to Customer Service Rules (Special Request #15);
- Attachment 4: Draft Modifications to Cross-Connection Rules (Special Request #19);
- Attachment 5: Draft Preliminary Statements;
- Attachment 6: Summary of Annual Depreciation Rates;
- Attachment 7: Non-Specific Capital Budgets;
- Attachment 8: Meter Replacement Program;
- Attachment 9: Rate Base Offset AL Projects; and
- Attachment 10: Conservation Budget.

These Attachments are contained in Exhibit B to this decision. Of note is the fact that the Settlement does not include specific rates or tariffs. Instead, as

1 When the last capital project in a district is nearing completion (operationally in
2 service and closed to plant), approximately one month before an advice letter seeking
3 recovery is filed, Cal Water will confer with ORA to alert it of the advice letter filing, and
4 begin providing the data supporting both the incremental capital projects, capital-related
5 costs and expenses in the memo account for the recovery requested.

6 **S. SPECIAL REQUEST #19: CROSS-CONNECTION RULES**

7
8 Cal Water proposed several policy changes to its cross-connection rules (in Tariff
9 Rule 16) necessary for implementing changes to its cross-connection control program
10 (“CCCP”) being driven by staff of the CDPH. The modifications to Rule 16 are generally
11 intended to (1) update terminology and references to reflect current industry standards;
12 (2) provide greater specificity and clarity to Cal Water’s mandates, and customers’
13 responsibilities, in order to carry out Cal Water’s enforcement of its CCCP consistent
14 with the expectations of the CDPH. The proposed modifications have no direct impact
15 on either customers’ rates or Cal Water’s revenue requirement. ORA expressed
16 concern about the potential for the modifications to cause some customers to install
17 backflow prevention assemblies unnecessarily.

18 The Parties agree that Cal Water should be authorized to file a Tier 1 advice
19 letter to revise Rule 16 as proposed (see Attachment 4, Draft Modifications to Cross-
20 Connection Rules), and that Cal Water will take certain steps going forward. Once the
21 full scale CCCP is implemented, Cal Water will begin tracking the rate of error for
22 mistakenly notifying customers that they must install a backflow prevention device, and
23 will report its findings in its next GRC. Cal Water will also provide a proposal on how it
24 may reduce the program's error rate in its next GRC. In addition, any customer notices
25 indicating that a backflow prevention assembly is required will clearly specify that the
26 customer has the option of requesting that Cal Water conduct an on-site inspection to
27 confirm the requirement before having to install the backflow prevention assembly.

Rule No. 16

SERVICE CONNECTIONS, METERS, AND CUSTOMER'S FACILITIES

A. General

1. Utility's Responsibility

- a. (1) In urban areas with dedicated front streets, rear service roads, or public utility easements the utility will furnish and install the service pipe, curb stop, meter and meter box at its own expense for the purpose of connecting its distribution system to the customer's piping, except for temporary services, and as otherwise provided in Rule No. 15, Main Extensions. The service connection, curb stop, meter and meter box will be installed at a convenient place between the property line and the curb, or inside the customer's property line where necessary.
- (2) In areas which do not have dedicated front streets, rear service roads, or public utility easements the utility will furnish and install the service pipe, curb stop, meter and meter box as above-provided but at a convenient point on or near the customer's property except for service beyond the service area.
- b. The service connection will determine the point of delivery of water service to the customer.

2. Customer's Responsibility

a.. Condition Precedent to Receiving Service

The customer as a condition precedent to receiving service shall:

- (1) Furnish and lay the necessary piping to make the connection from the service connection to the place of consumption and shall keep such piping in good repair in accordance with such reasonable requirements of the utility as may be incorporated in its rules herein.
- (2) Provide a main valve on the piping between the service connection and the point of customer use.
- (3) Where service is rendered at or near the service area boundary for use beyond the service area, install, operate and maintain the facilities necessary to provide service.

(Continued)

(To be inserted by utility)

Issued by

(To be inserted by Cal. P.U.C.)

Advice Letter No. 1129 FRANCIS S. FERRARO
NAME

Date Filed MAR 16 1990

Decision No. Vice President

Effective JAN 9 1990

TITLE

Resolution No. W 3477

Rule No. 16
(Continued)

SERVICE CONNECTIONS, METERS, AND CUSTOMER'S FACILITIES

- A.. 2. b. The customer's piping shall extend to that point on the curb line or property line of easiest access to the utility from its existing distribution system or requiring the least extension of the existing distribution main. The utility shall be consulted before installation thereof and its approval of location secured.
3. Ownership and Absence of Rental Obligation Where Facilities are On Premises of Customer
- a. The service pipe, curb stop, meter, and meter box furnished by the utility at its own expense and located wholly or partially upon a customer's premises are the property of the utility.
- b. No rent or other charge will be paid by the utility where the utility-owned service facilities are located on a customer's premises.
4. Access to Premises of Customer
- a. The utility shall at all reasonable hours have access to meters, service connections and other property owned by it which may be located on customer's premises for purposes of installation, maintenance, operation or removal of the property at the time service is to be terminated. The customer's system should be open for inspection at the reasonable times to authorized representatives of the utility.
- b. Any inspection work or recommendations made by the utility or its agents in connection with plumbing or appliances or any use of water on the customer's premises, either as a result of a complaint or otherwise, will be made without charge.
5. Responsibility for Loss or Damage
- a. The utility will not be responsible for any loss or damage caused by any negligence or wrongful act of a customer or a customer's authorized representatives in installing, maintaining, operating or using any or all appliances, facilities or equipment for which service is supplied.

(Continued)

(To be inserted by utility)

Issued by

(To be inserted by Cal. P.U.C.)

Advice Letter No. 1129 FRANCIS S. FERRARO

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NAME
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Resolution No. W 3477

Rule No. 16
(Continued)

SERVICE CONNECTIONS, METERS, AND CUSTOMER'S FACILITIES

A. 5. b. The customer will be held responsible for damage to utility's meters and other property resulting from the use of operation of appliances and facilities on customer's premises, including but not limited to damage caused by steam, hot water, or chemicals.

B. Services

1. Charge for Service Connections

The utility shall make no charge to a customer for making a service connection except in case of connections for private fire protection, service, connections for temporary service, changes made at the request and for the convenience of the customer, where additional connections are requested because of divisions of land ownership when the land before the division was receiving service, and as otherwise provided in the utility's main extension rules.

2. Size of Service Pipe

- a. The minimum size of service pipe installed by the utility will not be less than 3/4-inch nominal size.
- b. The utility may require the customer to provide such data as may be necessary for the utility properly to size a service larger than 3/4-inch nominal size consistent with pressure requirements.

3. Installation

Only duly authorized employees or agents of the utility will be permitted to install and/or connect a service pipe from the utility's main to the customer's service connection. (T)
(T)

(continued)

(To be inserted by utility)

Advice Letter No. 2470

Issued by

FRANCIS S. FERRARO

NAME

(To be inserted by Cal. P.U.C.)

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Rule No. 16
 (Continued)

Sheet 4 of 9 (T)

SERVICE CONNECTIONS, METERS, AND CUSTOMER'S FACILITIES

C. Cross-Connections

1. Protective Regulation

No physical connection between the potable water supply system of the public utility and that of any other water supply or source of actual or potential contamination will be permitted except in compliance with the regulations of the State Department of Public Health contained in Title 17, Sections 7583-7605 of the California Code of Regulations under "Regulations Relating to Cross-Connections". (L)

2. Backflow Prevention Assemblies Required (T)

Pursuant to general rate case decisions, and in accordance with the Commission's general supervisory policies, the utility will evaluate the degree of potential health hazard to the public water supply which may be created as a result of conditions existing on a user's premises. As a minimum, the evaluation will consider: the existence of cross-connections, the nature of materials handled on the property, the probability of a backflow occurring, the degree of piping system complexity and the potential for piping system modification. (N)

Notwithstanding the above, because certain activities present inherent risks to the water supply, the utility may forego a complete evaluation and may require backflow protection based on the type of facility or nature of water use, if certain conditions are present. Customers that are required to install a backflow prevention assembly under these circumstances will be provided with an internal cross connection inspection upon request. The conditions under which CWSC will require the installation of approved backflow prevention assembly(ies) of required type include, but are not limited to, those listed below. (N)

- a. Where a fresh water supply which has not been approved by the State Department of Public Health is already available from a well, spring, reservoir or other source. (If the customer agrees to destroy this other supply and agrees to remove all pumps and piping necessary for the utilization of an auxiliary supply, the installation of backflow prevention assembly(ies) will not be required.) (T)
- b. Where salt water, or water otherwise contaminated, is available for industrial or fire protection purposes at the same premises. (L)
- c. Where the premises are or may be engaged in industrial processes using or producing process waters or liquid industrial wastes, or where the premises are or may be engaged in handling sewage or any other dangerous substances. (L)
- d. Where fresh water hydrants or other outlets are or may be installed on piers or docks. (L)
- e. Where the circumstances are such that there is special danger of backflow of sewage or other contaminated liquids through plumbing fixtures or water-using or treating equipment, or storage tanks and reservoirs. (L)
- f. Where premises have internal cross-connections that are not abated to the satisfaction of the utility or the health agency. (T)
- g. Premises where cross-connections are likely to occur and entry is restricted so that cross-connection inspections cannot be made with sufficient frequency or at sufficiently short notice to assure that cross-connections do not exist. (L)
- h. Premises having a repeated history of cross-connections being established or re-established. (L)
- i. Premises that have more than one service connection present a loop-through hazard such that backflow protection on all service connections must be installed. Each backflow prevention assembly must be commensurate with the highest degree of hazard present, but must provide no less protection than a Double Check Valve Assembly. (N)
- j. Premises that have multiple users sharing one meter must install an RP due to the risk of occupancy change without notification to the utility. (N)

(Continued)

(To be inserted by utility)
 Advice Letter No. 2139
 Decision No. 14-08-011

Issued by
PAUL G. TOWNSLEY
NAME
Vice President
TITLE

(To be inserted by Cal. P.U.C.)
 Date Filed September 24, 2014
 Effective September 25, 2014
 Resolution No. -

Rule No. 16
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SERVICE CONNECTIONS, METERS, AND CUSTOMER'S FACILITIES

- C. 2. k. Premises that store or handle materials or substances that, if introduced into the water supply, have the potential to pose a health-related or aesthetic risk to drinking water quality. (N)

- l. New or modified fire sprinkler systems: A backflow prevention assembly must be installed when new or modified non-residential fire sprinkler systems are installed. If potable water pipes are used to construct the sprinkler system, no chemicals are added, and there is no auxiliary supply, a Double Check Detector Assembly may be installed. If non-potable water pipes are used, or chemicals are added, or there is an auxiliary water supply, then a Reduced Pressure Principle Detector Assembly must be installed. (N)

- Residential fire sprinkler systems do not need a backflow prevention assembly if they are designed and installed using potable water piping and materials, and have connections to points of regular water use to prevent degradation of water quality. Systems that do not meet these requirements must be equipped, at a minimum, with a Double Check Valve Assembly (DC) located at the service connection. If chemical additives, on-site storage, or booster pumps are used, backflow protection must be a Reduced Pressure Principle Assembly (RP). (N)

- Where a premises is required to have an RP backflow prevention assembly installed on a metered service, a Reduced Pressure Principle Detector Assembly must also be installed on all new or modified fire service connections. (N)

- All new or modified fire systems that are being fitted with a backflow prevention assembly shall be designed by a licensed engineer at the customer's expense. (N)

- 3. Type and Expense of Backflow Prevention Assemblies (T)

 - a. Any backflow prevention assembly utilized shall be of the type and design specified and approved for the circumstances in Section 7604, Title 17 of the California Code of Regulations (or its successor, and the California Plumbing Code, except that a customer may utilize an approved backflow prevention assembly providing greater protection than required by Section 7604. Such backflow prevention assembly shall be installed by and at the expense of the customer, in a manner approved by the utility and the public health agency having jurisdiction. (N)
 - b. Backflow prevention assemblies shall be tested, repaired or replaced at the expense of the customer. (T)
 - c. Backflow preventer prevention assemblies shall be installed as close as practical to the customer's connection to the utility, prior to any tee or branch line, and in a location which that is readily available for periodic inspection. (N)
 - d. Existing backflow prevention assemblies that are determined to provide an inadequate level of protection must be replaced by the appropriate level of protection instead of repaired. Inadequate backflow prevention assemblies must be replaced immediately, even if the existing assembly still passes the annual test, if there is an imminent health risk as determined by the utility. (N)
 - e. A non-residential connection that has a backflow prevention assembly installed to abate an internal backflow hazard, whether at the recommendation of utility or as directed by a regulatory agency, must also install a backflow prevention assembly at the meter commensurate with the degree of hazard. The utility does not have any responsibility or authority to abate internal hazards or monitor testing of backflow prevention assemblies that are installed internal to a customer's premise. (N)
 - f. Residential Irrigation Systems: At the discretion of the utility, properly installed Reduced Pressure Principle Assemblies (RPs), pressure vacuum breakers (PVBs), or spill resistant pressure vacuum breakers (SVBs) may be accepted as protection on residential irrigation systems in lieu of protection at the meter, when no other hazards are present, provided they are tested and maintained in accordance with Section 4. (N)

(Continued)

Rule No. 16
 (Continued)

Sheet 6 of 9 (T)

SERVICE CONNECTIONS, METERS, AND CUSTOMER'S FACILITIES

C. 3. g. For dedicated road median irrigation systems, PVBs and SVBs are acceptable as service protection only if they are properly installed. (N)
 (N)

4. Periodic Testing of Backflow Prevention Assemblies (T)

Whenever a backflow prevention assembly is installed, relocated, or repaired, the customer shall have it tested by persons who are certified to test backflow prevention assemblies by either the California Nevada Section of the American Water Works Association or the American Backflow Prevention Association. (N)
 |
 (N)

Backflow prevention assemblies shall be tested at least annually or more frequently if determined to be necessary by the health agency or utility. (T)
 (L)

The utility shall notify the customer on record when testing of backflow prevention assemblies is needed. (T)

The notice shall give the date by which the test must be completed. The notice shall also inform the customer that, following the compliance date, the utility may have all untested assemblies tested and, if needed, repaired or replaced. The costs of all testing, repair, or replacement will be borne by the customer, and the utility may add such costs to the customer's water bill. In tenant-landlord situations, the utility shall not be responsible for determining the responsible party beyond notification of the customer of record. (N)
 |
 |
 |
 (N)

Reports of testing and maintenance shall be maintained by the utility for a minimum of three years. Whenever a backflow prevention assembly is found to have failed, it must be repaired or replaced as soon as repair parts or a replacement assembly is available, but in no event later than the testing compliance date, or 20 days after testing, whichever comes first. If the assembly cannot or will not be repaired within 3 days of discovery of the failure, the backflow prevention assembly tester must notify the utility of the failure. In cases where the failed assembly presents an immediate risk to public health, the service will be discontinued until the repairs or replacement is completed. (N)
 |
 |
 |
 |
 (N)

5. Refusal to Serve or Discontinuance of Service

The utility may refuse or discontinue service:

- a. Until there has been installed on the customer's piping an approved backflow prevention assembly of the required type, if one is required. (T)
 (L)
- b. Where the utility has been denied access to the customer's premises to make an evaluation. (L)
- c. Where the customer refuses to test a backflow prevention assembly, or to repair or replace a faulty backflow prevention assembly. (T)
 (T)
- d. Where there is a direct or indirect connection between the public water system and a sewer line. (L)
- e. Where there is an unprotected direct or indirect connection between the public water system and a system or equipment containing contaminants. (L)
 (L)
- f. Where there is an unprotected direct or indirect connection between the public water system and auxiliary water system. (L)
 (L)
- g. When there is a situation which presents an immediate health hazard to the public water system. (L)

6. Thermal Expansion (N)

Prior to the installation of a backflow prevention assembly, it is the customers responsibility to have a qualified plumber mitigate the effects of thermal expansion. Failure to do so may create a dangerous condition resulting in damage and/or injury. (N)
 |
 (N)

(Continued)

(To be inserted by utility)

Issued by

(To be inserted by Cal. P.U.C.)

Advice Letter No. 2139

PAUL G. TOWNSLEY

Date Filed September 24, 2014

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Effective September 25, 2014

TITLE

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Rule No. 16
 (Continued)

Sheet 7 of 9 (T)

SERVICE CONNECTIONS, METERS, AND CUSTOMER'S FACILITIES

C. 7. Pumps and Boosters

When a customer receiving service at the utility's main or service connection must, by means of a pump of any kind, increase the pressure of the water received, the pump shall not be attached to any pipe directly connected to the utility's main or service pipe. Such pumping or boosting of pressure shall be done at the option of the utility, either: (L)

- a. From a sump, cistern or storage tank which must be served through an air gap connection, or (L)
- b. From a combination of an approved backflow prevention assembly plus a device approved by the water utility to prevent the booster pump from drawing the utility's system pressure below 20 psig. (T)
(L)

(D)
 (N)
 (N)

This requirement of a pressure limiting device shall not apply to fire protection systems equipped with booster pumps.

8. Automatic Valves

Quick closing or opening valves shall not be installed on customer's pipes which are directly attached to the utility's mains or service pipes. A customer whose operation requires the use of a quick opening or closing valve must operate such device from a tank, cistern, sump or other facility which may be served by but not directly connected with the utility's distribution mains or service pipes. This restriction does not apply to quick closing or opening valves used in connection with normal household appliances such as automatic dishwashers or washing machines. (L)
(T)
(L)
(T)
(L)

D. Reclaimed Water Service

1. Construction

a. Material

- (1) All on-site reclaimed water facilities must be readily distinguishable from all on-site potable water facilities. (L)
- (2) Reclaimed water pipes may be of PVC dyed purple (Pantone 512) with continuous lettering "CAUTION RECLAIMED WATER" applied at the factory. No other identification is required. (N)
(L)
- (3) All reclaimed water pipes except as specified in item 2 above, must be identified along their entire length with warning tape. The warning tape must be yellow in color, a minimum of 2 inches wide with the words "RECLAIMED WATER" printed in 1" high black letters. The lettering should be repeated continuously the full length of the tape. (L)
|
(L)
- (4) All piping from the reclaimed water system shall be installed to maintain ten (10') feet minimum horizontal separation from all potable water piping. Where reclaimed and potable water piping cross, the reclaimed water piping shall be installed below the potable water piping in a PVC class 200 pipe sleeve which extends a minimum of five (5') feet on either side of the potable water piping. Additionally, a minimum vertical clearance of six (6") inches shall be provided. (L)
|
(L)
- (5) All above ground reclaimed water facilities (risers, valves, controllers, etc.) must have identifying labels for reclaimed water. (L)
(L)

(Continued)

(To be inserted by utility)

Issued by

(To be inserted by Cal. P.U.C.)

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Effective September 25, 2014

Resolution No. -

Rule No. 16
(Continued)

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SERVICE CONNECTIONS, METERS, AND CUSTOMER'S FACILITIES

- D. 1. b. Valve Marking
 - Hose bibs are not permitted on the reclaimed water system.
 - c. Drawings Required
 - Applicants for reclaimed water service shall submit system plans for review and approval by the utility. (T)
 - d. Location
 - (1) Reclaimed water facilities shall not be installed inside any structures, indoor atriums or planters. (L)
 - (2) Drinking fountains and picnic tables shall be located to minimize exposure to direct and wind blown reclaimed water spray. (L)
 - (3) Reclaimed water shall not be sprayed outside the design area shown in the plans submitted in Section D.1.c. above. (L)
 - (4) Reclaimed water shall not be used to irrigate any enclosed private rear yard or patio. (L)
- 2. Cross Connection Control Requirements
 - a. Cross connection between the potable water system and the reclaimed water system is prohibited. (L)
 - b. Where reclaimed water and potable water service exist on the same site the potable water system shall be protected for backflow prevention with a California Department of Public Health approved backflow prevention assembly (reduced pressure principle assembly RP). Applicant shall pay all costs for the purchase, installation, and maintenance of backflow preventative devices. Final determination of the type of protection will be the responsibility of the water utility in conjunction with the Department of Public Health. (L) (T) (N) (L) (T) (T)
 - c. Backflow prevention devices shall not be installed on reclaimed water systems and must be removed from potable irrigation systems which are converted to reclaimed water. (L) (L)
 - d. Backflow prevention devices shall be tested as required and repaired or replaced as necessary at the expense of the customer. (L) (L)
- 3. Operational Requirements
 - a. The customer must appoint a Site Supervisor and provide name, title and 24-hour phone number(s) of designated Site Supervisor to the water utility. Alternate site supervisors may be appointed. (L) (T)
 - b. The Site Supervisor shall:
 - (1) Practice diligent surveillance of the system to ensure compliance with water utility rules, the California Department of Public Health regulations, and any local governmental requirements. Disregard for requirements could result in termination of service until the specified corrections are made. (T) (L) (L) (L)
 - (2) Educate occupants, residents, and on-site personnel on a continuous basis to insure that reclaimed water is used in compliance with the California Department of Public Health and any local governmental requirements. (L) (T) (L)
 - (3) Post warnings that reclaimed water shall not be used for human consumption or in the preparation of food. (L) (L)

(Continued)

(To be inserted by utility)
Advice Letter No. 2139
Decision No. 14-08-011

Issued by
PAUL G. TOWNSLEY
NAME
Vice President
TITLE

(To be inserted by Cal. P.U.C.)
Date Filed September 24, 2014
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Resolution No. -

Rule No. 16
(Continued)

Sheet 9 of 9 (T)

SERVICE CONNECTIONS, METERS, AND CUSTOMER'S FACILITIES

- D. 3. b. (4) Maintain the reclaimed water system to insure its integrity and minimize failures. Broken valves, pipes, and sprinklers shall be repaired in a timely manner. (L)
(L)
- (5) Notify the water utility annually by January 31 that all the requirements in Rule 16 Section D Reclaimed Water have been met. (T)
(L)

4. Usage Guidelines

- a. Avoid direct spray and minimize overspray on drinking fountains in areas irrigated with reclaimed water. (L)
- b. Adjust sprinklers to minimize reclaimed water spray on picnic tables, benches, decks, patios, sidewalks and roads. (L)
(L)
- c. Irrigate in a manner which will minimize ponding, and runoff . If necessary, use the "repeat" function of the irrigation controller to apply the required amount of water in several short duration cycles. (L)
(L)

5. Irrigation Time Restrictions

- a. Irrigation in areas of human contact, parks, playgrounds, and school yards shall be during the late night/early morning hours (10:00 p.m. – 6:00 a.m.). Slopes adjacent to pedestrian walkways are considered areas where there is human contact. (L)
(L)
(L)
- b. No time restrictions apply to irrigation areas where there is minimal human contact. (L)

6. Reporting and Inspections

- a. The water utility shall be notified 48 hours prior to the start of construction or pipeline installation in order to schedule inspection. (T)
(L)
- b. The water utility shall be notified immediately of a change in Site Supervisor. (T)
- c. All significant changes for the reclaimed water system shall be submitted to the water utility for pre-approval. (T)
(L)
- d. As-built plans for the reclaimed water system including subsequent modifications shall be submitted to the water utility for approval. (L)
(T)

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Attachment B
Assembly Bill 1671

Assembly Bill No. 1671

CHAPTER 533

An act to amend Section 116810 of, and to add Sections 116407 and 116555.5 to, the Health and Safety Code, relating to drinking water.

[Approved by Governor October 6, 2017. Filed with
Secretary of State October 6, 2017.]

LEGISLATIVE COUNSEL'S DIGEST

AB 1671, Caballero. Backflow protection and cross-connection controls: standards.

(1) Existing law, the California Safe Drinking Water Act, requires the State Water Resources Control Board to administer provisions relating to the regulation of drinking water to protect public health, including, but not limited to, conducting research, studies, and demonstration projects relating to the provision of a dependable, safe supply of drinking water, enforcing the federal Safe Drinking Water Act, adopting regulations, and conducting studies and investigations to assess the quality of private domestic water wells. Existing law makes certain violations of the act a misdemeanor.

Existing law requires any person who owns a public water system to ensure that the system does certain things, including, but not limited to, that it will not be subject to backflow under normal operating conditions. Existing law, to ensure that testing and maintenance of backflow prevention devices are performed by persons qualified to do testing and maintenance, authorizes local health officers to maintain programs for certification of backflow prevention device testers and requires the certification program to be consistent with backflow protection regulations adopted by the state board. A violation of these provisions, or an order by a local health officer pursuant to these provisions, is a misdemeanor.

This bill would require a public water system to implement a cross-connection control program that complies with, and would require the certification program to be consistent with, applicable regulations and the standards described in (2).

(2) Existing regulations establish standards for a backflow prevention device and cross-connection control.

This bill, on or before January 1, 2020, would require the state board to adopt standards for backflow protection and cross-connection control and would authorize the state board to do so through the adoption of a policy handbook, as specified. By authorizing the state board to adopt standards, the violation of which would be a crime, the bill would create a new crime and impose a state-mandated local program.

(3) The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

The people of the State of California do enact as follows:

SECTION 1. Section 116407 is added to the Health and Safety Code, to read:

116407. (a) On or before January 1, 2020, the state board shall adopt standards for backflow protection and cross-connection control.

(b) The state board may implement subdivision (a) through the adoption of a policy handbook that is not subject to the requirements of Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code. The policy handbook shall include standards for backflow protection and cross-connection control. In developing the standards and any amendments to those standards, the state board shall consult with state and local agencies and other persons whom the state board has identified as having expertise in the subject of backflow protection and cross-connection control. The state board shall hold at least two public hearings before adopting the policy handbook. The policy handbook shall be posted on the board's Internet Web site.

(c) (1) Upon the effective date of a policy handbook adopted by the state board pursuant to subdivision (b), the regulations set forth in Article 1 (commencing with Section 7583) and Article 2 (commencing with Section 7601) of Group 4 of Subchapter 1 of Chapter 5 of Division 1 of Title 17 of the California Code of Regulations shall become inoperative, and, 90 days thereafter, are repealed, unless the state board makes a determination not to repeal a specific regulation.

(2) If the state board determines not to repeal a specific regulation pursuant to paragraph (1), the state board shall provide to the Office of Administrative Law and the Secretary of State written notice of its determination, including identification of the specific regulation that is not repealed. That regulation, upon the provision of that written notice to the Office of Administrative Law and the Secretary of State, shall become operative.

SEC. 2. Section 116555.5 is added to the Health and Safety Code, to read:

116555.5. A public water system shall implement a cross-connection control program that complies with applicable regulations and with standards adopted by the board pursuant to Section 116407.

SEC. 3. Section 116810 of the Health and Safety Code is amended to read:

116810. To ensure that testing and maintenance of backflow prevention devices are performed by persons qualified to do testing and maintenance,

local health officers may maintain programs for certification of backflow prevention device testers. The local health officer may suspend, revoke, or refuse to renew the certificate of a tester, if, after a hearing before the local health officer or his or her designee, the local health officer or his or her designee finds that the tester has practiced fraud or deception or has displayed gross negligence or misconduct in the performance of his or her duties as a certified backflow prevention device tester. The local health officer may collect fees from certified testers to offset the cost of the certification program provided pursuant to this section. The certification standards shall be consistent with standards adopted by the state board pursuant to Section 116407 and any other applicable backflow protection regulations.

SEC. 4. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.

Attachment C
Rule No. 16 Redlined

Rule No. 16

SERVICE CONNECTIONS, METERS, AND CUSTOMER'S FACILITIES

A. General

1. Utility's Responsibility

- a. (1) In urban areas with dedicated front streets, rear service roads, or public utility easements the utility will furnish and install the service pipe, curb stop, meter and meter box at its own expense for the purpose of connecting its distribution system to the customer's piping, except for temporary services and as otherwise provided in Rule No. 15, Main Extensions. The service connection, curb stop, meter and meter box will be installed at a convenient place between the property line and the curb, or inside the customer's property line where necessary.
- (2) In areas which do not have dedicated front streets, rear service roads, or public utility easements, the utility will furnish and install the service pipe, curb stop, meter and meter box as above provided but at a convenient point on or near the customer's property except for service beyond the service area.
- b. The service connection will determine the point of delivery of water service to the customer.

2. Customer's Responsibility

a. Condition Precedent to Receiving Service

The customer as a condition precedent to receiving service shall:

- (1) Furnish and lay the necessary piping to make the connection from the service connection to the place of consumption and shall keep such piping in good repair in accordance with such reasonable requirements of the utility as may be incorporated in its rules herein.
- (2) Provide a main valve on the piping between the service connection and the point of customer use.
- (3) Where service is rendered at or near the service area boundary for use beyond the service area, install, operate, and maintain the facilities necessary to provide service.

- b. The customer's piping shall extend to that point on the curb line or property line of easiest access to the utility from its existing distribution system or requiring the least extension of the existing distribution main. The utility shall be consulted before installation thereof and its approval of location secured.

(L)

3. Ownership and Absence of Rental Obligation Where Facilities Are on Premises of Customer

- a. The service pipe, curb stop, meter, and meter box furnished by or on behalf of the utility, and located wholly or partially upon a customer's premises are the property of the utility.
- b. No rent or other charge will be paid by the utility where the utility-owned service facilities are located on a customer's premises.

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SERVICE CONNECTIONS, METERS, AND CUSTOMER'S FACILITIES

- A. 4. Access to Premises of Customer (L)
- a. The utility shall at all reasonable hours have access to meters, service connections and other property owned by it which may be located on customer's premises for purposes of installation, maintenance, operation or removal of the property at the time service is to be terminated. The customer's system should be open for inspection at all reasonable times to authorized representatives of the utility.
 - b. Any inspection work or recommendations made by the utility or its agents in connection with plumbing or appliances or any use of water on the customer's premises, either as a result of a complaint or otherwise, will be made without charge.
5. Responsibility for Loss or Damage
- a. The utility will not be responsible for any loss or damage caused by any negligence or wrongful act of a customer or of a customer's authorized representatives in installing, maintaining, operating or using any or all appliances, facilities or equipment for which service is supplied.
 - b. The customer will be held responsible for damage to utility's meters and other property resulting from the use or operation of appliances and facilities on customer's premises, including, but not limited to damage caused by steam, hot water, or chemicals.
- B. Services
1. Charge for Service Connections
- Except as provided in subparagraphs a., b., or c. below, the utility shall make no charge to a customer for making a service connection except in case of connections for private fire protection service, connections for temporary service, changes made at the request and for the convenience of the customer, where additional connections are requested because of divisions of land ownership when the land before division was receiving service, and as otherwise provided in the utility's main extension rules.
- a. Individual Customer Connection Fee
- A Class C or Class D utility, or a Class A or Class B utility district or subsidiary serving 2,000 or fewer connections, may accept from individual customers amounts in contribution as a connection fee calculated pursuant to the Commission's Connection Fee Data Form contained in the utility's tariffs.
- b. In lieu of paying the connection fee, an applicant for a service connection may retain a licensed contractor, qualified in the judgment of the utility, to install the service connection. Cost to the utility of inspection and supervision of the installation, including gross-up for tax required by a contribution, shall be paid by the applicant. The applicant shall provide the utility with a statement of actual construction costs in reasonable detail. The amount shall be treated as contribution by the utility. The installation shall be in accordance with plans and specifications of the utility. (L)

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B. 1. c. Individual Customer Facilities Fee

A Class C or Class D utility, or a Class A or Class B utility district or subsidiary serving 2,000 or fewer connections, may accept from individual customers amounts in contribution as a facilities fee calculated pursuant to tariff approved by the Commission.

2. Size of Service Pipe

a. The minimum size of service pipe installed by the utility will not be less than 3/4~~1~~-inch nominal size.

b. The utility may require the customer to provide such data as may be necessary for the utility to properly size a service larger than 3/4~~1~~-inch nominal size consistent with pressure requirements.

3. Installation

Only duly authorized employees or agents of the utility (or licensed contractors, upon approval of the utility) will be permitted to install a service pipe from the utility's main to the location of the service connection. The connection from the meter to the customer's piping will be made by the utility; provided, however, that if the customer's piping requires repair or replacement, the connection may, at the option of the utility, be made by the customer or his agent.

C. Cross-Connections

1. Protective Regulation

No physical connection between the potable water supply system of the public utility and that of any other water supply or source of actual or potential contamination will be permitted except in compliance with the regulations of the State Department of Public Health contained in Title 17, Sections 7583-7605 of the California Code of Regulations under "Regulations Relating to Cross-Connections."

It is unlawful for any person, firm, or corporation at any time to make or maintain or cause to be made, temporarily or permanently, for any period of time whatsoever, any cross-connection between plumbing pipes or water fixtures being served with water by the Utility and any other source of water supply or to maintain any sanitary fixture or other appurtenances or fixtures which, by reason of their construction, may cause or allow backflow of water or other substances into the water supply system of the Utility and/or the service of water pipes or fixtures of any consumer of the Utility.

2. Backflow Prevention Assemblies Preventers-Required

Pursuant to general rate case decisions, and in accordance with the Commission's general supervisory policies, the~~The~~ utility will evaluate the degree of potential health hazard to the public water supply which may be created as a result of conditions existing on a user's premises. As a minimum, the evaluation will consider: the existence of cross-connections, auxiliary intakes, bypasses or interconnections, the nature of materials handled on the property, the probability of a backflow occurring, the degree of piping system complexity, and the potential for piping system modification. It is not the responsibility of Liberty Utilities to identify all hazards within a facility rather than the hazards sufficient for identifying appropriate service protection.

(L)
(T)
(T)
(T)
(N)
(N)
(T)
(T)
(T)
(L)(T)

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- C. 2. Backflow ~~Prevention Assemblies Preventers~~ Required (continued) (L)(T)
- Notwithstanding the above, because certain activities present inherent risks to the water supply, the utility may forego a complete evaluation and may require backflow protection based on the type of facility or nature of water use, if certain conditions are present. The installation of a backflow prevention assembly at the potable water meter protects the public water system from potential cross-connections, but it does not prevent backflow within the customer's internal piping system. Liberty Utilities is not responsible for cross-connections within the customer's internal piping system. The conditions under which Liberty Utilities will require the installation of approved backflow prevention assembly(ies) of required type include, but are not limited to, those listed below. (N)
- ~~C. 2. The utility will require the installation of approved backflow preventers of required type under any of the following conditions:~~ (T)
- a. Where a fresh water supply which has not been approved by the ~~utility~~ State Department of Health Services is already available from a well, spring, reservoir or other source. (If the customer agrees to ~~destroy~~ abandon this other supply and agrees to remove all pumps and piping necessary for the utilization of ~~an auxiliary~~ this supply, the installation of backflow prevention assembly(ies) ~~preventers~~ will not be required.) (T)
 - b. Where salt water, or water otherwise contaminated, is available for industrial or fire protection purposes at the same premises.
 - c. Where the premises are or may be engaged in industrial processes using or producing process waters or liquid industrial wastes, or where the premises are or may be engaged in handling sewage or any other dangerous substances.
 - d. Where fresh water hydrants or other outlets are or may be installed on piers or docks.
 - e. Where the circumstances are such that there is special danger of backflow of sewage or other contaminated liquids through plumbing fixtures or water-fusing or treating equipment, or storage tanks and reservoirs.
 - f. ~~Where premises~~ ~~f. Premises that~~ have internal cross-connections that are not abated to the satisfaction of the utility or the health agency. (T)
 - g. Intricate plumbing and piping arrangements or premises ~~g. Premises~~ where cross-connections are likely to occur and entry is restricted so that cross-connection inspections cannot be made with sufficient frequency or at sufficiently short notice to assure that cross-connections do not exist. (T)
 - h. Premises having a repeated history of cross-connections being established or re-established. (L)
 - i. Premises that have more than one service connection present a loop-through hazard such that backflow protection on all service connections must be installed. Each backflow prevention assembly must be commensurate with the highest degree of hazard present, but must provide no less protection than a Double Check Valve Assembly. (N)
 - j. Premises that have multiple users or units sharing one meter must install an RP due to the risk of occupancy change without notification to the utility. (N)

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C. 2. Backflow Prevention Assemblies Preventers Required (continued)

(T)

k. Premises that store or handle materials or substances that, if introduced into the water supply, have the potential to pose a health-related or aesthetic risk to drinking water quality.

(N)

l. New or modified fire sprinkler systems: A backflow prevention assembly must be installed when new or modified non-residential fire sprinkler systems are installed. If potable water pipes are used to construct the sprinkler system, no chemicals are added, and there is no auxiliary supply, a Double Check Detector Assembly may be installed. If non-potable water pipes are used, or chemicals are added, or there is an auxiliary water supply, then a Reduced Pressure Principle Detector Assembly must be installed.

m. Temporary hydrants must be equipped with a RP device.

Residential fire sprinkler systems do not need a backflow prevention assembly if they are designed and installed using potable water piping and materials, and have connections to points of regular water use to prevent degradation of water quality. Systems that do not meet these requirements must be equipped, at a minimum, with a Double Check Valve Assembly (DC) located at the service connection. If chemical additives, on-site storage, or booster pumps are used, backflow protection must be a Reduced Pressure Principle Assembly (RP).

Where a premises is required to have an RP backflow prevention assembly installed on a metered service, a Reduced Pressure Principle Detector Assembly must also be installed on all new or modified fire service connections.

All new or modified fire systems that are being fitted with a backflow prevention assembly shall be designed by a licensed engineer at the customer's expense.

The water service may be discontinued in the case of non-compliance with Liberty Utilities Regulations. Non-compliance includes, but is not limited to, the following:

a. Refusal to allow the Cross-connections Control Specialist access to the property to survey for cross-connection(s).

b. Removal of a backflow prevention assembly or method that is required by the Utility.

c. Bypassing of a backflow prevention assembly or method that is required by the Utility.

d. Providing inadequate backflow prevention when potential or actual cross-connections exist.

e. Failure to install a backflow prevention assembly or method that is required by the Utility.

f. Failure to test and/or properly repair a backflow prevention assembly or method as required by the Utility.

(N)

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- C. 3. Type and Expense of Backflow ~~Prevention Assemblies~~~~Preventers~~ (T)
 - a. Any backflow ~~prevention assembly~~~~preventer~~ utilized shall be of the type and design specified and approved for the circumstances in Section 7604, Title 17 of the California Code of Regulations ~~(or its successor, and the California Plumbing Code)~~, except that a customer may utilize an approved backflow ~~prevention assembly~~~~preventer~~ providing greater protection than required by Section 7604. Such backflow ~~prevention assembly~~~~preventers~~ shall be installed by and at the expense of the customer, in a manner approved by the utility and the public health agency having jurisdiction. ~~Backflow preventers shall be installed as close as practical to the customer's connection to the utility and in a location which is readily available for periodic inspection.~~ (T)
 - b. Backflow ~~prevention assemblies~~~~preventers~~ shall be tested, repaired or replaced at the expense of the customer. (T)
 - c. ~~Backflow prevention assemblies shall be installed no more than 5 feet (unless approved by the utility) to the customer's connection to the utility, prior to any tee or branch line, and in a location which that is readily available for periodic inspection.~~ (N)
 - d. ~~Existing backflow prevention assemblies that are determined to provide an inadequate level of protection must be replaced by the appropriate level of protection instead of repaired. Inadequate backflow prevention assemblies must be replaced immediately, even if the existing assembly still passes the annual test, if there is an imminent health risk as determined by the utility.~~
 - e. ~~A non-residential connection that has a backflow prevention assembly installed to abate an internal backflow hazard, whether at the recommendation of utility or as directed by a regulatory agency, must also install a backflow prevention assembly at the meter commensurate with the degree of hazard. The utility does not have any responsibility or authority to abate internal hazards or monitor testing of backflow prevention assemblies that are installed internal to a customer's premise.~~
 - f. ~~Residential Irrigation Systems: At the discretion of the utility, properly installed Reduced Pressure Principle Assemblies (RPs), pressure vacuum breakers (PVBs), or spill resistant pressure vacuum breakers (SVBs) may be accepted as protection on residential irrigation systems in lieu of protection at the meter, when no other hazards are present, provided they are tested and maintained in accordance with Section 4.~~
 - g. ~~For dedicated road median irrigation systems, PVBs and SVBs are acceptable as service protection only if they are properly installed.~~
 - h. ~~No backflow prevention assemblies or methods shall be installed in a place where they would create a safety hazard such as, but not limited to, over an electrical panel or above ceiling level.~~
 - i. ~~The removal, bypassing, or altering of a protective assembly or the installation, thereof so as to render an assembly ineffective, shall constitute grounds for discontinuance of water service. Water service to such premises shall not be restored until the Customer has corrected or eliminated such conditions or defects.~~ (N)

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- C. 4. Periodic Testing of Backflow ~~Preventers~~Prevention Assemblies (L)(T)
- Whenever a backflow ~~prevention assembly~~preventer is installed, relocated, or repaired, the customer shall have it tested by persons who are certified to test backflow prevention assemblies by either the California Nevada Section of the American Water Works Association, County of Los Angeles Public Health or the American Backflow Prevention Association. (T)
- ~~Backflow prevention assemblies have demonstrated their competency in testing of these preventers to the utility or health agency. Backflow preventers shall be tested at least annually or more frequently if determined to be necessary by the health agency or utility. The utility shall notify the customer when testing of backflow preventers is needed. The notice shall give the date when the test must be completed. Reports of testing and maintenance shall be maintained by the utility for a minimum of three years.~~ (T)
- ~~The utility shall notify the customer on record when testing of backflow prevention assemblies is needed. The notice shall give the date by which the test must be completed. The notice shall also inform the customer that, following the compliance date, the costs of all testing, repair, or replacement will be borne by the customer. In tenant-landlord situations, the utility shall not be responsible for determining the responsible party beyond notification of the customer of record.~~ (N)
- ~~Reports of testing and maintenance shall be maintained by the utility for a minimum of three years.~~
- ~~The Utility shall have the right to inspect and require testing of the assemblies whenever deemed necessary.~~
- ~~Should a protective assembly be found defective or have a status of Failed, the Utility will require the assembly to be repaired promptly with manufacturer's specified parts, in accordance to manufacturer's suggested procedure, and placed in proper operating condition within 15-days of the finding or the specified time limit established by the Utility. Following repairs, the assembly is to be tested again to verify that it is meeting performance standards and have a status of Passed. The owner will be held responsible for maintaining protective measures in a good state of repairs.~~
- ~~If the assembly cannot or will not be repaired within 3 days (72 hours) of discovery of the failure, the backflow prevention assembly tester must notify the utility of the failure in cases where the failed assembly presents an immediate risk to public health, the service will be discontinued until the repairs or replacement is completed.~~
5. Refusal to Serve or Discontinuance of Service (L)
- The utility may refuse or discontinue service:
- a. Until there has been installed on the customer's piping an approved backflow prevention assembly~~preventer~~ of the required type, if one is required. (T)
 - b. Where the utility has been denied access to the customer's premises to make an evaluation. (T)
 - c. Where the customer refuses or fails to install, test a backflow prevention assembly~~preventer~~, or to repair or replace a faulty backflow prevention assembly. ~~preventer.~~ (T)

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- C. 5. d. Providing inadequate backflow prevention when potential or actual cross-connections exist. (L)(N)
- e. Where there is a direct or indirect connection between the public water system and a sewer line. (T)
- fe. Where there is an unprotected direct or indirect connection between the public water system and a system or equipment containing contaminants.
- gf. Where there is an unprotected direct or indirect connection between the public water system and auxiliary water system.
- hg. When there is a situation which presents an immediate health hazard to the public water system. (T)
- i. Bypassing of a backflow prevention assembly or method that is required by the Utility. (N)
- j. Removal of a backflow prevention assembly or method that is required by the Utility.
- 6. Thermal Expansion
- Prior to the installation of a backflow prevention assembly, it is the customer's responsibility to have a qualified plumber mitigate the effects of thermal expansion. Failure to do so may create a dangerous condition resulting in damage and/or injury. (N)
- 7. Pumps and Boosters (L)(N)
- When a customer receiving service at the utility's main or service connection must, by means of a pump of any kind, increase the pressure of the water received, the pump shall not be attached to any pipe directly connected to the utility's main or service pipe. Such pumping or boosting of pressure shall be done, at the option of the utility, either:
 - a. From a sump, cistern or storage tank which must be served through an air gap connection, or
 - b. From a combination of an approved backflow ~~prevention~~ prevention assembly plus a device approved by the water utility to prevent the booster pump from drawing the utility's system pressure below 20 psig. (T)
- This requirement of a pressure limiting device shall not apply to ~~American Water Works Association (AWWA) Class 2 Fire Protection systems, except as provided for in the Information Bulletin issued by the Office of State Fire Marshal on December 10, 1984.~~ (T)
- AWWA Class 2 fire protection systems equipped with have direct connections from public water mains only; no pumps, tanks or reservoirs, except that booster pumps. (T)
- AWWA Class 2 fire protection systems have direct connections from public water mains only; no pumps, tanks or reservoirs, except that booster pumps may be installed in the connections from the street mains to the fire protection systems; no physical connection from other water supplies; no antifreeze or other additives of any kind; all sprinkler drains discharging to atmosphere, dry wells, or other safe outlets. (D)

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C. 8. Automatic Valves

(N)

Quick closing or opening valves shall not be installed on customer's pipes which are directly attached to the utility's mains or service pipes. A customer whose operation requires the use of a quick opening or closing valve must operate such device from a tank, cistern, sump or other facility which may be served by but not directly connected with the utility's distribution mains or service pipes. This restriction does not apply to quick closing or opening valves used in connection with normal household appliances such as automatic dishwashers or washing machines.

D. Reclaimed Water Service

1. Construction

a. Material

- (1) All on-site reclaimed water facilities must be readily distinguishable from all on-site potable water facilities.
- (2) Reclaimed water pipes may be of PVC dyed purple (Pantone 512) with continuous lettering "CAUTION RECLAIMED WATER" applied at the factory. No other identification is required.
- (3) All reclaimed water pipes except as specified in item 2 above, must be identified along their entire length with warning tape. The warning tape must be yellow in color, a minimum of 2 inches wide with the words "RECLAIMED WATER" printed in 1" high black letters. The lettering should be repeated continuously the full length of the tape.
- (4) All piping from the reclaimed water system shall be installed to maintain ten (10') feet minimum horizontal separation from all potable water piping. Where reclaimed and potable water piping cross, the reclaimed water piping shall be installed below the potable water piping in a PVC class 200 pipe sleeve which extends a minimum of five (5') feet on either side of the potable water piping. Additionally, a minimum vertical clearance of six (6") inches shall be provided.
- (5) All above ground reclaimed water facilities (risers, valves, controllers, etc.) must have identifying labels for reclaimed water.

b. Valve Marking

Hose bibs are not permitted on the reclaimed water system.

c. Drawings Required

Applicants for reclaimed water service shall submit system plans for review and approval by the utility.

d. Location

- (1) Reclaimed water facilities shall not be installed inside any structures, indoor atriums or planters.
- (2) Drinking fountains and picnic tables shall be located to minimize exposure to direct and windblown reclaimed water spray.

(N)

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D.1.d. Location (continued)

(N)

(3) Reclaimed water shall not be sprayed outside the design area shown in the plans submitted in Section D.1.c. above.

(4) Reclaimed water shall not be used to irrigate any enclosed private rear yard or patio.

2. Cross Connection Control Requirements

a. Cross connection between the potable water system and the reclaimed water system is prohibited.

b. Where reclaimed water and potable water service exist on the same site the potable water system shall be protected with an approved backflow prevention assembly (reduced pressure principle assembly RP). Applicant shall pay all costs for the purchase, installation, and maintenance of backflow preventative devices. Final determination of the type of protection will be the responsibility of the water utility.

c. Backflow prevention devices shall not be installed on reclaimed water systems and must be removed from potable irrigation systems which are converted to reclaimed water.

d. Backflow prevention devices shall be tested annually or more frequently if determined to be necessary by the utility and repaired or replaced as necessary at the expense of the customer.

3. Operational Requirements

a. The customer must appoint a Site Supervisor and provide name, title and 24-hour phone number(s) of designated Site Supervisor to the water utility. Alternate site supervisors may be appointed.

b. The Site Supervisor shall:

(1) Ensure proper installation, operation, and maintenance of the recycled water system and all backflow prevention devices on the potable water system.

(2) Practice diligent surveillance of the system to ensure compliance with water utility rules, the State Board's Division of Drinking Water regulations, and any local governmental requirements. Disregard for requirements could result in termination of service until the specified corrections are made.

(3) Educate occupants, residents, and on-site personnel on a continuous basis to insure that reclaimed water is used in compliance with the State Board's Division of Drinking Water and any local governmental requirements.

(4) Post warnings that reclaimed water shall not be used for human consumption or in the preparation of food.

(5) Maintain the reclaimed water system to ensure its integrity and minimize failures. Broken valves, pipes, and sprinklers shall be repaired in a timely manner.

(6) Receive appropriate training to assure proper operation of recycling facilities, operations personnel protection, and that the reuse site meets all applicable requirements.

(N)

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4. Usage Guidelines

(N)

- a. Avoid direct spray and minimize overspray on drinking fountains in areas irrigated with reclaimed water.
- b. Adjust sprinklers to minimize reclaimed water spray on picnic tables, benches, decks, patios, sidewalks and roads.
- c. Irrigate in a manner which will minimize ponding, and runoff. If necessary, use the "repeat" function of the irrigation controller to apply the required amount of water in several short duration cycles.

5. Irrigation Time Restrictions

- a. Irrigation in areas of human contact, parks, playgrounds, and school yards shall be during the late night/early morning hours (10:00 p.m. – 6:00 a.m.). Slopes adjacent to pedestrian walkways are considered areas where there is human contact.
- b. No time restrictions apply to irrigation areas where there is minimal human contact.

6. Reporting and Inspections

- a. The water utility shall be notified 48 hours prior to the start of construction or pipeline installation in order to schedule inspection.
- b. The water utility shall be notified immediately of a change in Site Supervisor.
- c. All significant changes for the reclaimed water system shall be submitted to the water utility for pre-approval.
- d. As-built plans for the reclaimed water system including subsequent modifications shall be submitted to the water utility for approval.

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Jim Hansen
Navajo Mutual Water Company
P. O. Box 392
Apple Valley, CA 92307
jhansenjr@email.com

Kendall MacVey
Best Best & Krieger LLP
PO Box 1028
Riverside, CA 92502
kendall.macvey@bbklaw.com

Town of Apple Valley
Attention: Frank Robinson
14955 Dale Evans Parkway
Apple Valley, CA 92307
dcron@applevalley.org

Joshua Nelson
Best Best & Krieger LLP
500 Capitol Mall, Suite 1700
Sacramento, CA 95818
joshua.nelson@bbklaw.com

Manuel Benitez
County of San Bernardino
Special Districts Department
Water and Sanitation Division
12402 Industrial Blvd.
Bldg. D, Ste. 6
Victorville, CA 92392

California Public Utilities Commission
Attention: Ting-Pong Yuen
ORA Water
505 Van Ness Avenue
San Francisco, CA 94102
tpy@cpuc.ca.gov

Samuel Martinez
Executive Officer
Local Agency Formation Commission
1170 West 3rd Street, Unit 150
San Bernardino, CA 92415-0490
lafco@lafco.sbcounty.gov

Perry Dahlstrom
District Manager
Mountain Desert
Golden State Water Company
13608 Hitt Road
Apple Valley, CA 92308
Perry.Dahlstrom@gswater.com

Ronald Moore
Senior Regulatory Analyst
Golden State Water Company
630 East Foothill Blvd
San Dimas, California 91773
rkmoore@gswater.com