

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Application of California-American Water Company (U210W) for Approval of the Monterey Peninsula Water Supply Project and Authorization to Recover All Present and Future Costs in Rates.

A.12-04-019
(Filed April 23, 2012)

**CALIFORNIA-AMERICAN WATER COMPANY
CONTINGENCY PLAN COMPLIANCE FILING**

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I. INTRODUCTION

Pursuant to the *Administrative Law Judge's Directives to Applicant and Ruling on Motions Concerning Scope, Schedule And Official Notice*¹ and the *Administrative Law Judge's Ruling Concerning Contingency Plans*² (referred to as the "Ruling"), California-American Water Company ("California American Water") hereby submits this compliance filing providing contingency plans and information relating to possible barriers enumerated in the aforementioned rulings.

A. Procedural Background

During a workshop held on July 26 and July 27, 2012, California American Water and the intervening parties identified possible barriers to the successful and timely completion of the proposed project. On August 30, 2012, the assigned administrative law judge ("ALJ") directed California American Water to develop contingency plans addressing the following possible barriers: 1) brackish source water; 2) facility siting; 3) plant failure or periodic interruption; 4)

¹ *Administrative Law Judge's Directives To Applicant And Ruling On Motions Concerning Scope, Schedule And Official Notice*, filed Aug. 29, 2012, Ordering Paragraph No. 5.

² *Administrative Law Judge's Ruling Concerning Contingency Plans*, filed Aug. 30, 2012.

outfall use for brine disposal; 5) reduction in demand forecast; and 6) project delay.³

Accordingly, California American Water submits this compliance filing detailing contingency plans and other information, as directed in the Ruling, relating to these six issues.

II. CONTINGENCY PLANS TO POSSIBLE BARRIERS TO PROJECT COMPLETION

As an initial matter, California American Water stresses that the contingency plans identified herein are just that, contingencies. California American Water believes that it has selected the appropriate project in its application and is concerned that the intervening parties will use these contingency plans as a way to slow down the overall project. Time is of the essence and the California Public Utilities Commission (“Commission”) should avoid any unnecessary delays to the proposed project’s completion. California American Water must address the long-term water supply issues in its Monterey County District and replace a significant portion of the existing water supply from the Carmel River, as directed by the California State Water Resources Control Board (“SWRCB”). In reviewing these contingency plans, the Commission and parties to the proceeding should keep in mind that these contingencies are intended to replace the proposed project’s components only if the original components are not feasible. As discussed below, as with any project, each alternative is subject to various contingencies. California American Water went to great lengths to evaluate and select the most appropriate, feasible, and cost-effective project to address the needs of its Monterey County District.

A. Brackish Source Water

The Commission directed California American Water to discuss alternative sources if the

³ *Administrative Law Judge’s Ruling Concerning Contingency Plans*, filed Aug. 30, 2012, Ordering Paragraph No. 1.

Salinas Valley Aquifer became unavailable in whole or in part. Specifically, the Commission asked California American Water to discuss if there is an “availability of alternative well or intake locations in event slant wells fail or do not reliably supply sufficient rate or volumes . . .”⁴ Based on continued work on the slant test well permitting and preliminary design, California American Water plans to install screens in the shallower Sand Dunes Aquifer. Thus, the decision to install shallower wells is currently incorporated into the project.

As requested, California American Water evaluated possible contingency plans and determined that the following contingencies are the most feasible action items in the event that a new brackish water source is needed: 1) install a shallow slant well at the Cemex property that extracts from the Sand Dunes Aquifer; or 2) install a Ranney Well⁵ at the Cemex property that extracts from the Sand Dunes Aquifer; or 3) install an open ocean intake at the Cemex property; or 4) install the slant well intake system at Portrero Road with feedwater pumped to the proposed desalination plant at the Charles Benson Road site, and brine discharge to Monterey Regional Water Pollution Control Agency (“MRWPCA”) outfall; or 5) install direct intake of ocean water and pump feedwater to the proposed desalination plant at the Charles Benson Road site, and brine discharge to MRWPCA outfall. The fifth option can be accomplished by either:

- a. Diverting water from Moss Landing Harbor by:
 - i. Using existing Marine Refractories intake infrastructure with modifications;
or
 - ii. Tapping into the Moss Landing Power Plant’s (“MLPP”) spent cooling water system; or

⁴ *Id.*

⁵ A Ranney Well is comprised of a vertical caisson that extends vertically down 50 to 100 feet. From this caisson, horizontal wells would be launched radially outward towards the ocean. The maximum length per horizontal well is approximately 200 to 400 feet.

- iii. Tapping into MLPP's cooling water intake system; or
- b. Diverting water from the ocean by:
 - i. Converting existing Marine Refractories outfall into an open ocean intake; or
 - ii. Constructing a new ocean intake at or near Moss Landing.

The Technical Memorandum prepared by RBF Consulting, attached hereto as Attachment 1, provides a more detailed description of these five contingencies. Due to concerns about feasibility, cost and other variables associated with these contingencies, the Commission should not simply substitute these contingencies for the proposed project's brackish water source component unless the situation calls for it.

B. Facilities Siting

As directed in the Ruling, California American Water has considered the availability of alternative sites for a desalination plant in the event that the current site for the proposed desalination plant had to be relocated.⁶

Since filing its application, California American Water has been diligently working to secure property for the desalination plant and the intake facilities. As of the date of this filing, California American Water is in active negotiations on the proposed desalination plant at the Charles Benson Road site and on the intake facilities site. Furthermore, California American Water is currently in discussions with several other property owners discussing potential pipeline easements to and from the above-referenced facilities. Based on these items, California American Water is comfortable as to the progress in securing land and believes that the currently proposed site is adequate.

While California American Water is confident that it will secure the needed properties for

⁶ See *Administrative Law Judge's Ruling Concerning Contingency Plans*, filed Aug. 30, 2012, Ordering Paragraph No. 1.

the proposed project, California American Water has investigated alternatives to the currently proposed desalination plant at the Charles Benson Road site in the unlikely event that both the slant well intake at the Cemex property and the use of the existing or modified MRWPCA outfall are not possible. In that event, certain components or parts of the following five intake and/or outfall alternatives may be considered as options: 1) located at the People's Project at Marine Refractories; or 2) located at the Deep Water Desalination Project; or 3) EIR Moss Landing Desalination Plant ("EIR Desalination Plant") alternative initially considered in A.04-09-019; or 4) Portrero Road slant well intakes, EIR Desalination Plant site, with brine discharge to the MLPP outfall the Marine Refractories outfall, or a new ocean outfall; or 5) the Marine Refractories intake, EIR Desalination Plant site, with brine discharge to either the MLPP outfall or a new ocean outfall.

California American Water again stresses that as with any project, each alternative is subject to various contingencies and that none of these components should be substituted for the proposed project's desalination plant components unless the situation calls for it. For each of these components, there may be additional costs associated with pipeline and other facilities. In a report presented to the public in October of 2011, California American Water evaluated 11 alternatives; including a desalination plant located at Moss Landing. It concluded that relocating the desalination plant from the currently proposed site would result in higher costs and schedule delays. California American Water includes, attached hereto as Attachment 1, a Technical Memorandum prepared by RBF Consulting which provides a more detailed description of the previously described contingencies.

C. Plant Failure or Periodic Interruption

To the extent the proposed desalination plant at the Charles Benson Road site is unable to

operate at the required capacity for a short or long-term period, California American Water has considered planning for the availability of potable water “from alternative sources and/or plan for reducing deliveries to customers”⁷

California American Water has a diverse source of supply comprised of water from the following sources:

- Legal water rights on the Carmel River in the amount of 3,376 acre feet annually (“AFA”);
- Legal water rights on the Carmel River used for Aquifer Storage and Recovery (“ASR”) in the amount of 1,920 AFA Carmel River;
- Legal water rights in the Seaside Groundwater Basin in the ultimate adjudicated amount of 1,474 AFA; and
- Water from the Sand City Desalination Plant in the ultimate amount of 94 AFA.

In addition to these currently available sources, California American Water is also working on obtaining additional Table 13 water rights on the Carmel River. This additional source could yield approximately 500 to 600 AFA.

While the Monterey County District is facing future water supply issues, California American Water’s existing assets in the Seaside Basin and Carmel River are sufficient to meet all customer demands, including maximum day demands and maximum monthly demands in the near-term. Neither of these two sources are constrained for daily or monthly flows, meaning that if the proposed desalination plant at the Charles Benson Road site were down for a couple of days or a month, these existing assets will be able to meet customer demands just as they are currently doing.

⁷ *Id.*

If the proposed desalination plant at the Charles Benson Road site were to be offline for several months (e.g., three months or more) at the beginning of the water year⁸, then the existing facilities would also be able to meet customer demands during this outage. However, curtailment – using existing rules and tariffs – may likely be required to make it through the higher demand summer months later in the water year. The proposed desalination plant at the Charles Benson Road site alone would not be able to meet maximum month demands without the use of the existing Carmel River and Seaside Basin assets, which would likely be restricted as California American Water would have used these assets earlier in the year.

If the proposed desalination plant at the Charles Benson Road site were to be down for several months (e.g., three months or more) at the end of the water year, then curtailment would also likely be needed to stay within any remaining Carmel River and Seaside Basin rights that have not been used to make it through the higher demand summer months.

It is challenging to predict, in the short-term, the ultimate performance of ASR. If – in the long-term – the ASR water supply increases due to successive wet years in the first five years of operating the proposed desalination plant, then curtailment as described above may not be needed due to the presence of 1,920 AFA of ASR water and 500 to 600 AFA of Table 13 water. This amounts to almost two months of summer demands.

In addition to California American Water’s diverse water supply, the proposed desalination plant at the Charles Benson Road site will also be designed with redundant units and processes to ensure that it is able to provide 9,006 AFA at least 95% of the time. Further, California American Water has learned a great deal about desalination plants in operating the Sand City Desalination Plant. It intends to use this knowledge in order to focus on those less reliable components and build in redundancies in the most critical areas for the proposed

⁸ Water year runs from October – September.

desalination plant at the Charles Benson Road site.

In summary, due to the diversity of supply and inherent redundancy planned for the proposed desalination plant at the Charles Benson Road site, California American Water believes that it is amply covered to handle plant failure and periodic interruptions.

D. Outfall Use for Brine Disposal

While it is confident that it will secure the necessary facilities for the brine disposal proposed in its application, California American Water, as directed by the Commission,⁹ has outlined three contingencies in the event that the discharge of brine from the proposed desalination plant at the Charles Benson Road site to the unmodified MRWPCA outfall is not possible. California American Water will either: 1) modify outfall by inserting separate pipe for brine discharge, and adding dedicated brine diffusers at the end of the outfall; or 2) install a new outfall at the Cemex property; or 3) construct a brine pipeline to Moss Landing and connect it to either the MLPP outfall or the existing Marine Refractories outfall, with modifications to meet the State's Ocean Plan.

Please reference the Technical Memorandum, attached hereto as Attachment 1, prepared by RBF Consulting for a more detailed description of the previously described contingencies. California American Water again stresses that as with any project, each alternative is subject to various contingencies and that it would not be prudent to substitute the proposed project's brine outfall component with any of the proposed alternatives unless absolutely necessary.

E. Reduction in Demand Forecasts

In the Ruling, the Commission asked California American Water to discuss the impact on the project design, construction, and operation in the event that “[w]ater demand lessens to the

⁹ See *Administrative Law Judge's Ruling Concerning Contingency Plans*, filed Aug. 30, 2012, Ordering Paragraph No. 1.

point where there would be significant excess capacity in the proposed project.”¹⁰ At the workshops, California American Water heard the comment that as rates continues to rise, customers will use less and less water, causing rates to further increase resulting in a “downward spiral” in which demand will continue to drop.

However, as the following illustration demonstrates, a “downward spiral” is not likely even if customers reduce consumption. Using 2011 customer demands, approximately 94% of all consumption occurred in the following four customer classes: residential; multi-family residential; commercial; and public authority. The combined use of residential and multi-family residential accounted for approximately 65% of the usage with commercial and public authority accounting for approximately 25% and 4%, respectively.

Within the residential class the average customer or connection uses approximately 60 units per month with each unit being 75 gallons. Assuming that there are 2.5 to 3.1¹¹ people per connection, this would yield a per capita consumption of approximately between 50 and 60 gallons per day per capita. It is well established that 35 gallons per day per capita is the minimum amount of water needed to assure the health and sanitary welfare of all customers. Thus, for California American Water’s Monterey County District – assuming that the average customer reduces usage to 35 gallons per day per capita from 55 gallons per day per capita – we would expect to only see a reduction in residential demand of around 35%, or approximately 2,300 AFA. A 20% drop in commercial demands due to rate increases would yield an additional 550 AFA. This totals, 2,850 AFA or 31% of the proposed desalination plant’s capacity. Reducing the operational level of the proposed desalination plant at the Charles Benson Road site by approximately 31% would be good in terms of plant reliability and lower operating costs

¹⁰ *Id.*

¹¹ <http://quickfacts.census.gov/qfd/states/06/06053.html>

and would be more in line with how a typical water plant operates.

As part of its testimony in this proceeding, California American Water indicated that the proposed desalination plant has been sized to assist in meeting maximum month demands.¹² Even if customers use less water due to the increased cost of the water, there is no guarantee that the maximum demand month will reduce in an equal amount. Thus, California American Water believes that the proposed desalination plant at the Charles Benson Road site must stay at least at 9.0 MGD to meet maximum month demands. California American Water also indicates in its testimony that there is an estimated demand for lots of records of approximately 1,181 AFA and based on planning work completed within the county.¹³ Additionally, the General Plan Build Out indicates an ultimate demand of an additional 3,364 AFA for a total of 4,545 AFA.¹⁴ Further, if demands do drop, the proposed desalination plant could be used to serve these demands.

In addition to these potential future demands, California American Water will need to pay back the Seaside Basin approximately 18,000 to 20,000 AF after the proposed desalination plant at the Charles Benson Road site comes on-line. California American Water will also need to provide the Pebble Beach Company 380 AFA to account for improvements that it made at the Carmel Area Wastewater Treatment Plant to replace potable golf course irrigation water with recycled water.

F. Project Delay

The Ruling directed California American Water to discuss plans in the event that the proposed project is delayed beyond the December 2016 deadline established in the SWRCB's

¹² See Direct Testimony of Richard C. Svindland, dated April 23, 2012, pp. 21-23.

¹³ See *id.* at 37.

¹⁴ See *id.* at 37-38.

Cease and Desist Order.¹⁵ California American Water’s available alternatives in the case of a delay are extremely limited. If California American Water cannot meet the SWRCB’s deadline, the Monterey County District will be subject to emergency rationing based on an available supply calculation that considers the annual amounts legally available from both the Carmel River and Seaside Basin (including Laguna Seca), consistent with the Monterey Peninsula Water Management District’s (“MPWMD”) Rule 160 and California American Water’s current Tariff Rule 14.1.1, adopted by the Commission in D.12-06-016. For health and safety reasons, residential customers – as well as nonresidential customers such as hospitals, etc. – require a minimum of 35 gallons per person per day. Once this minimum amount is assigned for those customers, any remaining capacity available during emergency rationing would be divided between commercial/industrial customers.

As outlined in MPWMD Rule 160, Stages 1 through 7 would apply to water users in the Monterey County District that derives its supply from the Monterey Peninsula Water Resource System for as long as California American Water is subject to the water production limitations.¹⁶ The requirements and restrictions of stages 1 through 7 are outlined in MPWMD Rules 160-175 (MPWMD Regulation XV). Each stage after Stage 1 is initiated once a trigger is reached.

¹⁵ See *Administrative Law Judge’s Ruling Concerning Contingency Plans*, filed Aug. 30, 2012, Ordering Paragraph No. 1.

¹⁶ See MPWMD Rule 160 (D). Stage 4 through Stage 7 responds to limitations in supply caused by inadequate system inflow and storage, regulatory restrictions, or emergency situations that require water reductions. Specifically, Stage 7 shall be enforced in any Water Distribution System, including any California American Water subsystem, when that system is required to comply with a final Cease and Desist Order by the State Water Resources Control Board, the Seaside Watermaster or any other final court order that reduces available supplies by: (a) Fifty percent (50%) or more from pre-1995 production (16,806 AFA) in the Main California American Water System. This shall apply to any Water Distribution System that relies, in whole or in part, on production or production offsets from the Main California American Water System, Or (b) Fifty percent (50%) or more from base year production (the term “base year” shall refer to the Water Year immediately preceding any triggering order) for any Water Distribution System that does not rely to any extent upon production or production offsets from the Main California American Water System.

Please find attached, hereto as Attachment 2, MPWMD Rules 161-167 for a more detailed description of each stage's trigger.

III. CONCLUSION

Consistent with the Ruling, California American Water provides the Commission with reasonably detailed contingency plans for the proposed project. As previously discussed, California American Water stresses that these are simply contingency plans and believes that it has selected the appropriate project as part of its application. The Commission should not allow the intervening parties to use these contingency plans as a way to delay approval of the proposed project. Time is of the essence and California American Water asks the Commission to avoid any unnecessary delays to the proposed project's completion.

November 1, 2012

Respectfully submitted,

By: /s/ Sarah E. Leeper

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