

WATER/RSK/JPT/SHI/jlj

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

**DIVISION OF WATER AND AUDITS
Water and Sewer Advisory Branch**

**RESOLUTION NO. W-4679
April 10, 2008**

R E S O L U T I O N

(RES. W-4679), DEL ORO WATER COMPANY - STIRLING BLUFFS DISTRICT. ORDER AUTHORIZING A GENERAL RATE INCREASE TO PRODUCE ADDITIONAL ANNUAL REVENUE OF \$19,614 OR 18.5% IN TEST YEAR 2007.

SUMMARY

By draft Advice Letter filed on January 22, 2007, Del Oro Water Company (Del Oro), a Class B water utility, requested a general rate increase for its Stirling Bluffs district for test year 2007. This resolution authorizes an increase of \$19,614, or 18.5%, relative to revenue at present rates, for a 10.75% return on rate base for test year 2007.

BACKGROUND

By draft Advice Letter filed on January 22, 2007, Del Oro Water Company - Stirling Bluffs District (Stirling) requested authority under Section 454 of the Public Utilities Code to increase revenues by 12.77% or \$14,032, for an 11.5% return on rate base for test year (TY) 2007. The purpose of the rate increase is to recover increased operating expenses and to provide an adequate rate of return on plant investment. Stirling's present rates became effective on May 11, 2007 per Res.W-4644, which authorized an interim rate increase of 2.4%. Stirling was last authorized a general rate increase in 2004 per Res.W-4471.

Located approximately 30 miles northeast of Chico, Stirling's service territory includes Stirling City and adjoining areas in Butte County. As of February 15, 2008, Stirling had 160 active metered service connections and no flat rate connections, serving approximately 400 residents.

Stirling derives its water supply from the Hendricks Canal, an untreated surface water source owned by the Pacific Gas & Electric Corporation (PG&E). Surface water at the Hendricks Canal intake is elevated 500 feet by a pump to a treatment facility where the water undergoes processing to meet state and federal safe drinking water standards. The processed water is stored in a 168,000-gallon wooden storage tank and is then

supplied to Stirling's customers by gravity. Stirling's annual consumption averages approximately 80 acre-feet or 26,000,000 gallons, giving the storage tank slightly over two days of potable water supply in case of supply or treatment interruptions. The remaining untreated water in the canal that was not diverted by the intake pump flows downstream, where a portion of it ends up as inter-district sales by Stirling to Del Oro's Paradise Pines, Lime Saddle, and Magalia districts, as explained below.

By agreement with PG&E, Stirling is allowed to withdraw up to 365 acre-feet from the Hendricks canal for consumption within the district. The agreement permits Stirling to sell any remaining untreated water from the 365 acre-feet allotment to other Del Oro districts, with the stipulation that Stirling will only incur purchased water cost for water actually sold to the other districts but not for water consumed within Stirling.

NOTICE, PROTESTS, AND PUBLIC MEETING

A notice of the proposed rate increase was mailed by Stirling to each customer on May 1, 2007. The notice was also published in the May 5, 2007 edition of a local newspaper, the Paradise Post. The Division of Water and Audits (Division) received letters of protest against the proposed increase from two customers.

The Division's staff and Del Oro representatives held a public meeting on June 6, 2007 at the Community Hall in Stirling City. Eighteen customers attended the meeting. The Division's staff explained to the participants Commission rate-setting procedures, and Del Oro's Director of Community Relations explained the justifications behind the proposed rate increase. The rest of the meeting consisted of comments and questions by the ratepayers. The comments were mostly acrimonious in nature and stemmed from the ratepayers' strong dissatisfaction over what they perceived to be frequent and inequitable surcharges arising from the balancing account on the inter-district water sales.

DISCUSSION

This resolution authorizes an increase of \$19,614, or 18.5%, in revenue for a 10.75% return on rate base for test year 2007. Appendix C shows the rate impact for a customer with a 5/8 x 3/4-inch meter at different usage levels.

The Division performed an independent analysis of Stirling's summary of earnings. Appendix A shows Stirling's and the Division's estimates of the Summary of Earnings for test year 2007.

Inter-district Water Sales

Revenues from the inter-district sales of untreated water from the Hendricks Canal have in recent years amounted to over 60% of Stirling's gross revenues, and in the last three years contributed an average of \$12,990 per year to Stirling's net revenues before tax. Furthermore, as the water in the inter-district sales is always sold at a markup over cost, net proceeds from the sales always help to offset Stirling's expenses and keep Stirling's rates lower than they would have been otherwise. This point was widely misunderstood by the customers during the public participation meeting.

The unit cost at which Stirling charges other districts for the inter-district sales consists of: a variable water cost for the water purchased from PG&E, a wheeling cost paid to Vandergrift for the water's traversal over the Vandergrift property, and a fixed markup over these two costs that Stirling retains as net profit. Stirling incurs no pumping expense, volume-related expense, or other operational expenses on this water as it flows, assisted only by gravity, at the Hendricks Canal diversion point to the other districts. Only the PG&E and Vandergrift cost components are recorded in the purchased water cost item in the summary of earnings statement. Since Stirling derives its revenues entirely from the metered sales to its customers and the inter-district sales, any increase in Stirling's total required revenues not correspondingly reflected in the inter-district sales will have to be shifted in equal amounts to Stirling's customers. The net effect of this revenue shifting is that any rate increase facing Stirling's customers will be greatly magnified by the fact that the inter-district sales account for the bulk of Stirling's revenues on both the gross and the net basis. In other words, a relatively small deficiency on a large number (the inter-district sales) will have to be made up by a large percentage increase on a small number (the intra-district sales to Stirling customers), resulting in a greatly magnified increase in rates to the Stirling customers.

In the original general rate case filing workpapers submitted to the Division, Stirling employed the same markup used in the 2004 general rate case, in effect freezing the net revenues derived from the inter-district sales. As originally presented to the Division, the filing workpapers requested a 12.8% increase in total gross revenues, but the magnification effect to Stirling customers would result in a rate increase facing an average customer to approximately 40%. At the revenue levels recommended by the Division, if the unit cost was kept constant, Stirling would see an overall increase of 14% in gross revenues, but the magnification effect would translate the increase facing an average customer to an unacceptable 58% increase in rates. Such a magnitude of increase would effectively render infeasible any consideration of low-income assistance to be funded by a surcharge on the non-low-income customers.

The obvious solution to this magnification effect is to increase the markup in the unit cost such that the total increase in unit cost is comparable in percentage terms to the rate increase facing Stirling's customers. This is precisely the way the numbers in the last

column in the Summary of Earnings page (Appendix A) are presented. In Appendix A, at the Division's recommended amounts:

1. The markup for the inter-district sales will increase from \$79.4 per acre-foot to \$132.01 per acre-foot, for a 66.3% increase;
2. The total unit cost for inter-district sales will, on average, increase from \$297.84 to \$351.45 per acre-foot, for an 18% increase. The actual total unit cost will remain highly variable due to the variable nature of the PG&E water cost component, but the markup will be fixed at \$132.01.
3. The estimated annual net profit the inter-district water sales generate will increase from \$13,973 to \$26,106, for an 87% increase;
4. Stirling will see a 18.5% increase in total gross revenues; and
5. The total monthly bill for an average customer will rise by 19% prior to the introduction of any surcharges necessary to fund a low-income assistance program.

Balancing Account Treatment of Inter-district Water Sales

In the general rate case of 2004, the Commission authorized Stirling to establish a full-cost balancing account on the inter-district water sales. The balancing account and the resulting surcharges were frequently misunderstood by the customers and caused much controversy during the public meeting. Since its inception in 2004, the balancing account has resulted in two surcharges and no instances of surcredit. The balancing account treatment, when used in conjunction with an earnings test, has allowed Stirling to keep the combined collected revenues from fluctuating wildly from year to year due to fluctuations in the inter-district water sales. The surcharges are merely a reflection of the fact that the last general rate case in 2004 turned out to have overestimated profits from the inter-district sales, resulting in customer's water rates established in the 2004 general rate case being artificially lower than they should have been. The balancing account was created with the premise that either an overestimation or an underestimation could have occurred and authorized a mechanism to retroactively correct any overestimation of profits in the inter-district sales through surcharges without altering the underlying authorized rate of return. The opposite scenario of an underestimation in profits would have resulted in customer rates being artificially higher than they should have been, resulting in refunds to the customers through surcredits. The balancing account, therefore, ensures that Stirling will neither over-collect nor under-collect in relation to the authorized revenues and, when used in conjunction with an earnings test, also ensures that Stirling's realized rate of return conforms to the authorized rate of return. In summary, the balancing account treatment of inter-district sales has no long-term net effect on the rates that Stirling customers face. It furthermore serves to reduce fluctuations in Stirling's revenue stream. To the extent that the balancing account treatment results in a more stable revenue stream that

enhances the health and stability of the Del Oro Water Company, it also confers benefit on Stirling ratepayers.

Low-Income Assistance Program

Public Utilities Code § 739.8 directs the Commission to consider programs to provide rate relief for low-income ratepayers. The Water Action Plan adopted on December 15, 2005, further signaled the Commission's intention to make low-income rate assistance a primary rate design objective. As the Commission has no universal requirement currently in effect to compel water utilities to offer low-income assistance, its implementation is considered on a case-by-case basis.

In determining the feasibility of a low-income assistance program for Stirling, the Division took into account the following factors:

1. Percentage of all Stirling customers projected to participate in the program;
2. Size of discount offered to the low-income assistance program participants;
3. Projected rate impact on the non-participating customers due to implementation of the program; and
4. Funding mechanism for the program.

In designing a low-income assistance program, care will be needed to ensure that any discount offered to low income ratepayers does not result in a disincentive for them to conserve water by driving down the quantity charge. One proposal is to offer the discount only on the service charge, while keeping the quantity rate intact (See **Assessment of Water Utility Low-Income Assistance Programs** published by the Division in October, 2007). The surcharge would be commensurate with meter size, calculated using the same meter ratios and meter equivalents method described in Rate Design for Water and Sewer System Utilities Including Master Metered Facilities (Standard Practice U-7-W) that was used to derive the service charge. As a preliminary feasibility test for a low-income assistance program, the Division chooses a program that offers a 30% discount on the service charge to low-income customers.

In line with currently authorized water utility low-income assistance programs, the Division adopted the income eligibility guidelines published annually by the Energy Division applicable to the CARE program (California Alternative Rate for Energy) available to energy customers. The income guidelines used in the CARE programs are based on 200% of the federal poverty income guidelines at different household sizes.

Using household income data from the 2006 U.S. Census American Community Survey, the Division estimates that approximately 41% of the households in Butte County qualify for low income assistance using the 200% poverty level income guidelines

established for CARE. Statewide participation rate of eligible low income energy customers in the CARE program has hovered around 72%. Assuming the same 72% participation rate by 41% of the total customers who are eligible, it is estimated that approximately 30% of the total customers would participate. At the rates and discounts recommended by the Division, this would produce an average monthly discount of \$3.66 per participating customer and a monthly surcharge of \$1.53 per non-participating customer, producing an overall billing differential of \$5.19 or an effective discount of 21% that the low income customers will receive off the total monthly bill. The Division deems this estimated surcharge of \$1.53 an acceptable burden on the non-participating customers, as it compares favorably with low-income program surcharges at other water utilities regulated by the Commission.

The Division therefore recommends that Stirling be ordered to file a Tier-3 advice letter within 60 days of the effective date of this resolution to propose a low-income assistance program to offer a discount to its low-income customers. The precise details of an actual program may deviate from the one the Division chose as a feasibility test. The Division will review proposals to be submitted by Stirling to ensure that the objective of water conservation is preserved. Stirling should also propose a memorandum account to track expenses incurred in the provision of the rate assistance program as well as the amount of discounts provided.

Rate of Return on Rate Base

By July 1, 2007, Del Oro Water Company had retired the majority of its long-term debts, and, in so doing, Del Oro's debt/equity mix was changed substantially from 44%/56% to 3%/97%. This had a corresponding effect on the recommended rate of return, since it is generally calculated as the weighted average of returns on Del Oro's outstanding long term debts and the market return on equity for companies of comparable size and risk to Del Oro's. Using a purely weighted average approach, the rate of return would jump from 9.40% (assuming the old debt/equity ratio) to 11.01% (using the new debt/equity ratio). The Division instead recommends that a 10.75% rate of return be adopted in an effort to balance ratepayer interest and to recognize Del Oro's efforts to purchase troubled small water utilities.

Purchased Power Expense Balancing Account

A full-cost balancing account for Stirling's purchased power expense was established in the 2004 general rate case. The Division recommends that Stirling be ordered to resolve balances in this account at the same time that Stirling files advice letters to resolve balances in the inter-district water sales balancing account, since the latter account has historically incurred bigger balances and has triggered more frequent filings than the former.

Service Charge

Stirling currently expends approximately 50% of its revenues on fixed cost items. The Division's Standard Practice U-7-W, recommends that a Class B water utility should recover up to 50% of the fixed costs through its service charge. Using this 50% recovery ratio, the Division then used the meter ratios and meter equivalents method described in Standard Practice U-7-W to derive the service charge for different meter sizes.

Quantity Rate

To derive the quantity rate, the service charge revenues are first subtracted from the total revenues. The resulting amount represents the amount to be recovered from the quantity charge. The quantity rate is then obtained by dividing this number by the amount of water projected to be sold to Stirling customers in test year 2007.

Water Conservation

Through the Water Action Plan adopted on December 15, 2005, the Commission signaled its intention to encourage utilities to adopt aggressive water conservation measures. Del Oro's conservation program consists largely of an educational page on its website showing the water loss rates of leaking faucets and a table showing how modifications in the manner of usage during daily activities such as showering, toilet flushing, tooth brushing, and outdoor watering, etc. can have a profound impact on water consumption. While the Division finds the information on the webpage valuable, this educational effort is only effective to the extent that the information on the webpage can be disseminated broadly to water users. Although an increasing number of customers have begun to utilize Del Oro's website to pay their bills online, the overall customer exposure to the conservation information webpage is questionable. The Division concludes that the effectiveness of this education effort can be enhanced at reasonable cost by the use of regular bill inserts to convey the same information. However, as Del Oro currently uses a postcard billing format, any requirement for Del Oro to send out bill inserts would force it to incur a material expense by converting to an envelop format. The Division, therefore, makes the following recommendations:

1. Stirling should be ordered to modify the postcard bill to include conservation information; and
2. Stirling should be ordered to include a conservation information insert whenever Stirling mails out an annual Consumer Confidence Report.

Lastly, at the rates recommended by the Division, all customers will see a 4% increase in the service charge, while the quantity charge rate will increase by 43%. The resulting rate structure (Appendix B) should send a strong economic signal to Stirling customers to conserve water (Appendix C).

COMPLIANCE

Stirling is currently providing water service to its customers according to the standards of General Order 103. Stirling has regularly filed annual reports with the Division. There are no outstanding Commission orders requiring system improvements.

COMMENTS

Public Utilities Code Section 311(g) (1) provides that this resolution must be served on all parties and subject to at least 30 days public review and comment prior to a vote of the Commission. Section 311(g) (2) provides that this 30-day period may be reduced or waived upon the stipulation of all parties in the proceeding.

The 30-day comment period for the draft of this resolution was neither waived nor reduced. Accordingly, the draft resolution was mailed to parties for comments.

No comments were received.

FINDINGS

1. The Division's recommended summary of earnings (Appendix A) is reasonable and should be adopted.
2. The rates recommended by the Division (Appendix B) are reasonable and should be adopted.
3. The quantities (Appendix D) used to develop Division's recommendations are reasonable and should be adopted.
4. The rate increase authorized herein is justified and the resulting rates are just and reasonable.
5. The amount of increase authorized herein is justified and the resulting rates are just and reasonable.
6. Within 60 days from the effective date of this resolution, Del Oro Water Company - Stirling Bluffs district should be required to file an advice letter to establish a low-income assistance program that offers a discount to qualified low-income customers. The eligibility criteria will be modeled after the CARE programs available to energy customers.
7. Del Oro Water Company - Stirling Bluffs district should be required to resolve balances in the purchased power balancing account at the same time that it files advice letters to resolve balances in the inter-district water sales balancing account.
8. Del Oro Water Company - Stirling Bluffs district should be required to modify the postcard billing statements to include, where practicable, information on water conservation. Del Oro Water Company - Stirling Bluffs district should also be

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Appendix A
Del Oro Water Company
Stirling Bluffs District

Summary of Earnings
Test Year 2007

<u>Account</u>	<u>Category</u>	<u>2006</u>	<u>Utility Estimated</u>		<u>Division Estimated</u>		<u>Division Recommended</u>
			<u>Present Rates</u>	<u>Requested Amounts</u>	<u>Present Rates</u>	<u>Requested Amounts</u>	
<u>Operating Revenues:</u>							
460	Flat Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
470	Metered	\$ 45,208	\$ 37,471	\$ 51,503	\$ 37,425	\$ 50,137	\$ 44,655
	<u>Inter-district Sales</u>	\$ 72,710	\$ 72,455	\$ 72,455	\$ 68,800	\$ 68,800	\$ 81,185
	Total	\$ 117,918	\$ 109,926	\$ 123,958	\$ 106,226	\$ 118,937	\$ 125,840
<u>Operating Expenses</u>							
610	Purchased Water	56,554	56,157	56,157	54,828	54,828	55,079
615	Purchased Power	18,647	14,980	14,980	18,042	18,042	18,042
	Purchased Chemicals	-	-	-	-	-	-
618	Other Volume Related Expenses	1,677	1,410	1,410	1,410	1,410	1,410
630	Employee Labor	4,942	4,180	4,180	4,180	4,180	4,180
640	Materials	1,541	472	472	472	472	472
650	Contract Work	490	523	523	523	523	523
	Water Testing	-	-	-	-	-	-
660	Transportation Expense	1,109	1,122	1,122	1,122	1,122	1,122
664	Other Plant Maintenance Expense	-	5	5	5	5	5
670	Office Salaries	5,895	8,775	8,775	8,775	8,775	8,775
671	Management Salaries	2,658	2,676	2,676	2,676	2,676	2,676
674	Employee Pension and Benefits	2,879	3,665	3,665	3,665	3,665	3,665
676	Uncollectibles	66	205	205	205	205	205
678	Office Service & Rentals	1,958	2,494	2,494	2,494	2,494	2,494
681	Office Supplies & Expenses	3,578	1,392	1,392	1,392	1,392	1,392
682	Professional Services	1,514	516	516	516	516	516
684	Insurance	5,007	1,644	1,644	1,644	1,644	1,644
688	Regulatory Commission Exp.	2,617	1,700	1,700	1,700	1,700	1,700
689	General Expenses	1,588	1,865	1,865	1,865	1,865	1,865
800	minus expenses capitalized	-	-	-	-	-	-
	Franchise fees	-	-	-	-	-	-
	Total Operating Expenses	\$ 112,720	\$ 103,781	\$ 103,781	\$ 105,514	\$ 105,514	105,765
<u>Total Deductions</u>							
403	Depreciation	5,133	\$ 5,133	\$ 5,133	\$ 5,530	\$ 5,530	5,530
408	Taxes other than Income	-	1,293	1,293	1,293	1,293	1,293
	Interest	-	-	-	-	-	-
	Total Deductions	\$ 5,133	\$ 6,426	\$ 6,426	\$ 6,823	\$ 6,823	\$ 6,823
	Total Deductions and Expenses	\$ 117,853	\$ 110,207	\$ 110,207	\$ 112,337	\$ 112,337	\$ 112,588
	Net income before taxes	\$ 65	\$ (281)	\$ 13,751	\$ (6,111)	\$ 6,600	\$ 13,252
	Income Taxes	\$ 800	\$ 800	\$ 3,150	\$ 800	\$ 2,984	2,984
	Net Revenue	\$ (735)	\$ (1,081)	\$ 10,601	\$ (6,911)	\$ 3,617	\$ 10,269
<u>Rate Base:</u>							
	Average Plant	\$ 142,781	\$ 144,395	\$ 144,395	\$ 144,395	\$ 144,395	\$ 144,395
	Average Depr. Res.	\$ (44,244)	\$ (49,873)	\$ (49,873)	\$ (49,873)	\$ (49,873)	\$ (49,873)
	Net Plant	\$ 98,537	\$ 94,522	\$ 94,522	\$ 94,522	\$ 94,522	\$ 94,522
	Less: Advances/Contributions	\$ -	\$ -	\$ -	\$ -	\$ -	-
	Add: Materials and Supplies				\$ 1,000	\$ 1,000	1,000
	Rate Base	\$ 98,537	\$ 94,522	\$ 94,522	\$ 95,522	\$ 95,522	\$ 95,522
	Rate of Return	-0.75%	-1.14%	11.22%	-7.23%	3.79%	10.75%

Appendix B

Schedule No. SB-1

METERED SERVICE

STIRLING BLUFFS DISTRICT

APPLICABILITY

Applicable to all metered fresh water service.

TERRITORY

Sitrling City and vicinity, Butte County.

RATES

Per Meter Per Month

Quantity Rates:

For all water delivered, per 100 cu. ft.	\$0.63	(l)
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Service Charge:

For 5/8 x 3/4-inch meters	\$10.87	(l)
For 3/4-inch meters	16.30	(l)
For 1-inch meters	27.17	(l)
For 1-1/2-inch meters	54.35	(l)
For 2-inch meters	86.96	(l)
For 3-inch meters	163.05	(l)
For 4-inch meters	271.75	(l)

The Service Charge is a readiness-to-serve charge applicable to all metered service which is added to the quantity charge computed at the Quantity Rates.

Appendix C

Comparison of Rates

For a typical customer with a 5/8 x 3/4-inch meter at different usage levels

Service Charge

	<u>Present Service Charge</u>	<u>Division Recommended Service Charge</u>	<u>Percent Increase</u>
For 5/8 x 3/4-inch meters	\$ 10.44	\$ 10.87	4%

Quantity Charge

<u>CCF</u>	<u>Present Quantity Charge</u>	<u>Division Recommended Quantity Charge</u>	<u>Percent Increase</u>
0	\$ -	\$ -	N/A
5	\$ 2.20	\$ 3.15	43%
10	\$ 4.40	\$ 6.30	43%
12	\$ 5.28	\$ 7.56	43%
14	\$ 6.16	\$ 8.82	43%
16	\$ 7.04	\$ 10.08	43%
18	\$ 7.92	\$ 11.34	43%
20	\$ 8.80	\$ 12.60	43%
22	\$ 9.68	\$ 13.86	43%
24	\$ 10.56	\$ 15.12	43%
26	\$ 11.44	\$ 16.38	43%

Total Monthly Bill

<u>CCF</u>	<u>Total Bill at Present Rates</u>	<u>Total Bill at Division Recommended Rates</u>	<u>Percent Increase</u>
0	\$ 10.44	\$ 10.87	4%
5	\$ 12.64	\$ 14.02	11%
10	\$ 14.84	\$ 17.17	16%
12	\$ 15.72	\$ 18.43	17%
14	\$ 16.60	\$ 19.69	19%
16	\$ 17.48	\$ 20.95	20%
18	\$ 18.36	\$ 22.21	21%
20	\$ 19.24	\$ 23.47	22%
22	\$ 20.12	\$ 24.73	23%
24	\$ 21.00	\$ 25.99	24%
26	\$ 21.88	\$ 27.25	25%

Appendix D
Del Oro Water Company
Stirling Bluffs District

Adopted Quantities
Test Year 2007

Total water sold, CCF		33,946
Total water produced, CCF		34,160
Total kWh		108,361
kWH/CCF pumped		3.17
Composite power factor (\$/kWH)	\$	0.16650

Service Charge

For 5/8 x 3/4-inch meters	\$	10.87
For 3/4-inch meters	\$	16.30
For 1-inch meters	\$	27.17
For 1-1/2-inch meters	\$	54.35
For 2-inch meters	\$	86.96
For 3-inch meters	\$	163.05
For 4-inch meters	\$	271.75

Quantity Rate

\$ 0.63 per 100 cubic feet (CCF)

Markup for Inter-district Sales of Untreated Water

\$ 132.01 per Acre-foot

Incomes Taxes

Income before Interest and Expense	\$	13,252
Interest Expense	\$	-
State Taxable Income	\$	13,252
State Income Tax	\$	1,172
Federal Taxable Income	\$	12,081
Federal Income Tax	\$	1,812
Total State and Federal Income Taxes	\$	2,984