

**CALIFORNIA PUBLIC UTILITIES COMMISSION**  
Water Division

Calculating Weather Normalized Means Test (Pro-Forma) Rate of Return

Standard Practice U-34-W

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## INTRODUCTION

1. The Pro-Forma Rate of Return is defined as that rate of return on rate base for a 12-month period assuming that certain Commission authorized determinations are taken into account (see Procedures). The latest or designated 12-month period for which recorded operational data is available will be used for a rate of return in connection with the various rate filings such as offsets and step rates. The Pro-Forma Rate of Return will be a reasonable indication, on a ratemaking basis, of a utility's current level of earnings when the full effects of the current revenues, expenses and tariff rates in conjunction with decision authorized determinations are taken into account.
2. In determining the return, an agreed test period must be ascertained. This period must also reasonably reflect the earnings, on a rate making basis, of the utility. There are two approaches. A recorded test period or a future test period. A future test period is appealing because any earnings test anticipates with a forward view what should happen. The problems with a future period is determining the estimates of all the items for ratemaking, i.e., revenues, expenses and rate base. This is difficult enough in a rate case, as staff and utility always differ. Administratively, it would be virtually impossible on a month to month basis. One other factor argues against the future period and the hassles created by using it, which is the fact that from year to year large water utilities tend to grow rather slowly. As a result, not a great deal is going to be gained with a future test period, especially one of only twelve months. A recorded test period has the virtue of creating almost no disagreements between staff and utility. Because of the normal slow growth mentioned earlier, as a test period, it reasonably reflects when adjusted for ratemaking, what a utility's earnings are currently and in the near future

(twelve months). Also, it must be remembered that no test period is perfect; each has its faults. However, on balance, the recorded test period is best for pro-forma rate of return analyses.

3. The Pro-Forma Rate of Return, determined by the procedures which follow, should be used for all offset filings, attrition step increase filings, earnings reports submittals and any other investigation (general rate increase filings excluded) the Commission may perform.

4. The procedures herein assume that the adopted quantities used to establish the last authorized summary of earnings is available. They also assume that the adopted quantities are within one year old. For the large water utilities, who file for general rate increases on a regular-basis and who have multiple test years, this will be true. For the smaller utilities, who do not regular file and who do not have multiple test years, it is rather common to see adopted quantities greater than one year old.

5. These procedures will be applied on a case-by-case basis when the adopted data is determined to be outdated.

## **B - PROCEDURES**

6. Adopted numbers, such as water consumption per customer and kilowatt-hours consumed per cubic-foot of water pumped, are used in determining the adopted Summary of Earnings for a test year. In the procedure that follows, the adopted numbers must be from the test year in which the 12-month pro-forma period ended. For example, in calculating the Pro-Forma Rate of Return for a twelve-month period ending January 31, 1982, adopted numbers from test year 1982 must be used. For periods beyond the test years, use the adopted numbers from the last test year. In instances, for those utilities not filing general rate increases on a regular basis, the latest adopted numbers can be greater than one year old. In these instances, the appropriate numbers to use will be determined on a case-by-case basis.

7. Customers Use recorded 12-month weighted average number of customers for the 12-month period under consideration for each class. Use recorded 12-month weighted average for flat-rate customers by lot size.

8. Normalized Meter Water Sales Recorded average commercial metered customers for the 12-month period under consideration times adopted sales per customer (Ccf/cust). For Public Authority, Industrial and Other, use recorded sales for the 12-month period under consideration. The total of the above equals normalized sales. (App. A, pgs. 1-5, 2-5 & 3-5).

9. Normalized Consumption and Production

- a. Normalized metered consumption is the same as Normalized Metered Water Sales.
- b. For flat-rate districts, normalized flat-rate consumption is the adopted sales (Ccf/Sv) times the recorded commercial flat-rate customers for the 12-month period under consideration. (App. A, pg 1-5)
- c. Uncollected for water is calculated based on the adopted percentage of total production (total water supply). (App. A, pg 1-5)
- d. Normalized production is item 3 + 4 + 5.

10. Normalized Revenue

a. Metered Spread customers by meter size using the recorded 12-month weighted average number of customers explained earlier in item 1. (App. A, pgs 1-6, 2-6 & 3-6). For each meter size, multiply the number of services times the latest service charge tariff rates. This will equal the service charge revenues. (App. A, pgs 1-4, 2-4 & 3-4) The quantity revenues is the normalized sales in each block times the latest quantity tariff rates. (App. A, pgs 1-4, 2-4 & 3-4). Normalized metered revenue is item 8 plus item 9.

b. Flat Rate Commercial flat-rate services in each lot size multiplied by the latest tariff rates. This will equal the commercial flat-rate revenue. (App. A, pgs 1-4, 2-4 & 3-4) Use recorded revenue for private and public fire protection, rents and "other" miscellaneous revenues. (App. A, pgs 1-4, 2-4 & 3-4) Normalized total revenue is item 10 + 11 + 12.

11. Normalized Expenses (offsettable items)

a. Power Cost Use the Adopted kilowatt-hours (kWh) per one-hundred cubic feet (Ccf) and/or Therms per Ccf of adopted sales. (App. A, pgs 1-3, 2-3 & 3-3). Normalized production as explained in item 6. Normalized power requirement shall be the kWh and/or Therms calculated by multiplying item 14 times item 15 (normalized production). Use the unit power cost corresponding to the most recent tariff rates. Do not include power rates not reflected in the most recent tariff rates. Normalized power costs are computed by multiplying item 16 (power consumption) times item 17 (unit cost of power).

In order to arrive at the total normalized power cost, if the adopted or recorded data is identified separately such as well water power, boosted water power, etc., add all normalized components. The above shall be determined using the adopted mix of water used in developing water sales, supply and power costs from the latest decision.

12. Normalized Purchased Water Cost Use normalized production as a starting point. Use adopted quantities to determine the purchased water portion of the total normalized production. Use the unit purchased water cost corresponding to the most recent tariff rates. Do not include purchased water costs not reflected in the most recent tariff rates. (Appl. A, pages 2-3 & 3-3) Normalized purchased water costs are computed by multiplying item 20 (purchased water portion of the total normalized production) times item 21 (unit purchased water cost).

13. Normalized Pump Tax or Replenishment Assessment Use normalized production as a starting point. Using adopted quantities, determine the amount of water to which pump tax or replenishment assessment applies. Use pump tax rates or replenishment assessment rates corresponding to the most recent tariff rates. Do not include pump tax rates or

replenishment assessment rates not reflected in the most recent tariff rates. (App. A, pg 3-3) Normalized Pump Tax or Replenishment Assessment is computed by multiplying item 24 (amount of water to which the pump tax or replenishment assessment applies) times item 25 (pump tax or replenishment assessment).

14. Other Offsettable Items The utility must adjust other Commission recognized offsettable items if the rates of those items have undergone changes during the 12-month period under consideration. Do it by applying the latest rates reflected in the utility's most recent tariff rates to the recorded amounts (i.e., Ad-Valorem taxes). Do not include offsettable rates not reflected in the utilities most recent tariff rates.

15. Labor Expenses Utilities receiving multi-year rate increases are not allowed to offset labor expenses since the step rate increases and attrition allowances are designed to compensate the utility for the increases in this expense. For these utilities, the Commission determines a labor escalation rate for the adopted years involved. To normalize labor, the recorded amount for the 12-month period under consideration is adjusted to reflect the latest Commission authorized escalation rate for that district as shown in Appendix A, pages 1-2, 2-2 & 3-2.

16. Balancing Account Adjustments for undercollection or overcollection of the balancing account included in the current tariff rate are to be included as an expense since they are included in the rates used to calculate revenue. (App. A, pgs 1-3, 2-3 & 3-3). The adjustment would be found in the utility's latest offset authorization.



17. Extraordinary Expenses Normalize extraordinary expenses by amortizing over an appropriate number of years. Extraordinary expenses such as tank painting and rate case expenses will be determined on a case-by-case basis and as outlined in the latest adopted results of operations in the decision. (App. A, pgs 1-2, 2-2 & 2-3)

18. Normalized Income Tax Calculate income tax using normalized revenues and expenses for items mentioned above and recorded revenues and expenses for other items. The income tax, interest, tax depreciation and investment tax credits are to be calculated using the same methodology in the last rate decision or the normalization methodology prescribed by ERTA, whichever is most current. Recorded net plant additions for the 12-month period under consideration should be used.

19. Rate Base Rate base should be computed in a manner that is consistent with the format on page 10. Where indicated, 12-month weighted averages should be computed and provided. The "minimum banking cash deposits" and the "working cash allowance" should be adopted figures. The tax adjustments ("deferred FIT" and "ITC") should be calculated using the procedures set forth in Section 25, Normalized Income Tax. For those companies with a general office, the general office rate base should be calculated in the same manner as the district rate base and should be allocated by the percentage adopted in the last decision.

20. Pro-forma Rate of Return In summary, the pro-forma rate of return is calculated using the outline above and for the most part given consideration to the specified items in the Commission's decision.

21. Pro-forma and Adopted Rate of Return Comparison When pro-forma rate of return is to be compared with adopted rate of return, an adjustment must be made to put each rate of return into the same time frame. This adjustment procedure is explained in Appendix B.

## Rate Base Format

\*Utility Plant in Service <sup>1</sup>

### Working Capital

Materials & Supplies <sup>1</sup>

Minimum Banking Cash Deposits <sup>2</sup>

Working Cash Allowance <sup>2</sup>

Total Working Capital

### Adjustments

Advances <sup>1</sup>

Contributions <sup>1</sup>

Unamortized ITC

Deferred FIT

G.O. Allocated Rate Base

Total Adjustments

Depreciation Reserves <sup>1</sup>

Total Avg. Depreciated Rate Base

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\* Includes non-interest bearing CWIP when applicable.

<sup>1</sup> 13-month weighted average = 1/2 prior mo. #12 + current mo.'s #1 thru #11 + 1/2 current mo. #12.

<sup>2</sup> Use adopted figures.

## APPENDIX A

### PRO FORMA RATE OF RETURN

#### SUMMARY OF EXAMPLES

	<u>Page</u>
EXAMPLE 1 illustrates a typical water utility with commercial flat rate and metered customers that pumps water.	1-1 thru 1-6
EXAMPLE 2 illustrates a typical water utility with commercial Metered customers that purchases and pumps water.	2-1 thru 2-6
EXAMPLE 3 illustrates a typical water utility with commercial Metered customers that purchases water, pumps water, and pays pump taxes.	3-1 thru 3-6

Note in Procedures section: following each procedure in parenthesis is the example and page which shows the calculation required.