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California Water Association Small Company Instruction Modules

IM-04: Rate Base Offset Advice Letter



CWA ADVICE LETTER INSTRUCTION MODULE

IM-04: RATE BASE OFFSET ADVICE LETTER

October 30, 2014

I.) **OBJECTIVE:**

Prepare workpapers and tariff sheets supporting an advice letter to request a revenue increase commensurate with an increase in rate base for a proprietary plant improvement not previously included in net plant-in-service, hereinafter referred to as a Rate Base Offset AL. Contributed plant additions do not qualify for a rate base offset.

II.) **AUTHORIZING DOCUMENTS:** (with reference to applicable findings and orders)

CWA recommends that the utility obtain copies, on-line or in hard copy, of these documents for reference in the preparation of your Rate Base Offset AL:

1.) **GO-96 B, November 2007, last Revised January 2012:**

- Established three tiers for review and disposition of advice letters;
- Water Industry rule 7.3.3 (8) classifies a Rate Base Offset AL as a Tier 3 advice letter;
- Pursuant to General Rule 7.6.2, a Tier 3 advice letter “will generally be disposed of by Commission resolution.”

2.) **Standard Practice U-27-W, April 16, 2014:**

- P10: “A rate base offset allows the utility to adjust its rates to account for a change in utility plant in service that affects rate base”. Include “gross up” of net income to provide revenue sufficient to cover related expense increases.
- P22: Class B, C, and D utilities may file for a rate base offset without prior authorization.
- P23: Rate base offsets do not have an associated reserve account.
- P24: Any rate base offset not authorized in a GRC requires an earnings test.
- P25: Rate base offsets are available for used and useful utility plant only.
- P46: RBO filings should include all invoices for the project, or ... a listing of the invoices with date, company, service provided, interest accrued, and total requested.
- P59: For a rate base offset, the depreciation expense increase is the incremental plant cost multiplied by the adopted depreciation rate. The adopted ROR is that last approved for the utility (or district in a multi-district utility), typically at the last GRC.

3.) D.92-03-093, March 31, 1982:

- Authorized Class D water utilities to recover up to 100% of fixed costs in the service charge portion of their rate design.
- Authorized Class C utilities to recover up to 65% of fixed costs in the service charges.
- Class B utilities continue to recover up to 50% of fixed costs in service charges.
- Fixed costs include maintenance expenses; transportation and distribution expenses; customer expenses, excluding uncollectibles; administration and general expenses; rent expense; depreciation expense; property tax expense; and gross return on investment (*gross income*).

III.) DATA REQUIRED TO PREPARE A RATE BASE OFFSET AL:

- 1.) The utility's last GRC Resolution number and date, including the adopted rate of return (ROR), the adopted plant depreciation rate, and other adopted quantities.
- 2.) All new plant addition construction costs:
 - a.) Primary project construction costs: typically, primary contractor invoices with reasonable cost over-runs, if any;
 - b.) Support construction costs: other construction or materials costs not included in primary invoices
 - c.) Project (consulting) engineering fees and costs;
 - d.) Land-related costs for the plant addition: land acquisition costs, geological reports, private land easement procurement costs, other, if any;
 - e.) Public right-of-way encroachment permit fees;
 - f.) Capitalized interest and/or financing fees accrued prior to the effective date of the offset revenue increase.
- 3.) Property and related taxes rates:
 - a.) County property tax rate @ 1%;
 - b.) Franchise fee, if any, @ current rate;
 - c.) Other
- 4.) Related expenses:
 - a.) Uncollectibles @ adopted % of revenue;
 - b.) Offset preparation cost amortized over 3 years.

- 5.) Records verifying all claimed costs must be available for attachment in whole or in detailed summary to the offset advice letter. Competitive bids other than that selected are useful to demonstrate the cost/quality value of the primary contractor.

IV.) **STEP-BY-STEP PROCEDURES:**

Nomenclature:

In order to simplify the presentation of the procedures described below, the following terms for financial quantity increases will be used throughout this Instruction Module:

RBI is the rate base increase for which the offset revenue will be requested;

NET is the increase in annual net income commensurate with the RBI adjusted to eliminate prior over earning, if applicable.

DEP is the annual depreciation expense increase related to the RBI.

PTX is the annual property tax increase related to the RBI.

UAI is the annual uncollectible account expense increase, which is the percentage of revenue or net income adopted at the last GRC.

REV is the annual revenue increase to be requested in the offset AL to fund both the authorized return on the RBI and related expense increases.

PTI is the pre-tax (taxable) income increase, which is also the gross income increase.

SIT is the state income tax increase, which is equal to (0.0884) (PTI).

FIT is the federal income tax increase, which is (PTI – SIT) (FedRate) and equals (0.9116) (PTI) (FedRate).

FedRate is the applicable federal income tax rate on the PTI.

A.) The Earnings Test and Computation of The Net Income Increase (NET):

An earnings test (ET) on an actual basis is required for a rate base offset unless the rate base increase and offset were authorized at the last GRC.

- A-1 Prepare a Summary of Earnings (SOE) using most recent actual (reported) data from the last annual report. Calculate the income taxes for the SOE in order to determine the reported taxable income (reported PTI), the reported federal taxable income (reported Fed TI), the highest reported federal tax bracket and tax rate used in case these data are needed later. Divide the reported net income by the reported average rate base (reported RB) to determine the reported rate of return (reported ROR).

- A-2 Compare the reported ROR with the adopted ROR from the last GRC. If the reported ROR is equal to or less than the adopted ROR, the utility is not over earning before the RBI; and in this case, regardless of the size of the RBI, the utility will not be over earning post RBI. Proceed directly to Step B-1.
- A-3 If the reported ROR is greater than the adopted ROR, the utility is over earning prior to the RBI. The maximum net income that would have avoided over earning would have been the reported RB multiplied by the adopted ROR. Thus, the amount of over earning, or the excess prior net income, is: excess prior net income = reported net income - (reported RB) (adopted ROR)

The excess net income must be a positive number or the utility is not over earning.

- A-4 For a utility that is not over earning prior to the RBI, the net income increase due to the RBI is $NET = (RBI) (adopted ROR)$. But when the utility is over earning prior to the RBI, the net income increase (NET) that will exactly eliminate the over earning after the RBI is:

$$NET = (RBI) (adopted ROR) - \text{excess prior net income}$$

$$NET = (RBI) (adopted ROR) - (\text{reported net income} - (\text{reported RB}) (adopted ROR))$$

$$NET = (RBI + \text{reported RB}) (adopted ROR) - \text{reported net income}$$

B.) Calculation of the RBI Revenue Increase:

- B-1 When the plant addition project is complete, compute a comprehensive summary of all capitalized costs for the plant addition per Item 2 in Section III above:
- a.) Primary contractor project costs;
 - b.) Other construction or materials costs;
 - c.) Consulting engineering fees;
 - d.) Public easement encroachment permit fees;
 - e.) Purchased encroachment easements on private lands;
 - f.) Land related project costs : acquisition cost, legal fees, reports, tests, etc.;
 - g.) Financing costs accumulated prior to offset revenue effective date;
 - h.) Other direct costs as may apply.

This is the total plant addition cost, which is the RBI.

- B-2 The NET return on investment is computed in Step A-4 using the RBI computed Step B-1 and the reported quantities from the SOE in Step A-1, as repeated here:

$$NET = (RBI + \text{reported RB}) (adopted ROR) - \text{reported net income}$$

B-3 Compute the annual expense increases due to the plant addition:

- a) DEP equals RBI multiplied by the adopted depreciation rate;
- b) PTX equals RBI multiplied by 1%;
- c) UAI equals RBI multiplied by the adopted uncollectible account rate (%) of net income in the last GRC;
- d) Other tax or franchise fee increases, if any, may apply at their specified rate(s) multiplied by the RBI, similar to the PTX above. These additional taxes are less common and will be omitted from further discussion herein.

B-4 In order for the utility to earn the full authorized incremental return on its RBI investment, the NET computed in Step B-2 must be “grossed up” so that the revenue increase, REV, billed to the customers’ accounts for all related expense and income tax increases as well as the NET. Calculate the REV using the following equations:

$$REV = DEP + PTX + UAI + PTI \qquad \text{EQ-1}$$

and,

$$PTI = SIT + FIT + NET \qquad \text{EQ-2}$$

Note that operating expenses (with the exception of the uncollectibles) and payroll taxes are not included in these equations because there are no increases from the last reported expense numbers due to the RBI.

Restatement of EQ-2 using the Nomenclature definitions, and rearrangement of EQ-2 produces a useful and necessary expression for PTI in terms of the NET. This is the net income (NET) to gross income (PTI) relationship:

$$PTI = (0.0884) (PTI) + (0.9116) (PTI) (FedRate) + NET$$

$$PTI = NET / (0.9116) (1-FedRate) \qquad \text{EQ-3}$$

B-5 Applicable federal income tax rates (FedRates) are:

Fed Taxable Income Bracket (\$K)	FedRates %	Bracket Maximum Tax, (\$)
a.) 0 – 50	15	7,500
b.) 50 – 75	25	6,250
c.) 75 – 100	34	8,500
d.) Over 100	39	open

- B-6 Calculation of the PTI, and subsequently the REV, is easily done if the appropriate FedRate is known. The income tax computations used to calculate the SIT and FIT for the SOE in Step A-1 provide useful data in this regard.

The pre-tax income in the SOE is the reported PTI from which the reported SIT and the reported FIT were computed. All reported figures are actual quantities prior to the RBI, and are not increases. Since the incremental FIT due to the RBI adds on to the reported FIT, use the FedRate from the highest bracket for the reported FIT to compute the PTI using EQ-3, the (computed PTI).

- B-7 If the highest bracket for the reported FIT is the top Fed bracket, the FedRate of 39% is used for the PTI calculation without further qualification. Proceed to Step B-8.

If the highest bracket for the reported FIT is not the top Fed bracket, add the computed PTI to the reported PTI. This is the total PTI after the RBI. Calculate the total Fed taxable income (total Fed TI) from this total PTI:

$$\text{Total Fed TI} = \text{total PTI} - \text{total SIT} = (0.9116) (\text{total PTI})$$

If this total Fed TI does not exceed the maximum federal taxable income for the highest tax bracket used, the computed PTI using the FedRate for that bracket is the full increase of the PTI due to the RBI. Proceed to Step B-8.

If the intermediate bracket maximum is exceeded, go to Step B-9.

- B-8 In this case where the computed PTI leads to a total Fed TI that remains within the reported highest bracket maximum, use EQ-1 and EQ-3 from Step B-4 to compute the REV allowed for this RBI (again, these quantities are all increases):

$$\text{REV} = \text{DEP} + \text{PTX} + \text{UAI} + \text{PTI}$$

$$\text{REV} = \text{DEP} + \text{PTX} + \text{UAI} + \text{NET} / (0.9116) (1 - \text{FedRate}) \quad \text{EQ-4}$$

where, DEP, PTX, and UAI are known quantities from Step B-3, NET is known from Step B-2, and the FedRate is known from Step B-7

This completes the calculation of the REV for the RBI where the top (new) portion of the FIT is computed from the previous (and remaining) highest tax bracket. Proceed to Section IV-C below for procedures to allocate the REV into rates.

- B-9 If the total Fed TI computed in Step B-7 exceeds the maximum Fed TI for the highest tax bracket used for the reported FIT, the federal tax for the portion of the Fed TI increase in excess of the used bracket maximum must be recalculated using the FedRate for the next tax bracket. This affects the PTI and therefore the REV, as determined in the following Steps.

B-10 The Total PTI after the RBI is now composed of two components:

$$\text{Total PTI} = \text{PTI (1)} + \text{PTI (2)}$$

where PTI (1) is the pre-tax income which produces the incremental Fed TI in the previous highest Bracket (1), and which is taxed at FedRate1; and PTI (2) is the remaining total pre-tax income which produces the incremental Fed TI in the next higher Bracket(2), and which is taxed at FedRate2. As described above, Fed TI equals (0.9116) (PTI); therefore,

$$\text{PTI} = \frac{\text{Fed TI}}{(0.9116)}$$

The incremental Fed TI in Bracket (1) due to the RBI equals the Bracket (1) maximum TI minus the reported Fed TI from the SOE computations. So

$$\text{PTI (1)} = \frac{\text{Bracket (1) max TI} - \text{reported Fed TI}}{(0.9116)}$$

All quantities on the right side of this equation are known, so PTI (1) has been computed.

B-11 The portion of incremental net income (NET (1)) associated with PTI (1) is calculated using EQ-3 rearranged for NET in terms of PTI:

$$\text{NET (1)} = \text{PTI (1)} \times (0.9116) (1 - \text{FedRate1})$$

$$\text{so, NET (1)} = \frac{\{\text{Bracket (1) max TI} - \text{reported Fed TI}\} \times (0.9116) (1 - \text{FedRate1})}{(0.9116)}$$

$$\text{and, NET (1)} = \{\text{Bracket (1) max TI} - \text{reported Fed TI}\} \times (1 - \text{FedRate1})$$

Again, all entities on the right side of this equation are known quantities, so NET (1) has been computed.

B-12 The NET due to the RBI is likewise composed of two components:

$$\text{NET} = \text{NET (1)} + \text{NET (2)}$$

where, NET(1) is the portion of the NET computed from PTI(1) in Step B-11; and NET(2) is the remainder portion of the NET which is derived from PTI(2).

$$\text{NET (2)} = \text{NET} - \text{NET (1)}$$

NET and NET (1) are known quantities, so NET (2) has also been computed.

B-13 Again using EQ-3,

$$PTI (2) = \frac{NET (2)}{(0.9116)(1-FedRate2)}$$

All quantities on the right side are known, so PTI (2) has been computed.

B-14 Compute the incremental revenue, REV, to be requested in the Rate Base Offset AL for this RBI using EQ-1:

$$REV = DEP + PTX + UAI + Total PTI$$

$$REV = DEP + PTX + PTI (1) + PTI (2)$$

where, DEP, PTX, and UAI are computed in Step B-3, PTI (1) is computed in Step B-10, and PTI (2) is computed in Step B-13.

This completes the calculation of REV in this case where the Fed TI increase due to the RBI causes a Total PTI to be determined using two FedRates. Proceed to Section IV-C for procedures to allocate the REV into rates.

NOTE: This Instruction assumes that the total Fed TI resulting from this RBI, which is Total PTI x 0.9116, will also not exceed the maximum taxable income of the next higher federal tax Bracket(2). In the unlikely event that the RBI is large enough that the Bracket (2) maximum for Fed TI is also exceeded, extend Steps B-9 through B-14 into the next higher Bracket (3) to compute the appropriate REV.

C. Allocation of REV Computed in Steps B-8 or B-14 into Rates:

Utilities with All Metered Service:

C-1 The utility's fixed costs will be increased by the magnitude of the REV in accordance with the definition of fixed costs given in Ordering Paragraph No. 6 of D.92-03-093 (Section II-3 above).

As ordered in the same Decision, Class D utilities may recover up to 100% of fixed costs in meter service charges, so no fixed cost calculation is required. Proceed to Step C-3.

For Class B and C utilities, add the REV to the fixed costs data from your last annual report. Multiply the sum by the fixed costs percentage limits of 50% for Class B and 65% for Class C to calculate the maximum revenue that may be billed annually in service charge rates (the Fixed Costs % Limit).

C-2 Class B and C utilities multiply the current number of active metered service connections by meter size by the current meter service charges by meter size and

by the number of billing periods per year. This is the current annual metered service charge revenue.

- C-3 Class D utilities may allocate the entire REV to meter service charge increases by meter size by billing period using the adopted Meter Equivalent Ratios in the same computation procedure used in your last GRC. Proceed to Step C-4.

For Class B and C utilities, subtract the current annual service charge revenue in Step B-2 from the Fixed Costs % Limit in Step B-1.

- a) If the difference is a positive number, this portion of the REV from Step B-8 or B-14 (up to 100% of the REV) may be allocated to meter charge increases using the utility's adopted Meter Equivalent Ratios to calculate the meter service charge increases by meter size by billing period.
- b) If the portion of the REV used for meter service charge increases is less than the entire REV, the unused amount should be recovered in quantity rate increases discussed in Step C-5 below.
- c) If the difference between the Fixed Costs % Limit and the current annual meter service charge revenue is a negative number, none of the REV may be allocated to meter service charges and the entire REV must be recovered in quantity rate increases discussed in Step C-5 below.

- C-4 Add the meter service charge increases by meter size determined in Step C-3 to the current meter service charge rates to calculate the amended meter service charge rates by meter size by billing period.

- C-5 If less than all of the REV is allocated to meter service charge increases in Step C-3, the portion that is not used to increase meter service charges should be recovered in quantity rates. Divide the unused portion of the REV by the adopted water sold quantity from the last GRC to calculate the metered quantity rate increase (in \$/Ccf). Add this quantity rate increase to the utility's current metered quantity rate(s) to determine the amended metered quantity rate(s).

Utilities with All Flat Rate Service:

- C-6 Allocate the REV from Step B-8 or B-14 by billing period among your flat rate connections according to your utility's adopted Service Connection Category Equivalent Ratios. These are the flat rate service charge increases by service category by billing period.

- C-7 Add the flat rate service charge increases by service category from Step C-6 to the corresponding charges by service connection category in your current rates to determine the amended flat rate service charges by service category by billing period.

Utilities with Mixed Metered and Flat Rate Service:

- C-8 First, allocate the incremental revenue (REV) from Steps B-8 or B-14 to metered service customers and to flat rate service customers by the percentage of total revenues for each group adopted in the last GRC (the adopted revenue ratio).
- C-9 Allocate the metered service portion of the REV to meter service charges using the utility's adopted Meter Equivalent Ratios as in Step C-3 to calculate the meter service charge increases by meter size. As in Step C-4, add these meter charge increases to the current meter service charge rates to determine the amended metered service charge rates by meter size by billing period.
- C-10 Allocate the flat rate service portion of the REV to flat rate service charges using the utility's adopted Service Connection Category Equivalent Ratios, as in Step C-6. These are the flat rate service charge increases by service category by billing period. Add these service charge increases to the corresponding charges by service category in your current rates to determine the amended flat rate service charges by service category by billing period.

D) The Rate Base Offset AL:

Prepare and file a Tier 3 Rate Base Offset AL (see IM-01) requesting approval of amended tariffs with the amended rates from the applicable Steps in Section IV-C. Include all workpapers and the RBI capital cost summary and/or invoices as attachments to the AL. This completes preparation of the utility's Rate Base Offset revenue request.