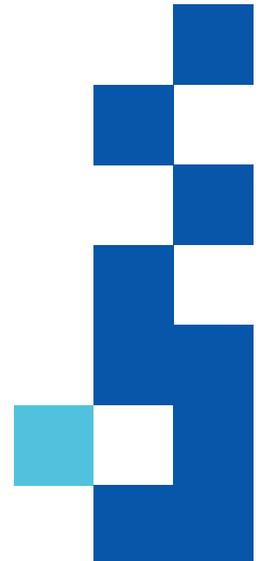


WATER ENERGY SYMPOSIUM

Forward-Looking Research and Water Regulatory Policies

Improvements in Water Rate Design and Policy Disincentives

March 28, 2005



Current California Public Utilities Policy on Rate Design for Class A Water Utilities

- Most Class A Water utilities have to follow the CPUC-enacted policy for rate design
- Rate design is calculated to produce the projected revenue requirement
- Up to 50% of the fixed charges are recovered in a meter proportioned monthly fixed service fee
- The remaining 50% of the fixed charges and all variable costs are usually recovered in single block quantity rate
- There can be up to three quantity block rates under extraordinary circumstances (California American Water's Monterey District is currently the only tiered design)

Problems With the Current “Standard” Rate Design

- At times, a fairly large portion of the revenue requirement is recovered in the fixed monthly meter service fee
- The rate design is not conservation oriented
- Water utilities do not have an incentive to promote conservation, the same as energy utilities. This is caused by the fact that 50% of fixed charges are recovered in the quantity rate
- The current rate design policy tends to place a greater burden on low income and low use customers

Present Rate Design for California American Water's Monterey District

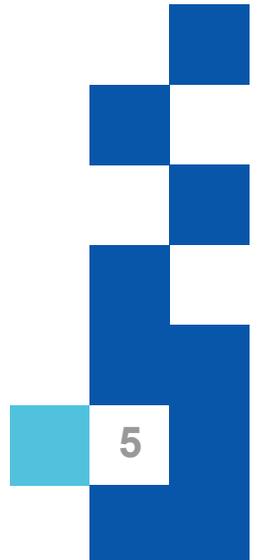
- For residential customers, 25% of the fixed charges are recovered in the monthly meter service charge – for other classes of customers, the fee is set at the standard 50%
- Low income customers are not required to pay the monthly meter service charge
- The remaining portion of the revenue requirement is recovered in a variable quantity rate design that has different block structures for different revenue classifications
- The Company is allowed a WRAM account to track the difference in the revenue received under this adopted “conservation” rate design – and the revenues that would have been collected under the basic rate design adopted by the Commission for all other Class A water utilities

Residential Rate Design for the Monterey District

- 5 block quantity rate design with the first block being set at $\frac{1}{2}$ the charge that otherwise would have been calculated under the current CPUC rate design policy for all other Class A water utilities
- The fifth block is set at 8 times the low block – or over \$14 per 100 cu ft of metered usage
- All residential customers have the block rate break points set based on their individual needs – i.e., number of residents, lot size, number of large animals and other special needs.
- Only 1 unit of water is allowed in winter months per service connection, irregardless of lot size

Monterey Rate Design for Other Than Residential Customers

- At most – only two blocks are used
- The break points for the blocks are set at normal assumed consumption for similar businesses



Example of Current Monterey Block Rate Design

■ Residential, Multi-Residential, and PAR Customers:

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■	For the first 100 cu. ft. x Customer ECU	\$1.6360
■	For the second 100 cu. ft. x Customer ECU	\$3.2720
■	For the third 100 cu. ft. x Customer ECU.	\$4.9080
■	For the fourth 100 cu. ft. x Customer ECU.	\$6.5440
■	All Water over 400 cu. ft. x Customer ECU.	\$13.0880
■	Service Charge	\$1.0852

■ Special Use Customers:

■	For all water delivered, per 100 cu. ft.	\$4.9080
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■ All Other Customers:

■	For all water delivered up to monthly allotment, per 100 cu. ft.	\$3.2720
■	For all water delivered over monthly allotment, per 100 cu. ft.	\$9.8160

- The upper two block rates for residential customers and the upper block rate for other customers are doubled when the Company is in a situation where it could exceed the limits of SWRCB Order 95-10 (see following slides)

Rationale for Implementation of the Current Monterey Rate Design

- State Water Resource Board Order 95-10 required that water production from the Carmel River be reduced 20% from historical average usage. This was not instituted solely to promote conservation
- Production over the allowed annual 11,285 Af from the Carmel River Resources could result in fines of over \$3.5 M
- Production from the only other available source – the Seaside Basin – is restricted to about 4,000 Af annually
- Water is in limited supply on the Peninsula and no other sources of supply outside of local water are available
- The Peninsula is very drought prone

Results of the Monterey Rate Design and Other Factors

- The Company has only exceeded the production limit once since the order was implemented in 1996. The limit was only exceeded in the second year after implementation
- The rate design was modified to be more conservation oriented after the limit was exceeded
- Between the Monterey Peninsula Water Management District and the Company, well over \$500,000 is spent annually to promote conservation in the area. This includes rebates for toilet and washer retrofits as well as availability of water audits and continuous conservation messaging

California American Water's Current Proposed Rate Design for its Los Angeles District

- A slight decoupling of the revenue requirement from the rate design
- Monthly meter service fees to be set to recover about 40% of fixed charges
- The remaining recovery of the fixed costs would be in the quantity rate
- The quantity rate to recover the fixed charges would be a guaranteed revenue stream through the use of a WRAM account
- Full consolidation of rates for all of the service areas in the Los Angeles District

California American Water's Current Proposed Rate Design for its Los Angeles District (cont)

- Implementation of a full cost balancing account for the major variable costs related to purchased water and power
- Implementation of a low income tariff to protect that class of customer
- Implementation of Distribution System Infrastructure Charge (in our proposal it is referred to as "ISRS") to allow for more latitude in replacing old infrastructure and only have customers pay for such replacements after the replacement is in service
- Implementation of a Conservation Memorandum Account

Rationale for the Proposals Contained in the Los Angeles Rate Case Application

- To promote conservation through rate design and conservation programs. The conservation proposal is designed to more fully implement the Best Management Practices enacted by the California Urban Water Conservation Counsel
- To apply a higher cost of water on customers using greater quantities
- To allow for more latitude in the replacement of infrastructure to ensure a tighter water system
- To ensure the Company and customers that the revenue requirement will be met – even with conservation - but also ensure the revenue requirement is not exceeded due to the de-coupling of the revenue requirement and the rate design

Further Conservation Efforts to be Continued and/or Proposed By California American Water in Future Cases

- Accelerated implementation of the replacement of flat-rate unmetered services with meters
- Greater decoupling of the revenue requirement from the rate design
- Installation of radio read meters (ARM)
- Completing the installation of SCADA (System Control and Data Acquisition) to allow for better water use analysis and control of the production systems
- More widespread use of tiered water rates
- Greater implementation of conservation programs to strive for compliance with the BMP's

Other Factors that Need to be Considered in the Future to Reduce Energy Consumption

- Current practices employed by Commission Staff usually focus on the short-term lowest cost alternatives
- System storage improvements will reduce energy costs, but will have higher short-term revenue requirements
- Replacement of current production equipment with variable speed drive equipment will reduce energy costs – but will also have higher short-term revenue requirements
- Faster replacement of older infrastructure will reduce water loss
- Replacement of local water production facilities with more purchased water from wholesalers will reduce energy needs