



Questions from Rate Advisory Committee Meetings

Consolidated Working Groups

Question asked by: Michael Kennick

Date question asked: September 9, 2021

Date question answered: October 19, 2021

Question: Following up on question from before – We judge the benefits for the STEP program by the Utility Costs Test (UCT) but the number that’s published for these different programs combines the avoided fuel cost which is a benefit to customers and the avoided plant capital costs which is a benefit to CPS. Can that be recalculated into 2 different UTC costs so we can see how much benefit is going to the customer and how much to CPS Energy?

Answer:

CPS Energy uses the Utility Cost Test (UCT) to evaluate the cost-effectiveness of **STEP** programs. The UCT analyzes the costs and benefits of each **STEP** program from the *utility's perspective*. As our rates are designed on a cost recovery basis, the benefits to the *utility* benefit all customers.

We shared the formula, $UCT = (\text{Avoided Fuel Costs} + \text{Avoided Plant Capital}) / \text{Program Costs}$. The avoided fuel and capacity-related costs are calculated based on CPS Energy's forecasted marginal production costs and are intended to capture what CPS Energy would have paid to generate or purchase and deliver electricity to the customer in the absence of the **STEP** program.

In the following table, we break these out separately for Fiscal Year (FY) 2021:

	Lifetime Benefits	Program Cost	UCT
Avoided Fuel Costs	\$77,430,299		
Avoided Plant Capital	\$108,934,341		
Total	\$186,364,640	\$57,091,349	3.26



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It's important to note, program costs are not separable into Fuel and Plant Capital, therefore, we calculate UCT overall and not by portion.

Another perspective that may be responsive to your question is to look at the Participant Cost Test (PCT) which analyzes the costs and benefits of an energy efficiency program from a *participating customer's perspective*. PCT is one of five industry-standard cost effectiveness tests, based on the California Standard Practice Manual.

The formula for PCT is, $PCT = (\text{Customer's Electric Bill Decrease} + \text{Rebate Incentive Received}) / \text{Customer's Investment Cost}$. From this viewpoint, the benefits include the bill savings over the lifetime of the energy efficiency measures undertaken and the rebate or incentive received for participation. The costs included in the PCT are the customer's incremental costs required to install the high efficiency option as compared to the baseline option.

We do not currently track incremental costs for all the **STEP** projects. However, we can produce an educated estimate of the costs and benefits from the customer's perspective. As an example, we estimate that the benefit-cost-ratio for participating customers in the **STEP** residential HVAC program is 2.92. That means for participating customers their Return on Investment (ROI) is \$2.92 for every \$1.00 invested.

If there is interest in this approach, Frontier Energy, our third-party evaluator, can calculate similar benefit-cost ratios for the remaining **STEP** programs.