

In order to perform cost effectiveness analysis of additional DSM measures, the team used the definitions and formulas for benefit-cost tests provided in the California Standard Practice Manual¹, specifically the Ratepayer Impact Measure or ‘RIM’ test. It is noted that based on the information and assumptions used to analyze potential program opportunities, none of the future program offerings in this report pass the RIM test. The RIM test analyzes programs from the perspective of a non-participating member to determine if a program benefits all members or participants only. Table 1 provides the results of the RIM tests for new programs.

Table 1. New Program Ratepayer Impact Measure (RIM) Benefit Cost Ratios

Energy Efficiency Program	RIM Benefit/Cost Ratio	
	Scenario (1)	Scenario (2)
HVAC Quality Install	0.22	0.21
HVAC Quality Retrofit	0.26	0.23
LED Giveaway (Direct Install)	0.28	0.29
LED Giveaway (Direct Install Excluding Energy Audit Costs)	0.30	0.31
Direct Load Control Water Heating	0.67	0.60
Smart Thermostats	0.37	0.36
C&I Lighting	0.38	0.38

Performing cost-effectiveness tests requires estimating program participation, energy/demand savings, program implementation costs, incentive costs, and contributors to net-to-gross ratios, such as free-ridership. AE/Tierra considered numerous secondary sources for these inputs, including utility program filings in Florida, Arizona, Kentucky, and California, and made best estimates based on Seminole member demographics. We also consulted the Arkansas Technical Reference Manual (the closest regional manual) and used information from existing Seminole Member Cooperative programs. As part of this effort, AE/Tierra used the California Energy Data and Reporting System (CEDARS) database (<https://cedars.sounddata.com/programs/list/>) maintained by the California Public Utilities Commission (CPUC). This database was used because it contains a large amount of detailed program information.

Seminole also provided certain primary data based on the best available information at the time of analysis. This data included avoided energy, capacity, and transmission costs for the years 2017 to 2043, current average residential and commercial retail rates, and an escalation schedule for retail rates. For the avoided cost assumptions, we considered two scenarios. The first scenario (listed as Scenario (1) in Table 1) included the total annual value of avoided capacity cost for a new generic unit coming online in May 2021. Years 2017 through 2020 include the cost of reliability purchases for Seminole’s single largest contingency during four summer months only per year. The second scenario (listed as Scenario (2) in Table 1) included the total value of avoided capacity cost based upon responses received in Seminole’s March 1, 2016 Request for Firm Capacity for the period from June 2021 through December 2025. The

¹ 2001, California Public Utility Commission (CPUC), California Standard Practice Manual Economic Analysis of Demand-Side Programs and Projects, http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/Utilities_and_Industries/Energy_-_Electricity_and_Natural_Gas/CPUC_STANDARD_PRACTICE_MANUAL.pdf

total annual cost of a new generic unit coming online in year 2026 is reflected thereafter. Years 2017 through 2020 include the cost of reliability purchases for Seminole's single largest contingency during four summer months only per year.

The input assumptions and additional outputs are included in exhibit X.