



RIVERSIDE PUBLIC UTILITIES

Board Memorandum

BOARD OF PUBLIC UTILITIES

DATE: NOVEMBER 17, 2025

SUBJECT: ENERGY EFFICIENCY AND DEMAND REDUCTION TEN-YEAR TARGET

ISSUE:

Approve the updated Energy Efficiency and Demand Reduction ten-year target.

RECOMMENDATION:

That the Board of Public Utilities recommend that the City Council approve the Riverside Public Utilities updated Energy Efficiency and Demand Reduction ten-year target of 0.36% of annual projected retail energy sales for the period beginning 2026 through 2035.

LEGISLATIVE HISTORY:

Energy efficiency has been seen by the State as a cost-effective means of supporting the energy grid. In state-wide energy planning, avoided energy use translates into lower costs for everyone by avoiding new generation facilities and expanded transmission and distribution systems. Everyone benefits from customers that participate in energy efficiency through reduced costs to build, operate and maintain grid and generation infrastructure. The following bills have supported energy efficiency as part of the statewide loading order for generation resources and for the development of programs that help customers as they make decisions to be more energy efficient.

- Assembly Bill (AB) 1890 (Brulte, 1996) required that 2.85% of electric revenue be utilized to fund public benefits programming in at least one of four areas: demand side management (energy efficiency), renewable energy, low-income assistance, or research, development, and demonstration.
- Senate Bill (SB) 1037 (Kehoe, 2005) was a comprehensive package that set ambitious energy conservation policies and goals. SB 1037 required publicly owned utilities (POU's) when procuring energy to serve their customer load, to "first acquire all available energy efficiency and demand reduction resources that are cost effective, reliable, and feasible" and to report kilowatt hour (kWh) savings to the California Energy Commission annually. This Senate bill also requires POU's to report results annually to its customers and the Energy Commission on its energy efficiency and demand reduction programs.
- AB 2021 (Levine, 2006) required POU's to identify, target and achieve all potentially cost-effective electric savings and establish 10-year energy efficiency targets.

- AB 2227 (Bradford, 2012) changed the frequency of the 10-year energy efficiency potential studies from once every three years to once every four years to be consistent with the State's Integrated Energy Planning process.
- SB 350 (De Leon, 2015) establishes annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas by January 1, 2030. The bill required local POU's to establish annual targets for energy efficiency savings and demand reduction consistent with this goal.

BACKGROUND:

The California Municipal Utilities Association (CMUA), in partnership with the Northern California Power Agency (NCPA) and the Southern California Public Power Authority (SCPPA), began a collaborative effort in 2005 to develop an evaluation tool to measure energy efficiency program effectiveness and report program savings in a consistent and comprehensive manner. The effort was and continues to be the process through which POUs undertake their annual reporting required by SB1037.

Since 2014, POU's throughout California have used a Technical Reference Manual (TRM) to measure and track energy efficiency savings via established and approved methods, formulas, and default assumptions used for calculating energy savings and peak demand impacts in a transparent format. The TRM was updated in 2017 and most recently in 2025, includes energy savings assumptions for both residential and commercial measures, and allows for custom and prescriptive energy efficiency calculations, which are essential in many commercial and industrial energy efficiency projects.

The last ten-year energy savings target was approved by City Council on June 15, 2021, and was set at 1% savings of projected sales. This target was ambitious and at the time was considered achievable as RPU was anticipating the end of the COVID-19 pandemic and new energy efficiency programs were under development. The impacts of the pandemic were more impactful than anticipated and this led to an increase in home energy consumption and less participation in energy efficiency programs.

DISCUSSION:

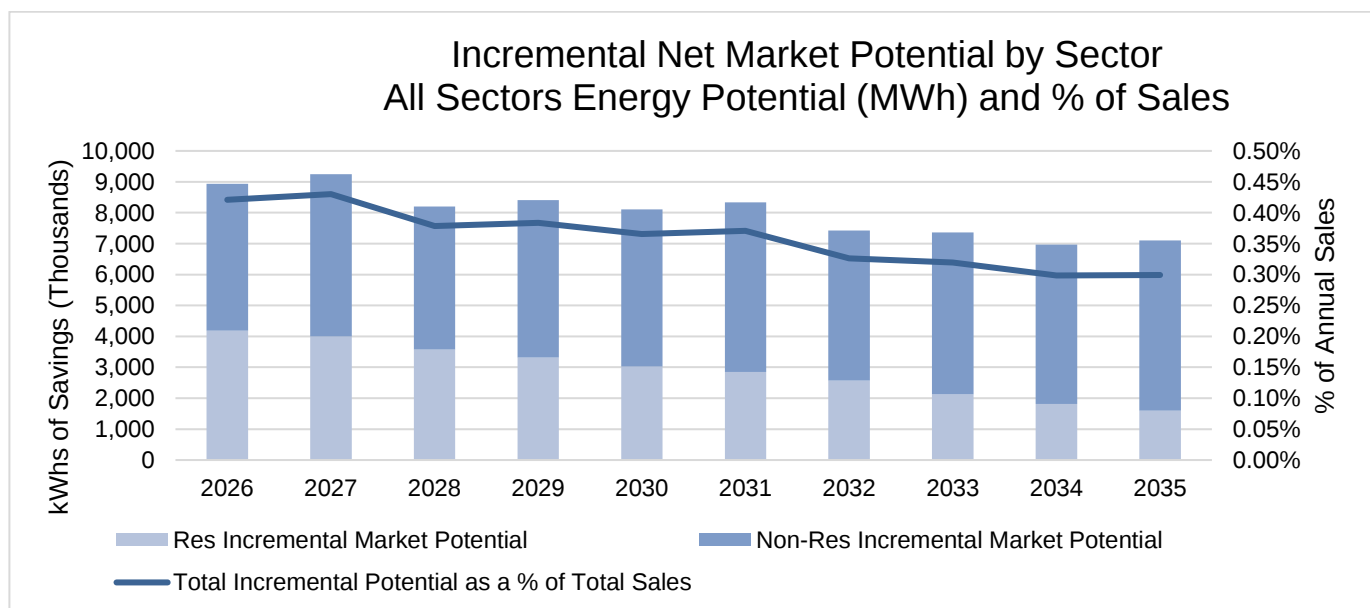
CMUA, NCPA, SCPPA, and 39 of their respective member agencies collaborate on the development of individual utility energy efficiency savings and demand reduction targets every four years as required by AB 2021 and AB 2227. Through this collaboration, and via a competitive request for proposal (RFP) process, GDS Associates, Inc. (GDS), was retained by CMUA to prepare individual member utility potential studies and assist each POU in establishing 10-year savings targets. GDS prepared a 10-year model of energy efficiency savings projections for each POU based upon several factors including technical potential, economic potential, cumulative market potential, and incremental market potential for the residential, commercial, industrial, and agricultural customer segments. This statewide potential study model is referred to as the Electric Resource Assessment Model (ELRAM). After analyzing RPU's programs and service territory with the ELRAM, GDS identified an RPU cumulative energy efficiency program target covering the next 10 years of 80,107 megawatt-hours (MWh) or 80,107,000 kilowatt-hours (kWh). This represents an average annual target of 0.36% of forecasted retail sales as a recommended kWh

savings target for RPU over the ten-year period 2026-2035. (Attachment 1)

The new ten-year assessment data shows a reduction from GDS's previously recommended target of 0.59% in 2021. The new study considers Riverside's service territory and accounts for the unique characteristics of the service area, customer base, climate zone, economic conditions, market penetration, RPU's current and anticipated energy savings programs, and adopted statewide appliance and building code energy efficiency standards. The reduction in RPU's recommended targets is primarily the result of increased energy efficiency standards in appliance and building codes – meaning that the energy efficiency that will be realized by the community will be the result of the code requirement as opposed to an RPU program benefit.

The following table illustrates RPU's gross energy efficiency potential as identified by GDS. The data does not capture kWh savings from projects outside the scope of RPU's rebate programs such as from state codes and standards or customers who choose to implement energy efficiency measures but do not apply for a rebate. RPU is only able to claim kWh savings for those energy efficiency and demand reduction measures that can be reasonably verified and for which RPU has provided a monetary incentive, resulting in kWh savings.

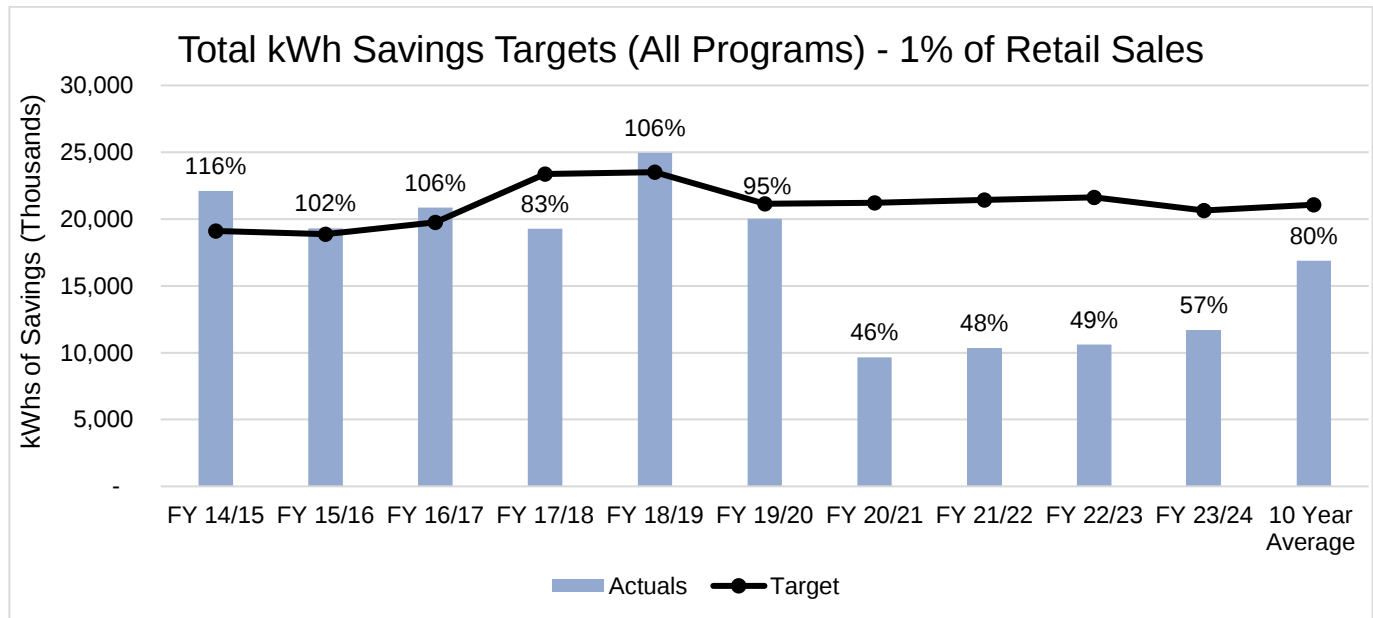
Most of the energy efficiency achieved through rebate programs is from measures taken in the commercial and industrial sector. RPU's large commercial and industrial customers comprise 12% of RPU's total customer base but represent approximately 65% of total energy consumed. By continuing to develop and maintain strong relationships with these customers RPU's key account managers collaborate to develop energy efficiency projects that can achieve RPU's kWh savings goals.



The market potential identified starts at 0.42% of retail sales in 2026, declining to 0.30% in 2035. This represents market penetration of rebate programs, as well as a projected decrease in allowable savings, due to the increased baseline of statewide codes and standards for energy efficiency.

After examining the performance of RPU programs and past results, staff recommend accepting GDS recommendation of 0.36% energy efficiency savings for the 2026 through 2035 period. This target is expected to be achieved with targeted customer outreach and continued direct installation and other rebate programs in both the residential and commercial sectors.

A potential study will be undertaken again in four years to reassess RPU's market potential and any technological advancements. This will provide RPU with the opportunity to review the 0.36% savings target to determine if it is still appropriate for the next ten-year period. Below is RPU's historical performance in relation to the 1% target over the past ten (10) years. RPU exceeded the target for four of these years, but notable impacts were realized from the COVID-19 pandemic and the time it took to procure vendor programming after the pandemic. RPU has introduced a range of new rebate programs which have helped address the decline in available energy efficiency potential in the marketplace.



RPU's Power Resources Division has reviewed the GDS potential study results and concurs with the staff recommendation in this report to adopt the 0.36% target. Additionally, the Customer Engagement and Power Resources Divisions will continue to evaluate the energy efficiency savings rebate programs as part of the RPU's Integrated Resource Planning efforts and will coordinate with the California Energy Commission on their use of the POU data and ELRAM model.

FISCAL IMPACT:

Adoption of the ten-year target itself has no immediate fiscal impact; however, implementation of associated energy efficiency programs to achieve the target will continue to require funding through RPU's Public Benefits program, consistent with existing budget allocations.

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Attachments:

1. GDS Associates, Inc. 10 Year Market Potential Study
2. Presentation