

## **RESOLUTION NO. 25-07-090**

### **RESOLUTION OF THE BOARD OF DIRECTORS OF CLEAN POWER ALLIANCE OF SOUTHERN CALIFORNIA ADOPTING AND APPROVING THE REVISED LOAD MANAGEMENT STANDARDS COMPLIANCE PLAN**

**THE BOARD OF DIRECTORS OF CLEAN POWER ALLIANCE OF SOUTHERN CALIFORNIA HEREBY RESOLVES AS FOLLOWS:**

**WHEREAS**, Clean Power Alliance of Southern California (formerly known as Los Angeles Community Choice Energy Authority) (“Clean Power Alliance” or “CPA”) was formed on June 27, 2017;

**WHEREAS**, Section 25403.5 of the California Public Resources Code authorizes the California Energy Commission (“CEC”) to adopt rules and regulations relating to electrical load management in each utility service area;

**WHEREAS**, the CEC first adopted load management standards (“LMS”) regulations in 1979 and amended its LMS regulations in January 2023 to require large community choice aggregators (“CCA”) that provide more than 700 GWh of electricity to customers in a calendar year to submit an LMS compliance plan (“Plan”) beginning on April 1, 2024;

**WHEREAS**, LMS regulations required a CCA’s LMS Plan to specify how the CCA will encourage the use of electrical energy at off-peak hours, control daily and seasonal peak loads to improve electric system efficiency and reliability, lessen or delay the need for new electrical capacity, reduce fossil fuel consumption and greenhouse gas emissions, and explain how the CCA will use marginal cost-based rates to achieve such objectives;

**WHEREAS**, LMS regulations authorized a CCA Plan to propose, in the alternative, programs that enable automated response to marginal cost signal(s), referred to as load flexibility programs, for each customer class and evaluates the proposed load flexibility programs, based on their cost-effectiveness, equity, technological feasibility, benefits to the grid, and benefits to customers;

**WHEREAS**, on March 7, 2024 CPA’s Board of Directors approved Resolution No. 24-03-062, approving submission of CPA’s Load Management Standards Plan (“Initial Plan”) to the CEC’s Executive Director for their approval, which was submitted to the CEC on March 15, 2024;

**WHEREAS**, in March of 2025, CEC Staff began discussions with CPA regarding CPA’s Initial Plan and provided CPA with guidance in developing a Revised Load Management Standards Compliance Plan (“Revised Plan”) that would better meet CEC’s interpretation of the LMS requirements and advised that participating in Southern California Edison Company’s (“SCE’s”) Expanded Dynamic Rate Pilot (“SCE Pilot”) would satisfy the LMS requirements;

**WHEREAS**, the Revised Plan proposes to meet the CEC's LMS requirements by participating in the SCE Pilot because it is a program that will enable automated response to marginal cost signals;

**WHEREAS**, CPA's participation in the SCE Pilot will allow CPA's staff to gather quantitative data to support evaluation of the cost-effectiveness, benefits to customers, and technological feasibility of offering marginal cost-based rates to each customer class after the SCE Pilot's conclusion;

**WHEREAS**, the LMS requirements further require large CCAs such as CPA to apply to its Board for approval of at least one marginal cost-based rate, a requirement which CPA can satisfy by obtaining its Board's approval of CPA participation in the SCE Pilot; and

**WHEREAS**, the LMS regulations require the CPA Board of Directors to approve the Revised Plan prior to submission of the Revised Plan to the CEC;

**NOW, THEREFORE, BE IT DETERMINED, AFFIRMED, AND ORDERED BY THE BOARD OF DIRECTORS OF THE CLEAN POWER ALLIANCE OF SOUTHERN CALIFORNIA** that the attached Revised Plan, presented as Exhibit A, wherein CPA proposes to participate in the SCE Pilot is hereby approved as of July 10, 2025;

**ADOPTED AND APPROVED this 10<sup>th</sup> day of July 2025.**

  
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Deborah Klein Lopez, Chair

**ATTEST:**

  
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Gabriela Monzon, Secretary

**EXHIBIT A**

**CPA REVISED LOAD MANAGEMENT STANDARDS COMPLIANCE PLAN**

(see attached)

*Clean Power Alliance of Southern California's Revised Load Management Standards Compliance Plan  
as Ordered by §1623.1(a)(1)*

## **Chapter 1: Introduction**

### **1) Executive Summary**

The California Energy Commission's ("CEC") 2022 Revised Load Management Standards ("LMS")<sup>1</sup> amended its electric load management standards to encourage the use of electrical energy during off-peak hours.<sup>2</sup> The amendments, which became effective on April 1, 2023, updated the procedures for the submittal of plans for approval, requests for exemptions from the requirements or delays of compliance with the requirements, and requests for modifications of approved plans.

To accomplish the goals of the LMS, the regulations require California's large investor own utilities ("IOUs"), large publicly owned utilities ("POUs"), and large community choice aggregators ("CCA") that provide more than 700 GWh of electricity to customers in any calendar year ("Large CCA(s)"), to either:

- (1) develop and propose marginal cost-based rates that change at least hourly<sup>3</sup>; Or,
- (2) If an entity determines not to propose new rates because in its evaluation it has found that (a) implementing new rates would not materially reduce peak load, or (b) if the implementation is not technologically feasible or cost-effective, the entity must offer cost-effective load flexibility programs.<sup>4</sup>

If a Large CCA offers cost-effective load-flexibility programs, such programs should provide at least one option for automating response to the CEC's Market Informed Demand Automation Server ("MIDAS") signals for each customer class that the entity's rate-approving body determines such a program will materially reduce peak load.

Clean Power Alliance of Southern California ("CPA") is a Large CCA and a load-serving entity ("LSE") that provides more than 700 GWh of electricity to customers in any calendar year to 33 cities and the counties in Los Angeles and Ventura Counties, representing roughly one million customers. CPA's initial LMS compliance plan ("Initial CPA Plan") was approved by its Board of Directors ("Board") on March 7, 2024. The Initial CPA Plan was then submitted to the CEC's Executive Director via email and filed in LMS docket 23-LMS-01 on March 15, 2024.

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<sup>1</sup> California Energy Commission, Title 20, California Code of Regulations, Adopts Section 1623.1, Amends Section 1621 and 1623

<sup>2</sup> Title 20, Division 2, Chapter 4, Article 5 of the California Code of Regulations §1621, et seq. ("LMS Regulations"). All section references are to the LMS Regulations unless otherwise specified.

<sup>3</sup> Section 1623.1 (b)(2) and Section 1623.1 (b)(4)

<sup>4</sup> Section 1623.1(a)(1).(A)-(B)



This CPA Revised Plan (“Revised Plan”) proposes to meet the requirements of the LMS Regulations by participating in the Southern California Edison Company (“SCE”) Expanded Dynamic Rate Pilot (“SCE Pilot”)<sup>5</sup> until December 31, 2027, as explained further in Chapter 3, Section 5 to this Revised Plan. CPA’s Board approved this Revised Plan on July 10, 2025 at a duly noticed meeting. CPA submits this Revised Plan to the LMS docket for approval. CPA will also submit a Tier 1 Advice Letter to the California Public Utilities Commission (“CPUC”) to inform the CPUC of CPA’s participation in the SCE Pilot. SCE and CPA currently estimate that SCE can begin enrollment of CCA customers in the SCE Pilot is November 2025.<sup>6</sup> All customer classes are eligible to participate in the SCE Pilot. CPA will cap enrollment of CPA customers in the SCE Pilot at 15% of SCE’s 50 megawatt (“MW”) enrollment target (7.5 MWs), in proportion to CPA’s load share ratio within SCE territory. The SCE Pilot dynamic rate is a marginal cost-based rate. At this time, CPA does not have sufficient data to conclude that implementing marginal cost-based rates would be cost-effective, technologically feasible, and/or beneficial to CPA’s customers. Any future implementation of marginal cost-based rates will depend on technology, costs, anticipated customer adoption, data availability, and other factors, including results from CPA’s participation in the SCE Pilot. CPA will continue to engage in good faith efforts to meet the LMS program goals.

## 2) Introduction

### a) CPA Joint Power Authority and Community Choice Aggregation Introduction

CPA is a CCA and an LSE that provides more than 700 GWh of electricity service in any calendar year to 35 cities and counties in Los Angeles and Ventura Counties, representing roughly three million residents and businesses.<sup>7</sup> CPA was established in 2017 by Los Angeles County, and the cities of Rolling Hills Estates and South Pasadena as a California Joint Powers Authority and the administrator of a CCA program. CPA’s Board members are locally-elected officials who represent and serve CPA’s communities.

CPA purchases electricity (or generation services) for its customers while working in partnership with Southern California Edison (“SCE”), who continues to deliver power and maintain the grid. Since CPA provides the generation services, CPA is only responsible for determining the generation component of the marginal cost-based rate based on evaluation factors prescribed in the 2022 Revised LMS. Therefore, this Revised Plan only evaluates the generation component of the marginal cost-based rate.

### b) LMS Summary and Regulations that Large CCAs Must Comply With

Load management is defined as “any utility program or activity that is intended to reshape deliberately a utility’s load duration curve.”<sup>8</sup> The LMS is intended to support the goals of slowing down rising electricity costs and aiding grid reliability by improving time-of-use efficiency of electricity consumption through increased demand flexibility of the energy system.

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<sup>5</sup> D.24-01-032, Decision to Expand System Reliability Pilots of Pacific Gas and Electric Company and Southern California Edison Company at p.40

<sup>6</sup> Given current implementation delays in the SCE Pilot, pumping and agriculture customers may not be able to enroll in the SCE Pilot until December of 2025.

<sup>7</sup> AB 117 (2002) enabled the establishment of CCAs.

<sup>8</sup> Public Resources Code (“PRC”) Section 25132

The LMS requires IOUs, POUs, and large CCAs in California to give all customers access to rates and/or programs that provide information needed to optimize customer energy use. Specifically, the amendments require CCAs to develop marginal cost-based rates or public programs structured according to the requirements below:

” . . . The plan shall include consideration of programs and rate structures as specified in Section 1623.1 (b)-(d).

(A) The plan must evaluate cost effectiveness, equity, technological feasibility, benefits to the grid, and benefits to customers of marginal cost-based rates for each customer class.

**(B) If after consideration of the factors in Subsection 1623.1(a)(1)(A) the plan does not propose development of marginal cost-based rates, the plan shall propose programs that enable automated response to marginal cost signal(s) for each customer class** and evaluate them based on their cost-effectiveness, equity, technological feasibility, benefits to the grid, and benefits to customers.<sup>9</sup> (Emphasis added.)

As stated in Chapter 1, Section 2(a) of this document, CPA is only responsible for evaluating the marginal cost-based rate’s generation component. This Revised Plan complies with the requirement provided in California Code of Regulations (“CCR”) Sections 1623.1(a)(1), as explained in Chapter 3, Section 5.

#### c) CPA Plan Administration

##### i) Board Approval Process

Section 1623.1(a)(1) states that within one year of April 1, 2023, each Large CCA shall submit a compliance plan that describes how the CCA will meet the goals of encouraging the use of electricity during off-peak hours, encouraging the control of daily and seasonal peak loads to improve electric system efficiency and reliability, lessening or delaying the need for new electrical capacity, and reducing fossil fuel consumption and greenhouse gas emissions. The plan must be submitted to the CCAs rate-approving body in a duly noticed meeting and submitted to the CEC within 30 days after adoption of a plan.<sup>10</sup>

This Revised Plan documents how CPA will meet the goals of the LMS and provides a description of how CPA will comply with each of the CEC regulation elements provided in the subsequent sections. The Initial CPA Plan was approved by CPA’s Board at a duly noticed meeting on March 7, 2024. This Revised Plan was presented to CPA’s Board and approved at a duly noticed meeting on July 10, 2025.

##### ii) Submission of Plan to the CEC

As required in Section 1623.1(a)(1), CCAs are required to submit a compliance plan that is consistent with Section 1623.1 to its rate-approving body for adoption. The Initial Plan was reviewed and approved by its Board (CPA’s rate-approving body) on March 7, 2024, and submitted on March 15, 2024, to the CEC.

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<sup>9</sup> Section 1623.1(a)(1).

<sup>10</sup> Section 1623.1(a)(3)(A).

In March of 2025, CEC Staff began discussions with CPA regarding its submitted Initial CPA Plan and subsequently provided CPA with assistance in developing this Revised Plan to meet the approval of the CEC's Executive Director.

This Revised Plan documents how CPA will meet the goals of the LMS and provides a description of how CPA will comply with each of the CEC regulation elements provided in the subsequent sections. This Revised Plan was presented to CPA's Board and approved at a duly noticed meeting on July 10, 2025. CPA submits this Revised Plan to the CEC's LMS docket.

### iii) Triennial Plan Review

Section 1623.1(a)(1)(C) requires each Large CCA to review its compliance plan at least once every three years. As mentioned previously, CPA submitted its Initial CPA Plan to the CEC on March 15, 2024. This Revised Plan was submitted to CPA's Board and approved at a duly noticed meeting on July 10, 2025. CPA submits this Revised Plan to the CEC's LMS docket. This Revised Plan will be reviewed by CPA at least once every three years following the date of adoption. Any material Plan change or update to the Revised Plan will also be submitted to CPA's Board for approval and will be subsequently submitted to the CEC.

### iv) Annual Reporting

Section 1623.1(a)(1)(C) requires each CCA to submit to the Executive Director of the CEC annual reports demonstrating their implementation of plans. The reports shall be submitted one year after plans are adopted by the CEC and annually thereafter. CPA will submit annual reports beginning one year after this Revised Plan is adopted by the CEC and annually thereafter describing the implementation of this Plan.

## **Chapter 2: Price Signals Via MIDAS**

### 1) Publication of Machine-Readable Rates in MIDAS Overview<sup>11</sup>

MIDAS was developed by the CEC to provide access to utilities' time-varying rates, greenhouse gas emission signals, and California Independent System Operator ("California ISO") FlexAlerts. MIDAS is the principal tool supporting the implementation of LMS. Section 1623.1(c), as modified by Order NO: 23-0531-10.<sup>12</sup> Section 1623.1(c) require Large CCAs to populate their time-dependent rate information into MIDAS no later than three (3) months after April 1, 2023. This section describes CPA's plan to meet these requirements.

#### Time-Dependent Rate Submission to MIDAS via the MIDAS API

##### a) Time-Dependent Rate Submission to MIDAS via the MIDAS API

On June 9, 2023, CPA, through Calpine Energy Solutions ("Calpine"), uploaded CPA's rates into MIDAS server. Calpine currently has authorization to upload CPA's time-dependent rates and any time-

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<sup>11</sup> Section 1623.1(c)

<sup>12</sup> Order No: 23-0531-10, In the matter of: Joint Parties' Request for Delay of July 1, 2023, MIDAS Rate Upload Deadline, p. 5

dependent rate updates to the MIDAS server. This section of the CPA Plan details Calpine's scope of work in coordination with CPA to meet the compliance requirements under the LMS.

i) Existing Rates Uploaded to MIDAS

Please see attached file in Appendix 1.

ii) Proof of Rates Availability on MIDAS

Please see the attached Appendix 2 for CPA's existing time-dependent rates that have been uploaded into MIDAS.

iii) Composite Rate Calculation and Submission Solution

As mentioned previously, CPA only provides generation services to unbundled customers. As such, CPA has uploaded only its time-dependent rates for generation services into MIDAS. SCE is responsible for the transmission and distribution component. The composite rate calculation contains CPA's customers' (who are considered unbundled customers) full rate charges and it includes the CCA generation component of the rate and the IOU's transmission and distribution component of the rate. In the spirit of mutual collaboration, CPA supports further discussions with SCE and the CEC to find a solution regarding how the composite rate calculation will be calculated, who is responsible to see out the calculation, who should report the calculation, and how it would be made available to customers.

2) Future Rate Uploads: Plan and Current Progress of Internal Infrastructure Upgrade for LMS-Compliant Submission of Current and Future Rates

Calpine has and will continue to leverage their existing rate infrastructure to upload current active rates and future rates, which meets current compliance standards.

Calpine, or any of CPA's future billing vendors, will continue to work on CPA's submission of current rates. In such cases where there have been issues with uploading rates into MIDAS, Calpine (or any future vendor) will communicate with the CEC in order to comply with the rate upload obligation.

3) Plan to Provide Rate Identification Number(s) ("RIN(s)") on Customer Billing Statements and Online Account Using Both Text and QR Code

a) Implementation Timeline

A testing plan and kick-off meeting with SCE, as CPA's billing agent, and Calpine, as CPA's billing vendor, was held on January 24, 2024, where CPA, Calpine, and SCE discussed a path forward to display RIN(s) on customer billing statements using both text and QR codes. SCE plans to implement RIN(s) in their internal system by March 21, 2024, with the expectation that the RIN will appear on customer bills starting April 1, 2024.

b) Billing System Update and Current Progress

Calpine will add the RIN into an existing Electronic Data Interchange (EDI) transaction and send it to SCE anytime Calpine generates a bill. SCE will then take this EDI 810 transaction and create the QR code, which will be shown on customer bills.



#### c) Proposed Text Design and QR Code Design and Proposed on Bills

SCE will provide the QR code for the CCA portion of the bill. The RIN, QR Code, and text will appear on CCA portion of the bill (as requested). A mockup bill that displays the RIN(s) and QR code has been provided by SCE.

d) QR Code Linked Webpage (if any) including timeline for webpage creations and finalization, webpage objectives, proposed contents, and considerations or plan to include LMS compliant programs and or rates available for the customer to encourage enrollment.

CPA will not link the QR code to a webpage. The QR code will only be a text code that contains the customer's RIN. The QR code can be scanned when setting up new smart appliances or alternatively, the customer can type in their 16-digit RIN. This approach would make it easier for smart devices to find the RIN and connect to Single Statewide RIN Access Tool rather than being directed to a webpage. CPA may reconsider as more progress has been made on the development of the Single Statewide Standard Tool and accordingly will provide a timeline for webpage creation, webpage objectives, proposed contents, and how to include LMS compliant programs or rates to encourage enrollment if CPA decides to link a webpage to the QR code.

### 4) Plans and Current Participation in the Development of Single Statewide Standard Tool

#### a) Development of Single Statewide Standard Tool

Please refer to the response in Chapter 2, Section (4)(b) of this Revised Plan.

#### b) Implementation of Single Statewide Standard Tool

CPA has been working with the other regulated load serving entities ("LSEs") on creating the statewide RIN tool pursuant to 20 CCR Section 1623(c). A proposed plan for the tool was submitted to the CEC for review on October 1, 2024. CPA will continue to work with other LSEs and the CEC to implement and maintain the statewide RIN tool in a timely manner subject to the tool's approval by the Commission.

## **Chapter 3: Marginal Cost-Based Rates**

### 1) Introduction to Marginal Cost-Based Rates Evaluation and Regulations

Section 1623.1(a)(1) requires each Large CCA to evaluate the cost-effectiveness, equity, technological feasibility, benefits to the grid, and benefits to customers of marginal cost-based rates for each customer class. After evaluating marginal cost-based rates, the CCA may instead propose and evaluate specified programs and/or delay or modify compliance with the LMS requirements.<sup>13</sup>

Section 1623.1(b)(2) requires Large CCAs within twenty-seven months of April 1, 2023, or by July 1, 2025, to apply to its rate-approving body for approval of at least one marginal cost-based rate. These CCAs may also apply for approval of marginal cost-based rates that are offered by the IOUs in whose service areas the CCAs exist in.

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<sup>13</sup> See Section 1623.1(a)(2)(A)-(D). A CCA's rate approving body may approve a plan to delay or modify compliance if the rate approving body determines that the plan demonstrates that compliance with the LMS requirements would not be cost-effective or technologically feasible to implement.

Section 1623.1(b)(4) requires each CCA within fifty-one months of April 1, 2023, or by July 1, 2027, to offer to each of its electricity customers voluntary participation in either a marginal-based rate developed according to Section 1623.1(b)(2), if such rate is approved by the CCA's rate-approving body, or a program identified according to Subsection 1623.1(b)(3).

This Chapter provides an overview of CPA's current time-dependent rates and addresses the requirement to evaluate the implementation of marginal cost-based rates on the timeframe specified in the LMS.

## 2) Overview of CPA's Current Time-Dependent Rates

CPA customers select their rates from three rate options: 100% Green Power (currently with 100% renewable energy content); Clean Power (currently with 50% renewable energy content); and Lean Power (currently with 40% clean energy content). CPA also offers time-of-use ("TOU") rates, and these TOU rates vary by season and by TOU period.

### a) Season

CPA TOU rates reflect two seasonal rate periods: Summer and Winter. Summer is from June 1 through September 30 of each calendar year, and Winter is from October 1 through May 31.

### b) TOU periods

The majority of CPA TOU rates contain three distinct TOU periods for each season, with a peak period from either 4:00 PM to 9:00 PM or 5:00 PM to 8:00 PM. Summer peak periods are only applicable during non-holiday weekdays while winter peak periods are applicable every day. CPA also offers a TOU rate for lighting customers with a peak period from 8:00 AM to 4:00 PM, and legacy TOU rates with a summer-only peak period from 12:00 PM to 6:00 PM.

### c) CPA Rate Classes

Nearly all CPA customers are offered at least one time-dependent rate. CPA has 10 rate classes: residential, small commercial, medium commercial, large commercial, industrial, pumping and agriculture, electric vehicle, lighting, traffic control, and wireless technology. Except for traffic control and wireless technology customers, all customers have access to TOU rates. Approximately 70% of CPA customers and 83% of CPA load are on TOU rates. In addition to TOU rates, CPA also offers load management programs and peak management pricing to particular customer classes which provide additional price signal mechanisms for enhanced demand flexibility (discussed further in Chapter 5).

#### i) Residential Rates

CPA's default residential rate is a TOU rate with a peak period from 4:00 PM to 9:00 PM.

#### ii) Commercial, Industrial and Pumping and Agriculture Rates

All of CPA's commercial, industrial, and pumping and agriculture rate offerings are TOU rates. Default rates have a peak period from 4:00 PM to 9:00 PM. Customers on default commercial, industrial, and agriculture and pumping rates are also eligible to participate in CPA's Peak Management Pricing program, which provides an additional hourly price signal to encourage conservation during peak pricing events (discussed further in Chapter 5).

### iii) Electric Vehicle Rates

All of CPA's electric vehicle ("EV") rate offerings are TOU rates with a peak period from 4:00 PM to 9:00 PM.

### iv) Lighting Rates

CPA offers one lighting TOU rate with a peak period from 8:00 AM to 4:00 PM.

## 3) CPA's Rate Development Process

### a) Board of Directors approval

The setting of all retail rates for power sold by CPA is the responsibility of CPA's Board. The Board typically adopts annual rate updates in June with an effective date of July 1, and may elect to implement interim rate changes throughout the fiscal year.

### i) Guiding Board Policy Objectives

CPA's purpose, as articulated in its Joint Powers Agreement<sup>14</sup>, includes providing customers with rate options that are lower than, or competitive with, the IOU's rates; promoting energy efficiency, demand response, and reduced energy consumption; and providing low-income customers with affordable and flexible energy options, including the provision of discounted rates to eligible low-income households. In its annual rate-setting process, CPA's Board considers CPA's cost of service, equitability, financial sustainability, affordability, rate stability, and competitiveness when adopting rate changes.

### ii) Rate Design and Implementation

CPA rate structures mirror SCE generation rate structures (e.g., seasons, TOU periods, demand charges) to minimize customer confusion and align generation and delivery price signals to shift or reduce load. Following adoption by CPA's Board, CPA's rates are implemented in collaboration with Calpine, CPA's billing and data administrator, and SCE, which provides CPA customers with a single monthly bill that includes CPA generation charges along with SCE delivery charges.

## 4) Marginal Cost-Based Rate Evaluation

In this section, CPA describes its current qualitative evaluation of the possible advantages and drawbacks associated with marginal cost-based rates absent of quantitative data. CPA's participation in the SCE Pilot will allow CPA's staff to gather quantitative data to support evaluation of the cost-effectiveness, benefits to customers, and technological feasibility of offering marginal cost-based rates to each customer class after the SCE Pilot's conclusion.

### a) Cost-Effectiveness Evaluation

In this section, CPA provides a qualitative evaluation of the possible advantages and drawbacks associated with marginal cost-based rates. At present, there is not enough information available for CPA to conduct a quantitative assessment of the overall cost-effectiveness of these rates.

### i) Estimated Costs

Costs for implementing marginal cost-based rates will include rate design, information technology development and setup, and marketing, education, and outreach ("ME&O").

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<sup>14</sup> CPA Amended and Restated Joint Powers Agreement, November 3, 2022, <https://files.cleanpoweralliance.org/uploads/2022/12/Amended-and-Restated-JPA-Final-11-03-2022-fully-executed.pdf>

## ii) Rate Design Costs

To ensure that marginal cost-based rate design both enables customer participation and is reflective of CPA's cost to serve, CPA will likely incur incremental rate design costs related to customer outreach, market research, and pilot development. The outreach costs specifically within this section relate to rate design format. However, there may be some overlap between Rate Design Costs and ME&O Costs detailed below.

## iii) Information Technology Costs

The implementation of marginal cost-based rates is expected to require substantial investment in new data management, analytical, billing, and reporting capabilities to handle the significant increase in volume and complexity of marginal cost-based rates that vary on an hourly or sub-hourly basis.

## iv) Marketing, Education, and Outreach ("ME&O") Costs

Recruiting and retaining customers on marginal cost-based rates will require substantial investment in ME&O, both directly to customers and through partnerships with automated service providers ("ASPs"), SCE, community-based organizations, and other stakeholders or parties. Education along with rebates or other incentives may be essential to motivate residential and small and medium business customers to install and utilize automated technologies to optimize electricity usage (or dispatch from behind-the-meter generation and storage systems) based on hourly or sub-hourly price signals. CPA's prior experience with opt-in programs, particularly novel and complex ones, suggests that customer acquisition costs per kWh of load shifted may be quite high in the early stages of program roll out.

## (1) Estimated and Potential Benefits

As the cost of electricity service can vary significantly by hour and season, marginal cost-based rates can provide strong price signals to customers and encourage beneficial load shift and economic optimization of electricity demand. The benefits of marginal cost-based rates include:

- Shifting electricity consumption from high market price hours to low market price hours, leading to reduced energy costs for all customers.
- Decreasing electricity usage during peak load demand periods, thereby lessening the requirement for additional generation capacity investments.

These financial benefits may accrue directly to marginal cost-based rate participants and may also result in a lower overall cost of generation service to the benefit of all customers. In addition to the potential financial benefit, the ability to shift electricity demand may also contribute to lower overall greenhouse gas emissions and enhanced air quality.

## (2) Rate Design Effectiveness and the Realization of Benefits

Effective rate design is critical for the delivery of benefits related to marginal cost-based rates. Ensuring that marginal cost-based rates both incentivize beneficial load shifting and appropriately reflect the impact to CPA's cost of service will require insight into the level of customer rate and technology adoption, demand profiles, and price sensitivity. Implementing marginal cost-based rates in the absence

of such understanding could lead to ineffective rate design and adverse financial consequences for both participating and non-participating customers.

Cost-effective rate design, customer engagement, and implementation will require additional research, customer feedback, and insight into the following:

#### *Available Technology*

Dynamic and highly variable marginal cost-based rates are likely to be most effective when paired with customer technology capable of processing price signals on an hourly or sub-hourly basis and reacting with an automated load response, such as smart thermostats, smart appliances, and electric vehicle supply equipment. In the absence of enabling technology, customers are less likely to respond to these price signals, limiting the benefits of marginal cost-based rates and potentially resulting in higher customer bills. CPA currently provides load management programs that utilize customer technologies for event-based demand response. However, more information is needed regarding the types of devices utilized among CPA customers and within customer classes, and whether they can process and respond to hourly or sub-hourly price signals.

#### *Customer Adoption*

The number of customers interested in participating in marginal cost-based rates is required to evaluate the resulting load response and potential cost reduction. A sufficient level of adoption is needed to ensure that set-up and ongoing costs of implementation are recovered, and that marginal cost-based rates do not adversely impact non-participating customers.

#### *Customer Experience*

CPA's current and planned load management programs are based on demand response events, which occur during times of higher than seasonally projected energy demand. Participating customers may also opt out of demand response events. Marginal cost-based rates will differ from these traditional demand response programs as customers will be provided price signals on an hourly or sub-hourly basis, where more frequent load management decisions may be necessary to lower monthly energy bills. If customers do not have a sufficient understanding of the change from TOU rates to marginal-cost based rates or are unable to modify their electricity demand in response, there is potential for significantly increased customer bills, negative customer experience, and customer opt-outs.

#### *Customer Price Elasticity*

Price elasticity refers to the responsiveness of electricity demand in response to changes in price. Determination of the price elasticity of each customer class will be required to estimate the expected load response and potential cost reduction from the implementation of marginal cost-based rates. While some understanding of customer load shift capability can be obtained from existing load management programs, these programs are limited to demand response events and do not provide insight into the effect of hourly or sub-hourly price signals on customer demand.

#### *Investor-owned Utility Marginal Cost-Based Delivery Rates*

As mentioned previously, CPA is a CCA providing generation service to participating communities within the service territory of SCE. CPA customers' delivery service provider is SCE, which may also offer marginal cost-based rates for delivery. Information regarding the alignment of CPA marginal cost-based generation rates and rate structure with SCEs marginal cost-based delivery rates and rate structure will be

necessary to determine the total price signal that is provided to customers as well as the ability of customers and ASPs to integrate and comprehend those signals, which may ultimately impact the expected customer adoption, load response, and potential cost reduction from marginal cost-based rates.

#### (a) Discussion

While marginal cost-based rates hold the potential for enhanced benefits compared to TOU rates and load management programs, CPA does not currently have sufficient information to quantify these benefits or CPA's ability to realize them. Factors such as available technology, customer adoption and experience, price elasticity, and the alignment with marginal cost-based delivery rates contribute to this uncertainty. The development of marginal cost-based rates is likely to incur substantial setup and ongoing costs. Without an informed rate design and implementation process, the development could result in additional costs borne by customers. Nonetheless, CPA does recognize the potential benefits of marginal cost-based rates and will continue gathering data to support an informed consideration of future marginal cost-based rate offerings by the CPA Board.

#### b) Equity Evaluation

CPA does not currently have sufficient information to make a quantitative assessment of the potential impact of marginal cost-based rates across various customer classes and segments. The following is a qualitative discussion of the equity considerations for marginal cost-based rates.

##### i) Equitable Access to Direct Benefits

Direct benefit from marginal cost-based rates is derived from the ability of customers to receive and respond to marginal cost-based rates. The following criteria contribute to a customer's ability to respond to marginal cost-based rates.

##### ii) Load Flexibility

The degree to which customers can adjust their electricity consumption will significantly influence their capacity to adapt to marginal cost-based rates. Residential customers who spend considerable time at home may possess greater flexibility in modifying their electricity usage compared to those who spend less time at home. Similarly, commercial clients who can freely adjust the timing of their daily activities stand to achieve more significant savings on their bills compared to commercial customers with less flexible operations.

##### iii) Enabling Technology

Access to enabling customer technology is a critical pathway for customers to directly benefit from marginal cost-based rates. The upfront cost of enabling technology is a barrier to accessing these benefits and may disadvantage low-income customers and communities. For commercial customers, industry-specific technologies may result in different levels of accessibility between customers and within the same customer class.

##### iv) Educational Tools

A sufficient understanding of the structure of marginal cost-based rates, and the potential impact on energy costs, is critical to maintain a positive customer experience. Access to educational materials and tools will be essential for customers to make an informed decision about the adoption of marginal

cost-based rates and how to manage their monthly electricity demand based on hourly or sub-hourly rates. Customer education may be necessary because marginal cost-based rates that are based on prevailing market energy costs will be subject to hourly or sub-hourly market volatility, where locational marginal price fluctuations may result in more substantial price swings than customers experience under TOU rates.

#### v) Equitable Access to Indirect Benefits

Marginal cost-based rates can lower costs related to generation capacity and market energy purchases, which may provide indirect benefits to non-participating customers. In addition, beneficial load shift has the potential to lower greenhouse gas emissions and enhance air quality. As discussed, more information is required for effective rate design and implementation that would result in indirect financial benefits to all customers, as well as which customers and locations may be impacted by changes in greenhouse gas emissions and air quality.

### (1) Discussion

#### (a) Evaluation Conclusion

At this time CPA is unable to conclude that the implementation of marginal cost-based rates would result in equitable direct and indirect benefits to CPA customers. Additional information on available technology, customer adoption and experience, price elasticity, and the alignment with marginal cost-based delivery rates is required to determine the magnitude of the associated benefits that would be attributed to various customer segments and classes.

#### c) Technological Feasibility Evaluation

##### i) CPA's Current Technology Systems

###### *Meters*

The majority of CPA customers have smart meters capable of hourly or 15-minute interval reads, a requirement for implementation of marginal cost-based rates. Customers that do not currently have a smart meter will require a meter upgrade to enable participation. Sub-hourly marginal-cost based rates will require additional investment in smart meters and IT infrastructure to enable participation for most CPA customers as approximately 32% of CPA smart meters can provide 15-minute interval reads.

###### *Access to Real-Time (Dynamic) Hourly Rates*

CPA does not currently have the internal capability to develop, maintain, and provide customers and ASPs with access to hourly or sub-hourly dynamic rates. Although CPA's time-dependent rates are now available through MIDAS, it is not clear what additional internal or external system capabilities will be required to enable uploading and access to rates that change on a day-ahead or real time basis and integration of dynamic generation and delivery rates. CPA will need to either build these capabilities internally or contract with a third-party to develop and maintain rates which integrate with available customer, ASP, and/or statewide tools and technologies (e.g., a statewide pricing machine).

###### *Billing System*

CPA's billing system is not currently equipped to ingest and bill customers based on hourly or sub-hourly rates. The cost and time that will be required by CPA's billing and data administrator to develop, test, and implement this capability is currently unknown but is likely substantial. Also unknown at this time are 1) the technical feasibility of processing the significantly higher volume of data within SCE's current four-day window for turning around bill charges; and 2) the ability to provide bill presentment for unbundled customers that is consistent with bundled customer experience given current limits established by SCE on



the quantity and quality of information CPA is able to incorporate into customer bills. Changes in either of these areas may require significant system investments both by CPA and by SCE.

### *Enrollment*

While CPA maintains distinct rates (prices), CPA rate structures mirror those of SCE. For a permanent marginal cost-based rate offering, participating CPA customers would also need to enroll in a marginal cost-based rate with SCE for delivery services.

### *Customer Educational Tools and Controls*

CPA currently works with a vendor to enroll and manage participation of customers in event-based demand response programs that involve automated load shifting (see Chapter 4 for more information). The programs and technologies in use do not currently provide the capability to ingest and respond to hourly or sub-hourly price signals in real time.

#### ii) Information Technology Roadmap

CPA's technology roadmap will be developed in conjunction with developing and implementing one or more marginal cost-based rate pilots as detailed in Chapter 3, Section 5 of this Revised Plan.

#### iii) Enabling Customer Technology

Customers will need smart devices (e.g., smart thermostats, battery energy storage systems, electric vehicle charges, energy management systems, other applicable devices, etc.) that can access hourly or sub-hourly rates and automatically shift load in response to those price signals. Penetration of such technologies is currently limited, especially among residential, small business, and low-income customers.

### (1) Discussion

#### (a) Evaluation Conclusion

CPA and its billing and data administrator currently lack the capability to implement hourly or sub-hourly marginal cost-based rates. CPA anticipates that participating in one or more dynamic rate pilots, as detailed in Chapter 3, Section 5 of this Revised Plan, will provide CPA with data and insights that will help inform the specifications and budget for future internal technology investments and/or vendor agreements.

#### d) Benefits to Customers

##### i) Avoided Capacity Needs

Generation providers providing service within the California Independent System Operation ("CAISO") electricity market must procure sufficient generation capacity to meet peak customer demand and demonstrate resource adequacy. Demand reduction during peak periods can both enhance grid reliability and reduce the need for investments in new generation capacity, which can indirectly benefit all CPA customers.

##### ii) Avoided Energy Purchase Costs

As a generation service provider, CPA purchases electricity through its long-term and short-term Power Purchase Agreements ("PPAs"), and from the CAISO on behalf of its customers. The ability of marginal cost-based rates to send price signals that shift electricity demand away from higher price hours



and towards lower price hours can directly lower energy costs for participating customers, and indirectly benefit all CPA customers.

### iii) Avoided GHG Emissions & Environmental Benefits

GHG emissions, primarily carbon dioxide and methane, trap heat in the Earth's atmosphere, contributing to global warming and leading to adverse effects such as more frequent and severe heatwaves and rising sea levels. Thermal generation can also adversely impact air quality in nearby communities. CPA was recently ranked the number one green power provider in the United States<sup>15</sup> and is committed to the reduction of GHG emissions from electricity generation. CPA does not own nor contract with any thermal generation suppliers and therefore does not incur any regulatory costs related to GHG emissions. However, the potential of marginal cost-based rates to shift electricity demand away from peak periods with higher thermal generation and towards hours with a greater proportion of renewable generation is aligned with CPA's core objectives and benefits all customers.

### iv) Customer Bill Impacts

Marginal cost-based rates provide customers with the opportunity to respond to hourly or sub-hourly price signals that lower their energy cost compared with their otherwise applicable electricity rate. However, even for customers with enabling customer technology, access to educational tools, and load flexibility, there is a risk of increased customer bills. Additionally, an informed and effective rate design will be required to ensure that the implementation of marginal cost-based rates does not result in additional costs borne by non-participating customers.

### v) Customer Experience

Marginal cost-based rates change on an hourly or sub-hourly basis, reflecting changes to underlying energy market dynamics are likely to vary to a much greater degree than current TOU rates. Significant customer education will be required to ensure that customers both understand the structure of marginal cost-based rates and obtain the necessary tools and information to make informed decisions about their electricity usage.

## (1) Discussion

### (a) Evaluation Conclusion

At this time CPA is unable to conclude that the potential benefits associated with marginal cost-based rates would be realized or quantify the magnitude of those benefits. Additional information on available technology, customer adoption and experience, price elasticity and the alignment with marginal cost-based delivery rates is required for effective rate design that results in the benefits discussed. Chapter 3, Section 5 below outlines CPA's compliance approach after concluding that additional information is needed to adopt marginal cost-based rates at this time.

## 5) CPA's Compliance Approach: Participating in the SCE Pilot to Obtain Data for Further Cost-Benefit Analysis for Implementing Cost-Based Rates

CPA's participation in the SCE Pilot will satisfy the LMS Regulations and provide CPA with data to more effectively evaluate adoption of marginal cost-based rates. Section 1623.1(a)(1) of the LMS

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<sup>15</sup> National Renewable Energy Laboratory, 2022 Utility Green Pricing Programs Rankings, <https://www.nrel.gov/analysis/green-power.html>

Regulations requires Large CCAs such as CPA to submit a compliance plan that details how Large CCAs must meet certain LMS goals. As described in Chapter 1, Section 2(b) of this Revised Plan, a Large CCA that does not plan to proposed development of marginal cost-based rates may satisfy the Section 1623.1(a)(1) requirement by proposing “programs that enable automated response to marginal cost signal(s) for each customer class and evaluate them based on their cost-effectiveness, equity, technological feasibility, benefits to the grid, and benefits to customers.”<sup>16</sup> CPA’s participation in the SCE Pilot satisfies the LMS requirements Section 1623.1(a)(1)(B) because the SCE Pilot is a program that will enable automated response to marginal cost signals and participation in the SCE Pilot will be evaluated by CPA. Furthermore, Section 1623.1(b)(2) requires Large CCAs such as CPA to apply to its rate-approving body for approval of at least one marginal cost-based rate for any customer class(es).<sup>17</sup> CPA satisfied this requirement by presenting to CPA’s Board a marginal cost-based rate in connection with the CPA’s Board’s approval of CPA’s participation in the SCE Pilot.

CPA recognizes the potential of marginal cost-based rates to result in beneficial load shift that benefits both participating and non-participating customers and will continue to gather data to better inform consideration by CPA’s Board of future implementation.

#### a) CPA Will Participate in the SCE Pilot

##### i) SCE Pilot

Beginning in 2023, SCE implemented a dynamic rate pilot for select customers<sup>18</sup> and in June of 2024<sup>19</sup> the SCE Pilot was to be available for one CCA in its service area<sup>20</sup>. The SCE Pilot includes both a subscription rate component, based on average customer hourly usage, and an hourly dynamic rate that is billed to incremental usage credited to a reduction in usage and an hourly dynamic rate that is billed to incremental usage or credited to a reduction in usage. CPA has engaged in discussions with SCE on its SCE Pilot since the first quarter of 2024. CPA participation in the SCE Pilot was brought to CPA’s Board for approval on July 10, 2025. This satisfied section 1623.1(a)(1) and Section 1623.1(b)(2) of the LMS Regulations. Given CPA’s Board approval of this Revised Plan, CPA will file a Tier 1 Advice Letter to participate in the SCE Pilot. After the Advice Letter is approved by the CPUC, it is currently estimated that the earliest SCE can begin enrollment of CCA customers in the SCE Pilot is November 2025.<sup>21</sup> The SCE Pilot will conclude on December 31, 2027. All customer classes will be eligible to participate in the SCE Pilot. CPA will cap enrollment of CPA customers in the SCE Pilot at 15% of SCE’s Pilot enrollment target of 50 megawatts (i.e., 7.5 megawatts), proportional to CPA’s load share ratio within Southern California Edison’s (SCE) territory. The SCE Pilot rate, designed by SCE, is a marginal cost-based rate.

##### ii) CPA Permanent Marginal Cost-Based Rate

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<sup>16</sup> Section 1623.1(a)(1)(B)

<sup>17</sup> Section 1623.1(b)(2)

<sup>18</sup> Decision 21-12-015, Phase 2 Decision Directing Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company To Take Actions To Prepare For Potential Extreme Weather in the Summers of 2022 and 2023

<sup>19</sup> There is a current delay in the implementation of the SCE dynamic rate pilot. The expected time that unbundled customers participation will begin is November 2025.

<sup>20</sup> D.24-01-032, Decision to Expand System Reliability Pilots of Pacific Gas and Electric Company and Southern California Edison Company at p.40

<sup>21</sup> Given current implementation delays in the SCE Pilot, pumping and agriculture customers may not be able to enroll in the SCE Pilot until December of 2025.

CPA's participation in the SCE Pilot will provide CPA with additional information and insights into the impact of marginal-cost based rates on customer behavior and CPA's cost or service, which may enable CPA staff to conduct a more robust cost-benefit analysis on the efficacy of marginal-cost based rates.

## **Chapter 4 Load Flexibility Programs**

### **1) Load Flexibility Programs**

#### **a) LMS Regulation Overview**

The LMS Regulations state that if an entity finds that adopting marginal cost-based rates on at least an hourly basis is not cost-effective, equitable, technologically feasible, and does not deliver benefits to the grid and to customers for each customer class,<sup>22</sup> then a large CCA can propose programs that enable automated response to marginal cost signal(s) for each customer class and evaluate them based on their cost-effectiveness, equity, technological feasibility, benefits to the grid, and benefits to customers.<sup>23</sup>

Section 1623.1(b)(3) describes that no later than 18 months after April 1, 2023, or by October 1, 2024, each CCA shall submit to the CEC Executive Director a list of load flexibility programs deemed cost-effective by the CCA.<sup>24</sup> This section further states that the portfolio of identified programs must provide at least one option for automating response to MIDAS signals for each customer class that the rate-approving body determines such a program will materially reduce peak load.<sup>25</sup>

Section 1623.1(b)(4) describes that within 51 months of April 1, 2023, or by July 1, 2027, each CCA shall offer to each of its electricity customers voluntary participation in either a marginal cost-based rate, if such rate is approved by the CCA's rate-approving body, or a cost-effective program identified according to Section 1623.1(b)(3).<sup>26</sup>

As described in Chapter 3 of this Revised Plan, CPA will participate in the SCE Pilot to satisfy the compliance obligations in the LMS Regulations. Depending on the results and cost-benefit analysis of CPA's participation in the SCE Pilot, CPA may or may not elect to use its load flexibility programs to fulfill the LMS Regulations.

#### **b) Overview of CPA's Current Load Flexibility Programs**

The implementation of customer programs that support grid reliability is a priority for CPA. CPA has implemented demand response programs to support the conservation of energy during times of high demand on the grid. Robust demand response programs help contribute to grid resiliency and reliability, provide incentives and savings to customers, lower CPA's procurement costs, and shift customer usage to less GHG intensive times of day. Furthermore, demand response provides an opportunity for customers to play a role in the operation of the electric grid by reducing their electricity usage during peak demand days when wholesale prices are highest in exchange for financial incentives.

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<sup>22</sup> Section 1623.1(a)(1)(A)

<sup>23</sup> Section 1623.1(a)(1)(B)

<sup>24</sup> Section 1623.1(b)(3)

<sup>25</sup> Section 1623.1(b)(3)(A)

<sup>26</sup> Section 1623.1(b)(3)

Demand response is also an important tool that realizes the objectives identified in the Resiliency and Grid Management category of the CPA Local Programs for a Clean Energy Future plan.<sup>27</sup> This Local Programs plan is the strategic vision for our customer programs and was adopted by CPA's Board in June 2020, then refreshed in 2023<sup>28</sup>. The Local Programs plan details the programs and services to be implemented, all of which are intended to result in community investment and to support our customers in co-managing their relationship with the energy system. CPA's programs are designed to bring local benefits to member communities, such as customer cost savings, economic and workforce development, improved air quality and public health, and more resilient communities.

Load flexibility in our service territory is of notable importance and CPA is accounting for new programs to prepare for the future needs in grid management. While our current offerings are event-based demand response, we are reviewing opportunities to support overall daily load management through pricing signals. As the grid conditions continue to change, it is becoming even more important to educate our customers on how to manage their energy usage in a way that is best for them, the grid, and the environment. In the near term, CPA is planning to pilot two new programs: the first which will support residential customers with TOU rate pricing indicators through smart light switches, and the second which will implement managed charging to shift EV charging load from peak times.

#### c) List of CPA's Current and Planned Program Offerings That Support Load Flexibility

##### Current Residential Programs

CPA considers "Current" programs to be those programs that are currently offered to its customers at the time that the CPA Plan is submitted. While CPA proposes to proceed with the SCE Pilot to meet the LMS requirements, this Revised Plan also includes a list of programs that support load flexibility beyond the SCE Pilot.

##### *Power Response Smart Home*

Power Response Smart Home is a demand response program where residents with eligible smart devices receive financial incentives for saving energy during times of high demand. The program is intended to encourage residential homeowners to reduce energy usage during times of higher than seasonally projected energy demand. Eligible devices include ecobee thermostats, Nest thermostats, Sensi thermostats, ChargePoint EV chargers, Wallbox EV chargers, and SolarEdge home battery systems. Customers receive an incentive for enrolling and annual incentives for continued participation. Incentives vary by device enrolled. Working with AutoGrid as the program implementer, CPA automatically manages devices during events to reduce load.

- Types of Hourly MIDAS Signals: None, this program uses hourly day-ahead CAISO pricing signals.
- Target End-Uses/Customers: Residential customers with smart connected devices.
- Equipment requirements: Smart connected devices, which currently includes smart thermostats, EV chargers, and home batteries.

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<sup>27</sup> CPA Local Programs for Clean Energy Future plan, <https://d2hgu8srlfn9ex.cloudfront.net/uploads/2020/06/Local-Programs-for-a-Cleaner-Future-Report.pdf>

<sup>28</sup> Local Programs for a Clean Energy Future Action Plan, 2023, [https://files.cleanpoweralliance.org/uploads/2023/07/CPALocalProgramsMidCycleRefreshActionPlan\\_062923.pdf](https://files.cleanpoweralliance.org/uploads/2023/07/CPALocalProgramsMidCycleRefreshActionPlan_062923.pdf)

- Participating 3rd party Automation Service Providers: Google Nest, ecobee, Emerson Sensi, ChargePoint, Wallbox, and SolarEdge.
- Control Algorithms: Energy Saving Events are called based on day-ahead market pricing triggers. AutoGrid is the program implementer for Power Response. AutoGrid sends dispatch signals to the Original Equipment Manufacturers (“OEMs”) via AutoGrid Flex Distributed Energy Resource Management System (“DERMS”) platform. The OEM communicates to the smart devices to adjust for reduced load or battery discharge.
- Enrollment Projections: Current enrollment as of 2/5/2024 for the program is 1,488 households and 1,761 devices, with a forecast of 3,000 devices enrolled by the end of the 2024 calendar year.
- Load Impact Projections: Approximately 1.7 MW of dispatchable capacity is currently enrolled, with a forecast of 2.8 MW by the end of the 2024 calendar year.

#### *Power Response Home*

Power Response Home is a demand response program open to all of CPA’s residential customers. The program is intended to encourage residential homeowners to manually reduce energy usage during times of higher than seasonally projected energy demand. Suggestions to reduce energy use during events include thermostat adjustments, turning off lights, delaying running of appliances, and/or unplugging appliances not in use. Participants receive \$2/kWh reduced per event as an incentive. An enrollment incentive of \$20 is also offered to eligible income-qualified customers on CARE/FERA rates and customers with a service address in a disadvantaged community.

- Types of Hourly MIDAS Signals: None, this program uses hourly day-ahead CAISO pricing signals.
- Target End-Uses/Customers: Residential customers.
- Equipment Requirements: No equipment is needed to participate.
- Participating 3rd Party Automation Service Providers: Not applicable.
- Control Algorithms: Energy Saving Events are called based on day-ahead market pricing triggers. AutoGrid is the program implementer for Power Response. AutoGrid sends notifications directly to behavioral demand response customers via AutoGrid Flex DERMS platform. Behavioral demand response customers then manually adjust their home system to reduce energy use.
- Enrollment Projections: Current enrollment for the program is 1,150 homes, with a forecast of 3,000 homes enrolled by the end of the 2024 calendar year.
- Load Impact Projections: Approximately .35 MW of dispatchable capacity is currently enrolled, with a forecast of .9 MW by the end of the 2024 calendar year.

#### *Power Response Multifamily Community*

The Power Response Multifamily Community Program offers an incentivized energy-saving opportunity for multifamily buildings meeting affordable housing eligibility requirements. The program provides smart connected thermostats and financial incentives to building owners and residents for enrolling and participating in demand response events. Working with AutoGrid as the program implementer, CPA automatically manages devices during events to reduce load.

- Types of Hourly MIDAS Signals: None, this program uses hourly day-ahead CAISO pricing signals.
- Target End-Uses/Customers: Affordable multifamily communities and their residents.
- Equipment Requirements: Smart connected thermostats, which are provided by CPA and installed by building management.
- Participating 3rd Party Automation Service Providers: Emerson Sensi.
- Control Algorithms: Energy Saving Events are called based on day-ahead market pricing triggers. AutoGrid is the program implementer for Power Response. AutoGrid sends dispatch signals to OEMs via AutoGrid Flex DERMS platform. The OEM communicates to the smart devices to adjust for reduced load.
- Enrollment Projections: A forecast of 300 multifamily units to be enrolled by the end of the 2024 calendar year.
- Load Impact Projections: A forecast of 0.3 MW by the end of the 2024 calendar year.

### Current Commercial Programs

#### *Power Response Commercial Leaders*

The Power Response Commercial Leaders Program incentivizes business and public sector customers for participating in demand response events and reducing their energy use during times of high demand. Participants receive up to \$80/kW each year for power reduced during Commercial Energy Saving Events. CPA works directly with interested businesses to create a custom plan to identify a customer plan. This may include manual adjustments to their systems or through smart devices that can be connected to and adjusted automatically.

- Types of Hourly MIDAS Signals: None, this program uses hourly day-ahead CAISO pricing signals.
- Target End-Uses/Customers: CPA customers on a business rate, including commercial and public agency customers.
- Equipment Requirements: Equipment is not required, but compatible smart devices and energy management systems may be used if available.
- Participating 3rd party Automation Service Providers: Any compatible connected device or energy management system supported by our program implementer, AutoGrid.
- Control Algorithms: Commercial Energy Saving Events are called based on day-ahead market pricing triggers. AutoGrid is the program implementer for Power Response. AutoGrid sends dispatch signals to the OEMs when applicable and notifications directly to sites that are manually adjusting their load via AutoGrid Flex DERMS platform. The OEM communicates to the smart devices to adjust for reduced load, as applicable.
- Enrollment Projections: Current enrollment for the program is 1 public agency building, with a forecast of 10-15 buildings enrolled by the end of the 2024 calendar year.
- Load Impact Projections: Approximately 11 kW of dispatchable capacity is currently enrolled, with a forecast of 150 kW by the end of the 2024 calendar year.

#### *Peak Management Pricing*

Peak Management Pricing is a demand response program that encourages eligible commercial and municipal customers to voluntarily take action to power down appliances, electronics, air conditioning, or other equipment during peak heat days and get summer bill credits

in return. Participants receive summer bill credits in exchange for the application of a surcharge on energy consumed during demand response events to encourage curtailment during peak demand days.

- Types of Hourly MIDAS Signals: None, this program uses hourly day-ahead CAISO pricing signals.
- Target End-Uses/Customers: Commercial customers on one of the following rates: TOU-GS-1-E, TOU-GS-2-D, TOU-GS-3-D, TOU-8-D, TOU-PA-2-D, or TOU-PA-3-D.
- Equipment Requirements: No equipment is needed to participate.
- Participating 3rd Party Automation Service Providers: Not applicable.
- Control Algorithms: Events are called by CPA based on hourly day-ahead market pricing triggers.
- Enrollment Projections: Current enrollment for the program is 1 commercial business.
- Load Impact Projections: Due to limited enrollment, a forecast is unknown at this time.

### Planned Residential Programs

CPA considers “Planned” programs to be those programs that have an established schedule for implementation.

#### *Smart Light Switches*

CPA will be launching a pilot in April 2024 with the goal of providing customers with time-based price signals through a color-coded display in the residential units of eligible multifamily communities. Smart light switches are to be offered to multifamily buildings meeting an affordable housing eligibility requirement. The smart light switch plates installed will have embedded color-coded technology that encourages end-users to reduce their bills and carbon emissions when energy on the grid is most expensive, and/or carbon intensive. Signals will be created based on CPA’s time-based electric rate signals and sent to an easy-to-understand informational display. Participating customers will be able to make educated decisions based on these pricing signals that directly impact their energy bill.

- Types of Hourly MIDAS Signals: None, this program intends to use time of day pricing signals based on CPA’s rates.
- Target End-Uses/Customers: Affordable multifamily housing residents.
- Equipment Requirements: Smart light switches with color-coded signal technology.
- Participating 3rd Party Automation Service Providers: Flick Power.
- Control Algorithms: Price-based signals will be dispatched daily to all participating residents with a smart light switch. Price signals will be based on CPA’s TOU rates.
- Enrollment Projections: 300 multifamily units during the pilot phase in 2024.
- Load Impact Projections: As this is a 1-year pilot project, CPA intends to review the data compiled for this first year to review the load impact achieved by issuing price-based signals to residential customers.

## Planned Commercial Programs

*Additional commercial programs are in the early stages of research and CPA will update the CPA Plan, as appropriate.*

### 2) Evaluation of Programs

As detailed above, CPA has a load flexibility program portfolio offering participation pathways to all CPA customers. The current demand response programs are event-based and use hourly day-ahead price signals from the CAISO to dispatch our programs on high-demand and high-cost days. CPA is also evaluating daily load management programs for grid flexibility, using hourly day-ahead price forecasts and price signals based on CPA's TOU rates to support daily grid demands. The quantitative benefits of adding a MIDAS signal to CPA's programs are unknown at this time. CPA is evaluating opportunities to implement daily load management strategies through price signals and will be better equipped to assess the benefits and cost effectiveness of incorporating MIDAS following such pilots. In October 2024, CPA submitted to the CEC a list of load flexibility programs deemed cost-effective by CPA.

#### i) Cost Effectiveness

CPA cannot conclude that the development of new programs that allow for automated responses to marginal cost-based rates would be cost-effective at this time.

#### ii) Equity

CPA cannot conclude that the development of new programs that allow for automated responses to marginal cost-based rates would materially address equity at this time.

#### iii) Technological Feasibility

CPA at this time cannot assess the technological feasibility of incorporating MIDAS signals into our programs following the results of our pilot programs that are testing daily load shifting impacts.

#### iv) Benefits to the Grid and Customers

CPA at this time cannot assess the expected incremental costs and benefits associated with incorporating more dynamic price signals and/or allowing resources to be dispatched by MIDAS signals.

## **Chapter 5: Public Information Program**

### 1) Public Information Program

#### a) Introduction to LMS Regulations in Providing Public Information Campaign

Section 1623.1(a)(5) requires CCAs to conduct a public information campaign to inform and educate the affected customers why marginal cost-based rates or customer programs and automation are



needed, how they will be used, and how they will save a customer money.<sup>29</sup> Chapter 5 describes how CPA will comply with conducting a public informational campaign to inform and educate customers.

**b) CPA's Current Communications Approach**

CPA's current communications strategy when phasing in new rate structures and/or customer programs include several approaches. These approaches include targeting customers already enrolled in CPA customer programs, targeted email and mailers, social media presence and awareness, informational webpages, fact sheets and explainer videos, providing CPA's member agencies with educational toolkits and outreach to local business chambers. CPA also supports the phasing in of new rates structures and customer programs with a call center to assist with customer inquiries.

**c) CPA's Current Outreach and Marketing**

As mentioned above CPA utilizes several approaches to communicate new rate structures and/or customer programs. These approaches serve bilaterally to outreach and market new rates or customer programs. In addition, CPA has coordinated and leveraged past statewide educational campaigns, such as the rollout of TOU rates to outreach and market to customers. If such an option is available during the rollout of load flexibility standards, CPA will leverage the existing statewide educational campaigns.

**d) Plan for Conducting Public Information Program**

In implementing the SCE Pilot, CPA will utilize SCE's ME&O strategies that are funded through the SCE Pilot's administrative costs, as approved in CPUC's D.24-01-032. In addition, CPA will incorporate information about the SCE Pilot on its website and in relevant customer program materials, including details that educate customers on the benefits of marginal cost-based rates and customer programs, how they work, and how they can save the customer money.

**i) Public Information Program**

In implementing the SCE Pilot, CPA will utilize SCE's ME&O strategies that are funded through the SCE Pilot's administrative costs, as approved in CPUC's D.24-01-032. In addition, CPA will incorporate information about the SCE Pilot on its website and in relevant customer program materials, including details that educate customers on the benefits of marginal cost-based rates and customer programs, how they work, and how they can save the customer money.

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<sup>29</sup> Section 1623.1(a)(5)

ii) Resource Commitment Plan to Design and Implement the Public Information Programs

CPA will leverage SCE's approved budget in the SCE Pilot to disseminate necessary information for SCE Pilot participation and enrollment.

## **Chapter 6: Summary of CPA's Compliance Plan Approach**

Below is a summary of the Revised Plan approach, which was approved by CPA's Board on July 10, 2025, to meet the LMS Regulations.

- 1) CPA does not recommend adopting marginal cost-based rates at this time. CPA's Board instead authorizes CPA to participate in the SCE Pilot until December 31, 2027 to gain insights into cost and benefits of marginal cost-based rates. .
- 2) CPA submitted to the CEC a list of load flexibility programs deemed cost-effective by CPA on October 1, 2024.
- 3) CPA will submit annual reports to the CEC demonstrating implementation of plan as required by Section 1623.1(a)(3)(C), as approved by CPA's Board.
- 4) CPA's participation in the SCE Pilot satisfies the requirement to submit at least one marginal cost-based rate to the Board of CPA for approval for any customer class(es) where such rate will materially reduce peak load as required by Section 1623.1(b)(2).
- 5) CPA will review the plan at least once every three years after the plan is adopted and submit a plan update to the Board of CPA if there is a material change as required by Section 1623.1(a)(1)(C).

## **Appendix 1**

Attachment: CPA's Existing Rates Uploaded to MIDAS as of February 13, 2024.

[https://files.cleanpoweralliance.org/uploads/2024/02/CPA-Midas-Rates\\_2017-2018-vintage.pdf](https://files.cleanpoweralliance.org/uploads/2024/02/CPA-Midas-Rates_2017-2018-vintage.pdf)

## **Appendix 2**

Attachment: PDF file for CPA's rates in MIDAS.

[https://files.cleanpoweralliance.org/uploads/2024/02/CPA\\_validation\\_20240111.pdf](https://files.cleanpoweralliance.org/uploads/2024/02/CPA_validation_20240111.pdf)