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SAN DIEGO COMMUNITY POWER

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Drew Bohan, Executive Director
California Energy Commission
715 P Street
8234 Ocean Breeze Drive
Sacramento, CA 95815

August 29, 2025

RE: San Diego Community Power Revised Load Management Standards Compliance Plan

Dear Mr. Bohan,

In accordance with section 1623.1 (a)(3)(A) of the Load Management Standards (LMS) regulation, San Diego Community Power (SDCP) hereby submits its Revised Compliance Plan to the California Energy Commission for consistency review and approval pursuant to section 1623.1 (a)(3)(B).

SDCP's initial Compliance Plan was adopted by the SDCP Board of Directors in a duly noticed public meeting on February 22, 2024, and this decision was made by SDCP's Board acting as its rate-approving body. Subsequently, Commission staff reviewed SDCP's initial Compliance Plan and requested additional clarification and information about the circumstances to substantiate that real-time pricing rates are not yet feasible or cost effective, expand information for the list of load flexibility programs that will be used for compliance, and update language regarding the coordination with other load serving entities on creating a statewide tool. SDCP's initial Compliance Plan has been revised in accordance with Commission staff feedback and adopted by the SDCP Board of Directors in a duly noticed public meeting on August 28, 2025.

Enclosed is SDCP's Revised LMS Compliance Plan for the Commission's final approval. If you have any questions, or additional information is required, please contact me at sgunther@sdcommunitypower.org or Aaron Lu at alu@sdcommunitypower.org.

Sincerely,

Stephen Gunther
Regulatory Manager

Attachments

- SDCP Revised Load Management Standards Compliance Plan

San Diego Community Power Load Management Standards Compliance Plan

August 1, 2025

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1. Executive Summary

Since 1974, the California Energy Commission ("CEC") held the authority to establish and revise the Load Management Standards ("LMS"). On April 1, 2023, the CEC adopted amendments to the LMS, which require all large utilities and community choice aggregators ("CCAs") to provide dynamic electricity rates in a format that can be shared and communicated with smart devices or service providers. The updated standards aim to assist customers to take better advantage of time-dependent rates, with the goal of decreasing overall costs by shifting energy use from peak to non-peak time periods. In addition, any technological and behavior changes, resulting from the LMS revisions, slow the rise of future energy costs, increase grid reliability, reduce the need for building more conventional power plants, and avoid transmission and distribution congestion.

The updated standards require all large publicly- and investor-owned utilities and Large[1] CCAs to (1) develop retail electricity rates that change at least hourly and list of cost-effective load flexibility programs to better reflect grid costs and greenhouse gas ("GHG") emissions and apply for approval by their governing board, (2) maintain up-to-date rates in CEC's new central repository for rate information, Market Informed Demand Automation Server ("MIDAS"), and (3) establish public outreach and education to customers about time-dependent rates and automation technologies.

Each utility and CCA must develop and submit a compliance plan describing actions taken to meet the requirements of the LMS amendments. Specifically, publicly owned utilities and large CCAs may delay or modify compliance of each requirement if they can show that despite good faith efforts, that requirement must be modified to provide a more cost-effective, equitable, technologically feasible, or safe pathway to achieve the LMS goals.

San Diego Community Power ("SDCP") firmly supports and aligns with the intent and goals of the LMS through its active load flexibility programs (described more in detail in Section 5) and its Community Clean Energy Innovation Grants Program[2] as well as its 100 Percent Renewable Energy by 2035 Policy.[3] The Community Clean Energy Innovation Grants Program aims to support scalable, replicable clean energy pilot projects that promote load flexibility and management, energy resilience, and increased access to clean energy technologies. Through the 100 Percent Renewable Energy Policy, SDCP's Board of Directors establishes a firm commitment to achieve 100 percent renewable energy by 2035, thus eliminating GHG emissions from SDCP's power supply. SDCP is actively pursuing pathways to reduce system peak, stress on the grids, GHG emissions, and customer costs through programs and pilots.

SDCP's compliance plan ("Plan") includes considerations of the specified marginal cost-based rate structures and programs, as described in the LMS requirements,[4] and evaluates the rate structures and

[1] Large CCAs are defined as any CCA that provides in excess 700 GWh of electricity to customers in any calendar year.
[2] San Diego Community Power Community Clean Energy Innovation Grants Policy, December 15, 2022, 2022-13-Community-Grant-Program-Policy.pdf (sdcommunitypower.org).
[3] San Diego Community Power 100 Percent Renewable Energy by 2035 Policy, March 23, 2023, Item-12b-SDCP-100-Renewable-Energy-by-2035-Policy-c1.pdf (sdcommunitypower.org).
[4] Barclays Official California Code of Regulations, § 1623.1. Large POU and Large CCA Requirements for Load Management Standards, April 1, 2023, View Document - California Code of Regulations (westlaw.com).

programs with respect to cost-effectiveness, equity, technological feasibility, and benefits to the grid and to customers.

Based on SDCP's evaluation, the conclusion is such that implementing complex new rate structures that change at least hourly by July 1, 2027 would not be cost effective nor result in material benefits to our customers or promote grid reliability at this time. The implementation of new and complex rate structures without review of pilot study results, sufficient testing, and refinement of the new rate designs would likely result in low customer adoption and/or confusion. In addition, SDCP's evaluation cannot conclude that implementing new programs that allow for automated response to MIDAS signals would result in material benefits, to be cost-effective at this time. However, SDCP has and will continue to implement and offer load flexibility programs, in lieu of offering a new marginal cost-based rate design, to support the intent and goals of the LMS and to meet LMS compliance.

SDCP describes the pathway and details of achieving LMS goals that are more cost-effective, customer oriented, and technologically feasible in Section 5. SDCP will continue to offer time-variant rates that customers are familiar with as well as develop and implement load flexibility programs. SDCP will reevaluate the specified rate and program designs in the next update of the Plan, informed by future pilot study results.

SDCP's Plan was presented and submitted to SDCP's Board of Directors ("Board") within one year of the adoption of LMS amendments on April 1, 2023. The Plan was adopted by the Board at a duly noticed meeting on February 22, 2024, and this decision was made by SDCP's Board acting as its rate-approving body. SDCP will review the Plan every three years following adoption, and material Plan updates will be submitted to the Board for approval. This Plan was timely filed with the CEC Docket No. 23-LMS-01 on March 7, 2024. The Plan was subsequently reviewed by CEC staff and CEC staff provided feedback and requested revisions on April 3, 2025. Revisions to the Plan were submitted to SDCP's Board and adopted on August 28, 2025 are captured herein. The revised final Plan will be filed with the CEC for approval in 2025.

2. Introduction

2.1 About SDCP

SDCP is a Joint Powers Authority ("JPA") formed by the communities of Chula Vista, Encinitas, Imperial Beach, La Mesa, and San Diego in October 2019. In November 2021, SDCP's founding member agencies were joined by National City and the unincorporated areas of San Diego County. As a JPA, SDCP is a local government agency and is governed by a seven-member Board of Directors composed of elected representatives of its member local agencies. Through these representatives, SDCP is controlled by and accountable to the communities SDCP serves. SDCP provides retail electric generation services and complementary energy programs to customers within the municipal boundaries of its member local governments.

SDCP was formed to empower its member communities to choose the generation resources that reflect their individual values and needs. SDCP was established to procure and develop electrical energy for customers in participating jurisdictions, address climate change by reducing energy-related greenhouse gas emissions, promote electrical rate price stability and affordability, and foster local economic benefits such as job creation, local energy programs, and local power development while prioritizing equity.

SDCP commenced retail electric service to its first phase of customer enrollment in March 2021. As of April 2024, SDCP will successfully have completed its planned phase-in activities of all its member agencies. SDCP is currently serving approximately 956,000 service accounts, equal to approximately 670 gigawatt hours ("GWh") of energy consumption per month.

At the service launch to customers, SDCP's Board approved a minimum 50 percent renewable energy supply portfolio for all participating customers, with a 100 percent renewable retail service option available on a voluntary basis. These retail service offerings have been named "PowerOn" and "Power100," respectively. The minimum quantity of renewable energy delivered to SDCP customers is expected to increase over time, moving to 85 percent by 2030. SDCP's Board adopted two additional service options that came into effect on July 1, 2024. Power100 Green-e Certified is a product offering for businesses looking to meet Leadership in Energy and Environmental Design ("LEED") standards. PowerBase is the second product offering with a 47 percent renewable energy supply portfolio and less expensive compared to SDG&E's default product offering.

2.1.1 Community Clean Energy Innovation Grants Program

On December 15, 2022, adopted through Board of Directors' approval of Policy Number 2022-13[5], SDCP established a grant program aimed to support scalable, replicable clean energy pilot projects that provide economic, environmental, and health benefits to local communities and increase overall energy literacy of SDCP customers. Enabling load flexibility is addressed by three of the program's five focus areas, including:

- Energy behaviors that reduce energy consumption and/or costs.
- Energy resilience to ensure communities can avoid, prepare for, minimize, adapt to, and recover from energy disruptions.
- Increased access to the benefits of clean energy technologies with a focus on underserved communities and vulnerable populations.

In June 2023, grants totaling $390,000 were awarded to ten organizations. SDCP expects to receive progress updates from the organizations periodically.[6] The program will run annually, and the next submission cycle will open in early 2024.

2.1.2 SDCP's 100 Percent Renewable Energy Policy

On March 23, 2023, adopted through the Board of Directors' Resolution 2023-03, SDCP's 100 Percent Renewable Energy by 2035 Policy commits SDCP to achieving 100 percent renewable energy for its generation energy supply by 2035. The policy commits SDCP's Chief Executive Officer to take all operational actions necessary to achieve this target. Annually, SDCP shall review progress towards this target at a Board meeting. As SDCP ramps up its energy supply towards 100 percent renewable energy,

[5] San Diego Community Power, Community Grant Program Policy, https://sdcommunitypower.org/wp-content/uploads/2023/02/2022-13-Community-Grant-Program-Policy.pdf.
[6] San Diego Community Power Community Clean Energy Innovation Grants Award Press Release, July 26, 2023, 23.07.26.SDCP_.SDF_.PressReleaseFinal.pdf (sdcommunitypower.org).

the organization is also committed to continue promoting electrical rate price stability and affordability and fostering local economic benefits.

Currently, SDCP is actively negotiating the offtake of renewable power from long-term projects of multiple technologies. Promoting the construction of renewable energy projects, in culmination with battery energy storage systems, will help with grid reliability as well as decreasing green-house-gas emissions that would be otherwise produced via conventional power generation. Current portfolio content is such that after providing 100 percent RPS for Power100 customers, PowerOn is tracking towards serving customers with 75 percent RPS by 2027. SDCP's new product offerings that started on July 1, 2024 have portfolio content that includes a 100 percent RPS for Power100 Green-e Certified and a 47 percent RPS for Powerbase. SDCP's contracting of long-term renewable projects will allow SDCP to achieve the Board target of 100 percent renewable by 2035, and price negotiating efforts will allow SDCP to forecast portfolio price impacts.

2.2 Load Management Standards

The central focus of CEC's LMS Rulemaking is to encourage customers to shift electricity use from peak times of day when it is expensive and polluting to cheaper and cleaner off-peak times of the day. According to the Public Resources Code, section 25132, load management is defined as "any utility program or activity that is intended to reshape deliberately a utility's load duration curve". Load management reduces the need for new electrical generation and backup generation, thus lowering customer energy costs, and is a key strategy to ensure grid reliability and resilience, distributed energy resources integration, and GHG emissions reduction.

The CEC adopted the LMS amendments through a rulemaking on April 1, 2023, and the amendments require publicly- and investor-owned utilities and Large CCAs to offer customers access to rate-structures and programs that provide the information needed to manage and optimize their energy use. Specifically, the revisions require development of marginal cost-based rates or load flexibility programs.

LMS defines marginal cost as the change in current and future electric system cost that is caused by a change in electricity supply and demand during a specified time interval at a specified location.[7] Total marginal cost is calculated as the sum of the marginal energy cost, the marginal capacity cost (generation, transmission, and distribution), and any other appropriate time and location dependent marginal costs, including the locational marginal cost of associated greenhouse gas emissions, on a time interval of no more than one hour.

In this Plan, SDCP uses the term dynamic rates to reflect responding to these marginal cost signals on an hourly or sub-hourly basis. Being a CCA, SDCP is authorized and responsible for setting and recovering only the generation cost components for each applicable electric rate. San Diego Gas and Electric ("SDG&E"), the investor-owned utility for the San Diego service area, is responsible for setting distribution, transmission, and any other non-generation cost components for each rate.

[7] Energy cost computations shall reflect locational marginal cost pricing as determined by the associated balancing authority, such as the Los Angeles Department of Water and Power, the Balancing Authority of Northern California, or other balancing authority. Marginal capacity cost computations shall reflect the variations in the probability and value of system reliability of each component (generation, transmission, and distribution).

2.2.1 SDCP's Compliance Plan Roadmap

Adopted LMS amendments section 1623.1(c) requires SDCP, along with the other utilities and Large CCAs, to develop and submit a compliance plan in response to meeting the revised LMS requirements. The following table is a roadmap identifying where each regulatory requirement, along with the due date, is addressed within SDCP's compliance plan.

LMS Section	Regulatory Requirement	Due Date	Plan Section	Status
§1623.1(c)	Within three months of regulation effective date, 4/1/2023, upload existing time-dependent rates to the MIDAS database.[8]	8/1/2023	3.1	Completed
§1623.1(a)(1)	Within one year of regulation effective date, develop and submit a compliance plan addressing how SDCP plans to comply with LMS requirements, and including evaluation of marginal cost-based rates and programs, to SDCP's Board. The plan must be considered for adoption within 60 days after submission.	4/1/2024	2.2.2.1	In progress
§1623.1(a)(3)(A)	Submit compliance plan to the Executive Director on the CEC within 30 days of adoption of the plan. Respond to requests for additional information and/or recommendations within 90 days.	6/1/2024	2.2.2.2	Completed; Plan revision submission in progress
§1623(c)(4)	Within one year of regulation effective date, provide customers access to their Rate Identification Numbers ("RIN") on billing statements and in online accounts using both text and QR.	4/1/2024	3.1.2	Completed
§1623(c)(2)	Within 18 months of regulation effective date, develop and submit to the CEC, in conjunction with the other obligated utilities, a single statewide standard tool for authorized rate data access by third parties, and the terms and conditions for using the tool. Upon CEC approval, maintain and implement the tool.	10/1/2024	3.1.3	In progress
§1623.1(b)(3)	Within 18 months of regulation effective date, submit to the CEC	10/1/2024	5.2.5.1	Completed

[8] On June 1, 2023, the CEC issued Order No. 23-0531-10 in response to a request for extension from the IOUs and Large CCAs. The Order approved an extension for CCAs to upload time-dependent generation rates by August 1, 2023, and remaining time-depending rates with rate modifiers by October 1, 2023.

	Executive Director a list of load flexibility programs deemed cost effective by SDCP. The portfolio of programs must provide at least one option to automate response to MIDAS signals for each customer class where SDCP's Board has determined such a program would materially reduce peak demand.			
§1623.1(a)(3)(C)	Submit annual reports to the CEC Executive Director demonstrating implementation of plan, as approved by SDCP's Board.	Every year, starting on 4/1/2025	2.2.2.4	Planned for future
§1623.1(b)(2)	Within 27 months of the regulation effective date, submit at least one marginal cost-based rate to SDCP's Board for approval for any customer class(es) where such a rate will materially reduce peak load.	7/1/2025	4.3.5	Deferred
§1623.1(b)(4)	Within 51 months of the regulation effective date, offer customers voluntary participation in either a marginal cost-based rate, if approved by SDCP's Board, or a cost-effective load flexibility program.	7/1/2027	4.3.5 and 5.2.5.2	In progress
§1623.1(b)(5)	Conduct a public information program to inform and educate affected customers why marginal cost-based rates or load flexibility programs and automation are needed, how they will be used, and how these rates and programs can save customers money.	Ongoing, dependent on offerings	6.3	In progress
§1623.1(a)(1)(C)	Review the plan at least once every 3 years after the plan is adopted and submit a plan update to the Board if there is a material change.	Every 3 years	2.2.2.3	Planned for 2028

2.2.2 SDCP's Compliance Plan Administration

2.2.2.1 Plan Development and Board Approval Process

Adopted LMS amendments section 1623.1(a) requires each Large CCA to submit a compliance plan consistent with the applicable requirements of the LMS, as well as actions taken to meet those requirements to its rate-approving body. The compliance plan must be submitted within one year of the regulation effective date, or by April 1, 2024, and must be considered for adoption by the rate-approving body in a duly noticed public meeting within 60 days of submission.

This Plan meets the requirements of section 1623.1(a). The Plan was submitted to the Board prior to April 1, 2024, and presented to SDCP's Board at a duly noticed meeting on February 22, 2024. SDCP's Board approved this Plan. The description of how SDCP complies with each element of the regulatory requirements of the LMS amendments is provided in the subsequent sections of this Plan.

2.2.2.2 CEC Review Process

Adopted LMS amendments section 1623.1(a)(3) specifies that, upon adoption by the Large CCA rate approving-body, the plan must be submitted to the CEC Executive Director within 30 days for review. SDCP's Board is the sole authority to approve rates, and in this regulatory proceeding, the CEC's role is limited to determining whether this adopted Plan complies with the regulation.

Following the Plan's presentation and adoption by SDCP's Board on February 22, 2024, the Plan was submitted to the CEC by April 1, 2024 for review. Any requests for additional information or recommended changes will be addressed, and a written response submitted to the CEC within 90 days as required in the regulation. The Plan was reviewed by CEC staff and CEC staff provided feedback and requested revisions on April 3, 2025. Through this revised compliance plan, SDCP is responding to the CEC staff accordingly.

2.2.2.3 Triennial Plan Review

Adopted LMS amendments section 1623.1(a)(1)(C) requires each Large CCA to review its compliance plan at least once every three years. The CCA must submit a plan update to its rate-approving body where there is a material change to the factors considered in evaluating marginal cost-based rates and programs. Material revisions to the plan shall follow the same process as the initial plan approval.

This Plan will be reviewed by SDCP every three years following the date of adoption, and material updates will be submitted to SDCP's Board for approval. Subsequently, this Plan and any approved material updates will be duly submitted to the CEC.

2.2.2.4 Annual Reporting

Adopted LMS amendments section 1623.1(a)(3)(C) requires each Large CCA to submit to demonstrate implementation of its LMS compliance plan through a submission to the CEC Executive Director. Each Large CCA must submit the initial report one year after adoption of the plan by the CCA's rate-approving body, and annually thereafter.

SDCP will timely submit annual reports to the CEC Executive Director describing the implementation of this Plan.

3. Access to Price Signals

3.1 Publication of Machine-Readable Rates in MIDAS

The CEC developed the MIDAS database, as part of the LMS revisions, so customers and automation service providers can link flexible loads to a machine-readable database of rates and other grid signals to automate demand flexibility. The LMS amendments

require the utilities and Large CCAs to populate utility rate information into MIDAS and to facilitate access to MIDAS signals for customers and their authorized third parties. This section of the Plan details SDCP's planned actions to meet this requirement.

3.1.1 Upload of Time-Dependent Rates

Adopted LMS amendments section 1623.1(c) requires each Large CCA to upload existing time-dependent rates to the MIDAS database within three months of the regulation effective date, or by July 1, 2023. On June 1, 2023, the CEC issued Order No. 23-0531-10[9] in response to a request for extension from the IOUs and Large CCAs. The Order approved an extension for CCAs to upload time-dependent generation rates by August 1, 2023, and remaining time-depending rates with rate modifiers by October 1, 2023. Each uploaded rate must be assigned a RIN, which is used to uniquely identify each rate. The MIDAS database will provide information about the rate and any associated marginal signals to which the customer may automate response for each associated RIN.

Large CCAs are also required to upload any new time-dependent rates or changes to existing rates, prior to the effective date of that rate. All uploaded time-dependent rates must include all applicable time-dependent cost components.

3.1.1.1 Existing Rates Upload

On August 1, 2023, SDCP successfully uploaded 180 rate permutations of time-dependent rates, including residential and non-residential customer classes. A list of current time-dependent rates and corresponding RINs can be found in Appendix A.

A message confirming successful upload was returned for each rate file loaded to MIDAS. SDCP also performed random retrieval of rates as a second point of confirmation to the successful rate upload and to validate accuracy of rates recorded in MIDAS. In addition, SDCP sent a confirmation of successful MIDAS upload email to CEC staff on August 1, 2023, and received acknowledgement from the CEC's MIDAS Lead contact on August 2, 2023.

On October 1, 2023, SDCP successfully uploaded the corresponding 180 rate permutations of time-dependent rates for SDCP's 100 percent renewable retail service option, "Power100". SDCP received acknowledgement from CEC's Lead contact on October 5, 2023, confirming successful additional MIDAS upload. SDCP coordinated with its vendor to upload any new time-dependent rates or changes to existing rates, that became effective on February 1, 2024 going forward.

3.1.1.2 Future Rates Upload

Going forward, SDCP will upload existing rates as needed, to reflect any rate changes, and any new time-dependent rates or rate components. SDCP will follow a similar process to the successful existing rate uploads in 2023. SDCP will create rate files in csv format, convert them to XML format, and load them to MIDAS through the application programming interface.

[9] California Energy Commission, Order No. 23-0531, June 1, 2023, https://efiling.energy.ca.gov/GetDocument.aspx?tn=250450&DocumentContentId=85205.

3.1.2 Provide RINS to Customers

Adopted LMS amendments section 1623(c)(4) requires each Large CCA to provide customers access to their RIN(s) on customer billing statements and online accounts using both text and quick response ("QR") or similar machine-readable digital code. This access must be provided within one year of the regulation effective date, or by April 1, 2024.

3.1.2.1 Implementation Plan

SDCP partners with SDG&E, the local investor-owned utility in the service area, to serve electricity charges to customers through either paper and/or electronic bill statements. The bill is the standard presentation of electricity billing statements to customers. Customers also have access to billing statements through their protected online SDG&E accounts.

SDCP through SDG&E made the RINs available in text and QR formats on billing statements on or before April 1, 2024 as required. This allows customers to access their RIN on the billing statement received by mail or accessed online. SDG&E has significant control of both paper and electronic billing statement designs, therefore SDCP's compliance with section 1623(c)(4) was dependent on successful coordination with SDG&E. SDCP, through its contracted back-office vendor, coordinated with SDG&E to implement the RINs, both in text and QR formats, by April 1, 2024. RINs are standardized to include country, state, distribution, energy, rate, and location information. RINs are also based on customer energy providers, pricing plans, locations, and other account considerations, such as participation in assistance and/or solar programs and pricing plan(s) changes.

SDCP customers see two RINs, one for the CCA-associated component(s) of their bill pertinent to their generation rates and another for the SDG&E-associated component(s) of their bill related to transmission and distribution rates. There may be multiple RINs for customers with group bills and corrected billing.

3.1.3 Statewide RIN Access Tool

Adopted LMS amendments section 1623(c) requires utilities and Large CCAs to collaboratively develop a single statewide standard tool for authorized rate data access by third parties, along with a single set of
terms and conditions for third parties using the tool. The tool must meet all the following requirements:

- Provide the RIN(s) for the rate(s) applicable to a customer's premise.
- Provide any RIN(s) for the rate(s) to which the customer is eligible to be switched.
- Provide estimated average or annual bill amounts based on the customer's current rate and any other rate(s) for the customer is eligible to be switched if such calculation tools already exist.

- Enable authorized third parties, upon the direction and consent of the customer, modify the customer's applicable rate, to be reflected in the next billing cycle.

The tool must also incorporate reasonable and applicable cybersecurity measures, minimize enrollment barriers, and be accessible in a digital, machine-readable format according to industry best practices and standards. The tool must be submitted to the CEC for approval within 18 months of the regulation effective date, or by October 1, 2024. After CEC approval, the utilities and Large CCAs must collaboratively implement and maintain the tool.

3.1.3.1 Statewide Tool Development

SDCP has been working with the other regulated load serving entities 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. We will continue to work with the other Load Serving Entities (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.

3.1.3.2 Statewide Tool Implementation

SDCP's internal infrastructure must be updated to integrate and support the final approved statewide tool.

SDCP is unable to specifically identify the full scope of integration efforts needed until the final tool is designed and approved by the CEC. Concurrent with the development process, however, SDCP is reviewing its internal infrastructure and scheduling budget requests. Implementation projects will be added to SDCP's annual work prioritization queue. While SDCP anticipates complying with this requirement, any delays in development of the tool could result in implementation delays. Similarly, if the costs of integrating the tool result in undue hardship to SDCP or its customers, SDCP may seek to delay or modify compliance with this requirement.

4. Dynamic Rates

The adopted LMS amendments identify dynamic hourly or sub-hourly rates as a central tool and are critical to encourage shifting peak energy-use, controlling daily and seasonal peak loads, lessening, or delaying the need for new electrical capacity, and reducing fossil fuel consumption and associated GHG emissions.

Adopted LMS amendments section 1623.1(b)(2) directs the Large CCAs to seek approval from their Boards for at least one dynamic rate for each customer class for which its rate-approving body determines such rate will materially reduce peak load. The application must be submitted within 27 months of the regulation effective date, or by July 1, 2025. In accordance with section 1623.1(b)(4), approved rates must be implemented 24 months following any Board rate approvals, or by July 1, 2027.

Adopted LMS amendments section 1623.1(a)(1) requires each Large CCA to evaluate the cost effectiveness, equity, technological feasibility, and benefits to the grid and customers, of dynamic rates for each customer class in its compliance plan. After evaluating such rates, the Large CCA may instead propose and evaluate specified programs and/or delay or modify compliance with the LMS requirements.

The following section of SDCP's Plan provides an overview of SDCP's current time-dependent rates, describes SDCP's rate development process, and addresses the requirement to evaluate the implementation of dynamic rates on the timeframes specified in the LMS.

4.1 Overview of Current Time-Dependent Rates

SDCP's portfolio of time-dependent rates includes at least one marginal cost-based time-dependent rate for nearly every customer class. SDCP has five customer classes: residential, small commercial, medium/large commercial, agriculture, and lighting. Apart from lighting and unmetered customers, all customers have access to Time-of-Use ("TOU") rates and 84% of SDCP customers are on TOU rates. Please see the following table for details on SDCP's rates by customer class and percent of customers in that customer class on TOU rates.

Customer Class	Available Rates[10]	% on TOU Rates
Residential	TOU: - DR-SES - EV-TOU, EV-TOU-2, EV-TOU-5 - TOU-DR, TOU-DR-1, TOU-DR-2 - TOU-ELEC Non-TOU: - DR - DR-LI-MB (CARE/FERA/Medical Baseline)	83%
Small Commercial	TOU: - TOU-A (Primary or Secondary) - TOU-A-2 (Primary or Secondary) - TOU-A-3 (Primary or Secondary) - TOU-M Non-TOU: - A-TC (Traffic Control Service) - E-LI-NR (CARE/FERA for TOU-A, TOU-A-2, TOU-A-3, TOU-M)	96% (100% if excluding A-TC, Traffic Control Service accounts)
Medium/Large Commercial	TOU: - A6-TOU (Primary, Secondary or Transmission) - AL-TOU (Primary, Secondary or Transmission)	96%

[10] SDCP has additional rate variants including legacy grandfathered rates and less than 20kW or 20kW or greater versions of rates.

	- AL-TOU-2 (Primary, Secondary or Transmission) - EV-HP (Primary or Secondary) - DG-R (Primary, Secondary or Transmission) Non-TOU: - E-LI-NR (CARE/FERA for AL-TOU, AL-TOU-2, DG-R) - OL-TOU	
Agriculture	TOU: - PA-T-1 (Primary, Secondary or Transmission) - TOU-PA (Primary or Secondary) - TOU-PA-2 (Primary or Secondary) - TOU-PA-3 (Primary or Secondary)	100%
Lighting	TOU: - LS-2-AD Non-TOU: - LS - OL-2	0% (96% of lighting accounts are unmetered)

SDCP is also developing load flexibility programs that incorporate time-varying marginal cost-based signals, some of which test response to different price signals, in addition to time-dependent rates to encourage customer peak load shift. The following section of the Plan provides a summary of SDCP's currently available time-dependent rates.

4.1.1 Residential Rates

SDCP's TOU-DR is the standard rate for residential customers. Residential customers pay different rates depending on the season, day, and hours of energy use, summarized in the table below. These time periods were selected because they are best aligned with highest peak loads and marginal electricity prices, while also being simple and easy for customers to understand.

Time-Of-Use Periods	Summer Months (June 1 through October 31)	Winter Months (November 1 through May 31)
On-Peak	4 pm – 9 pm	4 pm – 9 pm
Off-Peak	weekdays 6 am – 4 pm and 9 pm – 12 am, weekends and holidays 2 pm – 4 pm and 9 pm to 12 am	weekdays 4 am – 4 pm (excluding 10 am – 2 pm in March and April) and 9 pm – 12 am, weekends and holidays 2 pm – 4pm and 9 pm to 12 am
Super Off-Peak	weekdays 12 am – 6 am, weekends and holidays 12 am – 2pm	weekdays 12 am – 6 am (excluding 10 am – 2 pm in March and April), weekends and holidays 12 am – 2pm

SDCP's other TOU rates provide options for customers in terms of difference in peak, off-peak, and super off-peak periods to shift energy use. SDCP enrolled residential customers onto its TOU rates in the first half of 2022 during phase 3 of enrollment. The high adoption and retention of residential TOU rates has benefited both SDCP and customers.

SDCP's EVTOU is the standard rate for residential customers that charge their EVs at home. This rate encourages customers to charge their EVs during super off-peak times when energy is abundant, and energy prices are low.

4.1.2 Non-Residential Rates

SDCP's TOU-A is the standard rate for small commercial customers. SDCP's AL-TOU is the standard rate for medium/large commercial customers. SDCP's TOU PA is the standard rate for agriculture customers. All these rates are similar in concept to residential TOU rates, except the rate periods differ. Non-residential customers have been offered TOU rates for a much longer time compared to residential customers.

4.2 SDCP's Rate Development Process

4.2.1 Strategic Direction on Competitive Rates

Adopted by the Board on November 17, 2022, the Rate Development Policy[11] guides SDCP's rate development process. The policy provides a framework to ensure SDCP's rate design, development, and implementation of processes remain transparent, fiscally responsible, and centered on the customer. The policy includes the following objectives:

- Cost Recovery: rates must be sufficient to recover all expenses, debt service and other expenditure requirements.
- Reserves: rates must be sufficient to build prudent reserves.
- Rate Competitiveness and Customer Value: rates must allow SDCP to successfully compete to retain and attract customers while offering superior electricity service offerings with higher renewable content compared to the incumbent investor-owned utility.
- Rate Stability: rate changes should be minimized to reduce customer bill impacts with a preference for annual rate adjustments.
- Equity among customers: rate difference among customers should be justified by differences in usage characteristics and/or cost of service. Additionally, to the extent possible, rates shall be equalized from a value proposition perspective among customers enrolled during different Power Charge Adjustment Indifference ("PCIA") Vintage Years.
- Rate Structures: as new rates are developed; emphasis shall be put on rate-design simplicity and comparability as well as overall customer experience.
- Transparency: SDCP's Board will review and approve rates at an open and public meeting held in accordance with the Ralph M. Brown Act. SDCP shall post a copy of the adopted rates in both English and Spanish on its website within 14 calendar days

[11] San Diego Community Power Rate Development Policy, https://sdcommunitypower.org/wp-content/uploads/2023/01/Item-12a_Rate-Development-Policy.pdf.

of approval or by the rates' effective date, whichever is sooner. SDCP shall also make any rate design documents promptly available upon request under the California Public Records Act.

- Cost Shifting: SDCP shall avoid, to the best of its ability, cost shifting between customer classes.

- Cost of Service: SDCP may explore a cost-of-service model for rate design.

When designing rates, SDCP must balance all the above competing objectives, many of which are reflected in the LMS revisions' goals. As a public not-for-profit agency, SDCP designs and implements rates that meet revenue requirements as well as targeted reserves, while maintaining rate competitiveness, stability, and long-term financial viability. While SDCP understands the need to develop and implement dynamic rates, SDCP emphasizes the customer experience, such as ensuring the rate development process is transparent and rates are easy to understand, as well as minimize rate changes.

4.2.2 Rate Design and Implementation

Aligned with objectives of the Rate Development Policy, SDCP takes deliberate measures to ensure that any new rate development and implementation will be successful, effective, and accepted by its customers. These proactive measures may include:

- Conducting pilots to determine the effectiveness of different rate options and reception by customers.

- Developing and implementing iterative outreach and education campaigns.

- Developing and implementing new education tools, such as rate comparison tools and reports.

After rate implementation, SDCP is committed to monitoring the effectiveness of the rate with respect to shifting peak load and customer feedback.

4.3 Evaluation of New Dynamic Rates

Consistent with the adopted LMS amendments, the following section of the Plan evaluates the cost-effectiveness, equity, technological feasibility, and benefits of dynamic rates for each customer class. SDCP assumes that these new dynamic rates would be implemented on the schedule specified in the LMS amendments, which includes applying for Board approval of dynamic rates by July 1, 2025, and offering voluntary participation in those rates to all customers by July 1, 2027, where such a rate is determined to materially reduce peak load cost effectively.

SDCP does not have sufficient information at this time to conclude that proposing and implementing dynamic rates following the adopted LMS amendments' schedule would be cost effective or provide incremental benefits. Significant uncertainties exist related to a gap in dynamic rate pilot evaluation results and data in SDCP's and SDG&E's service area, the level of incremental load shift potential, customer response to market price risks, and

customer acceptance of a complex new rate design. Based on the results of this evaluation, SDCP plans to defer the proposal and adoption of new dynamic rates at this time. However, SDCP has and will continue to implement and offer load flexibility programs, in lieu of implementing a new marginal cost-based rate design, to support the intent and goals of the LMS and meet LMS compliance standards. SDCP will re-evaluate dynamic rates with the benefit of additional information from dynamic rate pilots in SDCP's and SDG&E's service area and other service areas in the next update of this Plan.

4.3.1 Cost-Effectiveness

Adopted LMS amendments section 1623.1(a)(1)(A) specifies cost effectiveness as the first evaluation factor. SDCP strives to qualitatively estimate the costs and benefits to customers, that are associated with new dynamic rates for each rate class. This approach is necessary because, as of the time of the preparation of this Plan, SDCP does not have data to support a full quantitative analysis.

To assess cost effectiveness, it is necessary to consider the costs associated with designing, implementing, and maintaining new rates for each customer class, as well as the ongoing benefits associated with implementation. To demonstrate cost effectiveness, the expected benefits for each rate must exceed the cost of implementation.

As best practice for assessing the cost effectiveness of a new rate, SDCP would conduct a comprehensive pilot study to test and gather data on different rate options, which would likely require several years and a multi-million-dollar investment. Forming in 2019, SDCP is still a relatively young organization and has been limited in terms of developing rate options and has been prioritizing building a strong foundation as a customer-centric organization. Thus, SDCP has not had sufficient time nor resources to pilot multi-year and multi-million-dollar rate pilots. SDCP plans to evaluate the effectiveness of dynamic rate options based on information gathered across the state from ongoing and proposed dynamic rate pilots.

As a result of the factors above, SDCP's cost-effectiveness evaluation is based on qualitative assessments, and SDCP anticipates exploring opportunities to expand data access and/or refine estimates to inform future updates of the Plan.

4.3.1.1 Estimated Costs

Significant investment in planning, customer education and marketing, and technology development is required to implement new rates for all customer classes, particularly rates that are far more complex than any other currently available. SDCP has identified the following cost categories associated with implementing dynamic rates:

- Rate design costs would include the costs of initial market research, implementing pilots to test rate options, and analyzing the results of those pilots to refine the final design. Once the pilot is complete and evaluation data is analyzed, the final rate recommendation needs to be designed.

- Setup costs include coordinating with external vendors and SDG&E on Information Technology system updates to enable settlement over new intervals, data integration, updating the bill presentment to reflect these intervals, and developing

new or updating existing customer tools. Having tools available for customers to self-service and monitor their costs and usage will be important for success with hourly rates.

- Recruitment and retention costs include marketing and enrollment costs. SDCP anticipates spending significant time educating customers through an extensive, phased marketing campaign and targeted outreach in a variety of languages. This effort will only be successful if significant time and funds are invested. Shifting to complex hourly rates while maintaining a positive customer experience – which is key for adoption and longer-term retention of the rate – will require informing and educating customers to, at a minimum, understand and monitor hourly rates, energy market dynamics, pricing, and temperature trends that may significantly impact their bills.

SDCP anticipates the above costs to make a dynamic rate available are fixed and do not vary by load, electricity usage, or enrollment level. While SDCP does not currently have pilot results to inform implementation costs, SDCP estimates significant resources to develop, implement, and maintain hourly rates for customers will be required. Depending on the scope of the costs, implementing complex new rates may necessitate a rate increase for all customers to bring in additional revenue.

4.3.1.2 Estimated Benefits

This section of the Plan describes the potential benefits associated with implementing new dynamic rates and the estimated realization of incremental benefits based on design effectiveness, adoption levels, and additional load shift capacity available to be captured.

4.3.1.2.1 Potential Benefits

SDCP has identified the primary avoided cost benefits of new dynamic rates as the following:

- Avoided capacity costs, resulting from a reduction for new capacity additions or resource adequacy procurement.

- Avoided energy costs, resulting from shifting demand from higher-cost periods to lower-cost periods.

Secondary benefits can also flow from the realization of avoided capacity and energy procurement needs. For example, to the extent that load shifting reduces the need for new capacity and wholesale energy purchases during peak periods, these reductions can also contribute to the following:

- Avoided transmission and distribution in the form of reduced need for capital investments to deliver energy during peak periods.

- Avoided GHG compliance costs associated with a reduction in generating or purchasing energy from fossil -fueled resources that may otherwise be needed to serve load during peak periods.

- Improved air quality, public health, and environmental outcomes associated with a reduction in operations of fossil-fueled resources. While these benefits do not accrue directly to SDCP, they provide value on a societal basis.

4.3.1.2.2 Realization of Benefits

As a retail electric service provider and a CCA, SDCP anticipates that the greatest potential direct benefits would be derived from avoided capacity and energy procurement costs. However, the realization of any of the above-identified benefits from new dynamic rates is highly dependent on the following several factors:

- The effectiveness of the rate design in shifting customer usage patterns.
- The operational value of the load shift.
- The adoption levels of the new rates.
- The customer experience on the new rate.

In addition, with respect to avoided GHG compliance costs and improved air quality, public health, and environmental outcomes, the realization of benefits also depends on the relative utilization of fossil-fueled resources to serve peak load versus periods of lower demand. A discussion of each factor's expected effect on the benefits attributable to developing new dynamic rates is detailed in the next section of the Plan.

4.3.1.2.2.1 Estimated Design Effectiveness

Effective rate design is necessary to achieve predictable load shift during the most valuable peak hours of the day. The risk of not having sufficient generation, which spurs the need for new capacity additions or resource adequacy procurement, is typically concentrated in a small number of peak hours each year when serving peak load is most challenging. Accordingly, to realize any avoided capacity benefits, it is vitally important that a new rate design can achieve consistent and meaningful load reductions during those peak hours. Reducing capacity and energy procurement during peak periods relies on a consistent shift in demand patterns.

Time to develop and test the effectiveness of rate design options will be especially important when shifting to a complex new rate structure that could include several price signal changes within a peak period or even within an hour. If customers do not understand the signals or the time periods
During which they are provided, their response may not be predictable, leading to reduced efficacy and potentially adverse bill impacts. SDCP's ideal dynamic rate development process would include market research, testing the effectiveness of different rate options through pilots, analyzing the results, and considering refinements before proposing a rate. Completing these steps helps to ensure that the rate sends the right signals and takes into consideration customers' willingness to respond either directly or via automated technologies/devices while fully recognizing that the process can take significant time and resources.

The LMS requirements direct Large CCAs to propose new dynamic rates for every customer class to the Board by July 1, 2025. That timeline does not provide sufficient time for SDCP to design a pilot, test responses to different rate options, and analyze the results for even one rate class. In addition, SDG&E's dynamic rate pilots have been delayed and results of those studies will not be available before July 1, 2025 because the California Public Utilities Commission ("CPUC") has not issued a decision for the Demand Flexibility proceeding (Rulemaking 22-07-005), which will require SDG&E to submit its dynamic rate pilot design. Without the results from pilots, SDCP cannot conclude that a complex new rate design would result in any incremental, dependable load shift or ensure a positive customer experience for any of our customers.

In addition, if SDCP undertook the rate design process, it would only be able to design and potentially implement commodity or generation component-only dynamic rates. Without knowledge of SDG&E's delivery dynamic rates and without coordination on customer billing and outreach, a SDCP generation component-only dynamic rate will not be able to achieve demand flexibility goals, and could cause significant customer confusion, and will be almost impossible to implement unilaterally. A successful dynamic rate pilot will require close coordinated collaboration between SDCP and SDG&E to align its rate design (i.e., dynamic interval, pricing differences, etc.), customer outreach messaging, and customer billing implementation. Currently, SDG&E has yet to share any information regarding its dynamic rate pilot.

4.3.1.2.2.2 Estimated Adoption Level

The estimated adoption level of new hourly dynamic rates directly impacts the value of load shift benefits. Based on available information, SDCP anticipates that dynamic rates rolled out to customers by July 1, 2027, would likely have low adoption and retention levels. SDCP's assumption is based on several key factors, including the uncertainty in bill impacts from complex new rate structures, the time needed to educate customers to promote a positive experience, and the cost and limited accessibility of enabling behind-the-meter automation technology.

- Bill savings are a significant driver for customer rate adoption. The predictability of bill impacts gives customers the assurance of how they can leverage a rate to see bill savings. With dynamic rates, customers take on the full risk of price fluctuations, which may not be sustainable in the long term.

- One method of mitigating the uncertainty of bill impacts from new dynamic rates is to fully educate and inform customers. SDCP is dedicated to a culture of delivering the best possible customer experience when transitioning customers from one rate structure to another or when offering optional rates. Limited time to engage and educate customers on new complex hourly rates, and the potential benefits and risks associated with participation, may lead to confusion about bill impacts and low uptake. Customer experience is a priority for SDCP, so negative experiences may have an unintended negative impact on the brand and act as a deterrence on current and future initiatives.

- Realizing the benefits of dynamic rates is dependent on customers' ability to access and adopt enabling technology. There are challenges and uncertainties associated with utilizing these devices for grid services, as further discussed in Section 4.3.3.2. SDCP expects that limited adoption of the needed technology would translate to limited benefits from dynamic rates, but accessibility of customer-owned automated devices that allow for response to hourly or sub-hourly signals is a near-term constraint.

- Adoption is also impacted by a customer's ability to understand and their capacity to meaningfully respond to dynamic rate signals. As part of its due diligence, SDCP issued an on-going survey to the largest commercial customers in 2022 to gauge interest in a Real-Time Pricing pilot rate and to date, no responses have been received.[12] Through day-to-day business interaction and planned engagement with commercial and industrial customers, the feedback can be summarized as either no interest in enrolling in a dynamic rate at this time or dynamic rates are too complex and will require too much up-front technology and staffing resources investment.

4.3.1.2.2.3 Estimated Incremental Load Shift Capability

The primary potential benefits of dynamic rates are based on reducing new capacity additions and associated avoided wholesale energy costs, which may carry additional benefits associated with reduced transmission and distribution costs, reduced GHG compliance costs, and improved air quality, public health, and environmental outcomes. SDCP's existing time-dependent rates and planned new load flexibility programs are likewise designed to capture these same benefits and to create a customer-centric experience, that is simple and easy-to-understand and have been supported with extensive customer outreach and education. Any incremental benefits associated with implementing dynamic rates rely on achieving incremental load shift relative to SDCP's existing rates and planned new programs. The following summarizes the current load shift capability of SDCP's existing rates and planned new programs, and potential incremental load shift opportunities.

- SDCP's TOU rate structures mirror SDG&E's rates and were designed to shift peak time periods energy use to off peak periods, thus reducing grid stress and resulting in financial benefits from combined energy and capacity savings.

- SDCP is in the process of designing and planning to offer new load flexibility and demand response programs that allow customers to respond to signals that incorporate day-ahead marginal prices, weather, and grid conditions. These programs complement our existing TOU rate structure and provide additional load shift benefit on a day-ahead basis and, in some cases, on a same-day basis for emergency scenarios. SDCP's new programs and pilots are discussed further in Section 5.

- SDCP has not yet conducted pilots to evaluate more complex dynamic rate options in which hourly market price risk is passed directly to the customers. In addition, planned dynamic rate pilots in SDCP's and SDG&E's service area have been delayed. The CPUC has not issued a decision for the Demand Flexibility proceeding, which will

[12] Real-Time Pricing Pilot Rate Survey, https://sdcommunitypower.org/real-time-pricing-rtp-pilot-rate-2/.

require SDG&E to submit its dynamic rate pilot design. Without the benefit of pilot results and given the inherent complexity of new dynamic rates coupled with the risk of adverse bill impacts, and the existence of more customer-friendly TOU rates and planned new programs, SDCP cannot conclude that such dynamic rates would likely result in incremental load shift benefits. As part of its due diligence, SDCP issued an on-going survey to the largest commercial customers in 2022 to gauge interest in a Real-Time Pricing pilot rate and to date, no responses have been received.[13] Through day-to-day business interaction and planned engagement with commercial and industrial customers, the feedback can be summarized as either no interest in enrolling in a dynamic rate at this time or dynamic rates are too complex and will require too much up-front technology and staffing resources investment.

4.3.1.3 Discussion

Based on the evaluation of available information, SDCP cannot conclude that implementing dynamic rates for any customer class on the LMS required timeline would be cost-effective. There are significant uncertainties both in the magnitude of value that can be captured and SDCP's ability to realize the value based on design efficacy, how customers would react to hourly market risks, and expected adoption levels. According to the whitepaper, Time-Varying and Dynamic Rate Design, authored by the Regulatory Assistance Project ("RAP") and the Brattle Group, real-time/dynamic pricing presents high rewards but also high risks.[14] SDCP anticipates that developing dynamic rates would result in significant costs and may even require a rate increase to all customers to bring additional revenue to support the development and implementation of the said rates. Without pilot results in SDCP's and SDG&E's service area to perform a comprehensive analysis, SDCP cannot readily ascertain rate development costs, the estimated benefits, or whether those benefits would be likely to offset the costs.

A 2004 Lawrence Berkley National Laboratory whitepaper concludes that most dynamic rate programs in the early 2000s, implemented across the country, did not achieve significant level of participation. Another takeaway from the survey is that although many customers on dynamic rates are price responsive, a substantial fraction are not.[15]

Significant changes are happening and will occur in the rate landscape in our region and at the state level, including a shift to battery energy storage systems, implementation of net billing tariff, adoption of an income-graduated fixed charge, and exploration of other potential fixed charges. The combination of multiple concurrent rate variables can make evaluating dynamic rate and demand flexibility difficult. Isolating and quantifying the benefits of just dynamic rates becomes a challenge, and these overlapping efforts complicate signaling a customer to change energy use behavior and may increase development costs. For example, introducing fixed charges, such as the income-graduated fix charge, dilutes the hourly variability that dynamic rates are trying to reflect.

[13] Real-Time Pricing Pilot Rate Survey, https://sdcommunitypower.org/real-time-pricing-rtp-pilot-rate-2/.
[14] *Time-Varying and Dynamic Rate Design*, RAP and the Brattle Group, July 2012, page 17.
[15] *A Survey of Utility Experience with Real Time Pricing*, Lawrence Berkeley National Laboratory and Neenan Associates, December 2004, ES-4 and ES-6.

The following summarizes the key items that highlight circumstances that substantiate why marginal cost-based rates are not yet feasible or cost effective for SDCP:

1. SDG&E's proposed dynamic rate pilots would have provided the more accurate estimated costs and benefits compared to pilots in other service territories because weather conditions, local economy, and local energy policies, and other factors that are captured by SDG&E's pilot overlap with SDCP's conditions. However, SDG&E proposed two dynamic rate pilots through Applications 21-12-006 and 12-12-008 to the CPUC, but the import rate pilot was dismissed without prejudice and the other pilot delayed. SDG&E will file a new application for a dynamic import rate once the CPUC issues a final decision in the Demand Flexibility Rulemaking that will provide guidance for dynamic rate applications.[16] SDCP continues to monitor and check in with SDG&E on the status of the Demand Flexibility Rulemaking and SDG&E's dynamic rate pilot but the CPUC has not issued a decision and is unlikely to do so by July 1, 2025.

2. Without information from SDG&E's dynamic rate pilot, it is infeasible for SDCP to design and implement a commodity or generation component-only dynamic rate. A closely coordinated collaboration and partnership with SDG&E is required for the rate design, rate and billing implementation, and customer outreach and education to achieve demand flexibility goals.

3. As part of its due diligence, SDCP issued an on-going survey to the largest commercial customers, starting in 2022, to gauge interest in a Real-Time Pricing pilot rate and to date, no responses have been received.[17] Through day-to-day business interaction and planned engagement with commercial and industrial customers, the feedback can be summarized as either no interest in enrolling in a dynamic rate at this time or dynamic rates are too complex and will require too much up-front technology and staffing resources investment.

4. Southern California Edison ("SCE") implemented its two dynamic rate pilots from 2022 through 2024. The Public Utilities Commission ordered SCE to conduct evaluations of the pilots to assess cost-effectiveness as well as other impacts. SDCP has reviewed the key findings and is hereby including the relevant and applicable lessons learned from SCE into any future dynamic rate design. On February 28, 2025, the Final Evaluation of SCE's Dynamic Rate Pilot was released, and the analysis did not find evidence of consistent and/or large changes on hourly energy usage due to customer price response.[18]

SDCP will continue to gather information to inform evaluation of future rate and program designs. As data becomes available from pilots, SDCP anticipates exploring cost-effectiveness analyses and/or quantifying the estimates provided in this section of the Plan.

[16] Ordering Paragraphs 1 and 2, Decision 23-11-006 Adopting Dynamic Export Rate Pilot and Dismissing Application for a Real Time Pricing Rate Pilot, November 15, 2023, 520868373.PDF (ca.gov).
[17] Real-Time Pricing Pilot Rate Survey, https://sdcommunitypower.org/real-time-pricing-rtp-pilot-rate-2/.
[18] *Final Evaluation of Southern California Edison's Dynamic Rate Pilot*, Christensen Associates, February 28, 2025, page 7.

4.3.2 Equity

The second criterion by which to evaluate dynamic rates is equity, a core principle for SDCP's establishing bylaws and purpose. Without pilot study data to support quantifying load shift and bill impacts for different customer groups, SDCP will qualitatively evaluate the equity impacts of these rates by considering customers' ability to benefit directly and indirectly from the rates.

4.3.2.1 Equitable Access to Direct Benefits

The ability to directly benefit from a dynamic rate depends on several factors, such as access to enabling technology, ability to shift load away from high-cost periods, and ability to benefit from the rate and absorb potential bill shocks.

- The ability to participate in a dynamic rate depends upon customers' access to technology with specific characteristics that enable response to hourly or sub-hourly price signals. Currently, the high upfront cost of this technology may pose a limitation. To help address these barriers, SDCP's Community Clean Energy Innovation Grant Program provides opportunities to increase access to the benefits of clean energy technologies with a focus on underserved communities and vulnerable populations. In addition, SDCP is exploring different incentive programs and developing strategies to help further broaden access.

- The ability to quickly shift load away from high-priced peak periods will affect whether participating customers can directly benefit from a dynamic rate. As market signals would be dynamic with potentially very large changes in prices between hours, customers that cannot or do not adopt and/or utilize and embrace enabling technology could see very large bill impacts.

- Participating customers i a dynamic rate runs the risk of bill shocks if they are unable to shift load away from high-priced peak hours. Customers who face greater barriers in implementing enabling technology are likely to be most exposed and least able to absorb potential bill shocks.

4.3.2.2 Equitable Access to Indirect Benefits

As previously described in Section 4.3.1.2.1, dynamic rates may offer benefits to SDCP's customers, to the extent such rates reduce overall capacity costs, contribute to reliability, and reduce reliance on fossil-fueled resources. These benefits could serve as a downward pressure on rates and result in improved air quality, public health, and environmental outcomes. However, as discussed in Section 4.3.1.2.2, SDCP is unable to conclude at this time the magnitude of these benefits that would result from the implementation of dynamic rates.

4.3.2.3 Discussion

Based on the evaluation of available information, SDCP cannot conclude that implementing dynamic rates would result in any equity benefits. The availability of such rates is likely to disproportionately benefit higher-income customers, early adopters of technology, and can absorb the risk of bill shocks. It is critical to analyze pilot study results to accurately quantify

the magnitude and uncertainty of these benefits, including the level of acceptance and adoption of dynamic, hourly, or sub-hourly rates from customers of different income levels. Severin Borenstein, in a 2009 article, states that some customers would be winners, and others would be losers with a switch to dynamic rates. He elaborates that those customers who consume disproportionate quantities at the most expensive times are being subsidized under time-invariant rates and may be worse off if they cannot adjust their consumption substantially under dynamic rates.[19]

4.3.3 Technological Feasibility

Technological feasibility is the third evaluation factor for dynamic rates. SDCP's evaluation assesses the technological feasibility of implementing dynamic rates for all customers on the schedule specified in the LMS requirements and considers the feasibility of both the technology systems needed to support implementation of dynamic rates and to the external customer technology that is needed to enable response to hourly or sub-hourly signals. Since SDCP is a CCA that isn't the Meter Data Management Agent ("MDMA"), SDG&E is in control and responsible for a significant portion of the technology systems' updates and rollout required to implement dynamic rates that overlap both organization's service areas.

4.3.3.1 Technology Systems

The primary technology systems needed to support dynamic rates include advanced metering infrastructure ("AMI"), SDCP and SDG&E's Customer Relationship Management software, and SDCP's and SDG&E's billing system software. SDCP also relies on additional applications from external vendors to develop customer educational tools and is working with these providers to provide functionality to communicate with and control enabling technologies, in the future. The following provides a feasibility assessment of each technology component:

- SDG&E's meters can provide hourly interval data for residential customers and sub-hourly interval data for non-residential customers. An assessment of the AMI network communication infrastructure is likely to be required to identify if additional equipment needs to be installed to support the increased volume. SDCP will coordinate with SDG&E to avoid any disruptions to customers.

- SDCP will coordinate with SDG&E regarding any necessary billing system configuration changes. SDCP anticipates it will be necessary to develop enhancements to SDG&E's online tools and services to help customers understand any new rates and rate changes holistically.

- Updating existing customer tools and developing new tools would be key to supporting a positive customer experience when implementing dynamic rates. SDCP will engage not only with external vendors on relevant existing tools but also SDG&E to assess the technological feasibility of timeframes necessary to develop and/or modify existing tools to support dynamic rates.

[19] *Electricity Pricing that Reflects Its Real-Time Cost*, Severine Borenstein, March 2009, https://www.nber.org/reporter/2009number1/electricity-pricing-reflects-its-real-time-cost.

In sum, SDCP anticipates that collaboration and coordination with SDG&E and external vendors will be critical to successfully implementing dynamic rates. SDCP will work with parties to assess enhancements, upgrades, and additional functionality that will be needed to ensure the optimal benefits of realization of dynamic controls and a positive customer experience.

4.3.3.2 Enabling Customer Technology

Realizing that the potential incremental benefits of dynamic rates depend on customer participation and the widespread availability of devices and technology that can support real time response to hourly or sub-hourly price signals; SDCP is in the process of assessing technologies with this kind of capability to include in future customer programs. The following is a list of common load flexibility technologies in SDCP's and SDG&E's service area. SDCP anticipates these same technologies will be needed to respond to new dynamic rates.

- Wi-fi enabled smart thermostats are the most widely adopted load flexibility technology. These devices can receive and respond to dispatch signals within 15-30 minutes. Utilities and CCAs rely on day-ahead and/or more real-time marginal costs and system conditions to inform the dispatch of resources in load flexibility programs.

- Battery energy storage systems are being adopted with increasing frequency by residential customers, particularly as an add-on to solar photo-voltaic ("PV") installations. Batteries have much greater ability to be dispatched on short notice, and SDCP has already designed and implemented a pilot program in 2024 to accelerate this adoption and reduce the payback period for solar plus storage deployments through upfront financial and on-going performance incentives. This pilot program was extremely successful and will be implemented as a standalone program by the third quarter of 2025.

- Air conditioning ("AC") switches are one of the oldest distributed resource technologies and have been deployed since the 1970s. These switches are included in various demand flexibility programs across the utilities and CCAs.

- Electric vehicles ("EVs") are an emerging source of load flexibility. There is significant potential for further growth given statewide goals for zero emissions vehicles by 2030. SDCP is assessing potential future charging programs that include sending hourly price signals to participating EVs.

SDCP's future programs, utilities and CCAs' existing programs will inform SDCP's understanding of how to most effectively engage with customers with behind-the-meter devices, considering different technologies, customer needs and preferences, and other factors. SDCP anticipates future programs will help increase the acceptance and adoption levels of enabling technologies as well as testing their response to utility signals and dispatch whereby the results of these programs will also inform future consideration of dynamic rates.

4.3.3.3 Discussion

Based on the evaluation of available information, SDCP believes the technology exists to implement some level of dynamic rates on the LMS timeframe. However, the capabilities of enabling behind-the-meter device technology, along with the impacts on customer experience, are still being tested and developed. SDCP believes that reassessing the technological feasibility of dynamic rates after evaluating pilot study results and future programs would better inform the likelihood of positive customer acceptance and material load shift benefits.

SDCP anticipates coordination with SDG&E and external vendors on implementing any necessary changes to internal systems, with the necessary infrastructure deployments and system configuration implementations. Additional time to enhance the billing experience, develop customer tools, and enhance DER functionality and control would create a better experience, improve the likelihood of acceptance of the new rates, and support improved realization of both customer and grid benefits in alignment with LMS desired outcomes.

4.3.4 Benefits to the Grid and Customers

The final two criteria for evaluating dynamic rates are benefits to the grid and benefits to customers. SDCP evaluates the two factors simultaneously because many benefits to the grid also have pass-through benefits to customers. SDCP evaluates each benefit by considering the expected effectiveness of the rate design and the expected adoption rate. The following is a summary of anticipated grid and customer benefits associated with implementation of new dynamic rates on the timeframe specified in the LMS requirements.

- An effective rate design that delivers meaningful, dependable load shift in response to hourly or sub-hourly signals is critical to capture benefits of avoided capacity costs, in terms of reduced new generation capacity or procurement. Shifting demand away from peak periods also has the potential to increase grid reliability. As further discussed in this Plan's section 4.3.1.2.2.3, SDCP is unable to conclude that implementing dynamic rates would result in incremental capacity cost savings, given the uncertainty around design effectiveness, adoption levels, and the magnitude of load shift potential.

- An effective rate design that encourages customers to shift from high-cost, high-GHG periods to lower-cost, lower-GHG periods is instrumental in capturing the benefits of avoided energy costs. This allows for more efficient use of cheaper renewable energy when it is generated and reduces the higher costs of fossil-fueled energy associated with serving peak load. However, as further discussed in the Plan's section 4.3.1.2.2.3, SDCP cannot conclude that implementing dynamic rates would result in incremental avoided energy costs.

- As distributed energy resources ("DERs") programs are still in pilot stages across the state, how they and rate designs impact the need for various transmission and distribution services is still uncertain. With limited available information, SDCP cannot conclude that dynamic rates will result in any transmission and/or distribution savings.

- To the extent that dynamic rates can shift energy use from peak time periods in which fossil fueled resources serve load to time periods with greater renewable energy generation, there is the potential for reduced compliance costs for GHG emissions. Reducing grid thermal operations and/or limiting market purchases when the grid has a greater carbon intensity can save costs for SDCP's customers.

  However, any incremental GHG cost savings depend on the realization of incremental reductions in capacity needs and/or in energy purchases during high-cost/high-GHG periods. GHG cost savings benefits are uncertain because SDCP is unable to conclude that implementing dynamic rates would result in material incremental load shifts. In addition, as SDCP gets closer to achieving a 100 percent renewable energy supply, SDCP anticipates increasingly less difference between the GHG emissions profiles of resources serving customers during the peak and in periods of lower demand.

- Potential air quality, public health, and environmental benefits associated with dynamic rates depend on whether such rates can successfully reduce capacity needs or energy purchases during time periods when the grid has a higher carbon intensity. SDCP cannot conclude that a material incremental increase in these benefits will accrue on the timeline specified in the LMS requirements.

- Through dynamic rates, customers have the potential to lower their energy costs by shifting their peak hour usage. However, customers take on the full risk of market price fluctuations, which could have severe impacts on customer bills, especially during times of extreme market volatility. If high prices are sustained over a long period of time, customers may not be able to shift energy use to prevent excessively large bills. As an example, during the May 25, 2021 Advanced DER and Demand Flexibility Management Workshop, SDG&E expressed the concern that while wholesale prices are effective at balancing supply and demand, they may cause unintended consequences during extreme scarcity events. SDG&E cited the example of the negative experience of Texas residential customers on wholesale prices.[20]

- SDCP strives to maintain a delicate balance between multiple objectives as described in its Rate Development Policy. When designing rates, one priority is to emphasize rate-design simplicity, comparability, and transparency. Dynamic rates could be very complex and difficult for customers to understand. Thus, leading to confusion and potential negative bill impacts, particularly if SDCP does not have sufficient time to fully educate customers on the potential benefits and risks of marginal cost-based rates.

4.3.4.1 Discussion

Based on the evaluation of available information, SDCP is unable to conclude that implementing dynamic rates on the timeframe specified in the adopted LMS amendments would yield material incremental benefits to the grid or to customers. Important takeaways from the Lawrence Berkeley National Laboratory white paper emphasized that sufficient

[20] *Advanced Strategies for Demand Flexibility Management and Customer DER Compensation*, California Public Utilities Commission, June 22, 2022, page 103.

resources must be devoted to developing and implementing a customer education program and customers need help understanding and managing price risk.[21]

Another team of Lawrence Berkeley National Laboratory researchers interviewed 29 customers in the Niagara Mohawk Power Corporation service territory with day-ahead dynamic prices in 2004. The study specified that reasons customers gave for why they were not price-responsive included implicit value placed on reliability, pricing structures, lack of flexibility in adjusting production inputs, just-in-time practices, perceived barriers to onsite generation, and insufficient time.[22]

Therefore, a premature introduction of dynamic rates may cause confusion and shift additional market price risk onto customers, creating a negative customer experience that may hinder adoption of both the new rate and longer-term load flexibility initiatives. A hurried implementation of a complex and untested dynamic rate structure is likely to result in costs, rather than benefits, to the grid and to customers.

4.3.5 Compliance Approach

Based on the results of this evaluation, SDCP plans to continue offering the existing portfolio of time-dependent rates. SDCP regularly reviews its rates, including cost-effectiveness. SDCP also plans to implement new load flexibility programs and pilots that will help the organization better understand how best to engage with behind-the-meter customer devices. With additional information and results, SDCP can consider developing a dynamic rate pilot rate for one or more customer classes in the future.

Therefore, SDCP will defer developing and proposing adoption of new dynamic rates beyond July 1, 2025, and offering voluntary participation in any such rates beyond July 1, 2027. Based on available information, SDCP cannot conclude that proposing and implementing dynamic rates, as proposed in the LMS requirements' timeline, would be cost-effective, provide equity benefits, be technologically feasible, and/or or yield any cost savings or emissions-related benefits to the grid and to customers. The risks of premature implementation can adversely impact participating customers' bills, the overall customer experience, and even SDCP's image and reputation.

In lieu of developing and proposing adoption of new dynamic rates, SDCP has and will continue to implement and offer load flexibility programs to support the intent and goals of the LMS and to meet LMS compliance.

SDCP plans to reassess the timeline for proposing and implementing dynamic rates no later than the triennial review of the Plan. The Plan review will also include potential updates to qualitative and quantitative evaluations for cost-effectiveness, equity, technological feasibility, and benefits to the grid and to customers.

[21] *A Survey of Utility Experience with Real Time Pricing*, Lawrence Berkeley National Laboratory and Neenan Associates, December 2004, ES-9.
[22] *Real Time Pricing and the Real Live Firm*, Lawrence Berkeley National Laboratory, August 2004, page 1.

5. Load Flexibility Programs

The adopted LMS amendments recognize that load flexibility programs may provide an alternative pathway to achieve the objectives of encouraging off-peak energy usage, controlling peak load to improve reliability and system efficiency, lessening, or delaying the need for new capacity, and reducing fossil-fuel consumption.

Adopted LMS amendments section 1623.1(a)(1)(B) requires each Large CCA to propose and evaluate programs that enable automated responses to marginal cost-based signals for each customer class, if the Large CCA does not propose the development of marginal cost-based rates. The programs must be evaluated based on cost effectiveness, equity, technological feasibility, and benefits to the grid and customers.

Adopted LMS amendments section 1623.1(b)(3) requires each Large CCA to submit a list of cost-effective MIDAS-integrated load flexibility programs to the CEC Executive Director by October 1, 2024. The portfolio of load flexibility programs must provide at least one option to automate response to MIDAS signals (that indicate, for example, hourly marginal cost-based rates, marginal prices, or hourly or sub-hourly GHG emissions) for every customer class where such a program is determined by its rate-approving body to materially reduce peak load.

Finally, each Large CCA is required to offer customers, by July 1, 2027, voluntary participation in a dynamic hourly rate, if approved by its rate-approving body, or a cost-effective MIDAS-integrated load flexibility program identified according to section 1623.1(b)(3).

The following section of SDCP's Plan provides an overview of SDCP's current and in-development future load flexibility programs and addresses the LMS requirement to evaluate and propose specified programs on timeframes. It also addresses the requirement to submit a list of cost-effective MIDAS-integrated load flexibility programs to the CEC.

5.1 Overview of SDCP Load Flexibility Programs

Load flexibility is a key strategy in helping SDCP achieve its 100 percent renewable energy goal. SDCP is currently piloting several programs that enable customers to be part of the strategy, dynamically managing load to reduce costs and increase grid resilience.

SDCP is focused on developing and offering load management programs that are simple, effective, flexible, and that allow SDCP to make rapid progress in unlocking peak load reduction potential. SDCP is working to innovate with technology and software providers to advance functionalities that will enable broad participation and maximize potential resources, optimized for customer and grid needs. When designing programs, SDCP strives to tailor its offers to specific customer segments and/or needs to maximize responsiveness beyond just price alone, delivering the greatest potential for mutual benefits to customers and to SDCP.

Piloting multiple approaches is a key strategy for SDCP. Pilot study results inform future program designs, and the technology needed to scale adoption. SDCP's in development program portfolio includes a portfolio-level Distributed Energy Resource Management

("DERMS") deployment that will, in time, serve as the central point of control and dispatch for a range of load flexibility program offerings, which may include residential, C&I, and agricultural customer classes. In the near term, SDCP is developing specific offerings related to residential load flexibility and electric vehicle-managed charging. SDCP is also still in the stage of exploring program offerings for agricultural and large C&I customer classes.

Agricultural customers contribute to approximately 4% of SDCP's total load in 2024, thus SDCP is initially focusing on residential and commercial customers with load flexibility programs since those customer classes make up the bulk of SDCP's load. For large C&I customers, SDCP is in the process of exploring and designing appropriate program offerings that are cost-effective and provide benefits to the customers. Dedicating constrained resources to focus on residential and small commercial customers has the benefit of easily replicating and growing current programs and pilots. Lessons learned and evaluations from current program offerings will be valuable before designing and potentially launching more complex programs for large C&I customers who have more complex operations and more specific requirements and/or needs.

The following section provides a list of existing and planned program offerings that test reliability, load reduction, and customer adoption. These programs support the intent and spirit of LMS goals and are also LMS compliant, with justifications of modifications to LMS requirements provided within each program summary below.

5.1.1 LMS Compliant Load Flexibility Programs

5.1.1.1 Bring Your Own Device Load Shifting Pilot

a. Pilot Name: Smart Home Flex

b. Date of first availability: The program first became available on a pilot basis in Q1 2025, with enrollment limited to 2,000 thermostats and 150 water heaters. Following evaluation of device performance, SDCP anticipates relaunching the pilot as a full program which will remain active and available past July 1, 2027, for both active and new participants.

c. Customer class and device eligibility: The pilot is open to residential customers with a qualified device. Qualified devices are currently limited to smart thermostats and water heaters and will expand to include pool pumps and battery storage in the next 1-2 years after the pilot is launched.

d. Device dispatch: The pilot dispatch strategy is designed to deliver daily load shifting value. The specific device-level dispatch varies by asset class, based on the technical and operational limitations of the equipment and/or Original Equipment Manufacturer ("OEM"). For example, smart thermostats are dispatched during the summer

cooling season generally for 4 hours at a time, with 1 hour of precooling followed by 3 hours of shed and called approximately 20 times per season. Thermostats are operated to maximize load shifting value, and while daily dispatch is not allowed by device OEMs, the strategy seeks to maximize alignment with price and load. Smart water heaters are called on twice daily throughout the year, with 1 hour of preheating followed by 2 hours of shed. As pool pumps and battery storage systems are brought into the pilot, they will operate as a daily load shifting asset. In all cases, enrolled devices are/will be used to shift load to lower cost, lower demand periods, while minimizing impacts to participant comfort or utility.

e. Dispatch signal: Resources are dispatched based on a multi-tier optimization framework. First, the pilot limits load-up commands to off peak periods and schedules load reductions to occur on peak, to maximize bill savings for participants. Within this constraint, the pilot dispatches devices in a manner that maximizes peak load reduction, using SDCP's DERMS. The DERMS allows for coordinated control and management of participating DERs and will, once available, use the Market Informed Demand Automation Server ("MIDAS") to incorporate day ahead pricing data into the dispatch and operationalization of the daily load shifting strategy. Finally, the pilot will override its daily load management strategy in the event of a grid emergency, to support statewide peak load reduction efforts.

f. Pilot Incentives: Customers may receive one or more of three categories of incentives for participating in the pilot, an upfront (or enrollment incentive), a participation (or seasonal) incentive and/or a performance incentive. The upfront incentive is a flat, one-time, per device payment (currently set at $50) for enrolling in the pilot program. The participation incentive is paid out seasonally for devices that remain in the pilot through a load shifting seasonal window (summer or winter). The performance incentive is a payment to customers that varies based on a device's responsiveness to daily load shifting commands. The specific incentives a pilot participant receives vary based on the device(s) enrolled. All enrolled DERs receive an enrollment incentive; however, some OEMs and/or DER asset classes are less conducive to, and in some cases prohibited from participating in, performance-based incentives.[23] In the case of smart thermostats, OEMs often keep participant data confidential, even towards load serving entities. In such a scenario, it is not possible for the load serving

[23] One of the major smart thermostat OEMs explicitly prohibits participation of its devices in programs or pilots that include performance-based incentives. Given this prohibition, the thermostat portion of SDCP's Smart Home Flex Pilot does not offer performance-based incentives.

entity to design performance-based incentives. For heat pump water heaters, the devices are already so energy efficient that there may not be enough capacity reduction to be achieved through their operational changes. SDCP prefers the use of performance-based incentives over fixed participation incentives whenever possible and will regularly revisit incentive design to ensure that performance-based incentives are being used.

g. Available supporting weblinks and reference materials:

https://sdcommunitypower.org/programs/smart-home-flex/

5.1.1.2 Solar Batteries Savings ("SBS") Program

a. Pilot Name: Solar Batteries Savings

b. Date of first availability: The program first became available on a pilot basis in Q2 2024. Pilot enrollment is limited to 2,000 residential energy storage systems. SDCP anticipates relaunching SBS as a full program in Q3 2025, which will remain active and available past July 1, 2027, for both active and new participants.

c. Customer class and device eligibility: The pilot is open to residential customers with a qualified device. Qualified devices in the pilot phase covered all major residential energy storage manufacturers. At program relaunch, eligibility will be limited to battery OEMs that have an active integration with SDCP's DERMS platform, Virtual Peaker. SDCP is assessing a potential program expansion to include commercial customers.

d. Device dispatch: The pilot dispatch strategy is designed to deliver daily load shifting value. Under the pilot program design, participating batteries are charged from onsite solar Photo-Voltaic ("PV") and discharged daily (weekdays only or weekdays and weekends, based on customer preference), during a two-hour window that changes monthly based on SDCP's demand profile. Participants can select the percentage of their battery's useable capacity to enroll in the program, with a minimum requirement of 50%. The dispatch strategy for the relaunched program is still under development but will likely expand the dispatch window from two hours to four hours and simplify the design by eliminating weekend dispatches.

e. Dispatch signal: Resources are dispatched based on a multi-tier optimization framework. First, participating batteries are required to charge exclusively from on-site solar, the least carbon intensive resource available. Next, the pilot schedules battery discharges to occur during on-peak, maximizing participant bill savings. Within this constraint, the pilot then dispatches devices in a manner that maximizes peak load reduction, using SDCP's DERMS. The DERMS allows for coordinated control and management of participating DERs and will, once

available, use MIDAS to incorporate day ahead pricing data into the dispatch and operationalization of the daily load shifting strategy. Finally, the pilot will override its daily load management strategy in the event of a grid emergency, to support statewide peak load reduction efforts.

f. Pilot Incentives: Customers receive two categories of incentives for participating in the pilot, an upfront and a performance incentive. The upfront incentive is a one-time, volumetric incentive based on the nameplate usable capacity of the battery being installed. The performance incentive is payment to customers that varies based on the amount of actual device discharge over the dispatch window during on-peak periods. In addition, the SBS pilot has two incentive tiers: Market Rate and Non-Market Rate; with higher Non-Market Rate incentives available for California Alternate Rates for Energy ("CARE") and Family Electric Rate Assistance Program ("FERA") customers and those located in one of SDCP's Communities of Concern.

   The performance-based incentive is based on the spirit of hourly marginal cost, in which charging and discharging profiles have a fixed value. Currently, there is no added benefit to providing incentives at a granular hourly level to achieve load impact results.

g. Available supporting weblinks and reference materials:

   https://sdcommunitypower.org/programs/solar-battery-savings-program-2/

5.1.1.3 Managed Charging (V1G) Program

a. Pilot Name: EV Flex Connect

b. Date of first availability: The program first became available on a pilot basis in Q1 2025. Pilot enrollment is limited to 1,000 vehicles. Following evaluation of pilot performance, SDCP anticipates relaunching the pilot as a program which will remain active and available past July 1, 2027, for both active and new participants.

c. Customer class and device eligibility: The pilot is open to residential customers with a qualified vehicle. Qualified vehicles are currently limited to those with a commercially sanctioned (a.k.a. "partner") Application programming Interface ("API"). Community Power is also undergoing an assessment of a commercial V1G offering.

d. Device dispatch: The pilot dispatch strategy is designed to deliver daily load shifting value. Participating vehicles are scheduled to charge during off-peak periods, with charging windows and durations optimized to ensure each vehicle reaches its desired state of charge by the scheduled departure time. The pilot is designed to achieve bulk system value from managed charging and to reduce peak load and spread load across the hours of the day.

e. Dispatch signal: Resources are dispatched based on a multi-tier optimization framework, with optimization around time-of-use rate structures. First, the pilot reschedules all vehicle charging to occur off peak, to maximize bill savings for participants. Within this constraint, the pilot then optimizes charging schedules in a manner that maximizes peak load reduction, using SDCP's V1G vendor platform. The V1G platform allows for coordinated control and management of participating vehicles and will, once available, use MIDAS to incorporate day ahead pricing data into the dispatch and operationalization of the daily load shifting strategy. This optimization is focused on spreading overnight charging load evenly across the off-peak period to avoid secondary peaks and impacts on slice-of-day resource adequacy. Finally, the pilot will override its daily load management strategy in the event of a grid emergency, to support statewide peak load reduction efforts. In addition, SDCP will also collaborate with SDG&E to understand how distribution operational needs can be incorporated into the optimization framework, seeking to balance bulk system and distribution value.

f. Pilot Incentives: Customers may receive two categories of incentives for participating in the pilot, an upfront (or enrollment incentive) and a participation incentive for staying enrolled in the pilot. The upfront incentive is a flat, one-time, per vehicle payment for enrolling in the pilot. The participation incentive is a monthly incentive, paid out seasonally for vehicles that remain in the pilot through a load shifting seasonal window (summer or winter). SDCP is considering a more performance-based incentive following the evaluation of pilot results, once the slice of day capacity value is better understood.

g. Available supporting weblinks and reference materials:

   https://sdcommunitypower.org/programs/ev-flex-connect/

5.2 Evaluation of Programs

SDCP is in the process of developing and implementing a robust portfolio of programs, including load flexibility, that strikes the right balance between customer needs and grid benefits. As summarized above, this portfolio is focused initially on the residential customer segment and exploring various dispatch signals, including automated response. These signals are based on several factors, including day-ahead marginal prices. The program development process will include collaborating with external vendors to build a technology platform that can optimize and automate dispatch of DERs.

The next section of the Plan evaluates the cost-effectiveness, equity, technological feasibility, and benefits to the grid and to customers of implementing programs that enable automated response to dispatch signals, including MIDAS signals, year-round, that are available to every customer class by July 1, 2027. Without program results at this time, SDCP cannot quantify the magnitude of peak load reduction, and/or other benefits can be provided through programs that enable automated dispatch based on MIDAS signals.

5.2.1 Cost-Effectiveness

The first evaluation factor is cost-effectiveness. SDCP will assess cost-effectiveness of new programs by comparing the estimated costs and incremental benefits associated with designing and implementing new load flexibility programs that allow for response to dynamic price signals and other grid conditions. For a program to be cost-effectiveness, the expected benefits must exceed the costs of design and implementation.

5.2.1.1 Estimated Costs

The costs associated with implementing a new load flexibility program include program development, implementation, and administration costs. SDCP anticipates these cost categories would apply, regardless of customer class.

- Program development costs include the costs associated with program design and setup, including integrating new programs with the CEC's MIDAS database and any applicable technology platform to the extent feasible.

- Program administration costs include ongoing costs to administer the program such as marketing, customer recruitment, customer education, development and maintenance of customer tools, and any upfront or ongoing incentive payments that are part of the design.

- Technology and implementation costs include any external software systems that must be procured to communicate with and dispatch devices, as well as internal systems which must be developed and configured to integrate the external software. New load flexibility programs may require significant investments in new technology platforms.

5.2.1.2 Estimated Benefits

The following section describes the potential benefits associated with implementing programs that allow for automated response to dynamic price signals, including MIDAS signals, and the estimated realization of such benefits based on the additional load shift capacity available to be captured.

5.2.1.2.1 Potential Benefits

The potential benefits associated with implementing programs that achieve incremental load shift include avoided capacity and energy costs, improved reliability during peak periods, avoided GHG compliance costs, and avoided air quality, public health, and environmental costs associated with a reduction in fossil-fuel generation, consistent with the benefits discussed in Section 4.3.4.6. These potential benefits are not unique to programs implemented for any one customer class.

5.2.1.2.2 Realization of Benefits

There are several uncertainties and barriers associated with realizing the above-identified incremental load shift potential and its associated benefits. SDCP expects these barriers and uncertainties to apply across residential, C&I, and agricultural customer classes. These uncertainties and barriers are summarized as follows:

- While there has been a rapid increase in the number of devices on the market that are able to automate load reductions, SDCP is not aware of any devices capable of effectively responding to real-time signals without significantly compromising customers' daily activities. Battery storage, EVs and even thermostats all require advance notice to meet customer needs.

- Removing the limits on how many program events can be called may bring additional load flexibility to utilities and CCAs, but frequent device dispatch without first understanding the impacts on customer experience runs the risk of eroding participation and satisfaction in the program.

- SDCP anticipates that directly exposing participants to market prices could result in deeper load reductions, to the extent that increasing prices will drive customers to shift more load away from the peak. However, the magnitude of additional load reduction as a function of price is not yet known. In addition, higher customer risk with dynamic prices is likely to reduce participation and benefits.

- SDCP anticipates that new programs would have to tap into load shift on 5- to 10- minute intervals to create incremental benefits relative to our programs and it is not yet known whether the issuance of multiple price signals over a peak period, or higher prices over the same period, would result in material incremental benefits, compared to existing programs.

5.2.1.2.3 Expected Incremental Benefits

Based on the above factors, following is a discussion of expected incremental benefits associated with programs that allow for automated response to dynamic price signals:

- The primary value stream for SDCP's load flexibility programs will be avoided RA procurement. To the extent a given program can generate MWs that meet the resource characteristics needed to avoid RA procurement; these avoided costs can be credited against the costs associated with implementing the program. While programs that expose customers to dynamic price signals may drive incremental load reductions when prices are highest, it is unknown how much and how reliable that incremental reduction would be, and how it would be credited under the current RA framework. Moreover, the magnitude of the load shift depends on significant adoption and acceptance of enabling technology.

- To the extent that new program structures and technology allow for faster load shift in response to short price spikes or drive greater load shift away from peak periods, SDCP could see reductions in energy purchase costs, but this is currently not yet known. Future program design will seek to maximize the energy savings associated with customer load flexibility, balanced against technological capability, customer acceptance, and impact on the overall energy system.

- Given uncertainties around customer response to dynamic price signals and current penetration of enabling technology, SDCP is unable to determine whether there would be secondary benefits (reliability benefits, avoided transmission and distribution costs, avoided GHG compliance costs, avoided public health, air quality, and environmental costs) associated with further reducing demand during peak periods from programs with automated response to hourly price signals versus existing programs.

5.2.1.3 Discussion

Based on the foregoing evaluation, SDCP cannot conclude that the development of new programs that allow for automated responses to dynamic price signals would be cost-effective at this time. SDCP will incur new programs' costs associated with design, implementation, and new technology investments.

While these costs could potentially be offset with capacity and/or energy cost savings, the magnitude of those benefits is uncertain.

In addition, SDCP anticipates that any incremental benefits will be limited in the near-term, while new technology is continuing to grow. SDCP will continue to assess the expected incremental costs and benefits associated with incorporating more dynamic price signals and/or allowing resources to be dispatched by MIDAS signals, as SDCP develops and potentially implements new programs.

5.2.2 Equity

The second criterion for evaluating new programs is equity. SDCP qualitatively evaluates whether programs that enable automated response to dynamic prices, including MIDAS signals, are likely to lead to equitable outcomes.

5.2.2.1 Equitable Access to Direct Benefits

When designing any program, SDCP ensures that all aspects of program design take equity into account. SDCP has committed to equity and the specific strategies for addressing it in SDCP's Community Power Plan ("CPP"). The CPP was created to provide strategic direction for developing customer energy programs that respond to community needs, with a focus on underserved communities and equity.

In accordance with the CPP, SDCP is committed to include equity as a core principle when designing programs that allow for response to dynamic signals, given the current access barriers and risk of price exposure that may disproportionately be experienced by lower income customers and customers from our communities of concern.

5.2.2.2 Equitable Access to Indirect Benefits

Program design also plays a major role in determining whether a program delivers incremental load shift benefits and results in cost savings and improved air quality, public health, and environmental outcomes that accrue to all customers. The realization of any indirect benefits is uncertain because SDCP cannot quantify load shift benefits that dynamic price signals would result.

5.2.2.3 Discussion

Based on the foregoing evaluation, SDCP is unable to conclude that implementing new programs that allow for automated response to dynamic price signals, including MIDAS signals, would materially address equity. Programs can be designed to ensure equitable access to participation and benefits regardless of if the programs incorporate sending dynamic signals directly to customers. Furthermore, the risk of price exposure from dynamic rates could potentially exacerbate inequities in outcomes.

5.2.3 Technological Feasibility

The third evaluation factor for programs is technological feasibility. SDCP's evaluation assesses the technological feasibility of implementing programs that allow for automated response to dynamic price signals on the schedule specified in the LMS requirements. SDCP's evaluation considers the feasibility of both the systems needed to dispatch dynamic price signals, including MIDAS signals, and external customer technology that is needed to enable response to hourly or sub-hourly signals.

5.2.3.1 SDCP's Technology Systems

As described previously, SDCP will continue to coordinate and collaborate with external vendors and SDG&E to ensure technological platforms are configured to implement new programs. SDCP has started discussions with multiple parties in assessing whether it is technologically feasible to incorporate programs that enable automatic response to dynamic price signals, including MIDAS signals, into current platforms.

5.2.3.2 Enabling Customer Technology

The incremental benefits derived from implementing new programs that allow for response to dynamic price signals depend on customer participation and the widespread availability and acceptance of devices that can respond to sub-hourly price signals without compromising customer experience. Refer to Section 4.3.3.2 for a detailed description of common load flexibility technologies deployed across the state, and their capabilities and challenges.

5.2.3.3 Discussion

SDCP is uncertain whether the technology and platforms needed to enable programs that allow for response to dynamic price signals exist or could be updated on the LMS requirements' timeframe, given close coordination and collaboration with external vendors and SDG&E will be required. However, SDCP has started discussions with those parties on technological feasibility in anticipation of developing and offering programs with enabling device automation technology.

5.2.4 Benefits to the Grid and Customers

The final two criteria for evaluating dynamic rates are benefits to the grid and to customers. SDCP is evaluating these factors separately, in contrast to the previous dynamic rates evaluation.

5.2.4.1 Benefits to the Grid

To the extent that new programs enabling responses to dynamic price signals result in consistent, material incremental load reduction, the following are potential grid benefits:

- Deferred or reduced need for new generation capacity or RA procurement.
- Deferred or reduced need for wholesale energy purchases to meet peak demand.
- Deferred or reduced need to upgrade transmission and/or distribution capacity to deliver energy to meet peak demand.
- Increased reliability is associated with reducing grid strain during periods of peak demand.

These benefits all depend, in significant part, on the magnitude of load shift resulting from new programs. Mutual benefit is necessary for effective, consistent load shift. With limited available information, SDCP is unable to quantify the load shift benefits of new MIDAS-integrated programs.

5.2.4.2 Benefits to Customers

The following is a summary of potential customers benefits associated with implementing new programs that allow for automated response to dynamic price signals:

- Pass-through cost savings associated with the realization of a reduced need for generation capacity, transmission and/or distribution upgrades, and higher-price wholesale energy purchases to meet peak load.

- Pass-through cost savings associated with avoided GHG compliance costs, to the extent that the incremental load shift reduces the need to rely on fossil-fuel resources to meet peak demand. SDCP anticipates these savings will become less significant as SDCP's energy supply transitions towards 100 percent renewable energy.

- Pass-through increased reliability, to the extent this grid benefit is realized.

- Improved public health, air quality, and environmental outcomes, to the extent that the incremental load shift reduces the need to rely on fossil-fuel resources to meet peak demand.

- Cost savings associated with participation, to the extent that devices automatically shift load away from higher price periods.

Based on the uncertainty of the magnitude of load reduction benefits that the new programs can achieve, SDCP is unable to conclude that there would be any incremental pass-through cost savings or reliability benefits to customers. Similarly, SDCP anticipates that any incremental air quality, public health, and environmental benefits would also be uncertain.

5.2.5 Compliance Approach

The following section of the Plan describes how SDCP plans to address the requirements to identify cost-effective programs that allow for automated response to dynamic price signals and offer customers voluntary participation in these programs, based on our evaluation of such programs.

5.2.5.1 Identification of Cost-Effective Load Flexibility Programs

Consistent with the LMS requirements, SDCP will submit to the CEC, no later than October 1, 2024, a list of cost-effective load flexibility programs that enable automated response to MIDAS signals for each customer class, if any, where such a program is determined by SDCP's Board to materially increase peak load reduction. SDCP is in the process of implementing its load flexibility programs, with pilots and/or programs designed to reduce peak load. SDCP will continue to evaluate the cost-effectiveness and incremental peak load reduction potential associated with incorporating automated response to MIDAS signals.

5.2.5.2 Voluntary Participation in Cost-Effective Load Flexibility Programs

SDCP is currently implementing and developing load flexibility programs that may offer customers voluntary participation. However, SDCP is unable to demonstrate that offering such programs beginning on July 1, 2027 would be cost effective. SDCP will continue to assess the cost-effectiveness and peak load reduction potential of programs that enable automated response to MIDAS signals as more information becomes available.

6. Public Information Program

Adopted LMS amendments section 1623.1(a)(5) requires each large CCA to conduct a public information program to inform and educate impacted customers about dynamic rates and/or load flexibility programs. Specifically, the information program must explain why dynamic rates or load flexibility

programs, and their automation, are needed, how they will be used, and how they lower energy costs. This section of the Plan addresses how SDCP will comply with the public information program requirements.

6.1 SDCP's Communication Approach

As a community-driven local electricity provider, SDCP is committed to broad customer outreach and education, communication, and customer service. SDCP provides its customers with the information, education, and tools to best manage their energy use according to their needs.

SDCP communicates through a wide variety of channels, including our website, social media, in-person, and direct mail to help ensure customers are aware of SDCP more broadly and specifically about available time-dependent rates and load flexibility programs, and their benefits.

As part of our commitment to customer access and education, SDCP formally established a Language Access Policy to ensure that customers can access information and materials in their preferred language. SDCP's customer service agents regularly interact with customers over the phone and email to address questions and concerns and resolve issues. We strive to empower our customers with comprehensive information, education, and tools tailored to meet their unique energy needs.

SDCP has developed a comprehensive and customer-centric communication strategy that recognizes the unique customer segments that SDCP serves. This strategic approach is designed not only to disseminate information but to empower our customers, enabling them to make well-informed decisions aligned with their individual needs. Through our website, customers have access to a centralized hub of resources, where they can find detailed information and educational materials tailored to enhance their understanding of SDCP as an organization, energy efficiency, and time-dependent rates. Our active presence on various social media platforms amplifies our engagement, providing a space for interactive communication and real-time updates. In the spirit of transparency, SDCP maintains regular communication with regional media, providing factual and timely information to the broader public.

SDCP's communication and community outreach efforts reflect the diverse communities we serve, so a broad mix of communication channels is used to reach all customers. This includes in-person outreach in the community at public events with information and resources available to the attendees. SDCP regularly participates in events across our member agencies as we aim to increase general awareness and answer questions in a friendly, helpful manner. In addition to community outreach, SDCP consistently sponsors large events throughout the greater San Diego region to increase general brand awareness.

6.2 Current Outreach and Marketing

SDCP recognizes the importance of collaboration and public outreach. SDCP has engaged in a variety of public relations, marketing, community outreach, and local government affairs activities to drive energy awareness and education, spark community engagement, and maintain high customer enrollment. We work closely with internal and external stakeholders to encourage participation in programs and leverage relationships with community partners to amplify our marketing and outreach efforts.

As noted above, SDCP's commitment to broad, in-person outreach and engagement is critical to our efforts. In 2023 SDCP participated in over 70 in-person events throughout our service territory which created the opportunity for approximately 250,000 interactions.

Having recently completed mass enrollment, SDCP has expanded marketing efforts to continue to educate our customers about SDCP and specifically, on the simple actions they can take to limit energy use during times of peak use. Energy tips and education around time-dependent rates can be found across our digital communication channels and in printed materials, including the Power Content Label mailer, which serves as an annual touchpoint with customers. This approach has expanded to digital efforts in both organic and paid social media, and into other marketing efforts, including a year-long sponsorship agreement with San Diego Magazine across print and digital channels and other local print and television outlets.

To achieve decarbonization goals, SDCP will continue to educate customers on the benefits of peak load reduction through time-dependent rates and load flexibility programs, how they work and how they can save the customers money. SDCP will continue to develop new strategies, processes and capacity to conduct more community outreach, expand marketing and brand awareness efforts, and provide timely, accurate information across multiple channels.

6.3 Compliance Approach

SDCP will continue with communication best practices to maintain its outreach, education, and marketing of rates, programs, and pilots that support load flexibility and recognize the benefits of reducing peak load. In parallel, SDCP will also update education and marketing materials to incorporate discussion of new rates, programs, and pilots, along with the role of automation.

7. Delay and Modification of Compliance Requirements

Adopted LMS amendments section 1623.1(a)(2) of the LMS regulation specifies that a Large CCA may approve a compliance plan, or material revisions to an approved plan, that delays or modifies compliance with certain LMS requirements. To do so, the compliance plan must demonstrate one of the following factors:

- Despite good faith efforts to comply, requiring timely compliance would result in extreme hardship.
- Requiring timely compliance would result in reduced system reliability, equity, safety, or efficiency.
- Requiring timely compliance would not be technologically feasible or cost-effective to implement.
- Or despite good faith efforts to implement a compliance plan, it must be modified to provide a more technologically feasible, equitable, safe, or cost-effective way to achieve the LMS requirements or the plan's goals.

This section of the Plan addresses how SDCP's Plan delays or modifies compliance with certain elements of the LMS requirements.

7.1 Providing RINs to Customers

Adopted LMS amendments section 1623(c)(4) requires each Large CCA to provide customers access to their RIN(s) on billing statements and in online accounts by April 1, 2024, using both text and QR code. As detailed in section 3.1.2 of this Plan, SDCP made the RINs available to customers in the required formats within the designated time.

7.2 Statewide RIN Access Tool

7.2.1 Development of Statewide Tool

Adopted LMS amendments section 1623(c) requires the utilities and Large CCAs to develop a single statewide standard tool for authorized rate data access by third parties, along with a single set of terms and conditions for third parties using the tool, for submission to the CEC by October 1, 2024, for approval.

As discussed in section 3.1.3, SDCP has been working with the other regulated LSEs in 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. We will continue to work with the other LSEs and the CEC to implement and maintain the statewide RIN tool in a timely manner, subject to the Commission's approval.

7.2.2 Implementation of Statewide Tool

Adopted LMS amendments section 1623(c)(3) also requires the utilities and Large CCAs to implement and maintain the tool, upon its approval by the CEC. SDCP does not anticipate needing to modify compliance with this requirement currently. However, SDCP notes that integration of the approved tool with internal systems could be delayed if the development and/or CEC approval of the tool are delayed, because integrating the tool before it is finalized and approved would not be technologically feasible, or if the cost of integrating the tool would cause extreme hardship for SDCP or SDCP's customers.

7.3 Dynamic Rates

Adopted LMS amendments section 1623.1(b)(2) directs each Large CCA to apply for approval of at least one dynamic rate for the customer class(es) from its Board by July 1, 2025, for which the Board determines such rate will materially reduce peak load. Section 1623.1(b)(4) requires CCAs to offer customers voluntary participation in such a rate or a specified load flexibility program by July 1, 2027.

As discussed in Section 4.3, based on its evaluation of dynamic rates, SDCP cannot currently conclude that developing and implementing such rates on the LMS timeframe for any customer class would result in material reductions in peak load or be cost effective. This is due to the following:

- Delayed SDG&E service area dynamic rate pilots, and corresponding data, to evaluate peak load reduction and cost-effectiveness.

- There is a significant market risk to customers on dynamic rates, even with enabling load-shifting technology.

- Customers understand time-dependent rates and programs better than a dynamic, market-based rate that fluctuates hourly.

While dynamic rates have the potential to provide incremental load shift and related benefits, there are significant uncertainties in the magnitude of such benefits. Without evaluation data from SDG&E service area dynamic rate pilots, it is incredibly difficult to quantify incremental load shift benefits and cost-effectiveness of dynamic rate implementation. In addition, implementation of unfamiliar and complex rate structures without sufficient testing and refinement of new rate designs, as well as thorough education, is likely to cause customer confusion, risking low adoption and limiting any incremental load shift benefits. The realization of incremental load shift benefits is made more uncertain by additional risks customers may bear with dynamic rates, especially if new enabling technology is not widely adopted.

While SDCP is not required to propose dynamic rates where such rates are not determined to materially reduce peak load, SDCP has determined that, for the reasons set forth in this Plan, the LMS requirements must be modified to provide a more cost-effective and technologically feasible way for SDCP to, in good faith, meet the LMS requirements and achieve the LMS goals. Thus, SDCP proposes to modify the dynamic rate requirements of the LMS to defer the development or proposal of new hourly or sub-hourly rate options and offering new rates to SDCP's customers would be likewise deferred. SDCP believes proposing dynamic rates to our Board by July 1, 2025, to implement them by July 1, 2027, is premature. SDCP will continue offering our suite of time-dependent rates while gathering information for analysis once data is available from dynamic rate pilots in SDG&E's service area. The results of the pilots will help SDCP better understand the effectiveness of the pilot approach, how customers with different technologies respond to different dispatch signals, and to what extent incremental load shift opportunities exist beyond existing time-dependent rates and programs. As SDCP receives and analyzes results from those pilots, SDCP will be better positioned to evaluate the cost-effectiveness and flexibility of dynamic rates. SDCP will review dynamic rates in the next Plan update. In lieu of developing and proposing adoption of new dynamic rates, SDCP has and will continue to implement and offer load flexibility programs to support the intent and goals of the LMS and to meet LMS compliance.

7.4 Dynamic Response Load Flexibility Programs

7.4.1 Identification of Cost-Effective Load Flexibility Programs

Adopted LMS amendments section 1623.1(b)(3) requires each Large CCA to submit a list of cost-effective MIDAS-integrated load flexibility programs to the CEC Executive Director by October 1, 2024. The portfolio of load flexibility programs must provide at least one option to automate response to MIDAS signals (that indicate, for example, hourly marginal cost-based rates, marginal prices, or hourly or sub-hourly GHG emissions) for every customer class where such a program would materially reduce peak load.

As discussed in Section 5.3, adding or modifying programs to allow response to MIDAS signals has not yet been determined to result in material incremental reductions in peak load for any customer class or to be cost effective. This is in part due to the uncertainties in incremental peak load reduction potential and customer acceptance when introducing hourly or sub-hourly price signals and exposure to market price spikes and volatility.

SDCP is required to identify MIDAS-integrated dynamic load flexibility programs for customer classes where such programs are determined to be cost-effective and materially reduce peak load. SDCP

anticipates submitting a list that includes planned load flexibility programs and pilots that achieve LMS goals without automated response to MIDAS signals, by October 1, 2024, because SDCP's evaluation has not concluded that developing and implementing programs or pilots with automated response to MIDAS would be cost-effective or materially reduce peak load. SDCP is in the process of implementing its load flexibility programs, with pilots and/or programs designed to reduce peak load. Thus, SDCP will evaluate the cost-effectiveness and incremental peak load reduction potential associated with incorporating automated response to MIDAS signals into these pilots and/or programs and include them on a future list as appropriate.

7.4.2 Voluntary Participation in Cost-Effective Load Flexibility Programs

Adopted LMS amendments section 1623.1(b)(4) requires each Large CCA to offer customers voluntary participation in either a dynamic rate, if approved by the Board, or cost-effective MIDAS-integrated load flexibility program by July 1, 2027.

SDCP is required to offer voluntary participation in cost-effective load flexibility programs that materially reduce peak load. As discussed in Sections 5 and 7.4.1 above, SDCP's evaluation has been unable to conclude that developing and implementing new load flexibility programs or pilots with automated response to MIDAS signals would be cost effective or materially reduce peak load. SDCP will assess the cost-effectiveness and peak load potential of planned and new programs that enable automated response to MIDAS signals as SDCP develops and refines load flexibility programs. Based on feedback from CEC staff, SDCP has and will continue to implement and offer load flexibility programs that are LMS compliant and support the intent and goals of the LMS.

Appendix A

The following are the RINs associated with each SDCP's rates and rate permutations that were uploaded to MIDAS, as of 1/1/2024.

RIN	Rate Permutation
USCA-XXSA-0001-0000	G-A6-TOU-P 2020 Vintage
USCA-XXSA-0002-0000	G-A6-TOU-P 2021 Vintage
USCA-XXSA-0003-0000	G-A6-TOU-P 2022 Vintage
USCA-XXSA-0004-0000	G-A6-TOU-T 2020 Vintage
USCA-XXSA-0005-0000	G-A6-TOU-T 2021 Vintage
USCA-XXSA-0006-0000	G-A6-TOU-T 2022 Vintage
USCA-XXSA-0007-0000	G-AL-TOU-P 2020 Vintage
USCA-XXSA-0008-0000	G-AL-TOU-P 2021 Vintage
USCA-XXSA-0009-0000	G-AL-TOU-P 2022 Vintage
USCA-XXSA-0010-0000	G-AL-TOU-S 2020 Vintage
USCA-XXSA-0011-0000	G-AL-TOU-S 2021 Vintage
USCA-XXSA-0012-0000	G-AL-TOU-S 2022 Vintage
USCA-XXSA-0013-0000	G-AL-TOU-T 2020 Vintage
USCA-XXSA-0014-0000	G-AL-TOU-T 2021 Vintage
USCA-XXSA-0015-0000	G-AL-TOU-T 2022 Vintage
USCA-XXSA-0016-0000	G-DG-R-P 2020 Vintage
USCA-XXSA-0017-0000	G-DG-R-P 2021 Vintage
USCA-XXSA-0018-0000	G-DG-R-P 2022 Vintage
USCA-XXSA-0019-0000	G-DG-R-S 2020 Vintage
USCA-XXSA-0020-0000	G-DG-R-S 2021 Vintage
USCA-XXSA-0021-0000	G-DG-R-S 2022 Vintage
USCA-XXSA-0022-0000	G-DG-R-T 2020 Vintage
USCA-XXSA-0023-0000	G-DG-R-T 2021 Vintage
USCA-XXSA-0024-0000	G-DG-R-T 2022 Vintage
USCA-XXSA-0025-0000	G-OL-TOU 2020 Vintage
USCA-XXSA-0026-0000	G-OL-TOU 2021 Vintage
USCA-XXSA-0027-0000	G-OL-TOU 2022 Vintage
USCA-XXSA-0028-0000	G-PA-T-1-P 2020 Vintage
USCA-XXSA-0029-0000	G-PA-T-1-P 2021 Vintage
USCA-XXSA-0030-0000	G-PA-T-1-P 2022 Vintage
USCA-XXSA-0031-0000	G-PA-T-1-S 2020 Vintage
USCA-XXSA-0032-0000	G-PA-T-1-S 2021 Vintage
USCA-XXSA-0033-0000	G-PA-T-1-S 2022 Vintage
USCA-XXSA-0034-0000	G-PA-T-1-T 2020 Vintage
USCA-XXSA-0035-0000	G-PA-T-1-T 2021 Vintage
USCA-XXSA-0036-0000	G-PA-T-1-T 2022 Vintage
USCA-XXSA-0037-0000	G-TOU-A-P 2020 Vintage

RIN	Rate Permutation
USCA-XXSA-0038-0000	G-TOU-A-P 2021 Vintage
USCA-XXSA-0039-0000	G-TOU-A-P 2022 Vintage
USCA-XXSA-0040-0000	G-TOU-A-S 2020 Vintage
USCA-XXSA-0041-0000	G-TOU-A-S 2021 Vintage
USCA-XXSA-0042-0000	G-TOU-A-S 2022 Vintage
USCA-XXSA-0043-0000	G-TOU-M 2020 Vintage
USCA-XXSA-0044-0000	G-TOU-M 2021 Vintage
USCA-XXSA-0045-0000	G-TOU-M 2022 Vintage
USCA-XXSA-0046-0000	G-TOU-PA-P 2020 Vintage
USCA-XXSA-0047-0000	G-TOU-PA-P 2021 Vintage
USCA-XXSA-0048-0000	G-TOU-PA-P 2022 Vintage
USCA-XXSA-0049-0000	G-TOU-PA-P Over 20kW-2020 Vintage
USCA-XXSA-0050-0000	G-TOU-PA-P Over 20kW-2021 Vintage
USCA-XXSA-0051-0000	G-TOU-PA-P Over 20kW-2022 Vintage
USCA-XXSA-0052-0000	G-TOU-PA-S 2020 Vintage
USCA-XXSA-0053-0000	G-TOU-PA-S 2021 Vintage
USCA-XXSA-0054-0000	G-TOU-PA-S 2022 Vintage
USCA-XXSA-0055-0000	G-TOU-PA-S Over 20kW-2020 Vintage
USCA-XXSA-0056-0000	G-TOU-PA-S Over 20kW-2021 Vintage
USCA-XXSA-0057-0000	G-TOU-PA-S Over 20kW-2022 Vintage
USCA-XXSA-0150-0000	A6-TOU-P 2020 Vintage
USCA-XXSA-0151-0000	A6-TOU-P 2021 Vintage
USCA-XXSA-0152-0000	A6-TOU-P 2022 Vintage
USCA-XXSA-0153-0000	A6-TOU-T 2020 Vintage
USCA-XXSA-0154-0000	A6-TOU-T 2021 Vintage
USCA-XXSA-0155-0000	A6-TOU-T 2022 Vintage
USCA-XXSA-0156-0000	AL-TOU-2-P 2020 Vintage
USCA-XXSA-0157-0000	AL-TOU-2-P 2021 Vintage
USCA-XXSA-0158-0000	AL-TOU-2-P 2022 Vintage
USCA-XXSA-0159-0000	AL-TOU-2-S 2020 Vintage
USCA-XXSA-0160-0000	AL-TOU-2-S 2021 Vintage
USCA-XXSA-0161-0000	AL-TOU-2-S 2022 Vintage
USCA-XXSA-0162-0000	AL-TOU-2-T 2020 Vintage
USCA-XXSA-0163-0000	AL-TOU-2-T 2021 Vintage
USCA-XXSA-0164-0000	AL-TOU-2-T 2022 Vintage
USCA-XXSA-0165-0000	AL-TOU-P 2020 Vintage
USCA-XXSA-0166-0000	AL-TOU-P 2021 Vintage
USCA-XXSA-0167-0000	AL-TOU-P 2022 Vintage
USCA-XXSA-0168-0000	AL-TOU-S 2020 Vintage
USCA-XXSA-0169-0000	AL-TOU-S 2021 Vintage
USCA-XXSA-0170-0000	AL-TOU-S 2022 Vintage
USCA-XXSA-0171-0000	AL-TOU-T 2020 Vintage

RIN	Rate Permutation
USCA-XXSA-0172-0000	AL-TOU-T 2021 Vintage
USCA-XXSA-0173-0000	AL-TOU-T 2022 Vintage
USCA-XXSA-0174-0000	DG-R-P 2020 Vintage
USCA-XXSA-0175-0000	DG-R-P 2021 Vintage
USCA-XXSA-0176-0000	DG-R-P 2022 Vintage
USCA-XXSA-0177-0000	DG-R-S 2020 Vintage
USCA-XXSA-0178-0000	DG-R-S 2021 Vintage
USCA-XXSA-0179-0000	DG-R-S 2022 Vintage
USCA-XXSA-0180-0000	DG-R-T 2020 Vintage
USCA-XXSA-0181-0000	DG-R-T 2021 Vintage
USCA-XXSA-0182-0000	DG-R-T 2022 Vintage
USCA-XXSA-0183-0000	DR-SES 2020 Vintage
USCA-XXSA-0184-0000	DR-SES 2021 Vintage
USCA-XXSA-0185-0000	DR-SES 2022 Vintage
USCA-XXSA-0186-0000	EV-HP-P 2020 Vintage
USCA-XXSA-0187-0000	EV-HP-P 2021 Vintage
USCA-XXSA-0188-0000	EV-HP-P 2022 Vintage
USCA-XXSA-0189-0000	EV-HP-S 2020 Vintage
USCA-XXSA-0190-0000	EV-HP-S 2021 Vintage
USCA-XXSA-0191-0000	EV-HP-S 2022 Vintage
USCA-XXSA-0192-0000	EV-TOU 2020 Vintage
USCA-XXSA-0193-0000	EV-TOU 2021 Vintage
USCA-XXSA-0194-0000	EV-TOU 2022 Vintage
USCA-XXSA-0195-0000	EV-TOU-2 2020 Vintage
USCA-XXSA-0196-0000	EV-TOU-2 2021 Vintage
USCA-XXSA-0197-0000	EV-TOU-2 2022 Vintage
USCA-XXSA-0198-0000	EV-TOU-5 2020 Vintage
USCA-XXSA-0199-0000	EV-TOU-5 2021 Vintage
USCA-XXSA-0200-0000	EV-TOU-5 2022 Vintage
USCA-XXSA-0201-0000	LS-2-AD 2020 Vintage
USCA-XXSA-0202-0000	LS-2-AD 2021 Vintage
USCA-XXSA-0203-0000	LS-2-AD 2022 Vintage
USCA-XXSA-0204-0000	OL-TOU 2020 Vintage
USCA-XXSA-0205-0000	OL-TOU 2021 Vintage
USCA-XXSA-0206-0000	OL-TOU 2022 Vintage
USCA-XXSA-0207-0000	PA-T-1-P 2020 Vintage
USCA-XXSA-0208-0000	PA-T-1-P 2021 Vintage
USCA-XXSA-0209-0000	PA-T-1-P 2022 Vintage
USCA-XXSA-0210-0000	PA-T-1-S 2020 Vintage
USCA-XXSA-0211-0000	PA-T-1-S 2021 Vintage
USCA-XXSA-0212-0000	PA-T-1-S 2022 Vintage
USCA-XXSA-0213-0000	PA-T-1-T 2020 Vintage

RIN	Rate Permutation
USCA-XXSA-0214-0000	PA-T-1-T 2021 Vintage
USCA-XXSA-0215-0000	PA-T-1-T 2022 Vintage
USCA-XXSA-0216-0000	TOU-A-2-P 2020 Vintage
USCA-XXSA-0217-0000	TOU-A-2-P 2021 Vintage
USCA-XXSA-0218-0000	TOU-A-2-P 2022 Vintage
USCA-XXSA-0219-0000	TOU-A-2-S 2020 Vintage
USCA-XXSA-0220-0000	TOU-A-2-S 2021 Vintage
USCA-XXSA-0221-0000	TOU-A-2-S 2022 Vintage
USCA-XXSA-0222-0000	TOU-A-3-P 2020 Vintage
USCA-XXSA-0223-0000	TOU-A-3-P 2021 Vintage
USCA-XXSA-0224-0000	TOU-A-3-P 2022 Vintage
USCA-XXSA-0225-0000	TOU-A-3-S 2020 Vintage
USCA-XXSA-0226-0000	TOU-A-3-S 2021 Vintage
USCA-XXSA-0227-0000	TOU-A-3-S 2022 Vintage
USCA-XXSA-0228-0000	TOU-DR 2020 Vintage
USCA-XXSA-0229-0000	TOU-DR 2021 Vintage
USCA-XXSA-0230-0000	TOU-DR 2022 Vintage
USCA-XXSA-0231-0000	TOU-DR-1 2020 Vintage
USCA-XXSA-0232-0000	TOU-DR-1 2021 Vintage
USCA-XXSA-0233-0000	TOU-DR-1 2022 Vintage
USCA-XXSA-0234-0000	TOU-ELEC 2020 Vintage
USCA-XXSA-0235-0000	TOU-ELEC 2021 Vintage
USCA-XXSA-0236-0000	TOU-ELEC 2022 Vintage
USCA-XXSA-0237-0000	TOU-M 2020 Vintage
USCA-XXSA-0238-0000	TOU-M 2021 Vintage
USCA-XXSA-0239-0000	TOU-M 2022 Vintage
USCA-XXSA-0240-0000	TOU-PA-2-P 2020 Vintage
USCA-XXSA-0241-0000	TOU-PA-2-P 2021 Vintage
USCA-XXSA-0242-0000	TOU-PA-2-P 2022 Vintage
USCA-XXSA-0243-0000	TOU-PA-2-S 2020 Vintage
USCA-XXSA-0244-0000	TOU-PA-2-S 2021 Vintage
USCA-XXSA-0245-0000	TOU-PA-2-S 2022 Vintage
USCA-XXSA-0246-0000	TOU-PA-3-P 2020 Vintage
USCA-XXSA-0247-0000	TOU-PA-3-P 2021 Vintage
USCA-XXSA-0248-0000	TOU-PA-3-P 2022 Vintage
USCA-XXSA-0249-0000	TOU-PA-3-P Over 20kW-2020 Vintage
USCA-XXSA-0250-0000	TOU-PA-3-P Over 20kW-2021 Vintage
USCA-XXSA-0251-0000	TOU-PA-3-P Over 20kW-2022 Vintage
USCA-XXSA-0252-0000	TOU-PA-3-S 2020 Vintage
USCA-XXSA-0253-0000	TOU-PA-3-S 2021 Vintage
USCA-XXSA-0254-0000	TOU-PA-3-S 2022 Vintage
USCA-XXSA-0255-0000	TOU-PA-3-S Over 20kW-2020 Vintage

RIN	Rate Permutation
USCA-XXSA-0256-0000	TOU-PA-3-S Over 20kW-2021 Vintage
USCA-XXSA-0257-0000	TOU-PA-3-S Over 20kW-2022 Vintage
USCA-XXSA-0264-0000	TOU-A-P 2020 Vintage
USCA-XXSA-0265-0000	TOU-A-P 2021 Vintage
USCA-XXSA-0266-0000	TOU-A-P 2022 Vintage
USCA-XXSA-0268-0000	TOU-A-S 2020 Vintage
USCA-XXSA-0269-0000	TOU-A-S 2021 Vintage
USCA-XXSA-0270-0000	TOU-A-S 2022 Vintage
USCA-XXSA-0272-0000	TOU-DR-2 2020 Vintage
USCA-XXSA-0273-0000	TOU-DR-2 2021 Vintage
USCA-XXSA-0274-0000	TOU-PA-P 2020 Vintage
USCA-XXSA-0275-0000	TOU-PA-P 2021 Vintage
USCA-XXSA-0276-0000	TOU-PA-P 2022 Vintage
USCA-XXSA-0277-0000	TOU-DR-2 2022 Vintage
USCA-XXSA-0278-0000	TOU-PA-S 2020 Vintage
USCA-XXSA-0279-0000	TOU-PA-S 2021 Vintage
USCA-XXSA-0280-0000	TOU-PA-S 2022 Vintage