BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Continue Implementation and Administration, and Consider Further Development, of California Renewables Portfolio Standard Program	Rulemaking 18-07-003 (Filed July 12, 2018)

FINAL 2022 RENEWABLES PORTFOLIO STANDARD PROCUREMENT PLAN OF SAN DIEGO COMMUNITY POWER

PUBLIC VERSION

Karin Burns
Chief Executive Officer
San Diego Community Power
815 E Street, Suite 12716
San Diego, CA 92112
(619) 657-0060
kburns@sdcommunitypower.org

Dated: January 18, 2023

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Continue Implementation and Administration, and Consider Further Development, of California Renewables Portfolio Standard Program	Rulemaking 18-07-003 (Filed July 12, 2018)

FINAL 2022 RENEWABLES PORTFOLIO STANDARD PROCUREMENT PLAN OF SAN DIEGO COMMUNITY POWER

PUBLIC VERSION

In accordance with the California Public Utilities Commission's ("Commission") March 30, 2021 *Assigned Commissioner and Assigned Administrative Law Judges' Ruling Identifying Issues and Schedule of Review for 2022 Renewables Portfolio Standard Procurement Plans and Denying Joint IOUs' Motion to File Advice Letters for Market Offer Process* ("ACR") and the *Decision on 2022 RPS Procurement Plans* ("D.22-12-030"), San Diego Community Power ("SDCP") hereby submits its Final 2022 Renewables Portfolio Standard Procurement Plan ("RPS Procurement Plan"). This RPS Procurement Plan includes responses to the issues listed in sections 6.1-6.16 of the ACR.

SDCP notes that certain issues and requests in these ACR sections apply to other retail sellers (electrical corporations and electric service providers) and do not extend to Community Choice Aggregators ("CCAs"). SDCP is nevertheless voluntarily responding to these ACR sections in the interest of transparency and to collaborate with the Commission. The submission of this RPS Procurement Plan pursuant to the ACR, however, should not be construed as a waiver of the right to assert that components of Senate Bill ("SB") 350, or Commission decisions and rulings on RPS Procurement Plan submittals, do not extend to CCAs, and SDCP reserves the right to challenge any such assertion of jurisdiction over these matters.

In reviewing this RPS Procurement Plan, SDCP encourages the Commission to consider the considerable differences between California's investor-owned utilities ("IOUs") and other retail sellers, including CCAs – differing levels of detail, procedure, complexity, and coordination are appropriate within the planning documents submitted by small, medium, and large organizations; and where the Commission may be inclined to identify informational deficiencies in certain areas (based on inevitable differences between content provided in the RPS Procurement Plans of California's IOUs and CCA programs), SDCP encourages the Commission to consider whether it is appropriate to utilize a "one size fits most/all" approach in managing widely varying RPS planning and procurement obligations. The Commission is also encouraged to consider the differing operational stages of reporting load serving entities ("LSEs"). Certain direction and guidance provided in Decision ("D.") 21-01-005 seems to suggest that each element of the RPS planning process should be universally applicable across all LSEs, regardless of pertinent operational status, and that is not the case. For example, it is likely inappropriate and relatively unhelpful for a newer CCA organization, like SDCP, to prepare a ten-year negative price forecast or curtailment analysis when such information would not necessarily be instructive when administering SDCP's existing RPS contracts – given the heightened attention and related information focused on changing market conditions, increased incidents of negative pricing and related energy curtailment, all LSEs are aware, to some extent, of these potential risk factors, but that does not mean that a related forecasting effort or other form of analysis would provide useful information to each LSE. For example, a generalized ten-year negative price forecast or curtailment analysis would have no meaning for a new LSE without existing contractual commitments or if its contractual commitments did not expose the buyer to negative price risk (due to the application of settlement mechanisms and/or fixed

volumetric commitments that eliminate such concerns). Similarly, it would not make sense for an LSE to prepare forward curtailment estimates if its renewable contract portfolio did not include contracts reflecting such exposure. Again, SDCP encourages the Commission to consider the appropriateness of universally requiring certain information within this planning process when such information may not be relevant or useful to the reporting entity – certain sections of these plans should be marked as "if necessary" or "if applicable" without the assumption that all LSEs should be comprehensively responsive in addressing such topics. While there may be some commonalities among planning and procurement practices reflected in the various RPS Procurement Plans submitted through this process, it is reasonable to assume that noteworthy differences may be prevalent, particularly when considering plans submitted by the IOUs and other retail sellers.

SDCP would also like to note that certain required elements of the RPS procurement planning process will evolve over time, particularly the organization's approach to assessing risk and establishing RPS planning reserves (namely, any minimum margin of over-procurement that may be established by SDCP's governing board). SDCP is a relatively new CCA organization that commenced retail electric service to participating customers in March 2021, and as facts and circumstances evolve and experience is gained over time, it will progressively elaborate on various topics in future RPS planning filings. For example, this Final 2022 RPS Procurement Plan now includes additional information regarding SDCP's recently implemented risk assessment process, including a description of its assessment methodology and a summary of related results. Such detail can be found in Section VII (below).

With regard to understanding the consequences of compliance shortfalls, SDCP is appreciative of both direct (*e.g.*, financial penalties and findings of non-compliance) and indirect impacts (*e.g.*, reputational damage that might accrue to participating communities or CCA organizations, generally) associated with such deficiencies and has chosen to pursue risk mitigation measures that are considerate of SDCP's aversion to such risks, as well as the related administrative complexity, cost and rigor that were deemed appropriate to achieve the desired level of mitigation, particularly during early-stage program operation. When undertaking CCA phase-in activities and early-stage planning efforts focused on renewable energy procurement, the completion of elaborate risk analyses and costly studies was not deemed necessary or desirable by SDCP, but as SDCP's resource planning activities have evolved, it has become increasingly important to evaluate prospective RPS delivery uncertainty and compliance risk in a more deliberate and detailed manner. With this in mind, SDCP has developed a risk assessment methodology of its own, as further described below, that quantifies the risk of RPS-related delivery shortfalls to inform the sufficiency of its adopted minimum margin of procurement.

As noted in previous planning documents, SDCP remains attentive to evolving market pricing conditions and will continue to evaluate historical pricing within geographic areas where renewable energy procurement opportunities are being considered, so long as the settlement structures associated with such procurement opportunities expose SDCP to market-based pricing risk. For now, SDCP has elected to pursue risk mitigation measures that are focused on: 1) the identification of highly qualified renewable energy suppliers – based on SDCP's recently completed risk assessment and the assignment of risk ratings/scores related to key risk factors, the identification of highly experienced/well qualified RPS suppliers remains the most important consideration in ensuring that contracted RPS deliveries are fulfilled according to plan; 2)

substantial levels of over-procurement created by SDCP's initial renewable energy procurement target that commences at 50 percent and increases over time; and 3) the pursuit of contract structures that minimize the risk of delivery shortfalls by providing SDCP with fixed delivery quantities and/or financial protections that generally offset the impacts of financial penalties (prescribed under the RPS Program) in the event of non- or under-delivery.

I. Major Changes to RPS Plan

This Section describes the most significant changes between SDCP's Final 2021 RPS Procurement Plan and its Final 2022 RPS Procurement Plan. A redline of this Final 2022 RPS Procurement Plan against SDCP's Updated Draft 2022 RPS Procurement Plan is included as Appendix A. The table below provides a list of key differences between SDCP's Final 2021 RPS Procurement Plan and this Final 2022 RPS Procurement Plan:

Plan Reference	Plan Section	Summary/Justification of Change
Final 2022 RPS Procurement Plan: Introduction	Introduction	Updated to reference pertinent sections of the 2022 ACR that SDCP must address.
Final2022 RPS Procurement Plan: Section II	Executive Summary	Updated to reflect the changes made throughout other sections of this RPS Plan; updated to indicate SDCP's recent Member Agency expansion launch in February 2022.
Final 2022 RPS Procurement Plan: Section III	Summary of Legislation Compliance	Updated to reflect changes in Section requirements.
Final 2022 RPS Procurement Plan: Section IV	Portfolio Optimization	Updated to include discussion regarding SDCP's recent resource planning progress; updated to acknowledge the May 20, 2021 adoption of Decision 21-05-030, which implements the Voluntary Allocation Market Offer proposal/framework, and RPS planning implications.

Plan Reference	Plan Section	Summary/Justification of Change
Final 2022 RPS Procurement Plan: Section IV.B	Responsiveness to Local and Regional Policies	Updated to describe impacts of local and regional policies on procurement targets, bid solicitation protocols, and forecasted supply.
Final 2022 RPS Procurement Plan: Section IV.B.1	Long-Term Procurement	Updated with relevant supporting information on how SDCP's ongoing procurement efforts are expected to meet the requirements of SB 350's long-term contracting for Compliance Period 4 (2021-2024) and beyond, including references to the impacts of SDCP's long-term VAMO elections on its RPS compliance obligations.
Final 2022 RPS Procurement Plan: Section V	Project Development Status Update	Updated Appendix D to reflect the current status of SDCP's new-build renewable generating projects.
Final 2022 RPS Procurement Plan: Section VII	Risk Assessment	Added narrative addressing SDCP's recently completed risk assessment, including a summary of results related to such analysis.
Final 2022 RPS Procurement Plan: Section VIII	Renewable Net Short Calculation	Updated Appendix C to reflect recent ongoing procurement efforts and prescribed changes to the planning period, which now extends through 2032.
Final 2022 RPS Procurement Plan: Section XIV	Cost Quantification	Updated Appendix E to reflect ongoing procurement efforts and prescribed changes to the planning period, which now extends through 2032.

SDCP timely commenced CCA service in March 2021 – such timing was consistent with information reflected in SDCP's Community Choice Aggregation Plan and Statement of Intent ("CCA Implementation Plan"), which was electronically served on all parties of record in proceedings R.17-09-020, R.16-02-007, and R.03-10-003 on December 9, 2019 and subsequently certified by the Commission on March 9, 2020. Based on current load and customer forecasts, which now include assumptions related to upcoming expansion activities in

2023, SDCP plans to serve approximately 930,000 service accounts located within the cities of Chula Vista, Encinitas, Imperial Beach, La Mesa, National City and San Diego as well as the unincorporated areas of San Diego County (together, the "Member Agencies"), which are expected to consume approximately 8,400 GWh per year following completion of all customer phase-in activities in 2023. In 2022, and until upcoming (2023) expansion activities are complete, SDCP's anticipates serving about 730,000 customer accounts that are expected to consume about 5,300 GWh, as reflected in Appendix C.

II. Executive Summary

San Diego Community Power is a CCA program that commenced retail electric service in March 2021 to certain customers located within the cities of San Diego, Encinitas, La Mesa, Chula Vista, and Imperial Beach. SDCP was formed when these five Member Agencies created a Joint Powers Authority, effective October 1, 2019.[1] SDCP submitted its CCA Implementation Plan, which was certified by the Commission on March 9, 2020, to address the anticipated consequences of CCA formation.[2] Since it commenced service in March 2021, SDCP successfully completed planned phase-in activities, which have increased the number of customer accounts as well as related retail electric energy requirements. As reflected in Appendix C, actual retail electricity sales in 2021 approximated 2,000 GWh (with customer account totals approximating 70,000 as of December 31, 2021). By the end of 2022, annual retail sales are expected to increase by approximately 159% to 5,300 GWh with service provided to more than 730,000 customer accounts.

[1] See *Joint Powers Agreement*, San Diego Regional Community Choice Energy Authority, October 1, 2019, available at https://www.sandiego.gov/sites/default/files/sdrccea_jpa_agreement_signed_0.pdf.

[2] See *Letter Certifying San Diego Community Power's Implementation Plan and Statement of Intent*, California Public Utilities Commission, March 9, 2020.

In November 2021, SDCP's Governing Board approved submittal of Addendum No. 1 to the Community Choice Aggregation Implementation Plan and Statement of Intent to Address Expansion to the City of National City and the unincorporated areas of San Diego County ("Addendum No. 1"); Addendum No. 1 was subsequently submitted to the Commission on December 22, 2021 and was also served to parties of record in proceedings R. 03-10-003, R.20-05-003, R.19-11-009, and R.21-10-002 on that day. Addendum No. 1 was later certified by the CPUC's Energy Division on February 28, 2022. As the document's title suggests, Addendum No. 1 addresses the prospective expansion of SDCP's service territory to include the noted municipalities with related customer service expected to commence in April 2023. Now that SDCP is in receipt of Energy Division's certification of Addendum No. 1, the anticipated increases in retail sales and related RPS purchases associated with this upcoming expansion are being considered in SDCP's RPS planning and procurement processes and are also reflected in Appendix C of this Plan. SDCP is aware of the increased RPS procurement obligation associated with future increases to its retail electricity sales and, as such, has already engaged in certain RPS planning and procurement activities to proactively address these future needs, including upcoming impacts to long-term contracting requirements.

At launch, SDCP's governing 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, as reflected elsewhere in this document and its appendices. During its renewable energy procurement efforts, SDCP has focused exclusively on Portfolio Content Category ("PCC") 1

and 2 product types (with a strong preference for PCC1 products).[3] This considerable commitment to renewable energy procurement during early-stage CCA operations is expected to result in meaningful planning reserves, which will provide compliance buffers in the event that contracted renewable energy purchases are not fulfilled as expected – this topic is further discussed in relation to SDCP's adopted voluntary margin of over-procurement ("VMoP"). To address RPS compliance risk, SDCP uses its risk assessment, including its renewable net short calculations, to establish a Minimum Margin of Procurement ("MMoP") to guide RPS compliance procurement planning. SDCP calculated its MMoP using a 10% risk adjustment that was applied to SDCP's minimum internally adopted RPS procurement targets (set at 50% upon program launch in 2021, increasing to 85% by 2030). SDCP's internally adopted renewable energy procurement goals provide a meaningful buffer above the state's RPS requirements and serve as VMoP, which will exceed statewide RPS mandates by at least 15 percent in each year of the planning period, which now extends through 2032. Considered in concert, SDCP's VMoP and MMoP provide a substantial aggregate renewable energy planning buffer, virtually eliminating the possibility of compliance shortfalls during continued SDCP operation.

SDCP also acknowledges that its renewable energy targets and related planning reserves could be periodically evaluated and adjusted by its governing board – such a determination could be based on the manner in which actual renewable energy purchases/deliveries relate to applicable mandates and internally adopted targets, project development progress for new-build renewable generating facilities, generalized renewable product availability, the extent to which prospective RPS deliveries under the VAMO process conform with related projections, load

[3] See *San Diego Community Power Community Choice Aggregation Implementation Plan and Statement of Intent*, December 9, 2019, available at http://sdcommunitypower.org/resources/key-documents/.

variability that may occur during customer enrollment periods, budgetary impacts, and/or various other considerations.

Reducing electric utility sector greenhouse gas ("GHG") emissions generated by residents and businesses within SDCP's Member Agencies was a driving factor in the formation of SDCP. Climate Action Plans ("CAP") adopted by SDCP's Member Agencies establish a variety of GHG reduction and clean energy goals within their respective jurisdictions as detailed in Section IV.B.ii (below). The Member Agencies intend to contribute to achieving their CAP goals collaboratively by operating SDCP to provide electric energy to residential, commercial and governmental electric accounts located within their communities.

SDCP's initial long-term RPS solicitation was issued on June 29, 2020 and was very successful in recruiting interest from qualified suppliers of such products. Since that time, SDCP's negotiation efforts have resulted in the execution of four unique long-term PCC1 supply agreements, which include: 1) a long-term (20-year) PCC1 supply agreement with Vikings Energy Farm, LLC, executed on May 3, 2021, which will cause the delivery of approximately 250,000 MWh per year of renewable energy produced by a new 100 megawatt photovoltaic solar array (plus battery storage) located in Imperial County that is expected to commence commercial operation in June 2023; 2) a long-term (20-year) PCC1 supply agreement with JVR Energy Park, LLC, executed on June 4, 2021, which will cause the delivery of approximately 260,000 MWh per year of renewable energy produced by a new 90 megawatt photovoltaic solar array (plus battery storage) located in San Diego County that is expected to commence commercial operation in March 2023; 3) a long-term (15-year) PCC1 supply agreement with IP Oberon, LLC, executed on June 11, 2021, which will cause the delivery of approximately 225,000 MWh per year of renewable energy produced by a new 75 megawatt photovoltaic solar array located in

Riverside County that is expected to commence commercial operation in late 2023 or early 2024; and 4) a long-term (10-year) PCC1 supply agreement with Duran Mesa LLC, executed January 27, 2022, which will cause the delivery of approximately 170,000 MWh per year of renewable energy produced by 50 MW of new wind capacity located in Torrance County, New Mexico that recently achieved commercial operation (on November 30, 2021, as reflected in the California Energy Commission's associated certificate for this project) and began delivering power to SDCP on February 1, 2022.

Concurrent with its negotiation of the above four long-term power purchase agreements, SDCP also completed bilateral negotiations of a long-term contract for bundled renewable energy supply from San Diego Gas & Electric ("SDG&E"), the incumbent IOU, and its portfolio of long-term renewable energy contracts. The unique structure of this contract is intended to serve as a vehicle via which SDCP can purchase from SDG&E its elected allocation of bundled, long-term renewable energy; that is, the contract sets a baseline annual volume of bundled, renewable deliveries between 2022 and 2033, which has been adjusted to reflect SDCP's allocation volume as determined through the VAMO mechanism. SDG&E filed the resulting contract for Commission approval in SDG&E AL 3936-E, which was subsequently received on May 19, 2022. Initial deliveries will occur, as expected, in July 2022; this agreement will meaningfully increase SDCP's long-term PCC1 position in Compliance Period 4 ("CP4", 2021-2024) and beyond.

To encourage local development of renewable energy and carbon-free free energy storage projects and to inform upcoming solicitations by better understanding current opportunities for contracting such facilities, SDCP issued a Request for Information for Local Renewable Energy and Energy Storage ("Local RFI") in August 2021. Subsequently, SDCP is negotiating power

purchase agreements with two prospective long-term PCC1 suppliers. Because such contracting opportunities remain under negotiation and are confidential, SDCP is unable to further elaborate until these contracts have been finalized, approved and executed.

SDCP expects to administer other solicitations for short- and long-term renewable energy supply, as well as other procurement activities, that will be necessary to meet its adopted portfolio objectives. Completed and upcoming renewable energy planning and procurement activities administered by SDCP include the following:

1) COMPLETE – approval of SDCP's Feed-In Tariff Program ("FIT") was received and this program is now active. SDCP's FIT program is expected to support locally-situated, small-scale RPS-eligible renewable energy projects, which will marginally increase long-term PCC1 supply while supporting local economic development activity and workforce utilization. Additional detail regarding SDCP's FIT program is available via the following link: https://sdcommunitypower.org/programs/feed-in-tariff/;
2) COMPLETE – SDCP completed negotiations of long-term PCC1 supply agreements with SDG&E (contract execution on December 20, 2021) and Duran Mesa, LLC (contract execution on January 27, 2022) in late 2021 and 2022, respectively. Deliveries under the Duran Mesa agreement commenced in February 2022. Deliveries from SDG&E are expected to occur in 2022 as well. ;
3) COMPLETE – SDCP participated in VAMO implementation and elected to receive 100 percent of its long-term Voluntary Allocation share from SDG&E. SDCP notified SDG&E of its Voluntary Allocation election agreement on July 29, 2022. Deliveries from SDG&E are expected to begin on January 1, 2023;

4) Q2 2022 – SDCP has administered short-term RPS solicitations to fill known open positions related to RPS products. Contracts have been executed with short-listed suppliers and expected deliveries are now reflected in Appendix C of this Plan. SDCP will continue to administer solicitations for such products, as necessary, and will update future planning documents to the extent such solicitations result in additional procurements;
5) Q2 2022 – SDCP released a targeted solicitation for long-term, new-build supply from "clean firm" renewable energy sources, which SDCP staff expect to be fueled by geothermal or bioenergy renewable energy, to be online by 2026 to meet the relevant requirements within the CPUC's Mid-Term Reliability ("MTR") procurement order. These offers are due on July 6, 2022, upon which time SDCP will review conforming offers and enter negotiations with those that its executive team and Energy Contract Working Group determine to be compelling.
6) Q3 2022 – SDCP expects to release a targeted solicitation for long-term, new-build "long duration storage" capacity to be online by 2026 to meet the relevant requirements within the CPUC's Mid-Term Reliability ("MTR") procurement order. Upon receipt of offers as delineated in the forthcoming solicitation materials, SDCP will review conforming offers and enter negotiations with those that its executive team and Energy Contract Working Group determine to be compelling.

7) Late Q3 2022/Q4 2022 – expected release of SDCP's second long-term renewable energy solicitation for all renewable resources. SDCP is evaluating the scope of this solicitation and will finalize its plans to reflect recent VAMO allocation elections. SDCP had delayed the release of this solicitation (which was originally scheduled for late-Q2 2022), as acceptance of significant VAMO allocations has meaningfully reduced open positions for long-term RPS products in Compliance Period 4;
8) Q4 2022 – expected receipt of offers related to second long-term renewable energy solicitation, if released in Q3 2022;
9) Q4 2022/Q1 2023 – evaluation of RFP responses and selection of short-listed respondents, if released in Q3 2022;
10) Q1 2023 – commencement of contract negotiations with short-listed respondents (to SDCP's second long-term RPS solicitation), if the long-term solicitation is released in Q3 2022;
11) Q1 2023 – finalization of long-term RPS contract negotiations, contract approval and execution, if the long-term solicitation is released in Q3 2022; and
12) CY 2024 and 2025 – commencement of initial deliveries under executed long-term renewable supply contract(s) resulting from SDCP's second long-term RPS solicitation, if released in Q3 2022.

SDCP is also aware that renewable energy procurement activities must be timely completed to ensure the achievement of noted renewable energy targets, so it intends to continue coordinating such activities with upcoming customer phase-in and expansion activities, as noted above. These procurement efforts will be focused on securing necessary short-term and long-

term renewable energy supply, the latter of which will be intended to facilitate compliance with California's 65 percent long-term contracting requirement, which became effective in 2021. SDCP acknowledges that certain long-term renewable contracting opportunities may require substantial lead time, particularly opportunities related to new-build renewable generating facilities. SDCP is aware that there may be lingering impacts of the pandemic on new-build renewable generating projects which may be heavily reliant on international supply chains to ensure timely completion. There are challenges in determining the extent to which such effects will be experienced by SDCP and other buyers, but SDCP hopes to learn more by monitoring development progress of new renewable generating facilities that have been recently placed under contract. With time, SDCP remains optimistic that it will be able to facilitate a meaningful level of new renewable infrastructure buildout through its ongoing renewable energy contracting efforts and expects to confirm such expectations as it moves forward.

During administration of its ongoing renewable energy solicitation activities, SDCP will gauge prospective supplier interest and potential concerns associated with new CCA programs and long-term supply commitments – the long-term contracting requirement and its lack of an "on ramp" for new retail sellers is expected to necessitate the execution of several long-term renewable energy supply commitments with product delivery to begin shortly after CCA service commencement. SDCP's long-term bundled transactions with Duran Mesa Wind and SDG&E are two necessary steps to secure such supply commitments as part of its resource planning and RPS compliance activities. While this immediate requirement for renewable generation to be delivered under long-term contracts is not ideal for resource planning from the perspective of a recently established CCA, SDCP is aware of potential repercussions associated with RPS compliance shortfalls and, with such concerns in mind, is committed to pursuing RPS

contracting opportunities that will satisfy pertinent mandates, plus sufficient planning reserves.

As part of its ongoing planning process, SDCP is also considering the manner in which renewable energy compliance risks will be assessed and mitigated. One key element of this process included the adoption of a formal Energy Risk Management Policy ("ERM Policy")[4], which occurred at the regularly scheduled meeting of SDCP's governing board on June 25, 2020. The ERM Policy addresses various types of risk and establishes related oversight in managing SDCP's various portfolio positions, control procedures and delegations of authority (related to the procurement of various energy and capacity products). SDCP's ERM Policy also necessitates formation of a Risk Oversight Committee ("ROC"), which meets on a regular basis to monitor SDCP's procurement efforts, open positions, counterparty credit exposure and other concerns. Staff provides SDCP's ROC with various deal tracking and position reports to keep program management apprised of ongoing progress in meeting statewide compliance mandates and SDCP's internally adopted renewable planning targets, which exceed statewide mandates. The ROC also receives updates regarding the development progress of new-build renewable generating facilities that are expected to contribute to SDCP's RPS compliance mandates. In addition to the noted ERM Policy and ROC, SDCP's Managing Director of Power Services oversees the day-to-day management of resource planning, power supply acquisition, and related compliance activities and ensures ongoing coordination with SDCP's suppliers.

Initial discussion among SDCP's executive leadership, power services staff, technical advisors, and Finance and Risk Management Committee (another SDCP committee intended to monitor program finances and risk) suggests that managing early-stage compliance risk is dependent upon the identification and selection of highly experienced and financially viable

[4] See *San Diego Community Power Energy Risk Management Policy*, June 25, 2020.

sellers during the administration of renewable energy solicitation processes. This understanding is supported by conversations with leadership of longer-standing California CCAs, which emphasized the importance of such an approach during early-stage renewable energy procurement efforts; such CCAs noted that the timing of early-stage RPS planning and procurement efforts (and the proximity of such efforts relative to imposition of the 65% long-term contracting mandate) necessitated considerable reliance on: 1) existing renewable generating facilities; and/or 2) highly experienced project developers with strong track records of timely project completion. At this time, the fundamental RPS-related risk to SDCP is insufficiency of its existing contractual commitments, but considering its recently executed long-term contracts and allocation elections via VAMO, SDCP remains confident that current renewable energy open positions will be significantly reduced in the near future. Given SDCP's gross RPS procurement needs and existing procurement efforts, a quantitative risk assessment was recently completed by SDCP. The results of such assessment are presented below, including a description of the methodology used to complete it. As SDCP continues to update its risk assessment based on future contracting efforts and its impressions of various sources of RPS delivery risk, it will elaborate on its findings in a future RPS Procurement Plan.

SDCP will carefully monitor the performance of selected renewable energy suppliers relative to projected RPS requirements and will augment procurement efforts in the event that actual renewable deliveries fall below projections. Based on SDCP's minimum 50 percent renewable procurement target, the organization could suffer significant delivery shortfalls while still satisfying statewide compliance mandates.

III. Summary of Legislative Compliance

This RPS Procurement Plan addresses the requirements of all relevant legislation and the Commission's regulatory framework. This Section describes the relevant statutory and regulatory requirements and how this RPS Procurement Plan demonstrates that SDCP will meet such requirements.

Senate Bill ("SB") 350 (stats. 2015) was signed by the Governor on October 7, 2015. SB 350 set a new RPS procurement target of 50 percent by December 31, 2030. On December 20, 2016, the Commission issued D.16-12-040, which partially implemented the increased targets of SB 350 by establishing new compliance periods and procurement quantity requirements. On July 5, 2017, the Commission issued D.17-06-026, which implemented some of the key remaining elements of SB 350, including adopting new minimum procurement requirements for long-term contracts and owned resources, as well as revising the excess procurement rules.

SB 100 was signed by the Governor on September 10, 2018, and became effective on January 1, 2019. SB 100 increased the RPS procurement requirements to 44 percent by December 31, 2024, 52 percent by December 31, 2027, and 60 percent by December 31, 2030. On June 6, 2018, the Commission issued D.18-05-026, which implemented changes made by SB 350 to the RPS waiver process and reaffirmed the existing RPS penalty scheme. In July of 2018, the Commission instituted Rulemaking 18-07-003 to continue the implementation of the RPS program. On June 28, 2019, the Commission issued D.19-06-023, which continues to use a straight-line method to calculate compliance period procurement quantity requirements.

The current RPS procurement targets are incorporated into SDCP's Renewable Net Short Calculation Table as described in Section VIII below and attached as Appendix C. SDCP's planned procurement, as reflected in SDCP's Renewable Net Short Calculation Table and

described in Sections IV and V, is expected to exceed pertinent RPS procurement mandates, including a minimum margin of over-procurement based on SDCP's risk assessment, as further described in Sections VII and IX. SDCP also expects to meet California's SB 350 long-term procurement requirement, as described in Sections V and VII, through the completion of current contract negotiations and any long-term RPS solicitation processes that may be administered thereafter.

SB 901, signed by Governor Brown on September 21, 2018, added Public Utilities Code section 8388, which requires any IOU, publicly owned electric utility, or CCA with a biomass contract meeting certain requirements to seek to amend the contract to extend the expiration date to be five years later than the expiration date that was operative as of 2018. SDCP does not have a contract with a biomass facility that is covered by Public Utilities Code section 8388.

IV. Assessment of RPS Portfolio Supplies and Demand

IV.A. Portfolio Supply and Demand

As previously noted, SDCP successfully initiated customer service in March 2021. Following the completion of upcoming expansion activities in 2023, SDCP expects to serve approximately 930,000 service accounts, which are expected to consume about 8,400 GWh per year. SDCP has now executed four long-term PCC1 supply contracts that will result in the delivery of approximately 1,000 GWh per year following the successful commercial operation of related renewable generating projects (which is expected to occur in 2023) and SDCP's election of long-term PCC1 and PCC0 supply contracts via VAMO allocations will result in the delivery of over 2,900 GWh per year. One of the new-build projects will utilize wind technology, while the other three new-build projects will utilize photovoltaic solar generating technology, with two of these projects incorporating battery storage to allow for re-shaping of project energy

deliveries.

Additional contracting efforts remain in process with additional solicitations scheduled in the future. Following the completion of negotiation activities associated with any long-term renewable supply agreement, the final contract(s) will be brought before SDCP's governing board for approval and, if approved, will be executed thereafter. Short-term renewable supply agreements may be executed by SDCP's Chief Executive Officer pursuant to delegated contracting authorities – the limitations associated with such contracting authorities are reflected in SDCP's Energy Risk Management Policy.

Over time, SDCP expects to continue meeting pertinent RPS compliance obligations by entering into a variety of renewable energy supply agreements of varying term lengths and structures. The exact portfolio characteristics selected may vary depending on direction received from SDCP's governing board, renewable resource availability, procurement costs, legislative and policy changes, technological improvements, principles of resource diversity, preferences of the Member Agencies and/or other developments. To manage this future uncertainty, SDCP will regularly evaluate anticipated supply requirements in consideration of expected customer electricity usage and anticipated renewable energy deliveries; such information is expected to influence future procurement efforts, which will attempt to balance customer usage with requisite resource commitments. SDCP is also aware of the need to promote the use of a diverse renewable resource portfolio, avoiding overcommitting to certain generating technologies, suppliers, geographic regions, etc. For now, the organization must remain open minded and considerate of all possible supply options. During early-stage operations, SDCP must also proceed with its RPS planning and procurement activities under a "compliance first" mindset with the primary goal of securing necessary RPS supply (both long-term and short-term) from

available generating sources – because financial penalties (related to compliance shortfalls) under the RPS program are not waived or reduced in consideration of portfolio characteristics (such as technology and/or geographic diversity), it is advisable for new retail sellers, including SDCP, to primarily focus on securing requisite volumes, even if the majority of such volumes happen to be associated with a specific technology type or geographic region. This noted, SDCP will make reasonable efforts to promote resource diversity during its early-stage renewable energy planning and procurement processes, and if such processes do not result in the desired level of resource diversity, SDCP will craft future solicitations to promote renewable energy portfolio diversity. For now, SDCP has successfully secured renewable energy deliveries that utilize wind, solar, "solar plus battery storage", the latter of which will allow SDCP to reshape typical solar production to better align with customer energy use and market price signals.

The ongoing examination of customer electricity usage and other market developments should help reduce costs and assist in meeting planned procurement for the period reflected in this RPS Procurement Plan. SDCP notes that understanding customer electricity usage may be more challenging than usual during early-stage operations (when CCA participations rates can exhibit a certain level of volatility) and expansion activities. These challenges could be exacerbated by the implementation of fiscal policy changes intended to curb inflation (via phased interest rate increases) that may impose recessionary pressures on the economy. If recessionary markers start to surface, including reduced spending, business closures, constrained access to credit, etc., SDCP will attempt to evaluate the extent to which future customer energy usage may be affected. Regarding demand side impacts, these are often more challenging to isolate, as normal variations in usage caused by weather may obscure otherwise atypical variations in consumption. For renewable energy planning purposes, SDCP's primary retail sales forecast

adjustments have been related to expected customer enrollments without noteworthy adjustments related to these circumstances. To the extent that retail sales fall below SDCP's expectations, it is likely that renewable energy content will be higher than necessary to promote achievement of programmatic goals. In such cases, SDCP expects that it could: 1) sell excess renewable energy supply to interested buyers, thereby rebalancing its portfolio to align with desired renewable energy targets; 2) retain excess renewable energy supply, providing customers with higher-than-promised renewable energy supply; or 3) explore other options/flexibility that may be available under California's RPS program to utilize excess volumes in another calendar year or compliance period. Such decisions will be made following consultation with SDCP's governing board, staff and technical advisors.

SDCP is also attempting to gain an improved understanding of the prospective impacts to its customer base associated with the potential reopening of California's direct access market due to SB 237 (2018) and D.19-05-043. In D.21-06-033, the Commission recommended against expanding direct access at this point, however, SDCP recognizes that this may change in the future. As such, SDCP will monitor the proceeding to determine potential impacts to its planning process. To the extent that SDCP load migrates to direct access providers, its retail sales would likely fall – in theory, such a change would increase SDCP's proportionate renewable energy content unless surplus supply was sold to other market participants; this would be similar to the impacts experienced by California's IOUs, which have resulted from ongoing CCA implementations and expansions – following these activities, the proportionate RPS content of each IOU has increased, as evidenced in the annual Power Source Disclosure Report of each IOU (for reference, this has occurred in spite of IOU-administered solicitations intended to sell off surplus RPS supply, which suggests that other retail sellers, particularly

CCAs, have already made meaningful progress in meeting applicable RPS mandates in the near-term planning horizon). To the extent that any direct access-related adjustments are incorporated in SDCP's RPS planning processes, it will reflect them in a subsequent RPS Procurement Plan. Through the ongoing evaluation of customer demand and other market developments, SDCP hopes to promote reduced overall costs while meeting planned procurement objectives for the period addressed in this RPS Procurement Plan.

IV.A.1. Voluntary Allocation and Market Offer (VAMO)

The Final Report of Working Group 3 Co-Chairs: Southern California Edison Company, CalCCA, and Commercial Energy ("Final Report") was filed on February 21, 2020, in the Commission's PCIA rulemaking (R.17-06-026). One of the Final Report's key proposals was for the Commission to create a VAMO framework, where each LSE serving customers subject to the PCIA would be provided an annual option to receive an allocation ("Voluntary Allocation") from the IOUs' PCIA-eligible RPS energy portfolios, based on that LSE's forecasted, vintaged, load share, and subject to certain conditions. Further, the Final Report proposed that any declined shares would be offered to LSEs through a market process ("Market Offer").

On May 20, 2021, the Commission adopted D.21-05-030, addressing the proposals in the Final Report. D.21-05-030 adopted the Final Report's VAMO proposal, subject to certain limitations and additional requirements. To implement this modified VAMO structure, D.21-05-030 identified various next steps, including IOUs providing LSEs their allocation share based on vintaged, annual load forecasts, and the submission of an advice letter to receive approval for pro forma contracts. LSEs were required to finalize elections and execute contracts with their respective IOU by July 29, 2022. The Commission recently approved D.22-06-034, which

provided additional guidance on the VAMO process, as well as Resolution E-5216 which approved the IOUs' pro forma contracts for the voluntary allocations. The IOUs have also filed advice letters outlining their market offer processes for resources not allocated through the voluntary allocations; approval for these processes is expected later this year.

SDG&E offered SDCP an allocation share consisting of two different pools of resources: long- and short-term. The long-term pool consists of resources with more than 10 years left on their contracts whereas the short-term pool consists of resources that have less than 10 years left on their contracts. SDCP elected to receive 100 percent of its available long-term renewable energy voluntary allocation from SDG&E and none of the short-term allocation share. The table below details SDCP's long-term PCC1 and PCC0 supply contracts via VAMO elections.

It is noteworthy that SDCP's long-term supply agreement with SDG&E includes annual delivery quantities that will be adjusted based on SDCP's VAMO elections. As such, the annual delivery quantities reflected in the existing contract has been replaced by such VAMO allocations, as estimated below (based on information previously provided by SDG&E). Note that the aggregate long-term renewable energy volumes reflected in this table meaningfully exceed volumes reflected in SDCP's original long-term renewable supply agreement with SDG&E (by more than 200%, on average), which will provide SDCP with much more long-term bundled renewable energy supply in 2023 and beyond, relative to planning projections that preceded SDCP's VAMO elections.

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Expected Long-Term PCC0 MWh to be received via SDG&E VAMO election	359,534	359,534	359,534	359,534	359,534	359,534	359,534	359,534	359,534	359,534
Expected Long-Term PCC1 MWh to be received via SDG&E VAMO election	2,570,407	2,570,407	2,570,407	2,570,407	2,570,407	2,570,407	2,570,407	2,570,407	2,570,407	2,570,407

IV.A.2. Portfolio Optimization

SDCP's goal is to meet organizational policies, reliability requirements, and statewide procurement mandates in a manner that is both cost effective and supportive of a well-balanced resource portfolio. Portfolio optimization strategies can help reduce costs and should facilitate alignment of SDCP's portfolio of resources with its forecasted load needs. To support this goal, SDCP considers the following strategies:

Purchases from Retail Sellers: Purchases of RPS-eligible renewable energy (via resale) from other retail sellers can provide a cost-effective way of meeting short-term resource needs or filling in gaps in procurement while long-term projects are under development.

Sales Solicitations: As SDCP's portfolio of resources continues to develop, it will also consider offering solicitations of sales to other retail sellers, if the disposition of surplus is deemed desirable. SDCP's willingness to pursue such sales will be dependent upon its

ongoing monitoring of RPS positions, prospective sales pricing and direction received from its Governing Board and executive management.

Optimizing Existing Procurement: As SDCP considers its long-term resource needs, it may evaluate options in its future power purchase agreements to increase the output of existing generating facilities through technological upgrades, by adding new capacity to an existing generator or by adding energy storage infrastructure to an existing renewable generator. Expanding existing facilities may provide additional generation at reduced costs with lower risks of project failure because the need for distribution system upgrades and permitting may be reduced – such opportunities may be pursued/developed, as deemed appropriate by SDCP. The addition of energy storage infrastructure to an existing renewable generator would be expected to enhance grid reliability as well as the value of electric energy produced by the generating facility, as the pre-storage energy delivery profile could be shifted to: 1) better align SDCP's supply with customer demand; or 2) create more value for SDCP customers by shifting electric energy deliveries to a time of day when market revenues received would be greater. In terms of reliability impacts related to the addition of energy storage infrastructure, SDCP expects that such enhancements would meaningfully increase the proportionate level of resource adequacy capacity that could be derived from an intermittent renewable generating resource without such storage infrastructure – reductions to the net qualifying capacity of intermittent renewable generating resources are well documented and ongoing, resulting in very little capacity benefits from solar-only generating projects. In considering these sorts of enhancements, SDCP will be mindful of the need to coordinate with its resource owners/operators to evaluate potential planning constraints (related to generator

interconnection, for example) before assuming that the addition of energy storage infrastructure at an existing generating facility would be a viable option.

Holistic Portfolio Design and Procurement Strategy: In light of the multiple procurement-related compliance requirements with which California LSEs must comply – RA (administered both by CAISO and CPUC), Integrated Resource Planning (D. 19-11-016, Mid-Term Reliability, etc.), RPS (including long-term contracting requirements), in addition to any LSE-specific incremental or voluntary program goals – SDCP is mindful to take a holistic approach to procurement efforts. Targeting resources that can satisfy multiple compliance or voluntary objectives provides for more efficient and cost-effective procurement than alternative approaches that may target individual compliance products or requirements one-by-one without consideration of synergies or economies of scale that may result from resources that can deliver products to satisfy multiple program requirements and evaluating projects and proposals as such to ensure that the co-benefits and efficiencies of such procurement are correctly incorporated.

On June 24, 2021, the Commission adopted D.21-06-035, which directed all retail sellers to procure 11,500 MW of new net qualifying capacity ("NQC") between 2023 and 2026 and assigned each retail seller a specific procurement responsibility based on its share of peak demand. SDCP's total obligation is 570 MW, which must include minimum amounts of procurement from certain subcategories: (1) 124 MW from firm, zero-emitting capacity by 2025; (2) 50 MW from long duration storage resources by 2026; and (3) 49 MW from firm, non-fossil fueled baseload generating resources by 2026. Pursuant to the allowance in D.21-06-035 for retail sellers within the same Transmission Access Charge ("TAC") area to reallocate procurement obligations upon mutual agreement, SDCP and SDG&E have collaborated to revise

their obligations in D.21-06-035, which were based on preliminary load forecasts that have since been refined. SDG&E filed the revised, mutually agreed capacity requirements to the CPUC on March 16, 2022 via Advice Letter 3967-E. This advice letter has since been suspended and awaits further commission review and action. SDCP expects that approval of this reallocation of obligations will be completed within the coming weeks. Once procurement obligations have been finalized, SDCP will review progress toward targets in each of the subcategories. SDCP expects that contracts executed pursuant to its 2020 Long-term RPS solicitation will fulfill a portion of 2023 and 2024 obligations, supplemented by additional volume from contracts currently under negotiation. SDCP expects its next Long-term RPS solicitation to focus on meeting any remaining procurement obligations from D.21-06-035.

IV.B. Responsiveness to Local and Regional Policies

(i) Responsiveness to Policies of SDCP's Governing Board

SDCP is a joint powers authority that is subject to the control of its governing board and is directly accountable to its Member Agencies. SDCP supports and is committed to meeting the state's GHG reduction and renewable procurement goals, as well as supporting its Member Agency cities in meeting their respective CAP goals. Furthermore, and as noted elsewhere in this RPS Procurement Plan, SDCP has adopted near-term renewable portfolio targets that meaningfully exceed RPS mandates, offering a minimum 50 percent renewable energy content through its default retail service offering. SDCP has also determined to: 1) forgo the purchase of PCC3 products; and 2) limit the use of PCC2 products (in favor of PCC1 products), subject to product availability and budgetary impacts. SDCP's Governing Board has decided to structure its RPS portfolio with these considerations in mind, as such an approach is expected to minimize attributed GHG emissions associated with its reported energy purchases (under California's

Power Source Disclosure Program). SDCP has a complementary carbon-free portfolio metric of 55 percent, so any renewable energy purchase will be evaluated in light of the incremental impacts to SDCP's anticipated emission rate – SDCP understands that all PCC3 and most PCC2 product purchases (subject to substitute energy specifications) will increase its overall emission factor. In addition to state mandates and meeting the respective CAP goals of SDCP's Member Agencies, as detailed below, on June 23, 2022, SDCP's Governing Board adopted additional targets for its energy portfolio development, including: goals of 50 percent renewable energy content in 2022, 75 percent in 2027, 85 percent in 2030 and 100 percent in 2035; 15 percent of energy portfolio from new, distributed infill storage or solar plus storage resources within Member Agencies' territory by 2035; and 600MW of new utility scale projects within San Diego and Imperial Counties by 2035, all of which will impact SDCP's energy portfolio strategies.

(ii) Responsiveness to Regional Policies

As noted in the previous sub-section, SDCP is overseen by its governing board. As such, the policies adopted by SDCP's governing board serve as guiding directives for CCA operations, including the determination of renewable energy planning targets that are intended to support local policy preferences. Reducing electric utility sector GHG emissions generated by residents and businesses was a driving factor in the formation of SDCP, as well as investing in the community through local projects. The City of San Diego adopted its CAP in December 2015, which sets a goal for 100 percent renewable energy city-wide by 2035.[5] The City of Encinitas adopted and updated CAP in 2020 with a goal to reduce emissions to 44 percent below 2012

[5] See *Climate Action Plan*, City of San Diego, December 2015, at 35, available at https://www.sandiego.gov/sites/default/files/final_july_2016_cap.pdf.

levels by 2030.[6] The City's establishment of a CCA program will have a significant impact on its emissions goals with a reduction of 19,465 MTCO2e, the largest of the prospective reductions reflected in the updated CAP's 20 GHG reduction strategies.[7] Similarly, the City of La Mesa adopted its CAP in March 2018, which set a goal to reduce emissions by 68,450 MTCO2e by 2035.[8] The City of Chula Vista adopted its CAP in September 2017, and it established a goal for up to 100 percent clean energy through the formation of a CCA program.[9] The City of Imperial Beach adopted a CAP in July 2019 which set a goal for 85 percent renewable energy by 2030.[10] SDCP's newest Member Agencies – National City and San Diego County – were also motivated in part to join SDCP as a strategy to meet their respective CAP goals and several Member Agencies are in the process of updating their CAPs. The Member Agencies intend to contribute to achieving these and future goals collaboratively by operating SDCP to provide electric energy to residential, commercial and governmental electric accounts located within their communities and delivering supportive customer programs.

---

[6] See *Climate Action Plan Interim Revision*, City of Encinitas, November 2020, at 1-7, available at https://encinitasca.gov/Portals/0/City%20Documents/Documents/City%20Manager/Climate%20Action/CAP_2_3_2021_final.pdf?ver=2021-02-03-151752-820

[7] See *Climate Action Plan Interim Revision,* City of Encinitas, at 3-7.

[8] See *Climate Action Plan,* City of La Mesa, March 13, 2018, at 45, available at https://www.cityoflamesa.us/DocumentCenter/View/11008/LMCAP_CC03132018.

[9] See *Climate Action Plan*, City of Chula Vista, September 2017, at 20, available at https://www.chulavistaca.gov/home/showdocument?id=15586.

[10] See *Local Coastal Program Resilient Imperial Beach Climate Action Plan*, City of Imperial Beach, July 17, 2019, at 31, available at https://www.imperialbeachca.gov/ApprovedClimateActionPlan2019.

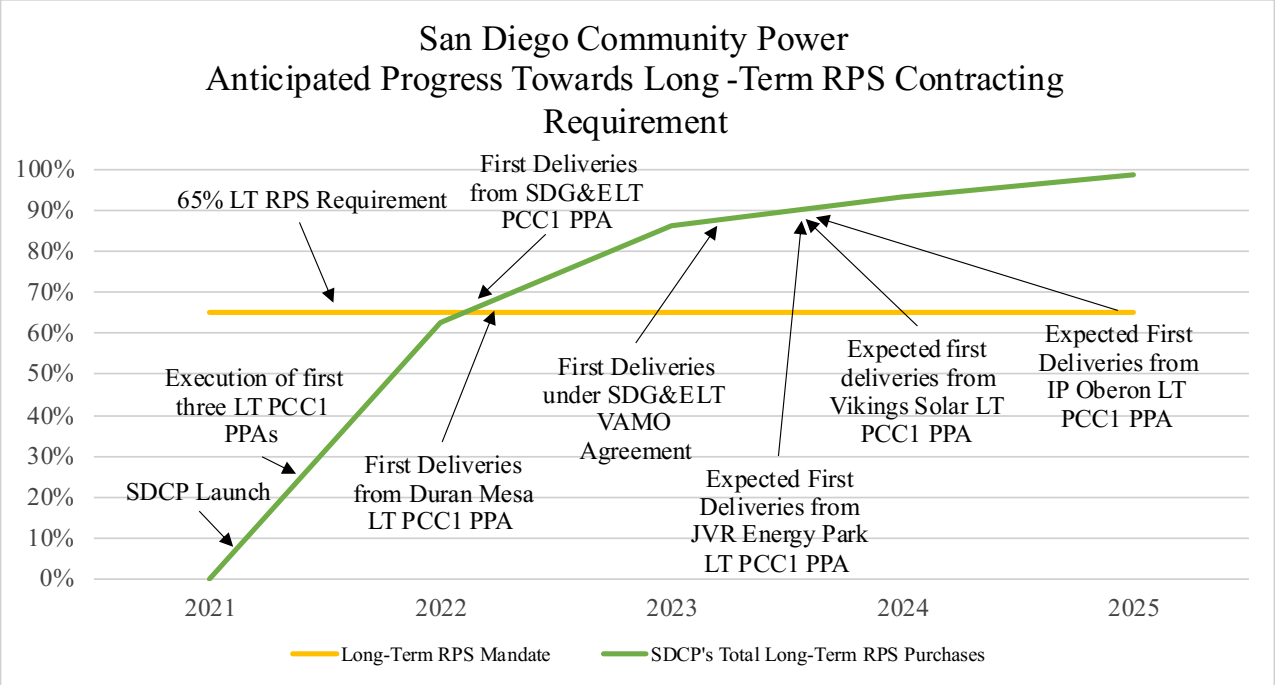
IV.B.1. Long-term Procurement

Pursuant to Public Utilities Code section 399.13(b), from 2021 onwards, 65 percent of mandated renewable energy purchases must be sourced from contracts of 10 years or more.[11] SDCP has been conscientiously pursuing contracting opportunities to meet this requirement and has now entered into five unique long-term PCC1 supply agreements, which include: 1) a long-term (20-year) PCC1 supply agreement with Vikings Energy Farm, LLC, executed on May 3, 2021, which will cause the delivery of approximately 250,000 MWh per year of renewable energy produced by a new 100 megawatt photovoltaic solar array (plus battery storage) located in Imperial County that is expected to commence commercial operation in June 2023; 2) a long-term (20-year) PCC1 supply agreement with JVR Energy Park, LLC, executed on June 4, 2021, which will cause the delivery of approximately 260,000 MWh per year of renewable energy produced by a new 90 megawatt photovoltaic solar array (plus battery storage) located in San Diego County that is expected to commence commercial operation in March 2023; 3) a long-term (15-year) PCC1 supply agreement with IP Oberon, LLC, executed on June 11, 2021, which will cause the delivery of approximately 225,000 MWh per year of renewable energy produced by a new 75 megawatt photovoltaic solar array located in Riverside County that is expected to commence commercial operation in June 2023; 4) a long-term (12-year) PCC1 supply agreement with SDG&E, executed on December 20, 2021, which will cause the delivery of approximately 120,000 to 1,580,000 MWh per year of renewable energy produced by a portfolio of RPS-eligible generating resources, as listed in the contract, beginning in 2022; and 5) a long-term (10-

[11] Cal. Pub. Util. Code § 399.13(b)(1) ("A retail seller may enter into a combination of long- and short-term contracts for electricity and associated renewable energy credits. Beginning January 1, 2021, at least 65 percent of the procurement a retail seller counts toward the renewables portfolio standard requirement of each compliance period shall be from its contracts of 10 years or more in duration or in its ownership or ownership agreements for eligible renewable energy resources.").

year) PCC1 supply agreement with Duran Mesa, LLC, executed on January 27, 2022, which will cause the delivery of approximately 170,000 MWh per year of renewable energy produced by a 50 MW share of a 105 MW wind project located in Torrance County, New Mexico that recently achieved commercial operation (on November 30, 2021, as reflected in the California Energy Commission's associated certificate for this project) and began delivering power to SDCP on February 1, 2022.

Note that one of the aforementioned projects, Duran Mesa, has already achieved commercial operation, and the noted agreement with SDG&E will be exclusively supplied from existing/operational projects, which serves to de-risk a significant portion of SDCP's upcoming long-term RPS deliveries. This noted, SDCP's upcoming expansion activities necessitated its acceptance of certain long-term allocations available under VAMO and, potentially, other long-term RPS purchases to ensure compliance with applicable long-term contracting requirements during CP4 and beyond. It is worth noting that SDCP intends to continue focusing the significant majority of its PCC1 contracting efforts on contract durations of ten years or longer, which should contribute to the accrual of a planning reserve over time, alleviating concerns regarding long-term contract compliance. This anticipated trajectory, which includes certain of SDCP's long-term VAMO allocation elections, is reflected in the following chart.



As reflected in the previous chart, SDCP expects to meaningfully exceed applicable long-term RPS procurement mandates in Compliance Period 4. More specifically, for Compliance Period 4, SDCP expects to procure in excess of 140% of its required long-term RPS mandate (which means that SDCP expects to procure 93% of <u>total</u> statutorily mandated RPS purchases from long-term contracts), based on expected RPS deliveries of over 9,000 GWh, relative to a projected long-term procurement obligation of about 6,300 GWh. Similarly, in Compliance Period 5, which includes calendar years 2025 through 2027, SDCP also expects to procure in excess of 140% of its required long-term RPS mandate (which means that SDCP again expects to procure approximately 93% of <u>total</u> statutorily mandated RPS purchases from long-term contracts), based on expected RPS deliveries of over 11,500 GWh, relative to a projected long-term procurement obligation of approximately 8,100 GWh. In Compliance Period 6, which includes calendar years 2028 through 2030, SDCP expects to procure about 120% of its required long-term RPS mandate (which means that SDCP again expects to procure approximately 79%

of total statutorily mandated RPS purchases from long-term contracts), based on expected RPS deliveries of approximately 11,500 GWh, relative to a projected long-term procurement obligation of approximately 9,600 GWh. These projections are based on estimated annual deliveries to be received under SDCP's long-term VAMO supply agreement with SDG&E, which was executed on December 20, 2021. While SDCP previously advised the Commission of its intent to accept certain long-term RPS volumes under VAMO, this agreement has now been finalized, so related volumes are forthcoming. The previous procurement estimates have accounted for the net impact of SDCP's VAMO supply to overall renewable energy purchases, and SDCP believes it would successfully achieve compliance with long-term RPS procurement mandates through 2030 under a variety of adverse scenarios in which sever delivery shortfalls could occur.

Even with long-term RPS deliveries expected to meaningfully exceed applicable mandates, SDCP expects to continue the selective pursuit of additional long-term RPS contracting opportunities via independently administered solicitations and bilateral contracting discussions. Future long-term RPS contracting efforts are likely to focus on diversifying SDCP's RPS supply portfolio and may include additional hybrid generating configurations, baseload renewable generating technologies and/or emerging renewable generating technologies that would be expected to promote budgetary certainty and grid reliability.

IV.C. Portfolio Diversity and Reliability

Power purchased from power marketers, public agencies, generators, CCAs, or utilities will be a significant source of supply during the first several years of SDCP's operation. Based on current contracting efforts, SDCP expects to obtain requisite electricity supply from several suppliers, including power marketers, project developers, and/or IOUs. Such suppliers will be

responsible for delivering a portion of SDCP's intended resource mix, including SDCP's desired quantities of renewable and carbon-free energy, to provide a stable and cost-effective resource portfolio.[12]

In carrying out its planning functions, SDCP will also consider the deliverability characteristics of its future generating resources placed under contract (such as the resource's dispatchability, available capacity, and typical production patterns) and will review the respective risks associated with short- and long-term purchases as part of its forecasting and procurement processes. These efforts should lead to a more diverse resource mix, address grid integration issues, and provide value to the Member Agencies.

SDCP intends to utilize a portfolio risk management approach as part of its power purchasing program, seeking low-cost supply (based on then-current market conditions) as well as diversity among technologies, production profiles, project sizes and locations, counterparties, lengths of contract, and timing of market purchases. For its recently executed long-term renewable supply agreements with new generating resources, SDCP has reflected a risk adjustment (failure/under-delivery rate) of 5 percent in year one and 3 percent in each year thereafter. The larger year-one adjustment is intended to account for potential late deliveries (resulting from delayed commercial operation), while the smaller ongoing risk adjustments are intended to account for resource intermittency and the potential for lower-than-anticipated energy production. These assumptions were informed by discussions with other CCA organizations. SDCP assumes that its initial supply portfolio may include a relatively small number of contracts which will grow in number over time, increasingly emphasizing the

[12] See *San Diego Community Power Community Choice Aggregation Implementation Plan and Statement of Intent*, December 9, 2019, p.1 at 6.6, available at http://sdcommunitypower.org/resources/key-documents/.

principles of resource and counterparty diversity as operational experience is gained and renewable energy requirements increase.

While SDCP is not opposed to considering emerging renewable generating technologies, it is unlikely that its early-stage supply agreement(s) will focus on such resources – SDCP has yet to receive credible and cost-competitive proposals from emerging renewable generating technologies, but if such proposals arrive in the future, they will be closely considered alongside other viable options. As a relatively new CCA organization, SDCP's first several renewable supply commitments must result in reliable, cost-effective supply to promote compliance with applicable RPS mandates without bearing the risks typically associated with newer technologies. Until compelling proposals for emerging renewable generating technologies are received, SDCP will likely exhibit preferences for proven generating technologies and supply structures that will minimize delivery risk during early-stage operation while allowing for re-shaping of certain renewable generating profiles to better align supply with demand. If, however, a compelling offer is presented for a cost-effective emerging technology, SDCP will evaluate such proposal on its merits relative to other available offers.

SDCP will procure renewable and other requisite energy products, as necessary, to ensure that the future energy needs of its customers are met in a reliable and cost-effective manner, consistent with applicable compliance mandates. SDCP, through its CCA Implementation Plan and subsequent planning discussions, has established initial procurement targets for requisite renewable energy supply, including subcategories for various renewable energy products, and has also established targets for related planning reserves as described elsewhere in this document. To the extent that SDCP's energy needs are not fulfilled through the use of renewable generating resources, it should be assumed that such supply will be

sourced from carbon-free and/or conventional energy resources, such as hydroelectric or natural gas generating technologies, as well as system power purchases.

A key component of SDCP's early-stage planning process relates to the analysis and consideration of expected load obligations with the objective of closely balancing supply and demand, rate stability, and overall budgetary impacts. During pre-launch activities, this process primarily focused on the compilation and analysis of historical customer data, as provided by SDG&E, identification of any ineligible/excluded accounts (that will not be enrolled in CCA service), and related refinements to SDCP's retail sales forecasts. Similar to most CCAs, SDCP expects that such historical data will not be a perfect predictor of future customer energy requirements, so it intends to actively monitor actual customer usage, relative to projections, over time, refining such forecasts as well as its ability to minimize variances between procured energy quantities and actual usage. SDCP also plans to maintain portfolio coverage targets of up to 100 percent (of expected customer energy requirements) in the near-term (0 to 2 years) but will leave larger open positions in the mid- to long-term, consistent with generally accepted industry practices.

At this point in time, SDCP has no explicit preference for specific renewable generating technologies and will consider all responses to its solicitations with the goal of assembling a diversified renewable energy supply portfolio that will deliver energy in a profile that is generally consistent with the SDCP's anticipated load shape – SDCP recognizes that closely aligning the shape of renewable energy deliveries with anticipated retail demand may be particularly challenging during early-stage operations; the need for substantial long-term renewable supply commitments, coupled with potential load variability during CCA customer enrollment processes, will likely necessitate the pursuit of contracting opportunities that may not

deliver power in close alignment with early-stage customer usage patterns; over time, however, SDCP's growing portfolio of renewable supply commitments will be increasingly considerate of load/resource balances and will attempt, subject to product availability and related costs, to promote such balance to the greatest practical extent. SDCP is also aware that use of intermittent renewable generating technologies has the potential to create occasional misalignments between customer energy consumption and related power production as well as the general quantity of renewable energy received from such projects. SDCP expects that its voluntary commitment to a minimum 50 percent renewable supply portfolio will protect against this uncertainty. In addition, and for purposes of promoting better alignment of customer energy usage and expected energy deliveries, SDCP is considering both stand-alone storage and hybrid or co-located storage and renewable energy projects – in addition to those already contracted under the Vikings Energy Farm and JVR Energy Park PPAs – via its ongoing Local RFI and its upcoming Long Duration Storage and all-source RPS RFOs.

In developing its load forecasts, SDCP prepares load curves that reflect expected increases in customer energy usage due to transportation and building electrification. Transportation electrification planning considers light duty vehicles (personal use), electrification of vehicle fleets (commercial) and local targets for electrification of public transit systems while building electrification considers the phasing out of onsite use of natural gas for heating, cooling and other appliances in buildings through all-electric technologies. The forecasting of SDCP's anticipated transportation electrification adoption rates is performed through the application of a fixed percentage annual increase that is informed by historical observations and generalized trends related to transportation electrification adoption. The information considered in this process includes the three scenarios (low, mid, high) identified in

the California Energy Commission's Integrated Energy Policy Report ("IEPR") Demand Forecast.[13] SDCP is currently evaluating the development of a transportation electrification forecast that would be directly based on the mid scenario for transportation electricity demand of the IEPR Demand Forecast as well as other available data/information that would allow such a forecast to be directly tailored to its region – this data/information may include local policies related to transportation electrification, if applicable, locally available incentives focused on transportation electrification and/or data related to electric transportation adoption/conversion occurring within SDCP's service territory. SDCP is in the early stages of coordinating with its member municipalities to determine pertinent local targets for transportation and building electrification and, following the identification of these local planning parameters, will accordingly update its load curves to reflect such assumptions. For the time being, SDCP has assumed annual increases in its retail sales that reflect the net impacts of transportation and building electrification, energy efficiency improvements, customer-sited generation and other factors, but SDCP will endeavor to continually refine such planning assumptions to more accurately characterize the impacts of transportation and building electrification on its overall energy needs and, in particular, its RPS-related renewable energy requirements. To more closely align SDCP's resource portfolio with the evolving energy requirements of its member communities, SDCP anticipates that a diverse set of renewable resources will be necessary, including the strategic inclusion of generating resources, energy storage resources, and complementary infrastructure that may allow SDCP to dispatch/shape such supply in consideration of evolving customer energy needs and usage patterns.

[13] *See* Javanbakht, Heidi, Cary Garcia, Ingrid Neumann, Anitha Rednam, Stephanie Bailey, and Quentin Gee. 2022. Final 2021 Integrated Energy Policy Report, Volume IV: California Energy Demand Forecast. California Energy Commission. Publication Number: CEC-100-2021-001-V4, at 65.

IV.D. Lessons Learned

In communicating with and reviewing the RPS Procurement Plans of California's most mature CCA organizations, SDCP observes that Marin Clean Energy ("MCE") has highlighted the benefits of geographic diversity in constructing a renewable supply portfolio. MCE noted that certain areas of the state have been overbuilt with renewable generating infrastructure, which has created challenges related to depressed market prices and increasing levels of resource curtailment. SDCP has kept this observation in mind when assembling its own renewable resource portfolio, avoiding overcommitment to resources within a narrowly defined geographic area. SDCP also continues to evaluate historical pricing trends, which have materially changed in the wake of increased renewable energy buildout. Due to these transitions and suppressed (and oftentimes negative) market pricing, SDCP will likely avoid contracting with generators located in certain areas or require substantial storage capacity (operated in parallel with renewable generating infrastructure) to mitigate market price risk when considering renewable generating resources located in such areas. SDCP appreciates the substantial financial risks that are created by California's long-term renewable contracting requirements and will continue to explore opportunities to manage such risks during its contracting efforts. SDCP also observes that technological diversity is an important principal to incorporate in RPS planning efforts.

As a relatively new CCA, SDCP is gaining familiarity and experience with the information and processes that will be necessary to demonstrate compliance with the requirements of California's RPS Program but does not have any substantive lessons learned to share at this point in time. SDCP is also aware that prudent planning and successful management of early-stage CCA program finances is critical in managing ongoing market risk and other uncertainties. As such, SDCP will exercise care in pursuing its early-stage renewable

energy supply options to promote alignment with budgetary parameters. SDCP may also pursue interagency solicitation/procurement opportunities to the extent that such coordinated efforts can increase procedural efficiency, reduce administrative redundancy, and decrease certain expenses typically associated with such processes.

V. Project Development Status Update

As described in Section IV.B above, SDCP's current and planned procurement is expected to be sufficient to meet both the applicable RPS procurement requirements as well as support the state's GHG reduction targets. Further, SDCP's current and planned procurement is expected to support system reliability by considering both portfolio diversity and alignment with SDCP's customers' load curve. SDCP has entered into five agreements with RPS-eligible facilities, with four having reached commercial operation. These projects are summarized in the following table.

Facility Name	Technology Type	MW-ac	Location	Term Length	Expected COD	Network Upgrades Milestone
VAMO	Various	Portfolio	Various	10	On-line	Complete
Duran Mesa	Wind	50	Torrance County, New Mexico	10	On-line	Complete
Vikings Energy Farm	Solar + Storage	100	Imperial, CA	20	[redacted]	[redacted]
IP Oberon	Solar	75	Riverside, CA	15	[redacted]	[redacted]
JVR Energy Park	Solar + Storage	90	San Diego, CA	20	[redacted]	[redacted]

Three of SDCP's five long-term RPS contracts are associated with generating resources that have yet to achieve commercial operation. These projects include:

- Vikings Energy Farm, LLC: a new 100 megawatt photovoltaic solar array (plus battery storage) located in Imperial County that is expected to commence commercial operation in 2023. This project is progressing through pre-construction activities. Vikings Energy Farm has executed an Interconnection Agreement and Transmission Service Rights Agreement with Imperial Irrigation District. Vikings has hired an Engineering firm and expects its Conditional Use Permit to be approved by Imperial County in Q2 2022.
- JVR Energy Park, LLC: a new 90 megawatt photovoltaic solar array (plus battery storage) located in San Diego County that is expected to commence commercial operation in 2023. This project is progressing through pre-construction activities. JVR has completed Interconnection Agreement, Major Use Permit, and EPC contracting.
- IP Oberon, LLC: a new 75 megawatt photovoltaic solar array located in Riverside County that is expected to commence commercial operation in 2023. Oberon has executed an Interconnection Agreement, received CEC Pre-certification, and has achieved all site control and permits.

In consideration of SDCP's recent contracting efforts with new renewable generating resources, it has updated Appendix D, the Project Development Status Update Report. SDCP is aware of the pandemic, geopolitical, and supply-chain impacts that many LSEs and developers are currently facing related to new resource development and is working closely with each of its contractual counterparties to monitor and mitigate any potential impacts of these delays on SDCP's supply portfolio, market exposure, RPS compliance, and customer rates. As new information related to SDCP's renewable energy contracting process(es) becomes available,

SDCP will update its Project Development Status Update Report accordingly.

SDCP has already submitted updates to the CODs for both Vikings and JVR Energy Park as those projects have experienced delays due to due to permitting or interconnection, and/or supply chain issues, particularly in light of Covid-19. These are reflected in previous table above.

VI. Potential Compliance Delays

Based on recently completed and expected renewable energy procurement efforts and the acceptance of VAMO allocations, SDCP does not anticipate any compliance delays related to Compliance Period 4, which includes calendar years 2021-2024. If a future compliance issue is identified or SDCP encounters challenges in securing requisite renewable energy supply in the future, then SDCP will address such issue within a subsequent RPS Procurement Plan.

SDCP will continue assessing projected long-term open positions (that may exist in CP5 and CP6) relative to expected deliveries and intends to administer future solicitations, as necessary, to ensure compliance with the RPS Program over the upcoming 10-year planning horizon. If a future compliance issue is identified or SDCP encounters challenges in securing requisite renewable energy supply, then it will address such issues in a subsequent RPS Procurement Plan.

VI.1. Impacts of COVID-19 Pandemic

As the Commission is aware, successful renewable energy markets depend upon international supply chains, substantial labor commitments, robust financial markets, timely interactions with governmental planning authorities and various other considerations. With numerous disruptions caused by the COVID-19 pandemic and various other challenges, it is incredibly challenging to determine if, and to what extent, renewable energy procurement opportunities may be compromised, particularly new-build renewable energy projects which

typically rely on long-term contracts as the basis for project financing. SDCP will closely monitor energy usage patterns to determine if any planning adjustments may be necessary based on current and expected economic conditions.

SDCP intends to closely monitor this situation as well as potential fallout related to supplier/developer effectiveness in fulfilling mandated renewable energy needs, project completion and overall supplier viability. SDCP is aware that many supply chains have been disrupted during the pandemic with a variety of material/component shortages occurring throughout the industry. Moreover, recent concerns regarding the application of tariffs on certain imported renewable infrastructure have also provoked certain supplier to request "reopening" of previously executed contracts and/or the negotiation of terms that allow for price adjustments in the event of unexpected costs (such as the noted tariff). While the tariff issue seems to be temporarily resolved, concerns of this nature have introduced a measure of instability in the long-term contracting efforts of many retail sellers. With these concerns in mind, SDCP encourages the Commission to closely monitor and potentially reconsider certain elements of the RPS Program as this situation evolves, particularly if there are widespread, well-documented challenges as California retail sellers attempt to fulfill pertinent procurement requirements. Relatedly, SDCP is aware of numerous instances in which contract documents are being drafted with more expansive force majeure language to alleviate the concerns of sellers/developers in meeting project completion schedules due to potential pandemic-related delays – "day for day" commercial operation date extensions have been pursued, creating flexibility in achieving commercial operation date targets based on the duration of shelter-in-place directives. From SDCP's perspective, buyers must be diligent in contracting efforts to strike an appropriate balance between flexibility and certainty. Not all project development delays are expected to be

directly attributable to the pandemic, so effectively parsing contractual accommodations for development delays in consideration of this reality should serve to manage uncertainties related to project completion and renewable delivery timelines.

SDCP also encourages the Commission to coordinate closely with the legislature to evaluate potential adaptations to the RPS Program, which may become necessary if renewable energy markets are materially impacted by the pandemic. With rapidly changing circumstances and related information, SDCP anticipates the need for considerable flexibility/agility in working to meet requisite renewable energy procurement mandates. In the meantime, SDCP will remain hopeful that impacts to renewable energy markets will not compromise California's ability to reach its renewable energy procurement goals or its own, internally established renewable procurement targets.

VII. **Risk Assessment**

Compliance Risk

An important element of SDCP's RPS risk assessment process is determining potential vulnerabilities related to procurement and/or delivery shortfalls that could trigger deficits relative to SDCP's anticipated compliance obligations. Considering SDCP's internally adopted renewable energy procurement targets and existing contractual commitments, this risk, as internally determined by SDCP, appears to be very low in Compliance Period 4 and beyond. As discussed elsewhere in this planning document, SDCP has established a VMoP and, further, a MMoP that inform RPS procurement efforts and insure against compliance-related shortfalls. A recent email communication from CPUC staff supports this assessment. More specifically, SDCP received a letter from the CPUC's Deputy Executive Director for Energy and Climate Policy on December 9, 2022, which provided an assessment of the perceived RPS compliance

risk for Compliance Period 4 (calendar years 2021 through 2024). SDCP's risk level was categorized as low within this assessment letter, which was based on information included in SDCP's 2021 RPS Compliance Reports, as submitted in the summer of 2022.

While SDCP received a letter indicating it has been assessed as being at low risk of compliance shortfalls, SDCP has meaningfully increased its RPS procurement since submittal of its 2021 RPS Compliance Report via acceptance of its VAMO allocations. As such, SDCP further understands that it is not at risk of failing to meet its Compliance Period 2021-2024 RPS long-term procurement and RPS procurement quantity requirements. Again, SDCP believes that its internally adopted renewable energy procurement targets (reflective of its VMoP and, further, its MMoP), which meaningfully exceed RPS mandates, as well as existing contractual commitments, including long-term VAMO volumes that are expected to bolster overall renewable energy procurement levels relative to those reflected in SDCP's 2021 RPS Compliance Report, leave SDCP very well positioned to meet its ongoing RPS compliance obligations. If anything happens to change in terms of SDCP's internal assessment of RPS compliance risk, it will inform the CPUC accordingly in a future RPS Procurement Plan.

Risk Modeling and Risk Factors

SDCP makes reasonable efforts to minimize the risk of renewable procurement shortfalls for purposes of complying with applicable RPS mandates established in SB 100, but it cannot definitively predict the scope or magnitude of circumstances that may impact annual retail energy sales, renewable energy markets, or individual project performance. With this in mind, SDCP responsibly assesses RPS compliance risk by considering three key planning elements: 1) retail sales variability; 2) renewable energy production/delivery variability; and 3) impacts to overall system reliability associated with SDCP's planned RPS purchases and other influences.

These topics are generally considered in the noted sequence with observed risks informing potential adaptations to SDCP's planning process, potential adaptations to planning reserves and, ultimately, refinements to SDCP's renewable energy procurement (or sales) processes and quantities. As described elsewhere in this RPS Procurement Plan, SDCP's previously executed renewable supply contracts, current negotiating efforts, VAMO allocations, and upcoming procurement processes will place the organization is a strong position to meet applicable RPS compliance requirements in Compliance Period 4 and beyond. Therefore, SDCP's self-determined risk of non-compliance is low. Nevertheless, SDCP continues to assess demand-side and supply-side risks to better understand potential areas of concern and to promote achievement of organizational compliance objectives.

Regarding demand-side risk, SDCP continues to evaluate and update prospective retail sales related to its evolving customer base and trailing 10-year planning period, including but not limited to anticipated changes related to customer eligibility, new development projects (that could increase retail energy consumption) and business closures, expected customer attrition (or growth) and changes to behind-the-meter generating capacity. From a practical perspective, the greatest demand-side risk with regard to SDCP's anticipated customer base is that retail sales are meaningfully higher than anticipated during Compliance Period 4. As the Commission is aware, CCAs provide an opportunity for customer choice, allowing customers to voluntarily participate in SDCP's program or remain bundled customers of the incumbent utility, SDG&E. To the extent that customers choose to leave SDCP's CCA program, or "opt out", SDCP's retail sales will decrease, resulting in related increases to the ratio of renewable energy serving such customers (and improving SDCP's position relative to applicable RPS compliance mandates). It is unlikely that SDCP's renewable supply commitments will provide volumetric

flexibility/options in the event of higher-than-anticipated retail sales volumes; in such instances, SDCP would need to pursue additional procurement opportunities to address unanticipated open positions. Thankfully, short-term RPS procurement opportunities seem to be readily available (to the extent such supply is necessary to augment long-term commitments) and available long-term RPS allocations under VAMO offered a viable option in the absence of other long-term contracting opportunities. Because SDCP's anticipated participation rates are based on the well-documented experience of California's other operational CCA programs, the organization is confident that actual retail sales will be reasonably well aligned with related forecasts.

Considering SDCP's ongoing coordination with member municipalities and associated planning departments, SDCP expects to be well informed regarding upcoming development projects or other customer changes that could materially increase retail sales. For this reason, SDCP believes that demand-side RPS compliance risk is low.

Regarding supply-side risks, SDCP is aware of the generation variability/intermittency associated with certain renewable technologies as well as the possibility of curtailment (based on pricing considerations or market directives) during certain times of day/year. In the case of new-build renewable projects, SDCP is also aware of the possibility of project delays and, potentially, project failure. Such circumstances can materially diminish renewable energy deliveries, jeopardizing the achievement of RPS compliance and exposing the organization to unexpected financial consequences. This noted, a primary objective of the SDCP's CCA program is offering participating customers stable and competitive retail generation rates, so the organization must balance generalized over-purchasing of certain compliance products, including RPS-eligible renewable energy, with related budgetary impacts. In its RPS planning process, SDCP has considered such impacts as well as previous procurement practices observed by successful

California CCAs, which have satisfied applicable compliance mandates reflected in California's RPS program. CCAs are exposed to considerable compliance risk at the time of, and in the few years immediately following, program launch, as load variability is generally highest during this period of time and organizational creditworthiness is generally weakest (due to the considerable costs associated with CCA implementation, the timing related to program expenditures and revenue receipts, and the methodical pace at which financial reserves are typically accrued during early-stage operations). To the best of SDCP's knowledge, few early-stage CCAs have experienced difficulties with generalized renewable energy procurement, but long-term RPS contracting has been more challenging – typical lead times (between contract execution and project completion) associated with new-build renewable energy projects are often 2-3 years or longer, and related power supply contracting efforts are rarely initiated so far in advance of service commencement. With this observation in mind, early-stage CCAs must either: 1) focus RPS contracting efforts on existing renewable generating resources; or 2) accept failure/delay risks associated with new-build renewable projects placed under contract near the time of CCA launch by incorporating reasonable planning reserves to mitigate such risks. SDCP's VAMO allocation elections, however, serve as a mitigating factor when considering long-term RPS compliance risk, as the typical lead time associated with new-build renewable generating projects does not apply to these deliveries (which would begin occurring in 2023). In the case of SDCP, a balanced approach has been pursued, which has entailed contracting efforts focused on both existing and new renewable generating resources, thereby minimizing, but not eliminating, risks associated with compliance shortfalls. With SDCP's planned expansion in 2023, resource planning and procurement efforts have been focused on addressing known increases in the organization's RPS needs, particularly long-term RPS needs. Prior to its upcoming expansion

activities, SDCP expected to have a long-term RPS surplus in CP4, but this situation has now changed. SDCP elected to receive 100 percent of available long-term VAMO allocations to help satisfy this compliance mandate. Regardless of the eventual long-term contracting opportunities that may be pursued by SDCP, the organization intends to pursue contract volumes in sufficient quantity to accommodate one or more project failures amongst SDCP's currently executed contracts and upcoming contract opportunities. SDCP has evaluated volumetric risk (due to project delays and/or under performance) in its updated risk assessment, as further described below, and has accounted for such impacts within Appendix C.

SDCP also anticipates mitigating supply-side risk by incorporating fixed-volume and index-plus pricing structures amongst its portfolio of RPS supply agreements. These procurement mechanisms serve to mitigate the risk of delivery variability (typically associated with intermittent renewable resources and/or renewable resources that may be subject to periodic curtailment) and exposure to negative market pricing (which could prompt economic curtailment). Fixed volume arrangements, in particular, also mitigate risk associated with commercial operation delays and facility failure; these structures also provide buyers with financial protections (via penalty payments) for under-delivery (which could be used, as a last resort, to offset compliance penalties in the event that the supplier or SDCP are unable to identify replacement volumes).

As part of SDCP's approach to managing supply-side risk, it has also adopted what it believes to be a CCA best practice related to RPS contracting: structuring early-stage solicitations to identify proven renewable generating technologies in prime resource locations to be developed and/or operated by the most experienced available suppliers (with strong, well-documented track records of successful project completion and operational reliability). Unlike

certain of the IOU's early-stage contracting efforts, which focused on experimental/unproven renewable generating technologies, CCAs have generally focused early-stage contracting efforts on tried-and-true technologies and highly experienced counterparties – SDCP intends to follow this practice as well. When evaluating prospective renewable energy supply opportunities, SDCP will seek to minimize the risk of delivery failure (or shortfalls) by pursuing supply arrangements with such experienced and financially stable suppliers that have demonstrated successful track records. This noted, there is always a possibility that future renewable energy supply will not be delivered as required, which is why SDCP intends to periodically evaluate the sufficiency of currently anticipated renewable energy procurement targets in meeting both statutory mandates and prudent planning reserve levels. Given SDCP's initial commitment to providing a minimum 50 percent renewable default service to participating customers, it seems highly unlikely that cumulative renewable energy delivery shortfalls could result in compliance deficiencies. While other CCA programs may choose to pursue differing planning reserve targets, SDCP observes that there does not seem to be a clear standard or related guidelines for setting such metrics and believes that its anticipated, internally defined renewable energy targets provide sufficient planning reserves.

Following contract execution, SDCP staff will closely coordinate with its suppliers, particularly developers of any new-build resource, to maintain an acute awareness of project development progress, including any anticipated issues that could delay expected initial deliveries or compromise overall project viability. Such communications are intended to provide SDCP with an early indication of such issues, which would allow "corrective procurement actions" to occur if the extent of such issues were determined to impact SDCP's RPS compliance status.

In terms of system and resource reliability, SDCP has adopted a procurement approach that intends to emphasize resource and contractual diversity. This process is expected to contribute to the identification of renewable generating resources that should positively impact system reliability over time.

SDCP will consider this potential risk of generation variability during its resource planning process and related procurement/contracting efforts and may pursue contract structures that promote volumetric stability through the application of firm delivery quantities and/or performance guarantees that provide financial remedies/penalties in the event of delivery shortfalls. If necessary, the application of such penalties could be used: 1) as a first priority, to procure additional renewable energy supply to address delivery shortfalls; or 2) in the event of a determination of non-compliance, to offset the cost of related penalties. SDCP's intent is to achieve and maintain compliance with applicable RPS mandates, and the latter option is a last resort that is not expected to apply.

In addition to the previously described considerations, SDCP utilizes a quantitative risk assessment that quantifies the energy impacts related to supply side losses. This approach organizes prospective risks into three general categories which pose the greatest supply-side impacts to the delivery of expected RPS energy: 1) curtailment risk; 2) counterparty risk; and 3) project cancellation risk. As part of its quantitative risk assessment, SDCP examines hourly forward-looking data that could lead to curtailment risk, specifically the likelihood that an hour within the forward market exhibits pricing that falls below negative $15/MWh beginning in 2022 through the expiration of each contract. Below this dollar amount, SDCP is presumed to be better off financially if it were to curtail the affected generating unit and, as a substitute for such curtailment, purchase additional renewable energy credits on the open market. Considering

SDCP's current long-term renewable energy positions, a reduction in long-term RPS volumes due to curtailment could, potentially, compromise the prospect of RPS compliance. The figures presented in the column quantifying curtailment risk are calculated by quantifying the volume of expected energy deliveries and multiplying such volume by the likelihood of curtailment. *Based on SDCP's assessment of curtailment risk associated with its renewable energy contract portfolio, this risk category was assigned a rating of low.*

Counterparty risk is the risk posed by a counterparty being unable or unwilling to honor its total RPS delivery obligations, as reflected in related contract documents. SDCP has quantified this likelihood by considering S&P Global's, Global Corporate Annual Default Rates by Rating Category (%) as a measure of organizational viability and financial stability. While this rate considers industries beyond the energy sector, it provides relevant insights into the correlation and potential impacts of dealing with uncreditworthy counterparties. The likelihood of default by credit rating was averaged over the years from 2014 to 2019. These years were chosen to remove irregularities in default rates during the Covid-19 pandemic. If a counterparty was found to be unrated, then the contract was reviewed to identify specified credit assurances; based on such assurances, an approximate rating was derived based on SDCP's experience and risk tolerance. *Based on SDCP's assessment of counterparty risk associated with its renewable energy contract portfolio, this risk category was assigned a rating of low.*

The final category reflected in SDCP's analysis is project/contract cancellation risk. This category is distinct from counterparty risk because the risk of project/contract cancellation may only affect a single project under a counterparty's portfolio. Projects may be cancelled for a variety of reasons, but in today's market, deals struck many months ago may no longer be economic for the seller. This risk only effects single source projects which have yet to be

constructed. These projects were chosen because they have a single point of failure unlike RPS energy purchased from a pool of resources (under a portfolio-style purchase agreement in which there is generally more diversity amongst the sources of supply). Based on discussions with various counterparties, other load serving entities and its own experience, SDCP has assessed that this risk effects roughly 1 in 20 deals. *Based on SDCP's assessment of project failure/contract cancellation risk associated with its renewable energy contract portfolio, this risk category was assigned a rating of low.*

Considering these categories holistically, SDCP was able to derive a cumulative energy percentage at risk. In consideration of SDCP's relatively conservative risk tolerances, a top-level risk of non-delivery offset at 0.25% of renewable energy procurements was added to the calculated energy at risk percentage. This adder will help to account for risks that SDCP cannot foresee and will help to guarantee the sufficiency of SDCP's planned RPS purchases in meeting both compliance-related and internally adopted renewable energy procurement targets. The percentage of renewable energy is the percentage of total renewable energy procured that was determined to be at risk, while the percentage of retail load is the energy at risk as a percentage of retail load. These "at risk" percentages reflect possible losses which, through no fault of SDCP, may occur by virtue of being a market participant. These losses pose a risk for non-compliance relative to SDCP's RPS goals and targets. Since this number is not a guaranteed loss, SDCP will implement the previously mentioned mitigation strategies to give the greatest chance of meeting its adopted renewable energy procurement targets.

ID	Contract	RPS Contract ID	Energy to be Delivered to Market (MWh)	Curtailment Risk (MWh)	Counterparty Risk (MWh)	Project Cancellation Risk (MWh)
1	Contract 2608	SDCP90001	780,000	-	265	-
2	Contract 2811	SDCP90002	100,000	-	-	-
3	Contract 2821	SDCP50003	2,462,130	5,820	47,322	-
4	Contract 2964	SDCP50005	4,299,960	10,164	82,645	-
5	Contract 2990	SDCP50004	5,151,236	12,176	99,007	-
6	Contract 3017	SDCP90008	135,000	-	-	-
7	Contract 3018	SDCP90008	35,000	-	-	-
8	Contract 3048	SDCP90011	100,000	-	142	-
9	Contract 3049	SDCP90010	165,000	-	3,171	-
10	Contract 3103	SDCP90014	75,000	-	-	-
11	Contract 3193	SDCP70015	75,000	177	26	-
12	Contract 3555	SDCP90017	7,670,000	18,130	-	-
13	Contract 3590	SDCP70019	1,707,630	4,036	32,821	-
14	Contract 3758	SDCP90020	25,000	-	9	-
15	Contract 3760	SDCP90018	300,000	-	-	-
16	Contract 3761	SDCP90018	50,000	-	-	-
17	Contract 3838	SDCP20021	244,788	-	83	-
Total			**23,375,744**	**50,504**	**265,491**	**-**

Energy

Total Renewable Energy	**23,375,744**
Total Renewable Energy at Risk	**315,994**
Pct of Renewable Energy at Risk	**1.35%**
Pct of Unknown Error at Risk	**0.25%**
Pct of Renewable Energy & Error at Risk	**1.60%**
Pct of Retail Load	**0.40%**

Based on SDCP's analysis, SDCP determined that 1.35 percent of SDCP's expected future RPS deliveries may be at risk, which equates to 0.40 percent of SDCP's retail load. These percentages reflect average risk throughout the study period, which suggests that actual risk could fall somewhat above or below these percentages. Regardless, the potential risk-related impacts to SDCP's RPS supply portfolio fall well below the ten percent MMoP reflected in its RPS planning process. *In consideration of the results of SDCP's risk analysis, the composite risk assessment, which considers all three of the previously described risk categories, results in an overall risk rating of low.*

As previously noted, SDCP adopted an ERM Policy at the meeting of its governing board on June 25, 2020. In accordance with SDCP's ERM Policy, these risk analyses/assessments are shared and reviewed with SDCP's ROC. If SDCP's internally adopted planning targets and related procurement efforts prove to be insufficient in meeting near-term RPS compliance targets, SDCP will bring such findings to the attention of its ROC and pursue suitable resolutions and mitigation measures under the oversight of the committee.

SDCP's is actively monitoring milestone completion for new-build renewable projects that have yet to achieve commercial operation with the goal of promoting timely project completion and initial deliveries to ensure that SDCP meets applicable compliance mandates during CP4 and beyond. To the extent that SDCP observes issues related to key milestone completion, it will accordingly adjust anticipated renewable energy deliveries to account for the prospect of RPS shortfalls (even though such shortfalls are unlikely to present compliance issues, due to the relatively high renewable energy content reflected in SDCP's default retail service offering).

System Reliability

With respect to system reliability, SDCP is aware of the need to pursue a portfolio of renewable resources with diverse and complementary delivery profiles as well as complimentary infrastructure (namely, energy storage infrastructure) that will support the reshaping of renewable energy deliveries to better align with load. For example, renewable energy procurement efforts that may initially focus on relatively low-cost solar resources will often necessitate subsequent investments in co-located energy storage infrastructure and/or higher-cost baseload renewable generating technologies, such as those using geothermal, biomass and landfill gas fuel sources. These baseload renewable technologies are often priced at three-to-four

times the level of in-state photovoltaic solar generation but generally provide increased capacity value (due to the more predictable, baseload generating profiles of such resources) and related reliability enhancements. To date, in pursuit of a balanced portfolio that ensures reliable renewable energy supply, SDCP has contracted with three solar resources, all of which are hybridized or co-located with battery storage (although SDCP does not receive the output or capacity attributes of the IP Oberon energy storage system), a wind generating facility which has a generation profile that is complementary to the solar and in-state wind generation shapes, and is actively negotiating with or soliciting offers for additional hybrid renewable resources, stand-alone storage facilities, and "clean firm" renewable resources. Going forward, SDCP will continue to balance these competing portfolio management interests to support reasonably close alignment between supply and demand (reducing the need for pronounced resource ramping on the system), cost-effective procurement and overall grid reliability. SDCP is aware that low-cost, long-term solutions are challenging to identify at this time, but it will remain committed to pursuing a conscientious planning process that balances grid reliability, compliance demonstration and customer cost impacts. SDCP is willing to engage in discussions with SDG&E and the California Independent System Operator regarding reliability and other system impacts related to its portfolio. SDCP is further willing to consider the feedback provided by the organizations in its planning and procurement processes going forward, so long as such suggestions generally conform with organizational objectives and Board-adopted policies. *In consideration of SDCP's diverse contractual commitments for requisite renewable energy supply and ongoing focus on the identification of RPS-eligible and complementary technologies that will mitigate reliability impacts associated with increased use of intermittent generating resources throughout the state, overall risks to system reliability associated with SDCP's RPS*

Procurement Plan were determined to be low.

Lessons Learned

In terms of lessons learned related to risk management, SDCP observes that internally adopted, above-RPS planning targets generally serve as effective mitigation measures related to RPS compliance. This approach seems to be supported by SDCP's low risk categorization from the compliance risk assessment letter from the CPUC, especially given SDCP has since meaningfully increased its RPS procurement via acceptance of its VAMO allocations. SDCP will, however, continue to evaluate the sufficiency of its adopted planning reserves (MMoP) to reduce the risk of RPS compliance shortfalls. If future RPS contracting activities impose larger than anticipated risks (on project failure and/or under-delivery), SDCP may increase its noted planning reserve to provide additional protection against such risks. The extent to which such adjustments may occur is not known at this time but will be discussed, as necessary, in a future RPS Procurement Plan.

SDCP has also observed the value of resource diversity across a broad spectrum of considerations, including resource location, generating technology, suppliers/developers and contract structures, amongst other concerns. Long-term renewable supply commitments are inherently risky in the sense that such commitments expose the buyer and/or seller to a variety of unknown circumstances, including but not limited to evolving market prices and policy changes. Throughout a long-term contract relationship, it seems evident that areas with initially low levels of negative pricing (and related curtailment of energy production) can materially change as new project development activity occurs, creating (or exacerbating) conditions of over-supply and related incidents of energy curtailment. This risk is particularly challenging to manage, as California's escalating RPS procurement mandates necessitate ongoing investment in new

renewable generating infrastructure, which is often sited in resource-rich areas that become saturated with similar generating technologies (and related delivery profiles). These circumstances seem inevitable and, over the course of a long-term supply relationship, may expose the contracted parties to unexpected risks, including negative prices (and related budgetary impacts) and curtailed deliveries (which may compromise the fulfillment of mandated procurement targets by the buyer). Again, SDCP will periodically reevaluate its current renewable energy planning reserve to address anticipated curtailment and/or underperformance risk to the extent that such concerns are pertinent to SDCP's renewable contract portfolio.

SDCP is also aware that risk can be diversified through various contract structures. For example, an "index-plus" pricing structure is useful in transferring nodal/market price risk to the seller – in such structures, the buyer pays a fixed renewable premium, while the seller assumes risk associated with market price fluctuations but also receives market revenues (which could be higher or lower than anticipated) – even though the buyer receives the energy, renewable attribute and (in certain instances) capacity value as part of such a transaction, the buyer's financial risk is generally limited to the payment of the renewable premium. For buyers who are averse to market price risk, the index-plus pricing structure effectively eliminates this concern but may result in higher overall contract costs (which may be acceptable, as a form of insurance, to mitigate market price exposure). In other structures, such as the "fixed-price" or "aggregate pricing" structure, the renewable energy premium and energy commodity (and oftentimes, capacity value) are reflected in a single price paid by the buyer – this structure deliberately allocates market price risk to the buyer, but the buyer may also pay a lower imputed renewable premium in instances where market revenues (realized when the energy commodity is delivered to the grid) closely approximate (or exceed) the aggregate renewable energy price. SDCP has

pursued both pricing structures as part of its portfolio diversification and risk management strategies, attempting to balance risk across a broad range of considerations. Any changes to this approach will be articulated in future iterations of the RPS procurement planning process.

VIII. Renewable Net Short Calculation

SDCP has provided a quantitative assessment to support the qualitative descriptions provided in this RPS Procurement Plan, which is attached as Appendix C. At this point in time and based on SDCP's initial renewable energy contracting efforts, certain risk-related adjustments have been incorporated in Appendix C, as described above. More specifically, SDCP previously described (above, in Section VII, Risk Assessment) its quantitative risk assessment methodology and the results of such analysis, which suggested that 1.35% of future renewable energy deliveries were at risk, meaning that SDCP reasonably anticipates that this portion of expected renewable energy deliveries will not be received. This determination was based on an assessment of the risk categories reflected in SDCP's analysis, which included: 1) curtailment risk; 2) counterparty risk; and 3) project failure/contract cancellation risk. In an effort to impute further conservatism in its risk management process (to mitigate against the prospect of compliance shortfalls), SDCP increased the 1.35% figure derived through its risk assessment to a full 2.00% delivery failure rate when preparing its Renewable Net Short calculations; this figure can be in rows 14 and 16 of the RNS reporting template. Such an (upward) adjustment was deemed appropriate to insure against unexpected renewable energy delivery shortfalls that could not be reasonably quantified through the aforementioned assessment. Also note that SDCP increased its forecasted failure rate for RPS Facilities in Development to 27% in 2023, an adjustment that was intended to reflect anticipated operational delays and resultant delivery shortfalls based on correspondence received from project

developers with which SDCP has entered into long-term RPS contracts. If such adjustments are deemed insufficient in the future, based on regular project development status updates, the results of a future SDCP risk assessment (using the methodology described above) or other information, SDCP will update such adjustments in a future planning document based on information specifically related to each contracting opportunity subsumed in Appendix C.

SDCP successfully procured nearly 58% of its total resource needs (PowerOn portfolio, plus Power100 portfolio) from RPS-eligible renewable resources since 2021 and, as a result, is beginning to accrue renewable energy quantities in excess of applicable statewide mandates. Renewable suppliers have generally performed as expected, so the noted failure rates that are reflected in Exhibit C (set at two percent in future years) are in excess of the findings reflected in SDCP's previously described risk assessment, which indicate that 1.35 percent of such supply may be at risk. If supplier performance becomes more erratic in the future and adjustments to these assumptions are deemed necessary, SDCP will reflect such adjustments in a future planning document.

IX. Minimum Margin of Procurement (MMoP)

SDCP is developing an electricity supply portfolio that will further the achievement of state mandates as well as internally adopted goals for increasing RPS-eligible renewable energy supply over time. The following table displays SDCP's intended margin of RPS over-procurement based on the differential between the SB 100 procurement targets and SDCP's internally adopted RPS procurement targets. This table reflects SDCP's voluntary margin of over-procurement, or VMoP.

State & Internally Adopted Renewable Energy Requirements

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
SB 100 RPS Procurement Requirement (% of Retail Sales)	38.5%	41.3%	44.0%	46.7%	49.3%	52.0%	54.7%	57.3%	60.0%	60.0%	60.0%
SDCP's Minimum Internally Adopted RPS Procurement Target (% of Retail Sales)	54.2%	58.3%	62.5%	66.7%	70.8%	75.0%	78.3%	81.7%	85.0%	88.0%	91.0%
SDCP's Voluntary Margin of Over-Procurement (% of Retail Sales)	15.7%	17.1%	18.5%	20.0%	21.5%	23.0%	23.7%	24.3%	25.0%	28.0%	31.0%

As reflected in the previous table, SDCP's RPS-eligible renewable energy target was set at a minimum 50 percent in 2021, increasing steadily to 75 percent by 2027 and to 85 percent by 2030. SDCP's internally adopted renewable energy procurement targets are intended to support SDCP's broader goal of providing a minimum 90% carbon-free electricity to all customers by 2030. SDCP's internally adopted minimum renewable energy procurement goals ensure a significant margin of procurement above the SB 100 mandates. SDCP's internally adopted renewable energy procurement goals provide a meaningful buffer above the state's RPS requirements and serve as SDCP's VMoP – SDCP's VMoP will minimally exceed statewide RPS mandates by at least 15 percent (relative to retail sales), increasing in each year through 2032.

To address RPS compliance risk, SDCP uses its risk assessments, including its renewable net short calculations, to establish a Minimum Margin of Procurement to guide RPS compliance procurement planning. SDCP calculated the minimum margin of procurement, or MMoP, using a 10% risk adjustment (or planning reserve) that was applied to SDCP's minimum internally adopted RPS procurement target (see row 2 in the previous table), which is reflective of the renewable content offered through SDCP's default retail service offering, PowerOn. On a voluntary basis, SDCP customers may enroll in SDCP's 100% renewable energy service offering, Power100 – customer participation in this program increases SDCP's overall renewable energy need but also provides an enhanced procurement buffer relative to applicable compliance mandates. This noted, SDCP does not include/rely on additional

renewable energy volumes required to serve Power100 customers in determining its MMoP or VMoP – such incremental renewable energy purchases are additive to SDCP's MMoP and VMoP (meaning that such volumes are in excess of the additional renewable energy purchases required to meet SDCP's MMoP and VMoP). Based on the manner in which SDCP has established its MMoP, as a 10% planning risk adjustment relative to total PowerOn renewable energy requirements, the effective MMoP percentages observed by SDCP are approximately 14%, relative to SDCP's projected RPS compliance need, for each year through 2032. The following chart provides additional detail regarding the effective MMoP percentages observed by SDCP.

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
SB 100 RPS Procurement Requirement (% of Retail Sales)	38.5%	41.3%	44.0%	46.7%	49.3%	52.0%	54.7%	57.3%	60.0%	60.0%	60.0%
SDCP's Minimum Internally Adopted RPS Procurement Target (% of Retail Sales)	54.2%	58.3%	62.5%	66.7%	70.8%	75.0%	78.3%	81.7%	85.0%	88.0%	91.0%
SDCP's RPS Planning Risk Adjustment (at 10% of Minimum Internally Adopted RPS Target)	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%
SDCP's Minimum Margin of Over-Procurement (% of Retail Sales)	5.4%	5.8%	6.3%	6.7%	7.1%	7.5%	7.8%	8.2%	8.5%	8.8%	9.1%
SDCP's Minimum Margin of Over-Procurement (% buffer relative to RPS Mandate)	14.1%	14.1%	14.2%	14.3%	14.4%	14.4%	14.3%	14.2%	14.2%	14.7%	15.2%

SDCP's MMoP is intended to address potential delivery variability for intermittent resources, curtailment risk, project delays (or failures) and other operational peculiarities that may cause actual renewable energy deliveries to deviate from projections. Note that certain of SDCP's renewable energy deliveries are not subject to variability – such agreements reflect minimum fixed delivery quantities (or quantities with limited volumetric variability) with corresponding financial penalties (paid to SDCP by related sellers in the event of delivery shortfalls). Beginning in 2022, SDCP will have limited exposure to resource intermittency via its long-term renewable supply agreement with Duran Mesa, LLC. Other sources of exposure will occur as other contracts come online in 2023 and have been accounted for in SDCP's

previously described risk assessment.

If SDCP adopts changes to its future renewable energy content/offerings, future RPS procurement planning documents will be updated accordingly. Staff assumes that future renewable procurement targets (inclusive of planning reserves necessary to meet RPS mandates) will consider a variety of factors, including but not limited to, the operational status of prospective renewable energy facilities to be placed under contract, the experience and general development track record of each project development team (associated with new resources), resource size (capacity), the location of prospective generating resources (for new facilities) and impacts of over-procurement to the CCA program's procurement budget and customer rates – certain of these factors are appropriately considered in SDCP's quantitative risk assessment.

IX.A. MMoP Methodology and Inputs

SDCP's MMoP is intended to address an RPS failure rate at or above that which is reflected in the renewable net short reporting template. In the event of contract under-deliveries, commercial operation delays and/or project failures, the MMoP should be sufficient to ensure SDCP is compliant with the RPS procurement requirements. SDCP's VMoP is the annual RPS-eligible minimum portfolio content identified in SDCP's internally adopted planning targets.

As discussed in Section VIII, SDCP has incorporated risk adjustments to certain renewable energy delivery estimates associated with existing generating facilities (due to increased fire risk throughout the state of California and the potential for related delivery reductions; delivery intermittency is also subsumed in prescribed risk adjustments) and resources that are under development. Achieving SDCP's MMoP necessitates higher levels of renewable energy procurement (approximately 14% over SDCP's annual RPS compliance needs for each year through 2032), which accommodate the potential for delivery shortfalls

(due to a variety of circumstances) while still allowing SDCP to meet prescribed RPS mandates. Considered in concert, SDCP's VMoP, which ranges from 15.7% to 31.0% over the planning period, and MMoP provide a substantial aggregate renewable energy planning buffer, which increases from 21.1% in 2022 to 40.1% in 2032, relative to applicable compliance mandates., as reflected in the following table.

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
SB 100 RPS Procurement Requirement (% of Retail Sales)	38.5%	41.3%	44.0%	46.7%	49.3%	52.0%	54.7%	57.3%	60.0%	60.0%	60.0%
SDCP's Minimum Internally Adopted RPS Procurement Target (% of Retail Sales)	54.2%	58.3%	62.5%	66.7%	70.8%	75.0%	78.3%	81.7%	85.0%	88.0%	91.0%
SDCP's Voluntary Margin of Over-Procurement (% of Retail Sales)	15.7%	17.1%	18.5%	20.0%	21.5%	23.0%	23.7%	24.3%	25.0%	28.0%	31.0%
SDCP's Minimum Margin of Over-Procurement (% of Retail Sales)	5.4%	5.8%	6.3%	6.7%	7.1%	7.5%	7.8%	8.2%	8.5%	8.8%	9.1%
SDCP's Aggregate Margin of Over-Procurement (% of Retail Sales)	21.1%	22.9%	24.8%	26.7%	28.6%	30.5%	31.5%	32.5%	33.5%	36.8%	40.1%

SDCP will effectively ensure its compliance with applicable RPS mandates by procuring in consideration of internal renewable energy goals that meaningfully exceed state-adopted requirements. SDCP currently provides a minimum 50% renewable energy content to all customers as part of its default retail service offering. SDCP's governing board may periodically consider increases to such renewable energy content for purposes of ensuring that SDCP differentiates its supply portfolio from applicable state-mandated renewable content. The extent to which SDCP will exceed statewide RPS mandates will be dependent upon a variety of factors, including RPS product availability, product cost and budgetary impacts and timely product deliveries from generating facilities under contract with SDCP. As SDCP's governing board considers and adopts changes to its internal renewable energy procurement targets, the organization will accordingly update future RPS planning documents to reflect such changes.

IX.B. MMoP Scenarios

SDCP plans to meet the annual program renewable goals reflected in the table presented in Section IX (above), including the MMoPs reflected therein. As reflected in this table, SDCP's anticipated MMoP percentages range from 14.1% in 2022 to 15.2% in 2032. The renewable net short included in the RNS Quantitative Template also incorporates the additional RPS-eligible renewable energy need resulting from SDCP's VMoP, which reflects its internally adopted renewable energy procurement goal that increases from 50% in 2022 to 85% in 2030.

During its bid evaluation and supplier selection processes, SDCP considers a variety of risks and will explicitly incorporate such risks into its MMoP calculation after related contracting processes are complete and project development progress (for new-build renewable projects) is being tracked by SDCP staff. Based on the information gathered during SDCP's contract management process (which focuses on key milestone achievement and deviations from initial project development schedules for new-build projects), SDCP may adjust expected renewable energy deliveries. To the extent that adjusted future deliveries meaningfully differ from SDCP's previous expectations, additional RPS procurement may be pursued to ensure that SDCP maintains its desired MMoP and related minimum customer delivery commitments.

SDCP will also model demand-side sensitivities that may impact MMoP calculations. This will be particularly important during administration of SDCP's future expansion activities, as participation rates are expected to be most volatile during such periods of time. In addition to load variability resulting from customer participation levels, SDCP will also monitor electric vehicle ("EV") penetration rates, net energy metering participation rates and other considerations that may impact overall customer energy requirements and related demand-based MMoP calculations.

X. Bid Solicitation Protocol

X.A. Solicitation Protocols for Renewables Sales

SDCP does not have immediate plans to issue a solicitation for sales of renewable energy products/projects. If such a need arises in the future, however, SDCP will consider a protocol that: 1) ensures that SDCP remains compliant with applicable RPS procurement mandates; 2) minimizes overall portfolio costs to the greatest extent practical; and 3) provides sufficient flexibility to accommodate reasonably anticipated supply-side and demand-side changes that could impact SDCP's overall renewable energy requirements.

X.B. Bid Selection Protocols

Consistent with Public Utilities Code section 399.13(a)(5)(C)[14], SDCP shall conduct solicitations for requisite energy resources, including specific needs for eligible renewable energy resources (reflecting locational preferences, when applicable, for such resources), generating capacity, and required online dates to assist in determining what resources fit best within its supply portfolio. Since CCA program governing boards are comprised of local elected officials, these solicitation and procurement decisions are overseen by elected representatives of the community. These solicitation and procurement decisions will seek to comply with targets and preferences that are considerate of local priorities and interests. Any new renewable energy supply agreements resulting from ongoing contract negotiations and future solicitation processes will be brought to SDCP's governing board for approval prior to execution.

[14] Cal. Pub. Util. Code § 399.13(a)(5)(C) ("Standard terms and conditions to be used by all electrical corporations in contracting for eligible renewable energy resources, including performance requirements for renewable generators. A contract for the purchase of electricity generated by an eligible renewable energy resource, at a minimum, shall include the renewable energy credits associated with all electricity generation specified under the contract. The standard terms and conditions shall include the requirement that, no later than six months after the commission's approval of an electricity purchase agreement entered into pursuant to this article, the following information about the agreement shall be disclosed by the commission: party names, resource type, project location, and project capacity.").

SDCP's most recent RPS solicitation, "San Diego Community Power 2020 Request for Proposals ("RFP") for Long-Term California RPS-Eligible Renewable Energy"[15] ("RFP") was issued on June 29, 2020, and is attached to this document as Appendix F. Pursuant to Public Utilities Code 399.13(a)(6)(C),[16] SDCP's RFP included a variety of considerations in related bid solicitation protocols as well as the proposal evaluation and selection process, including:

1. Price and relative value within SDCP's supply portfolio;
2. Project location and benefits to the local economy and workforce;
3. Potential economic benefits created within communities with high levels of poverty and unemployment;
4. Project development status, including but not limited to progress toward interconnection, deliverability, siting, zoning, permitting, and financing requirements;
5. Qualifications, experience developing projects in California and/or with CCAs, financial stability, and structure of the prospective project team (including its ownership);
6. Environmental impacts and related mitigation requirements, including impacts to air pollution within communities that have been disproportionately impacted by the existing generating fleet;
7. Potential impacts to grid reliability;
8. Interconnection status, including queue position, full deliverability of Resource Adequacy capacity, and related study completion, if applicable
9. Acceptance of SDCP's standard contract terms; and
10. Development milestone schedule, if applicable.

Based on the success of its initial solicitation(s), SDCP may adapt these considerations to improve success in future renewable energy procurement efforts.

SDCP's Inclusive and Sustainable Workforce Policy, adopted January 28, 2021, considers impacts to the local economy and workforce. SDCP will specifically consider "the

[15] See *San Diego Community Power 2020 Request for Proposals ("RFP") for Long-Term California RPS-Eligible Renewable Energy* available at https://www.sdcommunitypower.org/resources.
[16] Cal. Pub. Util. Code § 399.13(a)(6)(C) ("Consistent with the goal of increasing California's reliance on eligible renewable energy resources, the renewable energy procurement plan shall include all of the following: A bid solicitation setting forth the need for eligible renewable energy resources of each deliverability characteristic, required online dates, and locational preferences, if any.").

employment growth associated with the construction and operation of eligible renewable energy resources."[17] More specifically, to the extent SDCP procures new RPS resources in solicitations where qualitative factors are considered, SDCP will include a qualitative assessment of the extent to which proposed project development activities will support this goal. Such determinations will be based on information provided by the prospective supplier and SDCP's independent assessment of such information. When SDCP procures RPS resources, it will require bidders to submit information on projected California employment growth during construction and operation. This data will include the expected number of hires, duration of hire, and an indication of whether the bidder has entered into Project Labor Agreements or Maintenance Labor Agreements in California for the proposed project.

Pursuant to Public Utilities Code section 366.2(m), Community Choice Aggregators like SDCP are required to annually submit a report to the CPUC which provides a (1) detailed and verifiable plan for increasing procurement from small, local, and diverse business enterprises; and (2) a report regarding its procurement from women, minority, disabled veteran, and LGBT business enterprises.[18] In pursuing these efforts, SDCP is building its Supplier Diversity program which aims to support, to the extent applicable by law, the principles of the CPUC's General Order (GO) 156 by increasing the number of diverse suppliers, including power providers, to SDCP.[19]

Pursuant to Public Utilities Code section 399.13(a)(8)(A), SDCP will also consider the inclusion of evaluative preference for "renewable energy projects that provide environmental and

[17] See *Inclusive and Sustainable Workforce Policy*, adopted January 28, 2021, available at https://sdcommunitypower.org/resources/meeting-notes/.
[18] *See Supplier Diversity at https://www.cpuc.ca.gov/supplierdiversity/*
[19] See Section 11, Page 23 at https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/news-and-outreach/documents/bco/go-156-d22-04-035.pdf

economic benefits to communities afflicted with poverty or high unemployment, or that suffer from high emission levels of toxic air contaminants, criteria air pollutants, and greenhouse gases."[20] To the extent that SDCP procures RPS resources through solicitations where qualitative factors are considered, impact on disadvantaged communities will be considered. Such information will be gathered by requiring prospective suppliers to answer the following questions: Is your facility located in a community afflicted with poverty or high unemployment or that suffers from high emission levels? If so, the participant will be encouraged to describe how its proposed facility can provide the following benefits to adjacent communities:

- Projected hires from adjacent community (number and type of jobs);
- Duration of work (during construction and operation phases);
- Projected direct and indirect economic benefits to the local economy (i.e., payroll, taxes, services);
- Emissions reduction – identify existing generation sources by fuel source within 6 miles of proposed facility and indicate whether the proposed facility will replace/supplant the identified generation sources; and
- To the extent that the proposed generating facility is expected to replace/supplant an existing generating facility, the prospective supplier will be asked to quantify the associated emission impacts of this transition.

These considerations, including others that may be adopted by SDCP's governing board in future meetings, will be incorporated, as appropriate, in future solicitations administered by

[20] Cal. Pub. Util. Code § 399.13(a)(8)(A) ("In soliciting and procuring eligible renewable energy resources for California-based projects, each electrical corporation shall give preference to renewable energy projects that provide environmental and economic benefits to communities afflicted with poverty or high unemployment, or that suffer from high emission levels of toxic air contaminants, criteria air pollutants, and greenhouse gases.").

the organization.

X.C. LCBF Criteria

The Least-Cost Best Fit methodologies approved by the Commission pursuant to D.04-07-029, D.11-04-030, D.12-11-016, D.14-11-042, and D.16-12-044 are expressly only directly applicable to the IOUs and the Commission does not have jurisdiction over the solicitation protocols of CCAs. However, consistent with Public Utilities Code sections 399.13(a)(9), SDCP will consider best-fit attributes that support a balanced mix of resources to help support reliability of the electrical grid.[21]

In particular, SDCP considered "least cost best fit" ("LCBF") during the evaluation of responses to its initial renewable energy solicitation and will continue to do so in future solicitations that will be necessary to fill noted open positions. From SDCP's perspective, use of the term "costs" appropriately includes considerations beyond the basic price of renewable energy. More specifically, costs include a broad range of considerations, such as: 1) reputational damage resulting from failure to meet state-mandated and/or internally established renewable energy procurement targets; 2) compliance penalties resulting from failed project development efforts or delivery shortfalls; 3) administrative complexities related to dealing with inexperienced suppliers (such as prolonged contract negotiation processes and uncertainties related to project milestone timing and achievement); and 4) impacts to planning certainty resulting from higher risk projects. These factors, as well as various others, will continue to be considered by SDCP as components of its cost evaluation process, which may lead to the selection of offers that aren't necessarily the lowest cost option(s), as expressed on a dollar-per-MWh basis. With regard to

[21] Cal. Pub. Util. Code § 399.13(a)(9) ("In soliciting and procuring eligible renewable energy resources, each retail seller shall consider the best-fit attributes of resource types that ensure a balanced resource mix to maintain the reliability of the electrical grid.").

"fit", this aspect of a prospective supply opportunity has as much to do with compatibility (between SDCP and its suppliers) and alignment with key local objectives as it does with balancing customer usage and expected project deliveries, particularly when considering long-term contracting opportunities that will necessitate a constructive working relationship over a period of ten years or more. SDCP also interprets the term "fit" to mean the general suitableness of a project opportunity in promoting grid reliability – while SDCP has no explicit operational or maintenance responsibilities related to the local distribution system serving its customers or the bulk electric system at large, it is aware of the profound importance of supporting grid reliability through its procurement processes. With this in mind, SDCP will make best efforts to balance the demands of California's rigorous RPS compliance mandates with its interest in promoting such reliability. This is no small task, and SDCP expects that considerations related to grid reliability will be incorporated at each stage of its planning and procurement processes but also acknowledges that the full scope of its RPS contract/resource portfolio (including related impacts to grid reliability) will significantly evolve throughout the organizations operating history. Over time, SDCP expects to thoughtfully assemble a diversified portfolio of RPS contracts/resources that will not only contribute to SDCP's achievement of applicable compliance mandates but also to improved stability and reliability of California's electric system. As such, SDCP's LCBF methodology will consider a broad range of components, including those previously noted, balancing a variety of pertinent considerations at the time each renewable purchase opportunity is being evaluated.

Additionally, the requirement of Section 399.13(a)(8)(A) to give preference to renewable projects located in certain communities is expressly only applicable to "electrical

corporations" and is not mandatory for CCAs.[22] However, SDCP recognizes the need to help mitigate the impacts of air pollution in regions of the state where communities have been disproportionately impacted by the existing generating fleet as well as the need to bring economic benefits to communities with high levels of poverty and unemployment. Consistent with this recognition, SDCP will consider the manner in which air pollution may be impacted during its renewable energy solicitation process(es) and related project selection.

XI. Safety Considerations

San Diego Community Power holds safety as a top priority. Since SDCP does not own, operate, or control generation facilities, SDCP's procurement of renewable resources will not present any unique safety risks. This section describes how SDCP has taken actions to reduce the safety risks that may be posed by its renewable resource portfolio and how SDCP supports the state's environmental, safety, and energy policy goals.

In its procurement efforts, SDCP will consider the extent to which incorporating project safety requirements/risk mitigation requirements is necessary and appropriate in contracting. SDCP has generally included safety terms in its contracts requiring the seller to comply with all laws and prudent operating practices relating to the operation and maintenance of the renewable facility and the generation and sale of the renewable product. Additionally, the seller shall take all reasonable safety precautions with respect to the operation, maintenance, repair and replacement of the facility, and notify SDCP if seller becomes aware of any circumstances

[22] Cal. Pub. Util. Code § 399.13(a)(8)(A) ("In soliciting and procuring eligible renewable energy resources for California-based projects, each electrical corporation shall give preference to renewable energy projects that provide environmental and economic benefits to communities afflicted with poverty or high unemployment, or that suffer from high emission levels of toxic air contaminants, criteria air pollutants, and greenhouse gases.").

relating to the facility that creates an imminent risk of damage or injury to any person or any person's property, taking prompt, reasonable action to prevent such damage or injury. SDCP is aware that requesting more stringent processes and/or requirements (related to safety and/or other concerns) may trigger requested price increases by the seller/supplier. To the extent that product pricing would meaningfully increase due to the inclusion of such provisions, SDCP would need to evaluate budgetary impacts and other risks before proceeding.

In addition, SDCP has provided additional information below on its existing safety practices.

XI.1. Wildfire Risks and Vegetation Management

In ongoing and future negotiations, SDCP will ensure that its contracts with renewable generating facilities will require the facility operator to comply with all relevant safety requirements. This will be accomplished, in part, through contract provisions that require the counter party to operate and maintain the facility in compliance with all relevant laws and prudent operating practices, including relevant safety and environmental protection standards.

At this point in time, SDCP has yet to adopt specific procurement policies or preferences focused on the acquisition of forest biomass resources. SDCP is aware of the mitigating impacts that biomass generators, which use forestry waste as feedstock, may have on wildfire risk and will consider the adoption of a related procurement policy in the future.

One of the evaluative criteria considered by SDCP is project location. Part of this evaluation will include an analysis of project location with respect to wildfire risk. Projects that are sited in a high wildfire risk area may be scored lower, and the expected output associated with such project(s) may be reduced to account for potential reductions in output that may occur if fires happen to compromise the project or surrounding infrastructure. SDCP is aware of

instances when CCAs have received lower-than-expected deliveries from renewable generating facilities that were required to shut down or reduce output when fire risk compromised such electrical infrastructure. Based on this information, generating assets located in areas that are historically prone to fire risk will need to be considered in light of the potential for reduced output and resultant impacts to SDCP's RPS compliance standing.

SDCP is also considering the development of a program to educate and possibly incentivize its customers to eliminate or minimize the use of diesel and natural gas generators. As evidenced during Pacific Gas and Electric Company's 2019 Public Safety Power Shutoff ("PSPS") events, gas-powered generators can present fire hazards. Once all of SDCP residential and commercial accounts are phased in (which is expected to occur in 2023), SDCP can consider the development of a customer outreach initiative/education program to inform customers of the potential hazards presented by customer-sited gas generators, including fire risk presented by such infrastructure. This is especially important for SDCP customers located in the eastern portion of its service territory, which is semi-rural, hotter, and drier than other parts of San Diego County, making it an area of increased wildfire risk.

In future solicitations, SDCP will identify whether any of the bidding generating facilities are located within Tier 2 or Tier 3 of the Commission's Fire-Threat Map. When evaluating or executing a contract with a facility located in Tier 2 or Tier 3, SDCP will consider requiring that the seller utilize elevated wildfire prevention and safety measures for any construction, operation, and maintenance activities.

XI.2. Decommissioning Facilities

As SDCP just recently completed its initial long-term contracting efforts, it has not developed any plans or requirements related to the disposition of associated generating facilities

following completion of applicable delivery terms. For future contract negotiations, SDCP will evaluate requiring the seller to provide a project safety plan or a similar type of reporting document, which will include information on procedures for identifying and remediating safety incidents, as well as describing any relevant requirements (such as those associated with the permitting of the facility) for the decommissioning of the facility.

XI.3. Climate Change Adaptation

SDCP's internally adopted portfolio targets, relating to the use of renewable energy and other carbon-free energy supply, are intended to support the CAPs of Member Agencies and the San Diego Region at large. In future solicitations, SDCP will consider updating its bid evaluation criteria in consideration of the policies and preferences of its membership, including but not limited to risks associated with facilities located in regions that are forecasted to be impacted by higher instances of sea-level rise, flooding, wildfires, and/or elevated temperatures.

As noted above, SDCP has incorporated references to the Climate Action Plans of the Member Agencies and will provide more detailed strategies for climate change adaptation in its 2021 RPS Procurement Plans.

XI.4. Impacts During Public Safety Shut-off (PSPS) Events

As SDCP recently commenced CCA operations, potential impacts related to future PSPS events are uncertain. However, with regard to resource planning, it is likely that a relatively short-duration PSPS event impacting SDCP would marginally reduce retail electric sales and, as a result, would generate a very small increase in the proportionate share of renewable energy supply accruing to SDCP (if renewable supply agreements continue to perform as expected during such events). As SDCP executes contracts with renewable generating facilities, it will evaluate the risk of the loss of generation associated with PSPS events both for facilities that are

already online and for facilities that are still under development. Based on impact of prior PSPS events to generating facilities, SDCP anticipates that the total quantity of any PSPS-related reductions in RPS-eligible generation will be relatively small and would likely be offset by the potential reduction in retail sales that would result from PSPS events that directly impact SDCP's customers. Therefore, the likelihood of a material impact to SDCP's renewable energy planning process or related performance metrics seems unlikely.

XI.5. Biomass Procurement

SDCP's neutral position on biomass procurement remains unchanged. SDCP completed its initial long-term renewable energy contracting efforts in 2021 and has yet to receive offers from eligible "clean firm" renewable energy resources under its current RFO, so it is difficult to predict how the organization's renewable energy supply portfolio will evolve over time. While SDCP has no specific preferences for or against biomass resources, the prospect of procuring such resources will be dependent upon offers received during future solicitation processes. To the extent that future biomass offers/proposals are competitive (with similar offers received from other resource types) and/or in the event SDCP adopts policies explicitly supporting the acquisition of biomass energy resources, SDCP will consider the inclusion of biomass energy within its renewable energy supply portfolio.

XII. Consideration of Price Adjustments Mechanisms

During ongoing contracting processes and future solicitations, and consistent with SB 350 and SB 100, SDCP will review the prospects of incorporating price adjustments in contracts with online dates more than 24 months after the date of contract execution. As noted in the ACR, such price adjustments could include price indexing to key components or to the Consumer Price Index.

XIII. Curtailment Frequency, Forecasting, Costs

This Section responds to the questions presented in Section 5.13 of the ACR[23] and describe SDCP's strategies and experience so far in managing SDCP's exposure to negative pricing events, overgeneration, and economic curtailment for SDCP's region and portfolio of renewable resources.

XIII.1. Factors Having the Most Impact on the Projected Increases in Incidences of Overgeneration and Negative Market Price Hours

SDCP continues to learn a great deal about the California energy market, including information and considerations related to energy curtailment, potential cost impacts, contracting considerations, and other concerns. The following represents SDCP's understanding of this topic, which may impact future procurement processes.

Due in large part to the rapid increase in the amount of wind and solar generating facilities that have been brought online throughout the western United States, the California Independent System Operator's ("CAISO") balancing authority area has experienced an increasing frequency and magnitude of curtailment and negative pricing events. As of the end of 2019, California had over 12,800 MW of solar, 9,400 MW of behind-the-meter solar, and 5,900 MW of wind.[24] This increased capacity results in discrete periods where the majority of load in the CAISO is served by solar and wind resources. The monthly maximum load served by wind and solar in the CAISO has averaged 64.3 percent over the past 4 years (May 2018 to May 2022), and in May of 2022 the monthly maximum load served by wind and solar was just under

[23] See *Assigned Commissioner and Assigned Administrative Law Judge's Ruling Identifying Issues and Schedule of Review for 2020 Renewables Portfolio Standard Procurement Plans*, May 6, 2020 at p. 27-28.

[24] California Energy Commission, Renewable Energy Tracking Progress, Feb. 2020, at 6, *available at* https://www.energy.ca.gov/sites/default/files/2019-12/renewable_ada.pdf.

95%, while the maximum 5-minute amount of all renewables serving load was 103.5%.[25] To address the resulting instances of over-supply, the amount of curtailment of wind and solar in the CAISO has significantly increased each year from 2015 through 2020, totaling 187,000 MWh in 2015, 308,000 MWh in 2016, 379,510 MWh in 2017, 461,043 MWh in 2018, 965,241 MWh in 2019, and 1,586,500 MWh in 2020.[26] As of May 31, 2021, the total curtailment of solar and wind year to date is already 1,062,270 MWh.[27] Curtailment is typically the highest during the months of March, April, and May when hydroelectric generation is historically at its highest.

SDCP will continue to monitor this situation to the extent such circumstances are likely to impact procurement activities and contract administration. If prospective renewable generating opportunities are located in areas that are prone to frequent instances of negative market pricing (based on available historical data), SDCP will be sure to evaluate such data to better understand prospective financial impacts and/or pursue contractual pricing structures that will insulate the CCA program from such risks. When SDCP considers specific renewable project/contract opportunities in the future, it will likely assume that incidences of over-generation will continue to occur (or increase) in areas of the state with low load and relatively high levels of generation. To the extent there are not opportunities to store, export or otherwise use such generation as it occurs, SDCP understands that market pricing would likely be suppressed to the extent that generation exceeds load; and to the extent that generation meaningfully exceeds load, market pricing could turn negative (or significantly negative). This concern was previously considered by SDCP and will continue to be considered when evaluating

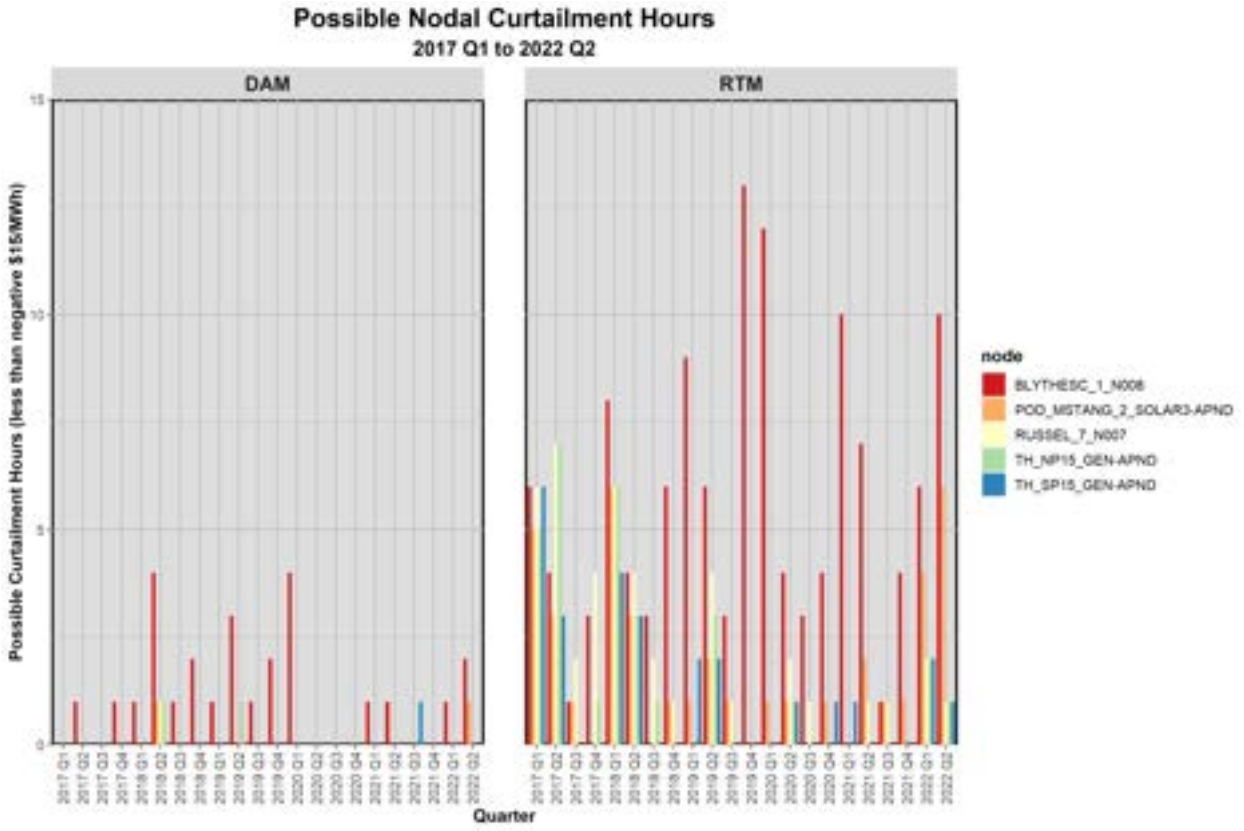
[25] CAISO, Monthly Renewables Performance Report, May 2022, *available at* http://www.caiso.com/Documents/MonthlyRenewablesPerformanceReport-May2022.html.
[26] CAISO, Managing Oversupply, Wind and Solar Curtailment Totals, updated June 6, 2021, *available at* http://www.caiso.com/informed/Pages/ManagingOversupply.aspx.
[27] *Id.*

future renewable project/contract opportunities, and to the extent that certain project locations seem predisposed to incidences of negative pricing, SDCP will weigh such risk against other available project/contract opportunities. Ultimately, SDCP must satisfy its RPS procurement mandates and will need to procure among available opportunities, even if such opportunities present related risks to SDCP – in such instances, SDCP may seek to minimize its negative price risk through contract structures that alleviate these concerns for the buyer.

XIII.2. Written Description of Quantitative Analysis of Forecast of the Number of Hours Per Year of Negative Market Pricing for the Next 10 Years

Negative prices in the CAISO market can significantly impact the cost and overall value of renewable generating assets, particularly if such supply agreements apply market-based settlement mechanisms to determine charges assessed to the buyer. Thus, it is important that SDCP consider the siting of prospective renewable generating resources to avoid taking on unforeseen costs or lower than expected delivered energy quantities, which may result from economic curtailments. For this reason, SDCP has endeavored to quantify the potential occurrence of negative pricing events within certain areas of the state that are known to include significant levels of renewable generating capacity. While SDCP is not yet directly exposed to such risks (by virtue of its current RPS contract portfolio), it is expected to experience exposure to negative price risk as its RPS contract portfolio evolves with time. To improve its understanding of such risks, SDCP has assembled a historic negative pricing analysis with the average results of such analysis being used as SDCP's ten-year negative price forecast. SDCP notes that moderately negative prices – between zero and $15/MWh – are not expected to trigger meaningful economic curtailments, as the cost of procuring replacement RPS supply under index-plus pricing arrangements would likely be equivalent in cost; in such instances, there would be little sense for SDCP to curtail renewable energy deliveries.

Below are several charts which illustrate the number of potential historic curtailment events that would have been triggered when nodal prices fell below negative $15/MWh (SDCP's prescribed pricing benchmark that was applied to identify potential economic curtailment incidents under this methodology). Estimates for the real-time market (RTM) have been averaged over the hour to promote comparability between day-ahead and RTM outcomes.



Using the historic data illustrated above, SDCP has created the following forecast that will be considered if future project opportunities are located adjacent to the specified nodes. If eventual project opportunities happen to be located in other geographic areas, SDCP would update its analysis based on the node in closest proximity to the prospective generating resource. This forecast methodology allows SDCP to estimate the quantity of time energy will be curtailed from a renewable energy project. Because most curtailment hours occur within the real-time market, SDCP has also included a sample of its analyses for a subset of nodes that are known to

be in close proximity to areas of the state in which prevalent renewable generation buildout has occurred. The color shading in the table is a visual cue reflecting curtailment density in certain hours of the year. This density will be helpful in determining the delivery profiles that may complement existing generating resources adjacent to the node as well as those that may exacerbate negative pricing. SDCP is mindful that it will need to annually evaluate relevant variables, such as regional hydrologic conditions and generalized weather trends, to determine if any adjustments ought to be made to its forecast.

BLYTHESC_1_N008 RTM

Hour	January	February	March	April	May	June	July	August	September	October	November	December
1	.17	.50	.00	.17	.17	.00	.20	.20	.20	.00	.40	.20
2	.17	.17	.00	.00	.00	.33	.00	.20	.00	.00	.20	.20
3	.00	.17	.00	.00	.17	.17	.20	.20	.00	.00	.20	.00
4	.00	.17	.00	.00	.00	.00	.00	.00	.00	.00	.20	.00
5	.00	.00	.17	.00	.00	.00	.20	.20	.00	.00	.20	.00
6	.17	.00	.00	.00	.33	.50	.20	.00	.00	.00	.40	.00
7	.00	.00	.00	.00	.50	1.00	.40	.20	.20	.00	.00	.40
8	.17	.50	.00	1.00	1.50	1.83	1.40	.40	.40	.40	.40	.80
9	.83	1.67	1.50	3.17	3.33	1.50	.40	.40	1.00	1.20	1.60	1.80
10	1.17	2.67	2.67	2.33	3.33	.67	.20	.40	1.60	2.20	2.60	3.60
11	2.67	3.00	3.00	2.50	2.17	.67	.00	.20	1.20	2.20	2.20	4.00
12	.83	2.83	2.50	2.83	2.17	.00	.20	.20	.80	2.40	2.60	2.60
13	3.00	3.17	4.50	1.33	1.33	.00	.00	.00	.60	1.00	2.20	2.60
14	1.00	3.83	4.33	2.17	1.33	.17	.00	.20	.60	2.40	1.20	2.40
15	1.00	4.17	4.33	1.67	.83	.50	.20	.00	.40	1.60	2.00	2.40
16	.67	3.00	3.00	1.50	.67	.00	.00	.00	.20	.80	1.40	.00
17	.17	.17	3.00	1.50	1.00	.00	.00	.00	.00	.20	.60	.40
18	.50	.17	.67	.17	.50	.00	.00	.00	.20	.00	.60	.80
19	.17	.17	.17	.00	.00	.00	.00	.00	.20	.00	.80	.80
20	.67	.50	.00	.00	.00	.00	.00	.20	.20	.00	.60	.40
21	.67	.17	.00	.00	.17	.17	.00	.20	.60	.00	.60	.20
22	.33	.50	.17	.00	.17	.33	.00	.00	.40	.00	1.00	.60
23	.33	.17	.00	.00	.00	.17	.20	.00	.60	.00	.40	.20
24	.17	.67	.33	.00	.00	.00	.00	.60	.20	.00	.40	.00
Total Monthly Incidents of Neg.Pricing	14.83	28.33	30.33	20.33	19.67	8.00	3.80	3.80	9.60	14.40	22.80	24.40
Average Monthly Incidents of Neg.Pricing	1.19	2.27	2.43	1.63	1.57	.64	.30	.30	.77	1.15	1.82	1.95
Annual Adjustment Factor to be applied across 10-year forecast	7.41%	14.15%	15.14%	10.15%	9.82%	3.99%	1.90%	1.90%	4.79%	7.19%	11.38%	12.18%

RUSSEL_7_N007 RTM

Hour	January	February	March	April	May	June	July	August	September	October	November	December
1	.17	.17	.00	.83	.50	.33	.20	.40	.00	.00	.00	.40
2	.17	.17	.00	.83	.83	.50	.40	.20	.00	.00	.00	.40
3	.00	.33	.00	.83	1.00	.17	.40	.40	.00	.00	.00	.40
4	.00	.17	.00	.50	.83	.17	.20	.40	.00	.00	.00	.40
5	.00	.00	.17	.50	.50	.00	.20	.20	.00	.00	.00	.40
6	.00	.00	.00	.50	.50	.17	.20	.20	.00	.00	.00	.60
7	.00	.00	.00	.50	.33	.83	.20	.20	.00	.00	.00	.80
8	.00	.00	.00	.83	.33	.50	.40	.00	.20	.00	.00	.40
9	.00	.50	.33	1.17	1.00	.50	.20	.20	.00	.00	.00	.40
10	.00	1.00	.33	1.33	.67	.67	.00	.00	.00	.00	.00	.40
11	.00	1.00	.67	.83	.67	.67	.00	.00	.00	.20	.00	.40
12	.17	.33	.17	.67	1.00	.17	.00	.00	.00	.00	.00	.40
13	.17	.17	.50	1.33	.50	.17	.00	.00	.00	.00	.00	.40
14	.17	.17	1.00	1.17	.33	.17	.00	.00	.00	.00	.00	.20
15	.17	.67	1.50	1.00	.67	.17	.00	.00	.00	.00	.00	.20
16	.00	.83	2.17	1.00	.67	.17	.00	.20	.00	.00	.00	.20
17	.00	.33	1.17	1.17	.67	.33	.20	.00	.20	.00	.00	.20
18	.00	.00	.50	.33	1.00	.17	.00	.00	.20	.20	.00	.40
19	.00	.00	.17	.50	.50	.33	.20	.00	.00	.00	.00	.40
20	.00	.00	.00	.83	.33	.17	.00	.20	.00	.00	.00	.40
21	.00	.00	.00	1.00	.17	.67	.20	.00	.20	.00	.00	.40
22	.00	.17	.00	1.17	.33	.50	.20	.20	.00	.00	.00	.40
23	.00	.17	.00	.83	.33	.17	.00	.20	.20	.00	.00	.40
24	.00	.50	.33	1.67	.67	.33	.00	.20	.00	.00	.00	.40
Total Monthly Incidents of Neg.Pricing	1.00	6.67	9.00	21.33	14.33	8.00	3.20	3.20	1.00	.40	.00	9.40
Average Monthly Incidents of Neg.Pricing	.08	.53	.72	1.71	1.15	.64	.26	.26	.08	.03	.00	.75
Annual Adjustment Factor to be applied across 10-year forecast	1.29%	8.60%	11.61%	27.52%	18.49%	10.32%	4.13%	4.13%	1.29%	0.52%	0.00%	12.12%

XIII.3. Experience, to Date, With Managing Exposure to Negative Market Prices and/or Lessons Learned from Other Retail Sellers in California

SDCP is a new CCA organization. To date, SDCP has no experience managing exposure to negative price risk but understands that it should pay close attention to historical nodal energy prices at/near areas where prospective renewable generating facilities will/may be located. Gathering such information should facilitate an improved understanding of the frequency and significance of instances involving negative pricing and may influence project rankings within SDCP-administered solicitation processes. SDCP understands that negative pricing is more prevalent in certain geographic regions throughout the state, so contracting with generating resources located within or adjacent to such areas may expose the organization to higher-than-expected renewable energy/compliance costs. SDCP has also learned that certain contract structures, including "index plus" pricing arrangements, may substantially minimize the financial impacts related to negative pricing. For example, numerous CCAs have pursued the use of index-plus pricing structures and, as a result, such contracts are generally insulated from instances involving negative market prices and/or curtailment risk. Another effective mitigation measure for negative price risk is the co-located installation of battery storage infrastructure with intermittent renewable generating capacity. Such infrastructure generally allows the buyer to shift some or all (based on the size of the storage infrastructure) of the renewable energy production away from times of day when negative pricing can be particularly prevalent, allowing for the delivery of such power at times of day when market pricing is higher/stronger. SDCP will consider implementing similar contracting and curtailment bid cap arrangements, as well as the inclusion of energy storage infrastructure, to minimize the risk of curtailment and negative pricing. In fact, two of SDCP's initial three long-term renewable energy supply contracts incorporate the use of battery storage to facilitate the shifting of production curves to better align

with customer energy use and market pricing conditions. During its solicitation processes, SDCP will evaluate negative pricing history, as needed, for project opportunities that may expose the organization to such risks.

SDCP plans to pursue a diversified portfolio of RPS contracts that seek to utilize a variety of contract structures, generating technologies, resource locations, suppliers/developers, risk allocation mechanisms and other considerations. SDCP will continue to learn lessons from established CCAs, particularly with regard to negative price risk mitigation. For example, Sonoma Clean Power Authority ("SCPA") assesses procurement opportunities by evaluating the proposed project location and nearby historical negative pricing, including congestion, and pursues contract terms that recognize and limit the potential financial impacts of negative pricing (including curtailment rights that allow an appropriate level of economic curtailment by the buyer). Additionally, SCPA is exploring battery storage systems at existing resources that are particularly exposed to negative pricing. The above-mentioned strategies for reducing the risk of negative pricing will be considered by SDCP as part of its strategy to mitigate negative price that could impact its customers.

XIII.4. Direct Costs Incurred, to Date, for Incidences of Overgeneration and Associated Negative Market Prices

SDCP is a new CCA organization. Based on current supply contracts, it has yet to incur direct costs related to negative pricing (for incidences of overgeneration associated with renewable generating facilities).

XIII.5. An Overall Strategy for Managing the Overall Cost Impact of Increasing Incidences of Overgeneration and Negative Market Prices

In reviewing the RPS Procurement Plans of other CCAs, it is evident that direct costs associated with incidences of overgeneration are currently, for most CCAs, an unfortunate

reality. It is the goal of SDCP to minimize these costs wherever possible by investigating mitigation strategies and learning lessons from those CCAs that have been able to avoid negative pricing through certain contracting mechanisms and operational strategies. While curtailment is a viable renewable integration strategy that is generally more cost-effective than other options, there are potential negative consequences from excessive curtailment. Curtailment of solar and wind represents a lost opportunity to generate zero GHG- emitting electricity, and excessive curtailment could impact the ability of the state to meet its environmental and energy policy goals. Additionally, these over-supply situations expose ratepayers to increased costs because their LSEs must either economically curtail the generating resource (and often pay for the electricity that was not generated) or generate power and be exposed to negative prices. Because these conditions are largely driven by state policy, it is appropriate to consider macro-level mitigation measures through CAISO initiatives, Commission rulemakings, and possibly even legislation. There are a number of measures and policies that have already been implemented or are currently being pursued that will have significant impacts on curtailment in the future. This includes the expansion of the Energy Imbalance Market, improvements to the CAISO market design and structure, enhanced forecasting capabilities, time-of-use rates, improved EV charging functionalities, and smart deployment of distributed energy resources. The Commission's IRP proceeding will be an appropriate forum to measure the impact of these policies and the effect that they will have on future curtailment. These new measures will need to be modeled and incorporated into forecasts of future curtailment.

XIII.6. Contract Terms Included in RPS Contracts Intended to Reduce the Likelihood of Curtailment or Protect Against Negative Prices.

As described elsewhere in this RPS Procurement Plan, SDCP is aware of potential cost, compliance, and environmental impacts of negative market prices and associated curtailment of

renewable resources. As a new CCA, SDCP has the luxury of building its supply portfolio without any energy contracts that subject SDCP to curtailment and negative price risk similar to those in some of the IOU and CCA contracts that predate SDCP's existence and the prevalence of such significant occurrences of negative market prices. With the benefit of such hindsight and the opportunity to shape its supply portfolio with the lessons learned, SDCP has incorporated a number of strategies and relevant contract provisions to further reduce curtailment and negative price risk. Primarily, SDCP has not signed a PPA with a solar-only (i.e. not co-located or hybridized with energy storage) generating facility that exposes SDCP to any market price exposure; instead, SDCP has preferred to contract with solar-plus-storage hybrid facilities. When contracting for solar or wind output not associated with hybrid or co-located facilities, SDCP has pursued index-plus pricing structures or fixed-volume contracts to ensure the same protection against negative prices and reductions in deliveries due to curtailment. When contracting with hybrid facilities that result in exposure to market prices, SDCP has maintained full dispatch rights of the facility to ensure that it can shift deliveries from negatively priced intervals and into higher priced periods, both to increase market revenues received and to reduce the magnitude of curtailed renewable generation. As its supply portfolio becomes more complex and diverse, SDCP expects that curtailment and negative price risks may present themselves; SDCP is likely to employ these strategies in future contracting while monitoring, exploring, and evaluating additional techniques to hedge against these potential outcomes.

XIV. Cost Quantification

SDCP has updated its Cost Quantification Table, Appendix E, based on current renewable energy supply contracts and has extended the planning period reflected in this appendix through 2032. SDCP will continue to update such information in future RPS

procurement planning documents when new data points become available.

XV. Coordination with the IRP Proceeding

The resources identified in this RPS Procurement Plan are consistent with resources that were identified in SDCP's most recent IRP, which was approved by SDCP's governing board and provided to the Commission for certification on September 1, 2020. As required by the ACR,[28] SDCP includes the following table that describes how SDCP's 2022 RPS Procurement Plan conforms with the determinations made in the IRP proceedings (R.16-02-007, R.20-05-003 and D.22-02-004). As required, SDCP will highlight the interrelationships of its RPS and IRP planning processes in a future iteration of this RPS Procurement Plan. The following table reflects SDCP's most recent updates, as reflected in its RPS Procurement Plan, regarding RPS alignment with the IRP process.

<table>
<tr><th>IRP Section
Subsection</th><th colspan="2">RPS Alignment in IRP</th></tr>
<tr><td rowspan="2">III. Study Results
A. Preferred and Conforming Portfolios</td><td colspan="2">Retail sellers should explain how the RPS resources they plan to procure, outlined in their RPS Plan, will align with each portfolio to be developed in their IRP. In addition to the list of the IRP portfolios developed and portfolio descriptions submitted for Commission approval and certification in IRP Plans, this should include:</td></tr>
<tr><td>1. Existing RPS resources that the retail seller owns or contracts.
2. Existing RPS resources that the retail seller plans to contract with in the future.
3. New RPS resources that the retail seller plans to</td><td>As part of its 2022 IRP filing, SDCP submitted two Preferred Conforming Portfolios that achieve its proportional share of both the 30 and 25 MMT GHG targets by 2035. These targets were in addition to the requirements in D.22-02-004 which require LSEs to meet their proportional share of the 2030 target of 38 MMT and plan for a 2030 target of 30 MMT. Because SDCP has yet to finalize its initial long-term RPS supply commitments that will contribute to the achievement of such portfolio goals, this document reflects those resources that SDCP intends to contract with in the future. Such</td></tr>
</table>

[28] See ACR at 32-35.

	invest in.
	
	4. New and existing resources that will be used to meet Mid-Term Reliability obligations adopted in D.21-06-035.
		procurement efforts are expected to contribute to the achievement of relevant GHG targets as well as RPS procurement requirements, including the 65% long-term contracting requirement.
		
		Description of 2022 Conforming Portfolios:
		
		• 30 MMT Conforming Portfolio: Portfolio that achieves SDCP's proportional share of a 30 MMT statewide GHG target.
		  o The 30 MMT Conforming Portfolio assumed the use of new RPS resources not yet placed under contract, including: 1,425 MW of new hybrid resources (which would include 750 MW of battery storage to promote grid reliability); 550 MW of new wind resources; and 100 MW of new geothermal resources
		  o The 30 MMT Conforming Portfolio also assumed the use of existing RPS resources not yet placed under contract, including: 250 MW of existing wind resources
		  o SDCP's 30 MMT portfolio conformed to the procurement timing, resource quantities, and general resource attributes identified in the 30 MMT reference system plan.
		• 25 MMT Conforming Portfolio: Portfolio that achieves SDCP's proportional share of a 25 MMT statewide GHG target.
		  o The 25 MMT Conforming Portfolio assumed the use of new RPS resources not yet placed under contract, including: 1,425 MW of new hybrid resources (which would include 750 MW of battery storage to promote grid reliability); 550 MW of new wind resources; and 100 MW of new geothermal resources.

		○ The 25 MMT Conforming Portfolio also assumed the use of existing RPS resources not yet placed under contract, including: 250 MW of existing wind resources. ○ SDCP's 25 MMT portfolio conformed to the procurement timing, resource quantities, and general resource attributes identified in the 25 MMT reference system plan. Meeting the Mid-Term Reliability obligations from D.21-06-035: ○ SDCP expects to meet Mid-Term Reliability ("MTR") obligations via resources that are currently under contract (scheduled to achieve commercial operation in 2023 and 2024) or under negotiation (to be online in 2023 through 2025). SDCP's next RPS RFO will address any outstanding requirements for resources to be online in 2025 or, should they present, in 2023 or 2024. With respect to Long Leadtime obligations for resources to be online in 2026, SDCP closed its solicitation on July 6, 2022 for "clean firm" resources and plans to release another solicitation for long-duration energy storage resources in 2023. Additionally, SDCP issued an RFP in October 2022 seeking resources that could be online between 2024-2026.
IV. Action Plan **A. Proposed Activities**	Retail sellers should describe how they propose to use RPS resources to implement their Preferred Portfolio. Narratives should include:	
	1. Proposed RPS procurement activities as required by Commission	To ensure compliance with its GHG and RPS targets, SDCP plans to substantially rely on GHG-free and RPS-eligible resources while contributing to statewide reliability

	decision or mandated procurement. *2. Description of RPS resources identified in the Study Results section that correspond to proposed activities.* *3. Procurement plans, potential barriers, and resource viability for each new RPS resource identified.*	requirements and responsibly managing overall portfolio costs. This approach is generally consistent between the 30 MMT Conforming Portfolio and 25 MMT Conforming Portfolio in the 2022 IRP Plan. In its IRP, SDCP also established that its planned incremental capacity exceeds its pro rata share of capacity that may be needed for replacement of Diablo Canyon. These resources are further described in SDCP's 2022 IRP and, following collaboration with SDG&E to realign MTR procurement obligations and associated procurement and contract administration, SDCP maintains the expectation that its capacity from resources under contract and currently in negotiation will exceed requirements related to replacement of Diablo Canyon SDCP expects to administer future solicitation processes to fill outstanding resource needs required to meet portfolio specifications reflected in its 30 MMT and 25 MMT Preferred Conforming Portfolios as well as ongoing RPS procurement obligations. As noted elsewhere in this RPS Procurement Plan, SDCP will update the Commission with regard to the outcomes of its current long-term RPS contract negotiations in a future iteration of this planning process. SDCP does not foresee any barriers or viability concerns related to its requisite resource commitments but will advise the Commission if this impression changes over time.
IV. Action Plan **B. Procurement Activities**	The retail seller should describe the solicitation strategies for the RPS resources that will be included in their Preferred Portfolio. This description should include:	
	1. The type of solicitation. *2. The timeline for each solicitation.* *3. Desired online dates.* *4. Other relevant*	SDCP may participate in distinct solicitations for different products (for example: specific renewable energy products, generating resources or storage infrastructure), or it may choose to solicit multiple products in the same solicitation. These solicitations will be competitive and may be similar to SDCP's initial long-term RPS solicitation, which was

	procurement planning	previously described in this RPS Procurement Plan. SDCP will administer future solicitations, as necessary, to promote consistency with the resource development plan identified in the IRP (for purposes of promoting achievement with state-mandated RPS targets as well as SDCP's internal targets). As noted above, SDCP anticipates administering upcoming solicitation activities consistent with the process and timeline described in Section I. During administration of future procurement processes, SDCP will utilize the evaluative and contract management processes (further described above in Section X and elsewhere in this Plan) to promote timely project completion and improve planning certainty.
IV. Action Plan **C. Potential Barriers**	Retail sellers should provide a summary of the barriers that will be identified in their Preferred Portfolio as they relate to RPS resources. The section should include:	
	1. Key market, regulatory, financial, or other resource viability barriers or risks associated with the RPS resources coming online in retail sellers' Preferred Portfolios. *2. Key risks associated with the potential retirement of existing RPS resources on which the retail seller intends to rely in the future.*	SDCP does not expect any procurement barriers to impede its future contracting for new renewable energy resources, but notes that even though a balanced, diverse RPS portfolio is desirable, the limited resource availability and lead time required for some technology types may necessitate planning flexibility. SDCP also observes that the rigorous demands of California's RPS program, particularly the currently effect 65 percent long-term contracting mandate, may necessitate contracting activities with a portfolio of resources that will evolve considerably over time – more specifically, SDCP may need to pursue initial supply commitments with a portfolio of resources that does not exactly reflect its eventual/ideal characteristics related resource diversity and/or reliability. Pursuit of such portfolio characteristics will continue to be a work in progress during SDCP's first several procurement efforts and will evolve throughout the upcoming 10-year planning period.

		The key risk affecting SDCP's achievement of the 46 MMT and 38 MMT Preferred Conforming IRP Portfolios in the 2020 IRP Plan and the 30 MMT and 25 MMT portfolios in the 2022 IRP Plan is reliance on new resources – while SDCP intends to contract with highly experienced and qualified project developers (when new-build resources are deemed necessary), there is always a limited risk of project failure. In consideration of SDCP's existing RPS contract negotiation processes that will support achievement of parameters of the Preferred Conforming IRP Portfolios, it does not have any substantive concerns regarding its ability to fulfill and achieve levels of renewable energy procurement that will be required to satisfy pertinent RPS mandates or IRP targets. If such concerns happen to change in the future, SDCP will accordingly notify the Commission in a subsequent iteration of this planning process.

Dated: January 18, 2023

Respectfully submitted,

/s/ *Karin Burns*

Karin Burns
Chief Executive Officer
San Diego Community Power
815 E Street, Suite 12716
San Diego, CA 92112
(619) 657-0060
kburns@sdcommunitypower.org

Appendix A

Redlined Version of Final 202 RPS Plan

(Public Version)

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Continue Implementation and Administration, and Consider Further Development, of California Renewables Portfolio Standard Program	Rulemaking 18-07-003 (Filed July 12, 2018)

FINAL~~UPDATED DRAFT~~ 2022 RENEWABLES PORTFOLIO STANDARD PROCUREMENT PLAN OF SAN DIEGO COMMUNITY POWER

PUBLIC VERSION

Karin Burns
Chief Executive Officer
San Diego Community Power
815 E Street, Suite 12716
San Diego, CA 92112
(619) 657-0060
kburns@sdcommunitypower.org

Dated: January 18, 2023~~August 15, 2022~~

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Continue Implementation and Administration, and Consider Further Development, of California Renewables Portfolio Standard Program	Rulemaking 18-07-003 (Filed July 12, 2018)

FINAL~~UPDATED DRAFT~~ 2022 RENEWABLES PORTFOLIO STANDARD PROCUREMENT PLAN OF SAN DIEGO COMMUNITY POWER

PUBLIC VERSION

In accordance with the California Public Utilities Commission's ("Commission") March 30, 2021 *Assigned Commissioner and Assigned Administrative Law Judges' Ruling Identifying Issues and Schedule of Review for 2022 Renewables Portfolio Standard Procurement Plans and Denying Joint IOUs' Motion to File Advice Letters for Market Offer Process* ("ACR") and the *Decision on 2022 RPS Procurement Plans* ("D.22-12-030"), San Diego Community Power ("SDCP") hereby submits its Final~~Updated Draft~~ 2022 Renewables Portfolio Standard Procurement Plan ("RPS Procurement Plan"). This RPS Procurement Plan includes responses to the issues listed in sections 6.1-6.16 of the ACR. ~~This update to SDCP's RPS Procurement Plan provides finalized information on SDCP's acceptance of allocations in the Voluntary Allocation Market Offer ("VAMO") process.~~

SDCP notes that certain issues and requests in these ACR sections apply to other retail sellers (electrical corporations and electric service providers) and do not extend to Community Choice Aggregators ("CCAs"). SDCP is nevertheless voluntarily responding to these ACR sections in the interest of transparency and to collaborate with the Commission. The submission of this RPS Procurement Plan pursuant to the ACR, however, should not be construed as a waiver of the right to assert that components of Senate Bill ("SB") 350, or Commission decisions

and rulings on RPS Procurement Plan submittals, do not extend to CCAs, and SDCP reserves the right to challenge any such assertion of jurisdiction over these matters.

In reviewing this RPS Procurement Plan, SDCP encourages the Commission to consider the considerable differences between California's investor-owned utilities ("IOUs") and other retail sellers, including CCAs – differing levels of detail, procedure, complexity, and coordination are appropriate within the planning documents submitted by small, medium, and large organizations; and where the Commission may be inclined to identify informational deficiencies in certain areas (based on inevitable differences between content provided in the RPS Procurement Plans of California's IOUs and CCA programs), SDCP encourages the Commission to consider whether it is appropriate to utilize a "one size fits most/all" approach in managing widely varying RPS planning and procurement obligations. The Commission is also encouraged to consider the differing operational stages of reporting load serving entities ("LSEs"). Certain direction and guidance provided in Decision ("D.") 21-01-005 seems to suggest that each element of the RPS planning process should be universally applicable across all LSEs, regardless of pertinent operational status, and that is not the case. For example, it is likely inappropriate and relatively unhelpful for a newer CCA organization, like SDCP, to prepare a ten-year negative price forecast or curtailment analysis when such information would not necessarily be instructive when administering SDCP's existing RPS contracts – given the heightened attention and related information focused on changing market conditions, increased incidents of negative pricing and related energy curtailment, all LSEs are aware, to some extent, of these potential risk factors, but that does not mean that a related forecasting effort or other form of analysis would provide useful information to each LSE. For example, a generalized ten-year negative price forecast or curtailment analysis would have no meaning for a new LSE

without existing contractual commitments or if its contractual commitments did not expose the buyer to negative price risk (due to the application of settlement mechanisms and/or fixed volumetric commitments that eliminate such concerns). Similarly, it would not make sense for an LSE to prepare forward curtailment estimates if its renewable contract portfolio did not include contracts reflecting such exposure. Again, SDCP encourages the Commission to consider the appropriateness of universally requiring certain information within this planning process when such information may not be relevant or useful to the reporting entity – certain sections of these plans should be marked as "if necessary" or "if applicable" without the assumption that all LSEs should be comprehensively responsive in addressing such topics. While there may be some commonalities among planning and procurement practices reflected in the various RPS Procurement Plans submitted through this process, it is reasonable to assume that noteworthy differences may be prevalent, particularly when considering plans submitted by the IOUs and other retail sellers.

SDCP would also like to note that certain required elements of the RPS procurement planning process will evolve over time, particularly the organization's approach to assessing risk and establishing RPS planning reserves (namely, any minimum margin of over-procurement that may be established by SDCP's governing board). SDCP is a relatively new CCA organization that commenced retail electric service to participating customers in March 2021, and as facts and circumstances evolve and experience is gained over time, it will progressively elaborate on various topics in future RPS planning filings. For example, this ~~Draft~~Final 2022 RPS Procurement Plan now includes additional information regarding SDCP's recently implemented risk assessment process, including a description of its assessment methodology and a summary of related results. Such detail can be found in Section VII (below).

With regard to understanding the consequences of compliance shortfalls, SDCP is appreciative of both direct (*e.g.*, financial penalties and findings of non-compliance) and indirect impacts (*e.g.*, reputational damage that might accrue to participating communities or CCA organizations, generally) associated with such deficiencies and has chosen to pursue risk mitigation measures that are considerate of SDCP's aversion to such risks, as well as the related administrative complexity, cost and rigor that were deemed appropriate to achieve the desired level of mitigation, particularly during early-stage program operation. When undertaking CCA phase-in activities and early-stage planning efforts focused on renewable energy procurement, the completion of elaborate risk analyses and costly studies was not deemed necessary or desirable by SDCP, but as SDCP's resource planning activities have evolved, it has become increasingly important to evaluate prospective RPS delivery uncertainty and compliance risk in a more deliberate and detailed manner. With this in mind, SDCP has developed a risk assessment methodology of its own, as further described below, that quantifies the risk of RPS-related delivery shortfalls to inform the sufficiency of its adopted minimum margin of procurement.

As noted in previous planning documents, SDCP remains attentive to evolving market pricing conditions and will continue to evaluate historical pricing within geographic areas where renewable energy procurement opportunities are being considered, so long as the settlement structures associated with such procurement opportunities expose SDCP to market-based pricing risk. For now, SDCP has elected to pursue risk mitigation measures that are focused on: 1) the identification of highly qualified renewable energy suppliers – based on SDCP's recently completed risk assessment and the assignment of risk ratings/scores related to key risk factors, the identification of highly experienced/well qualified RPS suppliers remains the most important

consideration in ensuring that contracted RPS deliveries are fulfilled according to plan; 2) substantial levels of over-procurement created by SDCP's initial renewable energy procurement target that commences at 50 percent and increases over time; and 3) the pursuit of contract structures that minimize the risk of delivery shortfalls by providing SDCP with fixed delivery quantities and/or financial protections that generally offset the impacts of financial penalties (prescribed under the RPS Program) in the event of non- or under-delivery.

I. Major Changes to RPS Plan

This Section describes the most significant changes between SDCP's Final 2021 RPS Procurement Plan and its Final~~Updated Draft~~ 2022 RPS Procurement Plan. A redline of this Final~~Draft~~ 2022 RPS Procurement Plan against SDCP's Updated Draft 2022~~Final 2021~~ RPS Procurement Plan is included as Appendix A. The table below provides a list of key differences between SDCP's Final 2021 RPS Procurement Plan and this Final~~Draft~~ 2022 RPS Procurement Plan:

Plan Reference	Plan Section	Summary/Justification of Change
Final~~Draft~~ 2022 RPS Procurement Plan: Introduction	Introduction	Updated to reference pertinent sections of the 2022 ACR that SDCP must address.
Final~~Draft~~ 2022 RPS Procurement Plan: Section II	Executive Summary	Updated to reflect the changes made throughout other sections of this RPS Plan; updated to indicate SDCP's recent Member Agency expansion launch in February 2022.
Final~~Draft~~ 2022 RPS Procurement Plan: Section III	Summary of Legislation Compliance	Updated to reflect changes in Section requirements.

Plan Reference	Plan Section	Summary/Justification of Change
Final~~Draft~~ 2022 RPS Procurement Plan: Section IV	Portfolio Optimization	Updated to include discussion regarding SDCP's recent resource planning progress; updated to acknowledge the May 20, 2021 adoption of Decision 21-05-030, which implements the Voluntary Allocation Market Offer proposal/framework, and RPS planning implications.
Final~~Draft~~ 2022 RPS Procurement Plan: Section IV.B	Responsiveness to Local and Regional Policies	Updated to describe impacts of local and regional policies on procurement targets, bid solicitation protocols, and forecasted supply.
Final~~Draft~~ 2022 RPS Procurement Plan: Section IV.B.1	Long-Term Procurement	Updated with relevant supporting information on how SDCP's ongoing procurement efforts are expected to meet the requirements of SB 350's long-term contracting for Compliance Period 4 (2021-2024) and beyond, including references to the impacts of SDCP's long-term VAMO elections on its RPS compliance obligations.
Final~~Draft~~ 2022 RPS Procurement Plan: Section V	Project Development Status Update	Updated Appendix D to reflect the current status of SDCP's new-build renewable generating projects.
Final~~Draft~~ 2022 RPS Procurement Plan: Section VII	Risk Assessment	Added narrative addressing SDCP's recently completed risk assessment, including a summary of results related to such analysis.
Final~~Draft~~ 2022 RPS Procurement Plan: Section VIII	Renewable Net Short Calculation	Updated Appendix C to reflect recent ongoing procurement efforts and prescribed changes to the planning period, which now extends through 2032.
Final~~Draft~~ 2022 RPS Procurement Plan: Section XIV	Cost Quantification	Updated Appendix E to reflect ongoing procurement efforts and prescribed changes to the planning period, which now extends through 2032.

SDCP timely commenced CCA service in March 2021 – such timing was consistent with information reflected in SDCP's Community Choice Aggregation Plan and Statement of Intent

("CCA Implementation Plan"), which was electronically served on all parties of record in proceedings R.17-09-020, R.16-02-007, and R.03-10-003 on December 9, 2019 and subsequently certified by the Commission on March 9, 2020. Based on current load and customer forecasts, which now include assumptions related to upcoming expansion activities in 2023, SDCP plans to serve approximately 930,000 service accounts located within the cities of Chula Vista, Encinitas, Imperial Beach, La Mesa, National City and San Diego as well as the unincorporated areas of San Diego County (together, the "Member Agencies"), which are expected to consume approximately 8,400 GWh per year following completion of all customer phase-in activities in 2023. In 2022, and until upcoming (2023) expansion activities are complete, SDCP's anticipates serving about 730,000 customer accounts that are expected to consume about 5,300 GWh, as reflected in Appendix C.

II. Executive Summary

San Diego Community Power is a CCA program that commenced retail electric service in March 2021 to certain customers located within the cities of San Diego, Encinitas, La Mesa, Chula Vista, and Imperial Beach. SDCP was formed when these five Member Agencies created a Joint Powers Authority, effective October 1, 2019.[1] SDCP submitted its CCA Implementation Plan, which was certified by the Commission on March 9, 2020, to address the anticipated consequences of CCA formation.[2] Since it commenced service in March 2021, SDCP successfully completed planned phase-in activities, which have increased the number of customer accounts as well as related retail electric energy requirements. As reflected in

[1] See *Joint Powers Agreement*, San Diego Regional Community Choice Energy Authority, October 1, 2019, available at https://www.sandiego.gov/sites/default/files/sdrccea_jpa_agreement_signed_0.pdf.

[2] See *Letter Certifying San Diego Community Power's Implementation Plan and Statement of Intent*, California Public Utilities Commission, March 9, 2020.

Appendix C, actual retail electricity sales in 2021 approximated 2,000 GWh (with customer account totals approximating 70,000 as of December 31, 2021). By the end of 2022, annual retail sales are expected to increase by approximately 159% to 5,300 GWh with service provided to more than 730,000 customer accounts.

In November 2021, SDCP's Governing Board approved submittal of Addendum No. 1 to the Community Choice Aggregation Implementation Plan and Statement of Intent to Address Expansion to the City of National City and the unincorporated areas of San Diego County ("Addendum No. 1"); Addendum No. 1 was subsequently submitted to the Commission on December 22, 2021 and was also served to parties of record in proceedings R. 03-10-003, R.20-05-003, R.19-11-009, and R.21-10-002 on that day. Addendum No. 1 was later certified by the CPUC's Energy Division on February 28, 2022. As the document's title suggests, Addendum No. 1 addresses the prospective expansion of SDCP's service territory to include the noted municipalities with related customer service expected to commence in April 2023. Now that SDCP is in receipt of Energy Division's certification of Addendum No. 1, the anticipated increases in retail sales and related RPS purchases associated with this upcoming expansion are being considered in SDCP's RPS planning and procurement processes and are also reflected in Appendix C of this Plan. SDCP is aware of the increased RPS procurement obligation associated with future increases to its retail electricity sales and, as such, has already engaged in certain RPS planning and procurement activities to proactively address these future needs, including upcoming impacts to long-term contracting requirements.

At launch, SDCP's governing 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, as reflected elsewhere in this document and its appendices. During its renewable energy procurement efforts, SDCP has focused exclusively on Portfolio Content Category ("PCC") 1 and 2 product types (with a strong preference for PCC1 products).[3] This considerable commitment to renewable energy procurement during early-stage CCA operations is expected to result in meaningful planning reserves, which will provide compliance buffers in the event that contracted renewable energy purchases are not fulfilled as expected – this topic is further discussed in relation to SDCP's adopted voluntary margin of over-procurement ("VMoP"). To address RPS compliance risk, SDCP uses its risk assessment, including its renewable net short calculations, to establish a Minimum Margin of Procurement ("MMoP") to guide RPS compliance procurement planning. SDCP calculated its MMoP using a 10% risk adjustment that was applied to SDCP's minimum internally adopted RPS procurement targets (set at 50% upon program launch in 2021, increasing to 85% by 2030). SDCP's internally adopted renewable energy procurement goals provide a meaningful buffer above the state's RPS requirements and serve as VMoP, which will exceed statewide RPS mandates by at least 15 percent in each year of the planning period, which now extends through 2032. Considered in concert, SDCP's VMoP and MMoP provide a substantial aggregate renewable energy planning buffer, virtually eliminating the possibility of compliance shortfalls during continued SDCP operation.

SDCP also acknowledges that its renewable energy targets and related planning reserves could be periodically evaluated and adjusted by its governing board – such a determination could

[3] See *San Diego Community Power Community Choice Aggregation Implementation Plan and Statement of Intent*, December 9, 2019, available at http://sdcommunitypower.org/resources/key-documents/.

be based on the manner in which actual renewable energy purchases/deliveries relate to applicable mandates and internally adopted targets, project development progress for new-build renewable generating facilities, generalized renewable product availability, the extent to which prospective RPS deliveries under the VAMO process conform with related projections, load variability that may occur during customer enrollment periods, budgetary impacts, and/or various other considerations.

Reducing electric utility sector greenhouse gas ("GHG") emissions generated by residents and businesses within SDCP's Member Agencies was a driving factor in the formation of SDCP. Climate Action Plans ("CAP") adopted by SDCP's Member Agencies establish a variety of GHG reduction and clean energy goals within their respective jurisdictions as detailed in Section IV.B.ii (below). The Member Agencies intend to contribute to achieving their CAP goals collaboratively by operating SDCP to provide electric energy to residential, commercial and governmental electric accounts located within their communities.

SDCP's initial long-term RPS solicitation was issued on June 29, 2020 and was very successful in recruiting interest from qualified suppliers of such products. Since that time, SDCP's negotiation efforts have resulted in the execution of four unique long-term PCC1 supply agreements, which include: 1) a long-term (20-year) PCC1 supply agreement with Vikings Energy Farm, LLC, executed on May 3, 2021, which will cause the delivery of approximately 250,000 MWh per year of renewable energy produced by a new 100 megawatt photovoltaic solar array (plus battery storage) located in Imperial County that is expected to commence commercial operation in June 2023; 2) a long-term (20-year) PCC1 supply agreement with JVR Energy Park, LLC, executed on June 4, 2021, which will cause the delivery of approximately 260,000 MWh per year of renewable energy produced by a new 90 megawatt photovoltaic solar array (plus

battery storage) located in San Diego County that is expected to commence commercial operation in March 2023; 3) a long-term (15-year) PCC1 supply agreement with IP Oberon, LLC, executed on June 11, 2021, which will cause the delivery of approximately 225,000 MWh per year of renewable energy produced by a new 75 megawatt photovoltaic solar array located in Riverside County that is expected to commence commercial operation in late 2023 or early 2024; and 4) a long-term (10-year) PCC1 supply agreement with Duran Mesa LLC, executed January 27, 2022, which will cause the delivery of approximately 170,000 MWh per year of renewable energy produced by 50 MW of new wind capacity located in Torrance County, New Mexico that recently achieved commercial operation (on November 30, 2021, as reflected in the California Energy Commission's associated certificate for this project) and began delivering power to SDCP on February 1, 2022.

Concurrent with its negotiation of the above four long-term power purchase agreements, SDCP also completed bilateral negotiations of a long-term contract for bundled renewable energy supply from San Diego Gas & Electric ("SDG&E"), the incumbent IOU, and its portfolio of long-term renewable energy contracts. The unique structure of this contract is intended to serve as a vehicle via which SDCP can purchase from SDG&E its elected allocation of bundled, long-term renewable energy; that is, the contract sets a baseline annual volume of bundled, renewable deliveries between 2022 and 2033, which has been adjusted to reflect SDCP's allocation volume as determined through the VAMO mechanism. SDG&E filed the resulting contract for Commission approval in SDG&E AL 3936-E, which was subsequently received on May 19, 2022. Initial deliveries will occur, as expected, in July 2022; this agreement will meaningfully increase SDCP's long-term PCC1 position in Compliance Period 4 ("CP4", 2021-2024) and beyond.

To encourage local development of renewable energy and carbon-free free energy storage projects and to inform upcoming solicitations by better understanding current opportunities for contracting such facilities, SDCP issued a Request for Information for Local Renewable Energy and Energy Storage ("Local RFI") in August 2021. Subsequently, SDCP is negotiating power purchase agreements with two prospective long-term PCC1 suppliers. Because such contracting opportunities remain under negotiation and are confidential, SDCP is unable to further elaborate until these contracts have been finalized, approved and executed.

SDCP expects to administer other solicitations for short- and long-term renewable energy supply, as well as other procurement activities, that will be necessary to meet its adopted portfolio objectives. Completed and upcoming renewable energy planning and procurement activities administered by SDCP include the following:

1) COMPLETE – approval of SDCP's Feed-In Tariff Program ("FIT") was received and this program is now active. SDCP's FIT program is expected to support locally-situated, small-scale RPS-eligible renewable energy projects, which will marginally increase long-term PCC1 supply while supporting local economic development activity and workforce utilization. Additional detail regarding SDCP's FIT program is available via the following link: https://sdcommunitypower.org/programs/feed-in-tariff/;
2) COMPLETE – SDCP completed negotiations of long-term PCC1 supply agreements with SDG&E (contract execution on December 20, 2021) and Duran Mesa, LLC (contract execution on January 27, 2022) in late 2021 and 2022, respectively. Deliveries under the Duran Mesa agreement commenced in February 2022. Deliveries from SDG&E are expected to occur in 2022 as well. ;

3) COMPLETE – SDCP participated in VAMO implementation and elected to receive 100 percent of its long-term Voluntary Allocation share from SDG&E. SDCP notified SDG&E of its Voluntary Allocation election agreement on July 29, 2022. Deliveries from SDG&E are expected to begin on January 1, 2023;
4) Q2 2022 – SDCP has administered short-term RPS solicitations to fill known open positions related to RPS products. Contracts have been executed with short-listed suppliers and expected deliveries are now reflected in Appendix C of this Plan. SDCP will continue to administer solicitations for such products, as necessary, and will update future planning documents to the extent such solicitations result in additional procurements;
5) Q2 2022 – SDCP released a targeted solicitation for long-term, new-build supply from "clean firm" renewable energy sources, which SDCP staff expect to be fueled by geothermal or bioenergy renewable energy, to be online by 2026 to meet the relevant requirements within the CPUC's Mid-Term Reliability ("MTR") procurement order. These offers are due on July 6, 2022, upon which time SDCP will review conforming offers and enter negotiations with those that its executive team and Energy Contract Working Group determine to be compelling.
6) Q3 2022 – SDCP expects to release a targeted solicitation for long-term, new-build "long duration storage" capacity to be online by 2026 to meet the relevant requirements within the CPUC's Mid-Term Reliability ("MTR") procurement order. Upon receipt of offers as delineated in the forthcoming solicitation materials, SDCP will review conforming offers and enter negotiations with those

that its executive team and Energy Contract Working Group determine to be compelling.

7) Late Q3 2022/Q4 2022 – expected release of SDCP's second long-term renewable energy solicitation for all renewable resources. SDCP is evaluating the scope of this solicitation and will finalize its plans to reflect recent VAMO allocation elections. SDCP had delayed the release of this solicitation (which was originally scheduled for late-Q2 2022), as acceptance of significant VAMO allocations has meaningfully reduced open positions for long-term RPS products in Compliance Period 4;
8) Q4 2022 – expected receipt of offers related to second long-term renewable energy solicitation, if released in Q3 2022;
9) Q4 2022/Q1 2023 – evaluation of RFP responses and selection of short-listed respondents, if released in Q3 2022;
10) Q1 2023 – commencement of contract negotiations with short-listed respondents (to SDCP's second long-term RPS solicitation), if the long-term solicitation is released in Q3 2022;
11) Q1 2023 – finalization of long-term RPS contract negotiations, contract approval and execution, if the long-term solicitation is released in Q3 2022; and
12) CY 2024 and 2025 – commencement of initial deliveries under executed long-term renewable supply contract(s) resulting from SDCP's second long-term RPS solicitation, if released in Q3 2022.

SDCP is also aware that renewable energy procurement activities must be timely completed to ensure the achievement of noted renewable energy targets, so it intends to continue

coordinating such activities with upcoming customer phase-in and expansion activities, as noted above. These procurement efforts will be focused on securing necessary short-term and long-term renewable energy supply, the latter of which will be intended to facilitate compliance with California's 65 percent long-term contracting requirement, which became effective in 2021. SDCP acknowledges that certain long-term renewable contracting opportunities may require substantial lead time, particularly opportunities related to new-build renewable generating facilities. SDCP is aware that there may be lingering impacts of the pandemic on new-build renewable generating projects which may be heavily reliant on international supply chains to ensure timely completion. There are challenges in determining the extent to which such effects will be experienced by SDCP and other buyers, but SDCP hopes to learn more by monitoring development progress of new renewable generating facilities that have been recently placed under contract. With time, SDCP remains optimistic that it will be able to facilitate a meaningful level of new renewable infrastructure buildout through its ongoing renewable energy contracting efforts and expects to confirm such expectations as it moves forward.

During administration of its ongoing renewable energy solicitation activities, SDCP will gauge prospective supplier interest and potential concerns associated with new CCA programs and long-term supply commitments – the long-term contracting requirement and its lack of an "on ramp" for new retail sellers is expected to necessitate the execution of several long-term renewable energy supply commitments with product delivery to begin shortly after CCA service commencement. SDCP's long-term bundled transactions with Duran Mesa Wind and SDG&E are two necessary steps to secure such supply commitments as part of its resource planning and RPS compliance activities. While this immediate requirement for renewable generation to be delivered under long-term contracts is not ideal for resource planning from the perspective of a

recently established CCA, SDCP is aware of potential repercussions associated with RPS compliance shortfalls and, with such concerns in mind, is committed to pursuing RPS contracting opportunities that will satisfy pertinent mandates, plus sufficient planning reserves.

As part of its ongoing planning process, SDCP is also considering the manner in which renewable energy compliance risks will be assessed and mitigated. One key element of this process included the adoption of a formal Energy Risk Management Policy ("ERM Policy")[4], which occurred at the regularly scheduled meeting of SDCP's governing board on June 25, 2020. The ERM Policy addresses various types of risk and establishes related oversight in managing SDCP's various portfolio positions, control procedures and delegations of authority (related to the procurement of various energy and capacity products). SDCP's ERM Policy also necessitates formation of a Risk Oversight Committee ("ROC"), which meets on a regular basis to monitor SDCP's procurement efforts, open positions, counterparty credit exposure and other concerns. Staff provides SDCP's ROC with various deal tracking and position reports to keep program management apprised of ongoing progress in meeting statewide compliance mandates and SDCP's internally adopted renewable planning targets, which exceed statewide mandates. The ROC also receives updates regarding the development progress of new-build renewable generating facilities that are expected to contribute to SDCP's RPS compliance mandates. In addition to the noted ERM Policy and ROC, SDCP's Managing Director of Power Services oversees the day-to-day management of resource planning, power supply acquisition, and related compliance activities and ensures ongoing coordination with SDCP's suppliers.

Initial discussion among SDCP's executive leadership, power services staff, technical advisors, and Finance and Risk Management Committee (another SDCP committee intended to

[4] See *San Diego Community Power Energy Risk Management Policy*, June 25, 2020.

monitor program finances and risk) suggests that managing early-stage compliance risk is dependent upon the identification and selection of highly experienced and financially viable sellers during the administration of renewable energy solicitation processes. This understanding is supported by conversations with leadership of longer-standing California CCAs, which emphasized the importance of such an approach during early-stage renewable energy procurement efforts; such CCAs noted that the timing of early-stage RPS planning and procurement efforts (and the proximity of such efforts relative to imposition of the 65% long-term contracting mandate) necessitated considerable reliance on: 1) existing renewable generating facilities; and/or 2) highly experienced project developers with strong track records of timely project completion. At this time, the fundamental RPS-related risk to SDCP is insufficiency of its existing contractual commitments, but considering its recently executed long-term contracts and allocation elections via VAMO, SDCP remains confident that current renewable energy open positions will be significantly reduced in the near future. Given SDCP's gross RPS procurement needs and existing procurement efforts, a quantitative risk assessment was recently completed by SDCP. The results of such assessment are presented below, including a description of the methodology used to complete it. As SDCP continues to update its risk assessment based on future contracting efforts and its impressions of various sources of RPS delivery risk, it will elaborate on its findings in a future RPS Procurement Plan.

SDCP will carefully monitor the performance of selected renewable energy suppliers relative to projected RPS requirements and will augment procurement efforts in the event that actual renewable deliveries fall below projections. Based on SDCP's minimum 50 percent renewable procurement target, the organization could suffer significant delivery shortfalls while still satisfying statewide compliance mandates.

III. Summary of Legislative Compliance

This RPS Procurement Plan addresses the requirements of all relevant legislation and the Commission's regulatory framework. This Section describes the relevant statutory and regulatory requirements and how this RPS Procurement Plan demonstrates that SDCP will meet such requirements.

Senate Bill ("SB") 350 (stats. 2015) was signed by the Governor on October 7, 2015. SB 350 set a new RPS procurement target of 50 percent by December 31, 2030. On December 20, 2016, the Commission issued D.16-12-040, which partially implemented the increased targets of SB 350 by establishing new compliance periods and procurement quantity requirements. On July 5, 2017, the Commission issued D.17-06-026, which implemented some of the key remaining elements of SB 350, including adopting new minimum procurement requirements for long-term contracts and owned resources, as well as revising the excess procurement rules.

SB 100 was signed by the Governor on September 10, 2018, and became effective on January 1, 2019. SB 100 increased the RPS procurement requirements to 44 percent by December 31, 2024, 52 percent by December 31, 2027, and 60 percent by December 31, 2030. On June 6, 2018, the Commission issued D.18-05-026, which implemented changes made by SB 350 to the RPS waiver process and reaffirmed the existing RPS penalty scheme. In July of 2018, the Commission instituted Rulemaking 18-07-003 to continue the implementation of the RPS program. On June 28, 2019, the Commission issued D.19-06-023, which continues to use a straight-line method to calculate compliance period procurement quantity requirements.

The current RPS procurement targets are incorporated into SDCP's Renewable Net Short Calculation Table as described in Section VIII below and attached as Appendix C. SDCP's planned procurement, as reflected in SDCP's Renewable Net Short Calculation Table and

described in Sections IV and V, is expected to exceed pertinent RPS procurement mandates, including a minimum margin of over-procurement based on SDCP's risk assessment, as further described in Sections VII and IX. SDCP also expects to meet California's SB 350 long-term procurement requirement, as described in Sections V and VII, through the completion of current contract negotiations and any long-term RPS solicitation processes that may be administered thereafter.

SB 901, signed by Governor Brown on September 21, 2018, added Public Utilities Code section 8388, which requires any IOU, publicly owned electric utility, or CCA with a biomass contract meeting certain requirements to seek to amend the contract to extend the expiration date to be five years later than the expiration date that was operative as of 2018. SDCP does not have a contract with a biomass facility that is covered by Public Utilities Code section 8388.

IV. Assessment of RPS Portfolio Supplies and Demand

IV.A. Portfolio Supply and Demand

As previously noted, SDCP successfully initiated customer service in March 2021. Following the completion of upcoming expansion activities in 2023, SDCP expects to serve approximately 930,000 service accounts, which are expected to consume about 8,400 GWh per year. SDCP has now executed four long-term PCC1 supply contracts that will result in the delivery of approximately 1,000 GWh per year following the successful commercial operation of related renewable generating projects (which is expected to occur in 2023) and SDCP's election of long-term PCC1 and PCC0 supply contracts via VAMO allocations will result in the delivery of over 2,900 GWh per year. One of the new-build projects will utilize wind technology, while the other three new-build projects will utilize photovoltaic solar generating technology, with two of these projects incorporating battery storage to allow for re-shaping of project energy

deliveries.

Additional contracting efforts remain in process with additional solicitations scheduled in the future. Following the completion of negotiation activities associated with any long-term renewable supply agreement, the final contract(s) will be brought before SDCP's governing board for approval and, if approved, will be executed thereafter. Short-term renewable supply agreements may be executed by SDCP's Chief Executive Officer pursuant to delegated contracting authorities – the limitations associated with such contracting authorities are reflected in SDCP's Energy Risk Management Policy.

Over time, SDCP expects to continue meeting pertinent RPS compliance obligations by entering into a variety of renewable energy supply agreements of varying term lengths and structures. The exact portfolio characteristics selected may vary depending on direction received from SDCP's governing board, renewable resource availability, procurement costs, legislative and policy changes, technological improvements, principles of resource diversity, preferences of the Member Agencies and/or other developments. To manage this future uncertainty, SDCP will regularly evaluate anticipated supply requirements in consideration of expected customer electricity usage and anticipated renewable energy deliveries; such information is expected to influence future procurement efforts, which will attempt to balance customer usage with requisite resource commitments. SDCP is also aware of the need to promote the use of a diverse renewable resource portfolio, avoiding overcommitting to certain generating technologies, suppliers, geographic regions, etc. For now, the organization must remain open minded and considerate of all possible supply options. During early-stage operations, SDCP must also proceed with its RPS planning and procurement activities under a "compliance first" mindset with the primary goal of securing necessary RPS supply (both long-term and short-term) from

available generating sources – because financial penalties (related to compliance shortfalls) under the RPS program are not waived or reduced in consideration of portfolio characteristics (such as technology and/or geographic diversity), it is advisable for new retail sellers, including SDCP, to primarily focus on securing requisite volumes, even if the majority of such volumes happen to be associated with a specific technology type or geographic region. This noted, SDCP will make reasonable efforts to promote resource diversity during its early-stage renewable energy planning and procurement processes, and if such processes do not result in the desired level of resource diversity, SDCP will craft future solicitations to promote renewable energy portfolio diversity. For now, SDCP has successfully secured renewable energy deliveries that utilize wind, solar, "solar plus battery storage", the latter of which will allow SDCP to reshape typical solar production to better align with customer energy use and market price signals.

The ongoing examination of customer electricity usage and other market developments should help reduce costs and assist in meeting planned procurement for the period reflected in this RPS Procurement Plan. SDCP notes that understanding customer electricity usage may be more challenging than usual during early-stage operations (when CCA participations rates can exhibit a certain level of volatility) and expansion activities. These challenges could be exacerbated by the implementation of fiscal policy changes intended to curb inflation (via phased interest rate increases) that may impose recessionary pressures on the economy. If recessionary markers start to surface, including reduced spending, business closures, constrained access to credit, etc., SDCP will attempt to evaluate the extent to which future customer energy usage may be affected. Regarding demand side impacts, these are often more challenging to isolate, as normal variations in usage caused by weather may obscure otherwise atypical variations in consumption. For renewable energy planning purposes, SDCP's primary retail sales forecast

adjustments have been related to expected customer enrollments without noteworthy adjustments related to these circumstances. To the extent that retail sales fall below SDCP's expectations, it is likely that renewable energy content will be higher than necessary to promote achievement of programmatic goals. In such cases, SDCP expects that it could: 1) sell excess renewable energy supply to interested buyers, thereby rebalancing its portfolio to align with desired renewable energy targets; 2) retain excess renewable energy supply, providing customers with higher-than-promised renewable energy supply; or 3) explore other options/flexibility that may be available under California's RPS program to utilize excess volumes in another calendar year or compliance period. Such decisions will be made following consultation with SDCP's governing board, staff and technical advisors.

SDCP is also attempting to gain an improved understanding of the prospective impacts to its customer base associated with the potential reopening of California's direct access market due to SB 237 (2018) and D.19-05-043. In D.21-06-033, the Commission recommended against expanding direct access at this point, however, SDCP recognizes that this may change in the future. As such, SDCP will monitor the proceeding to determine potential impacts to its planning process. To the extent that SDCP load migrates to direct access providers, its retail sales would likely fall – in theory, such a change would increase SDCP's proportionate renewable energy content unless surplus supply was sold to other market participants; this would be similar to the impacts experienced by California's IOUs, which have resulted from ongoing CCA implementations and expansions – following these activities, the proportionate RPS content of each IOU has increased, as evidenced in the annual Power Source Disclosure Report of each IOU (for reference, this has occurred in spite of IOU-administered solicitations intended to sell off surplus RPS supply, which suggests that other retail sellers, particularly

CCAs, have already made meaningful progress in meeting applicable RPS mandates in the near-term planning horizon). To the extent that any direct access-related adjustments are incorporated in SDCP's RPS planning processes, it will reflect them in a subsequent RPS Procurement Plan. Through the ongoing evaluation of customer demand and other market developments, SDCP hopes to promote reduced overall costs while meeting planned procurement objectives for the period addressed in this RPS Procurement Plan.

IV.A.1. Voluntary Allocation and Market Offer (VAMO)

The Final Report of Working Group 3 Co-Chairs: Southern California Edison Company, CalCCA, and Commercial Energy ("Final Report") was filed on February 21, 2020, in the Commission's PCIA rulemaking (R.17-06-026). One of the Final Report's key proposals was for the Commission to create a VAMO framework, where each LSE serving customers subject to the PCIA would be provided an annual option to receive an allocation ("Voluntary Allocation") from the IOUs' PCIA-eligible RPS energy portfolios, based on that LSE's forecasted, vintaged, load share, and subject to certain conditions. Further, the Final Report proposed that any declined shares would be offered to LSEs through a market process ("Market Offer").

On May 20, 2021, the Commission adopted D.21-05-030, addressing the proposals in the Final Report. D.21-05-030 adopted the Final Report's VAMO proposal, subject to certain limitations and additional requirements. To implement this modified VAMO structure, D.21-05-030 identified various next steps, including IOUs providing LSEs their allocation share based on vintaged, annual load forecasts, and the submission of an advice letter to receive approval for pro forma contracts. LSEs were required to finalize elections and execute contracts with their respective IOU by July 29, 2022. The Commission recently approved D.22-06-034, which

provided additional guidance on the VAMO process, as well as Resolution E-5216 which approved the IOUs' pro forma contracts for the voluntary allocations. The IOUs have also filed advice letters outlining their market offer processes for resources not allocated through the voluntary allocations; approval for these processes is expected later this year.

SDG&E offered SDCP an allocation share consisting of two different pools of resources: long- and short-term. The long-term pool consists of resources with more than 10 years left on their contracts whereas the short-term pool consists of resources that have less than 10 years left on their contracts. SDCP elected to receive 100 percent of its available long-term renewable energy voluntary allocation from SDG&E and none of the short-term allocation share. The table below details SDCP's long-term PCC1 and PCC0 supply contracts via VAMO elections.

It is noteworthy that SDCP's long-term supply agreement with SDG&E includes annual delivery quantities ~~have been~~that will be adjusted based on SDCP's VAMO elections. As such, the annual delivery quantities reflected in the existing contract has been replaced by such VAMO allocations, as estimated below (based on information previously provided by SDG&E). Note that the aggregate long-term renewable energy volumes reflected in this table meaningfully exceed volumes reflected in SDCP's original long-term renewable supply agreement with SDG&E (by more than 200%, on average), which will provide SDCP with much more long-term bundled renewable energy supply in 2023 and beyond, relative to planning projections that preceded SDCP's VAMO elections.

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Expected Long-Term PCC0 MWh to be received via SDG&E	359,534	359,534	359,534	359,534	359,534	359,534	359,534	359,534	359,534	359,534

VAMO election										
Expected Long-Term PCC1 MWh to be received via SDG&E VAMO election	2,570,407	2,570,407	2,570,407	2,570,407	2,570,407	2,570,407	2,570,407	2,570,407	2,570,407	2,570,407

IV.A.2. Portfolio Optimization

SDCP's goal is to meet organizational policies, reliability requirements, and statewide procurement mandates in a manner that is both cost effective and supportive of a well-balanced resource portfolio. Portfolio optimization strategies can help reduce costs and should facilitate alignment of SDCP's portfolio of resources with its forecasted load needs. To support this goal, SDCP considers the following strategies:

Purchases from Retail Sellers: Purchases of RPS-eligible renewable energy (via resale) from other retail sellers can provide a cost-effective way of meeting short-term resource needs or filling in gaps in procurement while long-term projects are under development.

Sales Solicitations: As SDCP's portfolio of resources continues to develop, it will also consider offering solicitations of sales to other retail sellers, if the disposition of surplus is deemed desirable. SDCP's willingness to pursue such sales will be dependent upon its ongoing monitoring of RPS positions, prospective sales pricing and direction received from its Governing Board and executive management.

Optimizing Existing Procurement: As SDCP considers its long-term resource needs, it may evaluate options in its future power purchase agreements to increase the output of existing generating facilities through technological upgrades, by adding new capacity to

an existing generator or by adding energy storage infrastructure to an existing renewable generator. Expanding existing facilities may provide additional generation at reduced costs with lower risks of project failure because the need for distribution system upgrades and permitting may be reduced – such opportunities may be pursued/developed, as deemed appropriate by SDCP. The addition of energy storage infrastructure to an existing renewable generator would be expected to enhance grid reliability as well as the value of electric energy produced by the generating facility, as the pre-storage energy delivery profile could be shifted to: 1) better align SDCP's supply with customer demand; or 2) create more value for SDCP customers by shifting electric energy deliveries to a time of day when market revenues received would be greater. In terms of reliability impacts related to the addition of energy storage infrastructure, SDCP expects that such enhancements would meaningfully increase the proportionate level of resource adequacy capacity that could be derived from an intermittent renewable generating resource without such storage infrastructure – reductions to the net qualifying capacity of intermittent renewable generating resources are well documented and ongoing, resulting in very little capacity benefits from solar-only generating projects. In considering these sorts of enhancements, SDCP will be mindful of the need to coordinate with its resource owners/operators to evaluate potential planning constraints (related to generator interconnection, for example) before assuming that the addition of energy storage infrastructure at an existing generating facility would be a viable option.

Holistic Portfolio Design and Procurement Strategy: In light of the multiple procurement-related compliance requirements with which California LSEs must comply – RA (administered both by CAISO and CPUC), Integrated Resource Planning (D. 19-

11-016, Mid-Term Reliability, etc.), RPS (including long-term contracting requirements), in addition to any LSE-specific incremental or voluntary program goals – SDCP is mindful to take a holistic approach to procurement efforts. Targeting resources that can satisfy multiple compliance or voluntary objectives provides for more efficient and cost-effective procurement than alternative approaches that may target individual compliance products or requirements one-by-one without consideration of synergies or economies of scale that may result from resources that can deliver products to satisfy multiple program requirements and evaluating projects and proposals as such to ensure that the co-benefits and efficiencies of such procurement are correctly incorporated.

On June 24, 2021, the Commission adopted D.21-06-035, which directed all retail sellers to procure 11,500 MW of new net qualifying capacity ("NQC") between 2023 and 2026 and assigned each retail seller a specific procurement responsibility based on its share of peak demand. SDCP's total obligation is 570 MW, which must include minimum amounts of procurement from certain subcategories: (1) 124 MW from firm, zero-emitting capacity by 2025; (2) 50 MW from long duration storage resources by 2026; and (3) 49 MW from firm, non-fossil fueled baseload generating resources by 2026. Pursuant to the allowance in D.21-06-035 for retail sellers within the same Transmission Access Charge ("TAC") area to reallocate procurement obligations upon mutual agreement, SDCP and SDG&E have collaborated to revise their obligations in D.21-06-035, which were based on preliminary load forecasts that have since been refined. SDG&E filed the revised, mutually agreed capacity requirements to the CPUC on March 16, 2022 via Advice Letter 3967-E. This advice letter has since been suspended and awaits further commission review and action. SDCP expects that approval of this reallocation of obligations will be completed within the coming weeks. Once procurement obligations have

been finalized, SDCP will review progress toward targets in each of the subcategories. SDCP expects that contracts executed pursuant to its 2020 Long-term RPS solicitation will fulfill a portion of 2023 and 2024 obligations, supplemented by additional volume from contracts currently under negotiation. SDCP expects its next Long-term RPS solicitation to focus on meeting any remaining procurement obligations from D.21-06-035.

IV.B. Responsiveness to Local and Regional Policies

(i) Responsiveness to Policies of SDCP's Governing Board

SDCP is a joint powers authority that is subject to the control of its governing board and is directly accountable to its Member Agencies. SDCP supports and is committed to meeting the state's GHG reduction and renewable procurement goals, as well as supporting its Member Agency cities in meeting their respective CAP goals. Furthermore, and as noted elsewhere in this RPS Procurement Plan, SDCP has adopted near-term renewable portfolio targets that meaningfully exceed RPS mandates, offering a minimum 50 percent renewable energy content through its default retail service offering. SDCP has also determined to: 1) forgo the purchase of PCC3 products; and 2) limit the use of PCC2 products (in favor of PCC1 products), subject to product availability and budgetary impacts. SDCP's Governing Board has decided to structure its RPS portfolio with these considerations in mind, as such an approach is expected to minimize attributed GHG emissions associated with its reported energy purchases (under California's Power Source Disclosure Program). SDCP has a complementary carbon-free portfolio metric of 55 percent, so any renewable energy purchase will be evaluated in light of the incremental impacts to SDCP's anticipated emission rate – SDCP understands that all PCC3 and most PCC2 product purchases (subject to substitute energy specifications) will increase its overall emission factor. In addition to state mandates and meeting the respective CAP goals of SDCP's Member

Agencies, as detailed below, on June 23, 2022, SDCP's Governing Board adopted additional targets for its energy portfolio development, including: goals of 50 percent renewable energy content in 2022, 75 percent in 2027, 85 percent in 2030 and 100 percent in 2035; 15 percent of energy portfolio from new, distributed infill storage or solar plus storage resources within Member Agencies' territory by 2035; and 600MW of new utility scale projects within San Diego and Imperial Counties by 2035, all of which will impact SDCP's energy portfolio strategies.

(ii) Responsiveness to Regional Policies

As noted in the previous sub-section, SDCP is overseen by its governing board. As such, the policies adopted by SDCP's governing board serve as guiding directives for CCA operations, including the determination of renewable energy planning targets that are intended to support local policy preferences. Reducing electric utility sector GHG emissions generated by residents and businesses was a driving factor in the formation of SDCP, as well as investing in the community through local projects. The City of San Diego adopted its CAP in December 2015, which sets a goal for 100 percent renewable energy city-wide by 2035.[5] The City of Encinitas adopted and updated CAP in 2020 with a goal to reduce emissions to 44 percent below 2012 levels by 2030.[6] The City's establishment of a CCA program will have a significant impact on its emissions goals with a reduction of 19,465 MTCO2e, the largest of the prospective reductions reflected in the updated CAP's 20 GHG reduction strategies.[7] Similarly, the City of La Mesa adopted its CAP in March 2018, which set a goal to reduce emissions by 68,450 MTCO2e by

[5] See *Climate Action Plan*, City of San Diego, December 2015, at 35, available at https://www.sandiego.gov/sites/default/files/final_july_2016_cap.pdf.

[6] See *Climate Action Plan Interim Revision*, City of Encinitas, November 2020, at 1-7, available at https://encinitasca.gov/Portals/0/City%20Documents/Documents/City%20Manager/Climate%20Action/CAP_2_3_2021_final.pdf?ver=2021-02-03-151752-820

[7] See *Climate Action Plan Interim REvision,* City of Encinitas, at 3-7.

2035.[8] The City of Chula Vista adopted its CAP in September 2017, and it established a goal for up to 100 percent clean energy through the formation of a CCA program.[9] The City of Imperial Beach adopted a CAP in July 2019 which set a goal for 85 percent renewable energy by 2030.[10] SDCP's newest Member Agencies – National City and San Diego County – were also motivated in part to join SDCP as a strategy to meet their respective CAP goals and several Member Agencies are in the process of updating their CAPs. The Member Agencies intend to contribute to achieving these and future goals collaboratively by operating SDCP to provide electric energy to residential, commercial and governmental electric accounts located within their communities and delivering supportive customer programs.

IV.B.1. Long-term Procurement

Pursuant to Public Utilities Code section 399.13(b), from 2021 onwards, 65 percent of mandated renewable energy purchases must be sourced from contracts of 10 years or more.[11] SDCP has been conscientiously pursuing contracting opportunities to meet this requirement and has now entered into five unique long-term PCC1 supply agreements, which include: 1) a long-term (20-year) PCC1 supply agreement with Vikings Energy Farm, LLC, executed on May 3, 2021, which will cause the delivery of approximately 250,000 MWh per year of renewable energy produced by a new 100 megawatt photovoltaic solar array (plus battery storage) located

[8] See *Climate Action Plan,* City of La Mesa, March 13, 2018, at 45, available at https://www.cityoflamesa.us/DocumentCenter/View/11008/LMCAP_CC03132018.

[9] See *Climate Action Plan*, City of Chula Vista, September 2017, at 20, available at https://www.chulavistaca.gov/home/showdocument?id=15586.

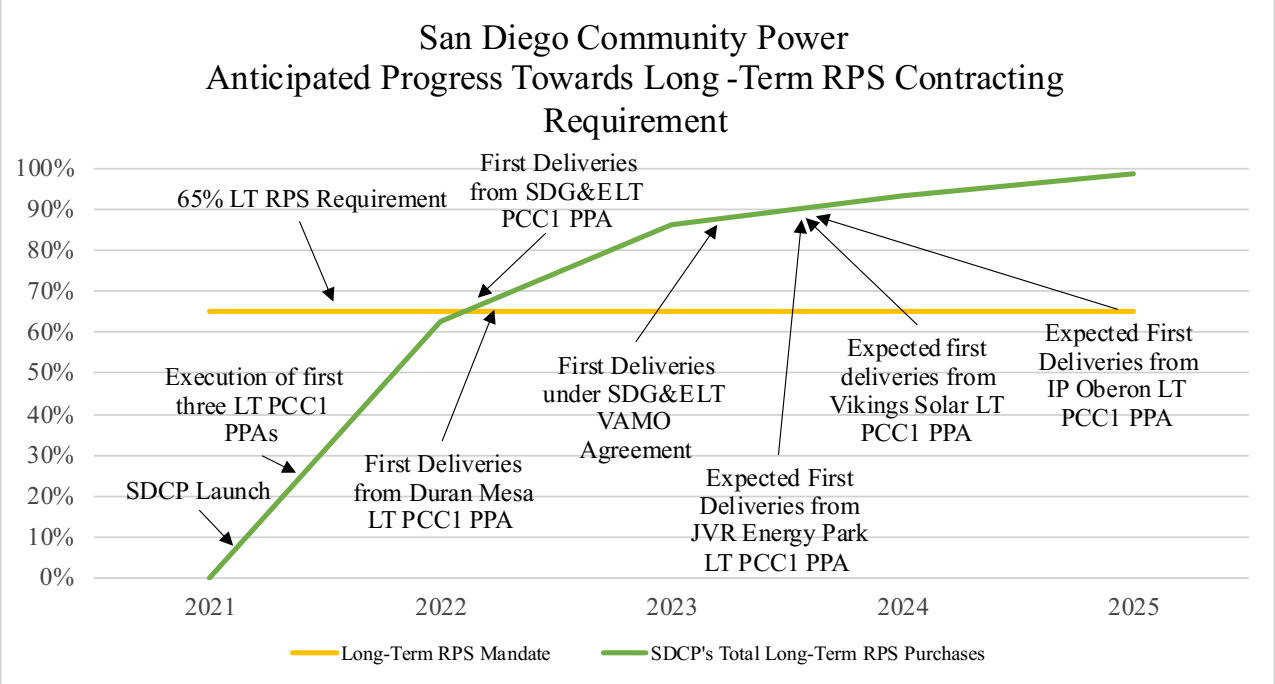
[10] See *Local Coastal Program Resilient Imperial Beach Climate Action Plan*, City of Imperial Beach, July 17, 2019, at 31, available at https://www.imperialbeachca.gov/ApprovedClimateActionPlan2019.

[11] Cal. Pub. Util. Code § 399.13(b)(1) ("A retail seller may enter into a combination of long- and short-term contracts for electricity and associated renewable energy credits. Beginning January 1, 2021, at least 65 percent of the procurement a retail seller counts toward the renewables portfolio standard requirement of each compliance period shall be from its contracts of 10 years or more in duration or in its ownership or ownership agreements for eligible renewable energy resources.").

in Imperial County that is expected to commence commercial operation in June 2023; 2) a long-term (20-year) PCC1 supply agreement with JVR Energy Park, LLC, executed on June 4, 2021, which will cause the delivery of approximately 260,000 MWh per year of renewable energy produced by a new 90 megawatt photovoltaic solar array (plus battery storage) located in San Diego County that is expected to commence commercial operation in March 2023; 3) a long-term (15-year) PCC1 supply agreement with IP Oberon, LLC, executed on June 11, 2021, which will cause the delivery of approximately 225,000 MWh per year of renewable energy produced by a new 75 megawatt photovoltaic solar array located in Riverside County that is expected to commence commercial operation in June 2023; 4) a long-term (12-year) PCC1 supply agreement with SDG&E, executed on December 20, 2021, which will cause the delivery of approximately 120,000 to 1,580,000 MWh per year of renewable energy produced by a portfolio of RPS-eligible generating resources, as listed in the contract, beginning in 2022; and 5) a long-term (10-year) PCC1 supply agreement with Duran Mesa, LLC, executed on January 27, 2022, which will cause the delivery of approximately 170,000 MWh per year of renewable energy produced by a 50 MW share of a 105 MW wind project located in Torrance County, New Mexico that recently achieved commercial operation (on November 30, 2021, as reflected in the California Energy Commission's associated certificate for this project) and began delivering power to SDCP on February 1, 2022.

Note that one of the aforementioned projects, Duran Mesa, has already achieved commercial operation, and the noted agreement with SDG&E will be exclusively supplied from existing/operational projects, which serves to de-risk a significant portion of SDCP's upcoming long-term RPS deliveries. This noted, SDCP's upcoming expansion activities necessitated its acceptance of certain long-term allocations available under VAMO and~~/or~~, potentially, other

long-term RPS purchases to ensure compliance with applicable long-term contracting requirements during CP4 and beyond. It is worth noting that SDCP intends to continue focusing the significant majority of its PCC1 contracting efforts on contract durations of ten years or longer, which should contribute to the accrual of a planning reserve over time, alleviating concerns regarding long-term contract compliance. This anticipated trajectory, which includes certain of SDCP's long-term VAMO allocation elections, is reflected in the following chart.



As reflected in the previous chart, SDCP expects to meaningfully exceed applicable long-term RPS procurement mandates in Compliance Period 4. More specifically, for Compliance Period 4, SDCP expects to procure in excess of 140% of its required long-term RPS mandate (which means that SDCP expects to procure 93% of total statutorily mandated RPS purchases from long-term contracts), based on expected RPS deliveries of over 9,000 GWh, relative to a projected long-term procurement obligation of about 6,300 GWh. Similarly, in Compliance Period 5, which includes calendar years 2025 through 2027, SDCP also expects to procure in

excess of 140% of its required long-term RPS mandate (which means that SDCP again expects to procure approximately 93% of total statutorily mandated RPS purchases from long-term contracts), based on expected RPS deliveries of over 11,500 GWh, relative to a projected long-term procurement obligation of approximately 8,100 GWh. In Compliance Period 6, which includes calendar years 2028 through 2030, SDCP expects to procure about 120% of its required long-term RPS mandate (which means that SDCP again expects to procure approximately 79% of total statutorily mandated RPS purchases from long-term contracts), based on expected RPS deliveries of approximately 11,500 GWh, relative to a projected long-term procurement obligation of approximately 9,600 GWh. These projections are based on estimated annual deliveries to be received under SDCP's long-term VAMO supply agreement with SDG&E, which was executed on December 20, 2021. While SDCP previously advised the Commission of its intent to accept certain long-term RPS volumes under VAMO, this agreement has now been finalized, so related volumes are forthcoming. The previous procurement estimates have accounted for the net impact of SDCP's VAMO supply to overall renewable energy purchases, and SDCP believes it would successfully achieve compliance with long-term RPS procurement mandates through 2030 under a variety of adverse scenarios in which sever delivery shortfalls could occur.

~~Based on SDCP's expected long-term renewable energy deliveries, VAMO allocations elections, other potential long-term contracting opportunities and upcoming expansion plans, there are a variety of approaches that could promote SDCP's compliance with the 65% contracting mandate. To address future long-term contracting needs (in CP5 and beyond)~~Even with long-term RPS deliveries expected to meaningfully exceed applicable mandates, SDCP expects to continue the selective pursuit of additional long-term RPS contracting opportunities

~~procure additional RPS products~~ via independently administered solicitations and~~,~~ bilateral contracting discussions ~~and, possibly, through participation in the Voluntary Allocation Market Offer process. SDCP's next long-term RPS solicitation is expected to occur in Q3 2022 or Q4 2022, the results of such solicitation will be addressed in a subsequent iteration of this plan~~. Future long-term RPS contracting efforts are likely to focus on diversifying SDCP's RPS supply portfolio and may include additional hybrid generating configurations, baseload renewable generating technologies and/or emerging renewable generating technologies that would be expected to promote budgetary certainty and grid reliability.

IV.C. Portfolio Diversity and Reliability

Power purchased from power marketers, public agencies, generators, CCAs, or utilities will be a significant source of supply during the first several years of SDCP's operation. Based on current contracting efforts, SDCP expects to obtain requisite electricity supply from several suppliers, including power marketers, project developers, and/or IOUs. Such suppliers will be responsible for delivering a portion of SDCP's intended resource mix, including SDCP's desired quantities of renewable and carbon-free energy, to provide a stable and cost-effective resource portfolio.[12]

In carrying out its planning functions, SDCP will also consider the deliverability characteristics of its future generating resources placed under contract (such as the resource's dispatchability, available capacity, and typical production patterns) and will review the respective risks associated with short- and long-term purchases as part of its forecasting and procurement processes. These efforts should lead to a more diverse resource mix, address grid

[12] See *San Diego Community Power Community Choice Aggregation Implementation Plan and Statement of Intent*, December 9, 2019, p.1 at 6.6, available at http://sdcommunitypower.org/resources/key-documents/.

integration issues, and provide value to the Member Agencies.

SDCP intends to utilize a portfolio risk management approach as part of its power purchasing program, seeking low-cost supply (based on then-current market conditions) as well as diversity among technologies, production profiles, project sizes and locations, counterparties, lengths of contract, and timing of market purchases. For its recently executed long-term renewable supply agreements with new generating resources, SDCP has reflected a risk adjustment (failure/under-delivery rate) of 5 percent in year one and 3 percent in each year thereafter. The larger year-one adjustment is intended to account for potential late deliveries (resulting from delayed commercial operation), while the smaller ongoing risk adjustments are intended to account for resource intermittency and the potential for lower-than-anticipated energy production. These assumptions were informed by discussions with other CCA organizations. SDCP assumes that its initial supply portfolio may include a relatively small number of contracts which will grow in number over time, increasingly emphasizing the principles of resource and counterparty diversity as operational experience is gained and renewable energy requirements increase.

While SDCP is not opposed to considering emerging renewable generating technologies, it is unlikely that its early-stage supply agreement(s) will focus on such resources – SDCP has yet to receive credible and cost-competitive proposals from emerging renewable generating technologies, but if such proposals arrive in the future, they will be closely considered alongside other viable options. As a relatively new CCA organization, SDCP's first several renewable supply commitments must result in reliable, cost-effective supply to promote compliance with applicable RPS mandates without bearing the risks typically associated with newer technologies. Until compelling proposals for emerging renewable generating technologies are received, SDCP

will likely exhibit preferences for proven generating technologies and supply structures that will minimize delivery risk during early-stage operation while allowing for re-shaping of certain renewable generating profiles to better align supply with demand. If, however, a compelling offer is presented for a cost-effective emerging technology, SDCP will evaluate such proposal on its merits relative to other available offers.

SDCP will procure renewable and other requisite energy products, as necessary, to ensure that the future energy needs of its customers are met in a reliable and cost-effective manner, consistent with applicable compliance mandates. SDCP, through its CCA Implementation Plan and subsequent planning discussions, has established initial procurement targets for requisite renewable energy supply, including subcategories for various renewable energy products, and has also established targets for related planning reserves as described elsewhere in this document. To the extent that SDCP's energy needs are not fulfilled through the use of renewable generating resources, it should be assumed that such supply will be sourced from carbon-free and/or conventional energy resources, such as hydroelectric or natural gas generating technologies, as well as system power purchases.

A key component of SDCP's early-stage planning process relates to the analysis and consideration of expected load obligations with the objective of closely balancing supply and demand, rate stability, and overall budgetary impacts. During pre-launch activities, this process primarily focused on the compilation and analysis of historical customer data, as provided by SDG&E, identification of any ineligible/excluded accounts (that will not be enrolled in CCA service), and related refinements to SDCP's retail sales forecasts. Similar to most CCAs, SDCP expects that such historical data will not be a perfect predictor of future customer energy requirements, so it intends to actively monitor actual customer usage, relative to projections, over

time, refining such forecasts as well as its ability to minimize variances between procured energy quantities and actual usage. SDCP also plans to maintain portfolio coverage targets of up to 100 percent (of expected customer energy requirements) in the near-term (0 to 2 years) but will leave larger open positions in the mid- to long-term, consistent with generally accepted industry practices.

At this point in time, SDCP has no explicit preference for specific renewable generating technologies and will consider all responses to its solicitations with the goal of assembling a diversified renewable energy supply portfolio that will deliver energy in a profile that is generally consistent with the SDCP's anticipated load shape – SDCP recognizes that closely aligning the shape of renewable energy deliveries with anticipated retail demand may be particularly challenging during early-stage operations; the need for substantial long-term renewable supply commitments, coupled with potential load variability during CCA customer enrollment processes, will likely necessitate the pursuit of contracting opportunities that may not deliver power in close alignment with early-stage customer usage patterns; over time, however, SDCP's growing portfolio of renewable supply commitments will be increasingly considerate of load/resource balances and will attempt, subject to product availability and related costs, to promote such balance to the greatest practical extent. SDCP is also aware that use of intermittent renewable generating technologies has the potential to create occasional misalignments between customer energy consumption and related power production as well as the general quantity of renewable energy received from such projects. SDCP expects that its voluntary commitment to a minimum 50 percent renewable supply portfolio will protect against this uncertainty. In addition, and for purposes of promoting better alignment of customer energy usage and expected energy deliveries, SDCP is considering both stand-alone storage and hybrid or co-located storage

and renewable energy projects – in addition to those already contracted under the Vikings Energy Farm and JVR Energy Park PPAs – via its ongoing Local RFI and its upcoming Long Duration Storage and all-source RPS RFOs.

In developing its load forecasts, SDCP prepares load curves that reflect expected increases in customer energy usage due to transportation and building electrification. Transportation electrification planning considers light duty vehicles (personal use), electrification of vehicle fleets (commercial) and local targets for electrification of public transit systems while building electrification considers the phasing out of onsite use of natural gas for heating, cooling and other appliances in buildings through all-electric technologies. The forecasting of SDCP's anticipated transportation electrification adoption rates is performed through the application of a fixed percentage annual increase that is informed by historical observations and generalized trends related to transportation electrification adoption. The information considered in this process includes the three scenarios (low, mid, high) identified in the California Energy Commission's Integrated Energy Policy Report ("IEPR") Demand Forecast.[13] SDCP is currently evaluating the development of a transportation electrification forecast that would be directly based on the mid scenario for transportation electricity demand of the IEPR Demand Forecast as well as other available data/information that would allow such a forecast to be directly tailored to its region – this data/information may include local policies related to transportation electrification, if applicable, locally available incentives focused on transportation electrification and/or data related to electric transportation adoption/conversion occurring within SDCP's service territory. SDCP is in the early stages of coordinating with its

13 See Javanbakht, Heidi, Cary Garcia, Ingrid Neumann, Anitha Rednam, Stephanie Bailey, and Quentin Gee. 2022. Final 2021 Integrated Energy Policy Report, Volume IV: California Energy Demand Forecast. California Energy Commission. Publication Number: CEC-100-2021-001-V4, at 65.

member municipalities to determine pertinent local targets for transportation and building electrification and, following the identification of these local planning parameters, will accordingly update its load curves to reflect such assumptions. For the time being, SDCP has assumed annual increases in its retail sales that reflect the net impacts of transportation and building electrification, energy efficiency improvements, customer-sited generation and other factors, but SDCP will endeavor to continually refine such planning assumptions to more accurately characterize the impacts of transportation and building electrification on its overall energy needs and, in particular, its RPS-related renewable energy requirements. To more closely align SDCP's resource portfolio with the evolving energy requirements of its member communities, SDCP anticipates that a diverse set of renewable resources will be necessary, including the strategic inclusion of generating resources, energy storage resources, and complementary infrastructure that may allow SDCP to dispatch/shape such supply in consideration of evolving customer energy needs and usage patterns.

IV.D. Lessons Learned

In communicating with and reviewing the RPS Procurement Plans of California's most mature CCA organizations, SDCP observes that Marin Clean Energy ("MCE") has highlighted the benefits of geographic diversity in constructing a renewable supply portfolio. MCE noted that certain areas of the state have been overbuilt with renewable generating infrastructure, which has created challenges related to depressed market prices and increasing levels of resource curtailment. SDCP has kept this observation in mind when assembling its own renewable resource portfolio, avoiding overcommitment to resources within a narrowly defined geographic area. SDCP also continues to evaluate historical pricing trends, which have materially changed in the wake of increased renewable energy buildout. Due to these transitions and suppressed

(and oftentimes negative) market pricing, SDCP will likely avoid contracting with generators located in certain areas or require substantial storage capacity (operated in parallel with renewable generating infrastructure) to mitigate market price risk when considering renewable generating resources located in such areas. SDCP appreciates the substantial financial risks that are created by California's long-term renewable contracting requirements and will continue to explore opportunities to manage such risks during its contracting efforts. SDCP also observes that technological diversity is an important principal to incorporate in RPS planning efforts.

As a relatively new CCA, SDCP is gaining familiarity and experience with the information and processes that will be necessary to demonstrate compliance with the requirements of California's RPS Program but does not have any substantive lessons learned to share at this point in time. SDCP is also aware that prudent planning and successful management of early-stage CCA program finances is critical in managing ongoing market risk and other uncertainties. As such, SDCP will exercise care in pursuing its early-stage renewable energy supply options to promote alignment with budgetary parameters. SDCP may also pursue interagency solicitation/procurement opportunities to the extent that such coordinated efforts can increase procedural efficiency, reduce administrative redundancy, and decrease certain expenses typically associated with such processes.

V. Project Development Status Update

As described in Section IV.B above, SDCP's current and planned procurement is expected to be sufficient to meet both the applicable RPS procurement requirements as well as support the state's GHG reduction targets. Further, SDCP's current and planned procurement is expected to support system reliability by considering both portfolio diversity and alignment with SDCP's customers' load curve. SDCP has entered into five agreements with RPS-eligible

facilities, with four having reached commercial operation. These projects are summarized in the following table

Facility Name	Technology Type	MW-ac	Location	Term Length	Expected COD	Network Upgrades Milestone
VAMO	Various	Portfolio	Various	10	On-line	Complete
Duran Mesa	Wind	50	Torrance County, New Mexico	10	On-line	Complete
Vikings Energy Farm	Solar + Storage	100	Imperial, CA	20	[redacted]	[redacted]
IP Oberon	Solar	75	Riverside, CA	15	[redacted]	[redacted]
JVR Energy Park	Solar + Storage	90	San Diego, CA	20	[redacted]	[redacted]

- Three of SDCP's five long-term RPS contracts are associated with generating resources that have yet to achieve commercial operation. These projects include: Vikings Energy Farm, LLC: a new 100 megawatt photovoltaic solar array (plus battery storage) located in Imperial County that is expected to commence commercial operation in 2023. This project is progressing through pre-construction activities. Vikings Energy Farm has executed an Interconnection Agreement and Transmission Service Rights Agreement with Imperial Irrigation District. Vikings has hired an Engineering firm and expects its Conditional Use Permit to be approved by Imperial County in Q2 2022.
- JVR Energy Park, LLC: a new 90 megawatt photovoltaic solar array (plus battery storage) located in San Diego County that is expected to commence commercial operation in 2023. This project is progressing through pre-construction activities. JVR has completed Interconnection Agreement, Major Use Permit, and EPC contracting.

- IP Oberon, LLC: a new 75 megawatt photovoltaic solar array located in Riverside County that is expected to commence commercial operation in 2023. Oberon has executed an Interconnection Agreement, received CEC Pre-certification, and has achieved all site control and permits.

In consideration of SDCP's recent contracting efforts with new renewable generating resources, it has updated Appendix D, the Project Development Status Update Report. SDCP is aware of the pandemic, geopolitical, and supply-chain impacts that many LSEs and developers are currently facing related to new resource development and is working closely with each of its contractual counterparties to monitor and mitigate any potential impacts of these delays on SDCP's supply portfolio, market exposure, RPS compliance, and customer rates. As new information related to SDCP's renewable energy contracting process(es) becomes available, SDCP will update its Project Development Status Update Report accordingly.

SDCP has already submitted updates to the CODs for both Vikings and JVR Energy Park as those projects have experienced delays due to due to permitting or interconnection, and/or supply chain issues, particularly in light of Covid-19. These are reflected in previous table above.

VI. Potential Compliance Delays

Based on recently completed and expected renewable energy procurement efforts and the acceptance of VAMO allocations, SDCP does not anticipate any compliance delays related to Compliance Period 4, which includes calendar years 2021-2024. If a future compliance issue is identified or SDCP encounters challenges in securing requisite renewable energy supply in the future, then SDCP will address such issue within a subsequent RPS Procurement Plan.

SDCP will continue assessing projected long-term open positions (that may exist in CP5 and CP6) relative to expected deliveries and intends to administer future solicitations, as

necessary, to ensure compliance with the RPS Program over the upcoming 10-year planning horizon. If a future compliance issue is identified or SDCP encounters challenges in securing requisite renewable energy supply, then it will address such issues in a subsequent RPS Procurement Plan.

VI.1. Impacts of COVID-19 Pandemic

As the Commission is aware, successful renewable energy markets depend upon international supply chains, substantial labor commitments, robust financial markets, timely interactions with governmental planning authorities and various other considerations. With numerous disruptions caused by the COVID-19 pandemic and various other challenges, it is incredibly challenging to determine if, and to what extent, renewable energy procurement opportunities may be compromised, particularly new-build renewable energy projects which typically rely on long-term contracts as the basis for project financing. SDCP will closely monitor energy usage patterns to determine if any planning adjustments may be necessary based on current and expected economic conditions.

SDCP intends to closely monitor this situation as well as potential fallout related to supplier/developer effectiveness in fulfilling mandated renewable energy needs, project completion and overall supplier viability. SDCP is aware that many supply chains have been disrupted during the pandemic with a variety of material/component shortages occurring throughout the industry. Moreover, recent concerns regarding the application of tariffs on certain imported renewable infrastructure have also provoked certain supplier to request "reopening" of previously executed contracts and/or the negotiation of terms that allow for price adjustments in the event of unexpected costs (such as the noted tariff). While the tariff issue seems to be temporarily resolved, concerns of this nature have introduced a measure of instability in the

long-term contracting efforts of many retail sellers. With these concerns in mind, SDCP encourages the Commission to closely monitor and potentially reconsider certain elements of the RPS Program as this situation evolves, particularly if there are widespread, well-documented challenges as California retail sellers attempt to fulfill pertinent procurement requirements. Relatedly, SDCP is aware of numerous instances in which contract documents are being drafted with more expansive force majeure language to alleviate the concerns of sellers/developers in meeting project completion schedules due to potential pandemic-related delays – "day for day" commercial operation date extensions have been pursued, creating flexibility in achieving commercial operation date targets based on the duration of shelter-in-place directives. From SDCP's perspective, buyers must be diligent in contracting efforts to strike an appropriate balance between flexibility and certainty. Not all project development delays are expected to be directly attributable to the pandemic, so effectively parsing contractual accommodations for development delays in consideration of this reality should serve to manage uncertainties related to project completion and renewable delivery timelines.

SDCP also encourages the Commission to coordinate closely with the legislature to evaluate potential adaptations to the RPS Program, which may become necessary if renewable energy markets are materially impacted by the pandemic. With rapidly changing circumstances and related information, SDCP anticipates the need for considerable flexibility/agility in working to meet requisite renewable energy procurement mandates. In the meantime, SDCP will remain hopeful that impacts to renewable energy markets will not compromise California's ability to reach its renewable energy procurement goals or its own, internally established renewable procurement targets.

VII. Risk Assessment

Compliance Risk

An important element of SDCP's RPS risk assessment process is determining potential vulnerabilities related to procurement and/or delivery shortfalls that could trigger deficits relative to SDCP's anticipated compliance obligations. Considering SDCP's internally adopted renewable energy procurement targets and existing contractual commitments, this risk, as internally determined by SDCP, appears to be very low in Compliance Period 4 and beyond. As discussed elsewhere in this planning document, SDCP has established a VMoP and, further, a MMoP that inform RPS procurement efforts and insure against compliance-related shortfalls. A recent email communication from CPUC staff supports this assessment. More specifically, SDCP received a letter from the CPUC's Deputy Executive Director for Energy and Climate Policy on December 9, 2022, which provided an assessment of the perceived RPS compliance risk for Compliance Period 4 (calendar years 2021 through 2024). SDCP's risk level was categorized as low within this assessment letter, which was based on information included in SDCP's 2021 RPS Compliance Reports, as submitted in the summer of 2022.

While SDCP received a letter indicating it has been assessed as being at low risk of compliance shortfalls, SDCP has meaningfully increased its RPS procurement since submittal of its 2021 RPS Compliance Report via acceptance of its VAMO allocations. As such, SDCP further understands that it is not at risk of failing to meet its Compliance Period 2021-2024 RPS long-term procurement and RPS procurement quantity requirements. Again, SDCP believes that its internally adopted renewable energy procurement targets (reflective of its VMoP and, further, its MMoP), which meaningfully exceed RPS mandates, as well as existing contractual commitments, including long-term VAMO volumes that are expected to bolster overall renewable energy procurement levels relative to those reflected in SDCP's 2021 RPS

Compliance Report, leave SDCP very well positioned to meet its ongoing RPS compliance obligations. If anything happens to change in terms of SDCP's internal assessment of RPS compliance risk, it will inform the CPUC accordingly in a future RPS Procurement Plan.

Risk Modeling and Risk Factors

SDCP makes reasonable efforts to minimize the risk of renewable procurement shortfalls for purposes of complying with applicable RPS mandates established in SB 100, but it cannot definitively predict the scope or magnitude of circumstances that may impact annual retail energy sales, renewable energy markets, or individual project performance. With this in mind, SDCP responsibly assesses RPS compliance risk by considering three key planning elements: 1) retail sales variability; 2) renewable energy production/delivery variability; and 3) impacts to overall system reliability associated with SDCP's planned RPS purchases and other influences. These topics are generally considered in the noted sequence with observed risks informing potential adaptations to SDCP's planning process, potential adaptations to planning reserves and, ultimately, refinements to SDCP's renewable energy procurement (or sales) processes and quantities. As described elsewhere in this RPS Procurement Plan, SDCP's previously executed renewable supply contracts, current negotiating efforts, VAMO allocations, and upcoming procurement processes will place the organization is a strong position to meet applicable RPS compliance requirements in Compliance Period 4 and beyond. Therefore, SDCP's self-determined risk of non-compliance is low. Nevertheless, SDCP continues to assess demand-side and supply-side risks to better understand potential areas of concern and to promote achievement of organizational compliance objectives.

Regarding demand-side risk, SDCP continues to evaluate and update prospective retail sales related to its evolving customer base and trailing 10-year planning period, including but not

limited to anticipated changes related to customer eligibility, new development projects (that could increase retail energy consumption) and business closures, expected customer attrition (or growth) and changes to behind-the-meter generating capacity. From a practical perspective, the greatest demand-side risk with regard to SDCP's anticipated customer base is that retail sales are meaningfully higher than anticipated during Compliance Period 4. As the Commission is aware, CCAs provide an opportunity for customer choice, allowing customers to voluntarily participate in SDCP's program or remain bundled customers of the incumbent utility, SDG&E. To the extent that customers choose to leave SDCP's CCA program, or "opt out", SDCP's retail sales will decrease, resulting in related increases to the ratio of renewable energy serving such customers (and improving SDCP's position relative to applicable RPS compliance mandates). It is unlikely that SDCP's renewable supply commitments will provide volumetric flexibility/options in the event of higher-than-anticipated retail sales volumes; in such instances, SDCP would need to pursue additional procurement opportunities to address unanticipated open positions. Thankfully, short-term RPS procurement opportunities seem to be readily available (to the extent such supply is necessary to augment long-term commitments) and available long-term RPS allocations under VAMO offered a viable option in the absence of other long-term contracting opportunities. Because SDCP's anticipated participation rates are based on the well-documented experience of California's other operational CCA programs, the organization is confident that actual retail sales will be reasonably well aligned with related forecasts.

Considering SDCP's ongoing coordination with member municipalities and associated planning departments, SDCP expects to be well informed regarding upcoming development projects or other customer changes that could materially increase retail sales. For this reason, SDCP believes that demand-side RPS compliance risk is low.

Regarding supply-side risks, SDCP is aware of the generation variability/intermittency associated with certain renewable technologies as well as the possibility of curtailment (based on pricing considerations or market directives) during certain times of day/year. In the case of new-build renewable projects, SDCP is also aware of the possibility of project delays and, potentially, project failure. Such circumstances can materially diminish renewable energy deliveries, jeopardizing the achievement of RPS compliance and exposing the organization to unexpected financial consequences. This noted, a primary objective of the SDCP's CCA program is offering participating customers stable and competitive retail generation rates, so the organization must balance generalized over-purchasing of certain compliance products, including RPS-eligible renewable energy, with related budgetary impacts. In its RPS planning process, SDCP has considered such impacts as well as previous procurement practices observed by successful California CCAs, which have satisfied applicable compliance mandates reflected in California's RPS program. CCAs are exposed to considerable compliance risk at the time of, and in the few years immediately following, program launch, as load variability is generally highest during this period of time and organizational creditworthiness is generally weakest (due to the considerable costs associated with CCA implementation, the timing related to program expenditures and revenue receipts, and the methodical pace at which financial reserves are typically accrued during early-stage operations). To the best of SDCP's knowledge, few early-stage CCAs have experienced difficulties with generalized renewable energy procurement, but long-term RPS contracting has been more challenging – typical lead times (between contract execution and project completion) associated with new-build renewable energy projects are often 2-3 years or longer, and related power supply contracting efforts are rarely initiated so far in advance of service commencement. With this observation in mind, early-stage CCAs must either: 1) focus

RPS contracting efforts on existing renewable generating resources; or 2) accept failure/delay risks associated with new-build renewable projects placed under contract near the time of CCA launch by incorporating reasonable planning reserves to mitigate such risks. SDCP's VAMO allocation elections, however, serve as a mitigating factor when considering long-term RPS compliance risk, as the typical lead time associated with new-build renewable generating projects does not apply to these deliveries (which would begin occurring in 2023). In the case of SDCP, a balanced approach has been pursued, which has entailed contracting efforts focused on both existing and new renewable generating resources, thereby minimizing, but not eliminating, risks associated with compliance shortfalls. With SDCP's planned expansion in 2023, resource planning and procurement efforts have been focused on addressing known increases in the organization's RPS needs, particularly long-term RPS needs. Prior to its upcoming expansion activities, SDCP expected to have a long-term RPS surplus in CP4, but this situation has now changed. SDCP elected to receive 100 percent of available long-term VAMO allocations to help satisfy this compliance mandate. Regardless of the eventual long-term contracting opportunities that may be pursued by SDCP, the organization intends to pursue contract volumes in sufficient quantity to accommodate one or more project failures amongst SDCP's currently executed contracts and upcoming contract opportunities. SDCP has evaluated volumetric risk (due to project delays and/or under performance) in its updated risk assessment, as further described below, and has accounted for such impacts within Appendix C.

SDCP also anticipates mitigating supply-side risk by incorporating fixed-volume and index-plus pricing structures amongst its portfolio of RPS supply agreements. These procurement mechanisms serve to mitigate the risk of delivery variability (typically associated with intermittent renewable resources and/or renewable resources that may be subject to periodic

curtailment) and exposure to negative market pricing (which could prompt economic curtailment). Fixed volume arrangements, in particular, also mitigate risk associated with commercial operation delays and facility failure; these structures also provide buyers with financial protections (via penalty payments) for under-delivery (which could be used, as a last resort, to offset compliance penalties in the event that the supplier or SDCP are unable to identify replacement volumes).

As part of SDCP's approach to managing supply-side risk, it has also adopted what it believes to be a CCA best practice related to RPS contracting: structuring early-stage solicitations to identify proven renewable generating technologies in prime resource locations to be developed and/or operated by the most experienced available suppliers (with strong, well-documented track records of successful project completion and operational reliability). Unlike certain of the IOU's early-stage contracting efforts, which focused on experimental/unproven renewable generating technologies, CCAs have generally focused early-stage contracting efforts on tried-and-true technologies and highly experienced counterparties – SDCP intends to follow this practice as well. When evaluating prospective renewable energy supply opportunities, SDCP will seek to minimize the risk of delivery failure (or shortfalls) by pursuing supply arrangements with such experienced and financially stable suppliers that have demonstrated successful track records. This noted, there is always a possibility that future renewable energy supply will not be delivered as required, which is why SDCP intends to periodically evaluate the sufficiency of currently anticipated renewable energy procurement targets in meeting both statutory mandates and prudent planning reserve levels. Given SDCP's initial commitment to providing a minimum 50 percent renewable default service to participating customers, it seems highly unlikely that cumulative renewable energy delivery shortfalls could result in compliance

deficiencies. While other CCA programs may choose to pursue differing planning reserve targets, SDCP observes that there does not seem to be a clear standard or related guidelines for setting such metrics and believes that its anticipated, internally defined renewable energy targets provide sufficient planning reserves.

Following contract execution, SDCP staff will closely coordinate with its suppliers, particularly developers of any new-build resource, to maintain an acute awareness of project development progress, including any anticipated issues that could delay expected initial deliveries or compromise overall project viability. Such communications are intended to provide SDCP with an early indication of such issues, which would allow "corrective procurement actions" to occur if the extent of such issues were determined to impact SDCP's RPS compliance status.

In terms of system and resource reliability, SDCP has adopted a procurement approach that intends to emphasize resource and contractual diversity. This process is expected to contribute to the identification of renewable generating resources that should positively impact system reliability over time.

SDCP will consider this potential risk of generation variability during its resource planning process and related procurement/contracting efforts and may pursue contract structures that promote volumetric stability through the application of firm delivery quantities and/or performance guarantees that provide financial remedies/penalties in the event of delivery shortfalls. If necessary, the application of such penalties could be used: 1) as a first priority, to procure additional renewable energy supply to address delivery shortfalls; or 2) in the event of a determination of non-compliance, to offset the cost of related penalties. SDCP's intent is to achieve and maintain compliance with applicable RPS mandates, and the latter option is a last

resort that is not expected to apply.

In addition to the previously described considerations, SDCP utilizes a quantitative risk assessment that quantifies the energy impacts related to supply side losses. This approach organizes prospective risks into three general categories which pose the greatest supply-side impacts to the delivery of expected RPS energy: 1) curtailment risk; 2) counterparty risk; and 3) project cancellation risk. As part of its quantitative risk assessment, SDCP examines hourly forward-looking data that could lead to curtailment risk, specifically the likelihood that an hour within the forward market exhibits pricing that falls below negative $15/MWh beginning in 2022 through the expiration of each contract. Below this dollar amount, SDCP is presumed to be better off financially if it were to curtail the affected generating unit and, as a substitute for such curtailment, purchase additional renewable energy credits on the open market. Considering SDCP's current long-term renewable energy positions, a reduction in long-term RPS volumes due to curtailment could, potentially, compromise the prospect of RPS compliance. The figures presented in the column quantifying curtailment risk are calculated by quantifying the volume of expected energy deliveries and multiplying such volume by the likelihood of curtailment. *Based on SDCP's assessment of curtailment risk associated with its renewable energy contract portfolio, this risk category was assigned a rating of low.*

Counterparty risk is the risk posed by a counterparty being unable or unwilling to honor its total RPS delivery obligations, as reflected in related contract documents. SDCP has quantified this likelihood by considering S&P Global's, Global Corporate Annual Default Rates by Rating Category (%) as a measure of organizational viability and financial stability. While this rate considers industries beyond the energy sector, it provides relevant insights into the correlation and potential impacts of dealing with uncreditworthy counterparties. The likelihood of default by credit

rating was averaged over the years from 2014 to 2019. These years were chosen to remove irregularities in default rates during the Covid-19 pandemic. If a counterparty was found to be unrated, then the contract was reviewed to identify specified credit assurances; based on such assurances, an approximate rating was derived based on SDCP's experience and risk tolerance. *Based on SDCP's assessment of counterparty risk associated with its renewable energy contract portfolio, this risk category was assigned a rating of low.*

The final category reflected in SDCP's analysis is project/contract cancellation risk. This category is distinct from counterparty risk because the risk of project/contract cancellation may only affect a single project under a counterparty's portfolio. Projects may be cancelled for a variety of reasons, but in today's market, deals struck many months ago may no longer be economic for the seller. This risk only effects single source projects which have yet to be constructed. These projects were chosen because they have a single point of failure unlike RPS energy purchased from a pool of resources (under a portfolio-style purchase agreement in which there is generally more diversity amongst the sources of supply). Based on discussions with various counterparties, other load serving entities and its own experience, SDCP has assessed that this risk effects roughly 1 in 20 deals. *Based on SDCP's assessment of project failure/contract cancellation risk associated with its renewable energy contract portfolio, this risk category was assigned a rating of low.*

Considering these categories holistically, SDCP was able to derive a cumulative energy percentage at risk. In consideration of SDCP's relatively conservative risk tolerances, a top-level risk of non-delivery offset at 0.25% of renewable energy procurements was added to the calculated energy at risk percentage. This adder will help to account for risks that SDCP cannot foresee and will help to guarantee the sufficiency of SDCP's planned RPS purchases in meeting both compliance-related and internally adopted renewable energy procurement targets. The percentage

of renewable energy is the percentage of total renewable energy procured that was determined to be at risk, while the percentage of retail load is the energy at risk as a percentage of retail load. These "at risk" percentages reflect possible losses which, through no fault of SDCP, may occur by virtue of being a market participant. These losses pose a risk for non-compliance relative to SDCP's RPS goals and targets. Since this number is not a guaranteed loss, SDCP will implement the previously mentioned mitigation strategies to give the greatest chance of meeting its adopted renewable energy procurement targets.

ID	Contract	RPS Contract ID	Energy to be Delivered to Market (MWh)	Curtailment Risk (MWh)	Counterparty Risk (MWh)	Project Cancellation Risk (MWh)
1	Contract 2608	SDCP90001	780,000	-	265	-
2	Contract 2811	SDCP90002	100,000	-	-	-
3	Contract 2821	SDCP50003	2,462,130	5,820	47,322	-
4	Contract 2964	SDCP50005	4,299,960	10,164	82,645	-
5	Contract 2990	SDCP50004	5,151,236	12,176	99,007	-
6	Contract 3017	SDCP90008	135,000	-	-	-
7	Contract 3018	SDCP90008	35,000	-	-	-
8	Contract 3048	SDCP90011	100,000	-	142	-
9	Contract 3049	SDCP90010	165,000	-	3,171	-
10	Contract 3103	SDCP90014	75,000	-	-	-
11	Contract 3193	SDCP70015	75,000	177	26	-
12	Contract 3555	SDCP90017	7,670,000	18,130	-	-
13	Contract 3590	SDCP70019	1,707,630	4,036	32,821	-
14	Contract 3758	SDCP90020	25,000	-	9	-
15	Contract 3760	SDCP90018	300,000	-	-	-
16	Contract 3761	SDCP90018	50,000	-	-	-
17	Contract 3838	SDCP20021	244,788	-	83	-
Total			**23,375,744**	**50,504**	**265,491**	**-**

Energy	
Total Renewable Energy	**23,375,744**
Total Renewable Energy at Risk	**315,994**
Pct of Renewable Energy at Risk	**1.35%**
Pct of Unknown Error at Risk	**0.25%**
Pct of Renewable Energy & Error at Risk	**1.60%**
Pct of Retail Load	**0.40%**

Based on SDCP's analysis, SDCP determined that 1.35 percent of SDCP's expected future RPS deliveries may be at risk, which equates to 0.40 percent of SDCP's retail load. These percentages reflect average risk throughout the study period, which suggests that actual risk could fall somewhat above or below these percentages. Regardless, the potential risk-related impacts to SDCP's RPS supply portfolio fall well below the ten percent MMoP reflected in its RPS planning process. *In consideration of the results of SDCP's risk analysis, the composite risk assessment, which considers all three of the previously described risk categories, results in an overall risk rating of low.*

As previously noted, SDCP adopted an ERM Policy at the meeting of its governing board on June 25, 2020. In accordance with SDCP's ERM Policy, these risk analyses/assessments are shared and reviewed with SDCP's ROC. If SDCP's internally adopted planning targets and related procurement efforts prove to be insufficient in meeting near-term RPS compliance targets, SDCP will bring such findings to the attention of its ROC and pursue suitable resolutions and mitigation measures under the oversight of the committee.

SDCP's is actively monitoring milestone completion for new-build renewable projects that have yet to achieve commercial operation with the goal of promoting timely project completion and initial deliveries to ensure that SDCP meets applicable compliance mandates during CP4 and beyond. To the extent that SDCP observes issues related to key milestone completion, it will accordingly adjust anticipated renewable energy deliveries to account for the prospect of RPS shortfalls (even though such shortfalls are unlikely to present compliance issues, due to the relatively high renewable energy content reflected in SDCP's default retail service offering).

System Reliability

With respect to system reliability, SDCP is aware of the need to pursue a portfolio of renewable resources with diverse and complementary delivery profiles as well as complimentary infrastructure (namely, energy storage infrastructure) that will support the reshaping of renewable energy deliveries to better align with load. For example, renewable energy procurement efforts that may initially focus on relatively low-cost solar resources will often necessitate subsequent investments in co-located energy storage infrastructure and/or higher-cost baseload renewable generating technologies, such as those using geothermal, biomass and landfill gas fuel sources. These baseload renewable technologies are often priced at three-to-four times the level of in-state photovoltaic solar generation but generally provide increased capacity value (due to the more predictable, baseload generating profiles of such resources) and related reliability enhancements. To date, in pursuit of a balanced portfolio that ensures reliable renewable energy supply, SDCP has contracted with three solar resources, all of which are hybridized or co-located with battery storage (although SDCP does not receive the output or capacity attributes of the IP Oberon energy storage system), a wind generating facility which has a generation profile that is complementary to the solar and in-state wind generation shapes, and is actively negotiating with or soliciting offers for additional hybrid renewable resources, stand-alone storage facilities, and "clean firm" renewable resources. Going forward, SDCP will continue to balance these competing portfolio management interests to support reasonably close alignment between supply and demand (reducing the need for pronounced resource ramping on the system), cost-effective procurement and overall grid reliability. SDCP is aware that low-cost, long-term solutions are challenging to identify at this time, but it will remain committed to pursuing a conscientious planning process that balances grid reliability, compliance demonstration and customer cost impacts. SDCP is willing to engage in discussions with SDG&E and the California Independent System Operator

regarding reliability and other system impacts related to its portfolio. SDCP is further willing to consider the feedback provided by the organizations in its planning and procurement processes going forward, so long as such suggestions generally conform with organizational objectives and Board-adopted policies. *In consideration of SDCP's diverse contractual commitments for requisite renewable energy supply and ongoing focus on the identification of RPS-eligible and complementary technologies that will mitigate reliability impacts associated with increased use of intermittent generating resources throughout the state, overall risks to system reliability associated with SDCP's RPS Procurement Plan were determined to be low.*

Lessons Learned

In terms of lessons learned related to risk management, SDCP observes that internally adopted, above-RPS planning targets generally serve as effective mitigation measures related to RPS compliance. This approach seems to be supported by SDCP's low risk categorization from the compliance risk assessment letter from the CPUC, especially given SDCP has since meaningfully increased its RPS procurement via acceptance of its VAMO allocations. SDCP will, however, continue to evaluate the sufficiency of its adopted planning reserves (MMoP) to reduce the risk of RPS compliance shortfalls. If future RPS contracting activities impose larger than anticipated risks (on project failure and/or under-delivery), SDCP may increase its noted planning reserve to provide additional protection against such risks. The extent to which such adjustments may occur is not known at this time but will be discussed, as necessary, in a future RPS Procurement Plan.

SDCP has also observed the value of resource diversity across a broad spectrum of considerations, including resource location, generating technology, suppliers/developers and contract structures, amongst other concerns. Long-term renewable supply commitments are

inherently risky in the sense that such commitments expose the buyer and/or seller to a variety of unknown circumstances, including but not limited to evolving market prices and policy changes. Throughout a long-term contract relationship, it seems evident that areas with initially low levels of negative pricing (and related curtailment of energy production) can materially change as new project development activity occurs, creating (or exacerbating) conditions of over-supply and related incidents of energy curtailment. This risk is particularly challenging to manage, as California's escalating RPS procurement mandates necessitate ongoing investment in new renewable generating infrastructure, which is often sited in resource-rich areas that become saturated with similar generating technologies (and related delivery profiles). These circumstances seem inevitable and, over the course of a long-term supply relationship, may expose the contracted parties to unexpected risks, including negative prices (and related budgetary impacts) and curtailed deliveries (which may compromise the fulfillment of mandated procurement targets by the buyer). Again, SDCP will periodically reevaluate its current renewable energy planning reserve to address anticipated curtailment and/or underperformance risk to the extent that such concerns are pertinent to SDCP's renewable contract portfolio.

SDCP is also aware that risk can be diversified through various contract structures. For example, an "index-plus" pricing structure is useful in transferring nodal/market price risk to the seller – in such structures, the buyer pays a fixed renewable premium, while the seller assumes risk associated with market price fluctuations but also receives market revenues (which could be higher or lower than anticipated) – even though the buyer receives the energy, renewable attribute and (in certain instances) capacity value as part of such a transaction, the buyer's financial risk is generally limited to the payment of the renewable premium. For buyers who are averse to market price risk, the index-plus pricing structure effectively eliminates this concern

but may result in higher overall contract costs (which may be acceptable, as a form of insurance, to mitigate market price exposure). In other structures, such as the "fixed-price" or "aggregate pricing" structure, the renewable energy premium and energy commodity (and oftentimes, capacity value) are reflected in a single price paid by the buyer – this structure deliberately allocates market price risk to the buyer, but the buyer may also pay a lower imputed renewable premium in instances where market revenues (realized when the energy commodity is delivered to the grid) closely approximate (or exceed) the aggregate renewable energy price. SDCP has pursued both pricing structures as part of its portfolio diversification and risk management strategies, attempting to balance risk across a broad range of considerations. Any changes to this approach will be articulated in future iterations of the RPS procurement planning process.

VIII. Renewable Net Short Calculation

SDCP has provided a quantitative assessment to support the qualitative descriptions provided in this RPS Procurement Plan, which is attached as Appendix C. At this point in time and based on SDCP's initial renewable energy contracting efforts, certain risk-related adjustments have been incorporated in Appendix C, as described above. More specifically, SDCP previously described (above, in Section VII, Risk Assessment) its quantitative risk assessment methodology and the results of such analysis, which suggested that 1.35% of future renewable energy deliveries were at risk, meaning that SDCP reasonably anticipates that this portion of expected renewable energy deliveries will not be received. This determination was based on an assessment of the risk categories reflected in SDCP's analysis, which included: 1) curtailment risk; 2) counterparty risk; and 3) project failure/contract cancellation risk. In an effort to impute further conservatism in its risk management process (to mitigate against the prospect of compliance shortfalls), SDCP increased the 1.35% figure derived through its risk

assessment to a full 2.00% delivery failure rate when preparing its Renewable Net Short calculations; this figure can be in rows 14 and 16 of the RNS reporting template. Such an (upward) adjustment was deemed appropriate to insure against unexpected renewable energy delivery shortfalls that could not be reasonably quantified through the aforementioned assessment. Also note that SDCP increased its forecasted failure rate for RPS Facilities in Development to 27% in 2023, an adjustment that was intended to reflect anticipated operational delays and resultant delivery shortfalls based on correspondence received from project developers with which SDCP has entered into long-term RPS contracts. If such adjustments are deemed insufficient in the future, based on regular project development status updates, the results of a future SDCP risk assessment (using the methodology described above) or other information, SDCP will update such adjustments in a future planning document based on information specifically related to each contracting opportunity subsumed in Appendix C.

SDCP successfully procured nearly 58% of its total resource needs (PowerOn portfolio, plus Power100 portfolio) from RPS-eligible renewable resources since 2021 and, as a result, is beginning to accrue renewable energy quantities in excess of applicable statewide mandates. Renewable suppliers have generally performed as expected, so the noted failure rates that are reflected in Exhibit C (set at two percent in future years) are in excess of the findings reflected in SDCP's previously described risk assessment, which indicate that 1.35 percent of such supply may be at risk. If supplier performance becomes more erratic in the future and adjustments to these assumptions are deemed necessary, SDCP will reflect such adjustments in a future planning document.

IX. Minimum Margin of Procurement (MMoP)

SDCP is developing an electricity supply portfolio that will further the achievement of

state mandates as well as internally adopted goals for increasing RPS-eligible renewable energy supply over time. The following table displays SDCP's intended margin of RPS over-procurement based on the differential between the SB 100 procurement targets and SDCP's internally adopted RPS procurement targets. This table reflects SDCP's voluntary margin of over-procurement, or VMoP.

State & Internally Adopted Renewable Energy Requirements

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
SB 100 RPS Procurement Requirement (% of Retail Sales)	38.5%	41.3%	44.0%	46.7%	49.3%	52.0%	54.7%	57.3%	60.0%	60.0%	60.0%
SDCP's Minimum Internally Adopted RPS Procurement Target (% of Retail Sales)	54.2%	58.3%	62.5%	66.7%	70.8%	75.0%	78.3%	81.7%	85.0%	88.0%	91.0%
SDCP's Voluntary Margin of Over-Procurement (% of Retail Sales)	15.7%	17.1%	18.5%	20.0%	21.5%	23.0%	23.7%	24.3%	25.0%	28.0%	31.0%

As reflected in the previous table, SDCP's RPS-eligible renewable energy target was set at a minimum 50 percent in 2021, increasing steadily to 75 percent by 2027 and to 85 percent by 2030. SDCP's internally adopted renewable energy procurement targets are intended to support SDCP's broader goal of providing a minimum 90% carbon-free electricity to all customers by 2030. SDCP's internally adopted minimum renewable energy procurement goals ensure a significant margin of procurement above the SB 100 mandates. SDCP's internally adopted renewable energy procurement goals provide a meaningful buffer above the state's RPS requirements and serve as SDCP's VMoP – SDCP's VMoP will minimally exceed statewide RPS mandates by at least 15 percent (relative to retail sales), increasing in each year through 2032.

To address RPS compliance risk, SDCP uses its risk assessments, including its renewable net short calculations, to establish a Minimum Margin of Procurement to guide RPS compliance procurement planning. SDCP calculated the minimum margin of procurement, or MMoP, using a 10% risk adjustment (or planning reserve) that was applied to SDCP's minimum internally adopted RPS procurement target (see row 2 in the previous table), which is

reflective of the renewable content offered through SDCP's default retail service offering, PowerOn. On a voluntary basis, SDCP customers may enroll in SDCP's 100% renewable energy service offering, Power100 – customer participation in this program increases SDCP's overall renewable energy need but also provides an enhanced procurement buffer relative to applicable compliance mandates. This noted, SDCP does not include/rely on additional renewable energy volumes required to serve Power100 customers in determining its MMoP or VMoP – such incremental renewable energy purchases are additive to SDCP's MMoP and VMoP (meaning that such volumes are in excess of the additional renewable energy purchases required to meet SDCP's MMoP and VMoP). Based on the manner in which SDCP has established its MMoP, as a 10% planning risk adjustment relative to total PowerOn renewable energy requirements, the effective MMoP percentages observed by SDCP are approximately 14%, relative to SDCP's projected RPS compliance need, for each year through 2032. The following chart provides additional detail regarding the effective MMoP percentages observed by SDCP.

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
SB 100 RPS Procurement Requirement (% of Retail Sales)	38.5%	41.3%	44.0%	46.7%	49.3%	52.0%	54.7%	57.3%	60.0%	60.0%	60.0%
SDCP's Minimum Internally Adopted RPS Procurement Target (% of Retail Sales)	54.2%	58.3%	62.5%	66.7%	70.8%	75.0%	78.3%	81.7%	85.0%	88.0%	91.0%
SDCP's RPS Planning Risk Adjustment (at 10% of Minimum Internally Adopted RPS Target)	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%
SDCP's Minimum Margin of Over-Procurement (% of Retail Sales)	5.4%	5.8%	6.3%	6.7%	7.1%	7.5%	7.8%	8.2%	8.5%	8.8%	9.1%
SDCP's Minimum Margin of Over-Procurement (% buffer relative to RPS Mandate)	14.1%	14.1%	14.2%	14.3%	14.4%	14.4%	14.3%	14.2%	14.2%	14.7%	15.2%

SDCP's MMoP is intended to address potential delivery variability for intermittent resources, curtailment risk, project delays (or failures) and other operational peculiarities that may cause actual renewable energy deliveries to deviate from projections. Note that certain of SDCP's renewable energy deliveries are not subject to variability – such agreements reflect

minimum fixed delivery quantities (or quantities with limited volumetric variability) with corresponding financial penalties (paid to SDCP by related sellers in the event of delivery shortfalls). Beginning in 2022, SDCP will have limited exposure to resource intermittency via its long-term renewable supply agreement with Duran Mesa, LLC. Other sources of exposure will occur as other contracts come online in 2023 and have been accounted for in SDCP's previously described risk assessment.

If SDCP adopts changes to its future renewable energy content/offerings, future RPS procurement planning documents will be updated accordingly. Staff assumes that future renewable procurement targets (inclusive of planning reserves necessary to meet RPS mandates) will consider a variety of factors, including but not limited to, the operational status of prospective renewable energy facilities to be placed under contract, the experience and general development track record of each project development team (associated with new resources), resource size (capacity), the location of prospective generating resources (for new facilities) and impacts of over-procurement to the CCA program's procurement budget and customer rates – certain of these factors are appropriately considered in SDCP's quantitative risk assessment.

IX.A. MMoP Methodology and Inputs

SDCP's MMoP is intended to address an RPS failure rate at or above that which is reflected in the renewable net short reporting template. In the event of contract under-deliveries, commercial operation delays and/or project failures, the MMoP should be sufficient to ensure SDCP is compliant with the RPS procurement requirements. SDCP's VMoP is the annual RPS-eligible minimum portfolio content identified in SDCP's internally adopted planning targets.

As discussed in Section VIII, SDCP has incorporated risk adjustments to certain renewable energy delivery estimates associated with existing generating facilities (due to

increased fire risk throughout the state of California and the potential for related delivery reductions; delivery intermittency is also subsumed in prescribed risk adjustments) and resources that are under development. Achieving SDCP's MMoP necessitates higher levels of renewable energy procurement (approximately 14% over SDCP's annual RPS compliance needs for each year through 2032), which accommodate the potential for delivery shortfalls (due to a variety of circumstances) while still allowing SDCP to meet prescribed RPS mandates. Considered in concert, SDCP's VMoP, which ranges from 15.7% to 31.0% over the planning period, and MMoP provide a substantial aggregate renewable energy planning buffer, which increases from 21.1% in 2022 to 40.1% in 2032, relative to applicable compliance mandates., as reflected in the following table.

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
SB 100 RPS Procurement Requirement (% of Retail Sales)	38.5%	41.3%	44.0%	46.7%	49.3%	52.0%	54.7%	57.3%	60.0%	60.0%	60.0%
SDCP's Minimum Internally Adopted RPS Procurement Target (% of Retail Sales)	54.2%	58.3%	62.5%	66.7%	70.8%	75.0%	78.3%	81.7%	85.0%	88.0%	91.0%
SDCP's Voluntary Margin of Over-Procurement (% of Retail Sales)	15.7%	17.1%	18.5%	20.0%	21.5%	23.0%	23.7%	24.3%	25.0%	28.0%	31.0%
SDCP's Minimum Margin of Over-Procurement (% of Retail Sales)	5.4%	5.8%	6.3%	6.7%	7.1%	7.5%	7.8%	8.2%	8.5%	8.8%	9.1%
SDCP's Aggregate Margin of Over-Procurement (% of Retail Sales)	21.1%	22.9%	24.8%	26.7%	28.6%	30.5%	31.5%	32.5%	33.5%	36.8%	40.1%

SDCP will effectively ensure its compliance with applicable RPS mandates by procuring in consideration of internal renewable energy goals that meaningfully exceed state-adopted requirements. SDCP currently provides a minimum 50% renewable energy content to all customers as part of its default retail service offering. SDCP's governing board may periodically consider increases to such renewable energy content for purposes of ensuring that SDCP differentiates its supply portfolio from applicable state-mandated renewable content. The extent to which SDCP will exceed statewide RPS mandates will be dependent upon a variety of factors, including RPS product availability, product cost and budgetary impacts and timely product deliveries from generating facilities under contract with SDCP. As SDCP's

governing board considers and adopts changes to its internal renewable energy procurement targets, the organization will accordingly update future RPS planning documents to reflect such changes.

IX.B. MMoP Scenarios

SDCP plans to meet the annual program renewable goals reflected in the table presented in Section IX (above), including the MMoPs reflected therein. As reflected in this table, SDCP's anticipated MMoP percentages range from 14.1% in 2022 to 15.2% in 2032. The renewable net short included in the RNS Quantitative Template also incorporates the additional RPS-eligible renewable energy need resulting from SDCP's VMoP, which reflects its internally adopted renewable energy procurement goal that increases from 50% in 2022 to 85% in 2030.

During its bid evaluation and supplier selection processes, SDCP considers a variety of risks and will explicitly incorporate such risks into its MMoP calculation after related contracting processes are complete and project development progress (for new-build renewable projects) is being tracked by SDCP staff. Based on the information gathered during SDCP's contract management process (which focuses on key milestone achievement and deviations from initial project development schedules for new-build projects), SDCP may adjust expected renewable energy deliveries. To the extent that adjusted future deliveries meaningfully differ from SDCP's previous expectations, additional RPS procurement may be pursued to ensure that SDCP maintains its desired MMoP and related minimum customer delivery commitments.

SDCP will also model demand-side sensitivities that may impact MMoP calculations. This will be particularly important during administration of SDCP's future expansion activities, as participation rates are expected to be most volatile during such periods of time. In addition to load variability resulting from customer participation levels, SDCP will also monitor electric

vehicle ("EV") penetration rates, net energy metering participation rates and other considerations that may impact overall customer energy requirements and related demand-based MMoP calculations.

X. Bid Solicitation Protocol

X.A. Solicitation Protocols for Renewables Sales

SDCP does not have immediate plans to issue a solicitation for sales of renewable energy products/projects. If such a need arises in the future, however, SDCP will consider a protocol that: 1) ensures that SDCP remains compliant with applicable RPS procurement mandates; 2) minimizes overall portfolio costs to the greatest extent practical; and 3) provides sufficient flexibility to accommodate reasonably anticipated supply-side and demand-side changes that could impact SDCP's overall renewable energy requirements.

X.B. Bid Selection Protocols

Consistent with Public Utilities Code section 399.13(a)(5)(C)[14], SDCP shall conduct solicitations for requisite energy resources, including specific needs for eligible renewable energy resources (reflecting locational preferences, when applicable, for such resources), generating capacity, and required online dates to assist in determining what resources fit best within its supply portfolio. Since CCA program governing boards are comprised of local elected officials, these solicitation and procurement decisions are overseen by elected representatives of the community. These solicitation and procurement decisions will seek to comply with targets

[14] Cal. Pub. Util. Code § 399.13(a)(5)(C) ("Standard terms and conditions to be used by all electrical corporations in contracting for eligible renewable energy resources, including performance requirements for renewable generators. A contract for the purchase of electricity generated by an eligible renewable energy resource, at a minimum, shall include the renewable energy credits associated with all electricity generation specified under the contract. The standard terms and conditions shall include the requirement that, no later than six months after the commission's approval of an electricity purchase agreement entered into pursuant to this article, the following information about the agreement shall be disclosed by the commission: party names, resource type, project location, and project capacity.").

and preferences that are considerate of local priorities and interests. Any new renewable energy supply agreements resulting from ongoing contract negotiations and future solicitation processes will be brought to SDCP's governing board for approval prior to execution.

SDCP's most recent RPS solicitation, "San Diego Community Power 2020 Request for Proposals ("RFP") for Long-Term California RPS-Eligible Renewable Energy"[15] ("RFP") was issued on June 29, 2020, and is attached to this document as Appendix F. Pursuant to Public Utilities Code 399.13(a)(6)(C),[16] SDCP's RFP included a variety of considerations in related bid solicitation protocols as well as the proposal evaluation and selection process, including:

1. Price and relative value within SDCP's supply portfolio;
2. Project location and benefits to the local economy and workforce;
3. Potential economic benefits created within communities with high levels of poverty and unemployment;
4. Project development status, including but not limited to progress toward interconnection, deliverability, siting, zoning, permitting, and financing requirements;
5. Qualifications, experience developing projects in California and/or with CCAs, financial stability, and structure of the prospective project team (including its ownership);
6. Environmental impacts and related mitigation requirements, including impacts to air pollution within communities that have been disproportionately impacted by the existing generating fleet;
7. Potential impacts to grid reliability;
8. Interconnection status, including queue position, full deliverability of Resource Adequacy capacity, and related study completion, if applicable
9. Acceptance of SDCP's standard contract terms; and
10. Development milestone schedule, if applicable.

Based on the success of its initial solicitation(s), SDCP may adapt these considerations to

[15] See *San Diego Community Power 2020 Request for Proposals ("RFP") for Long-Term California RPS-Eligible Renewable Energy* available at https://www.sdcommunitypower.org/resources.

[16] Cal. Pub. Util. Code § 399.13(a)(6)(C) ("Consistent with the goal of increasing California's reliance on eligible renewable energy resources, the renewable energy procurement plan shall include all of the following: A bid solicitation setting forth the need for eligible renewable energy resources of each deliverability characteristic, required online dates, and locational preferences, if any.").

improve success in future renewable energy procurement efforts.

SDCP's Inclusive and Sustainable Workforce Policy, adopted January 28, 2021, considers impacts to the local economy and workforce. SDCP will specifically consider "the employment growth associated with the construction and operation of eligible renewable energy resources."[17] More specifically, to the extent SDCP procures new RPS resources in solicitations where qualitative factors are considered, SDCP will include a qualitative assessment of the extent to which proposed project development activities will support this goal. Such determinations will be based on information provided by the prospective supplier and SDCP's independent assessment of such information. When SDCP procures RPS resources, it will require bidders to submit information on projected California employment growth during construction and operation. This data will include the expected number of hires, duration of hire, and an indication of whether the bidder has entered into Project Labor Agreements or Maintenance Labor Agreements in California for the proposed project.

Pursuant to Public Utilities Code section 366.2(m), Community Choice Aggregators like SDCP are required to annually submit a report to the CPUC which provides a (1) detailed and verifiable plan for increasing procurement from small, local, and diverse business enterprises; and (2) a report regarding its procurement from women, minority, disabled veteran, and LGBT business enterprises.[18] In pursuing these efforts, SDCP is building its Supplier Diversity program which aims to support, to the extent applicable by law, the principles of the CPUC's General Order (GO) 156 by increasing the number of diverse suppliers, including power providers, to

[17] See *Inclusive and Sustainable Workforce Policy*, adopted January 28, 2021, available at https://sdcommunitypower.org/resources/meeting-notes/.
[18] *See Supplier Diversity at https://www.cpuc.ca.gov/supplierdiversity/*

SDCP.[19]

Pursuant to Public Utilities Code section 399.13(a)(8)(A), SDCP will also consider the inclusion of evaluative preference for "renewable energy projects that provide environmental and economic benefits to communities afflicted with poverty or high unemployment, or that suffer from high emission levels of toxic air contaminants, criteria air pollutants, and greenhouse gases."[20] To the extent that SDCP procures RPS resources through solicitations where qualitative factors are considered, impact on disadvantaged communities will be considered. Such information will be gathered by requiring prospective suppliers to answer the following questions: Is your facility located in a community afflicted with poverty or high unemployment or that suffers from high emission levels? If so, the participant will be encouraged to describe how its proposed facility can provide the following benefits to adjacent communities:

- Projected hires from adjacent community (number and type of jobs);
- Duration of work (during construction and operation phases);
- Projected direct and indirect economic benefits to the local economy (i.e., payroll, taxes, services);
- Emissions reduction – identify existing generation sources by fuel source within 6 miles of proposed facility and indicate whether the proposed facility will replace/supplant the identified generation sources; and

[19] See Section 11, Page 23 at https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/news-and-outreach/documents/bco/go-156-d22-04-035.pdf

[20] Cal. Pub. Util. Code § 399.13(a)(8)(A) ("In soliciting and procuring eligible renewable energy resources for California-based projects, each electrical corporation shall give preference to renewable energy projects that provide environmental and economic benefits to communities afflicted with poverty or high unemployment, or that suffer from high emission levels of toxic air contaminants, criteria air pollutants, and greenhouse gases.").

- To the extent that the proposed generating facility is expected to replace/supplant an existing generating facility, the prospective supplier will be asked to quantify the associated emission impacts of this transition.

These considerations, including others that may be adopted by SDCP's governing board in future meetings, will be incorporated, as appropriate, in future solicitations administered by the organization.

X.C. LCBF Criteria

The Least-Cost Best Fit methodologies approved by the Commission pursuant to D.04-07-029, D.11-04-030, D.12-11-016, D.14-11-042, and D.16-12-044 are expressly only directly applicable to the IOUs and the Commission does not have jurisdiction over the solicitation protocols of CCAs. However, consistent with Public Utilities Code sections 399.13(a)(9), SDCP will consider best-fit attributes that support a balanced mix of resources to help support reliability of the electrical grid.[21]

In particular, SDCP considered "least cost best fit" ("LCBF") during the evaluation of responses to its initial renewable energy solicitation and will continue to do so in future solicitations that will be necessary to fill noted open positions. From SDCP's perspective, use of the term "costs" appropriately includes considerations beyond the basic price of renewable energy. More specifically, costs include a broad range of considerations, such as: 1) reputational damage resulting from failure to meet state-mandated and/or internally established renewable energy procurement targets; 2) compliance penalties resulting from failed project development efforts or delivery shortfalls; 3) administrative complexities related to dealing with inexperienced

[21] Cal. Pub. Util. Code § 399.13(a)(9) ("In soliciting and procuring eligible renewable energy resources, each retail seller shall consider the best-fit attributes of resource types that ensure a balanced resource mix to maintain the reliability of the electrical grid.").

suppliers (such as prolonged contract negotiation processes and uncertainties related to project milestone timing and achievement); and 4) impacts to planning certainty resulting from higher risk projects. These factors, as well as various others, will continue to be considered by SDCP as components of its cost evaluation process, which may lead to the selection of offers that aren't necessarily the lowest cost option(s), as expressed on a dollar-per-MWh basis. With regard to "fit", this aspect of a prospective supply opportunity has as much to do with compatibility (between SDCP and its suppliers) and alignment with key local objectives as it does with balancing customer usage and expected project deliveries, particularly when considering long-term contracting opportunities that will necessitate a constructive working relationship over a period of ten years or more. SDCP also interprets the term "fit" to mean the general suitableness of a project opportunity in promoting grid reliability – while SDCP has no explicit operational or maintenance responsibilities related to the local distribution system serving its customers or the bulk electric system at large, it is aware of the profound importance of supporting grid reliability through its procurement processes. With this in mind, SDCP will make best efforts to balance the demands of California's rigorous RPS compliance mandates with its interest in promoting such reliability. This is no small task, and SDCP expects that considerations related to grid reliability will be incorporated at each stage of its planning and procurement processes but also acknowledges that the full scope of its RPS contract/resource portfolio (including related impacts to grid reliability) will significantly evolve throughout the organizations operating history. Over time, SDCP expects to thoughtfully assemble a diversified portfolio of RPS contracts/resources that will not only contribute to SDCP's achievement of applicable compliance mandates but also to improved stability and reliability of California's electric system. As such, SDCP's LCBF methodology will consider a broad range of components, including those previously noted,

balancing a variety of pertinent considerations at the time each renewable purchase opportunity is being evaluated.

Additionally, the requirement of Section 399.13(a)(8)(A) to give preference to renewable projects located in certain communities is expressly only applicable to "electrical corporations" and is not mandatory for CCAs.[22] However, SDCP recognizes the need to help mitigate the impacts of air pollution in regions of the state where communities have been disproportionately impacted by the existing generating fleet as well as the need to bring economic benefits to communities with high levels of poverty and unemployment. Consistent with this recognition, SDCP will consider the manner in which air pollution may be impacted during its renewable energy solicitation process(es) and related project selection.

XI. Safety Considerations

San Diego Community Power holds safety as a top priority. Since SDCP does not own, operate, or control generation facilities, SDCP's procurement of renewable resources will not present any unique safety risks. This section describes how SDCP has taken actions to reduce the safety risks that may be posed by its renewable resource portfolio and how SDCP supports the state's environmental, safety, and energy policy goals.

In its procurement efforts, SDCP will consider the extent to which incorporating project safety requirements/risk mitigation requirements is necessary and appropriate in contracting. SDCP has generally included safety terms in its contracts requiring the seller to comply with all laws and prudent operating practices relating to the operation and maintenance of the renewable

[22] Cal. Pub. Util. Code § 399.13(a)(8)(A) ("In soliciting and procuring eligible renewable energy resources for California-based projects, each electrical corporation shall give preference to renewable energy projects that provide environmental and economic benefits to communities afflicted with poverty or high unemployment, or that suffer from high emission levels of toxic air contaminants, criteria air pollutants, and greenhouse gases.").

facility and the generation and sale of the renewable product. Additionally, the seller shall take all reasonable safety precautions with respect to the operation, maintenance, repair and replacement of the facility, and notify SDCP if seller becomes aware of any circumstances relating to the facility that creates an imminent risk of damage or injury to any person or any person's property, taking prompt, reasonable action to prevent such damage or injury. SDCP is aware that requesting more stringent processes and/or requirements (related to safety and/or other concerns) may trigger requested price increases by the seller/supplier. To the extent that product pricing would meaningfully increase due to the inclusion of such provisions, SDCP would need to evaluate budgetary impacts and other risks before proceeding.

In addition, SDCP has provided additional information below on its existing safety practices.

XI.1. Wildfire Risks and Vegetation Management

In ongoing and future negotiations, SDCP will ensure that its contracts with renewable generating facilities will require the facility operator to comply with all relevant safety requirements. This will be accomplished, in part, through contract provisions that require the counter party to operate and maintain the facility in compliance with all relevant laws and prudent operating practices, including relevant safety and environmental protection standards.

At this point in time, SDCP has yet to adopt specific procurement policies or preferences focused on the acquisition of forest biomass resources. SDCP is aware of the mitigating impacts that biomass generators, which use forestry waste as feedstock, may have on wildfire risk and will consider the adoption of a related procurement policy in the future.

One of the evaluative criteria considered by SDCP is project location. Part of this evaluation will include an analysis of project location with respect to wildfire risk. Projects that

are sited in a high wildfire risk area may be scored lower, and the expected output associated with such project(s) may be reduced to account for potential reductions in output that may occur if fires happen to compromise the project or surrounding infrastructure. SDCP is aware of instances when CCAs have received lower-than-expected deliveries from renewable generating facilities that were required to shut down or reduce output when fire risk compromised such electrical infrastructure. Based on this information, generating assets located in areas that are historically prone to fire risk will need to be considered in light of the potential for reduced output and resultant impacts to SDCP's RPS compliance standing.

SDCP is also considering the development of a program to educate and possibly incentivize its customers to eliminate or minimize the use of diesel and natural gas generators. As evidenced during Pacific Gas and Electric Company's 2019 Public Safety Power Shutoff ("PSPS") events, gas-powered generators can present fire hazards. Once all of SDCP residential and commercial accounts are phased in (which is expected to occur in 2023), SDCP can consider the development of a customer outreach initiative/education program to inform customers of the potential hazards presented by customer-sited gas generators, including fire risk presented by such infrastructure. This is especially important for SDCP customers located in the eastern portion of its service territory, which is semi-rural, hotter, and drier than other parts of San Diego County, making it an area of increased wildfire risk.

In future solicitations, SDCP will identify whether any of the bidding generating facilities are located within Tier 2 or Tier 3 of the Commission's Fire-Threat Map. When evaluating or executing a contract with a facility located in Tier 2 or Tier 3, SDCP will consider requiring that the seller utilize elevated wildfire prevention and safety measures for any construction, operation, and maintenance activities.

XI.2. Decommissioning Facilities

As SDCP just recently completed its initial long-term contracting efforts, it has not developed any plans or requirements related to the disposition of associated generating facilities following completion of applicable delivery terms. For future contract negotiations, SDCP will evaluate requiring the seller to provide a project safety plan or a similar type of reporting document, which will include information on procedures for identifying and remediating safety incidents, as well as describing any relevant requirements (such as those associated with the permitting of the facility) for the decommissioning of the facility.

XI.3. Climate Change Adaptation

SDCP's internally adopted portfolio targets, relating to the use of renewable energy and other carbon-free energy supply, are intended to support the CAPs of Member Agencies and the San Diego Region at large. In future solicitations, SDCP will consider updating its bid evaluation criteria in consideration of the policies and preferences of its membership, including but not limited to risks associated with facilities located in regions that are forecasted to be impacted by higher instances of sea-level rise, flooding, wildfires, and/or elevated temperatures.

As noted above, SDCP has incorporated references to the Climate Action Plans of the Member Agencies and will provide more detailed strategies for climate change adaptation in its 2021 RPS Procurement Plans.

XI.4. Impacts During Public Safety Shut-off (PSPS) Events

As SDCP recently commenced CCA operations, potential impacts related to future PSPS events are uncertain. However, with regard to resource planning, it is likely that a relatively short-duration PSPS event impacting SDCP would marginally reduce retail electric sales and, as a result, would generate a very small increase in the proportionate share of renewable energy

supply accruing to SDCP (if renewable supply agreements continue to perform as expected during such events). As SDCP executes contracts with renewable generating facilities, it will evaluate the risk of the loss of generation associated with PSPS events both for facilities that are already online and for facilities that are still under development. Based on impact of prior PSPS events to generating facilities, SDCP anticipates that the total quantity of any PSPS-related reductions in RPS-eligible generation will be relatively small and would likely be offset by the potential reduction in retail sales that would result from PSPS events that directly impact SDCP's customers. Therefore, the likelihood of a material impact to SDCP's renewable energy planning process or related performance metrics seems unlikely.

XI.5. Biomass Procurement

SDCP's neutral position on biomass procurement remains unchanged. SDCP completed its initial long-term renewable energy contracting efforts in 2021 and has yet to receive offers from eligible "clean firm" renewable energy resources under its current RFO, so it is difficult to predict how the organization's renewable energy supply portfolio will evolve over time. While SDCP has no specific preferences for or against biomass resources, the prospect of procuring such resources will be dependent upon offers received during future solicitation processes. To the extent that future biomass offers/proposals are competitive (with similar offers received from other resource types) and/or in the event SDCP adopts policies explicitly supporting the acquisition of biomass energy resources, SDCP will consider the inclusion of biomass energy within its renewable energy supply portfolio.

XII. Consideration of Price Adjustments Mechanisms

During ongoing contracting processes and future solicitations, and consistent with SB 350 and SB 100, SDCP will review the prospects of incorporating price adjustments in contracts with

online dates more than 24 months after the date of contract execution. As noted in the ACR, such price adjustments could include price indexing to key components or to the Consumer Price Index.

XIII. Curtailment Frequency, Forecasting, Costs

This Section responds to the questions presented in Section 5.13 of the ACR[23] and describe SDCP's strategies and experience so far in managing SDCP's exposure to negative pricing events, overgeneration, and economic curtailment for SDCP's region and portfolio of renewable resources.

XIII.1. Factors Having the Most Impact on the Projected Increases in Incidences of Overgeneration and Negative Market Price Hours

SDCP continues to learn a great deal about the California energy market, including information and considerations related to energy curtailment, potential cost impacts, contracting considerations, and other concerns. The following represents SDCP's understanding of this topic, which may impact future procurement processes.

Due in large part to the rapid increase in the amount of wind and solar generating facilities that have been brought online throughout the western United States, the California Independent System Operator's ("CAISO") balancing authority area has experienced an increasing frequency and magnitude of curtailment and negative pricing events. As of the end of 2019, California had over 12,800 MW of solar, 9,400 MW of behind-the-meter solar, and 5,900 MW of wind.[24] This increased capacity results in discrete periods where the majority of load in the CAISO is served by solar and wind resources. The monthly maximum load served by wind

[23] See *Assigned Commissioner and Assigned Administrative Law Judge's Ruling Identifying Issues and Schedule of Review for 2020 Renewables Portfolio Standard Procurement Plans*, May 6, 2020 at p. 27-28.

[24] California Energy Commission, Renewable Energy Tracking Progress, Feb. 2020, at 6, *available at* https://www.energy.ca.gov/sites/default/files/2019-12/renewable_ada.pdf.

and solar in the CAISO has averaged 64.3 percent over the past 4 years (May 2018 to May 2022), and in May of 2022 the monthly maximum load served by wind and solar was just under 95%, while the maximum 5-minute amount of all renewables serving load was 103.5%.[25] To address the resulting instances of over-supply, the amount of curtailment of wind and solar in the CAISO has significantly increased each year from 2015 through 2020, totaling 187,000 MWh in 2015, 308,000 MWh in 2016, 379,510 MWh in 2017, 461,043 MWh in 2018, 965,241 MWh in 2019, and 1,586,500 MWh in 2020.[26] As of May 31, 2021, the total curtailment of solar and wind year to date is already 1,062,270 MWh.[27] Curtailment is typically the highest during the months of March, April, and May when hydroelectric generation is historically at its highest.

SDCP will continue to monitor this situation to the extent such circumstances are likely to impact procurement activities and contract administration. If prospective renewable generating opportunities are located in areas that are prone to frequent instances of negative market pricing (based on available historical data), SDCP will be sure to evaluate such data to better understand prospective financial impacts and/or pursue contractual pricing structures that will insulate the CCA program from such risks. When SDCP considers specific renewable project/contract opportunities in the future, it will likely assume that incidences of over-generation will continue to occur (or increase) in areas of the state with low load and relatively high levels of generation. To the extent there are not opportunities to store, export or otherwise use such generation as it occurs, SDCP understands that market pricing would likely be suppressed to the extent that generation exceeds load; and to the extent that generation

[25] CAISO, Monthly Renewables Performance Report, May 2022, *available at* http://www.caiso.com/Documents/MonthlyRenewablesPerformanceReport-May2022.html.
[26] CAISO, Managing Oversupply, Wind and Solar Curtailment Totals, updated June 6, 2021, *available at* http://www.caiso.com/informed/Pages/ManagingOversupply.aspx.
[27] *Id.*

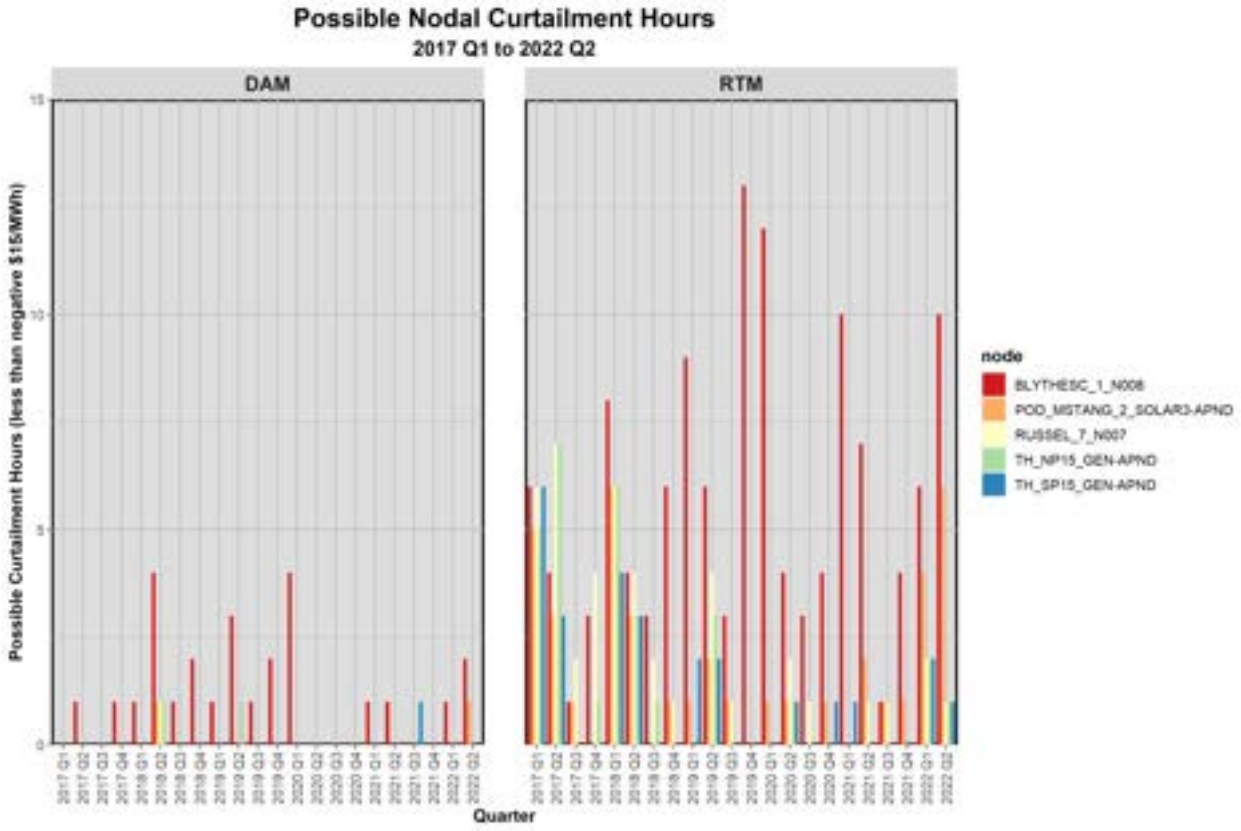
meaningfully exceeds load, market pricing could turn negative (or significantly negative). This concern was previously considered by SDCP and will continue to be considered when evaluating future renewable project/contract opportunities, and to the extent that certain project locations seem predisposed to incidences of negative pricing, SDCP will weigh such risk against other available project/contract opportunities. Ultimately, SDCP must satisfy its RPS procurement mandates and will need to procure among available opportunities, even if such opportunities present related risks to SDCP – in such instances, SDCP may seek to minimize its negative price risk through contract structures that alleviate these concerns for the buyer.

XIII.2. Written Description of Quantitative Analysis of Forecast of the Number of Hours Per Year of Negative Market Pricing for the Next 10 Years

Negative prices in the CAISO market can significantly impact the cost and overall value of renewable generating assets, particularly if such supply agreements apply market-based settlement mechanisms to determine charges assessed to the buyer. Thus, it is important that SDCP consider the siting of prospective renewable generating resources to avoid taking on unforeseen costs or lower than expected delivered energy quantities, which may result from economic curtailments. For this reason, SDCP has endeavored to quantify the potential occurrence of negative pricing events within certain areas of the state that are known to include significant levels of renewable generating capacity. While SDCP is not yet directly exposed to such risks (by virtue of its current RPS contract portfolio), it is expected to experience exposure to negative price risk as its RPS contract portfolio evolves with time. To improve its understanding of such risks, SDCP has assembled a historic negative pricing analysis with the average results of such analysis being used as SDCP's ten-year negative price forecast. SDCP notes that moderately negative prices – between zero and $15/MWh – are not expected to trigger meaningful economic curtailments, as the cost of procuring replacement RPS supply under

index-plus pricing arrangements would likely be equivalent in cost; in such instances, there would be little sense for SDCP to curtail renewable energy deliveries.

Below are several charts which illustrate the number of potential historic curtailment events that would have been triggered when nodal prices fell below negative $15/MWh (SDCP's prescribed pricing benchmark that was applied to identify potential economic curtailment incidents under this methodology). Estimates for the real-time market (RTM) have been averaged over the hour to promote comparability between day-ahead and RTM outcomes.



Using the historic data illustrated above, SDCP has created the following forecast that will be considered if future project opportunities are located adjacent to the specified nodes. If eventual project opportunities happen to be located in other geographic areas, SDCP would update its analysis based on the node in closest proximity to the prospective generating resource. This forecast methodology allows SDCP to estimate the quantity of time energy will be curtailed

from a renewable energy project. Because most curtailment hours occur within the real-time market, SDCP has also included a sample of its analyses for a subset of nodes that are known to be in close proximity to areas of the state in which prevalent renewable generation buildout has occurred. The color shading in the table is a visual cue reflecting curtailment density in certain hours of the year. This density will be helpful in determining the delivery profiles that may complement existing generating resources adjacent to the node as well as those that may exacerbate negative pricing. SDCP is mindful that it will need to annually evaluate relevant variables, such as regional hydrologic conditions and generalized weather trends, to determine if any adjustments ought to be made to its forecast.

BLYTHESC_1_N008 RTM

Hour	January	February	March	April	May	June	July	August	September	October	November	December
1	.17	.50	.00	.17	.17	.00	.20	.20	.20	.00	.40	.20
2	.17	.17	.00	.00	.00	.33	.00	.20	.00	.00	.20	.20
3	.00	.17	.00	.00	.17	.17	.20	.20	.00	.00	.20	.00
4	.00	.17	.00	.00	.00	.00	.00	.00	.00	.00	.20	.00
5	.00	.00	.17	.00	.00	.00	.20	.20	.00	.00	.20	.00
6	.17	.00	.00	.00	.33	.50	.20	.00	.00	.00	.40	.00
7	.00	.00	.00	.00	.50	1.00	.40	.20	.20	.00	.00	.40
8	.17	.50	.00	1.00	1.50	1.83	1.40	.40	.40	.40	.40	.80
9	.83	1.67	1.50	3.17	3.33	1.50	.40	.40	1.00	1.20	1.60	1.80
10	1.17	2.67	2.67	2.33	3.33	.67	.20	.40	1.60	2.20	2.60	3.60
11	2.67	3.00	3.00	2.50	2.17	.67	.00	.20	1.20	2.20	2.20	4.00
12	.83	2.83	2.50	2.83	2.17	.00	.20	.20	.80	2.40	2.60	2.60
13	3.00	3.17	4.50	1.33	1.33	.00	.00	.00	.60	1.00	2.20	2.60
14	1.00	3.83	4.33	2.17	1.33	.17	.00	.20	.60	2.40	1.20	2.40
15	1.00	4.17	4.33	1.67	.83	.50	.20	.00	.40	1.60	2.00	2.40
16	.67	3.00	3.00	1.50	.67	.00	.00	.00	.20	.80	1.40	.00
17	.17	.17	3.00	1.50	1.00	.00	.00	.00	.00	.20	.60	.40
18	.50	.17	.67	.17	.50	.00	.00	.00	.20	.00	.60	.80
19	.17	.17	.17	.00	.00	.00	.00	.00	.20	.00	.80	.80
20	.67	.50	.00	.00	.00	.00	.00	.20	.20	.00	.60	.40
21	.67	.17	.00	.00	.17	.17	.00	.20	.60	.00	.60	.20
22	.33	.50	.17	.00	.17	.33	.00	.00	.40	.00	1.00	.60
23	.33	.17	.00	.00	.00	.17	.20	.00	.60	.00	.40	.20
24	.17	.67	.33	.00	.00	.00	.00	.60	.20	.00	.40	.00
Total Monthly Incidents of Neg.Pricing	14.83	28.33	30.33	20.33	19.67	8.00	3.80	3.80	9.60	14.40	22.80	24.40
Average Monthly Incidents of Neg.Pricing	1.19	2.27	2.43	1.63	1.57	.64	.30	.30	.77	1.15	1.82	1.95
Annual Adjustment Factor to be applied across 10-year forecast	7.41%	14.15%	15.14%	10.15%	9.82%	3.99%	1.90%	1.90%	4.79%	7.19%	11.38%	12.18%

RUSSEL_7_N007 RTM

Hour	January	February	March	April	May	June	July	August	September	October	November	December
1	.17	.17	.00	.83	.50	.33	.20	.40	.00	.00	.00	.40
2	.17	.17	.00	.83	.83	.50	.40	.20	.00	.00	.00	.40
3	.00	.33	.00	.83	1.00	.17	.40	.40	.00	.00	.00	.40
4	.00	.17	.00	.50	.83	.17	.20	.40	.00	.00	.00	.40
5	.00	.00	.17	.50	.50	.00	.20	.20	.00	.00	.00	.40
6	.00	.00	.00	.50	.50	.17	.20	.20	.00	.00	.00	.60
7	.00	.00	.00	.50	.33	.83	.20	.20	.00	.00	.00	.80
8	.00	.00	.00	.83	.33	.50	.40	.00	.20	.00	.00	.40
9	.00	.50	.33	1.17	1.00	.50	.20	.20	.00	.00	.00	.40
10	.00	1.00	.33	1.33	.67	.67	.00	.00	.00	.00	.00	.40
11	.00	1.00	.67	.83	.67	.67	.00	.00	.00	.20	.00	.40
12	.17	.33	.17	.67	1.00	.17	.00	.00	.00	.00	.00	.40
13	.17	.17	.50	1.33	.50	.17	.00	.00	.00	.00	.00	.40
14	.17	.17	1.00	1.17	.33	.17	.00	.00	.00	.00	.00	.20
15	.17	.67	1.50	1.00	.67	.17	.00	.00	.00	.00	.00	.20
16	.00	.83	2.17	1.00	.67	.17	.00	.20	.00	.00	.00	.20
17	.00	.33	1.17	1.17	.67	.33	.20	.00	.20	.00	.00	.20
18	.00	.00	.50	.33	1.00	.17	.00	.00	.20	.20	.00	.40
19	.00	.00	.17	.50	.50	.33	.20	.00	.00	.00	.00	.40
20	.00	.00	.00	.83	.33	.17	.00	.20	.00	.00	.00	.40
21	.00	.00	.00	1.00	.17	.67	.20	.00	.20	.00	.00	.40
22	.00	.17	.00	1.17	.33	.50	.20	.20	.00	.00	.00	.40
23	.00	.17	.00	.83	.33	.17	.00	.20	.20	.00	.00	.40
24	.00	.50	.33	1.67	.67	.33	.00	.20	.00	.00	.00	.40
Total Monthly Incidents of Neg.Pricing	1.00	6.67	9.00	21.33	14.33	8.00	3.20	3.20	1.00	.40	.00	9.40
Average Monthly Incidents of Neg.Pricing	.08	.53	.72	1.71	1.15	.64	.26	.26	.08	.03	.00	.75
Annual Adjustment Factor to be applied across 10-year forecast	1.29%	8.60%	11.61%	27.52%	18.49%	10.32%	4.13%	4.13%	1.29%	0.52%	0.00%	12.12%

XIII.3. Experience, to Date, With Managing Exposure to Negative Market Prices and/or Lessons Learned from Other Retail Sellers in California

SDCP is a new CCA organization. To date, SDCP has no experience managing exposure to negative price risk but understands that it should pay close attention to historical nodal energy prices at/near areas where prospective renewable generating facilities will/may be located. Gathering such information should facilitate an improved understanding of the frequency and significance of instances involving negative pricing and may influence project rankings within SDCP-administered solicitation processes. SDCP understands that negative pricing is more prevalent in certain geographic regions throughout the state, so contracting with generating resources located within or adjacent to such areas may expose the organization to higher-than-expected renewable energy/compliance costs. SDCP has also learned that certain contract structures, including "index plus" pricing arrangements, may substantially minimize the financial

impacts related to negative pricing. For example, numerous CCAs have pursued the use of index-plus pricing structures and, as a result, such contracts are generally insulated from instances involving negative market prices and/or curtailment risk. Another effective mitigation measure for negative price risk is the co-located installation of battery storage infrastructure with intermittent renewable generating capacity. Such infrastructure generally allows the buyer to shift some or all (based on the size of the storage infrastructure) of the renewable energy production away from times of day when negative pricing can be particularly prevalent, allowing for the delivery of such power at times of day when market pricing is higher/stronger. SDCP will consider implementing similar contracting and curtailment bid cap arrangements, as well as the inclusion of energy storage infrastructure, to minimize the risk of curtailment and negative pricing. In fact, two of SDCP's initial three long-term renewable energy supply contracts incorporate the use of battery storage to facilitate the shifting of production curves to better align with customer energy use and market pricing conditions. During its solicitation processes, SDCP will evaluate negative pricing history, as needed, for project opportunities that may expose the organization to such risks.

SDCP plans to pursue a diversified portfolio of RPS contracts that seek to utilize a variety of contract structures, generating technologies, resource locations, suppliers/developers, risk allocation mechanisms and other considerations. SDCP will continue to learn lessons from established CCAs, particularly with regard to negative price risk mitigation. For example, Sonoma Clean Power Authority ("SCPA") assesses procurement opportunities by evaluating the proposed project location and nearby historical negative pricing, including congestion, and pursues contract terms that recognize and limit the potential financial impacts of negative pricing (including curtailment rights that allow an appropriate level of economic curtailment by the

buyer). Additionally, SCPA is exploring battery storage systems at existing resources that are particularly exposed to negative pricing. The above-mentioned strategies for reducing the risk of negative pricing will be considered by SDCP as part of its strategy to mitigate negative price that could impact its customers.

XIII.4. Direct Costs Incurred, to Date, for Incidences of Overgeneration and Associated Negative Market Prices

SDCP is a new CCA organization. Based on current supply contracts, it has yet to incur direct costs related to negative pricing (for incidences of overgeneration associated with renewable generating facilities).

XIII.5. An Overall Strategy for Managing the Overall Cost Impact of Increasing Incidences of Overgeneration and Negative Market Prices

In reviewing the RPS Procurement Plans of other CCAs, it is evident that direct costs associated with incidences of overgeneration are currently, for most CCAs, an unfortunate reality. It is the goal of SDCP to minimize these costs wherever possible by investigating mitigation strategies and learning lessons from those CCAs that have been able to avoid negative pricing through certain contracting mechanisms and operational strategies. While curtailment is a viable renewable integration strategy that is generally more cost-effective than other options, there are potential negative consequences from excessive curtailment. Curtailment of solar and wind represents a lost opportunity to generate zero GHG- emitting electricity, and excessive curtailment could impact the ability of the state to meet its environmental and energy policy goals. Additionally, these over-supply situations expose ratepayers to increased costs because their LSEs must either economically curtail the generating resource (and often pay for the electricity that was not generated) or generate power and be exposed to negative prices. Because these conditions are largely driven by state policy, it is appropriate to consider macro-level

mitigation measures through CAISO initiatives, Commission rulemakings, and possibly even legislation. There are a number of measures and policies that have already been implemented or are currently being pursued that will have significant impacts on curtailment in the future. This includes the expansion of the Energy Imbalance Market, improvements to the CAISO market design and structure, enhanced forecasting capabilities, time-of-use rates, improved EV charging functionalities, and smart deployment of distributed energy resources. The Commission's IRP proceeding will be an appropriate forum to measure the impact of these policies and the effect that they will have on future curtailment. These new measures will need to be modeled and incorporated into forecasts of future curtailment.

XIII.6. Contract Terms Included in RPS Contracts Intended to Reduce the Likelihood of Curtailment or Protect Against Negative Prices.

As described elsewhere in this RPS Procurement Plan, SDCP is aware of potential cost, compliance, and environmental impacts of negative market prices and associated curtailment of renewable resources. As a new CCA, SDCP has the luxury of building its supply portfolio without any energy contracts that subject SDCP to curtailment and negative price risk similar to those in some of the IOU and CCA contracts that predate SDCP's existence and the prevalence of such significant occurrences of negative market prices. With the benefit of such hindsight and the opportunity to shape its supply portfolio with the lessons learned, SDCP has incorporated a number of strategies and relevant contract provisions to further reduce curtailment and negative price risk. Primarily, SDCP has not signed a PPA with a solar-only (i.e. not co-located or hybridized with energy storage) generating facility that exposes SDCP to any market price exposure; instead, SDCP has preferred to contract with solar-plus-storage hybrid facilities. When contracting for solar or wind output not associated with hybrid or co-located facilities, SDCP has pursued index-plus pricing structures or fixed-volume contracts to ensure the same protection

against negative prices and reductions in deliveries due to curtailment. When contracting with hybrid facilities that result in exposure to market prices, SDCP has maintained full dispatch rights of the facility to ensure that it can shift deliveries from negatively priced intervals and into higher priced periods, both to increase market revenues received and to reduce the magnitude of curtailed renewable generation. As its supply portfolio becomes more complex and diverse, SDCP expects that curtailment and negative price risks may present themselves; SDCP is likely to employ these strategies in future contracting while monitoring, exploring, and evaluating additional techniques to hedge against these potential outcomes.

XIV. Cost Quantification

SDCP has updated its Cost Quantification Table, Appendix E, based on current renewable energy supply contracts and has extended the planning period reflected in this appendix through 2032. SDCP will continue to update such information in future RPS procurement planning documents when new data points become available.

XV. Coordination with the IRP Proceeding

The resources identified in this RPS Procurement Plan are consistent with resources that were identified in SDCP's most recent IRP, which was approved by SDCP's governing board and provided to the Commission for certification on September 1, 2020. As required by the ACR,[28] SDCP includes the following table that describes how SDCP's 2022 RPS Procurement Plan conforms with the determinations made in the IRP proceedings (R.16-02-007, R.20-05-003 and D.22-02-004). As required, SDCP will highlight the interrelationships of its RPS and IRP planning processes in a future iteration of this RPS Procurement Plan. The following table reflects SDCP's most recent updates, as reflected in its RPS Procurement Plan, regarding RPS

[28] See ACR at 32-35.

alignment with the IRP process.

IRP Section Subsection	RPS Alignment in IRP	
III. Study Results **A. Preferred and Conforming Portfolios**	Retail sellers should explain how the RPS resources they plan to procure, outlined in their RPS Plan, will align with each portfolio to be developed in their IRP. In addition to the list of the IRP portfolios developed and portfolio descriptions submitted for Commission approval and certification in IRP Plans, this should include:	
	1. Existing RPS resources that the retail seller owns or contracts. *2. Existing RPS resources that the retail seller plans to contract with in the future.* *3. New RPS resources that the retail seller plans to invest in.* *4. New and existing resources that will be used to meet Mid-Term Reliability obligations adopted in D.21-06-035.*	As part of its 2022~~0~~ IRP filing, SDCP submitted two Preferred Conforming Portfolios that achieve its proportional share of both the ~~46~~30 and ~~38~~25 MMT GHG targets by 2035. These targets were in addition to the requirements in D.22-02-004 which require LSEs to meet their proportional share of the 2030 target of 38 MMT and plan for a 2030 target of 30 MMT. Because SDCP has yet to finalize its initial long-term RPS supply commitments that will contribute to the achievement of such portfolio goals, this document reflects those resources that SDCP intends to contract with in the future. Such procurement efforts are expected to contribute to the achievement of relevant GHG targets as well as RPS procurement requirements, including the 65% long-term contracting requirement. ~~For the 2022 IRP filings, the June 15, 2022 Administrative Law Judge's Ruling Finalizing Load Forecasts and Greenhouse Gas Emissions Benchmarks for 2022 Integrated Resource Plan Filings indicates that the IRP filings should be planning for 2035 as the target year and adopts planning targets of 30 MMT and 25 MMT. These are in addition to the requirements in D.22-02-004 which require LSEs to meet their proportional share of the 2030 target of 38 MMT and plan for a 2030 target of 30 MMT.~~ Description of 2022~~0~~ Conforming Portfolios: • ~~46~~30 MMT Conforming Portfolio: Portfolio that achieves SDCP's

		proportional share of a ~~46~~30 MMT statewide GHG target. ○ The ~~46~~30 MMT Conforming Portfolio assumed the use of new RPS resources not yet placed under contract, including: ~~600~~ 1,425 MW of new hybrid resources (which would include ~~300~~750 MW of battery storage to promote grid reliability); ~~300~~ 550 MW of new wind resources; ~~400 additional MW of new solar-only resources;~~ and 100 MW of new geothermal resources ○ The 30~~46~~ MMT Conforming Portfolio also assumed the use of existing RPS resources not yet placed under contract, including: ~~256~~250 MW of existing wind resources~~; and 398 additional MW of existing solar-only resources.~~ ○ SDCP's 30~~46~~ MMT portfolio conformed to the procurement timing, resource quantities, and general resource attributes identified in the 30~~46~~ MMT reference system plan. • ~~38~~25 MMT Conforming Portfolio: Portfolio that achieves SDCP's proportional share of a 25~~38~~ MMT statewide GHG target. ○ The 25~~38~~ MMT Conforming Portfolio assumed the use of new RPS resources not yet placed under contract, including: 1,425~~600~~ MW of new hybrid resources (which would include ~~300~~750 MW of battery storage to promote grid reliability); ~~300~~550 MW of new wind resources; ~~400 additional MW of new solar-only resources;~~ and 100 MW of new geothermal resources. ○ The ~~38~~25 MMT Conforming

		Portfolio also assumed the use of existing RPS resources not yet placed under contract, including: 256~~6~~0 MW of existing wind resources~~; and 398 additional MW of existing solar-only resources.~~. ○ SDCP's 253~~8~~ MMT portfolio conformed to the procurement timing, resource quantities, and general resource attributes identified in the 253~~8~~ MMT reference system plan. ~~Description of 2022 Preferred Conforming Portfolios:~~ ~~• 38 MMT in 2030 and 30 MMT in 2035 Conforming Portfolio~~ ~~○ This is a continuance of the 38 MMT portfolio from the 2020 IRP. It is anticipated at this time that the contracts outlined above will continue to be sufficient~~ ~~• 30 MMT in 2030 and 25 MMT in 2035 Conforming Portfolio:~~ ~~○ SDCP is only beginning to determine how it plans on meeting this new, lower GHG requirement. SDCP anticipates that the procurement required will be similar to the outlines discussed above to meet the 38 MMT portfolio from the 2020 IRP.~~ Meeting the Mid-Term Reliability obligations from D.21-06-035: ○ SDCP expects to meet Mid-Term Reliability ("MTR") obligations via resources that are currently under contract (scheduled to achieve commercial operation in 2023 and 2024) or under negotiation (to be online in 2023 through 2025). SDCP's next RPS RFO will address any outstanding

		requirements for resources to be online in 2025 or, should they present, in 2023 or 2024. With respect to Long Leadtime obligations for resources to be online in 2026, SDCP closed its solicitation ~~expects to receive offers~~ on July 6, 2022 for "clean firm" resources and plans to release another ~~follow that~~ solicitation ~~promptly with another~~ for long-duration energy storage resources in 2023. Additionally, SDCP issued an RFP in October 2022 seeking resources that could be online between 2024-2026.
IV. Action Plan **A. Proposed Activities**	Retail sellers should describe how they propose to use RPS resources to implement their Preferred Portfolio. Narratives should include:	
	1. Proposed RPS procurement activities as required by Commission decision or mandated procurement. *2. Description of RPS resources identified in the Study Results section that correspond to proposed activities.* *3. Procurement plans, potential barriers, and resource viability for each new RPS resource identified.*	To ensure compliance with its GHG and RPS targets, SDCP plans to substantially rely on GHG-free and RPS-eligible resources while contributing to statewide reliability requirements and responsibly managing overall portfolio costs. This approach is generally consistent between the ~~46~~30 MMT Conforming Portfolio and ~~38~~25 MMT Conforming Portfolio in the 202~~0~~2 IRP Plan~~, as well as the 30 MMT and 25 MMT portfolios required to be included in the 2022 IRP Plan~~. In its IRP, SDCP also established that its planned incremental capacity exceeds its pro rata share of capacity that may be needed for replacement of Diablo Canyon. These resources are further described in SDCP's 202~~0~~2 IRP and, following collaboration with SDG&E to realign MTR procurement obligations and associated procurement and contract administration, SDCP maintains the expectation that its capacity from resources under contract and currently in negotiation will exceed requirements related to replacement of Diablo Canyon SDCP expects to administer future solicitation processes to fill outstanding resource needs

		required to meet portfolio specifications reflected in its ~~46~~30 MMT and ~~38~~25 MMT Preferred Conforming Portfolios as well as ongoing RPS procurement obligations. As noted elsewhere in this RPS Procurement Plan, SDCP will update the Commission with regard to the outcomes of its current long-term RPS contract negotiations in a future iteration of this planning process. SDCP does not foresee any barriers or viability concerns related to its requisite resource commitments but will advise the Commission if this impression changes over time.
IV. Action Plan **B. Procurement Activities**	The retail seller should describe the solicitation strategies for the RPS resources that will be included in their Preferred Portfolio. This description should include:	
	1. The type of solicitation. *2. The timeline for each solicitation.* *3. Desired online dates.* *4. Other relevant procurement planning*	SDCP may participate in distinct solicitations for different products (for example: specific renewable energy products, generating resources or storage infrastructure), or it may choose to solicit multiple products in the same solicitation. These solicitations will be competitive and may be similar to SDCP's initial long-term RPS solicitation, which was previously described in this RPS Procurement Plan. SDCP will administer future solicitations, as necessary, to promote consistency with the resource development plan identified in the IRP (for purposes of promoting achievement with state-mandated RPS targets as well as SDCP's internal targets). As noted above, SDCP anticipates administering upcoming solicitation activities consistent with the process and timeline described in Section I. During administration of future procurement processes, SDCP will utilize the evaluative and contract management processes (further described above in Section X and elsewhere in this Plan) to promote timely project completion and improve planning certainty.

IV. Action Plan **C. Potential Barriers**	Retail sellers should provide a summary of the barriers that will be identified in their Preferred Portfolio as they relate to RPS resources. The section should include:	
	1. Key market, regulatory, financial, or other resource viability barriers or risks associated with the RPS resources coming online in retail sellers' Preferred Portfolios. *2. Key risks associated with the potential retirement of existing RPS resources on which the retail seller intends to rely in the future.*	SDCP does not expect any procurement barriers to impede its future contracting for new renewable energy resources, but notes that even though a balanced, diverse RPS portfolio is desirable, the limited resource availability and lead time required for some technology types may necessitate planning flexibility. SDCP also observes that the rigorous demands of California's RPS program, particularly the currently effect 65 percent long-term contracting mandate, may necessitate contracting activities with a portfolio of resources that will evolve considerably over time – more specifically, SDCP may need to pursue initial supply commitments with a portfolio of resources that does not exactly reflect its eventual/ideal characteristics related resource diversity and/or reliability. Pursuit of such portfolio characteristics will continue to be a work in progress during SDCP's first several procurement efforts and will evolve throughout the upcoming 10-year planning period. The key risk affecting SDCP's achievement of the 46 MMT and 38 MMT Preferred Conforming IRP Portfolios in the 2020 IRP Plan and the 30 MMT and 25 MMT portfolios in the 2022 IRP ~~p~~Plan is reliance on new resources – while SDCP intends to contract with highly experienced and qualified project developers (when new-build resources are deemed necessary), there is always a limited risk of project failure. In consideration of SDCP's existing RPS contract negotiation processes that will support achievement of parameters of the Preferred Conforming IRP Portfolios, it does not have any substantive concerns regarding its ability to fulfill and achieve levels of renewable energy procurement that will be required to satisfy pertinent RPS mandates or IRP targets. If such

		concerns happen to change in the future, SDCP will accordingly notify the Commission in a subsequent iteration of this planning process.

Dated: January 18, 2023~~August 15, 2022~~

Respectfully submitted,

/s/ *Karin Burns*

Karin Burns
Chief Executive Officer
San Diego Community Power
815 E Street, Suite 12716
San Diego, CA 92112
(619) 657-0060
kburns@sdcommunitypower.org

Appendix B

202 RPS Procurement Plan Checklist and Verification

Final 2022 RPS Procurement Plan Checklist- Task Completed

Retail seller name: San Diego Community Power	**YES/NO**	**NOTES**
I. Major Changes to RPS Plan	YES	
II. Executive Summary	YES	
III. Summary of Legislation Compliance	YES	
IV. Assessment of RPS Portfolio Supplies and Demand	YES	
IV.A. Portfolio Supply and Demand	YES	
IV.A.1. Voluntary Allocation and Market Offer (VAMO)	YES	
IV.A.2. Portfolio Optimization	YES	
IV.B. Responsive to Policies, Regulations, and Statutes	YES	
IV.B.1 Long-term Procurement	YES	
IV.C. Portfolio Diversity and Reliability	YES	
IV.D. Lessons Learned	YES	
V. Project Development Status Update	YES	
VI. Potential Compliance Delays	YES	
VII. Risk Assessment	YES	
VIII. Renewable Net Short Calculation	YES	
IX. Minimum Margin of Procurement (MMoP)	YES	
IX.A. MMoP Methodology and Inputs	YES	
IX.B. MMoP Scenarios	YES	
X. Bid Solicitation Protocol	YES	
X.A. Solicitation Protocols for Renewables Sales	YES	
X.B. Bid Selection Protocols	YES	
X.C. LCBF Criteria	YES	
XI. Safety Considerations	YES	
XII. Consideration of Price Adjustments Mechanisms	YES	
XIII. Curtailment Frequency, Forecasting, Costs	YES	
XIV. Cost Quantification	YES	
XV. Coordination with the IRP Proceeding	YES	
Appendix A: Redlined Version of the Final 2022 RPS Plan	YES	

Officer Verification

I am an officer of the reporting organization herein and am authorized to make this verification on its behalf. The statements in the foregoing document are true of my own knowledge, except as to matters which are therein stated on information or belief, and as to those matters, I believe them to be true. The spreadsheet templates used within this filing have not been altered from the version issued or approved by Energy Division.

Executed on January 18, 2023, in San Diego, California.

/s/ Karin Burns

Karin Burns
Chief Executive Officer
San Diego Community Power
815 E Street, Suite 12716
San Diego, CA 92112
(619) 657-0060
kburns@sdcommunitypower.org

Appendix C

Renewable Net Short Calculation

(Public Version)

Renewable Net Short Calculations - 2020 RPS Procurement Plans

LSE Name:	SDCP
Date Filed:	1/1 /23

Input required | No input required | Hard-coded

Variable	Calculation	Item	2017 Actual	2018 Actual	2019 Actual	2020 Actual	**2017-2020**	2021 Actual	2022 Forecast	2023 Forecast	2024 Forecast	**2021-2024**	2025 Forecast	2026 Forecast	2027 Forecast
		Forecast Year					**CP 3**		1	2	3	**CP 4**	4	5	6
		Annual RPS Requirement													
A		**Total Retail Sales (MWh)**					-	**2,047,877**					**8,369,741**	**8,415,286**	**8,457,370**
B		RPS Procurement Quantity Requirement (%)	27.0%	29.0%	31.0%	33.0%	NA	35.8%	38.5%	41.3%	44.0%	41.1%	46.7%	49.3%	52.0%
C	A*B	**Gross RPS Procurement Quantity Requirement (MWh)**	-	-	-	-	-	**732,116**					**3,906,158**	**4,151,261**	**4,397,832**
D		Voluntary Margin of Over-procurement (MWh)					-	449,601					948,292	982,064	1,014,884
E	C+D	**Net RPS Procurement Need (MWh)**	-	-	-	-	-	**1,181,717**					**4,854,450**	**5,133,324**	**5,412,717**
		RPS-Eligible Procurement													
Fa		**Risk-Adjusted RECs from Online Generation (MWh)**					-	**1,181,717**					**3,950,704**	**3,850,704**	**3,850,703**
Faa		Forecast Failure Rate for Online Generation (%)					*#DIV/0!*						2.0%	2.0%	2.0%
Fb		**Risk-Adjusted RECs from RPS Facilities in Development (MWh)**					-						**755,439**	**752,246**	**749,048**
Fbb		Forecast Failure Rate for RPS Facilities in Development (%)					*#DIV/0!*						2.0%	2.0%	2.0%
Fc		**Pre-Approved Generic RECs (MWh)**					-								
Fd		**Executed REC Sales (MWh)**					-								
F	Fa+Fb+Fc-Fd	**Total RPS Eligible Procurement (MWh)**	-	-	-	-	-	**1,181,717**					**4,706,143**	**4,602,950**	**4,599,751**
F0		Category 0 RECs					-						359,534	359,534	359,534
F1		Category 1 RECs					-	996,717					4,246,609	4,243,416	4,240,218
F2		Category 2 RECs					-	185,000					100,000		
F3		Category 3 RECs					-								
		Gross RPS Position (Physical Net Short)													
Ga	F-E	**Annual Gross RPS Position (MWh)**	-	-	-	-	-	-					**(148,306)**	**(530,374)**	**(812,965)**
Gb	F/A	Annual Gross RPS Position (%)	0%	0%	0%	0%	0%	58%					56%	55%	54%
		Application of Bank													
Ha	J-Hc (from previous CP)	**Existing Banked RECs above the PQR**					-	-				-	-		
Hb		RECs above the PQR added to Bank					-					-			
Hc		Non-bankable RECs above the PQR					-					-			
H	Ha+Hb	**Gross Balance of RECs above the PQR**	-	-	-	-	-	-	-	-	-	-	-	-	-
Ia		Planned Application of RECs above the PQR towards RPS Compliance					-					-			
Ib		Planned Sales of RECs above the PQR					-					-			
J	H-Ia-Ib	**Net Balance of RECs above the PQR**	-	-	-	-	-	-	-	-	-	-	-	-	-
J0		Category 0 RECs					-					-			
J1		Category 1 RECs					-					-			
J2		Category 2 RECs					-					-			
		Expiring Contracts													
K		RECs from Expiring RPS Contracts (MWh)					-	450,000	1,330,000	150,000	146,873	2,076,873	100,000		
		Net RPS Position (Optimized Net Short)													
La	Ga+Ia-Ib-Hc	**Annual Net RPS Position after Bank Optimization (MWh)**	-	-	-	-	-	-					**(148,306)**	**(530,374)**	**(812,965)**
Lb	(F+Ia-Ib-Hc)/A	Annual Net RPS Position after Bank Optimization (%)	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.577045012					0.56228065	0.546974876	0.543874936

Note: All values are to be input in MWhs

Renewable Net Short Calculations - 2020 RPS Procurement Plans

LSE Name:	SDCP
Date Filed:	1/18/23

Variable	Calculation	Item	2025-2027	2028 Forecast	2029 Forecast	2030 Forecast	2028-2030	2031 Forecast	2032 Forecast
		Forecast Year	CP 5	7	8	9	CP 6	10	11
		Annual RPS Requirement							
A		**Total Retail Sales (MWh)**	**25,242,396**	**8,499,657**	**8,542,155**	**8,584,866**	**25,626,677**	**8,627,790**	**8,670,929**
B		RPS Procurement Quantity Requirement (%)	49.3%	54.7%	57.3%	60.0%	57.3%	60.0%	60.0%
C	A*B	**Gross RPS Procurement Quantity Requirement (MWh)**	**12,455,250.8**	**4,646,762**	**4,897,217**	**5,150,919**	**14,694,899.2**	**5,176,674**	**5,202,557**
D		Voluntary Margin of Over-procurement (MWh)	2,945,240	1,133,004	1,253,134	1,287,730	3,673,868	1,466,724	1,734,186
E	C+D	**Net RPS Procurement Need (MWh)**	**15,400,491**	**5,779,767**	**6,150,352**	**6,438,649**	**18,368,767**	**6,643,398**	**6,936,743**
		RPS-Eligible Procurement							
Fa		**Risk-Adjusted RECs from Online Generation (MWh)**	**11,652,112**	**3,500,704**	**3,500,704**	**3,500,704**	**10,502,112**	**3,220,704**	**3,067,314**
Faa		Forecast Failure Rate for Online Generation (%)	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Fb		**Risk-Adjusted RECs from RPS Facilities in Development (MWh)**	**2,256,733**	**745,842**	**742,627**	**739,404**	**2,227,873**	**736,183**	**732,954**
Fbb		Forecast Failure Rate for RPS Facilities in Development (%)	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Fc		**Pre-Approved Generic RECs (MWh)**	-				-		
Fd		**Executed REC Sales (MWh)**	-				-		
F	Fa+Fb+Fc-Fd	**Total RPS Eligible Procurement (MWh)**	**13,908,845**	**4,246,546**	**4,243,331**	**4,240,108**	**12,729,985**	**3,956,887**	**3,800,268**
F0		Category 0 RECs	1,078,603	359,534	359,534	359,534	1,078,603	359,534	359,534
F1		Category 1 RECs	12,730,242	3,887,012	3,883,797	3,880,574	11,651,382	3,597,353	3,440,734
F2		Category 2 RECs	100,000				-		
F3		Category 3 RECs	-				-		
		Gross RPS Position (Physical Net Short)							
Ga	F-E	**Annual Gross RPS Position (MWh)**	**(1,491,646)**	**(1,533,221)**	**(1,907,021)**	**(2,198,541)**	**(5,638,783)**	**(2,686,511)**	**(3,136,475)**
Gb	F/A	Annual Gross RPS Position (%)	55%	50%	50%	49%	50%	46%	44%
		Application of Bank							
Ha	J-Hc (from previous CP)	**Existing Banked RECs above the PQR**	-	-			-	-	
Hb		RECs above the PQR added to Bank	-				-		
Hc		Non-bankable RECs above the PQR	-				-		
H	Ha+Hb	**Gross Balance of RECs above the PQR**	-	-	-	-	-	-	-
Ia		Planned Application of RECs above the PQR towards RPS Compliance	-				-		
Ib		Planned Sales of RECs above the PQR	-				-		
J	H-Ia-Ib	**Net Balance of RECs above the PQR**	-	-	-	-	-	-	-
J0		Category 0 RECs	-				-		
J1		Category 1 RECs	-				-		
J2		Category 2 RECs	-				-		
		Expiring Contracts							
K		RECs from Expiring RPS Contracts (MWh)	100,000				-		17,373
		Net RPS Position (Optimized Net Short)							
La	Ga+Ia-Ib-Hc	**Annual Net RPS Position after Bank Optimization (MWh)**	**(1,491,646)**	**(1,533,221)**	**(1,907,021)**	**(2,198,541)**	**(5,638,783)**	**(2,686,511)**	**(3,136,475)**
Lb	(F+Ia-Ib-Hc)/A	Annual Net RPS Position after Bank Optimization (%)	0.55101126	0.499613822	0.496751813	0.493904983	0.496747382	0.458621145	0.438276909

Note: All values are to be input in MWhs

Appendix D

Project Development Status Update

Reporting LSE Name	RPS Contract ID	Project Name	Technology Type	Project Development Phase	City	County	State	Zip Code
San Diego Community Power (SDCP)	SDCP50003	Viking Energy Farm, LLC	Solar PV +BESS	Pre-Construction	Holtville	Imperial	CA	92250
San Diego Community Power (SDCP)	SDCP50005	IP Oberon, LLC	Solar PV	Pre-Construction	Desert Center	Riverside	CA	92239
San Diego Community Power (SDCP)	SDCP50004	JVR Energy Park, I	Solar PV +BESS	Pre-Construction	Jacumba Hot Springs	San Diego	CA	91934

Reporting LSE Name	RPS Contract ID	Project Name	Latitude	Longitude	Contract Length (Years)	Contract Execution Date (mm/dd/yyyy)	Contract Start Date (mm/dd/yyyy)
San Diego Community Power (SDCP)	SDCP50003	Viking Energy Farm, LLC	32.8034	-115.2702	20	5/3/21	6/30/23
San Diego Community Power (SDCP)	SDCP50005	IP Oberon, LLC	33.7181	-115.3426	15	6/11/21	6/30/23
San Diego Community Power (SDCP)	SDCP50004	JVR Energy Park, I	32.6242	-116.1748	20	6/4/21	3/31/23

Reporting LSE Name	RPS Contract ID	Project Name	Contract End Date (mm/dd/yyyy)	Contract Capacity	Expected Annual Generation	Total Contract Volume
San Diego Community Power (SDCP)	SDCP50003	Viking Energy Farm, LLC	6/29/43	100	260000	5200000
San Diego Community Power (SDCP)	SDCP50005	IP Oberon, LLC	6/29/38	75	230000	3450000
San Diego Community Power (SDCP)	SDCP50004	JVR Energy Park, I	3/30/43	90	260000	5200000

Reporting LSE Name	RPS Contract ID	Project Name	Commercial Operation Date (COD)	Transmission Status	Storage: Rated Power (MW)	Storage: Capacity (MWh)
San Diego Community Power (SDCP)	SDCP50003	Viking Energy Farm, LLC	NA		150	600
San Diego Community Power (SDCP)	SDCP50005	IP Oberon, LLC	NA		0	0
San Diego Community Power (SDCP)	SDCP50004	JVR Energy Park, I	NA		70	280

Reporting LSE Name	RPS Contract ID	Project Name	Project Notes
San Diego Community Power (SDCP)	SDCP50003	Viking Energy Farm, LLC	
San Diego Community Power (SDCP)	SDCP50005	IP Oberon, LLC	
San Diego Community Power (SDCP)	SDCP50004	JVR Energy Park, I	

Appendix E

Cost Quantification

(Public Version)

LSE Name:	SDCP
Date Filed:	1/18/23

Input Required No Input Required

Table 1: Cost Quantification (Actual Net Costs, $)		Actual RPS-Eligible Procurement and Generation Net Costs ($)		
1	**Executed RPS-Eligible Contracts by Technology Type* (Purchases and Sales)**	**2019**	**2020**	**2021**
2	Biogas: Digester Gas	$0	$0	
3	Biogas: Landfill Gas	$0	$0	
4	Biodiesel	$0	$0	
5	Biomass	$0	$0	$12,272,766
6	Muni Solid Waste	$0	$0	
7	Geothermal	$0	$0	$5,924,610
8	Small Hydro (Non-UOG)	$0	$0	$716,915
9	Conduit Hydro	$0	$0	
10	Water Supply / Conveyance	$0	$0	
11	Ocean Wave	$0	$0	
12	Ocean Thermal	$0	$0	
13	Tidal Current	$0	$0	
14	Solar PV (Non-UOG)	$0	$0	$37,959,123
15	Solar Thermal	$0	$0	$1,073,170
16	Wind	$0	$0	$15,441,284
17	Unbundled RECs (REC Only)	$0	$0	
18	Various (Index Plus REC)***	$0	$0	
19	Fuel Cell	$0	$0	
20	UOG: Small Hydro	$0	$0	
21	UOG: Solar PV	$0	$0	
22	UOG: Other	$0	$0	
23	Executed REC Sales (Revenue)	$0	$0	
24	**Total RPS-Eligible Procurement and Generation Net Cost**	**$0**	**$0**	**$73,387,868**
25	Total Retail Sales (MWh)			2,047,876.64
26	**Incremental Rate Impact**	**#DIV/0!**	**#DIV/0!**	**3.583607854**

LSE Name:	SDCP
Date Filed:	1/18/23

Input Required No Input Required

	Table 2: Cost Quantification (Forecast Costs and Revenues, $)	Forecast RPS-Eligible Procurement Costs and Revenues ($)										
1	**Executed But Not Approved RPS-Eligible Contracts (Purchases and Sales)****	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**
2	Biogas: Digester Gas											
3	Biogas: Landfill Gas											
4	Biodiesel											
5	Biomass											
6	Muni Solid Waste											
7	Geothermal											
8	Small Hydro (Non-UOG)											
9	Conduit Hydro											
10	Water Supply / Conveyance											
11	Ocean Wave											
12	Ocean Thermal											
13	Tidal Current											
14	Solar PV (Non-UOG)											
15	Solar Thermal											
16	Wind											
17	Unbundled RECs (REC Only)											
18	Various (Index Plus REC)***											
20	Fuel Cell											
21	UOG: Small Hydro											
22	UOG: Solar PV											
23	UOG: Other											
24	Executed REC Sales (Revenue)											
25	**Total Executed But Not Approved RPS-Eligible Procurement and Generation Cost**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
26	Total Retail Sales (MWh)				8,369,740.59	8,415,285.85	8,457,369.84	8,499,656.69	8,542,154.97	8,584,865.75	8,627,790.08	8,670,929.03
27	**Incremental Rate Impact**	**0**	**0.00 ¢/kWh**	**0.00 ¢/kWh**	**0.00 ¢/kWh**	**0.00 ¢/kWh**	**0.00 ¢/kWh**	**0.00 ¢/kWh**	**0.00 ¢/kWh**	**0.00 ¢/kWh**	**0.00 ¢/kWh**	**0.00 ¢/kWh**
28	**Executed RPS-Eligible Contracts (Purchases and Sales)******	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**
29	Biogas: Digester Gas											
30	Biogas: Landfill Gas											
31	Biodiesel											
32	Biomass											
33	Muni Solid Waste											
34	Geothermal											
35	Small Hydro (Non-UOG)											
36	Conduit Hydro											
37	Water Supply / Conveyance											
38	Ocean Wave											
39	Ocean Thermal											
40	Tidal Current											
41	Solar PV (Non-UOG)				$40,279,363	$38,366,021	$36,082,089	$36,152,662	$36,223,242	$36,293,808	$36,364,916	$36,436,048
42	Solar Thermal											
43	Wind				$12,024,490	$11,422,657	$10,684,641	$10,769,288	$10,854,782	$10,941,130	$11,028,343	$1,130,957
44	Unbundled RECs (REC Only)											
45	Various (Index Plus REC)***				$60,243,813	$50,693,906	$47,452,500	$25,506,280	$25,706,543	$25,908,808	$7,833,929	$7,895,828
47	Fuel Cell											
48	UOG: Small Hydro											
49	UOG: Solar PV											
50	UOG: Other											
51	Executed REC Sales (Revenue)											
52	**Total Executed and Approved RPS-Eligible Procurement and Generation Cost**				**$112,547,665**	**$100,482,585**	**$94,219,230**	**$72,428,230**	**$72,784,567**	**$73,143,747**	**$55,227,187**	**$45,462,834**
53	Total Retail Sales (MWh)	5,306,753	7,785,940	8,349,095	8,369,741	8,415,286	8,457,370	8,499,657	8,542,155	8,584,866	8,627,790	8,670,929
54	**Incremental Rate Impact**				**1.344697173**	**1.194048383**	**1.114048828**	**0.852131238**	**0.85206329**	**0.852008042**	**0.640108148**	**0.524313296**
55	**Total RPS-Eligible Procurement and Generation Cost**				**$112,547,665**	**$100,482,585**	**$94,219,230**	**$72,428,230**	**$72,784,567**	**$73,143,747**	**$55,227,187**	**$45,462,834**
56	**Total Incremental Rate Impact**				**1.344697173**	**1.194048383**	**1.114048828**	**0.852131238**	**0.85206329**	**0.852008042**	**0.640108148**	**0.524313296**

*Note: Technology definitions are given in the PCC Classification Handbook located in the RPS Compliance Reporting section of: https://www.cpuc.ca.gov/RPSComplianceReporting/

**Note: For contracts that have been executed but still require formal approval (CPUC or other formal approval process) for purchases and sales.

***Note: The "Various" technology type is to be used in the case of contracts encompassing multiple facilities where the generation type is not yet known

****Note: For IOUs and SMJUs: Include all executed contracts that required CPUC approval. For CCAs and ESPs: Include all executed contracts that have been approved through relevant formal approval processes.

LSE Name:	SDCP		Input Required		No Input Required
Date Filed:	1/18/23				

Table 3: Cost Quantification (Actual Procurement / Generation and Sales, MWh)		Actual RPS-Eligible Procurement / Generation and Sales (MWh)		
1	**Technology Type* (Procurement / Generation and Sales)**	**2019**	**2020**	**2021**
2	Biogas: Digester Gas	0	0	
3	Biogas: Landfill Gas	0	0	
4	Biodiesel	0	0	
5	Biomass	0	0	132,319
6	Muni Solid Waste	0	0	
7	Geothermal	0	0	73,327
8	Small Hydro (Non-UOG)	0	0	9,398
9	Conduit Hydro	0	0	
10	Water Supply / Conveyance	0	0	
11	Ocean Wave	0	0	
12	Ocean Thermal	0	0	
13	Tidal Current	0	0	
14	Solar PV (Non-UOG)	0	0	601,525
15	Solar Thermal	0	0	15,889
16	Wind	0	0	349,259
17	Unbundled RECs (REC Only)	0	0	
18	Various (Index Plus REC)***	0	0	
19	Fuel Cell	0	0	
20	UOG: Small Hydro	0	0	
21	UOG: Solar PV	0	0	
22	UOG: Other	0	0	
23	Executed REC Sales (MWh)	0	0	
24	**Total RPS Eligible Procurement (MWh)**	**0**	**0**	**1,181,717**

LSE Name:	SDCP		Input Required	No Input Required
Date Filed:	1/18/23			

	Table 4: Cost Quantification (Forecast Procurement / Generation and Sales, MWh)	Forecast RPS-Eligible Procurement / Generation and Sales (MWh)										
1	**Executed But Not Approved RPS-Eligible Contracts (Purchases and Sales) ****	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**
2	Biogas: Digester Gas											
3	Biogas: Landfill Gas											
4	Biodiesel											
5	Biomass											
6	Muni Solid Waste											
7	Geothermal											
8	Small Hydro (Non-UOG)											
9	Conduit Hydro											
10	Water Supply / Conveyance											
11	Ocean Wave											
12	Ocean Thermal											
13	Tidal Current											
14	Solar PV (Non-UOG)											
15	Solar Thermal											
16	Wind											
17	Unbundled RECs (REC Only)											
18	Various (Index Plus REC)***											
20	Fuel Cell											
21	UOG: Small Hydro											
22	UOG: Solar PV											
23	UOG: Other											
24	Executed REC Sales (MWh)											
25	**Total Executed But Not Approved RPS-Eligible Procurement**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
26	**Executed and Approved RPS-Eligible Contracts (Purchases and Sales) ******	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**
27	Biogas: Digester Gas											
28	Biogas: Landfill Gas											
29	Biodiesel											
30	Biomass											
31	Muni Solid Waste											
32	Geothermal											
33	Small Hydro (Non-UOG)											
34	Conduit Hydro											
35	Water Supply / Conveyance											
36	Ocean Wave											
37	Ocean Thermal											
38	Tidal Current											
39	Solar PV (Non-UOG)				755,439	752,246	749,048	745,842	742,627	739,404	736,183	732,954
40	Solar Thermal											
41	Wind				170,763	170,763	170,763	170,763	170,763	170,763	170,763	17,373
42	Unbundled RECs (REC Only)											
43	Various (Index Plus REC)***				850,000	750,000	750,000	400,000	400,000	400,000	120,000	120,000
45	Fuel Cell											
46	UOG: Small Hydro											
47	UOG: Solar PV											
48	UOG: Other											
49	Executed REC Sales (MWh)											
50	**Total Executed and Approved RPS-Eligible Procurement**				**1,776,202**	**1,673,009**	**1,669,811**	**1,316,605**	**1,313,390**	**1,310,167**	**1,026,946**	**870,327**
51	**Total RPS Eligible Procurement (MWh)**				**1,776,202**	**1,673,009**	**1,669,811**	**1,316,605**	**1,313,390**	**1,310,167**	**1,026,946**	**870,327**

*Note: Technology definitions are given in the PCC Classification Handbook located in the RPS Compliance Reporting section of: https://www.cpuc.ca.gov/RPSComplianceReporting/

**Note: For contracts that have been executed but still require formal approval (CPUC or other formal approval process) for purchases and sales.

***Note: The "Various" technology type is to be used in the case of contracts encompassing multiple facilities where the generation type is not yet known

****Note: For IOUs and SMJUs: Include all executed contracts that required CPUC approval. For CCAs and ESPs: Include all executed contracts that have been approved through relevant formal approval processes.